

A
STATISTICAL ACCOUNT
OF THE
SEVEN COLONIES OF AUSTRALASIA,
1901-1902,

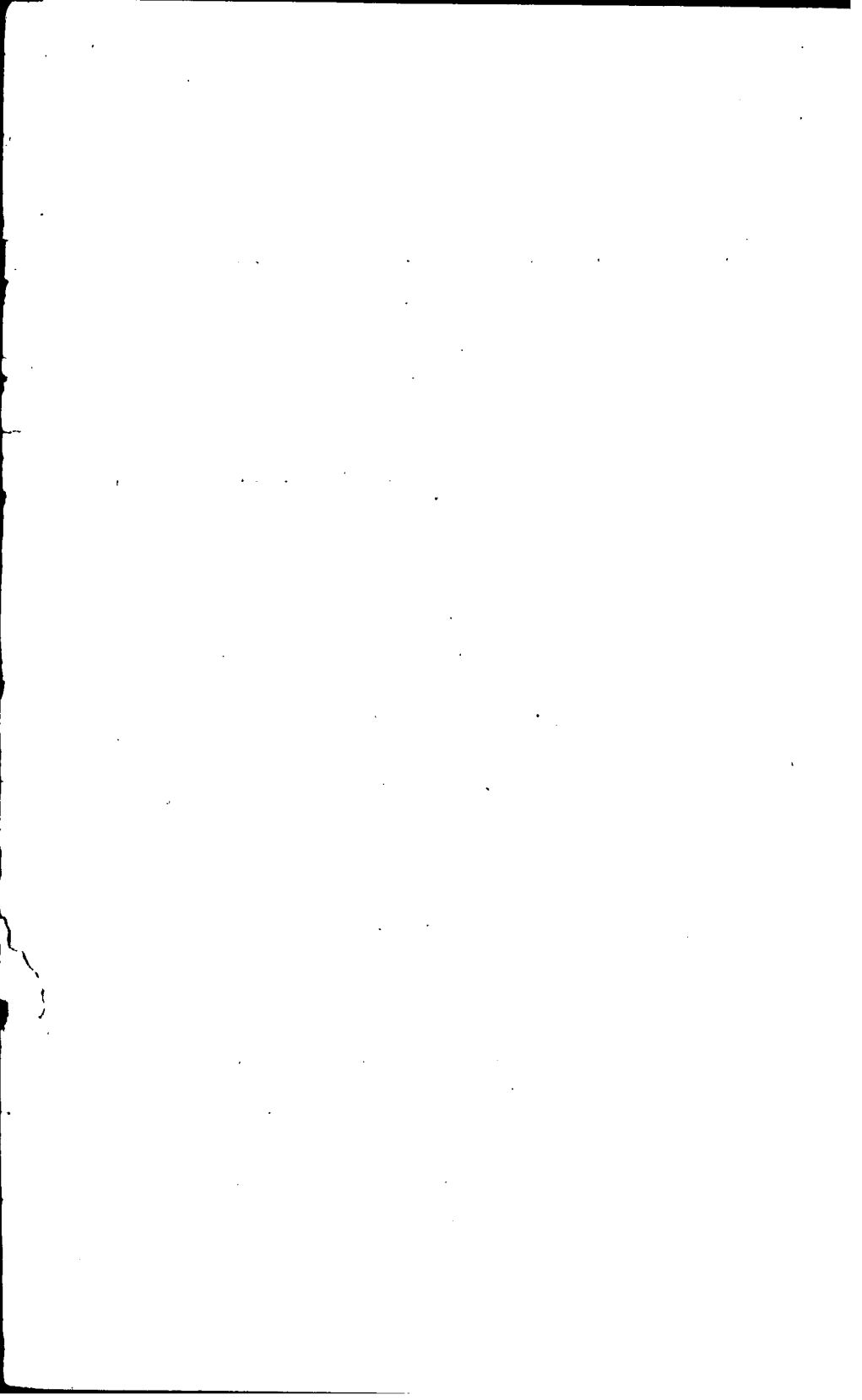
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PREFACE.

THE general plan adopted in previous issues has been followed on the present occasion; but additional chapters have been added, and the scope of several others greatly enlarged. The new chapters are the Discovery of Australia, the Constitution of the Commonwealth, the Constitutions of the States, Chronological Table of Principal Occurrences in Australia and New Zealand, Industrial History, and Commonwealth Finance. Owing to the necessity for printing off the chapters as they were compiled, no attempt has been made to arrange them in their natural order of sequence, but the voluminous index provided will save the reader inconvenience on this score.

In all cases the figures have been revised to accord with the latest information, and as a rule they refer either to the year 1901 or to the year 1902; in some instances, however, owing to the undue delay in publishing the official statistics, I have been compelled to use figures relating to 1900, but the instances where this was necessary were neither many nor important.

Care has been taken to correct errors which have escaped notice in previous editions, and to keep this edition free from them. Should any such have remained undetected, as in the multitude of references is quite possible, it would be deemed a favour if their nature and position were pointed out.

I desire to return thanks to the Statisticians of the States and New Zealand, and to the various officers of the Commonwealth and States who have so readily on all occasions supplied me with information asked for.

T. A. COGHLAN.

*Statistician's Office,
Sydney, 3rd December, 1902.*

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Map of Australasia	<i>Facing Title-page.</i>

THE DISCOVERY OF AUSTRALIA AND NEW ZEALAND.

IT is impossible to say who were the first discoverers of Australia, although there is evidence that the Chinese had some knowledge of the continent so far back as the Thirteenth Century. The Malays, also, would seem to have been acquainted with the northern coast; while Marco Polo, who visited the East at the close of the Thirteenth Century, makes reference to the reputed existence of a great southern continent. There is in existence a map, dedicated to Henry the Eighth of England, on which a large southern land is shown, and the tradition of a Terra Australis appears to have been current for a long period before it enters into authentic history.

In 1503, a French navigator named Binot Paulmyer, Sieur de Gonneville, was blown out of his course, and landed on a large island, which was claimed to be the great southern land of tradition, although Flinders and other authorities are inclined to think that it must have been Madagascar. Some French authorities confidently put forward a claim that Guillaume le Testu, of Provence, sighted the continent in 1531. The Portuguese also advance claims to be the first discoverers of Australia, but so far the evidence cannot be said to establish their pretensions. As early as 1597, the Dutch historian, Wytfliet describes the Australis Terra as the most southern of all lands, and proceeds to give some circumstantial particulars respecting its geographical relation to New Guinea, venturing the opinion that, were it thoroughly explored, it would be regarded as a fifth part of the world.

Early in the Seventeenth Century, Philip the Third of Spain sent out an expedition from Callao, in Peru, for the purpose of searching for a southern continent. The little fleet comprised three vessels, with the Portuguese pilot, De Quiros, as navigator, and De Torres as admiral, or military commander. They left Callao on the 21st December, 1605, and in the following year discovered the island now known as Espiritu Santo, one of the New Hebrides Group, which De Quiros, under the impression that it was indeed the land of which he was in search, named "*La Austrialia del Espiritu Santo.*" Sickness and discontent led to a mutiny on De Quiros' vessel, and the crew, overpowering their officers during the night, forced the captain to navigate his ship to Mexico. Thus abandoned by his consort, De Torres, compelled to bear up for the Philippines to refit, discovered and sailed through the strait that bears his name, and may even have caught a glimpse of the northern coast of the Australian Continent. His discovery was not, however, made known until 1792, when Dalrymple rescued his name from oblivion, bestowing it upon the passage which separates New Guinea from

Australia. De Quiros returned to Spain to re-engage in the work of petitioning the king to despatch an expedition for the purpose of prosecuting the discovery of the Terra Australis. He was finally successful in his petitions, but died before accomplishing his work, and was buried in an unknown grave in Panama, never being privileged to set his foot upon the continent the discovery of which was the inspiration of his life.

During the same year in which De Torres sailed through the strait destined to make him famous, a little Dutch vessel called the "Duyfken," or "Dove," set sail from Bantam, in Java, on a voyage of discovery. This ship entered the Gulf of Carpentaria, and sailed south as far as Cape Keerweer, or Turn-again. Here some of the crew landed, but being attacked by natives, made no attempt to explore the country. In 1616, Dirk Hartog discovered the island bearing his name. In 1622 the "Leeuwin," or "Lioness," made some discoveries on the south-west coast; and during the following year the yachts Pera and Arnhem explored the shores of the Gulf of Carpentaria. Arnhem Land, a portion of the Northern Territory, still appears on many maps as a memento of this voyage. Among other early Dutch discoverers were Van Edels; Pool, in 1629, in the Gulf of Carpentaria; Nuijts, in the "Gulden Zeepaard," along the southern coast, which he called, after himself, Nuijts Land; De Witt; and Pelsaert, in the "Batavia." Pelsaert was wrecked on Houtman's Abrolhos; his crew mutinied, and he and his party suffered greatly from want of water. The record of his voyage is interesting from the fact that he was the first to carry back to Europe an authentic account of the western coast of Australia, which he described in any but favourable terms. It is to Dutch navigators in the early portion of the Seventeenth Century that we owe the first really authentic accounts of the western coast and adjacent islands, and in many instances the names given by these mariners to prominent physical features are still retained. By 1665 the Dutch possessed rough charts of almost the whole of the western littoral, while to the mainland itself they had given the name of New Holland. Of the Dutch discoverers, Pelsaert was the only one who made any detailed observations of the character of the country inland, and it may here be remarked that his journal contains the first notice and description of the kangaroo that has come down to us.

In 1642, Abel Janszoon Tasman sailed on a voyage of discovery from Batavia, the head-quarters of the Governor and Council of the Dutch East Indies, under whose auspices the expedition was undertaken. He was furnished with a yacht, the "Heemskirk," and a fly-boat, the "Zeehaen" (or "Sea Hen"), under the command of Captain Jerrit Jansen. He left Batavia on what has been designated by Dutch historians the "Happy Voyage," on the 14th August, 1642. After a visit to the Mauritius, then a Dutch possession, Tasman bore away to the south-east, and, on the 24th November, sighted the western coast of the land which he named Van Diemen's Land, in honor of

the Governor under whose directions he was acting. The honor was later transferred to the discoverer himself, and the island is now known as Tasmania. Tasman doubled the southern extremity of Van Diemen's Land and explored the east coast for some distance. The ceremony of hoisting a flag and taking possession of the country in the name of the Government of the Netherlands was actually performed, but the description of the wildness of the country, and of the fabulous giants by which Tasman's sailors believed it to be inhabited, deterred the Dutch from occupying the island, and by the international principle of "non-user" it passed from their hands. Resuming his voyage in an easterly direction, Tasman sighted the west coast of the South Island of New Zealand on the 13th December of the same year, and describes the coast line as consisting of "high mountainous country."

Tasman was under the belief that the land he saw was part of a great polar continent discovered some years before by Schouten and Le Maire, to which the name of Staaten Land had been given. He, therefore, duplicated the designation; but within three months afterwards Schouten's "Staaten Land" was found to be merely an inconsiderable island. Tasman's discovery thereupon received the name of New Zealand, on account of a fancied likeness to a province of Holland to which it bears not the least resemblance, and by this name it has been known ever since. Tasman sailed along the coast to a bay, and there he anchored. This inlet is known as Golden or Massacre Bay, called by Tasman, Murderer's Bay. Here an unprovoked attack by the Maoris on a boat's crew resulted in the death of four of Tasman's sailors. Leaving Murderer's Bay, Tasman steered along the west coast of North Island. Vainly seeking a passage to the east, he passed and named Cape Maria Van Diemen, finally taking leave of New Zealand at North Cape. At the Three Kings Islands he made an attempt to land, but the ferocious aspect of the natives terrified his boat's crew, and the voyage was resumed. Tasman left New Zealand with a most unfavourable impression of its inhabitants. He had been off the coast for some three weeks without landing or planting the flag of his country thereon, and more than a century and a quarter elapsed before another European is known to have visited New Zealand.

The first English navigator to sight the Australian continent was William Dampier, who made a visit to these shores in 1688, as supercargo of the "Cygnet," a trader, whose crew had turned buccaneers. On his return to England he published an account of his voyage, which resulted in his being sent out in the "Roebuck" in 1699 to further prosecute his discoveries. To him we owe the exploration of the coast for about 900 miles—from Shark Bay to Dampier's Archipelago, and thence to Roebuck Bay. He appears to have lauded in several places in search of water. His account of the country was quite as unfavourable as Pelsaert's. He described it as barren and sterile, and almost devoid of animals, the only one of any importance somewhat resembling a racoon—a strange creature, which advanced by great bounds or leaps instead of

walking, using only its hind legs, and covering 12 or 15 feet at a time. The reference is, of course, to the kangaroo, which Pelsaert had also remarked and quaintly described some 60 years previously.

During the interval elapsing between Dampier's two voyages, an accident led to the closer examination of the coasts of Western Australia by the Dutch. In 1684 a vessel had sailed from Holland for the Dutch possessions in the East Indies, and after rounding the Cape of Good Hope, she was never again heard of. Some twelve years afterwards the East India Company fitted out an expedition under the leadership of Commander William de Vlamingh, with the object of searching for any traces of the lost vessel on the western shores of New Holland. Towards the close of the year 1696 this expedition reached the island of Rottneest which was thoroughly explored, and early the following year a landing party discovered and named the Swan River. The vessels then proceeded northward without finding any traces of the object of their search, but, at the same time, making fairly accurate charts of the coast line.

The great voyage of Captain James Cook, in 1769-70, was primarily undertaken for the purpose of observing the transit of Venus, but he was also expressly commissioned to ascertain "whether the unexplored part of the Southern Hemisphere be only an immense mass of water, or contain another continent." H.M.S. "Endeavour," the vessel fitted out for the voyage, was a small craft of 370 tons, carrying twenty-two guns, and built originally for a collier, with a view rather to strength than to speed. Chosen by Cook himself, she was renamed the "Endeavour," in allusion to the great work which her commander was setting out to achieve. Mr. Charles Green was commissioned to conduct the astronomical observations, and Sir Joseph Banks and Dr. Solander were appointed botanists to the expedition. After successfully observing the transit from the island of Tahiti, or Otaheite, as Cook wrote it, the *Endeavour's* head was turned south, and then north-west, beating about the Pacific in search of the eastern coast of the great continent whose western shores had been so long known to the Dutch. On the 6th October, 1769, the coast of New Zealand was sighted, and two days later Cook cast anchor in Poverty Bay, so named from the inhospitality and hostility of the natives.

The expedition had thus far been sailing southward. Dissatisfied with the results, and finding it difficult to procure water in sufficient quantities, Cook put about, determining to follow the coast to the northward. He named a promontory in the neighbourhood Cape Turnagain. Another promontory more to the north, where a huge canoe made a hasty retreat, he called Cape Runaway. In the month of November he touched at a point on the coast, where he landed and erected an observatory for the purpose of observing the transit of Mercury—one of the chief objects of his expedition on that occasion. A signal station was erected on the headland from which Cook took his observation, and which is now known as Shakespeare's Head. On the 9th of November the transit of Mercury was successfully observed, and the name Mercury Bay was given to the inlet where the observation was

made. Two localities, for reasons which will be obvious, were called Oyster Bay and Mangrove River. Before leaving Mercury Bay, Cook caused to be cut upon one of the trees near the watering-place the ship's name and his own, with the date of arrival there, and, after displaying the English colours, took formal possession of it in the name of His Britannic Majesty King George the Third. It is noteworthy that Cook always managed to obtain wood and water wherever wood and water were to be had, no matter whether his intercourse with the natives were friendly or otherwise. He also contrived to carry on his surveys in spite of all opposition with such accuracy and deliberation that they remained the standard authority on the outlines of the islands for some seventy years or more. He was, moreover, a benefactor in no mean degree to the natives, who seldom knew the meaning of meat, save at a cannibal feast after a tribal victory. He not only improved their vegetables by giving them seed potatoes, but he turned loose fowls and pigs to supply their flesh larder. To the time of writing, the wild pigs which haunt the forests and the mountain gorges are called after Captain Cook, and they furnish many a solitary shepherd, miner, farmer, and gum-digger with excellent meat. Cook was, perhaps, either more prudent, or more successful than Captain Tobias Furneaux, of the consort "Adventure," who, in a subsequent voyage to New Zealand, lost an entire boat's crew of nine men, who were captured or killed, and duly cooked and eaten by the Maoris.

On the 17th December, the "Endeavour" doubled North Cape, which is the northern extremity of North Island, and began the descent of its western side. The weather now become stormy, and with a repetition of Tasman's experience from an opposite course on the same coast, very dangerous. Often was the vessel compelled to stand off in great distress, and intercourse with the natives was considerably interrupted. At one point, however, the English mariners satisfied themselves that the inhabitants ate human flesh—the flesh, at least, of enemies who had been killed in battle. On January 30th, 1770, Cook erected a flagpost on the summit of a hill in Queen Charlotte's Sound, where he again hoisted the Union Jack, and, after naming the bay where the ship was at anchor after the Queen, took formal possession of the South Island in the name of His Majesty King George the Third.

Cook crossed the waters of Doubtless Bay on the same day that the French Captain, De Surville, in the "St. Jean Baptiste," was approaching the land at Mangonui. A few hours afterwards, and totally ignorant of Cook's presence in New Zealand waters, the Frenchman anchored in this very inlet and named it Lauriston Bay. This navigator was sent out by his Government, who believed that the English had found "an island of gold" in the South Seas, and sailed post haste from India to see if he could not participate in the exploitation of the precious metal. He was received by the natives with great hospitality; but, finding nothing more valuable than spars for his ship, he proceeded to South America, carrying away in irons the Rarawa chief, Ngakinui,

who had entertained him and his sick seamen with great hospitality while on shore. Ngakinui pined on ship-board for his native food, and died some eighty days after his seizure. De Surville, only eleven days after the death of this unfortunate Maori chief, was drowned in the surf at Callao.

After voyaging westward for nearly three weeks Cook, on the 19th April, 1770, sighted the eastern coast of Australia at a point which he named after his lieutenant, who discovered it, Point Hicks, and which modern geographers identify with Cape Everard.

The "Endeavour" then coasted northward, and after passing and naming Mount Dromedary, the Pigeon House, Point Upright, Cape St. George, and Red Point, Botany Bay was discovered on the 28th April, 1770, and as it appeared to offer a suitable anchorage, the "Endeavour" entered the bay and dropped anchor. The ship brought to opposite a group of natives, who were cooking over a fire. The great navigator and his crew, unacquainted with the character of the Australian aborigines, were not a little astonished that these natives took no notice of them or their proceedings. Even the splash of the anchor in the water, and the noise of the cable running out through the hawse hole, in no way disturbed them at their occupation, or caused them to evince the slightest curiosity. But as the captain of the "Endeavour" ordered out the pinnace and prepared to land, the natives threw off their nonchalance; for on the boat approaching the shore, two men, each armed with a bundle of spears, presented themselves on a projecting rock and made threatening signs to the strangers. It is interesting to note that the ingenious "wommera," or throwing-stick, which is peculiar to Australia, was first observed on this occasion. As the men were evidently determined to oppose any attempt at landing, a musket was discharged between them, in the hope that they would be frightened by the noise, but it produced no effect beyond causing one of them to drop his bundle of spears, of which, however, he immediately repossessed himself, and with his comrade resumed the same menacing attitude. At last one cast a stone towards the boat, which earned him a charge of small shot in the leg. Nothing daunted, the two ran back into the bush, and presently returned furnished with shields made of bark, with which to protect themselves from the firearms of the crew. Such intrepidity is certainly worthy of passing notice. Unlike the American Indians, who supposed Columbus and his crew to be supernatural beings, and their ships in some way endowed with life, and who were thrown into convulsions of terror by the first discharge of firearms which they witnessed, these Australians were neither excited to wonder by the ship, nor overawed by the superior number and unknown weapons of the strangers. Cook examined the bay in the pinnace, and landed several times; but by no endeavour could he induce the natives to hold any friendly communication with him. The well-known circumstance of the great variety of new plants here obtained, from which Botany Bay derives its name, should not be passed over.

Before quitting the bay the ceremony was performed of hoisting the Union Jack, first on the south shore, and then near the north head, formal possession of the territory being thus taken for the British Crown. During the sojourn in Botany Bay the crew had to perform the painful duty of burying a comrade—a seaman named Forby Sutherland, who was in all probability the first British subject whose body was committed to Australian soil.

After leaving Botany Bay, Cook sailed northward. He saw and named Port Jackson, but forebore to enter the finest natural harbour in Australia. Broken Bay and other inlets, and several headlands, were also seen and named, but the vessel did not come to an anchor till Moreton Bay was reached, although the wind prevented Cook from entering this harbour. Still sailing northward, taking notes as he proceeded for a rough chart of the coast, and landing at Bustard and Keppel Bays and the Bay of Inlets, Cook passed over 1,300 miles without the occurrence of any event worthy of being chronicled, till suddenly one night at 10 o'clock the water was found to shoal, without any sign of breakers or land. While Cook was speculating on the cause of this phenomenon, and was in the act of ordering out the boats to take soundings, the "Endeavour" struck heavily; and fell over so much that the guns, spare cables, and other heavy gear had at once to be thrown overboard to lighten the ship. As day broke, attempts were made to float the vessel off with the morning tide; but these were unsuccessful. The water was rising so rapidly in the hold that with four pumps constantly going the crew could hardly keep it in check. At length one of the midshipmen suggested the device of "fothering," which he had seen practised in the West Indies. This consists in passing a sail, attached to cords, and charged with oakum, wool, and other materials, under the vessel's keel, in such a manner that the suction of the leak may draw the canvas into the aperture, and thus partially stop the vent. This was performed with great success, and the vessel was floated off with the evening tide. The land was soon after made near the mouth of a small stream, which Cook called, after the ship, the Endeavour River. A headland close by he named Cape Tribulation. The ship was steered into the river, and there careened and thoroughly repaired. Cook having completed the survey of the east coast, to which he gave the name of New South Wales, sighted and named Cape York, the northernmost point of Australia, and took final possession of his discoveries northward from latitude 38° south to latitude 10½° south, on a spot which he named Possession Island, thence returning to England by way of Torres Straits and the Indian Ocean.

The great navigator's second voyage, undertaken in 1772, with the "Resolution" and the "Adventure" is of less importance. The vessels became separated, and both at different times visited New Zealand. Captain Tobias Furneaux, in the "Adventure," also found his way to Storm Bay in Tasmania. In 1777, while on his way to search for a north-east passage between the Atlantic and Pacific Oceans, Cook again touched at the coast of Tasmania and New Zealand.

On his return to England, Cook gave a most graphic description of New Zealand and its people. Men engaged in commerce became impressed with the value of the various articles which New Zealand produced, and hence of its importance as a market for manufactured goods; while the savant and the scientist regarded with great interest the information recently published respecting a race of people who, while having a real though hitherto undescribed form of civilisation, were yet greedy eaters of human flesh. Cook's report of the genial climate, the fertile soil, and the evergreen forests of the new archipelago, not only excited considerable interest in England, but so captivated the eminently practical mind of Benjamin Franklin that the American philosopher published a proposal for its immediate colonisation.

Meanwhile, in 1772, Captain Marion du Fresne anchored his two ships, the "Marquis de Castries" and the "Mascarin," in the Bay of Islands. These vessels formed a French expedition of discovery. Sailing from Nantes, on the Loire, Lieutenant Crozet, in command of the King's sloop "Mascarin," had lost his masts, and the two ships put into the Bay of Islands to refit. Du Fresne was frequently on shore during his stay, and habits of intimacy begat in the mind of the French Commander confidence in the friendship of the natives. Both races lived in harmony for several weeks. "They treated us," says Crozet, "with every show of friendship for thirty-three days, with the intention of eating us on the thirty-fourth." The Maori version, given by Dr. Thompson, is: "We treated Marion's party with every kindness for thirty days, and on the thirty-first they put two of our chiefs in irons, and burned our sacred places." It matters little whether the Maoris had any valid excuse for eating their guests or not, the fact remains that an attack was made on the French, when twenty-eight of their party and the commander were killed and eaten. Crozet, who had a party of men engaged in getting spars on the Kawakawa River, was also in danger of being trapped by the treacherous savages; but being forewarned, he was enabled to punish those who had killed his comrades and sought his own destruction. Before leaving the river he refitted the two vessels, and, after a stay of sixty-four days in the Bay of Islands, continued his voyage.

On his first voyage, in 1770, Cook had some grounds for the belief that Van Diemen's Land, as Tasmania was then called, was a separate island. The observations of Captain Furneaux, however, did not strengthen this belief, and when making his final voyage, the great navigator appears to have definitely concluded that it was part of the mainland of Australia. This continued to be the opinion of geographers until 1798, when Bass discovered the strait which bears his name. The next recorded expedition is a memorable one in the annals of Australian History—the despatch of a British colony to the shores of Botany Bay. Further information respecting the discovery and history of the various states of the Commonwealth will be found in subsequent chapters.

NEW SOUTH WALES.

THE favourable reports brought to England by Captain Cook on his return from the voyage in the "Endeavour," directed the attention of the British Government towards the possibility of founding a settlement in Australia. The loss of the North American colonies by their successful rebellion made it an imperative necessity that some fresh outlet should be found for the disposal of the criminal population; but, besides this, there seems ample proof that the idea of colonial expansion was at that time strong in the minds of the British people.

In 1787 Viscount Sydney, then Secretary of State for the Colonies, resolved on the foundation of a colony in that portion of the Great Southern Continent which Cook had rather inaptly termed New South Wales. In virtue of the sovereignty established by Captain Cook, the islands of New Zealand were included as part of the British dominions, in the Royal Commission appointing the Governor of the new colony. There is no doubt that the selection of Botany Bay as a place of penal settlement was largely due to Cook's official report as to the suitability of the locality; but it was keenly debated in the House of Commons whether Cook's New Zealand or Cook's Botany Bay should be the site of the first experiment in penal colonisation. "New Zealand," says an early historian, "escaped the perilous distinction, possibly on account of fears entertained that the existence of her ferocious cannibal population might prove incompatible with the safe keeping and probationary discipline of the prisoners, and that in some fatal outburst of the cannibal passion, convict, governor, and guard might undergo the common lot, prematurely, in the native oven." This, possibly, may have been the reason; indeed, the early authorities of New South Wales had a thorough dread of the old-time Maori.

In May the "First Fleet," which was to convey the expedition, was got together. It comprised the 20-gun frigate "Sirius," with its tender the "Supply"; the storeships "Golden Grove," "Fishburn," and "Borradale"; and six transports—the "Alexander," "Scarborough," "Lady Penrhyn," "Prince of Wales," "Friendship," and "Charlotte." The largest of these vessels measured not more than 450 tons, whilst the smallest was not more than 270 tons. The six transports had on board 564 male and 192 female convicts; 178 marines, officers and men; 5 medical men, a few mechanics, 40 women, wives of the marines; and 13 children. The command of the expedition was entrusted to Captain

Phillip, R.N., to whom was also granted a commission appointing him Governor and Captain-General of New South Wales. Captain Hunter, of the "Sirius," was second in command, while Mr. David Collins accompanied the expedition in the capacity of Judge-Advocate.

In January, 1788, the fleet arrived in Botany Bay. A very short examination proved that the place was ill-suited for the settlement about to be founded. The soil was everywhere poor, while there was a dearth of fresh water, and in addition to these disadvantages to settlers, the depth of water was not sufficient to allow ships of fair tonnage to approach the shore. The land northward appeared to promise bolder indentations, and Captain Phillip, taking with him three boats, proceeded in that direction, and after going a few miles, he found himself abreast of Port Jackson, marked by Cook as a boat-harbour. He entered the inlet, and found to his great surprise that he had discovered a port in every way suited for his purpose, and, indeed, as he speedily realised, one of the most beautiful as well as most convenient harbours in the world.

The fleet now sailed round to Port Jackson, and on the 26th January, 1788, the vessels anchored in Sydney Cove, the colonists were disembarked, and Captain Phillip formally proclaimed the new colony. As only a limited supply of provisions was available from the stores, it was necessary for the settlers immediately to devote their attention to agriculture. Land was therefore cleared at the head of Farm Cove, and wheat was sown, but owing to the unsuitability of the soil in this vicinity the crop was a failure. This was a contingency against which provision had not been made, and affairs were becoming very serious, when the arrival of a ship with a fresh batch of convicts, but without stores, brought them to a head. In this emergency Captain Phillip despatched the "Sirius" to Cape Colony and the "Supply" to Batavia to procure provisions, but only a very moderate quantity could be obtained, so that within a few weeks the community was on the verge of starvation. In these circumstances it was necessary for everyone to be placed on short allowance, while the cattle and sheep, which were introduced for breeding purposes, were slaughtered for food. To relieve the pressure on the stores at Sydney, a detachment of 200 convicts, with a guard of 70 marines, was despatched to Norfolk Island, where Lieutenant King had been sent to establish a branch colony, and had been successful in raising an abundant crop. To add to the colony's misfortunes, the "Sirius," in which the detachment sailed, was wrecked on a reef near the Island, and the prospect of relief from this source was for the time frustrated. The colony seemed to be threatened with extinction by famine, when three storeships providentially arrived and rescued the settlers from their privations. Trouble seemed, however, persistently to follow the young settlement. Several shiploads of convicts arrived, and in consequence of overcrowding and insanitary conditions on the voyage, it was found that out of a total of 1,700 who had been placed on board in England, 200 had died on the voyage,

while hundreds of others were in an enfeebled or dying condition when they reached Port Jackson. Trouble was also occasioned by successful and unsuccessful attempts of convicts to escape.

After a particularly arduous administration of four years, Governor Phillip returned to England in 1792, and subsequently received a pension from the Imperial Authorities in recognition of his services. During the period elapsing till the arrival of Captain Hunter, who succeeded him, the government was administered by Major Grose and Captain Paterson, the senior military officers in the colony. In the interregnum, Sydney whalers began to visit the coasts of New Zealand; and thereafter adventurous spirits, honest and outlaw, ran into the ports of the islands for spars and flax, preserved human heads, and other native curiosities. In 1793, the "Daedalus," under command of Lieutenant Hanson, was sent to cruise about the New Zealand coast with the avowed intention of kidnapping one Maori or more to teach the convict settlers of Norfolk Island the Maori method of flax-dressing. Unfortunately, one of the captives secured was a priest ("tohunga") and the other a chief ("rangatira"), and they would not admit that they knew anything about such work, and were restored to their home at Doubtless Bay after several months' detention.

Governor Hunter arrived at Sydney in 1795, and brought with him some free settlers, mainly agricultural labourers. These turned their attention to the fine alluvial land on the banks of the Hawkesbury, and before very long upwards of 6,000 acres were under crops of wheat and maize. In the following year a herd of 60 cattle was discovered at the "Cowpastures," near Camden. These animals were the descendants of cattle that had strayed away from the settlement some years previously, and besides being a welcome addition to the available food supply, proved the adaptability of the colony for stock-raising purposes.

During Hunter's term of administration the river named after him was discovered, and the existence of workable seams of coal in its vicinity was demonstrated, and about the same time Bass and Flinders carefully examined and charted the coast line to the south of Sydney. Governor Hunter left New South Wales in 1800, the population at the time being slightly in excess of 6,000. His successor was Philip Gidley King, who had been previously appointed to the control of the branch settlement at Norfolk Island.

The new Governor soon found himself embroiled in serious trouble with the New South Wales Corps. This body had been specially recruited for service in the colony, as it was impossible to find officers of regular army regiments in England who would willingly accept virtual banishment to a far distant land to act as a sort of prison guard over convicts. Some of those who were induced to accept commissions by grants of land in the colony had never before seen service in the army, while the general idea of most of the officers seemed to be to amass fortunes as quickly as possible and return to England. It was found that the rum trade offered the speediest means to this end. Not

only did the officers of the Corps import large quantities, which they retailed at enormous profits, but some of them, in defiance of Government orders, went so far as to set up stills on their own account. The Governor resolutely set his face against the traffic, and refused to allow the landing of thousands of gallons of wine and spirits. The strong stand taken by the Governor roused the bitterest opposition amongst the officers, who found themselves likely to lose their chief source of emolument by reason of his action.

Governor King had also to face serious trouble in the shape of a mutiny amongst the convicts. It was customary to set the most refractory of the prisoners to work on the roads in chain-gangs, while those who merited better treatment by consistent good conduct were assigned as servants to the free settlers. On one occasion over 300 convicts were working in chain-gangs on the road at Castle Hill, between Parramatta and Windsor, under a very small force of soldiers. The prisoners overpowered the guard, and freeing themselves from their chains, marched towards the Hawkesbury, where they counted on the assistance of the men employed near Windsor. The insurgents, however, were speedily routed by Major Johnston, who had a force of only 20 men with him. The ringleaders were hanged, and the others were allowed to return to work under strict surveillance.

The initiation of wool-growing, one of the most important events in Australian history, took place during King's administration. Captain John Macarthur of the New South Wales Corps had received a grant of 10,000 acres of land on the Cowpasture River, near Camden, and with praiseworthy enterprise secured a small flock of Spanish merinos and commenced the experiments in wool-growing which eventually resulted in material gain not only to the originator of the idea, but also to Australia generally.

After six years of constant labour King was glad to give up the reins of office, and was succeeded in the administration of the colony by Captain Bligh. The new Governor, who assumed office in 1806, had previously won for himself a reputation for coolness and daring by his noteworthy voyage after the mutiny of the "Bounty," and subsequently at the bombardment of Copenhagen in 1798 had gained the publicly-expressed encomiums of Lord Nelson. The Imperial Authorities therefore thought that their choice had fallen on the right man to correct the abuses which King had been powerless to deal with, especially in regard to the traffic in rum. The Governor immediately on his arrival issued a stringent proclamation forbidding the bartering of strong liquors in exchange for commodities, and applying the injunction to all persons without distinction. This drastic action was viewed with the deepest resentment by a large section of the colonists, who, in spite of all authority, maintained the illicit trade throughout the whole of Bligh's term of administration. The affair which resulted in the deposition of Bligh was not directly connected with his dispute with the officers on the traffic in rum, but there can be no doubt but that

Bligh's interference with the lucrative business which the officers carried on led to his downfall. Macarthur had received a summons from Atkins, the Judge-Advocate, calling upon him to answer a complaint preferred by the crew of a vessel of which he was part owner for non-payment of wages. Macarthur did not obey the order, but sent a letter defining his position in the matter. A warrant was therefore issued for his arrest, and he was brought before the Judge-Advocate and a jury of six officers of the New South Wales Corps—such being the composition of the Supreme Court at the time. Macarthur objected to the Judge-Advocate's presiding at the trial on the ground that Atkins bore him personal ill-will, and the six officers sustained his objection. Bligh refused to remove the Judge-Advocate, as indeed he had not the power to do, Atkins having been appointed by the Imperial Government.

The Governor now ordered the six officers to appear before him to justify their conduct, but they refused to obey. He also sent several messages to the Commandant, Major Johnston, requesting him to confer with him respecting the conduct of his subordinates, but that officer pleaded ill-health as his excuse for not complying with the Governor's request. Nevertheless, on the same evening Major Johnston arrived in Barrack Square, paraded his regiment, and marched in full military array to Government House, where he placed Governor Bligh in close confinement. Johnston then assumed control of affairs, and dismissed the Judge-Advocate and other prominent officials, appointing deputies in their stead.

Lieutenant-Colonel Foveaux shortly afterwards superseded Major Johnston, and he in turn was succeeded by Colonel Paterson, who came over from Tasmania to administer the government. This was about twelve months after Bligh's deposition, and although Paterson in a general way approved of Johnston's action, he nevertheless set the imprisoned Governor at liberty on condition that he proceeded home in a vessel then about to sail. Bligh promised to sail direct to England, but when he was at liberty he refused to be bound by a promise given under compulsion, and remained off the coast of Tasmania. When the Imperial Authorities became apprised of the turn affairs had taken in New South Wales they immediately despatched Lieutenant-General Macquarie to assume control of the colony. He was directed to reinstate Bligh for one day, and despatch Major Johnston under close arrest to England. He was unable, of course, to carry out his instructions with reference to Bligh, but Johnston was arrested and sent to England, where he was subsequently tried and punished with dismissal from the army.

During Macquarie's term of office a great improvement manifested itself in the moral and industrial condition of the colony, and the illicit traffic in spirits was rigidly suppressed. Education, hitherto neglected, received special attention, churches and public buildings were erected, and the work of exploration was pushed on. For the purpose of making himself personally acquainted with the conditions

of life in the colony, the Governor undertook periodical journeys throughout the various districts, and no important event happened in the settlement of which the Governor was not made cognisant. In his efforts towards the amelioration of social conditions in the young colony the Governor was ably assisted by his wife, who specially devoted her attention to improving the lot of the women and children.

The Blue Mountains had hitherto formed an impassable barrier to the extension of colonisation towards the west, and many attempts had been made to find a practicable route across them. In 1813, however, Messrs. Blaxland, Lawson, and Wentworth succeeded in crossing the range, and opening the way to the vast plains of the interior.

In 1814 the continent which had hitherto been called New Holland was named Australia, on the recommendation of Flinders.

Macquarie showed great kindness to the "emancipists," as those settlers were called who had served their sentences as convicts and remained in the colony. Many of these were leading useful and honorable lives, and it was the Governor's constant effort to remove the social ban under which they laboured and to encourage them to persevere in the path of useful citizenship. The Governor also showed a large-minded tolerance in religious affairs, removing, as far as possible, the unfairness which in this respect had for some time prevailed. After the longest term of office enjoyed by any vice-regal representative, Macquarie returned to England in 1821, carrying with him the affectionate esteem of the community, with the exception of a minority who were irreconcilably opposed to his policy of toleration. He was succeeded in the administration by Sir Thomas Brisbane.

During Brisbane's term of office the work of exploration was steadily continued. In 1823 Surveyor-General Oxley was sent to survey Moreton Bay, Port Curtis, and other portions of what is now the Queensland coast. From information given by a castaway named Pamphlet, Oxley discovered the river discharging into Moreton Bay, which he named Brisbane in honour of the Governor. While this was going on in the north, the south was not being neglected. Hume and Hovell were despatched with an exploring party in a south-westerly direction overland from Sydney. After opening up much new country they discovered the Murray and Murrumbidgee Rivers, which, rising in the Great Dividing Range, flow westward, ultimately unite, and discharge into the sea on the South Australian coast, over a thousand miles from their respective sources.

Besides doing all in his power to increase the knowledge of outlying portions of the land under his rule Governor Brisbane also encouraged the introduction of free settlers, with the result that numbers of wealthy young men came to the colony and took up land, and this in time led to the abolition of the costly Government farms. It was found also that supplies could be raised from the soil at a much lower rate than was possible under the previous conditions of Government control.

The Governor gave evidence of liberal views in other directions. Up till this time there had been a rigid censorship over newspaper articles published in the colony, but in 1824 liberty of the press was affirmed by proclamation. About this time also the old method of dispensing justice in a Court composed of a judge, assisted by assessors drawn entirely from officers of the army, was dispensed with, and trial by jury was instituted, the first properly empanelled jury sitting at the Quarter Sessions of November, 1824. To Sir Francis Forbes, the first Chief Justice, is mainly due the credit of introducing this much-needed reform. Up to this time the Governor had possessed practically absolute power over the affairs of the colony, the only restraining influence being the force of public opinion amongst the colonists, and the far-distant authority of the Secretary of State. But the colonists were granted a certain measure of self-government in 1823, when, under an Act passed by the British Parliament, it was provided that the Governor should nominate a Legislative Council of seven members, by whose advice he was to be guided.

Sir Thomas Brisbane was succeeded in 1825 by Major-General Ralph Darling, who before very long found himself involved in serious disputes with the colonists and the press. On account of some very severe strictures by the latter with reference to the conduct of public affairs, the Council passed several Acts which temporarily curtailed newspaper criticism. An indirect result of the enforcement of these Acts was that the number of members of the Council was increased from seven to fifteen in 1828. About this time the Bushranging Act was passed by the Council with the idea of putting a stop to the depredations of the bushrangers, as the desperadoes were called, who either singly or in gangs roamed over the highways, and robbed travellers indiscriminately.

During Governor Darling's administration the work of exploration was vigorously pushed forward. In 1823 Allan Cunningham made his way northwards from Bathurst towards the head waters of the Castlereagh, discovering the gap in the mountains known as the Pandora Pass, by which access was opened to the country beyond. In 1826 he penetrated northwards to the country round the Upper Darling. In 1827, crossing the Namoi and Dumaresq Rivers, he reached the Darling Downs. Next year, working inland from Moreton Bay, he discovered the practicable pass from the coast to the Downs which still bears his name. The most famous explorer of the time, however, was Captain Sturt. In his first journey Sturt discovered the Darling and traced both the Castlereagh and Macquarie to their junction therewith. At the time when he passed over the country a prolonged drought had left its effects, the Darling being quite salt, while the bed of the Castlereagh was destitute of water. The inland sea which Oxley had affirmed his belief in was also proved to be non-existent. In his second expedition, on which he was accompanied by George Macleay, Sturt descended the Murrumbidgee and discovered the Murray, which he followed down to the sea.

At this time there were persistent rumours to the effect that the French contemplated the formation of settlements on the Australian Continent. Steps were therefore taken to occupy the threatened points in advance, and expeditions were despatched to Western Port and King George's Sound. At King George's Sound the township of Albany was founded, but Western Port, which the French had left in disgust, was shortly after abandoned.

Governor Darling left Australia in 1831, and was succeeded in the administration by Sir Richard Bourke, one of the most popular of the Governors who have ruled in New South Wales. It was to Bourke's suggestion that the policy of assisted immigration was due, the British Government doubling the amount voted by the Legislative Council to give effect to it. The first immigrants to arrive under this system were fifty young women from an orphan school in Ireland, and fifty-nine mechanics brought from Scotland by Dr. Lang to assist in building the Australian College.

Bourke's tenure of office was also made noteworthy by the valuable explorations conducted by Sir Thomas Mitchell, the Surveyor-General. In his first expedition Mitchell made a careful examination of the country northward from the Liverpool Plains. His second expedition had for its object the closer exploration of the districts between the Bogan and the Darling. On this occasion he found the country far different from what Sturt had experienced, for the river banks were now well-grassed, while the Darling was no longer a salt stream, but a stately river. Mitchell established the *dépôt* of Fort Bourke, and explored the river's course for some three hundred miles. He had now established the fact of its connection with the Namoi, Gwydir, and Condamine, and therefore determined to make certain whether it joined the Murray or flowed away westward. Next year, therefore (1836), he proceeded down the Lachlan basin to the Murrumbidgee, and thence along the Murray till he met the stream which Sturt had taken to be the Darling. This idea he proved to be correct, and then turned back with the object of ascertaining the connection between the Murray and Hume's series of rivers. But near Swan Hill he reached the Loddon, and ascending Mount Hope and Pyramid Hill, obtained the first vision of a country which so charmed him that he gave it the name of Australia Felix. Passing through this district, he crossed the Loddon and Avoca Rivers to the head waters of the Wimmera, and later on reached the Glenelg. This stream he followed down to its estuary, and then turned eastward to Portland Bay, where he came upon the settlement of the brothers Henty. On his return journey Mitchell ascended Mount Macedon, whence he viewed the grassy plains stretching away to Port Phillip; then retracing his steps to his camp near Castlemaine, he proceeded from this point to the river Murray, which he crossed a little below the present site of Albury. Mitchell soon afterwards made a triumphal entry into Sydney, after an absence of seven months' duration.

Governor Bourke left New South Wales in 1837, carrying with him the esteem of the colonists over whom he had so ably ruled. As some recognition of his many services, particularly in regard to the question of religious equality, it was decided to erect a statue of him in Sydney. and in 1842 the statue was completed and placed at the Macquarie-street entrance to the Domain, where the ceremony of unveiling took place on the 11th April of the same year.

The next Governor was Sir George Gipps, who assumed office in 1838, and immediately found himself called upon to grapple with questions of very serious import. One of the most pressing of these was the abolition of the transportation system. For a long time the feeling had been growing in the colony that the day was past when New South Wales should be called upon to receive convicts, and, as early as 1830, a league had been formed to ensure cessation of transportation. The Parliamentary Committee of 1837-8 had collected a volume of evidence which fairly horrified public opinion in England when it became known. In spite of the opposition of those landholders who feared that loss of convict labour would mean the destruction of their interests, an Order in Council was passed in 1840 entirely abolishing the system so far as it affected New South Wales. During the fifty-three years when transportation was in operation 82,250 convicts, of whom 70,040 were males, and 12,210 females, had been landed in Sydney. Some nine years after the passing of the Order in Council an attempt was made to revive the system, but without success. Another very important event which took place during the administration of Sir George Gipps was the granting of a new Constitution providing for the appointment of a Legislative Council consisting of thirty-six members, twelve of whom were to be nominated by the Crown, while the remainder were to be elected. The franchise qualification was a £20 rental, or a freehold of £200 in value, and the qualification for elective members was property to the amount of £2,000, or of £100 yearly value. The first meeting of the newly-constituted Council took place on the 1st August, 1843.

In 1844 a movement was begun by the settlers in the Port Phillip district to have that portion of the continent proclaimed a separate colony. At this period the total population of what is now New South Wales, Victoria, and Queensland was not more than 150,000, the residents of the Port Phillip district numbering about 30,000. It was claimed by these settlers that the distance which separated them from the seat of government was too great to permit of their requirements receiving attention, and their claim for separation was eloquently supported by Dr. Lang, one of the six members representing the Port Phillip district in the Council. After seven years of agitation their petition was granted, and in 1851, when the population numbered 77,345, the country south of the Murray was formed into a separate colony under the name of Victoria.

Sir George Gipps retired from office in 1846, and was succeeded by Sir Charles Augustus Fitzroy. During Fitzroy's term of office, which expired in January, 1855, occurred some of the most important events in the annals of the colony. Chief amongst these was the discovery of gold in 1851. For some years before this time there had been rumours of the existence of the precious metal. In 1839 Count Strzelecki found traces of gold in iron ore at Hartley, in the Blue Mountains, but Governor Gipps, fearful of its effects on the convict community, persuaded Strzelecki to keep the matter secret. Again, in 1841, the Rev. W. B. Clarke found grains of gold in a creek near Bathurst. Speaking in England in 1844, Sir Roderick Murchison stated it to be his belief that the Great Dividing Range of Australia would be found as rich in gold as the Ural Mountains of Europe. But it was not till the Government Geologist had confirmed Edward Hargraves' discoveries in 1851, and nuggets of gold began to arrive in Sydney, that the teachings of the geologists were remembered. Almost in an instant all classes of the community were infected with the most intense excitement. The immediate result of the discovery was extremely unpleasant. The squatters were deserted by their shepherds and labourers, work in the various trades was paralysed for want of hands to attend to it, while a general suspension of ordinary business seemed about to result from the wild rush to the diggings. However, in a few years matters resumed a more sober aspect, and gold-mining took its place among the settled industries of the colony.

The year 1851 was also a memorable one through the passing of an Act by the Imperial Government providing for the granting of a larger measure of self-government for New South Wales. The desire for a free Constitution had been strong for some years before the discovery of gold, and now that the colony had received such a large accession of free settlers consequent on the discovery, its position as a Crown dependency was becoming still more irksome. In pursuance of the powers granted by the Act, a Select Committee of the Legislative Council was appointed in 1852 to draw up a Constitution. As a result of the deliberations of this body, a remonstrance was despatched to the Secretary of State for the Colonies in which objection was taken to the form of Constitution which the Imperial Authorities proposed to grant, and after some negotiation the demands of the colonists were practically agreed to. In the report submitted by this Committee there was one extraordinary proposal. In their desire to copy as far as possible the British model, the Committee agreed to recommend an elective Assembly to represent the Commons and a nominated Council to represent the House of Peers. To provide for this Upper House the Committee recommended the establishment of an hereditary order of colonial nobility, from amongst the members of which the Upper House was to be chosen. The publication of the report raised a storm of indignation and ridicule in the metropolis. Numerous public meetings were held, and strongly-worded resolutions were unanimously

adopted denouncing the proposed establishment of a colonial peerage. Nevertheless, the Council proceeded to discuss the Committee's report in the ordinary course, but at length the tide of public opinion grew so strong that the objectionable aristocratic clause was removed, and the Constitution Act as it now stands was finally passed on the 21st December, 1853. Messrs. Wentworth and Deas-Thomson were deputed to proceed to England in order to facilitate the acceptance of the measure by the Imperial Parliament, and in July, 1855, Royal Assent was given to the necessary Bill, making the Constitution operative. The formal inauguration of the Constitution was performed by Governor Denison on the 19th December. Sir William Denison, who had just succeeded Governor Fitzroy, was sworn in under a commission from the Queen which revoked his former credentials and appointed him Governor-in-Chief of New South Wales. The writs for the first Parliament were issued on the 22nd May, 1856.

It was unfortunate that the introduction of the new Constitution should have been coincident with the arrival of Sir William Denison. His unpopular reputation had preceded him from Tasmania, and his appointment to the Governorship of the colony was viewed with a considerable amount of distrust which his subsequent conduct seemed to justify.

The outbreak of the Crimean War in 1854 had caused no little apprehension in the minds of the people of New South Wales lest they should receive an unwelcome visit from some armed Russian cruiser. It was in consequence of this that Sir William Denison decided on making some attempt at fortifying the harbour of Port Jackson. Several forts were erected and guns placed in position; the forts and guns remain to this day, monuments of the want of foresight which led to their construction and of the ease with which public money can be thrown away in times of scare. To modern eyes the value of these preparations seems peculiarly ludicrous.

The first Ministry under Responsible Government, short-lived though it was, is worthy of record as marking a new stage in the Colony's progress. Its personnel was as follows:—Stuart Alexander Donaldson, Colonial Secretary; Thomas Holt, Colonial Treasurer; William Montagu Manning, Attorney-General; John Bayley Darvall, Solicitor-General; George Robert Nichols, Auditor-General; and William C. Mayne, Representative of the Government in the Legislative Council. Nichols was also Secretary for Lands and Works in this Administration. Donaldson, Manning, and Darvall were appointed Members of the Executive Council on the 29th April, 1856, but they did not take office until the 6th June, as some preliminary arrangements were necessary before they vacated their seats as Members of the Legislative Assembly. Mr. Alexander Warren was also appointed a Member of the Executive Council on the 21st May, 1856, but resigned without entering upon the duties of the office.

Early in 1857 a Bill was reserved for the Royal Assent, which had for its object the repeal of so-much of the Constitution Act as required the concurrence of two-thirds majorities in both Houses of Parliament in the passing of measures for the alteration of the Constitution, or of the number and apportionment of representatives in the Legislative Assembly. In the same year the public mind was greatly disturbed by the spread of a rumour to the effect that the Moreton Bay district was to be separated from New South Wales with a view to a revival of transportation to that settlement. A series of motions embodying the popular sentiment on the subject was moved by Mr. Parkes, and carried by the Assembly without division.

The subject of Federation had received considerable attention from the framers of the Constitution, and it was again brought up by Mr. E. Deas-Thomson, who moved in the Legislative Council for a Select Committee to bring up a report on the matter. This Committee subsequently met and brought up a report embodying various resolutions, but prorogation of Parliament stopped further progress.

In the year 1855 steam communication was renewed with England. It had been interrupted by the outbreak of the Crimean War, when all the available means of transport were pressed into service for the conveyance of troops and stores to the seat of operations. But so far as the colony was concerned, this year was marked by a much more important event, namely, the opening of the railway line which connected Sydney and Parramatta. On the 26th September, five years after the first sod was turned, and nine years after the railway project was mooted, the first train that ran in New South Wales left the Redfern Railway Station.

The year 1856 saw the erection, at the instance of Sir William Denison, of the Sydney Observatory, a great number of the instruments therein being those which were originally used in the old Parramatta Observatory. The first observatory in the colony existed as far back as 1788, a view of Port Jackson at the time showing it as on the shore of Sydney Cove. On the 29th October, 1858, the telegraph line between Sydney, Melbourne, and Adelaide was opened for communication, while extensions to Bathurst and Maitland were completed two years later.

The year 1857 was marked by an unprecedented number of casualties. In many districts of the colony disastrous floods occurred, resulting in much loss of life and property. The valleys of the Hunter and Hawkesbury Rivers in particular were the scenes of much devastation. Another awful catastrophe was the wreck of the "Dunbar" at the Gap, near Sydney Heads, when, out of 120 persons, mostly colonists returning to New South Wales, only one was saved. This disaster was shortly afterwards followed by another, the wreck of the "Catherine Adamson" near the Heads, resulting in the loss of twenty-one lives.

In consequence of the latter tragic occurrences, steps were taken to improve the coastal lighting in the vicinity of Sydney Heads, and a fine lighthouse was erected on outer South Head.

About the middle of 1858 reports came down the Queensland coast of the discovery of gold at Port Curtis. The find was made at a cattle station called Canoona, some seven miles from the landing-stage of what is now the city of Rockhampton, on the Fitzroy River. The discovery was greatly magnified, as was, and is, so often the case with respect to new "rushes"; and a great exodus set northwards, especially from Sydney and Melbourne. During the month no less than 4,000 miners left Sydney for Rockhampton, and the excitement grew with every shipload that left the port. A township sprang into sudden existence, and by the end of October some 10,000 miners were assembled at the scene of the "rush." But the Canoona field was as short-lived as it was famous. The area of payable workings was confined to some two and a half acres, and even in this limited space the gold was all on the surface. Deep digging was rewarded with disappointment, and the field was proved a failure. The miners flocked to Sydney, and it became necessary for the State to relieve their destitution. By the end of the year 1858 the Port Curtis field was practically abandoned, but, strange to relate, the surrounding district has since developed into one of the richest fields in the northern colony. Fortunately, shortly after the failure of the Canoona "rush," gold was found at Kiandra, in the neighbourhood of Snowy River, and a number of miners quickly collected on the spot, though anything like systematic exploitation was not possible during the winter months. The Kiandra field was quickly worked out for the time being; though the workings at New Chum Hill, and other places in the vicinity, have since been profitably reopened. Discovery followed upon discovery in various parts of the colony about this time, one of the most famous being that of Burrangong, or Lambing Flat, which was subsequently to give the Government no little trouble in connection with the rioting of the diggers over the influx of Chinese.

In 1859 assembled the new Parliament, which had been elected under Cowper's measure providing for increased electoral representation, universal manhood suffrage, and vote by ballot. Every Parliament since then has been elected on the same basis, with the extension of manhood suffrage by the adoption of the principle of "One man one vote"; the adjustment, from time to time, of electoral representation of population, and a few minor changes.

The first half of the year 1860 was marked by heavy and greatly destructive floods, and the Legislative Assembly was impelled to vote the sum of £3,000 for the relief of the sufferers. The gold-fields at Kiandra and Burrangong were gradually absorbing the disappointed men who had returned from the Port Curtis "rush," and considerable activity in the exploitation of the precious metal was everywhere exhibited. But if the mining industry was in a prosperous condition,

so much cannot be said of the pastoral interest. About this time a new sickness broke out among the stock in the colony; this was anthrax, called locally the "Cumberland Disease," and many stock-owners were heavy losers.

The presence of large numbers of Chinese at Lambing Flat gave rise to a serious disturbance towards the close of 1860. Matters had reached such a pitch that bodies of police and military had to be despatched to the locality to maintain order. There is no doubt that the action of the Premier, Mr. Cowper, in personally proceeding to the diggings, and promising on behalf of the Government to give the miners' claims every consideration, averted what might have proved to be far more serious developments.

After the first excitement of the rush for gold had died out, the question of land settlement had to be dealt with in an entirely new spirit, to meet the requirements of a class of immigrants different to that contemplated by previous enactments. In September, 1860, Mr. Robertson introduced two Land Bills—the Crown Lands Alienation Bill and the Crown Lands Occupation Bill. The main principle of the latter Bill was that of "free selection before survey," but after a protracted debate the measure was defeated. Soon afterwards a vote of want of confidence in the administration was carried, and Parliament was dissolved.

One of the last official acts of Sir William Denison gave rise to much criticism and parliamentary attack. After a lengthy correspondence between the Imperial and Colonial Governments, the Governor made a re-grant to the heirs of a person named Tawell of certain property escheated to the Crown. Tawell was a returned convict who had been executed in England for a murder he had committed there. The grant had been drawn up in the office of a private solicitor, and the Governor demanded the Great Seal of the Colony from Mr. Cowper in order to impress the grant with it. The Premier refused to hand it over, and pointed to a previous decision of the Cabinet on the subject. But Sir William Denison had received the command of the Secretary of State and was determined to obey it, notwithstanding the protests of the Colonial Ministry. He, therefore, insisted on the surrender of the Seal, and the Ministry handed it over, but tendered their resignations at the same time. His Excellency having completed the deed of grant, returned the Seal, but declined to receive the resignations of the Ministry. This led to a proposal in Parliament by Mr. Cowper that a Committee should be appointed to prepare an address to Her Majesty praying that she might be pleased to direct that the Great Seal of the colony should not be used except with the advice of a responsible Minister, or of the Executive Council for the time being. After some debate, however, no further action was taken in the matter.

An event of the greatest importance during the régime of Sir William Denison was the separation of the Moreton Bay district in the year 1859, and its erection into a separate colony under the name of

Queensland. The agitation for separation had continued on the part of the northern settlers for many years; but they encountered a determined opposition at the hands of the representatives of the southern communities. The Imperial Government requested Governor Denison to draw up a report on the advisability of granting self-government to the residents of Moreton Bay district, and in his reply the Governor strenuously opposed the idea. When the text of the Governor's despatch was published it raised a storm of indignation in the breasts of the northerners. But the indignation was transformed into delight when Her Majesty's Government informed His Excellency that the time had arrived when "separation would be desirable," despite vice-regal arguments to the contrary; and at length, on the 13th May, 1859, Royal Letters Patent were issued creating the Colony of Queensland, and appointing Sir George Ferguson Bowen as its first Governor. The new colony was formally proclaimed on the arrival of Bowen in the month of December following, and separation from the mother-colony was an accomplished fact.

Sir William Denison surrendered office on the 22nd January, 1861. From the 23rd January to the 21st March, the Government was administered by Lieutenant-Colonel John F. Kempt, of the 12th Regiment. On the 22nd March, the Right Hon. Sir John Young arrived in the colony, but was not immediately sworn in as Governor-in-Chief, as he had reached the colony in advance of his credentials. He, therefore, took office as Administrator, and as such remained until the 15th May, when he assumed the position of Governor-in-Chief, and held it until the 24th December, 1867.

Throughout the whole of the period during which Sir John Young presided over the Government of the colony a great deal of democratic legislation was attempted, and some carried into effect. About this time the gold-miners made their influence felt as a political factor in the colony, and brought sufficient pressure to bear on the Government to ensure the passing of a Gold-fields Bill, with especial reference to aliens. The labour market was starved through the withdrawal of hundreds to the diggings, and the Assembly voted the sum of £5,000 for the despatch to Great Britain and Ireland of lecturers and immigration agents, the choice falling upon Messrs. Parkes and Dalley, who accordingly left the colony to carry out this mission.

Early in 1861, Mr. Robertson again introduced his Land Bills, and to ensure their passing the Upper House resigned his seat in the Assembly, and on the 3rd April was sworn in as a member of the Legislative Council. In order to counteract the determined opposition which the measures aroused in the Upper House, twenty-one new members were appointed to the Council. The effect of these appointments was to bring about a parliamentary crisis, the President of the Council together with a number of the members withdrawing from the House, and, as the new members could not be sworn in, the Legislative

Council ceased to exist. Under any circumstance the Council had not long to live, as its members were nominated for a term of five years only; and as no legislation had been passed in regard to a new Council, it devolved on the Governor to choose a Council whose members would hold seats for life. The nominations gave the Governor's advisers much trouble and anxiety, and the Premier, Mr. Charles Cowper, called to his aid the experience of the most capable man in the political arena of the colony—William Charles Wentworth. The Governor, on his part, was also extremely anxious in the matter of the nominations, and selected some twenty-seven names for the life period, or six above the minimum number, being advised in the matter by Edward Deas-Thomson, the most experienced person in the official life of the colony, and its virtual ruler in the days of Sir Charles Fitzroy. But there were other men of tried experience and high position, and His Excellency was in daily consultation with a little council privileged and able to advise him. Of those proposed for appointment several declined the honour, but on the 24th June, 1861, the following list of the first "life" Council was published in the *Government Gazette*. From an historical standpoint it possesses an especial interest—George Allen, William Byrnes, John Campbell, John Bayley Darvall, Robert Fitzgerald, John Fletcher Hargrave, George Kenyon Holden, Charles Kemp, John Macfarlane, Alexander Macarthur, Sir William Montagu Manning, Francis Lewis Shaw Merewether, James Mitchell, John Hubert Plunkett, John Robertson, Ralph Meyer Robey, Bourn Russell, William Russell, Alexander Walker Scott, Edward Deas-Thomson, Edward Wolstenholme Ward, John Brown Watt, and William Charles Wentworth—the appointment of the last-named as President of the Legislative Council being announced in the same number of the *Government Gazette*.

The first matter to engage the attention of the new Parliament was Robertson's deferred land legislation. At last, on the 18th September, 1861, the Crown Lands Alienation Bill and the Crown Lands Occupation Bill were introduced to the Assembly by Mr. Cowper. Both Bills were passed through all their stages, and transmitted to the Legislative Council on the following day, and soon afterwards became law. A Chinese Immigrants Regulation and Restriction Bill was introduced on the 25th September, 1861, and practically embodied the legislation of Victoria on the subject. It provided for a penalty of £10 upon the owner, charterer, or master of any vessel, for every Chinese passenger arriving at the port in excess of one to every ten tons of the ship's tonnage; and likewise for the payment of £10 by each Chinese before being permitted to land. It also provided for an annual payment of £4 by each Chinese during his residence in the colony, and there was a clause against the naturalisation of Chinese. After some differences with the Council and several amendments made in the Upper House, the Bill got through its final stages, and was assented to on the 27th November, 1861.

The question of Church and School Lands, which had been before the country for many years, again came up for discussion. In 1826 a Corporation styled the Trustees of the Clergy and School Lands in the Colony of New South Wales was empowered, amongst other things, to sell and grant leases of such lands as should be granted by the Crown, the rents and purchase money to be paid to the Treasury. The net revenue obtained was to be applied to two funds—the Improvement and Building Fund, and the Clergy and Schools Account—the former fund being devoted to the improvement of churches, parsonages, school-houses, &c., and the latter to the support of the clergy of the Established Church of England and the maintenance of schools and schoolmasters. All lands which had been set apart for the maintenance and education of orphans and all moneys pertaining thereto were also vested in this Corporation. In 1833 the affairs of the Corporation were transferred to a Board of Commissioners, and all property belonging to the Corporation at the time of its dissolution was vested in the Crown. The annual income arising from sales and leases of property was blended in one fund and paid to the Colonial Treasurer, and was applied in accordance with instructions received from the Secretary of State in the proportion of five-sevenths in payment to ministers of the Church of England, Presbyterian, Roman Catholic, and Wesleyan Methodist Churches, and two-sevenths to the purposes of public instruction. In 1864 it was urged in Parliament that, on the dissolution of the Corporation previously alluded to, the Clergy and School Lands became waste lands of the Crown, and the revenue arising from them should be paid into the Consolidated Revenue Fund, but by a decision of the Supreme Court it was held that these lands were not so disposable, but had reverted to and become vested in the Crown for the promotion of religion and education in the colony.

The matter of an elective Legislative Council, with a modified franchise on the basis of the Assembly's membership, was again brought forward in 1861. A Bill dealing with the question had passed the Assembly in the preceding session but had not been proceeded with, and a similar Bill was introduced by the Attorney-General into the Council and referred to a Select Committee. At the close of the session this Committee brought up a progress report, wherein they stated that they had discussed the subject, but had not had time to mature their views. All through this particularly active legislative period the question of an elected Upper House was a burning one. Wentworth, disappointed with the failure of his proposed nominee chamber, lent the weight of his approval to the measure of reform. In June, 1862, the Attorney-General again introduced a Bill, which, after argument, was referred to a Select Committee. The property qualifications recommended by this Bill were—Freehold or leasehold for an unexpired term of at least 21 years, or of the value of £300, or £20 per annum; leasehold if for a less term, of £50 per annum; household occupancy paying rent of £50 per annum, or pastoral tenure of Crown

Lands at £20 per annum. The "Hare" system of voting for election was advocated. It was also proposed to introduce a principle which provided for the appointment of nominated members selected for special services, who should hold their seats for life. After passing through all its stages in the Council, this Bill was sent to the Legislative Assembly on the 8th October, where, after being debated for some time, it was allowed to drop. Another measure which aroused a good deal of controversy was the Bill to prohibit future grants of public money in aid of public worship. Prior to the third reading, requests were put forward by the clergy of the Church of England for permission to represent their case by counsel, and later, Mr. Gordon was heard at the bar of the House. The Bill passed the Assembly and was transmitted to the Legislative Council, where various protests were lodged against its acceptance. The council made certain amendments in the measure, which, however, were not insisted on, and having passed through its remaining stages, it was reserved on the 10th December for the signification thereon of Her Majesty's pleasure, which was given in due course.

The question of cotton cultivation was one of extreme interest during the early sixties, when the American Civil War was at its height. Members had curious visions of a second America, white with a wealth that should replace that of the gold-field days, already drifting into a memory. On the 27th June, 1862, Mr. Hay obtained leave to introduce a Bill for the encouragement of cotton-growing. The Act provided that grants of portions of waste lands might be made on certain conditions to associations and responsible persons who would undertake cotton culture. The Bill passed both Houses and received the Royal Assent.

On the 9th October, 1862, Mr. Wentworth vacated the President's chair in the Legislative Council, and was succeeded by Mr. (afterwards Sir) Terence Aubrey Murray, formerly Speaker of the Legislative Assembly. In the meanwhile Messrs. Parkes and Dalley, emigration agents and lecturers, were recalled from their mission to Great Britain and Ireland in pursuance of a resolution of the House of Assembly, adopted on the motion of Mr. Robertson.

During the interval that elapsed between the session of 1862 and that of 1863, an Intercolonial Conference was held in Melbourne to discuss the existing tariffs, and certain other matters affecting the interests of the colonies. A more extended reference to the deliberations of this Conference will be found in the chapter dealing with the history of Victoria.

On the 19th August, 1863, Mr. James Martin (afterwards Chief Justice of the Colony) moved:—"That, in the opinion of this House, the alarming insecurity for life and property which has so long prevailed throughout the country districts is in a high degree discreditable to Her Majesty's Ministers in this colony; and, secondly, that the conduct of Her Majesty's Ministers in this colony, in the appointments to the Magistracy, and generally in connection with the administration

of justice, has been such as to call for the strong condemnation of this House." Indeed, the condition of the country districts had grown to be alarming in the extreme. Acts of bushranging (or of "robbery under arms") were of daily occurrence, and the police appeared powerless to cope with the evil. Highway robbery is an invariable practice in young countries where means of communication and transit are limited. From the earliest times it had been the experience of New South Wales and Van Diemen's Land, where a large prison population and the scattered nature of settlement made it an extremely difficult task to deal effectively with criminal escapees. Victoria drew several highwaymen to her country districts as soon as the gold discoveries had made it profitable to "stick up" escorts and mail coaches. It was not until the colonies were traversed by railroads and threaded by telegraph wires that life and property could be considered as being at all safe. It was by no means the first time in the history of New South Wales that extraordinary legislation had been demanded to combat the great evil of bushranging; and Van Diemen's Land was also obliged to make strenuous efforts to put down this pest. The Bushranging Act of New South Wales, one of the most remarkable measures known in the colony, was passed by the old Legislative Council in 1830, at a single sitting. The debate on Mr. James Martin's resolutions concerning bushranging, moved on the 19th August, 1863, continued until the 27th of the same month, when the resolutions were negatived by 44 to 18. On the first of the month following Mr. William Forster moved that the proceedings and results of the recent Intercolonial Conference held at Melbourne had been highly unsatisfactory, but his resolution was lost by 27 to 16.

The year 1863 witnessed the initiation of the long-protracted Riverina district trouble. On the 2nd September Mr. Morris presented a petition from the inhabitants of that part of the colony praying for the establishment of their district as a distinct one, with defined boundaries, on the same footing as that of Port Phillip before separation, and with a superintendent or sub-governor. The petition was received, and on the same evening a similar petition to the Governor, with the reply of the Colonial Secretary thereto, was laid on the table. The letter of the Colonial Secretary was to the effect that the Government were not prepared to recognise the necessity of defining any portion of the existing colony of New South Wales as a distinct province; and that the appointment of a Government superintendent would impede rather than expedite the transaction of public business. Amidst their arduous duties the members of the Assembly found time to attend to their own particular affairs, and, on a resolution moved by Mr. Stewart, affirmed, by 19 to 13, that it was desirable that members of Parliament should be entitled to travel by railway free of charge.

Sir John Young retired from the Government of New South Wales on the 24th December, 1867, and Sir Trevor Chute, K.C.B., administered the Government till the arrival of the Earl of Belmore, who entered office on

the 8th January, 1868. About a week after the installation of the new Governor, the Duke of Edinburgh arrived in the colony, and was received with great demonstrations of loyalty. A feeling of widespread horror pervaded all classes when news respecting his attempted assassination on the 12th March became known. The party feeling, aroused by the suggestions—very widely believed—that this unfortunate occurrence was instigated by a certain section of the community, forms one of the most regrettable incidents in the annals of the colony.

On the 18th March Mr. Martin moved, and Mr. Robertson seconded, a motion for the suspension of the Standing Orders, with a view to the passing through all its stages in one day of a "Bill for the Better Security of the Crown and Government of the United Kingdom, and for the Better Suppression and Punishment of Seditious Practices and Attempts." The Bill passed through all its stages in both Houses in one day, and assent thereto was reported on the next day. The Treason Felony Act, brought in by Mr. James Martin, was, in its scope and language, according to the reported words of that gentleman, "sufficiently large to include any attempts at deposing the Queen, establishing a Republic, putting down the Courts of Law, or any designs which may exist here or elsewhere for any such purposes as those."

Shortly after the departure of the Duke of Edinburgh for England, Mr. Henry Parkes, in a speech delivered at Kiama, stated that he held conclusive proof that the attempted assassination of the Prince was the result of a deliberate plot, and further, that someone who had a guilty knowledge of the secret, and whose fidelity was suspected, had been foully murdered. These statements created a profound impression throughout the country, and in the early part of 1869 formed the subject of an inquiry by a Select Committee of the Legislative Assembly. This Committee, in its report, practically declared that the statements made by Mr. Parkes were unsupported by the evidence adduced. However, when the report came before the Assembly, Mr. Parkes secured its rejection by a substantial majority, and had it expunged from the records. The Assembly then adopted resolutions condemnatory of the methods employed by the Select Committee in conducting the inquiry.

On the 15th December, 1868, the Triennial Parliaments Bill was introduced by Dr. Lang. On the 22nd January following, the second reading of the Bill was negatived by 20 to 18, and it was then discharged by the casting vote of the Speaker. It was, however, subsequently reintroduced and passed in 1874.

In the months of June and July, 1870, an Intercolonial Conference was held in Melbourne, at which representatives from New South Wales, Victoria, and South Australia were present, the New South Wales delegates being the Hon. Charles Cowper, Colonial Secretary, and the Hon. Saul Samuel, Colonial Treasurer. Information respecting the deliberations of this body will be found in the chapter of this work dealing with the history of Victoria.

The year 1870 was the hundredth anniversary of the discovery of the eastern coast of the Continent by Captain Cook, and it was felt that it would be a peculiarly appropriate year for an Intercolonial Exposition. Queensland, South Australia, Tasmania, and Victoria furnished exhibits illustrative of their resources, but New Zealand was not represented. The Exhibition was held in a building erected in Prince Alfred Park by the City Corporation at a cost of £20,000, and, in spite of various drawbacks, was a pronounced success.

During the elections following immediately on the dissolution of Parliament in 1872, considerable feeling was displayed in the Southern Border Electorates over the separation question. Mass meetings were held at Albury, and attempts were made to revive the agitation for the separation of the Riverina from the mother colony.

The Earl of Belmore retired from the Government of New South Wales on the 22nd February, 1872, and an interval of about four months elapsed before the arrival of Sir Hercules Robinson, during which time the Government was administered by Sir Alfred Stephen. On the 3rd June, 1872, the new Governor assumed office under a Commission appointing him Governor and Commander-in-Chief of New South Wales.

On the 7th May, 1873, Sir James Martin announced in the Legislative Assembly the death of Mr. William Charles Wentworth, and moved that as a fitting tribute of respect the House should adjourn, which was accordingly done. On the meeting of the Legislative Council, on the day following, that House also adjourned in token of respect to Mr. Wentworth's memory.

Legislative activity at about this period concerned itself most particularly with the Border duties. A Bill to make provision for free intercourse across the boundary-line of the river Murray was introduced by Mr. Parkes on the 12th June, 1873, and passed the Assembly by a large majority. The Bill was, however, shelved by the Legislative Council by a majority of one in a very small House. The action of the Council caused much irritation in the Assembly, and the Premier announced his intention of taking steps to reform the Upper House. About this time the Government introduced a public works policy of an expansive character involving the construction of four separate lines of railway, as well as various harbour works and public buildings, the whole involving an expenditure of £1,562,000; and in order to have labour for the construction of these works, it was proposed to set apart £50,000 for immigration purposes. This public works policy was continued for a little over fifteen years under various administrations.

Towards the close of 1874 the Governor announced to the House the intention of the Imperial Authorities to take over the Fiji Islands in the South Pacific, and in pursuance of this policy he proceeded to the islands, and formally took possession of the group in the name of Her Majesty.

During Sir Hercules Robinson's term of office the first "through" cable message was received from England; railway communication with Melbourne was carried on within the Victorian territory from the metropolis of that colony as far as Wodonga; the cable from La Perouse to Wakapuaka was opened, and direct telegraphic communication between New South Wales and New Zealand thereby established; the railway from Sydney to Bathurst was opened to traffic; the overland telegraph line from Adelaide to Perth was completed, and the "Seven Colonies" were thus brought within sympathetic earshot.

But, perhaps, the most important event marking Sir Hercules Robinson's term of office was of political and not of material significance. This was the institution in New South Wales of Triennial Parliaments. The first Parliament elected under the Constitution Act met on the 22nd May, 1856; and the duration of Parliament, unless it should be previously prorogued, was originally fixed at five years; but in 1874 an Act was passed establishing Triennial Parliaments, and this Act has ever since remained in force.

On the day following the departure of Sir Hercules Robinson (the 20th March, 1879), Sir Alfred Stephen took up the duties of Administrator, and discharged them until the 3rd August, when Sir Augustus William Frederick Spencer Loftus, P.C., G.C.B. (commonly called Lord Loftus), entered on his term of office as Governor.

The holding of the first International Exhibition was a great event in Lord Loftus' régime. The previous Intercolonial Exhibition having proved so successful, it was determined that this one should partake of an international character. The management of the affair was originally in the hands of the Agricultural Society, but it assumed such large proportions that the Government determined to take it over, and entrusted the work to an honorary Commission. The Exhibition was held in a commodious building called the Garden Palace, and was in every respect a pronounced success. On the advantage to commerce resulting from it there is little need to dwell. Unfortunately the building was burnt to the ground in 1882, and many valuable documents were destroyed.

The colony gave further proof of its power and its resources in the despatch of a military contingent to the British Army which had been working its way up the Nile in an endeavour to rescue General Gordon. The prevailing uncertainty as to the fate of the gallant Governor of Khartoum caused profound anxiety in the colony, and the Acting Premier, the Hon. William Bede Dalley, with the sanction of the Ministry, offered the armed assistance of New South Wales. It was thought that an expedition from Suakim to the Nile was about to be undertaken, and under this impression the New South Wales Government suggested the despatch to Suakim of a force of infantry and artillery, together with the necessary supply of horses. The offer of the colony was accepted. On the 3rd March, 1885, the Australian Contingent, as it was called, although it was really the New South Wales Contingent, sailed from Sydney to Suakim in two large steamships, the "Iberia" and the

“Australasian,” which left Port Jackson amid the wildest enthusiasm. This was the first military support ever tendered by any of these colonies to the mother country. The day of departure was proclaimed a public holiday, and no more brilliant and exciting spectacle had ever been seen in Sydney than was witnessed on the day of departure of the troops. The military plans for the Egyptian campaign were subsequently modified, and the little army returned in safety on the 24th June, nearly four months from the date of their setting forth, without having seen much service; but the impression produced in England by the spontaneous loyalty of the colonies was extraordinary, and this impression has been accentuated by the presence of Australian troops at the Jubilee Celebrations, the subsequent visit of a squadron of the New South Wales Lancers to England, and lastly, by the despatch of troops from the various Australasian colonies to assist the British forces in the Transvaal. The Soudan Contingent gave rise to a new estimate of the value of the Colonial Empire, and stimulated greatly the discussion of the whole question of Imperial Federation.

During Lord Loftus' term of office, a leading topic of conversation in social and political circles, and a source of Ministerial trouble and worry, was the celebrated Millburn Creek Copper-Mining Company scandal, which involved the reputation and probity of several persons occupying leading positions in the community. Among other events deserving of record, His Excellency's period of administration was marked by the successful sinking of the first artesian bore in Australia at Killara, New South Wales; and by the first issue of silver coin at the Sydney Mint. During this year the National Park, the largest of the metropolitan pleasure-grounds, was dedicated to the people of New South Wales, and it is intended that this locality shall, so far as possible, preserve for all time its distinctive scenery.

One of the most important measures passed in the colony since the introduction of Responsible Government, was the “Bill to make more adequate provision for Public Education,” introduced by Sir Henry Parkes in 1879, and assented to in 1880. This Bill, known as the “Public Instruction Act of 1880,” repealed the Public Schools Act of 1866, and dissolved the Council of Education, the powers of which were entrusted to the Minister of Public Instruction. The Bill abolished State aid to denominational schools and established a secular and compulsory system with free education for the children of those who were not in a position to pay the small fee imposed by law.

Another important enactment in 1879 was the Electoral Bill. This Bill, assented to in 1880, repealed the Electoral Act of 1858, divided New South Wales into 68 electoral districts, and increased the number of members to serve in the Assembly to 103.

Allusion has been made to the vexed question of Church and School Lands. This was finally disposed of by a measure called the Church and School Lands Dedication Act, which was assented to in 1880, and vested the control of the Church and School Lands in the Legislature

of New South Wales, and applied the income arising therefrom to the purposes of public instruction. An Intercolonial Conference commenced its sitting in Melbourne on 26th November, 1880, the colonies represented being New South Wales, Victoria, and South Australia. Various matters of intercolonial concern were discussed, such as concerted action with respect to the influx of Chinese, the appointment of a Federal Council to deal with questions affecting the colonies in common, Border duties, &c.

On the 7th July, 1881, Sir Henry Parkes introduced his Chinese Restriction Act, and it received the Royal Assent on the 6th December. Provision was made for the payment of £10 by every Chinese entering the colony by sea or land, and restrictions were placed on the number which could be introduced by any one vessel. Severe penalties were provided for any infringement of the law.

The year 1883 witnessed the completion of the railway from Sydney to Melbourne. The line from the Southern capital to Wodonga had been opened in 1875, but it was not till eight years afterwards that the Southern line from Sydney reached this part of the border. Two years later the massive railway bridge crossing the Murray at Albury was completed, thus joining the colonies by an iron link. An important feature of the year 1883 was the discovery of the rich silver deposits at Broken Hill. In 1885 the Broken Hill Proprietary began operations, and during the period extending from that year to the 31st May, 1902, silver and lead to the value of £24,440,000 were produced.

Amongst the remaining events of importance during the administration of Lord Loftus were the establishment of the Board of Technical Education, and the completion of the railway line to Bourke, on the river Darling. Lord Loftus' term of office came to a close on the 9th November, 1885, and his successor, the Right Hon. Baron Carrington, did not arrive in the colony till the 12th December following. In the meantime Sir Alfred Stephen discharged the duties of Lieutenant-Governor.

On the 23rd March, 1887, a terrible disaster occurred at the Bulli Colliery, when 83 miners lost their lives through an explosion of gas in the workings of the mine. As a result of the inquiry following on the catastrophe, the Legislature took steps towards minimising the possibility of such accidents occurring in the future.

The close of the year 1887 witnessed the completion of the present scheme of waterworks for the metropolitan district. In the early days of settlement the colonists had to be content with the waters of the "Tank Stream." At a later date a supply was obtained from the natural reservoir at Botany, but as this proved inadequate for the ever-increasing population, the present scheme, which is among the most perfect in the world, was initiated. The sources of supply are the waters of the Nepean, Cataract, and Cordeaux Rivers, draining an area of 354 square miles, the catchment area enjoying a copious and regular rainfall. The off-take works are built at a height of 437 feet above sea-level, and the water flows through a series of conduits,

partly tunnel, partly open canal, and in places wrought-iron aqueducts, to Prospect reservoir, a distance of 40 miles from the farthest source of supply. Here a storage reservoir has been constructed, capable of holding 11,000 million gallons, of which nearly 7,000 millions are available for supply by gravitation. From Prospect the water flows into various distributing and pumping reservoirs. During the year ended 31st December, 1901, the total amount of water supplied was 10,000,000,000 gallons, but this quantity by no means adequately represents the capacity of the available supply. Recent events, however, have proved that large as is the supply and the storage they are not likely to meet, for any lengthened period, the needs of the growing population of Sydney.

Early in 1888 the public mind was much exercised by the large influx of Chinese immigrants, who, in spite of the "Chinese Restriction Act of 1881," had been arriving in rather alarming numbers. In the preceding twelve months no fewer than 4,436 Chinese subjects had arrived in the country. Early in May two vessels arrived in Port Jackson bringing a large number of the aliens, but they were not allowed by the Premier, Sir Henry Parkes, to land. However, this action on the part of the Premier was contrary to law, and the matter was brought before the Supreme Court, with the result that he had to give way. Feeling still ran high in the colony, and at length, on the 11th July, 1888, Parliament voiced the sentiments of the people by passing a drastic "Chinese Restriction Act." Under the provisions of this measure, which is still in force, no vessel is allowed to carry more than one Chinese passenger to the colony to every 300 tons; such Chinese as land are required to pay a poll-tax of £100; they are not permitted to engage in mining without authority from the Minister of Mines; nor are they permitted to take advantage of the Naturalisation Act. An exception is made in the case of Chinese who, by birth, are British subjects. Provision is made for a penalty of £500 for a breach of the Act. This measure has, of course, tended greatly to reduce the number of Chinese immigrants, but it is believed that not a few manage to elude the vigilance of the police, and enter the colony by the landward borders. In 1887 the number of Chinese immigrants into New South Wales was 4,436; in 1888 it had fallen to 1,848, and in 1889 to 7. During 1901 the number recorded was 71, of whom 62 were British subjects.

From the year 1885 the colony began to suffer from a stoppage in the tide of prosperity, which people had fondly accustomed themselves to regard as permanent. In 1886 employment became difficult to obtain, and wages consequently fell. In the years 1886-7 work was suspended in some of the Southern collieries by strikes and disputes. On the 24th August, 1888, 6,000 coal-miners in the Northern district collieries laid down their tools. Ill-feeling between the owners and men ran high, and was further accentuated by the arrest of several miners on a charge of rioting. However, the sentences passed on these men were afterwards remitted by the Governor. This strike ended in November, but, after a short intermission, was renewed. In the years 1888-9 the

completion of various large public works, and the depletion of the Treasury of loan money, threw out of employment some 12,000 men, no inconsiderable portion of the unskilled labour of the colony. In September, 1890, the Broken Hill silver-mines closed down through a renewal of the strike. Soon after this a conference of employers issued their manifesto. The Intercolonial Labour Conference held its first meeting on the same day (12th September), and on the next issued a manifesto in reply to that of the employers. Fully 40,000 men left off work in response to the demands of the Conference, and on the 16th these were joined by various trolly and dray men. This was in the height of the wool season, and the carriage of wool through the city had to be undertaken by volunteer drivers. Shortly afterwards a shearers' strike took place, involving some 20,000 men. Again, in 1892, the miners at Broken Hill turned out on strike, and the silver-mines had to lie idle for over four months. On the 4th July, 1893, a general strike of seamen on the intercolonial steamers began, and ultimately ended in the defeat of the workers.

From 1872 to 1886 the Government of the colony had pursued what was popularly termed a spirited policy of public works. The completion of the works undertaken in pursuance of this policy threw large numbers of men on the labour market, and thus tended to reduce the wages of those who remained in employment. This cessation of public works also brought about the practical discontinuance of State-aided immigration, which had been the policy of the country for over fifty years. In 1883 the number of immigrants assisted to the colony by the State was 8,369; in 1886 it had fallen to 4,081, in 1887 to 1,362, and in 1888 it was only 528.

Lord Carrington's term of office was marked not alone by strikes and industrial disturbances, but by droughts, bush-fires, and floods. Early in March, 1888, immense loss was caused by the raging of bush-fires in many parts of the country, and further devastation was wrought by fires in the month of October, 1890. In May, 1889, the greater portion of the low-lying suburbs of Sydney was under water through excessive rains, while the Hawkesbury River was in flood. In September following heavy floods occurred on the Murray. In January, 1890, the Clarence and Richmond Rivers overflowed their banks, working great havoc in the lower portions of their courses. February and March, 1890, were noted for excessive rains, causing disastrous floods on most of the Northern coastal rivers. In April the towns of Bourke and Louth, in the far west, were inundated. Shortly afterwards the basins of the Darling and Murrumbidgee were the scenes of devastating floods.

From the 6th to the 14th February, 1890, the Federation Conference sat in Melbourne, and determined the preliminary details for the holding of a National Convention, such as was advocated by Sir Henry Parkes in the month of October preceding; and on the 7th May Sir Henry Parkes moved the Federal Convention resolutions in the New South Wales Legislative Assembly. Later on, the National Convention

was arranged for in all its various details, and was held in due course in the first year of the Jersey régime.

Amongst other matters of importance which characterised Lord Carrington's term of office in the colony were the inauguration of a weekly mail service to England on the 1st February, 1888; the completion of the railway line from Murrumburrah to Blayney; the opening of the Centenary Universal Exhibition on 14th March, 1888; the completion and opening of the final section of the Illawarra railway; the completion of the great iron railway bridge over the Hawkesbury River; the laying of a duplicate cable between New South Wales and New Zealand; and the passing of a Payment of Members' Bill, which received the Royal Assent on 20th September, 1889.

Lord Carrington left Sydney on the 1st November, 1890, and on the 15th January, 1891, his successor (the Earl of Jersey) arrived, the affairs of the colony being in the interval administered by Sir Alfred Stephen. Two days after the Governor's arrival the coastal district was visited by a terrific storm, and heavy rainfall. The severity of the weather delayed the completion of the Parliamentary elections of 1891 in various districts of the colony.

The year 1891 was also distinguished by the appearance of Labour as an element in practical politics. New South Wales was the first country in the world which endeavoured to settle labour grievances through the ballot-box, and to send a great party to Parliament with a direct representation of Labour. Several attempts had been made by Labour candidates to enter Parliament at by-elections; and although in one or two cases they were successful, the persons elected were not labour members in the sense in which the term is now understood. In June, 1891, a concerted effort was made by the Labour organisations, and the following manifesto was put forth:—(1) Electoral reform to provide for the abolition of plural voting; the abolition of money deposits in Parliamentary elections; extension of the franchise to seamen, shearers, and general labourers by means of a provision for the registration of votes; extension of the franchise to policemen and soldiers; abolition of the six months residential clause as a qualification for the exercise of the franchise; single member electorates and equal electoral districts on adult population basis; all Parliamentary elections to be held on one day, and that day to be a public holiday; and all public-houses to be closed during the hours of polling. (2) Free, compulsory, and technical education, higher as well as elementary, to be extended to all alike. (3) Eight hours to be the legal maximum working day in all occupations. (4) A Workshop and Factories Act, to provide for the prohibition of the sweating system; the supervision of land boilers and machinery, and the appointment of representative working men as inspectors. (5) Amendment of the Mining Act, to provide for all applications for mineral leases being summarily dealt with by the local wardens; the strict enforcement of labour conditions on such leases; abolition of the leasing system on all new gold-fields; the right to mine

on private property; greater protection to persons engaged in the mining industry; and inspectors to hold certificates of competency. (6) Extension to seamen of the benefits of the Employers' Liability Act. (7) Repeal of the Masters and Servants Act and the Agreements Validating Act. (8) Amendment of the Masters and Apprentices Act and the Trades Union Act. (9) Establishment of a Department of Labour, a national bank, and a national system of water conservation and irrigation. (10) Elective magistrates. (11) Local government and decentralisation; extension of the principle of the Government as an employer, through the medium of local self-governing bodies; the abolition of the present method of raising municipal revenue by the taxation of improvements effected by labour. (12) The Federation of the Australasian colonies upon a national as opposed to an Imperialistic basis; the abolition of the present Defence Force and the establishment of the military system upon a purely voluntary basis. (13) The recognition in legislative enactments of the natural and inalienable rights of the whole community to the land—upon which all must live, and from which, by labour, all wealth is produced—by the taxation of that value which accrues to land by the presence and needs of the community, irrespective of improvements effected by human exertion; and the absolute and indefeasible right of property on the part of all Crown tenants in improvements effected on these holdings. (14) All Government contracts to be executed in the colony. (15) Stamping of Chinese-made furniture. (16) Any measure that will secure for the wage-earner a fair and equitable return for his or her labour.

At the general elections in June, 1891, the Labour Party's candidates plunged into the battle with their platform of the foregoing sixteen clauses. For the first, or metropolitan, batch of elections, fifty-two members were required, and the Labour Party scored heavily. Twenty-seven candidates were nominated, and eighteen seats out of the fifty-two were captured, and even in those metropolitan constituencies where the Labour candidates failed, they nevertheless obtained a large number of votes. When the contest was over, the Labour Members in Parliament numbered thirty-five; but besides these some dozen or more members were prepared to support every plank in the Labour platform. Some of the constituencies cast a block Labour vote. For instance, Balmain sent four Labour Members to Parliament, Canterbury two, Forbes two, West Sydney four, Young two, Redfern two, and Newcastle two; while seventeen other constituencies sent one each. The party did not long remain united; and on the displacement of the Government of Sir Henry Parkes and the accession to office of Mr. (afterwards Sir) George Dibbs, of the thirty-five original members eighteen voted with the Government, and seventeen with the Opposition. Later the party became further disorganised, and a new "Democratic Party" was formed out of the fragments, with a platform comprising the following planks:—Regulation of factories and workshops, regulations of coal-mines and mining on private property, repeal of the conspiracy laws,

amendment of the Masters and Servants Act, an amended Land Bill, abolition of pensions, and the restriction of alien and pauper labour. The newly reorganised party was definitely pledged to a solid vote on every issue in which the existence of the party was threatened; and, though now less numerically powerful than it originally was, it is still essentially a factor to be reckoned with.

On the 2nd March, 1891, the Federation Convention held its first sitting in the New South Wales Legislative Assembly, under the presidency of Sir Henry Parkes. On the 9th April the National Federation Convention, after twenty-two days of deliberation, completed its labours, and was dissolved, after having agreed upon an Australian Commonwealth Convention Bill. The delegates taking part in this historic conference had been appointed by the different Australasian Parliaments, and numbered forty-five. The Convention was called together at the instance of the Hon. James Munro, the Premier of Victoria, and the colonies represented were New South Wales, Victoria, Queensland, South Australia, Tasmania, Western Australia (each sending seven delegates) and New Zealand (sending three). The Draft Bill framed by the Convention of 1891 did not, however, meet with the approval of the various Colonial Parliaments, though it afterwards formed the basis of the Bill adopted by the Convention held six years later. During the Convention of 1891, the Premiers of the colonies, assembled together as delegates from their respective provinces, met at the Colonial Secretary's office in Sydney, to discuss matters affecting their common Australian interest; and this was the first occasion of the gathering together of such a representative group.

The Australasian Auxiliary Squadron arrived in Port Jackson on the 5th September, 1891. It consisted of five fast cruisers and two torpedo gun-boats—viz., the "Katoomba," the "Ringarooma," the "Mildura," the "Wallaroo," the "Tauranga," the "Boomerang," and the "Karrakatta." The fleet was created under the provisions of the Australasian Naval Force Act, which was assented to on the 20th December, 1887, all the Australasian colonies entering into an agreement with the British Government for the payment of a subsidy towards its maintenance.

Among other incidents and events of Lord Jersey's term of office were the entering of the colonies into the Universal Postal Union; a temporary run on the Government Savings Bank at Sydney in February, 1892; and the opening of the Women's College.

In 1893 occurred the financial crisis which shook Australia to its foundations. Reference has just been made to the temporary run on the Government Savings Bank on the 11th February, 1892. This was the result of a groundless rumour regarding its stability. Far otherwise was the banking crisis of 1893. Bank after bank operating in the Australasian colonies suspended payment. A shipment of £900,000 in gold was made from London to meet the requirements of Australia, but the inadequacy of this sum was shown by the action of a Melbourne bank which refused to accept assistance amounting to nearly

£2,000,000 on the grounds that it was insufficient. Panic was general. The Dibbs Government endeavoured to allay the financial perturbation by declaring bank notes to be a legal tender and guaranteeing their payment by the State from the 15th May to the 13th November, 1893, after which date this expedient was no longer needed. The action of the Government had an excellent effect, but public confidence had received such a staggering blow that it was long ere it recovered. In the middle of 1893 a general strike took place of all seamen engaged on intercolonial steamers. Loading and working the vessels had to be done largely by volunteer labour, but the employers were strongly supported, and the strike terminated with the defeat of the workers. The problem of the unemployed, which had become intensified by the financial difficulties, received much attention during the year, and New South Wales, in common with the other States, inaugurated a system of co-operative village settlements to meet in some measure the unwonted demand for employment. As a rule, however, the experiments did not prove very satisfactory. In 1893 an important step was taken in the direction of improving the means of communication with the outside world by the contract entered into with Canada for a mail service between that country and New South Wales. Both countries subsidised the service which was carried on regularly between Sydney and Vancouver, and later was extended to Queensland and New Zealand.

The year 1894 was marked by fresh labour troubles, a general strike of shearers disorganising the wool industry for some months in New South Wales and Queensland. Unfortunately, in both States, the strike was accompanied by deeds of violence at the hands of lawless individuals, who did not hesitate at burning station buildings, and assaulting the police and free labourers. An attempt was made during the year to avert the recurrence of such industrial crises by the formation of a Board of Arbitration and Conciliation, but the scheme was not successful, and it was not till eight years later that practical legislation was carried into effect on the subject, in the shape of the "Industrial Arbitration Act of 1901." The Ministry of Sir George Dibbs gave way in July, 1894, to a fresh Ministry, under the leadership of Mr. G. H. Reid.

Early in 1895 a new tariff, on free-trade lines, and a Land and Income Tax Act were passed by the Assembly. The Legislative Council, however, refused to adopt the Premier's financial proposals, and Mr. Reid thereupon resolved to appeal to the country. The result of the general elections, in July, confirmed the policy of the Government, and the Customs Duties Bill and Land and Income Tax Assessment Bill were passed by the Assembly, but the Legislative Council still proved obdurate. Matters were, however, adjusted by a conference of the two Houses, and the measures finally became law. Amongst other important legislation passed by this Government were the Crown Lands Act, introducing the principle of homestead and settlement leases, the Factories and Shops Act, Public Health Act,

Water Rights Act, Advances to Settlers Act, Audit Act, and Public Service Act. The last-mentioned Act removed the appointment and promotion of officers from the control of political heads, and placed them under three independent Commissioners. A Federal Enabling Act was also passed, by which electors qualified to vote for members of the Assembly were empowered to choose ten members to represent New South Wales at a Federal Convention. The work of this Convention is elsewhere described.

Sir Robert Duff, who succeeded Lord Jersey in 1893, died in office on the 15th March, 1895. Sir Frederick Matthew Darley took up the administration, and continued his duties till the arrival of Viscount Hampden on the 21st November, 1895.

Throughout 1895 and 1896 there was abundant evidence that the country had recovered in great measure from the depression which culminated in the crisis of 1893. The pastoral, agricultural, and, dairying industries were in a flourishing state, while the labour market was relieved by the opening of a new field of enterprise in Western Australia. The benefits of the new Crown Lands Act were also felt in the spread of settlement, particularly in the South-western district. In the year 1896 occurred the death of one of Australia's leading public men in the person of Sir Henry Parkes. The deceased statesman had been one of the foremost advocates of Australian Federation, while during his long political career some of the most important measures on the Statute Books of New South Wales became law.

In 1897, New South Wales, in common with other portions of Australia, suffered from a protracted drought, the number of sheep in the State decreasing by over four millions. The most notable event of the year was the passing of a Bill containing the necessary provisions for holding a referendum on the question of Australian Federation; but this portion of Australian history is referred to more fully in a subsequent chapter. The month of June was marked by the celebration throughout Australia of the Diamond Jubilee of Her late Majesty Queen Victoria. With the exception of a strike at the Lucknow Gold Mine, industrial conditions were quiet, while local politics were more or less overshadowed by the Federal question. Federation still loomed largely in public affairs in 1898, and at the general elections in July it formed the principal subject of discussion on the hustings. In Parliament, attention was devoted to the consideration of amendments to the Federation Bill, and to the proposed imposition of fresh Customs Duties. The new mail contracts for a weekly service to England came into operation in February, having been renewed for a period of seven years on the old basis. Wrecks and disasters to shipping were remarkably heavy in 1898, no fewer than twenty-six vessels being wrecked, and seventy-nine lives lost on the coast of New South Wales.

After the disposal of the Federal question by the successful referendum of 1899, Mr. Barton resigned his position as leader of the Opposition, and was succeeded by Sir William Lyne. Early in September,

1899, a vote of censure was carried against the Government. The Reid Ministry, after a term of five years in office, was succeeded by a Cabinet under the premiership of Sir William Lyne. During the closing months of the year the new Government carried several useful legislative enactments, including an Early Closing Act, Navigation Act, Gold Dredging Act, and Friendly Societies Act.

In the pastoral industry, the ravages of drought were still keenly felt, particularly in the Western district, but as a set-off there was a phenomenal rise in the price of wool, the figures realised in some instances being twice as large as those obtained in the previous season. The year was also notable for the despatch of the first contingent of troops from New South Wales for service in South Africa.

In 1900, the government of Sir William Lyne was successful in passing several important legislative enactments, chief amongst which was an Act to Provide for Old-age Pensions, to which more extended reference is given in a subsequent chapter. During the year the State was subjected to a most unfortunate visitation in the shape of the bubonic plague, which, despite the strenuous efforts to eradicate it, has since re-appeared at intervals, though happily in a less virulent form. One result of its appearance was the increased attention given to the sanitation of the capital. Two important Acts of Parliament were passed, one for the Resumption of the Darling Harbour Wharfs, and the second placing the control of Port Jackson under the Sydney Harbour Trust. In response to a call for additional troops for service in South Africa three contingents were despatched by the Government, the voluntary subscriptions of citizens almost entirely providing for another detachment, while a corps known as the Imperial Bushmen's Contingent was organised and despatched at the expense of the Imperial Government. In November, Earl Beauchamp left for England after a term of office lasting for one year and eleven months. On the acceptance of a portfolio in the Federal Government by Sir William Lyne, the premiership passed to Mr. (now Sir) John See. A most important piece of legislation was carried by this administration in the form of the Industrial Arbitration Act of 1901. This measure declares strikes and lockouts to be illegal, and provides for the settlement of industrial disputes by means of a special court. The operation of the Act has been limited to five years, and it has already been appealed to in the settlement of disputes between employers and employed. Further contingents were despatched to South Africa in 1901, and the State also contributed its quota to the Commonwealth detachments in 1902. A naval contingent was sent to China to assist in the suppression of the Boxer rebellion. During the interval from the 25th May to the 6th June, 1901, Their Royal Highnesses, the Prince and Princess of Wales (then the Duke and Duchess of York) visited Sydney in continuation of their tour round the world.

Vice-Admiral Sir Harry Holdsworth Rawson, K.C.B., the newly-appointed governor, arrived in Sydney at the end of May, 1902. Prior

to the meeting of the present session of Parliament, the question of the reduction of the number of members, and the lessening of the cost of administration in various other ways had been prominently discussed, and these matters will form the subject of legislation at no distant date. During the early months of 1902 the continuance of the drought caused a phenomenal increase in the price of meat, and of farm and dairy produce. Reports from the pastoral districts state that in many instances the season has been the worst experienced since the beginning of settlement. The absence of rain over the catchment area, coupled with the unusual demands on the supply owing to the dry weather, considerably reduced the contents of the Prospect reservoir, and it became necessary to place restrictions on the over lavish use of the water previously indulged in. At the end of July a disastrous explosion occurred in the workings of the Mount Kembla coal-mine in the Illawarra district, when about ninety-five employees lost their lives.

In the following table will be found a list of the successive Ministries which have held office since the introduction of Responsible Government, with the duration in office of each :—

No.	Ministry.	From—	To—	Duration.	
				months.	days.
1	Donaldson	6 June, 1856	25 Aug., 1856	2	19
2	Cowper	26 Aug., 1856	2 Oct., 1856	1	6
3	Parker	3 Oct., 1856	7 Sept., 1857	11	5
4	Cowper	7 Sept., 1857	26 Oct., 1859	25	20
5	Forster	27 Oct., 1859	8 Mar., 1860	4	11
6	Robertson	9 Mar., 1860	9 Jan., 1861	10	0
7	Cowper	10 Jan., 1861	15 Oct., 1863	33	7
8	Martin	16 Oct., 1863	2 Feb., 1865	15	18
9	Cowper	3 Feb., 1865	21 Jan., 1866	11	19
10	Martin	22 Jan., 1866	26 Oct., 1868	33	6
11	Robertson	27 Oct., 1868	12 Jan., 1870	14	16
12	Cowper	13 Jan., 1870	15 Dec., 1870	11	3
13	Martin	16 Dec., 1870	13 May, 1872	16	28
14	Parkes	14 May, 1872	8 Feb., 1875	32	26
15	Robertson	9 Feb., 1875	21 Mar., 1877	25	13
16	Parkes	22 Mar., 1877	16 Aug., 1877	4	24
17	Robertson	17 Aug., 1877	17 Dec., 1877	4	0
18	Farnell	18 Dec., 1877	20 Dec., 1878	12	3
19	Parkes	21 Dec., 1878	4 Jan., 1883	48	16
20	Stuart	5 Jan., 1883	6 Oct., 1885	33	2
21	Dibbs	7 Oct., 1885	21 Dec., 1885	2	14
22	Robertson	22 Dec., 1885	25 Feb., 1886	2	3
23	Jennings	26 Feb., 1886	19 Jan., 1887	10	24
24	Parkes	20 Jan., 1887	16 Jan., 1889	23	27
25	Dibbs	17 Jan., 1889	7 Mar., 1889	1	20
26	Parkes	8 Mar., 1889	22 Oct., 1891	31	16
27	Dibbs	23 Oct., 1891	2 Aug., 1894	33	11
28	Reid	3 Aug., 1894	13 Sept., 1899	61	10
29	Lyne	14 Sept., 1899	27 Mar., 1901	18	12
30	See	28 Mar., 1901	Still in office.	.....	.....

VICTORIA.

THE first authentic identification of what is now the State of Victoria dates from the 19th April, 1770, when Captain Cook, in the barque "Endeavour," sighted the eastern coast of Australia at a spot which he named Point Hicks—probably the Cape Everard of to-day. Twenty-seven years afterwards a store ship was wrecked on one of the islands beyond Cape Howe, and some of the crew, reaching the mainland, walked along the coast a distance of 240 miles to Sydney. Surgeon George Bass, who had already made a voyage along the coast in an open boat, having heard from the shipwrecked sailors an account of their adventures, induced the Governor to provide him with a whale-boat, with a crew of six and provisions for six weeks, in order to carry on explorations. Having sailed along the coast as far as Wilson's Promontory without adventure, Bass was driven by a storm to seek shelter in Western Port, where he remained nearly a fortnight, making careful explorations. His provisions being almost exhausted, he returned to Sydney without making any further discoveries on the southern coast, though he had established the fact that the Continent was separated from Van Diemen's Land by a strait, which the Governor named after its discoverer. In the year 1800, Lieutenant Grant, in H.M.S. "Lady Nelson," sighted the south-western coast at Cape Northumberland, and left it at Cape Schank. He was, therefore, the first European to sail through Bass Strait from the westward. In the following year he sailed from Sydney and explored the southern coast as far as Western Port, and cleared land and planted a garden on Churchill Island. In the month of December, 1802, Lieutenant John Murray, who had succeeded Grant in the command of the "Lady Nelson," reaped the first harvest from Victorian soil, and then sailed on to the mouth of a large inlet, into which he sent his first mate, Lieutenant Bowen, in a launch. Some days later, the brig herself entered the Heads, and, after three weeks of exploration along the shores of the harbour, the territory was taken possession of in the name of the King, with the usual ceremonies, at Point Paterson.

On the 26th April, 1802, about three months after Lieutenant Murray's departure, Flinders, who was voyaging from England to Sydney, in the "Investigator," entered Port Phillip, but did not make any extended survey of the inlet. Acting on the favourable recommendation of Flinders, Governor King urged the Home authorities to make a settlement on the shores of Port Phillip, and, in the meantime, despatched a surveyor and an officer to make a tour of the Bay, and

report upon its suitability for occupation. Their report, however, was wholly condemnatory of the country as a place of settlement; but before this adverse verdict could reach England, Lieutenant-Governor Collins had been sent out, bringing with him, in the "Calcutta" and the "Ocean," the nucleus of a small colony to form the station which Governor King had so earnestly recommended. When Collins arrived in Port Phillip Bay in 1803, he effected a landing at what is now known as Sorrento; but being impressed with all its defects and none of its advantages for purposes of settlement, he stayed only about four months. Then he weighed anchor and conveyed his little colony to the newly-formed station at Risdon, in Van Diemen's Land. During his stay, however, the first white child born on Victorian soil saw the light, the first death occurred, and the first marriage was solemnised. Then for some twenty years the interior of the colony remained untrodden by the foot of a white man.

On the 16th December, 1824, Hume and Hovell, who had led an expedition overland from Lake George, in New South Wales, encamped on the site of the present city of Geelong. Two years later, in order to forestall French designs on the southern territory, a party was sent by sea from Sydney to form a station at Western Port; but this shared the fate of Collins' abortive settlement and was abandoned in consequence of the unfavourable reports of the leaders. The first serious attempt at settlement on Victorian soil was that of the brothers Henty, who established themselves at Portland Bay in 1834, with flocks, farm-servants, and agricultural implements, and were there found by Major Mitchell, in the course of his famous expedition through *Australia Felix*, as the explorer named the territory now known as Western Victoria.

The genuine colonisation of the Port Phillip district was effected in 1835 by two parties operating from Van Diemen's Land, the one being led by John Batman, a native of Parramatta, in New South Wales, and the other by John Pascoe Fawcner, a native of Launceston. Batman treated with some native chiefs for the transfer of 600,000 acres of land, and secured that area for trifling payments of flour, blankets, tomahawks, handkerchiefs, trinkets, etc.; but the claims of his company were disallowed by the Government at Sydney, and by the Home authorities; although the Batman Association was subsequently granted, by the Governor of New South Wales, the sum of £7,000 as compensation, in recognition of its assistance in the colonisation of the new territory. Batman was materially assisted in his transactions with the aborigines by a wild white man named William Buckley living among them. He had escaped from the expedition of Collins in 1803, during that leader's stay at Sorrento. At the time when Batman found him, Buckley was about 50 years of age. He had been a soldier, and was convicted for his share in a mutiny at Gibraltar. Batman arrived at the site of Melbourne towards the end of May, and Fawcner's party at the end of August, 1835; and they were speedily followed by other settlers from Van Diemen's Land. Stockmen came overland from

Sydney and the squattages near Lake George, and, before long, the downs and the valleys around Geelong and Melbourne were covered with the flocks and the herds of the new settlers.

In the month of September, 1836, the Port Phillip district was proclaimed open to settlement, and on the 29th of that month Captain Lonsdale arrived to assume later the position of Chief Magistrate. In the month of March of the succeeding year, the settlement was visited by Sir Richard Bourke, the Governor of New South Wales, and received from him its name of Melbourne; while the designations—Flinders, Collins, Bourke and Lonsdale—bestowed upon some of the principal streets, commemorate the early years of Australia's colonial history.

The first years of settlement were marked by steady progress. In 1839, the Secretary of State for the Colonies appointed Mr. Charles Joseph La Trobe Superintendent of the District of Port Phillip, an office carrying with it the authority and functions of a Lieutenant-Governor. Captain Lonsdale was appointed his secretary, and a Court of Justice was established, Mr. Justice Willis being the first resident Judge. In the beginning of the following year, Angus McMillan discovered, and partially explored, the large and fertile province of Gippsland, named in honour of Sir George Gipps, the Governor of New South Wales. On his return journey, McMillan met Count Strzelecki setting forth on a similar expedition. The latter gentleman explored the Murray to its sources in the Australian Alps, discovered and named Mount Kosciusko, travelled thence in a south-westerly direction to Mount Tambo and the Omeo District, crossed the Great Dividing Range, and, heading for Western Port, crossed and named eight large rivers, and succeeded in opening up a magnificent country covering an area of 5,600 miles, with 2,000 square miles of coast ranges and 250 miles of seaboard. In the wake of the explorations of McMillan and Strzelecki settlement rapidly followed; in fact, almost as soon as the travellers returned with accounts of their discoveries, adventurous spirits pushed forward to establish squattages in the wilds of Gippsland.

In 1842, Melbourne was incorporated, Henry Condell being its first mayor, and savings-banks were established in the new city. By an Act of the Imperial Parliament, passed in the same year, the inhabitants of the Port Phillip District were empowered to send six representatives to the Legislative Council of New South Wales. The first representative of Melbourne was also its first mayor, while of the five members elected to represent the voters outside the capital of the district, two—Mr. C. H. Ebdon and Dr. Alexander Thomson—were settlers in Port Phillip; and three—the Rev. Dr. Lang, Dr. (afterwards Sir) Charles Nicholson, and Mr. Thomas Walker—belonged to Sydney. Some time previously, an agitation had been started among the people of the Colony for separation from New South Wales, and expression was given to this feeling by Dr. Lang, who moved a resolution affirming its necessity in the Legislative Council of New South Wales on the 20th August, 1844. Dr. Lang's

resolution was negatived by more than three to one. A petition from the residents of the Port Phillip District, praying for separation, was, in the same year, sent to England; and on the 11th February, 1846, a favourable answer was received in Melbourne, and the occasion was marked by a public banquet to Dr. Lang. Events now moved rapidly. On the 5th August, 1850, Victoria, South Australia, and Tasmania were granted representative institutions by Imperial Statute; and when, on the 11th November news arrived in Melbourne of the granting of separation from New South Wales, the rejoicing thereat continued for five days. On the 1st July, 1851, Victoria was proclaimed a separate colony. On the 16th of the month Mr. La Trobe was appointed Lieutenant-Governor, Sir Charles Augustus Fitzroy, of New South Wales, being named about the same time as Governor-General of Australia; and on the 11th November the first Victorian Legislature—of which two-thirds were elected members—met at Melbourne. In 1850, the year preceding separation, the year also prior to that in which gold was discovered, and only forty-eight years since its discovery by Lieutenant Murray, Port Phillip had a revenue of £230,000, its exports amounted to £760,000, and its population was over 76,000.

The beginning of the year 1851 brought ruin and desolation to many a home, and in the gruesome designation of "Black Thursday" there has been preserved the bitter memory of the 6th of February, when the hot blasts from the north swept with fury over the earth, carrying with them flame and death. We are told by an eye-witness that the conflagration was terrible in its completeness; men, women, and children, sheep and cattle, birds and snakes, fled commingled before the fire in one common panic. For hundreds of miles the country was wrapped in flames; the most fertile districts were swept clean, flocks and herds were abandoned, and the entire population rushed in terrified hordes for their lives. The ashes from the forests on fire at Macedon, 46 miles distant, littered the streets of Melbourne.

Four months afterwards it was announced in the *Port Phillip Gazette* that gold had been discovered in the Henty Ranges. On the 9th June, 1851, the Gold Discovery Committee was formed in Melbourne; on the following day Mr. William Campbell, a settler on the Loddon, found some specks of the precious metal in quartz upon the station of Mr. Donald Cameron, at Clunes. Then the excitement spread and grew. On the 5th July a discovery of gold was reported at Anderson's Creek; on the 8th August gold was found at Buninyong; on the 8th September, at Ballarat; and on the 10th December at Bendigo. The simultaneousness and magnitude of these discoveries were perfectly startling. The simplest appliances and the labour of only a few hours appeared quite sufficient, to the overwrought imagination of the early gold-hunters, to secure a fabulous fortune, transcending the visions of romance. All classes and all distinctions were levelled, the thirst for gold seizing upon the entire community. The shops were empty, the streets deserted, the doors of the counting-houses

barred, the plough left rusting in the furrow, sheep and cattle wandered untended, while the port of Melbourne was filled with unmanned vessels, dropping to pieces for lack of attention or repair. But in the valleys, and all along the creek courses of Clunes, Buninyong, and the Loddon River, and in many other auriferous places around, thousands of men swarmed, and the roads from the port to the fields were crowded with the eager gold-seekers. Trade soon, however, began to revive, and brisk business was done by the gold-buyers and lodging-housekeepers in the city; by the carriers, who found freightage at £80 per ton from Melbourne to Bendigo to pay as well as gold-digging on the fields; by saloon proprietors and the shanty and dancing-hall keepers, who became the veritable "first robbers" of fortunate diggers. The public service was, however, reduced to abject inefficiency; the police decamped, like their superiors, in search of fortune; and even domestic servants, male and female, joined in the general stampede. The Governor was reduced to a condition of absolute powerlessness, and ruled in Melbourne with hardly any to obey his behests—like a monarch without a realm. Society was, in truth, utterly disorganised, and it was not long before the position became even more embarrassing. The news reached China, America, Europe, besides the neighbouring colonies, and at the port of debarkation up sprang "Canvas Town," formed by the myriad tents of the new arrivals. From South Australia and Van Diemen's Land, without reckoning the other colonies, something like 11,000 people poured into Melbourne, bound for the fields, in the latter half of the year 1851. Moreover, the supply of gold appeared inexhaustible. Before the end of the month of December in the year of its discovery (1851), upwards of 10 tons of the metal had been obtained from the Victorian fields; and it is interesting to note here that nearly one-third of the world's annual production of gold is raised in the Australasian Colonies. Of these Victoria, down to 1897, retained the first position; while the colony's total yield since the first discovery up to the end of the year 1901 was 65,136,000 oz., valued at about 260½ millions sterling.

The arrivals from Europe in the early days included, not only what has been picturesquely described by an Australian writer as the "brain and brawn of the Old World," but also many that could have been easily spared, viz, fugitives from justice, adventurers from California and the South Pacific, escaped convicts and disguised bushrangers, sharpers and professional gamblers from every city on the "Continent" or in the "States," and hordes of Asiatics from Canton and the Straits Settlements, there being not less than 25,000 Chinese whom the gold fever allured to the various fields. Week after week, and month after month, vessels sailed into Hobson's Bay, landing passengers and discharging cargoes in the most primitive fashion, for their crews deserted as soon as the ships dropped anchor or came to their moorings. The nobly-born and the gently-nurtured, professional men and navvies, artisans, farm-labourers, deserting soldiers and runaway sailors, "forty-

miners" from the fields of California, political refugees from France and Germany and Russia—representatives, in short, of every civilised and almost every uncivilised people beneath the sun—poured, in never-ending stream, into Port Phillip, *en route* for the gold-fields. Upwards of 15,000 immigrants arrived by sea during the latter half of 1851, 94,000 during the year following, and in 1853-4-5, nearly a quarter of a million. The gold yield from the Victorian fields reached its maximum only two years after its discovery, when the return of production during twelve months represented a value of £12,600,000. The value of the gold raised from 1852 to 1860 inclusive was upwards of £95,000,000; while the population of the colony in the latter year was little over half a million. The palmy days of gold-hunting represented a period of about a decade, and most of the great prizes were won in the early days of the history of the industry. The first large nugget (weighing 1,620 oz.) was found in Canadian Gully, Ballarat, in February, 1853. Another, found on Bakery Hill, in the same district, in June, 1853, weighed 2,217 oz. Men mining at Golden Point, Ballarat, each made from £300 to £400 sterling per day. The Governor, who visited this part of the field in 1851, says that he saw 8 lb. weight of gold washed from two dishes of dirt. He heard also of a party which had raised, at an early hour of the day, gold weighing 16 lb.; and the same party had succeeded in obtaining 31 lb. in weight before nightfall. But though the prizes were great, the failures were many; and numbers of the disappointed and disillusioned were glad to return to their former callings, or turn their hands to the employments that the conditions of the diggers' life called into being. Wages rose phenomenally, and carpenters and blacksmiths found constant work, and fierce competition among employers for their labour, at £1 and £1 5s. a day. Cartage from the seaport was excessive, amounting in the case of some fields to as much as £100 sterling per ton; and it is said that a publican, who controlled no less than 120 drinking shanties, disbursed as much as £1,500 a week in the conveyance of goods from Melbourne, for seven consecutive months, in the year 1853.

A noteworthy incident of the period was the robbery of the ship "*Nelson*," lying in Hobson's Bay, by a gang of desperadoes (probably escaped convicts from across the straits), who boarded the vessel and carried off gold-dust, valued at some £24,000 or £25,000 sterling. The criminal element in the community found exercise for their talents also in "sticking-up" and robbing the gold escorts on their way to the capital, sometimes killing the armed officials who formed the guard, though such bushranging exploits were much more common in the early gold-fever days of the neighbouring Colony of New South Wales.

Governor La Trobe was succeeded by Sir Charles Hotham, R.N., who arrived in Melbourne in the month of June, 1854. This official has been described as one who attempted to govern a free colony as he would the quarter-deck, and who, though possessed of many fine qualities, was totally lacking in the great essential of tact. He came

to Victoria in a time of administrative trouble and embarrassment. The separation of the Port Phillip district from the Colony of New South Wales had been attended by the creation of a Legislative Council, composed of ten nominees and twenty elected members. Among the latter there were, however, no representatives of the great bulk of the people who had been attracted to the gold-fields. One of the first acts of the Council was the imposition of a license-fee of £1 10s. per month—which had for a time been raised to £3—exacted from every person searching for gold, the license not being transferable, and available only within a half-a-mile of the police head-quarters whence it had been issued. Moreover, whenever it was demanded from a digger by a police officer, the license had instantly to be produced; and this proved an excessively galling condition. Digger-hunting by the young cadets in the Government service was frequently indulged in with unnecessary harshness, and the spectacle of some fifty or sixty handcuffed together was no uncommon thing. Everyone engaged in searching for gold who had neglected to procure or to renew, or who had lost or mislaid his license, was a subject for legal treatment; and the action of the authorities occasioned tremendous heart-burning. This culminated in an agitation for the suppression of the license-fee, which began at Bendigo, in 1853, and quickly spread to the other gold-fields. The Government met this manifestation of popular indignation, in 1854, by the issue of an order directing the police to devote two whole days a week to the hunting down of unlicensed diggers; and then the smouldering embers of rebellion broke into flame.

A digger named Scobie had been killed in a scuffle at an hotel in Ballarat kept by a man named Bentley, and the man's comrades believed the latter to be concerned in what they considered to be murder. The Police Magistrate, before whom Bentley was brought, acquitted him, and indignation meetings were immediately held. At one of these the hotel which had figured in the trouble was burnt to the ground, its owner only escaping by flight on horseback. For this act of incendiarism three men were arrested, not one of whom, it was alleged, was concerned in the affair; and a public meeting was held, at which resolutions were carried demanding their immediate release, affirming at the same time the right of the people to the exercise of political power. However, the three prisoners were taken to Melbourne, and each was sentenced to a short term of imprisonment. Again did the diggers demand their release, and again were they refused. Their attitude, however, was ominous, and two detachments of infantry were sent up to Ballarat from Melbourne. They arrived on the 29th of November, 1854, and were attacked by the diggers, who followed them to their bivouac. This brought about a sortie by the police, who drove the assailants of the military back. Two days afterwards there followed another digger-hunt, and the soldiers were called from quarters to support the constabulary. The diggers resisted

and organised themselves for an armed defence, electing the late Hon. Peter Lalor as their leader, and entrenching themselves behind a stockade in Eureka-street—since known as the Eureka Stockade. On the 3rd December the soldiers and police, consisting of 276 men, and including cavalry, advanced on the entrenchment to attack the recalcitrant diggers. The insurgents made a gallant defence, but, after several volleys had been fired on both sides, the Stockade was carried at the point of the bayonet, and the diggers were dispersed. During the engagement, which lasted about a quarter-of-an-hour, Captain Wise, of the 40th Regiment, was mortally wounded; about thirty of the diggers were killed, and 125 were taken prisoners; while of the soldiers, four were killed, and many were wounded. All the tents within the Stockade were burnt down; the district was placed under martial law, and the prisoners were conveyed to Melbourne. On the 1st April, 1855, they were arraigned on a charge of high treason in the Supreme Court, though three of the leaders in the outbreak—Messrs. Lalor, Vern, and Black—succeeded in evading capture. Public sympathy with the insurgents ran, however, so high, that no jury could be empannelled to convict them. Their defence was voluntarily undertaken by several leading barristers, and their acquittal was secured. An amnesty was then proclaimed; and the causes which led to the outbreak were removed. A commission of inquiry subsequently recommended the introduction of constitutional government on a representative system, based on a liberal franchise. On the 23rd November, 1855, the new Constitution, which had been prepared by the existing Legislature, and had received the sanction of the Imperial Parliament, was proclaimed. It established Responsible Government, with popular representation and two Chambers, both elective; and when the first Cabinet, with Mr. Haines as Premier, took office, the district of Ballarat was represented in Parliament by Messrs. Lalor and Humffray, both of whom were concerned in the armed resistance to authority at the storming of the Eureka Stockade. The former became, in course of time, and remained for years, Speaker of the Legislative Assembly.

The colonists proved themselves worthy of the trust reposed in them by the Home Government; though for one man at least the anxieties of the position were not outweighed by its compensations. The mental worry and distress attending the administration of the colony, proved too much for Sir Charles Hotham, and he succumbed to a severe illness at the close of the year 1855, the administration of the Government devolving upon Major-General Macarthur until the arrival of the next Governor.

Sir Henry Barkly, who had been appointed to succeed Sir Charles Hotham, did not arrive in the Colony until the 23rd December, 1856. Some few months after he assumed office, his wife, who had become very popular, died of injuries received in a carriage accident, the peculiarly sad circumstances surrounding the unfortunate event exciting the deepest sympathy from all classes of the community.

At the end of the year 1857, the Philosophical Institution took up the question of the exploration of the interior of the Continent, and appointed a committee to inquire into and report upon the subject. In September, 1858, and as soon as it had become known in Victoria that John McDouall Stuart had succeeded in penetrating as far as the centre of Australia, the sum of £1,000 was anonymously offered for the prosecution of exploration, on condition that a further sum of £2,000 was subscribed within a twelvemonth. The amount having been raised within the time specified, the Victorian Parliament supplemented it by a vote of £6,000, and an expedition was organised, under the leadership of Robert O'Hara Burke, with W. J. Wills as surveyor. The promotion of this exploratory scheme was merely a matter of emulation between Victoria and South Australia as to which colony should be first to cross the Continent from sea to sea. The undertaking was planned upon a large scale, and no pains were spared to secure success. The expedition, however, ended in disaster; its leaders—Robert O'Hara Burke, W. J. Wills, and an assistant named Gray—lost their lives. No one can deny the heroism of the men whose lives were sacrificed in this ill-starred undertaking; but it is admitted that the leaders were not bushmen, and had no experience in exploration. Disunion and disobedience to orders, from the highest to the lowest, brought about the worst results, and all that now remains to tell the story of the failure of the undertaking is a monument to the memory of the explorers, from the chisel of the late Charles Summers, erected on a prominent site in Melbourne. The anxiety of the Exploration Committee of the Royal Society, and of the Australian public, regarding the fate of Burke and Wills, led to the despatch of several relief expeditions by Victoria, Queensland, and South Australia. That sent out by Victoria was led by Alfred W. Howitt, a son of William and Mary Howitt, and resulted in the finding of John King, camel-driver to the Burke and Wills expedition, and sole survivor of the four who had crossed the Continent. Howitt was again sent out, shortly after his return with King to Melbourne, to disinter and bring back the bodies of Burke and Wills, which received a public funeral on the 28th December, 1862—one of the most impressive spectacles ever witnessed in the capital of Victoria.

During the seven years in which Sir Henry Barkly held office, some radical changes were made by the Legislature, not only in its own constitution, but also in the laws of the Colony. Manhood suffrage and vote by ballot were instituted, and the property qualification for Members of the Assembly was abolished. Large areas of land were thrown open for selection, the maximum area for each selector being fixed at 640 acres, and State aid to religion was abolished.

In March, 1863, an Intercolonial Conference was held in Melbourne to discuss the existing tariffs and various other matters of inter-colonial concern. The suggestion which led to the meeting was

made by Sir Dominic Daly, Governor of South Australia, and delegates from all the colonies, with the exception of Western Australia and Queensland, were present. The reasons urged by those colonies for not sending delegates were, that the former was precluded by its geographical position from entering into any arrangement that the colony would be likely to agree to, and that in the latter no Parliamentary authority had been given for the holding of such a conference.

The Conference discussed the tariff, and questions of a kindred character, including drawbacks and *ad valorem* duties; inland inter-colonial Customs duties and their distribution; transportation from the United Kingdom to the Australian possessions; a permanent immigration fund, to be provided by Act by each Colony, upon an equitable basis; improvement of internal rivers in Australia for purposes of navigation and irrigation; coastal lighthouses, and other maritime questions affecting the shipping interest; fortnightly ocean-postal communication; Anglo-Australian and China telegraph; legal questions, including the law of bankruptcy, of patents, of joint-stock companies, of probates and letters of administration; a Court of Appeal for the Australian Colonies; and a uniform system of weights and measures. Concerning the tariff and kindred subjects, the following resolutions were passed:—"That the basis of a uniform tariff should be determined for the Australian Colonies, and also for Tasmania; that the *ad valorem* mode of levying duties upon goods was open to many objections, and that it ought not to be continued; and that the following tariff be adopted by the Conference:—Spirits (imported), 10s. per gallon; wine, in wood, 2s. per gallon; in bottle, reputed quarts, 8s. per dozen; reputed pints, 4s. per dozen; ale, porter, and beer, in wood, 6d. per gallon; in bottle, reputed quarts, 1s. per dozen; in bottle, reputed pints, 6d. per dozen; malt, 6d. per bushel; hops, 3d. per lb.; tobacco, manufactured, 2s. per lb.; unmanufactured, 1s. per lb.; sheepwash, 3d. per lb.; cigars and snuff, 4s. per lb.; tea, 6d. per lb.; sugar, refined and candy, 7s. per cwt.; unrefined, 5s. 6d. per cwt.; molasses and treacle, 3s. 6d. per cwt.; coffee, chicory, cocoa, and chocolate, 3d. per lb.; opium, manufactured, 20s. per lb.; unmanufactured, 10s. per lb.; rice, 4s. per cwt.; dried fruit, nuts, and almonds, 10s. per cwt.; candles, 1d. per lb.; oils, whether of natural or artificial origin, and fluids used for burning or lighting purposes, 6d. per gallon; and salt, 40s. per ton." It was further resolved that the members of the Conference should undertake to urge upon their respective Parliaments the adoption of such tariff; that the tariff which had been agreed upon, after the fullest deliberation, ought not to be altered by any one colony, nor until after the proposed alteration should have been considered in a future Conference; and that drawbacks should be allowed on the following articles, viz.: wines, hops, tea, sugar, rice, coffee, chicory, cocoa, and chocolate.

On intercolonial Customs duties and their distribution, it was resolved that Customs duties ought to be paid to the revenues of those colonies by whose population the dutiable articles were consumed; and that the colonies of New South Wales, Victoria, and South Australia ought to co-operate with each other to secure to each colony the revenue to which it was legally entitled, either by the distribution of the Customs revenues collected by all at stated periods ratably, according to their population, or by some other mode which might be considered equitable and practical.

As to transportation, it was resolved that a committee, consisting of Messrs. Cowper, O'Shannassy, Meredith, and Blyth, should prepare an address to Her Majesty, which address was afterwards adopted. It set forth that the appointment of a Royal Commission to inquire into the subject of transportation had caused apprehensions in the minds of the inhabitants of the Australian Colonies lest some portion of their territory might be selected as a site for a new penal settlement. The address, after reviewing the experience of the colonies, protested against the system, and implored Her Majesty to refuse her sanction to any proposal for reviving transportation to any part of her Australian possessions. It was further resolved that four copies of the address should be engrossed, for transmission to Her Majesty severally by the Governors of the colonies represented.

As to immigration, it was resolved that it was of the highest importance to the prosperity and future greatness of Australia that a healthy flow of immigration should be encouraged and promoted, chiefly from the United Kingdom; and that, in pursuance of a common interest, the Legislatures should severally make provision (as had been done by some) for permanent legal appropriation, so that they might accomplish this object. Further, that the decision arrived at with regard to any alteration in the tariff should apply with equal force to that affecting the immigration policy.

As to improvements to the rivers in the interior, it was resolved that the obligation of carrying into effect the necessary works for rendering navigable the great rivers of the interior should primarily devolve upon the respective Governments having jurisdiction over those rivers.

As to lighthouses and maritime objects, it was resolved that legislative action should be taken by the colonies represented, to prohibit vessels proceeding to sea from any port in the colonies unless under the command of masters holding certificates of competency. It was also resolved to make provision for granting certificates by competent authority, to ensure necessary qualifications; and to make uniform provision upon the subjects of salvage, buoyage, and the management of lifeboats. Further, that the system of maintaining coast lighthouses should be reconsidered, and that a joint commission should be appointed to consider and report generally upon the entire subject.

As to fortnightly postal communication with England, it was resolved that it was inexpedient, in the present state of the question, to consider the proposal for the adoption of a fortnightly postal service with the United Kingdom *via* Suez.

As to electric telegraph communication with England, it was resolved that it was not then expedient to discuss the proposals brought under consideration with reference to the projected Anglo-Australian, Indian, and China Electric Telegraph.

As to legal questions, it was resolved, *inter alia*, that it was desirable that the bankruptcy laws should be assimilated; and that a uniform system of weights and measures should prevail throughout the Australian Colonies.

Sir Henry Barkly's successor was Sir Charles H. Darling, who governed Victoria during an exceedingly troubled and contentious administration—from 1863 to 1866. The interval between these years represents a period of angry and protracted conflict between the partisans of the opposed fiscal policies of Protection and Free-trade. The cause of the former was espoused by a large majority of the people and of the Legislative Assembly, while that of the latter found vehement adherents in a large, influential, and wealthy minority of the inhabitants of the Colony and in the Legislative Council. A Bill imposing numerous Customs duties of a protective character passed the Lower House, and was rejected by the Upper. The measure was then tacked on to the Appropriation Bill, and the Council again threw it out. The Government then proceeded to collect the duties on the authority of the Lower Chamber alone; and, as funds were not available for the payment of the Public Service, the Governor gave his approval, and the Executive Council borrowed money from one of the banks, confessing judgment as soon as the loan reached £40,000. The Supreme Court of the Colony pronounced the collection of Customs duties on a mere resolution of the Legislative Assembly to be illegal; and, in another session, the Tariff Bill, severed from the Appropriation Bill, was again passed by the Lower House, and again the Council threw it out. This was followed by a dissolution, and the new Legislative Assembly contained fifty-eight Protectionists to twenty Free-traders; and a third time the measure was passed, and a third time rejected by the Council. The Ministry had no option but to resign, upon which the leader of the Opposition, Mr. Fellows, formed an Administration, but Sir Charles Darling would neither see the Chief Secretary nor grant him a dissolution. Meanwhile the salaries and wages of every person in Government service had fallen into ten weeks arrears. Then Sir James McCulloch, the late Chief Secretary, returned to office, and a third session of Parliament was held in which the Tariff Bill was passed in all its stages, and sent up to the Council with a preamble asserting the absolute and exclusive right of the Legislative Assembly to grant supplies. The Upper House objected to this, as being inconsistent

with the letter, as well as the spirit of the Constitution Act, and a conference was agreed upon ; and the obnoxious portions of the preamble having been withdrawn, the measure passed through all its stages, as did also the Supply Bill, and the deadlock was removed. The conclusion of the crisis was precipitated by the recall of the Governor, on the ground that he had not maintained that strict neutrality during the political crisis which, as a constitutional administrator, it was incumbent on him to observe. His departure was made the occasion, on the part of his political friends, of a great public demonstration. Subsequently, also, the Legislative Assembly voted £20,000 of the public money to Lady Darling, as a *solatium* for her husband's recall. The Bill for the appropriation of what is historically known as the "Lady Darling Grant" did not, however, meet with the approval of the Upper House. A futile attempt was made by the Assembly to force the measure through the Upper House by means of a "tack," and this brought about another deadlock. At this juncture, news arrived from England of the death of the late Governor ; and on the motion of Mr. Fellows, an annuity was voted to Lady Darling, all parties generously concurring, and thus averting a second crisis in the political conflict, the course of which was coeval with Sir Charles Darling's sojourn in the colony.

The Right Hon. J. H. T. Manners-Sutton (afterwards, by the death of his father, Viscount Canterbury) assumed the reins of Government on the 13th August, 1866, and held office until the 2nd March, 1873. During his term of administration there were no less than six changes of Ministry in less than seven years ; but these do not seem to have affected the general prosperity of the colony. The fiscal policy of the country had been settled ; there was a subsidence in the fury of party warfare ; the revenue was on the ascendant grade ; manufacturing enterprise experienced great expansion ; the railway system of the province was being steadily developed, and things trended on the whole towards progress. In the months of June and July, 1870, an Intercolonial Conference met in Melbourne, at which representatives from the colonies of New South Wales, Victoria, and South Australia were present. The most important questions considered by the Conference, as set forth in the Report, were :—A free interchange of the natural products and manufactures of the respective Colonies, a uniform tariff, a Custom's Union, and a distribution of the revenue derived therefrom upon the basis of population. The delegates from the different colonies were, however, unable to fix a basis of agreement with regard to a list of articles involving freetrade on the one hand, and discriminating duties on the other ; though they were in perfect accord upon several other questions of considerable importance. Despatches from the Imperial Government having intimated the intended withdrawal of the troops stationed in Australia, the Conference took into consideration the course to be pursued under the altered circumstances in which the colonies were about to be placed, and it

was decided to press upon the attention of Her Majesty's Government the necessity of making adequate naval provision for the protection of British and Australian commerce in Australian waters, especially in time of war. Resolutions were also agreed to on the following subjects :—

- The adoption of the necessary steps for securing the withdrawal of the large amount of worn and deteriorated silver coinage circulating in the Australian Colonies.
- The establishment of a British Protectorate over the Fiji Islands.
- The calling of the Peninsular and Oriental Company's steamers at the port of Kangaroo Island, in South Australia.
- Telegraphic communication with Port Darwin, and with the Gulf of Carpentaria.
- The proposed new schemes of ocean, postal, and passenger service.
- The relief of distressed colonists and seamen in foreign ports.
- The compilation of the statistical records of the several Colonies upon a uniform method.

The Conference also expressed an opinion that the respective Governments should exert their influence with a view to the introduction of the decimal system of weights.

Perhaps the most noteworthy measure of the period was the Education Act drafted by Mr. Wilberforce Stephen, which came into force on the 1st January, 1873, and which provided free, compulsory, and secular education up to a fixed standard. During the first twelve years of its operation, there was an increase of 72 per cent. on the number of schools opened, of 74 per cent. in the number of instructors, of 63 per cent. in that of the scholars on the rolls, of 76 per cent. in their average attendance and in the estimated number of distinct children in attendance.

During Viscount Canterbury's administration the Duke of Edinburgh visited Victoria, and received an enthusiastic welcome. His public acts during his sojourn in the Colony were the laying of the first stone of the Town Hall, in Swanson-street, and of the fine hospital on St. Kilda-road that bears his name.

Viscount Canterbury was succeeded by Sir George Ferguson Bowen, who had served as Queensland's first Governor, and whose tenure of office in Victoria was marked by a renewal of the political turmoil which had characterised the administration of Governor Darling. The old antagonism between the two Chambers broke out with redoubled vehemence; and they joined vigorous issue on the subject of payment of members. On two occasions the Upper House had passed a specific measure, authorising payment of members, to be operative for three years; but at the beginning of the third session of Parliament, in 1877, a new Ministry, at the head of which was Mr. Graham Berry, backed by a powerful

majority in the Assembly, declared that the item should in future be tacked on to the Appropriation Bill. This course was adopted, and the Council set the Bill aside. The consequence was that there were no funds to pay the servants of the Government, and on the 8th of January, 1878, a date henceforth known in the history of the colony as "Black Wednesday," a notice appeared in the *Government Gazette* dismissing all heads of Departments, the Judges of Country Courts, Courts of Mines and Insolvency, Police Magistrates, Crown Prosecutors, and members of other public offices. The proceeding was universally denounced as "revolutionary," and the effect on public confidence was disastrous in the extreme. There was an immediate shrinkage in property values, commerce was suddenly paralysed, and a considerable exodus to New South Wales, both of capital and labour, set in. The Upper House thereupon passed two Bills—one a separate measure dealing with the payment of Members; the other an Appropriation Bill with the obnoxious "tack" omitted. Shortly afterwards, the Lower Chamber introduced a Bill adopting the principle of the referendum, and thus depriving the Upper House of most of its power as a co ordinate branch of the Legislature. Of course, this was thrown out by the Council; and the Assembly then voted a sum of £5,000 to enable the Premier and a colleague, Professor C. H. Pearson, to proceed to England in order to lay the case before the Secretary of State for the Colonies. This precipitated matters. On the 4th December, 1878, Sir George Ferguson Bowen received a despatch recalling him to England.

On the 27th February, 1879, the Marquis of Normanby arrived. He was regarded by the Home Authorities as a safer administrator in time of political crisis than his predecessor. Meanwhile, Messrs. Berry and Pearson had arrived in England to seek Imperial aid in Victoria's constitutional difficulties. They were kindly received by Sir Michael Hicks-Beach, then at the head of the Colonial Office, and were given a great deal of excellent counsel. The Secretary of State for the Colonies signified that, in his opinion, no sufficient case for the intervention of the British Parliament had been made out. The right of self-government had been given to the Colony of Victoria, and it was incumbent on her to work out her own constitutional problems. He counselled the Legislative Assembly not to introduce elements foreign to the tenor of Bills of Supply, and he considered that the Council would not then be likely to reject them. The despatch (which was shown to Messrs. Berry and Pearson before its transmission to the Governor) concluded by stating that the Imperial Parliament would never alter the Constitution of the Colony at the instance of only one House. This wise course of action on the part of the Colonial Office mitigated a political conflict which has never since been revived to the same extent.

Almost contemporaneously with the assumption by the Marquis of Normanby of the Government of the Colony occurred the capture,

after a protracted siege in an hotel at Glenrowan, of the notorious band of armed highwaymen, known in the annals of crime as the "Kelly Gang." The career of these outlaws is one of the most marvellous in the history of modern times, and certainly transcends that of any other association of a like nature in the history of bushranging in Australia. The "Gang" originally consisted of Edward and Daniel Kelly, Isaiah (or Wild) Wright, the brothers Quinn, and the brothers Lloyd. They established themselves in the ranges lying between Greta and the King River, from which they issued forth to prey upon the settlers in the surrounding country, receiving assistance and being aided in their concealment by numerous friends and neighbours who were, like themselves, horse-thieves and cattle-lifters. A fairly large reward having been offered for their capture, four mounted troopers of the Victorian Police Force, namely, Sergeant Michael Kennedy, Thomas Lonigan, Michael Scanlan, and Thomas McIntyre, set forth in pursuit, and encamped on the Stringybark Creek, about 20 miles from the town of Mansfield. Here one of them incautiously betrayed his presence by firing at some parrots. In the evening of the 26th October, 1878, as McIntyre and Lonigan were engaged in making tea, Kennedy and Scanlon being at the time absent, four armed men, two of whom were recognised as the brothers Kelly, suddenly made their appearance, and commanded the police to throw up their hands. McIntyre having no weapons with him, complied; but Lonigan drew his revolver, and was immediately shot dead by Edward Kelly. Presently the outlaw and his associates, hearing Scanlan and Kennedy approaching, concealed themselves behind some logs, and, covering McIntyre with a rifle, gave him the option of silence or instant death. Kennedy was commanded to throw up his hands. He did not do so, and was immediately fired at. He dismounted at this, and sought cover behind a tree; but before he could unslung his rifle he was shot dead, and Scanlan shortly afterwards met a similar fate. In the meantime McIntyre had mounted his horse, and dashed down the creek, followed by several bullets, which did not, however, touch him, though his horse must have been hit, for it soon gave in and had to be abandoned. As soon as darkness set in, McIntyre took off his boots, in order to make no noise, and on the afternoon of the second day succeeded in reaching a place of refuge, from which he was conveyed to Mansfield. The bodies of the three murdered policemen were afterwards discovered and interred with honour; and a marble monument, erected to their memory by public subscription, stands at the intersection of two of the principal streets of the town of Mansfield. After the outrage just detailed, the assassins betook themselves to the recesses in the ranges, where Superintendent Nicholson, who had already distinguished himself by his gallant capture of the bushranger Power, drew a cordon round the outlaws, by which they were cut off from all supplies, and were forced a few weeks afterwards to make a break for the open. In doing so they captured the homestead of a squatting station and locked up the inmates; and then,

two hours afterwards, they made a descent upon Euroa. Before entering the town, and at a distance of 4 miles from it, they cut the telegraph wires, and stationed a guard to keep watch. Arrived at Euroa, "Ned" Kelly and an accomplice named Stephen Hart, entered the National Bank, and the leader of the "Gang," presenting a revolver at the head of the accountant, entered the manager's room, threatened to shoot him if he as much as stirred, made prisoners of the latter, his wife, his mother, his seven children, two servants, the accountant, and the clerk, and then calmly proceeded to ransack the bank, which contained about £2,000 in notes and cash. They then conveyed the plunder and the whole of the prisoners in a buggy, a spring cart, and a baker's light waggon, to the squatting station previously referred to, where no less than twenty-two persons, who had been placed under restraint, were being guarded by a man named Byrne, a fourth member of the marauding band. Finally, at about half-past 7 in the evening, the whole of the prisoners were placed in a hut, and warned not to stir from it at the peril of their lives, until 11 o'clock. The four outlaws, all of whom were well-mounted, then rode off with the money they had obtained, and disappeared again for weeks. Meanwhile the Victorian Legislature passed a special Act of Parliament, by which the bushrangers and their numerous confederates and helpers were declared outlaws. Under the provisions of this measure, twenty-one accomplices were arrested, while £8,000 were offered for the apprehension of the "Gang," and black-trackers were imported from Queensland to discover and follow their trail. Suddenly, and without warning, they appeared at Jerilderie, in New South Wales, and plundered the bank there, on the 8th of February, 1879. In the month of June, in the year following, a free selector named Skerritt was shot in his hut at Sebastopol, near Beechworth, by "Joe" Byrne. On the 28th of the same month, a detachment of police was sent from Melbourne by special train to Glenrowan, a railway station 40 miles north of Euroa, and reinforcements from Benalla, Beechworth, and Wangaratta brought the force up to thirty. Kelly's party had torn up the rails about a mile and a half beyond Glenrowan, and had taken up a defensive position in a public-house upon which the police opened fire. Suddenly, and to their great surprise, they were attacked from the rear by a man clad in a suit of armour. This was "Ned" Kelly, the outlaw leader. Shots were exchanged between him and the police, and wounded in his arms and legs, which were not armoured, he was seized and disarmed. The siege was maintained throughout the night, and Byrne was shot at about 5 in the morning. At 10, while "Dan" Kelly and "Steve" Hart were defending the back of the premises, thirty men, all of whom had been made prisoners by the bushrangers, rushed out of the front door of the public-house and threw themselves flat upon the ground. A little after 3 in the afternoon, the police set fire to the house, and the two surviving outlaws perished in the flames. An old man named Cherry, who had been dangerously wounded by one

of the "Gang," was rescued from an out-house in an insensible condition, and expired shortly afterwards. "Ned" Kelly was in due course tried, convicted, and hanged. It transpired in the evidence that during his career he had stolen upwards of 200 horses, and that an expenditure of no less than £50,000 sterling had to be incurred before he could be brought to justice.

On the 1st October, 1880, the first Melbourne International Exhibition was opened by the Marquis of Normanby. It closed in May, 1881, and during the seven months it remained open the admission of all classes numbered 1,900,496, and the receipts amounted to £50,000. There had previously been five industrial exhibitions in Melbourne. The first two (those of 1854 and 1861) had been of a purely local character: the others, held in 1866, 1872, and 1875 respectively, were intercolonial.

During the administration of the Marquis of Normanby a measure was passed which effected an important reform in the Constitution of the Legislative Council. It increased the number of Members from thirty to forty-two, lowered the property qualification required from them, shortened the tenure of their seats, and widened the electoral basis upon which that House rests; any person rated on a freehold of the annual value of £10, or a leasehold of the annual value of £25, being entitled to exercise the franchise for the Legislative Council. In July of the same year the third Berry Ministry was overthrown, and this led to the advent to power of Sir Bryan O'Loughlen.

The O'Loughlen Ministry lost their position in March, 1883, but they held office long enough to enable the embittered feelings engendered by the political warfare of previous years to subside, and an entirely different tone began to pervade political life. A renewed feeling of confidence arose in the public mind, when, on the fall of the O'Loughlen Cabinet, a coalition Ministry was formed under Mr. James Service, comprising the leading men of both sides of the Assembly. The two great Acts of the Service Administration were the abolition of the political control of the Government railways and the abolition of patronage in the Public Service. The railways were placed under the management of three independent Commissioners, and the Act doing away with patronage in the Public Service in regard to appointments and promotions, substituted what the Act itself termed "a great and equitable system in lieu thereof, which will enable all persons who have qualified themselves in that behalf to enter the Public Service without favour or recommendation other than their own merits and fitness for the position aspired to."

On the 9th December, 1885, the Victorian Parliament adopted the Imperial Act constituting a Federal Council of Australasia, and Victorian representatives attended the first meeting of the Council, which opened in Hobart on the 25th January, 1886.

The year 1886 and the following years were somewhat uneventful. The colony was busily engaged expanding its railway system, and

pursuing what is known in Australia as a vigorous policy of public works. The Service Ministry was followed in February, 1886, by that of Mr. Duncan Gillies, which lasted 1,722 days, and was, next to that of the McCulloch Ministry (1863-68), the most long-lived of Victorian Administrations, although both the McCulloch and the Gillies Ministries have been since surpassed by the administration of Sir George Turner. The second Victorian International Exhibition was opened in Melbourne in 1888, and was highly successful. During the same year the number of members of the Legislative Council was increased to forty-eight, and of the Assembly to ninety-five. The boundaries of the electoral districts of the Assembly were altered, and the number of districts increased to eighty-four, so that, with a few exceptions, only one Member should be returned by each constituency. During 1888 Victoria touched its highest point of prosperity, and, judged by the inflow of population, was more attractive to the immigrant from Europe than any other province of Australasia. Population still flowed to the colony during the three following years, but in greatly diminished numbers.

In 1890 there met in Melbourne a conference of delegates from all the provinces to consider the question of Australasian union; it was unanimously agreed that the best interests of the colonies would be promoted by their early union, and the Legislatures of the respective colonies were invited to appoint delegates to a National Convention to report upon a scheme for a Federal Constitution. Agreeably with the resolutions of the Conference, all the provinces appointed delegates to a Convention held in Sydney. The history of this and subsequent Conferences belongs more properly to the history of Australia as a whole than to Victoria, and will be found elsewhere in these pages.

On the 5th November, 1890, Mr. Duncan Gillies ceased to be Premier, and was succeeded by Mr. James Munro, who in turn gave place, in February, 1892, to Mr. Shiels. One of the earliest acts of the new Government was to suspend the Railway Commissioners. The Commissioners were appointed under the Act passed in 1884 to administer the service on business lines, and whatever may have been the contributing causes, their administration was not successful, and the Government considered that the best way to meet the case was to relieve the Commissioners of their functions. The Commissioners' suspension lasted from the 17th March till the 7th June, when these officers resigned. An interim arrangement was made by the Government appointing temporary Commissioners, and subsequently the law was altered to allow of the railway management being vested in one Commissioner.

As in the rest of Australia, the year 1893 was marked by widespread financial disaster in Victoria. The years of inflation, fondly believed to be a permanent condition of prosperity by investors and speculators, had their natural reaction, and when the final crash came, the result

was a condition of panic. The position of Victoria was in most respects worse than that of any other state, the unnatural rise in the value of landed property, the mushroom-like growth of numerous building societies, and the excessive speculation of the land boom period being there more pronounced. The storm, however, had not burst without some premonitory signals. Between the years 1889 and 1892 there had been failures of several smaller banks and building societies, although the limited sphere of operation did not allow their suspension to be very widely felt. Early in 1893, however, one of the foremost institutions closed, and from this onward the stream of failures went on with monotonous regularity. Strenuous efforts were made by the associated banks to save the situation, and the Government also declared a "moratorium" of five days from the 1st to the 5th May, to give the banks time to collect their resources. But the heavy withdrawals, not only by colonial depositors but also by people in England and Wales, depleted the reserve funds, and the failure of the larger institutions involved the downfall of the smaller building and investment societies. Between April 5th and May 17th, no fewer than twelve banks closed their doors, and of these seven were practically Victorian institutions, two had their head-offices in New South Wales, and three in Queensland. The crisis was the worst ever experienced in Victoria, but it was met by the people of that State with unexampled fortitude. One good effect of this financial dislocation was the sweeping away of many bogus institutions, and the establishment, on a firmer basis, of the banks and societies which had weathered the storm. The rapidity with which many institutions resumed operations was a striking example of the energy and ability with which the situation was met.

In January, 1893, the Shields Ministry, after being in power for less than a year, was displaced by that of Mr. J. P. Patterson. Attention was given during 1894 to a continuation of the scheme of co-operative village settlements introduced during the previous year for the purpose of coping with the unemployed difficulty, but these settlements met with little more success than those of the parent State. Amongst the few that succeeded in overcoming initial obstacles was one founded by the Presbyterian Church of Victoria. In August Mr. (now Sir George) Turner carried a vote of non-confidence against the Ministry, but the Premier secured a dissolution, and a general election took place. The result left Mr. Patterson in a minority, and Sir George Turner became leader of the new Ministry on the 27th September, 1894. Sir George Turner found the finances of the state in a condition of disorganisation, and the chief care of the Ministry was to overtake the deficiency left by its predecessors and to keep the expenditure within the income; and in this it was successful. In 1893, the year preceding the accession to office of the Turner Ministry, the expenditure exceeded the revenue by £1,030,521; in 1894 the deficiency fell to £593,432, and in 1895 to £45,787; in 1896 it amounted to £81,500; but in 1897 and 1898 the revenue exceeded the expenditure by £61,285 and £205,796

respectively. The question of finance is, however, dealt with at greater length in its proper place in succeeding pages. Although the effects of the financial crisis were still felt severely, the state exhibited vigorous progress in the domain of agriculture and kindred industries, and the exports of domestic produce in 1895, were the highest since 1891. There was also a revival in the mining industry, and the output of gold, returned at 740,000 oz., was higher than in any of the preceding ten years.

The Earl of Hopetoun left Victoria at the conclusion of his term of office as governor on the 12th July, 1895, Sir John Madden taking up the duties of administration pending the arrival of Lord Brassey, who assumed office on the 25th October. During the year an important advance was made towards the Federal Union of Australia by an agreement of the Premiers to commit the duty of framing a Federal Constitution to a convention of delegates elected by the various provinces. One of the first acts of the Victorian Legislature in 1896 was the passing of an Enabling Bill to give effect to this decision.

The year 1896 was generally one of increasing prosperity, and signs were not wanting everywhere, that the depression of 1893 was fast lifting. The manufacturing industry was making fair progress, and agriculture and dairying were also expanding. The Government, while adhering to its policy of retrenchment, was nevertheless able, by utilising portion of the Savings Banks funds, to institute a sort of "Crédit Foncier" system on a limited scale. During the year the control of the railways was removed from political interference by being placed in the hands of an independent Commissioner. Among the more important legislation carried into effect in 1896, were an Income Tax Act, a Local Government Act, and an Amendment to the Shops and Factories Act, in the direction of establishing a minimum wage rate—the last-mentioned being adopted on the recommendation of a Commission of Inquiry, with the object of putting an end to the practice of "sweating."

In the early part of 1897, considerable havoc was wrought in Gippsland by floods and storms, but other portions of the state suffered from a lack of sufficient rainfall, and there was a falling off in pastoral production. Agriculture and dairying still made good progress, but in consequence of the best land for these pursuits having been taken up, there was an exodus of settlers to the other states, and especially to Queensland. This exodus has kept up more or less from year to year. The operation of the minimum wage rate, alluded to above, was at first attended by a certain amount of friction, but in the end the scheme proved advantageous both to employers and employed. In mining, several abandoned gold-fields were taken in hand and worked at a profit, and the Legislature passed two measures with a view to the betterment of mining conditions. A conference of railway experts during the year recommended the adoption of a uniform gauge of 4 feet 8½ inches, for Victoria, New South Wales, and South Australia, but nothing further was done in this direction. It may be mentioned that an

attempt is now being made to meet the difficulty occasioned by the break of gauge from 5 feet 3 inches in Victoria to 4 feet 8½ inches in New South Wales by erection of machinery which will lift freight cars from one set of wheels and rails to another without necessitating the removal of their contents.

In Parliament the chief work of the session was the discussion of the Commonwealth Draft Bill and its amendments, which were subsequently forwarded to the Federal Convention. A general election took place in October, and Sir George Turner was returned to power with a substantial majority. The close of the year was marked by the most destructive fire in Australian history, an entire block in the heart of Melbourne being almost completely burnt out. The loss to property was estimated at over a million and a half sterling, the insurances aggregating upwards of £750,000.

In January and February, 1898, Gippsland suffered from another destructive visitation, the district on this occasion being swept by bush-fires. The fires of the latter month are described as having been almost equal in their devastating effects to those of "Black Thursday," in 1851, mention of which was made in preceding pages. Towards the close of the year portions of the state again suffered from forest-fires, but between the two outbreaks serviceable rains fell and added materially to the wheat yield. In politics the chief interest centred in the question of Federation. At the beginning of the year the Federal Convention held its final sittings in Melbourne and the bill, as drafted, was submitted to the people of the various provinces. The measure was accepted by a large majority in Victoria, the voting being 100,520 in the affirmative and 22,099 in the negative, and considerable disappointment was caused by its rejection in New South Wales. In his budget speech for 1898 the Treasurer showed an excess of revenue over expenditure amounting to £205,796, the most substantial increase since 1892. During the year Lord Brassey visited England on leave, and while there delivered several lectures on various aspects of Australian and Victorian progress, which had the effect of awakening renewed interest in Australia.

Early in 1899, a Conference of Premiers met in Melbourne to discuss the amendments to the Commonwealth Bill proposed by Mr. Reid on behalf of New South Wales. A mutual agreement having been arrived at, another referendum was necessary in all the states, and Victoria again declared in favour of Federation by an overwhelming majority. In December Sir George Turner's ministry was displaced on a no-confidence motion, and was succeeded by one under the leadership of Mr. Allan McLean. The Turner Ministry had held office for the long period of 5 years 70 days, and had ably watched over the interests of Victoria during some of the most troublous times experienced since the granting of responsible government. In April, the death of the Hon. James Service deprived Victoria of one of her ablest and most popular public

men, though at the time of his decease he had long retired from active politics. During the year, Victoria made great progress in the agricultural and pastoral industries, and immense strides were also made in dairying, the export of butter amounting to nearly 1,405,000 lb., or nearly twice the quantity for the preceding year. In common with the other states, Victoria provided contingents to assist the British Army in South Africa, the first detachment of troops being sent away in 1899. The closing days of the year were marked by destructive bush-fires, the conflagrations being most extensive in the Beechworth district where immense damage was done to property and live stock. It was not until heavy rains fell that the fires ceased and the settlers were able to set about the restoration of their homesteads. The ministry of Mr. McLean, after holding office for a little over eleven months, was overthrown by a vote of censure, and Sir George Turner again became Premier on the 15th November, 1900. The session was not an extended one, but the Old-age Pensions Act became law, and the preliminary arrangements were made for the establishment of the Commonwealth, in so far as Victoria was concerned. Sir George Turner shortly afterwards accepted office as Treasurer of the first Federal Cabinet. He continued to act as Premier, however, until the 12th February, 1901, when he finally handed over his charge to Mr. (now Sir) A. J. Peacock, who had been Chief Secretary in both the Turner ministries. The despatch of volunteers to the seat of war in South Africa was continued in 1901, and a naval contingent was sent to assist the British forces in the suppression of the Boxer outbreak in China. Lord Brassey's term of office as governor expired in January, and the duties of administration were thereupon assumed by the Lieutenant Governor, Sir John Madden. It was decided that no fresh vice-regal appointment should be made until after the establishment of federation. Both at the beginning and end of the year serious losses were occasioned in the country districts by outbreaks of bush-fires.

On the 5th May, 1901, Their Royal Highnesses, the Prince and Princess of Wales landed in Melbourne, and were accorded a most enthusiastic reception. An account of the proceedings in connection with the opening of the first Federal Parliament will be found in another chapter. Destructive bush-fires again occurred during the year. Several persons lost their lives, and a vast amount of damage to property was occasioned in the country districts, the devastating effects of the outbreaks in some localities being described as equalling those of "Black Thursday." The ceremony of swearing-in the present Governor, Sir George Sydenham Clarke, took place on the 11th December, 1901.

With 1902 a movement towards state reform was commenced. It was recognised that in consequence of the increased expenditure cast on the state the necessity existed for rigid economy in administration. As a first step towards this end it was considered that the number of parliamentary representatives should be diminished. In order to assist the Premier in this regard the whole of the Ministers, with one

exception placed their resignation in his hands. Sir A. J. Peacock, however, announced that the resignations would not be accepted inasmuch as he intended to make Parliamentary Reform part of the government programme for 1902. On the 3rd June, 1902, the Peacock Ministry was displaced on a no-confidence motion, the voting being 45 to 42. Mr. Irvine, the Opposition leader, in his speech on the occasion declared that the Government had deceived the country with regard to the reconstruction policy, while the Ministers' joint letter of resignation being post-dated five months made reconstruction in the recess impossible. A virtually defunct Government was thereby in charge of departments, and all active duty was shirked. The Premier in reply professed ignorance of the date of the resignations, and stated that he had not wilfully deceived the House, but had been himself deceived by his colleagues. The new Ministry under the leadership of Mr. Irvine was sworn in on the 10th June, 1902.

The following is the succession of Ministries, with their term of office in each case, from the inception of Responsible Government to the date of the publication of the present volume :—

No. of Ministry.	Name.	From—	To—	Duration of Office.	
				months.	days.
1	Haines	28 Nov., 1855	11 March, 1857	15	11
2	O'Shanassy	11 March, 1857	29 April, 1857	1	18
3	Haines	29 April, 1857	10 March, 1858	10	12
4	O'Shanassy	10 March, 1858	27 Oct., 1859	19	17
5	Nicholson	27 Oct., 1859	26 Nov., 1860	12	30
6	Heales	26 Nov., 1860	14 Nov., 1861	11	19
7	O'Shanassy	14 Nov., 1861	27 June, 1863	19	13
8	McCulloch	27 June, 1863	6 May, 1868	58	9
9	Sladen	6 May, 1868	11 July, 1868	2	5
10	McCulloch	11 July, 1868	20 Sept., 1869	14	9
11	MacPherson	20 Sept., 1869	9 April, 1870	6	19
12	McCulloch	9 April, 1870	19 June, 1871	14	10
13	Duffy	19 June, 1871	10 June, 1872	11	21
14	Francis	10 June, 1872	31 July, 1874	25	21
15	Kerferd	31 July, 1874	7 August, 1875	12	7
16	Berry	7 August, 1875	20 Oct., 1875	2	13
17	McCulloch	20 Oct., 1875	21 May, 1877	19	1
18	Berry	21 May, 1877	5 March, 1880	33	12
19	Service	5 March, 1880	3 August, 1880	4	29
20	Berry	3 August, 1880	9 July, 1881	11	6
21	O'Loughlen	9 July, 1881	8 March, 1883	19	27
22	Service	8 March, 1883	18 Feb., 1886	35	10
23	Gillies	18 Feb., 1886	5 Nov., 1890	56	18
24	Munro	5 Nov., 1890	16 Feb., 1892	15	11
25	Shiels	16 Feb., 1892	23 Jan., 1893	11	7
26	Patterson	23 Jan., 1893	27 Sept., 1894	20	4
27	Turner	27 Sept., 1894	5 Dec., 1899	62	8
28	McLean	5 Dec., 1899	15 Nov., 1900	11	10
29	Turner	15 Nov., 1900	12 Feb., 1901	2	28
30	Peacock	12 Feb., 1901	10 June, 1902	15	7
31	Irvine	10 June, 1902	.....	.....	.....

QUEENSLAND.

AS early as the year 1822, the existing settlements in New South Wales were considered by the authorities to be inadequate to accommodate the increasing number of prisoners constantly arriving in Port Jackson. It was therefore deemed advisable to make an examination of the coast and inlets to the northward, particularly in the vicinity of Port Curtis, with a view to finding a suitable locality for the establishment of a branch colony. Sir Thomas Brisbane, the then Governor of New South Wales, acting upon instructions from England, despatched Surveyor-General John Oxley in the month of October, 1823, in the colonial cutter "Mermaid," accompanied by Messrs. Stirling and Uniacke, to examine and report upon the inlets of Moreton Bay, Port Curtis, and Port Bowen. Discovering and naming the Tweed River *en route*, Oxley first examined Port Curtis, but deeming the site unsuitable for settlement, he turned south, as it was too late in the season to make an examination of Port Bowen. Upon his arrival in Moreton Bay on the return journey, the anchor was scarcely let go when a number of natives were seen about a mile distant, and amongst them one whose appearance was not that of an aborigine. This man subsequently turned out to be one Thomas Pamphlet, who, with three others, had left Sydney in an open-boat to bring cedar from the Five Islands (Wollongong). They were driven out to sea by a gale, and suffered terrible hardships, one man of the party dying of thirst. At last they were shipwrecked on Moreton Island, and had lived with the blacks for a period of seven months. Pamphlet and his two companions, Finnegan and Parsons, had once started out to reach Sydney overland, but Pamphlet and Finnegan separately returned, after going some 50 miles; and Parsons was suffered to proceed alone. Guided by Pamphlet and his comrade, Oxley and Stirling set out to examine the large river of which the castaways told them, and which emptied its waters, after a tortuous course, into the south end of Moreton Bay. The explorers found the river, according to their informants' report, and pulled up it in a whale-boat for a distance of about 50 miles. Oxley was not provisioned for a longer journey, so he turned back at this point. To the river he gave the name of Brisbane, in honor of the Governor of New South Wales. The two rescued men were taken on board the "Mermaid," and the return voyage was made to Sydney, which the party reached on the 13th December, 1823. In the month of September following, Governor Brisbane despatched Oxley to Moreton Bay in the brig "Amity," with Lieutenant Millar and a detachment of the 40th Regiment in charge of thirty prisoners to prepare for the establishment of a penal settlement.

Almost the first person Oxley met upon landing on the beach near his old station at Pumicestone River was Parsons, the shipwrecked companion of Pamphlet. He had started out the year before to walk to Sydney, and had been given up for lost.

The spot named Redcliffe by Flinders, during his exploration of the inlet, was selected for the new settlement, and extensive buildings were erected there. The site was, however, found to be disappointing, and a new one was chosen on the banks of the Brisbane River, some time after Oxley's departure. While the Redcliffe settlement was being prepared, Oxley, accompanied by Allan Cunningham and Lieutenant Butler, made a fresh exploration up the river, and this time went as far as his boat could be navigated. Here the Surveyor-General and Cunningham proceeded on foot, ascended an eminence, and obtained an extensive view over the whole of what is now the West Moreton district, extending as far as the Albert River.

In the year 1825, Major Lockyer made a long-boat excursion up the Brisbane River, and, the stream being somewhat swollen by floods, he was enabled to penetrate inland for nearly 150 miles. During the same year, Captain Logan, of the 57th Regiment, was sent up from Sydney to take charge of the little settlement. At this time the entire population was recorded as comprising only forty-three males and two females. In May, 1824, Sir Thomas Brisbane, Governor of New South Wales, had visited the place, and officially approved of the last selected situation. He appears, however, to have been absolutely oblivious of the great possibilities of the river for future development, and somewhat coldly discounted Oxley's enthusiasm in this direction. While visiting the new settlement, the Governor ordered the abandonment to the natives of the buildings at Redcliffe; the aborigines seem, however, not to have greatly appreciated this act of generosity, for they made no use of the gift, and gave to the deserted structures the name of Umpie Bong (literally "dead houses"), an appellation still preserved in "Humpy Bong."

Captain Logan was a man of energetic and resolute character, but his rule was marked by excessive severity in the enforcement of discipline. Under his direction building, clearing, and cultivation were vigorously pushed forward. The alignment of what is now the principal street in Brisbane originated in the long façade of a massive range of buildings built by Logan to serve as prisoners' barracks. These buildings, before their ultimate demolition, served successively for the first House of Parliament and for the Supreme Court. Logan erected, on an abrupt and elevated knoll which dominates the city, a windmill, which subsequently served as an observatory for watching, and still serves as a tower for signalling, the approach of vessels. It is said, however, that his industrial projects were not always directed by a knowledge equal to their needs, and a story is extant of his having sown the prepared rice of commerce in expectation of its germinating. Logan, besides being a builder and cultivator, was a vigorous explorer and an ardent botanist. He discovered the river which bears his

name, and voyaged up the Bremer, the principal tributary of the Brisbane. Finding at the head of boat navigation plentiful outcrops of limestone rocks and many indications of coal, he sent up a party of prisoners to construct a kiln, and quantities of lime were thence conveyed for use in the buildings of the main settlement, which had now received the name of Brisbane, and the population of which, at one time during Logan's rule, had risen to between 1,000 and 1,500 inhabitants. These were, however, with the exception of the civil staff and a hundred or so of soldiers to preserve order, all prisoners; no free person being permitted to visit or to settle without a special permit.

In 1827, Allan Cunningham, who, in company with Oxley, had already had some experience of inland exploration, and had sailed round the continent with King, set out from the Upper Hunter at the head of an expedition, with the intention of reaching Brisbane overland along an interior route. At the outset of his journey, and to avoid having his movements hampered by its spurs and lateral offshoots, he crossed the dividing range, and, turning northward, skirted the Liverpool Plains. After traversing much unpromising country, he reached the banks of the Gwydir River, and afterwards discovered and named the Dumaresq, so called after the colonel who had filled the post of Commissioner of the Australian Agricultural Company. Cunningham pierced northward from the stream just named through a belt of very poor country, and emerged on the 5th June, 1827, on the famous Darling Downs (named after the then Governor of New South Wales). This discovery was destined to have a most important influence upon the pastoral industry of the southern settlement, and to form a centre round which gathered the elements of the future colony of Queensland. The edge of the plateau on which the Downs are situated appeared to be inaccessible from the coastal settlements on the east. But here fortune favoured the explorer, as it had previously done in his discovery of Pandora Pass, which opened a gateway through the Liverpool Ranges to the rich plains beyond; and on this occasion a route through the mountains was found, and received the name of Cunningham's Gap. After noting the whereabouts of this pass the explorer retraced his steps to Segenhoe Station, on the Upper Hunter, which he had left on the 30th April, and from which he had been absent about thirteen weeks. Besides the discovery of the Downs, the most important results of this expedition were the finding of the streams which are tributary to the Condamine, and of the Dumaresq, the Gwydir, and the Barwon—in short, of that network of rivers that forms the Upper Darling system and feeds the main stream.

During the year 1827, Governor Darling went up from Sydney on a visit to the settlement at Moreton Bay, and expressed dissatisfaction with its site. In a subsequent despatch to Lord Goderich he actually suggested the abandonment of the place, the tediousness and difficulty of the approach rendering it extremely inconvenient. He suggested the removal of the settlement to Dunwich, a knoll on the bay shore of

Stradbroke Island, and recommended it as a station for the first reception of prisoners.

In the following year Cunningham, accompanied by Charles Frazer, the Colonial Botanist, proceeded by sea to Moreton Bay, with the intention of discovering a practicable route to the Darling Downs from Brisbane. On his arrival, Captain Logan, with characteristic activity, organised an expedition, in which he took a leading part, to further the object of Cunningham's visit. The party attempted, by following up the recently discovered river Logan to its sources in the mountains, to find a path to the plains beyond the range; but in this they were unsuccessful, and were compelled to retrace their steps to the settlement. Thereupon Cunningham made a fresh start from Limestone (Ipswich), on the Bremer, and on this occasion was entirely successful. He found the eastern outlet of the gap which bears his name, and then ascending the range he reached his old camp.

The Moreton Bay Settlement, deprived of the ministrations of religion during the first few years of its existence, was in 1828 provided with a chaplain, who after a very brief residence was withdrawn, owing to a difference with Commandant Logan.

In 1828 Cunningham went on his third expedition—the last he was destined to undertake—in what is now Queensland territory. On this occasion, after proceeding to Moreton Bay by sea, he devoted six weeks to the exploration of the Brisbane River, and examined it to its source, tracing its head waters among the eastern slopes and spurs of the main range. In the year 1830 the labours of Commandant Logan were brought to a tragic close. He had, at the head of a small exploring party, consisting mainly of prisoners of the Crown, pushed on beyond the boundaries of location, and was not again seen alive. His companions returned to Brisbane with the story that he had left the camp alone on a botanising expedition, and had failed to return. The officer left in charge of the settlement, Captain Clunie (who filled the position of next commandant), sent out a search party to look for his absent chief. On the fifth day the searchers found Captain Logan's body pierced with a spear and battered apparently with waddies, or aboriginal clubs. The genuineness of the evidence was accepted without question, and the murder charged to the blacks, though it subsequently leaked out, in half-hinted fashion, that the ill-starred captain had fallen a victim to the vengeance of his bond followers. Logan's remains were brought to Sydney and interred with military honors at Garden Island, in the same tomb as that in which were deposited those of Judge Bent, a friend of his early youth. Somewhat over fifteen years after Logan's death the Colonial Office granted his widow a pension of £70 a year, in recognition of her husband's services. Under Logan's directions some experiments had been tried, and some progress had been made in the cultivation of cotton. A report sent to the Colonial Office in 1828 showed that a bag of cotton despatched to London from Moreton Bay was of excellent quality.

Captain Clunie, of the 17th Regiment, succeeded to the control of the settlement at Moreton Bay, as it continued to be called, and the history of his administration is little more than a record of offences and offenders and the degrading details of prison management and mismanagement.

In 1831 the population had risen to 1,241, of whom 1,066 were prisoners, 40 being women. In 1833 there were 1,128 bond males and 38 free, 30 bond females and 13 free. Four years later the number of prisoners had been reduced to 300. Governor Sir Richard Bourke thought little of Brisbane, even as a place of penal settlement. He had adopted all Sir Ralph Darling's prejudices against the locality and supplemented them with some of his own, and he prepared gradually for its abandonment.

In 1836 Moreton Bay was visited by Messrs. James Backhouse and George Washington Walker, two Quakers who had engaged in a seven years' examination of the penal settlements at the antipodes, seeking everywhere an opportunity, by the ministrations of religion, to alleviate the sufferings of the convicts undergoing sentence. After returning to England, Backhouse published an account of their experiences, in which, amongst other deplorable circumstances, he noted that on one occasion he saw forty women working in a field at Eagle Farm, some of whom were very young, while in several instances the unfortunate creatures were compelled to work in irons. It must not be forgotten, however, that Backhouse wrote at a period when the penalty of death was attached in the statute-book to no fewer than 223 offences, and when men were hanged in batches even in so advanced a centre of civilisation as the city of London.

Governor Bourke had determined, in 1835, gradually to diminish the deportation of convicts to Moreton Bay, and to close the settlement. This was finally accomplished about five years later. Captain Fyans was commandant in succession to Captain Clunie, and ruled from 1835 to 1837; and Major Cotton succeeded to the control of the rapidly dwindling settlement. Then followed Lieutenant Gravatt, whose term of office extended from May, 1839, to July of the same year. Lieutenant Gorman was the next and last commandant at Moreton Bay. He arrived in 1839, and was entrusted with the duties of clearing away the last relics of the penal establishment. The convict settlement was broken up about the middle of the year, and the way was thus left clear for free settlers. The first of these arrived in Brisbane in 1840, although the enactment against free settlers was still nominally in force. In the meantime the country around Brisbane had been thoroughly examined, one of the most enterprising of the local explorers being Andrew Petrie, who had arrived in Sydney in the year 1835. His arrival in Brisbane is noteworthy on account of the circumstance that the vessel which conveyed him, the "James Watt," was the first steamship to enter Moreton Bay. Soon after coming to the young settlement Petrie explored the coast as far as the

present northern boundary of the Moreton district, and made some important discoveries of indigenous flora. During one of his expeditions Petrie effected a landing about half-way between Moreton Bay and the entrance to Wide Bay, and there found a convict absconder named Bracefield (called by the natives "Wandi"), living in savagery with the blacks. With Bracefield's assistance Petrie found another young convict who had escaped from the settlement so long before that he had almost forgotten his own language. His name was James Davis, otherwise "Durranoi," and the story of his experiences among the aborigines is of the most interesting character. Andrew Petrie was for some time acting as foreman of works of the Royal Engineer's Department at Brisbane, and his knowledge of the country acquired in this service was of the greatest assistance to the first free settlers. During the year 1840 Surveyor Stapleton and his assistant were murdered by aborigines near the head waters of the Logan. The culprits were captured in the following year, and, after trial, were found guilty and executed. But this was only one of a series of similar outrages, the blacks in the earlier days of free settlement in Queensland being particularly troublesome. In 1840 Patrick Leslie crossed the Great Dividing Range through Cunningham's Gap, and formed a station on the Condamine River, and in the following two years a great deal of useful exploration was carried out by the brothers Stewart and Sydenham Russell in the Darling Downs, Wide Bay, and Moreton districts. New South Wales squatters followed in their wake, and much country was taken up and utilised for the depasturage of sheep and cattle. In 1841 the population of Moreton Bay numbered exactly 200, and of these only 67 were free. This enumeration probably included a little colony established by grudging permission within 7 miles of the penal settlement as a Christian mission to the aborigines. The colony was exclusively German, and included two regular ministers and some peasants and tradesmen, with their families. The Colonial Office allowed them £1,298 in four years for the maintenance of 19 adults and 11 children. No good accrued to the aborigines from their ministrations, as the blacks fought them instead of listening to them, and on one occasion the missionaries were driven to defend themselves with their muskets against their assailants. Government aid being withdrawn, the mission collapsed as a religious agency, and became a purely secular settlement. The German station is now an outlying suburb of Brisbane, where some of the mission station buildings may still be seen, while the descendants of the original party are numerous among the citizens. A contemporaneous mission of similar character, established by the Rev. Mr. Handt, of the Church of England, was also fruitless in the prosecution of the work of Christianising the aboriginal natives. Indeed the blacks at this time were too warlike to tolerate white approach in any guise.

In 1842 Governor Gipps, visited Brisbane, and is said to have given directions to reduce the width of the streets in all subsequent

surveys—a very short-sighted policy. His Excellency subsequently reported to the Colonial Office the existence of forty-five squattages within 50 miles of Brisbane. In 1842 the export of wool was 1,800 bales. In the returns of 1844 the population is given as 471; and the stock consisted of 660 horses, 13,295 cattle, and 184,651 sheep. From the date of the Governor's visit a marked improvement in the progress of the settlement was apparent. Moreton Bay was opened to free settlement; and to provide the requisite holdings for expected immigrants, Brisbane was proclaimed a land district, the first sale of Crown Lands being held there on the 7th July, 1842. The first steamer of the Hunter River Steam Navigation Company which visited the harbour arrived the same year, and continued for a time to ply regularly between Sydney and Moreton Bay. The service was afterwards discontinued, one or two small sailing vessels being found sufficient for all purposes of trade. The prisoners had now been removed; the old penal settlement being a thing of the past, a military commandant was no longer wanted, and the principal authority was vested in a civil officer—Captain Wickham, R.N., being appointed first police magistrate;—and in 1843 Moreton Bay was granted representation in the New South Wales Legislative Council, as it existed under the old constitution.

In 1844 Leichhardt started out on his first expedition from Jimbour Station, on the Darling Downs, to Port Essington, by way of the Gulf of Carpentaria. Gilbert, the naturalist of the party, met his death at the hands of the aborigines during a night attack, and Leichhardt and his companions reached their destination after almost incredible sufferings. After an absence of nearly two years the explorers returned to Sydney by sea, and were received with the greatest enthusiasm. A public subscription was instituted, and a sum of nearly £200 was presented to Dr. Leichhardt. This was supplemented by a donation of £1,000 from the Government, and the thanks of the Legislative Council were voted to him and formally conveyed to the intrepid and successful explorer by the Speaker from the Chair. Port Essington was, however, subsequently abandoned as a port of settlement.

In the early days of free settlement a struggle, which continued for over twenty years, was begun between the squatters and the selectors for the possession of the public lands of the colony. This fight for the soil may be considered as having been definitely determined in favour of the selectors by the passing of the Crown Lands Alienation Acts of 1866 and 1868. Another question which gave rise to constant rancour was the employment of convict, as against free labour.

The aborigines continued to give the colonists trouble during the early years of the settlement. A new track had been formed to the Darling Downs, and along this route the blacks showed themselves especially bold and hostile. At a point on the road which led from Ipswich to the mountains they boldly attacked a caravan of bullock drays, and the drivers and attendants fled for their lives. The drays were looted by

the victorious aborigines, who burnt whatever they could not consume. Thereupon the squatters assembled in force to make reprisals, and organised a foray upon the plunderers. They found the tracks of the natives, and, following them up, forced the band to disperse and take refuge on Hay's Peak. Many of the natives were killed, but the survivors remained untamed; and it was found necessary to employ a detachment of soldiers as a permanent guard at the foot of the main range, in order to assure the safety of the travellers by this route. Elsewhere, however, the blacks could not be kept under control, and the early forties were marked by murders of settlers—men, women, and children—and wholesale outrage, incendiarism, and pillage.

Late in the year 1845 Major Sir Thomas Mitchell, Surveyor-General of New South Wales, started out on his famous exploration of tropical Australia, at the head of a little army. Edmund Kennedy was his second in command, and he took with him besides a surgeon, twenty-eight men, eight bullock drays, three horse drays, and two boats. He was absent about a year, and discovered many splendid rivers and a great deal of fine country; and his expedition did much to enlarge the geographical knowledge of Central Queensland.

The first Queensland newspaper, the "Moreton Bay Courier," began publication in 1846, and still exists as the "Brisbane Courier." Communication by steamer between the capital and Ipswich was established about the same time; and Moreton Bay was declared a port of entry, with resident Customs Officers.

At this time Mr. Gladstone essayed the formation of a colony at Port Curtis, to be called North Australia, to consist of "exiles," or criminals who had merited by good behaviour some alleviation of their lot, and Colonel Barney was sent out to establish this probationary penitentiary. However, the scheme fell through, and Barney was re-called.

Leichhardt again took the field, and left Jimbour Station, Darling Downs, in the month of December, 1846, just as Sir Thomas Mitchell was returning from his expedition to Tropical Australia. Leichhardt's intention was to cross the Continent from east to west, making for the settlement at Swan River, in Western Australia. The attempt, however, ended in failure; dissensions broke out among the explorers, the party became fever-stricken, a flock of goats had to be abandoned, most of the bullocks and some of the horses and mules were lost, and a retreat had to be made to the confines of settlement. Another expedition, made by Leichhardt to the Fitzroy Downs, discovered by Mitchell, was also unsuccessful in its results. A Government Surveyor named Burnett made a useful journey of exploration in 1847, which added greatly to the knowledge of the country forming the hinterland of Wide Bay. The Burnett River bears this explorer's name. In 1847, Edmund Kennedy was sent out to trace the course of the Barcoo of Mitchell, and to determine whether or not it was identical with the Cooper's Creek of Sturt. Kennedy soon set this question at rest, and

discovered on his own account the Thompson, one of the principal affluents of the Barcoo, or Victoria.

The beginning of the year 1848 saw Leichhardt once more making a plunge into the unmapped wilderness, but this time he did not return. He set forth poorly provisioned, in all save live stock, and with an insufficient supply of ammunition, to realise his great trans-Continental project; and nothing more is known than that he reached the Cogoon River. The same year another ill-fated expedition set out; this time for the north. The leader was Edmund Kennedy, and his destination Cape York. He took with him eleven white men and a black boy. Of the whole party, only the black boy and two of the white men returned; the rest of the party perished, the leader having been speared by the natives.

A number of Chinese were imported in 1848 to act as shepherds to the squatters, there being at that time a great dearth of this kind of labour. Emigration from Great Britain of free colonists of a superior class was also encouraged, with a view to the counteraction of the evils arising from the convict system. Among the foremost leaders of this movement was the Rev. Dr. J. D. Lang, who had visited Brisbane in the year 1846. He was the means of introducing to the young colony hundreds of artisans and their families; but the promoter of this type of immigration frequently came into collision with the authorities at the Colonial Office. One of the ships chartered under his auspices, the "Fortitude," gave its name to Fortitude Valley, now a well-known section of the City of Brisbane.

For the next few years the history of the settlement is chiefly a record of disputes between the squatters, who were desirous of a renewal of transportation in order to obtain cheap labour, and the great bulk of the free population, who were decidedly averse to any such proposal. The outcome of this warfare between the two parties, combined with the rapid progress of the young colony, was the gradual growth of a keen aspiration for independent Government. The first public meeting held in Brisbane to discuss this matter was convened in January, 1851; and the movement thus inaugurated was continued until brought to a successful issue in the granting of separation by the Imperial authorities in 1859. Moreton Bay was raised to the dignity of a Residency in 1853, and the Police Magistrate, Captain Wickham, was appointed first Government Resident.

With the outbreak of the gold fever in 1852, there was a heavy exodus of population from the northern districts to Victoria. As happened in all the other colonies, ordinary business of all kinds was paralysed, and those who could not go to the diggings themselves organised and supported expeditions for vigorously prospecting all parts of the occupied districts which were regarded as likely to be gold-bearing. However, nothing substantial came of the researches made at this time in the Moreton Bay District, and it was long believed that northern Australia was destitute of rich deposits of the precious metal, an

erroneous idea that was afterwards amply dissipated in the magnificent discoveries at Charters Towers, the Croydon, the Hodgkinson, the Palmer, the Etheridge, the Gilbert, the Woolgar, Mount Morgan, and various other rich finds. In course of time people recovered their composure, and enterprise again flowed in its ordinary channels. The cultivation of cotton was attempted, but not on a large scale; the coal measures on the banks of the Brisbane and the Bremer were worked with redoubled energy, and wheat-growing and arrowroot culture were begun.

The aborigines continued to give trouble to the settlers in the frontier districts. On one occasion four or five hundred natives combined to attack a station in the Maranoa District, and were beaten off while attempting to storm the hut in which the hands had entrenched themselves. In 1851, the first wool ship from Moreton Bay sailed direct to London; and in the same year Brisbane became a place for holding a Circuit Court. The Judge sat in the chapel of the old convict barracks, an apartment which, after separation, was used as a Legislative Assembly Chamber; and again, until its demolition, accommodated the Supreme Court of Queensland.

The non-return of Leichhardt was a matter of grave anxiety to the colonists, and the most circumstantial rumours reached them that the intrepid explorer had met with an untimely end. These rumours became so prevalent and disquieting that at length Hovenden Hely, a former officer of the ill-starred Leichhardt, was sent out in January, 1852, to search for the missing expedition. He was unsuccessful in his quest, however, and, his provisions running short, he was compelled to beat a retreat to the settlements. In 1855, A. C. Gregory took up the solution of the mystery of the interior, and made extensive explorations in north-west Australia and the country around the Gulf of Carpentaria; but, so far as the fate of Leichhardt was concerned, he was equally unsuccessful.

In the year 1855, the Fitzroy River was first navigated, and the adjacent country speedily taken up by the squatters. At Canoona, a station only 7 miles distant from the point of debarkation, a patch of rich alluvial gold deposits was subsequently found, and the discovery was so exaggerated by rumour, that a fleet of vessels from all the ports in Australasia made a speedy appearance in Keppel Bay, conveying an immense rush of diggers and adventurers from all quarters; even New Zealand being represented. A township immediately sprang up; but all the payable gold was soon exhausted, and starvation stared thousands of adventurers in the face. The country around was scoured for the precious metal, and was declared barren, though since then thousands of ounces have been taken from it. The diggers were at their wits' end, when the Governments of New South Wales and Victoria despatched steamers to take away such as had been unable to leave at their own cost, or with the help of the friends they had left behind them.

The memory of the lost Leichhardt was suddenly revived, in 1857, by the curious story told by a convict named Garbut, who had been a frontier bushman, and who offered the disclosure of a great secret as the price of his liberty. He stated that he had paid a visit, far beyond the outposts of settlement; in fact, in the very heart of the Continent, to a colony of absconders from the old penal depôts. These outlaws had been chanced upon by Leichhardt in the course of his expedition, and they, fearing disclosure and punishment, had compelled him and his party to remain with them. Public sympathy eagerly caught hold of the fable, and Gregory was again sent out to search for the lost explorer. Garbut's fiction was easily exploded by a passage through his invented paradise, where the only thing the search expedition found, which could, by any possibility, be identified with Leichhardt, was the letter "L," cut into a tree growing near the Barcoo River. Gregory traversed a large area of unknown country, and was received in Adelaide with great enthusiasm.

Moreton Bay entrance was the scene of a deplorable shipping disaster in 1856, when the immigrant vessel, "Phœbe Dunbar," grounded at Amity Point, Stradbroke Island. In the same year, eleven persons were murdered by the aborigines at Hornet Bank, on the Dawson River. On the 6th September, 1858, Brisbane was proclaimed a municipality. On the 10th December, 1859, the whole of New South Wales north of Point Danger was proclaimed a separate colony under the name of Queensland.

The work of exploration continued to be pushed vigorously forward. In 1858-9, William Landsborough explored in detail a considerable stretch of territory on the Isaacs and Suttor Rivers; and George Elphinstone Dalrymple organised an expedition by land, and ran down the Burdekin towards the sea, while a schooner sailed up the coast to meet him at Upstart Bay. In 1861, Burke and Wills (concerning whose expedition something has already been said in the chapter dealing with the affairs of Victoria), after traversing the continent from Melbourne to the Gulf of Carpentaria, perished from privation on the return journey in the Great Stony Desert of Sturt. This ill-starred expedition crossed and re-crossed the only portion of Queensland which, up to then, remained unexplored, viz., the extreme west, from Cooper's Creek to the great Gulf; and three relief expeditions simultaneously set forth from bases of operations widely apart to rescue them, or to ascertain their fate, and these added greatly to the growing knowledge of the interior. The relief expedition under McKinlay, with whom was W. O. Hodgkinson, started from the south, and ultimately reached the coast, where the party found Captain Norman, R.N., on the Albert River with H.M.S. "Victoria," and the wreck of the tender "Firefly" moored as a hulk in the stream. The second relief expedition, led by Commandant Fred. Walker, started from the Bauhinia Downs, on the Dawson River, on the 7th September, 1861, and proceeded north-westerly, *via* the head-waters of the Alice

and Thompson Rivers. Walker discovered and named the Norman, and after considerable exploration in the north-west of the colony, made his way by the Gilbert Ranges and the Burdekin River to Port Denison. Landsborough, the leader of the third relief expedition, did not succeed in tracing the route of Burke and Wills, but he was, nevertheless, received in Melbourne with every mark of public appreciation. A noteworthy expedition of this period was that of the brothers Frank and Alexander Jardine, who essayed the transport of a mob of cattle to Somerset, Cape York, and who literally fought their way through hordes of hostile blacks, ultimately arriving at their destination in safety. In 1866, a man named Hume, pretending to have authentic information concerning the fate of Leichhardt, managed to induce a couple of believers to accompany him to Cooper's Creek. Reaching the creek the travellers for four days journeyed inwards without water, and then they separated, each man hunting for the precious fluid by himself. One was fortunate enough to find water, and returned to the rendezvous only to discover that his comrades had departed; so he went on to a station for help. Searchers sent out with succour found the body of Hume beside that of his horse, which he had killed in order to drink its blood. The corpse of the other man was afterwards discovered in another direction. Some years later a person named Skuthorpe, frontier bushman and squatter, also professed to have found relics of the lost explorer, but he never suffered them to be seen, and his assertions were received with incredulity.

The Royal Letters Patent creating the colony of Queensland were issued, as already mentioned, on the 13th May, 1859. The first Governor appointed by the Crown to the superintendence of the young province was Sir George Ferguson Bowen, who arrived in Brisbane by the war corvette "Cordelia," on the 10th December, 1859, and, on landing, formally proclaimed the colony, amidst universal jubilation.

The territory over which Governor Bowen had been appointed to rule was noble as regards area and magnificent in point of resources. It extended for 1,300 miles from north to south, and 900 miles from east to west, including great varieties both of soil and climate, and furnishing the products both of the temperate and torrid zones. It occupied the north-eastern portion of the continent, and comprised an area of 668,497 square miles, being thus more than twice the size of New South Wales and nearly eight times that of Victoria.

Besides the Royal Letters Patent creating the colony and appointing its Governor, there was a second order which invested His Excellency with specific powers to make laws and provide for the administration of justice, while the Governor of New South Wales was empowered to create a nucleus of a local Parliament by appointing for four years such persons as he might deem qualified to sit in the new Legislative Council. The Governor of Queensland was charged with the task of completing the *personnel* of the Council by additional nominations of members with life tenure. With respect to the election of members to form the

representative chamber, the Legislative Assembly, the franchise was limited to such residents as had at least the qualification of a £10 annual lodger's tenancy. Great dissatisfaction was expressed in the new colony at the exclusion from its territorial area of the rich territory comprising the Clarence, the Richmond, and the New England Districts; and, for years after, this north-eastern portion of the mother colony indulged in sporadic outbreaks of quickly subsiding agitation for union with Queensland.

The population of the new colony at the date of its separation was about 25,000. The pastoral industry was almost the only one deserving the name, agriculture being limited to the cultivation of maize and of hay, and mining was represented by a couple of coal pits of small output. Three-fourths of the richest pastoral land in the colony were untenanted save by aborigines; and, though population was increasing, it was but at a slow rate. At the time of the establishment of separate government, there was not a seaport town in the colony to the wharfs of which a laden ship of 1,000 tons could approach; and there was also scarcely a made road in the whole territory, although the city of Brisbane had been proclaimed a municipality on the 6th September of the year preceding.

With the Governor came Mr. Robert G. W. Herbert, who had, like His Excellency himself, served as private secretary to Mr. Gladstone. This gentleman was appointed by Sir George Bowen to act as Colonial Secretary and First Minister. On his return to England some few years later, Mr. Herbert became Permanent Under Secretary of the Colonial Office. The elections for the first Legislative Assembly were held early in the year, and the first Parliament was opened on the 29th of May, 1860, ninety years and a few days after the date when Captain Cook visited Moreton Bay.

During the tenure of office of the first Herbert Ministry, legislation dealing with primary and secondary education was adopted. The former was undertaken by the State, and the administration delegated to a nominee board, while provision was made for the latter by affording facilities for the founding of grammar schools under trustees, with endowments from the consolidated revenue. On the 6th November, 1860, State-aid to religion was withdrawn. In 1861, laws of equal importance were passed; among them measures providing for municipal government, and for the transfer of real estate, the latter founded on the Torrens system. The first census was taken on the 7th of April, in the same year, when the population of the colony was found to be 30,059. The first telegraph message was despatched on the 10th of the same month. The first State trial (*Regina v. Pugh*) took place in 1861, the question at issue being the right of free discussion, and resulted in favour of the defendant. The first Queensland Exhibition was opened on the 29th October in this year.

During the provincial connection of Moreton Bay with New South Wales, thousands of immigrants were constantly being poured into

Sydney, the northern colony having, perforce, to be content with an occasional shipload. With the advent of separate Government, Queensland inaugurated an independent immigration system, selecting Mr. Henry Jordan, who proved a particularly efficient agent, to advocate in England the advantages of the colony as a sphere for enterprise. Special inducements were offered by the Legislature to desirable immigrants. To those who defrayed the cost of their own passages orders were granted available in payment for lands, representing to each adult £18 on arrival, and £12 additional after two years' residence, two children being accepted as equal to one adult. An extensive traffic in these orders immediately sprang up. The newly-arrived immigrants uncertain where to proceed or how to act under their altered condition of life, were easily persuaded to sell their orders at less than their value, and the purpose for which they were issued was thus defeated, while the newcomers drifted into hired service or hung about the towns; though a certain proportion did take up land and settle down. Later on a Land Act was passed which made provision for the establishment of agricultural reserves, each containing 100 acres, at East and West Moreton, Wide Bay, Port Curtis, and Keppel Bay; and reservations for settlement, 10,000 acres in extent, were to be defined within 5 miles of every town of 500 inhabitants. These lands were made available to selectors at £1 per acre, payable by instalments. As a result of its immigration policy, the colony soon received a large accession to its population; in the first four years alone the number added was not less than 46,422.

During the first years of responsible government the pastoral industry was exceedingly prosperous. Settlers were constantly pushing forward the frontiers of settlement, though greatly harassed by the hostility of the aboriginal inhabitants. Murders by the blacks of solitary shepherds and straggling stockmen were constantly being reported, without, however, exciting much more than passing interest and annoyance. The colony was greatly shocked, therefore, when a massacre occurred on a larger scale, and a whole family named Wills, together with their station hands, nineteen persons in all, were slaughtered by the aborigines in one night. This outrage was followed by an act of vengeance by the whites, the police, assisted by volunteers, killing some 170 aborigines whom they pursued to the Midway Ranges.

In 1861, Governor Bowen paid a visit to Cape York with the object of selecting a station to replace that so long uselessly maintained at Port Essington. Nearly every commander of a Queen's ship exploring in the seas lying to the northward of the colony had condemned it, and expressed a preference for Port Albany. His Excellency confirmed their recommendations, and appointed as Government Resident Mr. Jardine, who was established with a small detachment of marines at Somerset, a harbour of refuge on the inner side of Albany Island. By this time pastoral settlement had spread all along the coast as far north as Cardwell; inland, the Thompson River was being rapidly occupied; and northward, the country watered by the Flinders River; the Plains

of Promise were occupied by cattle, and the hinterland of the Gulf of Carpentaria was rapidly taken up for squattages. Extensive deposits of copper ore had been discovered in the Peak Downs District, and active mining operations were proceeding.

The second Parliament met on the 22nd July, 1863, and did not dissolve until the 29th May, 1867, and, during the greater part of its term, the Hon. Robert Herbert retained the confidence of the representative legislature. On the 21st September, 1863, the Queensland Bank Act was passed, and the first bank having its headquarters in the colony was established under its provisions. The bank began business in October, but had only a brief life, being overwhelmed in the financial cataclysm of 1866.

Just after the accomplishment of separation, a movement was initiated by a public company to construct a tramway to facilitate traffic between the Darling Downs and the Bremer at Ipswich, to which point river steamers daily plied from Brisbane. This project collapsed, and the conception of a railway took its place. The starting of construction was, however, delayed for several years, owing to the contentions which arose between Brisbane and Ipswich as to the proper point of departure. At length the squatting party in Parliament, seeking to deal out a rebuff to the capital, which represented the democracy (mainly immigrant) of the colony, decided on Ipswich, and the work of construction was begun. The gauge adopted was the 3 ft. 6 in., and the line was opened from Ipswich to Grandchester on the 31st July, 1865. Brisbane obtained, as some compensation, a measure for improving the access to the town, and the river bar and the flats were dredged with the view of cutting a deep-water channel. Sugar culture was encouraged by liberal arrangements for the acquisition of plantations on the alluvial lands along the coastal rivers and creeks; and the first sugar from Queensland cane was manufactured on the 9th September, 1864. The growth of cotton was effectually stimulated by liberal bounties granted by Parliament on the export of the staple, and between 1867 and 1874 no less than 10,023,585 lb. were grown and exported. But with the increase of production in America, consequent on the termination of the Civil War and the cessation of the practice of paying bounties, it was found impossible to obtain payable results, and the cultivation died out.

The revenue of the young colony was not, of course, adequate for defraying the cost of founding its institutions and carrying out great public works, and recourse had early to be had to the money market of London, where, during the years 1861-3-4, loans had been authorised and negotiated aggregating £1,856,236.

From January, 1860, to the end of September 1865, over 46,000 immigrants had been added to the population of the colony; the Bank of Queensland, with local share-holding and a local directorate, had been established, money was plentiful and credit readily obtained, building societies had been established, and business enterprises of all kinds

were flourishing. In 1865, however, the colony was forced to repeat the bitter experience of South Australia in 1841, of New South Wales in 1842, and of New Zealand in the cold days of financial collapse that succeeded the Vogel policy of national expansion and construction of public works. There can be no doubt that the expenditure of borrowed money had been extravagant and in not a few instances unjustifiable. The waste of money on railways and in dredging was enormous, and the stoppage of this extravagance was coincident with one of those waves of depression which, from time to time, afflict the commercial operations of the world. Its effects were felt with emphatic severity in Queensland; prices of pastoral products fell; the banks stopped the granting of credit and called in their advances. Parliament naturally turned its hand against the Herbert Ministry which was driven from office. The new Ministry was led by the Hon. Arthur Macalister, and attempted to stem the torrent of disaster, but confusion reigned supreme, and after six months it was swept aside. The Hon. Robert Herbert again essayed the task of governing the country and again succumbed after three weeks' trial. On the 7th August Macalister once more accepted office amid the wildest public panic. The failures in Great Britain of the banking firm of Overend Gurney, and the great contractors, Peto, Brassey, and Betts, who had the contract for the railway then being constructed, and also for the Victoria bridge, had greatly intensified the crisis in Queensland; but it was hoped that the storm might be weathered with the help of a freshly authorised loan. The Sydney agency of the Agra and Masterman's Bank had already undertaken to make the necessary advances, when the news from London of the collapse of that institution brought total wreckage in its train. The Bank of Queensland closed its doors; investment society after investment society rapidly went to the wall, insolvencies followed each other in bewildering succession, and the whole fabric of social polity seemed to be absolutely disintegrating. The Treasury was totally depleted—trust funds, saving banks' deposits, and ordinary revenue had alike disappeared. Tenants ceased to pay their rents, and thousands were discharged from employment, or had to forego the receipt of their salaries; even the navvies engaged in railway construction were turned adrift by the contractors who could no longer pay their wages. The discharged navvies thereupon collected in a menacing body, seized a train going to Ipswich, and marched upon the city of Brisbane, heralded by rumours of the most alarming description. Reports circulated among the citizens that the malcontents had sworn to loot the shops and the banks, to burn down Government House, and to hang the Ministers of the Crown. The members of the Government were panic-stricken, and behaved as if they were demented, their abject terror serving only to augment the public alarm. The police were, however, armed, and the members of the Civil Service provided with batons, and sworn in as special constables. Many citizens were also sworn in, but the only things served out to them for the protection of the community were badges and rosettes. When the

navvies arrived they were found to number only 125 very weary famished men ; but they were speedily reinforced by many of the local unemployed. The Riot Act was read, the police loaded their rifles with ball cartridges, and the men were headed off to a vacant reserve on the flank of Windmill Hill, where they were furnished with food and addressed by the Roman Catholic Bishop and others. Employment was found for them on relief works, where they received 5s. a day and rations, and the difficulty was tided over.

This diversion gained for the Ministry a little breathing time, of which they proceeded to make immediate use. Parliamentary sanction was obtained, and £300,000 of Treasury bills at short dates, and bearing 10 per cent. interest, were issued, and realised £298,671, thus staving off the total collapse which apparently was imminent. One hundred thousand pounds of Treasury notes of £1 each, serving alike as relief to the Government and as a currency, were also put into circulation, and other devices were resorted to in order to avert financial ruin. Just prior to this great crisis, Kanakas to work on the sugar plantations were first introduced into the colony, and the germ of a disintegrating social factor was thus sown which was destined to produce unpalatable fruit in later years of development. In the month of September, 1867, a miner named James Nash, while wandering in the Wide Bay district, found indications of gold, and in a day or two had washed out sufficient of the precious metal to represent a value of some £200 or £300. The news soon became known far and wide, and the discovery was announced to the authorities. Nash led the Gold Commissioner and nearly the whole population of Maryborough to the scene of his fortunate find. The whole of Queensland was in a turmoil, and thousands of impoverished settlers gathered to the new "rush." Then was unearthed the Curtis nugget, containing £3,000 worth of gold, and a tremendous influx of diggers set in from all parts of Australia and New Zealand. The town of Gympie sprang up, and many localities in the neighbourhood were found to contain gold in alluvial deposit. The discovery was opportune, and gave a new impetus to the hopes of the colonists. The field was situated about 100 miles north of Brisbane, and has since proved one of the most important gold-producing centres of the colony.

During the Macalister *régime* a Stamp Duties Act was passed, also an important measure dealing with the alienation of the Crown lands ; but the result of the general election failed to confirm Mr. Macalister's policy, and his Ministry was succeeded by that of the Hon. Robert R. Mackenzie, who, retaining office for a little more than a year, appealed to the country, and, on the meeting of the fourth Parliament, was defeated. In spite of the political instability, the colony was now, once more, upon the upward grade. The new Land Act gave greater facilities for settlement, and the sugar industry began to give signs of importance, and to replace the languishing cotton plantations. By the end of 1869 there were in the colony twenty-eight sugar-mills at work.

Sir George Bowen surrendered his office just on the eve of the new era of promise and financial confidence, leaving the colony on the 4th January, 1868. The Government was administered till the 14th August following by the Hon. Colonel (afterwards Sir) Maurice Charles O'Connell, President of the Legislative Council. Sir George Bowen's successor, Colonel Samuel Wensley Blackall, assumed the responsibilities of office on the 14th August, 1868.

The Hon. Charles Lilley's Ministry succeeded that of Mr. Mackenzie on the 25th November, 1868, and lasted till the end of May, 1870. During its term of office the Civil Service Act was repealed, a number of measures dealing with court procedure were passed, and amendments were made in the electoral laws. The tenure of pastoral leases was changed by making provision for the resumption, at the discretion of the Government, of lands as required for settlement, subject, however, to the approval of Parliament.

During Sir Maurice O'Connell's administration, and early in the year 1868, the Duke of Edinburgh, who was making the tour of the Australasian Colonies, paid a visit to Brisbane, and was received with great enthusiasm.

The colony continued to advance, and it owed no little of its prosperity to the successive discoveries of gold made within its borders. One after the other, the new fields afforded scope to the energies of the digger, and opened up fresh avenues for the employment of the capital of the speculator. Ravenswood, the Cape River, the Gilbert, the Etheridge, Charters Towers, and Cloncurry, are all gold-bearing areas, still worked, which were opened up about this period, and attracted population and invited investment. There was, however, the germ of future trouble which became more serious as the years went by. This was the presence among white people of an alien and coloured race. The expansion of the sugar industry had created a demand for cheap labour, available for employment on the plantations. An old South Sea whaling captain, named Robert Towns, who had accumulated great wealth in trading with the South Sea Islanders prior to settling in Sydney, was among the earliest to engage in sugar-cane growing on a large scale. He first took up a plantation on the Logan River; but is best known as the founder of Townsville. With a view to working his plantation more cheaply he quietly brought to the colony a shipload of Kanakas, as the South Sea Islanders are termed; and it was not long before other planters began to follow his example. In 1868, an attempt was made to legislate restrictively with regard to the traffic in this class of labour; but the sugar interest had become politically powerful, and the Legislature confined its action to passing an Act to regulate recruiting for labour in the South Seas, and the conditions of the contracts made with the Islanders. The early records of "black-birding" cruises, and the scandal connected with the *Hopeful* case, cast a cloud of suspicion upon the entire system. The ships of Her Majesty's Navy eyed with severe scrutiny the doings of the labour boats; and the white

workers in the colony resented the competition and the presence among them of an inferior and an alien race. They alleged that cheapness was the only cause of the employment of savages in a civilised community and the capitalists retorted that the work was such that Europeans could not perform it, and that the employment of Kanakas had enabled an industry to be developed, which otherwise, like the cultivation of cotton, would not have been possible—an industry, moreover, which indirectly furnished employment to large numbers of white labourers in other departments of production and distribution. Some notion of the proportions rapidly attained by the traffic in South Sea Island labour may be formed from a consideration of the fact that in 1868 (when official statistics first became available) six vessels brought 437 males and two females; in 1869 five ships brought 276 males and two females; and in 1870, nine ships brought 1,294 males and 18 females.

In the year 1869 another step was made in the progress of public instruction, provision being made under State subsidy for secondary education by the establishment of the Brisbane Grammar School. In the month of May, 1870, the Hon. Charles Lilley had no longer the command of a majority in the Legislative Assembly, and resigned. The Hon. (afterwards Sir) Arthur Hunter Palmer was thereupon summoned to form a Ministry, and two months later he obtained a dissolution. On meeting the new Parliament, Mr. Palmer found that his policy had been confirmed by a majority of the electors; and he was able to retain office until the 8th January, 1874.

Governor Blackall, the most popular and the most deeply regretted of all the representatives of Royalty who had ruled the colony, died in office on the 2nd January, 1871, and the Government was administered by the Hon. M. C. O'Connell, President of the Legislative Council, until the arrival of the Marquis of Normanby on the 12th August following. In the month of June of the same year, after a life of rather more than six months, the fifth Parliament was dissolved; but the succeeding one, opened in November, brought no change in the administration.

The Queensland National Bank, which has been a fertile source of political trouble, and in connection with which there has been such a vast amount of litigation, was founded in 1871, and was opened on the 2nd of June that year.

In the year 1872 immense deposits of tin were discovered near the south-eastern border of the colony, at a place now famous as Stanthorpe, and almost simultaneously attention was directed to the extensive lodes of copper ore on the Mount Perry Run, Burnett District. The existence of opal in the northern part of Queensland was also brought to light, followed shortly afterwards by the discovery of extensive beds of this gem on the Bulloo, in the Warrego District. The mineral discoveries at Stanthorpe and Mount Perry were only the precursors of others equally rich and extensive, and the colonists found that they were dowered with every kind of hidden wealth that only awaited

their exploitation. A heavy fall in the market price of tin and copper somewhat checked the extravagances of their day dreams, and great losses were experienced by many who had indulged in too eager speculation. In 1872 the discovery of coal in the Wide Bay District added a further area to the proved coal measures of the colony; but the mineral discovery of the most sensational character during this year was that of the Palmer gold-field by Mr. William Hann, who had been despatched to explore and prospect for minerals in the wild country outside the limits of settlement, in the base of the Cape York Peninsula. Mr. Hann had associated with him Mr. Taylor, a geologist of established reputation, while Dr. Tate accompanied the party in the capacity of botanist. Prospecting was conducted over a very wide area of country, and several important geographical discoveries were made, one of the most notable being that of the Palmer River, named after the Premier. Here prospects of gold were found by Mr. Warner, the surveyor of the expedition, a discovery which subsequently resulted in the development of one of the richest gold-fields in Australia, though the man who chanced upon it thought himself fortunate in being rewarded by half a pound of coarse fig tobacco. In 1873 James Venture Mulligan took up the work of prospecting for gold at the point where Hann had left off, and was fortunate in finding payable "shows" for some 40 miles in the bed of the Palmer River. Acting on Mulligan's advice the Government opened Cooktown, and sent up officers to that gold-field. After prospecting and finding gold for 80 miles along the course of the Palmer, and for a radius of 40 miles outside the Palmer, Mulligan's party applied for and obtained the Government reward of £1,000. The fame of Cooktown spread far and wide throughout the civilised world, and a great "rush" set in, thousands of diggers swarming to the spot in a fleet of vessels, which were moored or anchored hard by the estuary of the Endeavour River, where Cook had beached his battered barque over a hundred years before. Among the invaders came hordes of Chinese, and the friction caused by their intrusion on the field occasioned legislative action, which excluded men of that race from all gold-bearing areas until a certain period had elapsed after discovery.

Up to this time Ipswich had been the terminus of the railway nearest the coast, but it was now resolved to remove the absurd anomaly of leaving the metropolis and principal seaport still disconnected from the railway system of the colony, and in January, 1873, the extension of the railway from Ipswich to Brisbane was begun. In June of the same year Captain Moresby unfurled the Union Jack in New Guinea, and formally read a proclamation taking possession of it in the name of Queen Victoria; his action, however, was not confirmed. During this cruise the blacksmith on board H.M.S. "Basilisk," Captain Moresby's vessel, reported the discovery, a few miles inland, of gold-bearing quartz. This discovery has since been confirmed by numerous visits of gold-hunting diggers, particularly to Sudest and

Woodlark Islands. In the following year the Hon. Henry Parkes, at that time Colonial Secretary for New South Wales, addressed a minute to Governor Robinson, advising that an effort be made towards the colonisation of New Guinea under British auspices, but no definite answer was received from the Home Government.

Mr. George E. Dalrymple was again sent out by the Government in 1874 to extend his researches along the north-eastern seaboard. He left Cardwell with a party of twenty-six men, including thirteen well armed native troopers, in the cutters "Flying Fish" and "Coquette" — crafts of some 10 or 12 tons burden. He made many and important discoveries, passing and naming rivers, harbours, and roadsteads, and finding large areas of rich alluvial coast lands, which proved of great subsequent value for the cultivation of tropical products. In 1875 the settlement at Port Albany, lying too far from the route of vessels navigating Torres Straits, was abandoned by the Admiralty, the marines were withdrawn, and a new station was established by the Government of Queensland on Thursday Island, one of the Prince of Wales Group, in Torres Straits, a change which has worked very satisfactorily.

In 1875 the question of the annexation of New Guinea again came to the front, while a large public meeting held at Sydney, in the parent colony, also declared in favour of the proposal. The "Chevert," fitted out by the Hon. William Macleay, M.L.C., to explore south-west New Guinea, made no new geographical discoveries, but it brought back an immense collection of specimens of the greatest interest to naturalists.

The Marquis of Normanby had departed from the colony on the 12th November, 1874, and until the arrival of his successor, Mr. William Wellington Cairns, on the 23rd January, 1875, the Government was administered once more by the President of the Legislative Council, the Hon. M. C. O'Connell. Governor Cairns left the colony on the 14th March, 1877, to take up the rôle of Administrator of South Australia, and the Hon. M. C. O'Connell filled the vice-regal chair until the 10th of April following, when Sir Arthur Edward Kennedy, G.C.M.G., C.B., took up the responsibilities of Governor. During Sir Arthur Kennedy's absence on leave, from the 19th March, 1880, till the 22nd November of the same year, the Hon. Joshua Peter Bell, President of the Legislative Council, administered the Government. Sir Arthur Kennedy left the colony on the 2nd May, 1883, and the Government was administered by Sir Arthur Hunter Palmer, K.C.M.G., the President of the Legislative Council, until the arrival of the next Governor, Sir Anthony Musgrave.

The most important political event of 1878 was the restriction of Chinese immigration into the colony. At that time it was estimated that there were about 18,000 or 19,000 of these aliens distributed about the various mining fields. At Maytown, in the year 1878, a serious fracas took place amongst the resident Chinese, resulting in the deaths of several of their number.

In the year 1879 Mr. (afterwards Sir) Thomas McIlwraith succeeded the Hon. John Douglas as Premier, and immediately revived the project of a transcontinental railway on the land-grant system. The new Ministry had no difficulty in carrying through Parliament a Railway Companies Preliminary Act, which conferred upon the Government power to enter into treaties for the construction of railways, subject, however, to the confirmation by Parliament of any arrangement that might be made with contracting syndicates. An association of British capitalists was soon negotiating terms with the Government for the construction of the long canvassed line from Charleville to the Gulf of Carpentaria, with a terminal station at Point Parker; and General Fielding was sent out in charge of an expedition of engineers to report upon the proposed route. This report was so favourable that a preliminary agreement was, after some delay, signed and sealed between the Government and the contracting syndicate. The squatting interest in Parliament became alarmed, however, at the large resumption from squattages that a land-grant system of railway construction would involve. They, therefore, withdrew their allegiance from the Government and formed a third party. The Opposition was led by Mr. (afterwards Sir) Samuel W. Griffith, a gentleman who was at first favourably inclined towards the land grant railway scheme, but who afterwards opposed it most strenuously. The combination of the regular Opposition and the third party was able to defeat the Government, and the McIlwraith Ministry was succeeded by one led by the Hon. S. W. Griffith.

Before relinquishing his hold of the Colonial Treasurer's portfolio, Mr. McIlwraith made his historical attempt to seize New Guinea in 1883. Tired of long and vain solicitations to Lord Derby, then Secretary of State for the Colonies, to take formal possession of the island, he quietly instructed Mr. Henry M. Chester, the Police Magistrate at Thursday Island, to cross Torres Straits and on behalf of Her Majesty's Government in Queensland, to hoist the British Ensign and proclaim the annexation to the colony of that part of the island not claimed by the Dutch. This proceeding was not authorised by the Colonial Office, and after some hesitation the Imperial authorities repudiated the annexation. Lord Derby, however, in 1884, declared a British Protectorate over a part of unannexed New Guinea, and Germany thereupon seized the remainder. During the McIlwraith Government the Queensland and South Australian boundary was fixed by Messrs. Winnecke and Barclay, two surveyors who had been despatched by the South Australian Government in 1878 to reach the Queensland border from the transcontinental telegraph line. The expedition of 1878 was fruitless, but a second attempt in 1880 proved successful.

Sir Anthony Musgrave, G.C.M.G., who had previously governed South Australia from 1873 to 1877, relieved Sir Arthur H. Palmer of the responsibilities of administration on the 6th November, 1883. During the absence, on leave, of Governor Musgrave from the 19th April to December, 1886, the Government was again administered by

Sir Arthur Palmer. During Sir Anthony Musgrave's régime several events of importance occurred. On the 1st October, 1884, one of those sensational "crushings" took place which tend to keep alive and fan to flame the gold-hunter's enthusiasm, no less than 2,249 ounces of the precious metal being obtained at Gympie from 107 tons of stone. The main political event of the year was the meeting at Townsville, the headquarters of the Separationists, of the Separation Convention, on the 10th April. The centralisation of power and influence in the Southern corner of the colony had been productive of discontent in the Central and Northern parts of Queensland, and for years intense agitation was carried on for the division of the territory into three, or at least two, distinct colonies, with separate responsible Governments. In order to promote the objects of the Separation League, a committee was formed in London on the 2nd October, 1885, and the work of agitation was vigorously proceeded with. Railway extension was now being pushed forward rapidly, and various sectional lines were opened and given over to traffic. On the 25th January, 1886, the first meeting of the Federal Council of Australia was held at Hobart, thus preparing the way for what was later on to take form in an earnest movement towards complete federation. Queensland was represented in this and all subsequent meetings of the Council.

Early in 1887 the Queensland Government appointed Mr. Clement Wragge to the position of Meteorological Observer, and from that time onward the regular publishing of meteorological data has proved of great advantage not only to the shipping interests of Queensland, but to Australia generally.

The beginning of the year 1888 saw railway communication between Sydney and Brisbane established. During the month of February disastrous floods occurred at Rockhampton, no less than 21 inches of rain falling in a space of time little over twenty-four hours in duration. In the fall of the year Dr. (now Sir William) McGregor, appointed Administrator of New Guinea, proclaimed British sovereignty over the British section of the Island.

In 1888 the deaths of two prominent men occurred. The first was that of the Governor, Sir Anthony Musgrave, at the age of 60 years; the second, that of Mr. Frank C. Gregory, at the age of 68. Sir Anthony Musgrave died in office on the 8th October, universally regretted in the colony as a Governor of marked ability, and a gentleman of gracious social manners. Mr. Frank Gregory had accomplished excellent exploratory work in Western Australia. General Sir Henry Wylie Norman succeeded to the Government of Queensland on the 1st May, 1889, and continued in office till the 15th November, 1895.

A terrible marine catastrophe took place on the 28th February, 1890, when the R.M.S. "Quetta" struck upon an uncharted rock off the coast of Northern Queensland. She sank in a few minutes after striking, only 137 persons being saved out of a total of 283. The month of

March, 1890, was exceptionally tempestuous. Extensive floods devastated large areas in Queensland and the northern districts of New South Wales, causing fearful damage to property. A terrific hurricane occurred at Townsville, and lasted two days, occasioning great loss of property, both in houses and shipping, and heavy rains and floods in both colonies were attended by serious losses.

The Morehead Ministry, which had succeeded that of Sir Samuel Griffith on the 30th November, 1888, came to a dramatic termination on 7th August, 1890, when it was saved from defeat on a want of confidence motion only by two votes, the number of votes recorded being thirty five to thirty-three. Five days afterwards the second Griffith Ministry was formed, and Parliament was adjourned until the 16th September.

The year 1890 saw something of a crisis in the industrial history of Australasia. On the 19th August the great maritime strike began in Sydney, and soon became general throughout the colonies. In a previous chapter dealing with New South Wales will be found a short account of the developments in the period of industrial warfare which was ushered in by this episode.

The Queensland Premier, Sir S. W. Griffith, so far entertained the proposals of the Separationist Party—or was so far swayed by their agitation—that he proposed, in the month of November, 1890, to divide the Colony into three semi-independent States.

In March and April, 1891, a parliamentary convention was held in Sydney for the purpose of drawing up a federal constitution. The work of the Convention is elsewhere described.

The squatters, but more particularly the planters, had ever kept a longing and interested eye on cheap alien labour, and it is possible that such industries as the growing of sugar cane could not be conducted without it. The great bulk of the white labourers, however, held particularly strong views against the introduction of alien races of any kind, but especially of kanakas; and they received, therefore, with no good grace the remarks of Sir Samuel Griffith, when, speaking on the 18th March, 1892, at Maryborough, the centre of a sugar-cane growing district, he advised the re-introduction of Polynesian labourers. The representatives of labour in Queensland entered a vigorous protest against the proposals of the head of the Government, but this protest was of little avail, for, on the 14th April following, the Pacific Labourers (Extension) Bill passed both Houses of Parliament.

On the 14th September, 1892, Mr. Justice (afterwards Sir) William Windeyer proceeded to Brisbane at the invitation of the Queensland Government, and by special permission of the Government of New South Wales, and sat in the Supreme Court to adjudicate in the Queensland Investment Company's cases. On the 11th January, 1893, Sir Samuel Griffith resigned his position as Premier of the Colony to become Chief Justice, the Right Hon. Sir Hugh Muir Nelson, P.C., undertaking the

duties of Acting Chief Secretary until the arrival of Sir Thomas McIlwraith from Europe, which event followed on the 19th of the same month.

The year 1893 opened most disastrously. During the last week in January the greater part of the country was visited by terrific storms and floods, which caused serious damage. From the 14th to the 16th of the following month the watershed of the Brisbane River was devastated by floods, which rose to an unusual height. The low-lying portions of the metropolis and of Ipswich were completely submerged, dwelling houses were swept away from points along the river banks, and both the Indooroopilly and Victoria bridges were destroyed, the carrying away of several spans of the latter structure completely cutting off communication with South Brisbane. For a week business was at an entire standstill. It was estimated that the damage to property involved a sum of upwards of £2,000,000. In consequence of the immense amount of silt brought down by the flood-waters, the lower reaches of the river were choked up, and during the rains of a fortnight later the waters being unable to escape "backed up" to the town, and caused a second inundation, the damage, however, not being so heavy as on the first occasion. The northern coastal regions of New South Wales also suffered from floods and storms, and telegraphic communication was interrupted for some considerable time.

Queensland also had its share of the troubles resulting from the financial crisis of 1893. Several of the banks and institutions from the southern States which had offices in the northern province closed their doors, and some of the local institutions also suspended operations. Chief amongst the latter were the Queensland National Bank and the Bank of North Queensland, which stopped payment on the 15th May, and the Royal Bank of Queensland, which closed two days later. The Bank of North Queensland reopened on the 31st July, and the reconstructed Royal Bank of Queensland followed suit on the 31st August. The Queensland National Bank, which lately proved such a fruitful source of litigation, also reconstructed, and resumed business.

As a direct result of the strike of 1890, a movement was set on foot having for its object the founding of a sort of communistic colony, where the settlers should be free from the strife and troubles incidental to existing social conditions. The leader of the movement was a Mr. William Lane, a Brisbane journalist, and he devoted himself with whole-souled energy to preaching the blessings of the new Promised Land, and collecting funds to enable the colony to be started. After much negotiation, the position of the settlement was chosen in Paraguay, in South America, and on the 16th July, 1893, the first detachment of New Australians left Sydney in the "Royal Tar." Other consignments of intending settlers sailed in succeeding ships; but, though the settlement is still in existence, it has, as is usual with such Utopian schemes, fallen sadly short of the ideals which led to its foundation. Some of the disillusioned emigrants were assisted by the Queensland Government

to return to their old homes; others managed to get away without assistance, while those that remained were for the most part plunged in continual bickerings with one another. The latest available news gave the number of settlers at Cosme as ninety, consisting of twenty-five men, sixteen women, and forty-nine children. The Government originally granted 25,000 acres to the colony, exempted the settlers from all direct taxation, appointed locally-nominated magistrates, established a postal service, and recently, through the State Bank, supplied, on favourable terms of repayment, machinery for the development of its resources. Visits have been paid at intervals to various lands in search of recruits, and towards the close of 1901 Mr. John Lane came to Australia, as honorary immigration agent appointed by the Paraguayan Government. The British Consul, however, reported that in consequence of the unsettled nature of the country it would be unwise for British subjects to proceed there, and the agent's efforts were therefore not very successful.

In the session of 1893 the "separationists" succeeded in carrying a resolution affirming the desirableness of submitting to a referendum the question of the separation of Central Queensland from the rest of the colony, but although the matter was spasmodically debated in later years the resolution was never given effect to, and Queensland still remains undivided. Shortly afterwards, a resolution in favour of a Bill raising the salary of members from £150 to £300 per annum, though opposed by the Government, was carried in the Assembly by 27 votes to 22. In October, Sir Thomas McIlwraith was supplanted as Premier by Sir Hugh M. Nelson, Sir Thomas accepting the portfolios of Chief Secretary and Secretary for Railways in the Ministry, and shortly afterwards leaving for England.

The industrial disputes of the past few years reached their climax in 1894 when the great Shearer's Strike was called, and in Queensland, no less than in New South Wales, it was attended by deeds of violence. Free labourers were waylaid and maltreated, and in some localities station buildings were burnt down. Matters reached such a pitch that it became necessary to send detachments of soldiery to various inland towns, while the numbers of the police were strengthened in the centres of disaffection. On the 13th July the Assembly passed a resolution to the effect that "the time had arrived when Parliament should take steps to put an end to industrial disputes." But the action taken by the Government in this direction met with the disapproval of the Labour Party, and their opposition to the Peace Preservation Bill became so disorderly that eight members were removed from the House and suspended for a week. On the 12th September the Bill passed through Committee, and the Opposition, with three exceptions, rose in a body and left the House. The suspended members presented themselves in Parliament on the 18th as a protest, but they were conducted from the precincts by the Serjeant-at-Arms. A few days later seven members issued writs against the Speaker claiming damages for assault, trespass, and false imprisonment in connection with their suspension.

The first of these cases, *Browne v. The Speaker*, was heard in the following year, and resulted in a judgment for the defendant, whereupon the other cases were withdrawn. In November, 1894, the Payment of Members Bill was rejected by the Legislative Council on a motion for the second reading by 24 votes to 2. The increased remuneration was, however, made in 1896. It was during the course of the year 1894 that the real extent of the artesian water-bearing strata of Queensland became known, and the supply began to be used in the little-watered regions of the west. The result of investigations by the Government Geologist and Government Hydraulic Engineer proved that fully half the area of the State was underlain by subterranean stores of water, and the tapping of these in all directions has proved of immense value to pastoralists and other dwellers in the dry inland districts.

Destructive storms and floods had occurred in the north during the early months of 1894, and a similar visitation affected this district in the beginning of 1895. Throughout the year there were, however, unmistakable signs of returning prosperity. The area of land under cultivation materially increased, and though the wheat crop was a comparative failure the production of maize was satisfactory, while the assistance afforded to sugar-growers under the provisions of the Sugar Works Guarantee Act was responsible for an increased acreage being placed under cane. During the year an impetus was given to the pastoral industry by the throwing open to selection of 1,500,000 acres of grazing land which had hitherto been unavailable. The action of the Government in this respect attracted a large number of settlers to Queensland, some of whom came from the southern States and also from distant countries. Gold-mining received a decided impetus from the development of deep-level sinking, the precious metal being met with at Gympie at a depth of 1,479 feet. The production was also increased by the extensive application of the cyanide process, and by other methods of economical recovery from low-grade ores. An evidence of the improved condition of the State was also furnished by the readiness of British investors to entrust their capital in its securities, a loan floated at $3\frac{1}{2}$ per cent. in April being quoted a few days later at a premium of $4\frac{1}{2}$ per cent.

The Treasurer in his budget speech declared an excess of revenue over expenditure for the financial year 1894-5, and a similar return was anticipated for 1895-6. In November, 1895, General Sir Henry Wylie Norman, one of the most popular vice-regal representatives the State has had, resigned his position, after holding office from May, 1889. A year after his departure he was appointed Agent-General for the State in London. Lord Lamington, the next Governor, assumed office on the 19th April, 1896, Sir Arthur Hunter Palmer performing the duties of the administration until his arrival. The year 1896 did not come up to the expectations formed in 1895. The wheat harvest was a failure, while pastoral production was checked by the long-continued dry weather. In spite of the adverse climatic conditions the sugar industry continued to expand, and the cultivation occupied the second

place after maize. For the third year in succession disastrous gales and floods occurred in the north of Queensland. Other parts of the State also suffered, and serious loss of life and damage to property was occasioned. The ferry steamer "Pearl" capsized while crossing the Brisbane River, and twenty-eight persons were drowned.

The new Parliament found itself forced to deal with the affairs of the Queensland National Bank, which institution showed a loss of £2,400,000 on the year's transactions, and would have been compelled to suspend operations but for the action of the Government in guaranteeing current accounts to the extent of £800,000. Subsequently Parliament passed a Bill offering to the Bank deferred deposits to the amount of £2,000,000 for a period of twenty-five years, at a rate of interest of not less than $2\frac{1}{2}$ per cent.

Although the Governor's speech at the opening of Parliament in June, 1897, referred to the continued prosperity of the colony, it cannot be said that such prosperity was universal. Portions of the western district suffered severely from drought, while the pastoralists in the eastern districts lost large numbers of stock through the ravages of the tick pest. Coming, it is believed, originally from Java, the pest entered Queensland by way of the northern territory of South Australia, and worked its way steadily through the eastern districts, until at the present time it is threatening the New South Wales border, much to the concern of northern stock-owners and dairy-farmers. During this year primary producing interests received a certain amount of encouragement from the Government. The increased facilities granted to settlers by the Land Act were eagerly availed of by large numbers of selectors, not only from Queensland but from other parts of Australia, and particularly from Victoria. There was an increase in the wool output, and dairy farmers were feeling the beneficial effects of a Meat and Dairy Produce Encouragement Act passed in 1896. Sir H. M. Nelson visited England during the year to attend the festivities in connection with the celebration of the Diamond Jubilee of Queen Victoria, and during his absence contentious matters were abstained from in Parliament. At the close of the year, however, the subject of the affairs of the Queensland National Bank was made the occasion of a motion of censure. Mr. Glassey, leader of the Opposition, moved, "That in view of the disclosures contained in the report of the Committee appointed to investigate the affairs of the Queensland National Bank, no Government of which Sir T. McIlwraith, Sir Hugh M. Nelson, or the Hon. A. H. Barlow are members can have the confidence of the House." The motion was debated at some length, and eventually an amendment was proposed, omitting all the words after "Bank," and inserting in their place "the House, while retaining its confidence in the Right Hon. Sir Hugh M. Nelson and the Hon. A. H. Barlow, desires to record its opinion that, pending further inquiry into Sir Thomas McIlwraith's relations with the Queensland National Bank and its late general manager, it is not desirable that Sir Thomas McIlwraith should continue to be a member

of the Executive Council." The motion in its amended form was passed on the 25th November, and on the 19th December the resignation of Sir Thomas McIlwraith was accepted. It should perhaps be mentioned here that since the elections of 1896 Sir Thomas McIlwraith had been a member of the Executive Council without a seat in the Legislature.

Sir Hugh Nelson resigned the Premiership on the 13th April, 1898, and was appointed President of the Legislative Council. The task of leading the Government was entrusted to Mr. T. J. Byrnes, who immediately embarked on a policy of progressiveness, but unfortunately for the State, what gave promise of a brilliant career was cut short by his death in September, 1898, at the early age of 36 years. The Hon. J. R. Dickson, C.M.G., then became Premier, although a section of the Ministerial Party favoured the appointment of the Hon. R. Philp. Under the leadership of Mr. Glassey the Labour Party were awaiting developments, and when the expected split did not eventuate, announced that they would consider themselves the Constitutional Opposition, though still retaining their title as Labour Party. A few days later Mr. J. G. Drake announced that six members sitting with him had formed themselves into an Independent Opposition. The most important legislative work of the session was the passing of a comprehensive Mining Act, which consolidated and improved previous legislation on the subject. During the year the country experienced a fair measure of prosperity. The drought lifted for a time in many districts, while the agricultural and pastoral industry benefited greatly from seasonable rains. Work was plentiful, and the demand for labour was so general that the Government began to consider the advisableness of reviving the system of assisted immigration. Nothing definite was, however, accomplished in this direction until 1900, when upwards of 2,000 State-aided immigrants entered Queensland.

The elevation of Mr. Dickson to the Premiership brought about a change in the attitude of Queensland towards federation. Hitherto politicians, notably Sir Hugh Nelson and the Hon. T. J. Byrnes, had been lukewarm on the subject, and in consequence, Queensland had not been represented by delegates at the Federal Convention of 1898. But Mr. Dickson was an ardent federalist, and set about the accomplishment of his ideals almost as soon as he became head of the Government. He succeeded in having Queensland represented in his own person at the Conference of Premiers in 1899 which followed the first referendum, and the new Parliament which met after the General Election in May devoted itself almost solely to the passing of an Enabling Bill. This was carried out, and in September Queensland adopted Federation by a large majority. But, as in the other provinces, when the question of Federation was disposed of, the course of local politics was interrupted, and Mr. Dickson found himself ousted in December by Mr. Anderson Dawson, the head of the Labour Party. Mr. Dawson's Cabinet was composed entirely of Labour members, but the combination did not last longer than a week, and on the re-assembling of Parliament a vote of

no-confidence was immediately carried against them on the motion of Mr. Philp. A new Ministry was then formed by Mr. Philp, and with sundry alterations has remained in office ever since. At this period, despite the drawbacks occasioned by drought and the tick pest, the pastoral industry had made great progress, and agriculture also advanced, notwithstanding bad seasons. The export of dairy produce showed a satisfactory expansion, while the increased prices realised in all branches of production compensated in some measure for the bad seasons experienced in the past. Queensland in 1899 was the first Australian province to offer troops for service in South Africa, and the despatch of the first contingent was made the occasion for a great outburst of enthusiasm. The early months of this year were marked by a succession of violent cyclonic storms, which wrought great havoc in the north, and culminated in the disaster to the Thursday Island pearling fleet, when nearly all the vessels employed in the pearling industry were wrecked, and upwards of two hundred employees drowned.

The year 1900 was the last of Queensland's period of prosperity, although the healthy condition of the public finances was sustained by an excess of revenue over expenditure amounting to £47,789. At the close of the financial year there were signs of an approaching period of depression. The drought still continued in the western districts, and its effects began to be felt nearer the coast, and although pastoral produce still showed large in the lists of exports, it was inevitable that the decreasing flocks and herds should be followed by a falling off. There was a slight increase in wheat production, which was, however, counter-balanced by a decline in the output of sugar, while the mining industry, although the yield showed an increase, began to suffer from the lack of water. An impetus was, however, given to the latter industry by the initiation of private railway schemes, several of which received Parliamentary approval during the session, despite the opposition of the Labour Party. These lines were to be built by syndicates primarily to connect mining areas with the coast, but it was urged that in addition agricultural and pastoral industries would be benefited in the districts traversed by them. The Shops and Factories Act instituting early closing regulations and other efforts towards the betterment of shop and factory workers was also passed. Three contingents were despatched to South Africa during the year, and another was recruited before the Commonwealth took over the Defence departments.

During 1901 the fortunes of Queensland were at a lower ebb than for many years past. The severity of the drought led to the abandonment of many stations and selections, and the consequent falling off in pastoral production seriously affected the railway receipts. The sugar crop was indifferent, while the industry was in an unsettled state owing to the federal legislation with respect to coloured labour. The Chillagoe Copper Mines Company, from which great results were anticipated, collapsed in the market, and had to be reconstructed. At the end of the financial year the Treasurer's statement showed a deficit of £528,188. The only

bright spots in the year's cloud of misfortune were the record yield of wheat and the expansion of the dairy industry, although the latter suffered somewhat from the unfavourable climatic conditions. In Parliament the chief work was the passing of a Pastoral Holdings New Leases Act, which was designed to afford some assistance to pastoralists, by giving greater security of tenure. Lord Lamington left for England in June, having extended his term of office to cover the visit of the Prince and Princess of Wales, which took place in May, and was marked by the same enthusiasm as elsewhere. The new Governor, Sir Herbert Charles Chermside, took up his duties in March, 1902.

The outlook in the early months of 1902 was not by any means cheering. In consequence of the shrinkage in revenue occasioned by drought and by the falling off in the Customs receipts, rigid economy had to be practised, and the policy of retrenchment in the Civil Service was resorted to. One of the most striking evidences of the disastrous effects of the drought was provided in May, by the announcement that the firm of Cobb & Co. had abandoned the carriage of inland mails, owing to the scarcity of fodder and water. This action for a time caused great inconvenience, many travellers being left stranded in the inland towns. Some time later, however, an arrangement was made between the Postal authorities and the contractors, and the service was renewed.

In the following table will be found a list of the Ministries which have held office in Queensland from the inauguration of responsible Government up to the date of publication of this volume:—

No. of Ministry.	Name.	Period of Office.		Duration.	
		From—	To—	Months.	Days.
1	Herbert	10 Dec., 1859	1 Feb., 1866	73	22
2	Macalister	1 Feb., 1866	20 July, 1866	5	19
3	Herbert	20 July, 1866	7 Aug., 1866	0	18
4	Macalister	7 Aug., 1866	15 Aug., 1867	12	8
5	Mackenzie	15 Aug., 1867	25 Nov., 1868	15	10
6	Lilley	25 Nov., 1868	3 May, 1870	17	8
7	Palmer	3 May, 1870	8 Jan., 1874	44	5
8	Macalister	8 Jan., 1874	5 June, 1876	28	28
9	Thorn	5 June, 1876	8 Mar., 1877	9	3
10	Douglas	8 Mar., 1877	21 Jan., 1879	21	13
11	McIlwraith.....	21 Jan., 1879	13 Nov., 1883	57	23
12	Griffith	13 Nov., 1883	13 June, 1888	55	0
13	McIlwraith.....	13 June, 1888	30 Nov., 1888	5	17
14	Morehead	30 Nov., 1888	12 Aug., 1890	20	13
15	Griffith	12 Aug., 1890	27 Mar., 1893	31	15
16	McIlwraith.....	27 Mar., 1893	27 Oct., 1893	7	0
17	Nelson	27 Oct., 1893	13 April, 1898	53	17
18	Byrnes.....	13 April, 1898	1 Oct., 1898	5	18
19	Dickson	1 Oct., 1898	1 Dec., 1899	14	0
20	Dawson	1 Dec., 1899	7 Dec., 1899	0	6
21	Philp	7 Dec., 1899	.....	...	...

SOUTH AUSTRALIA.

IN 1834 a Colonisation Committee, called the "South Australian Association," was formed. It consisted, in the first instance, of twenty-nine gentlemen, all of whom occupied leading positions, eighteen being Members of the House of Commons. A Bill for the colonisation of South Australia, promoted by this Committee, was introduced and passed the House of Commons with the support of the Secretary of State for the Colonies, and on the last day of the session of 1834 it received the Royal Assent.

The Act under which South Australia was founded empowered the Crown to erect "one or more provinces" in that part of Australia lying between the 132nd and the 141st meridians of east longitude, and between the 26th parallel of south latitude and the Southern Ocean. It further enacted that all persons residing within the said province or provinces should be free,—“not subject to the law or Constitution of any other part of Australia, but bound by only those which should be constructed especially for their own territory.” The measure provided that the entire proceeds of sales of land in that portion of Australia should be devoted to the transportation of labourers from the mother country, but that no convicts should at any time be sent to this favoured colony; and that a Constitution should be granted to the inhabitants as soon as they numbered 50,000 souls.

As the Commissioners were restrained from entering upon the exercise of their general powers until they had invested £20,000 in Exchequer Bills, or other securities, and until land to the value of £35,000 had been sold, in order to secure the mother country from expense in founding and governing the new colony, there was some little hitch at the beginning of the new establishment, and fears were entertained as to the ability of the Commissioners to dispose of a sufficient quantity of land to realise the required sum. At the outset the price of land had been set at £1 per acre, and each land-order was for 80 acres of country land and 1 acre of town land; the price for the whole being £81. At about this juncture the "South Australian Company" was formed, under the inspiring direction of George Fife Angas, with a large capital, intended for employment in the progress and development of the colony. This association offered to purchase at once the remaining lots of land at an upset price of 12s. per acre. The

Commissioners accepted the proposition, but, in order to act fairly by their former clients, allowed those who had paid for 80 acres of land at £1 per acre to receive 134 acres at 12s. per acre.

To Edward Gibbon Wakefield belongs the merit of devising this new method of colonisation. The essential principle of his scheme was that land should be exchanged for labour, instead of being given away or alienated for a merely nominal sum. The colony should, in short, be self-supporting from the very first, and a revenue created by the sale of the waste or unappropriated lands within it, which revenue should be used as an immigration fund; the price of land should, moreover, be fixed sufficiently high to secure a constant supply of hired labour for its cultivation. In South Australia the land was sold in unconditional and absolute fee simple, without reserve for any purpose. The three fundamental principles upon which the colony was founded were self-support, anti-transportation, and the voluntary principle as applied to religion.

The required quantity of land having been sold, and the investment of £20,000 in Exchequer bills completed, the Commissioners began their arrangements for the founding of the colony. In the first place the Governorship of the new community was offered to Sir Charles James Napier—"the Conqueror of Scinde"; but this gentleman wanted a military establishment, and power to draw upon the Home Government for funds in case of emergency; and as the colony was intended to be self-supporting, his demands could not, of course, be complied with. He thereupon declined the proffered honour, and Captain Hindmarsh, R.N., a bluff, typical British seaman, was gazetted to the post on the 4th February, 1836.

In the meantime the despatch of emigrants had begun, the first vessel, the "Duke of York," arriving on the 29th July, 1836, and casting anchor in Nepean Bay. The first person to set foot on shore in the new colony, was also the youngest member of the party, namely, the infant daughter of Mr. Beare, the second officer. Other vessels began to arrive in fairly quick succession; and Kangaroo Island being then better known than any portion of the mainland, steps were accordingly taken by the Company's agents to make the settlement there. On the 19th August, 1836, Colonel Light arrived at Kangaroo Island in the "Rapid," and at once assumed command of the expedition. His first work was the selection of a site for the settlement—a task he set about with unusual care. After examining Kangaroo Island and various places on the shores of the Gulf of St. Vincent, he turned his attention to Port Lincoln in Spencer's Gulf, but without discovering any locality suitable for the establishment of a large settlement. He ultimately decided upon the arm of the sea upon which Port Adelaide is situated, and here he fixed the site of the colony's chief town.

Governor Hindmarsh arrived in the "Buffalo" in Holdfast Bay on the 28th December of the same year, and at 3 o'clock in the afternoon, under the shade of gum-trees a short distance from the beach,

proceeded with the ceremony of the swearing in of himself, the members of his Council, and other officers, and the reading of his Commission to the settlers, of whom there were present about three hundred. The Union Jack was then hoisted with the usual accompaniment of a Royal salute; the marines who formed the Governor's escort fired a *feu-de-joie*; the "Buffalo," lying in the offing, saluted with fifteen guns; and the foundation of the colony of South Australia was an accomplished fact.

From the inauguration of the new settlement there was a lack of cordial relations between the administrative bodies. The Governor, the resident Commissioners, and the Surveyors-General had each large administrative powers, and in exercising them there was mutual interference, producing dissension and collision most injurious to the prospects of the colony. The leading subject of dispute was the site of the chief town of the settlement, the Governor and Judge Jeffcott and some of their friends, having regard to the commercial capabilities of the River Murray, wished the capital to be situated at Encounter Bay; others, again, bearing in mind its splendid harbour, voted enthusiastically for Port Lincoln. Colonel Light was inexorable. He had examined the coast carefully. Kangaroo Island and Port Lincoln had successively been abandoned on account of their unsuitability. Adelaide, in its present position, he considered an ideal site. The river Torrens flowed through it and supplied water in abundance, the surrounding country was level and fertile, well-timbered and well-grassed, and the elevation above the sea-level was well adapted for drainage. To meet the objections of those who said that Adelaide was too far from the sea to be a commercial centre, Colonel Light surveyed a secondary town called Port Adelaide, and the wisdom of this arrangement is now fully justified.

A great cause of complaint was found in the slowness with which the surveys were made, months elapsing before any selection of land could be completed; there was, in fact, no adequate means of transport to carry the surveyors and their camps from place to place, while, all the time, of course, nothing in the way of production could be attempted, and the arrivals from England had no homes to go to, but were obliged to camp wherever they could. The condition of the colony at this period is described as that of a continuous "picnic." In the meantime, Mr. G. S. Kingston, then second in command of the surveying staff, sailed to England to lay certain views before the English Commissioners for the purpose of expediting the surveys. His suggestions were adopted, and Colonel Light immediately resigned. This implied reprimand, however, so preyed upon his spirits, that he sickened and died in the following year. His remains were accorded a public funeral, and were buried in the public square that bears his name, and a monument was placed over his grave.

Captain Hindmarsh was continually embroiled with his subordinates throughout his term of office. He was a distinguished naval officer of

the old school, habituated to the employment of a most autocratic command, and as such was not well suited for a position of merely nominal superiority. Complaints were forwarded to the Secretary of State for the Colonies, Lord Glenelg, who wrote sharply to the effect that, upon his own showing, Captain Hindmarsh appeared "to be incapable of carrying on the government; with the exception of the Judge and the Harbour-master, he was, more or less, at variance with all the official functionaries of the colony." He was recalled in 1838, and Mr. George Milner Stephen was sworn in as Acting-Governor.

During Hindmarsh's term of office, a Supreme Court was established. On April 3rd, 1838, Mr. Joseph Hawdon arrived overland from Sydney with a mixed herd of 335 head of cattle. Soon after, Mr. E. J. Eyre arrived with another herd of 300 head, and Captain Charles Sturt (afterwards Colonial Secretary) with one of 400 head. At this point in the colony's progress the habitations erected were of the flimsiest materials. Government House was merely a reed hut, and most of the other dwellings were structures of a similar description. In January, 1839, the old Government House was burnt down, and nearly the whole of the executive and legislative records up to that date were destroyed. Cultivation continued to languish, and food was daily growing dearer. Flour was worth £30 per ton, beef 1s. a lb., tea 4s. a lb., and other things in proportion; and these prices were sometimes exceeded. The only watchmaker received 17s. for cleaning a watch. The Australian Company tried to carry on the whale-fishing, and for some years the only exports were whalebone and oil, but there was no external trade in either mineral, pastoral, or agricultural products.

Governor Hindmarsh's successor was Colonel Gawler, K.H., who arrived in the colony on the 12th October, 1838. When Governor Hindmarsh arrived in the colony the population was 546 souls; when he left it had increased to 2,377. When Colonel Gawler arrived there was a population of 3,680. The new Governor found the affairs of the colony in a deplorable condition, and he made strenuous efforts to evolve some show of order, but his headstrong actions only served to involve the settlement in still deeper confusion. The finances were in such a perilous state that in 1838, when the expenditure totalled £16,580, the revenue amounted to only £1,448. The people, too, instead of opening up the country, remained in the city; while of the rural holdings, which were in the hands of the proprietors, only about 200 acres had been devoted to the plough. The Governor did his best to get the people to proceed with the cultivation of the soil, and with some success. He projected extensive public works to provide employment for the landless, and had, of course, to incur a heavy expenditure. He drew upon the Home Government to meet current liabilities, and his bills were returned dishonored.

The revenue for 1839-40-41 amounted to £75,773; the expenditure during the same period was £357,615; thus leaving a deficit in the

public accounts of £281,842. In consequence of this, Colonel Gawler was recalled, and he was superseded by Captain George Grey, to whom Governor Gawler had extended the utmost consideration on his arrival in Adelaide some time previously, ill, and suffering from spear-wounds inflicted by the blacks.

There is little doubt, at this distance of time, that Colonel Gawler was treated by the Commissioners somewhat unfairly. They sent out shipload after shipload of emigrants, for whom their representative had to provide in some manner; but they did not furnish him with the wherewithal to do this. He believed in the province, and drew on its future. When he left, after three years of office, the population had more than doubled; the land under cultivation had increased from 86 to 2,503 acres; the sheep depastured from 28,000 to more than 200,000; and the export trade from next to nothing to over £100,000 in annual value. With Gawler's dismissal came a period of acute crisis. Confidence in the colony was not only severely shaken, it was well-nigh destroyed, and adverse criticism from without attacked its fundamental principles. For a time economists unhesitatingly pronounced the Wakefield scheme of colonisation to be a failure. The colonists, however, stood loyally by their departing Governor, and showed their sense of his integrity and ability by farewell addresses and a gift of £500; while the Duke of Wellington is reported to have said of him, on one occasion, "Gawler could not act otherwise than wisely, for he never did a foolish thing in his life."

Colonel Gawler personally took part in the exploration of the colony, and during his administration sent out various parties to discover land suitable for settlement. One of the most sensational efforts to penetrate the mystery of the interior was undertaken at this period. This was the great journey made by Mr. Edward John Eyre, in 1840, to reach Perth overland from Adelaide. After untold sufferings, the murder of his white companion by treacherous aboriginal servants, theft of provisions, and desertion, he accomplished 1,500 miles of travel along the coast-line, breaking at one point his monotonous journey when he fell in with, and was succoured by, a French whaling ship in command of Captain Rossiter. Refreshed by a long rest and abundant food, he ultimately reached Albany, after an absence of nearly thirteen months from Adelaide, where he had long been given up for dead.

The departure of Governor Gawler marked the conclusion of the experimental stage of colonisation. The office of the Commissioners in London had been abolished, and the Government of South Australia was vested in the Secretary of State for the Colonies. Captain Grey, the new Governor, was instructed to inaugurate the most drastic retrenchment, the sudden collapse of the financial credit of the province pressing with peculiar insistence on the attention of the British Parliament. A Select Committee was appointed to investigate the affairs of the struggling settlement, and an outcome of its report was a

vote of £155,000 as a loan to cover some of Colonel Gawler's bills. This amount was afterwards converted into a free gift. Besides this sum, £27,900 was loaned to the colony for the payment of Colonel Gawler's bills on the Colonisation Commissioners, and £32,646 to meet bills drawn by Captain Grey for the support of the "pauper immigrants," and to meet the interest on the bonded debt of the colony temporarily assumed by Great Britain. These amounts were repaid, and the debt due to the British Government was thought to have been extinguished in 1851; but, as late as 1887, a claim for £15,516 on account of interest was made against South Australia. Although the colony was not legally called upon to satisfy this demand, the amount was paid over, and with this incident terminated the monetary difficulties arising from Gawler's policy.

Captain Grey began his office as Governor of South Australia in a period of financial disaster, which his policy of retrenchment and taxation was alleged to have aggravated; hence his rule was intensely unpopular from its very inception. The colony was in a state of bankruptcy, and numbers of people were ruined beyond redemption. The colonists felt their troubles intensified by the cessation of that partial control over their own affairs which the previous Governor had allowed. The new Governor was the servant of the Secretary of State, and the province had practically become a Crown colony. It was ruled, under instructions from England, by Captain Grey and his Executive Council, the people having no voice in the imposition of taxation, or the expenditure of revenue. The Governor exercised his power to its fullest limit, but he certainly had an unpleasant and unpopular task to perform. His chief effort was directed to force an unwilling people to leave the town and settle in the country, and in this he had some slight measure of success. Before his arrival a Municipal Council of Adelaide had been elected, but Captain Grey found that it interfered with his independence of action, and he determined to get rid of it. As his relations with the Council became more and more strained, he questioned the legality of its acts and disregarded its suggestions, and finally the Corporation, which was the first ever established in a British Colony, became defunct. Grey's unpopularity continued to increase, and at a public meeting of the citizens his policy of taxation and retrenchment was denounced in unmeasured terms. The Governor was, however, inflexible, and showed that he was determined to adhere at all hazards to the line he had marked out for himself. As time wore on, things began to improve, and the relations between the autocrat and the settlers became more endurable, so that on the eve of his departure from the colony he enjoyed a measure of public favour which might, indeed, be almost regarded as popularity.

However much or little may have been due to Captain Grey's policy, there is no doubt that during his administration the colony passed through its darkest hour. Before the close of his term of office, pastoral products were found to be increasing, and agriculture was spreading

rapidly, although the prices of all staple commodities were low in the extreme. But at a time when sheep were being boiled down for their tallow, and wheat was worth but half-a-crown a bushel, the splendid copper-mines of Kapunda and Burra-Burra were successively discovered, and proved the salvation of the province. The only capital invested in Burra-Burra was £12,320; while the return in copper, before the workings were stopped in 1877, amounted in value to close upon five millions sterling. These valuable finds occurred very opportunely. The Home authorities had so little faith in South Australia's future, that Governor Grey was instructed to send to Sydney all the immigrant labourers then employed on Government works. The Governor took the responsibility of ignoring his instructions. He was aware that numbers of persons had already left for New Zealand and other settlements. He was aware also that the expense of deportation would be much greater than that which would be incurred by keeping the labourers employed at the cost of about £4,000 per quarter, and he advised the Imperial authorities to the effect that, had he at once sent all the immigrants away, the colony would have been irretrievably ruined, and the whole expenditure laid out upon it utterly lost. He writes: "I should, in the first instance, have had to send away 2,427 souls—that is, one-sixth part of the whole population; the fact of having done so would have made paupers of a great many more, who must have been removed in the same manner, and there would have been no labourers remaining in the colony to procure food for those who were left." When Captain Grey assumed office the population was 14,562; when he retired on the 25th October, 1845, it had increased to 21,759. The steady increase in the number of the people was one of the constant embarrassments of his position. Throughout his term of office the ordinary revenue was never equal to the expenditure, and recourse had constantly to be had to land sales, the proceeds of which were levied upon to meet current liabilities.

In 1840, in the time of Governor Gawler, there had been some trouble with the aboriginals, who had murdered the seventeen white survivors of a wrecked brig named the *Maria*; and two of the natives were court-martialled and summarily hanged. About nine months afterwards, in 1841, Mr. Inman, while overlandng sheep, was, with two drovers, severely wounded, while all the sheep, numbering some 7,000, were carried off by the aborigines who had attacked the party. Major O'Halloran was sent out with an expeditionary force to trace and punish the offenders; but was recalled in consequence of the censures passed on Colonel Gawler for his execution of the two murderers concerned in the *Maria* outrage. Thereupon some volunteers under Lieutenant Field, R.N., took up the enterprise. This second party of whites was surrounded by a body of natives, some 200 or 300 strong, and, after shooting some of their assailants, its members barely escaped with their lives. Another expedition was then organised in Adelaide, but Governor Grey intervened, and refused to allow it "to levy war or to exercise

any belligerent actions" against the offending blacks. A police party, consisting of an inspector and twenty-nine men, sent to the protection of some settlers in one of the disturbed districts, next encountered a tribe of disaffected aborigines. A conflict between the two parties took place, and thirty blacks were killed and about ten wounded. Although there was a strong disposition in certain quarters to blame the police, an official investigation resulted in their complete exoneration; but, to obviate as far as possible the occurrence of similar troubles in the future, Mr. E. J. Eyre was appointed Protector of Aborigines, and stationed at Moorundi, on the Murray. He soon secured the confidence of his charges, and from that time outrages by the blacks upon white travellers entirely ceased.

In the second year of Grey's administration, Captain Frome, R.E., Surveyor-General, led an expedition to examine the country round Lake Torrens, but did not penetrate far beyond Mount Serle, the country proving so inhospitable that he was forced to beat a retreat. Several other unsuccessful attempts were made to reach the centre of the Continent, but notwithstanding these failures, Captain Sturt was despatched, at the instance of the Imperial Government, on a similar quest. He left Adelaide on August 10th, 1844, and returned in March, 1846, having been absent for about nineteen months. This expedition was rich in discoveries of fine pastoral country now occupied by prosperous squattages; but it was made tragic, also, by the horrors of the Great Central Desert. The terrible privations of Captain Sturt so greatly affected his sight that he gradually became totally blind. He was granted a pension of £600 per annum by the South Australian Government, which he enjoyed until his death, in 1869.

On account of the trouble in connection with the Maori War, the Imperial Government, anxious to employ the proved ability of Captain Grey, sent him to New Zealand, and provided what was practically a *locum tenens* in Lieutenant-Colonel Frederick Holt Robe, who was suddenly summoned from the Mauritius, and assumed control of the colony on the 25th October, 1845. The administration of this officer, who was privately sworn in as Lieutenant-Governor only, was particularly colourless, his policy being chiefly confined to following in the footsteps of his predecessor. In the few instances in which Governor Robe took personal initiative, he invariably made mistakes; what he did was afterwards reversed, and what he refused to do was afterwards carried into effect. He imposed an impolitic royalty on minerals, which was soon abolished. In the face of strong opposition he devoted public money to the support of religion, and thereby stirred up a great deal of strife. He granted to Bishop Short, as the site for an Anglican Cathedral, an acre of land in Victoria-square, in the very heart of the city, close to where the General Post Office now stands; but the validity of the grant was successfully contested by the City Council on behalf of the citizens, in 1855, the Supreme Court deciding that the Executive had no power to alienate any part of the public estate. The Lieutenant-Governor also refused his consent to a proposal to

re-establish the City Corporation. Still, notwithstanding the weakness of his administration, the colony, during his term of office, continued to prosper, and to recover the prestige it had lost with the collapse of the Gawler régime. Agriculture in particular had made important advances, its development being greatly assisted by the invention of improved wheat-harvesting machinery. Governor Robe held office until August, 1848, by which time the population had increased to 38,666, compared with 21,759 in 1845. The ordinary revenue had grown from £32,433 to £82,411 during the same period. The proceeds of the land sales, from the foundation of the Colony to the date of Colonel Robe's departure, amounted to £530,877.

Two years before Governor Robe's departure, Mr. J. Ainsworth Horrocks organised an expedition to solve the problem of the interior. Mr. Horrocks had been in the colony since 1839, and had gained some experience in the work of exploration. He now, in 1846, proposed to cross the head of Spencer's Gulf, and travel north-west from the further side of Lake Torrens. The expedition, which had suffered greatly through want of water and the hostility of the natives, was, however, brought to a tragic close within a month from the date of its inception, by the accidental death of its leader.

On Major Robe's recall, Sir Henry Young was transferred from the Eastern Province of the Cape of Good Hope, of which he was Lieutenant-Governor, to take similar rank in South Australia. He had previously been Governor of Prince Edward's Island. Though not an administrator of remarkable ability, he fulfilled the functions of his office with considerable success, and the province, generally, prospered under his rule. The colony is indebted to him, amongst other things, for the introduction of an extensive main-road system, and the institution of valuable local government organisations in the form of District Councils. In 1851, South Australia experienced a severe, albeit temporary, check in the exodus of population that followed the discovery of gold in Victoria. The attractions of the gold-fields almost denuded the province of its labouring population. Merchants, bankers, and all owners of property were reduced to the severest straits for lack of labour; mines stopped working, business enterprise was arrested, and all branches of industry came to a standstill. At this crisis, Attorney-General (afterwards Sir) Richard D. Hanson, at the suggestion of Mr. G. S. Walters, of the English and South Australian Copper Company, adopted a measure to make gold by weight a legal tender at a fixed standard value. The principle was incorporated in the Bullion Act; the overland escort was organised, and a portion of the wealth won from the Victorian fields by the South Australian diggers was diverted into their own colony, thus exercising a beneficial effect in the restoration of confidence in the resources and credit of the province.

Another event of great historical importance was the opening-up of the Murray River to steam navigation. Captain Cadell had descended the river from Victoria in a canvas boat, and this exploit had drawn

fresh attention to the value of the stream as a means of intercolonial communication, and a source of prospective profitable traffic along its course. Governor Young took a keen interest in the matter. Many accidents had happened at the mouth of the river, but the Governor believed that a good harbour might be constructed at Port Elliott, and a short tramway made thence to the Murray at Goolwa, distant 7 miles. He, therefore, procured the offer of a bonus to the man who should take the first steamer up the stream as far as the Darling Junction, and he himself accompanied Captain Cadell to Echuca, 1,300 miles, in the "Lady Augusta."

Prior to Captain Cadell's voyage up the Murray in the "Lady Augusta," Mr. William Randall had built a small steamer at Mannum, on the Murray, about 80 miles above Goolwa, and had steamed up the Murray, and for some distance along the Darling, but his craft did not fulfil the conditions which would have entitled him to the reward.

In his Murray River projects, the Governor was undoubtedly too sanguine, not sufficiently taking into account the circumstance that the water supply of the Murray was variable, and that the eastern colonies also might have views with regard to the exploitation of any possible traffic. The tramway proposed by him was, however, constructed, and a sum of £20,000 was spent in constructing a breakwater at Port Elliott. "He believed and wrote," says one of his critics, "that it would become the New Orleans of the Australian Mississippi, but the money was literally thrown into the sea." The water-borne traffic of the Murray never greatly benefited South Australia, for when it began to grow to any appreciable volume it was promptly tapped by the Victorian railway system. Nevertheless, in the broad Australian sense, the passage of the first steamer up the river was a highly important historical event. Railways to the Port and northward were also initiated, but in consequence of the lack of experience in construction, these cost the colony enormous sums, in one instance 8 miles of line over level ground, with no engineering difficulties to surmount, and only one bridge to be built, involving an expenditure of nearly a quarter of a million sterling. It would appear, however, that a large proportion of the money spent was absorbed in providing work for the unemployed in order to relieve the labour market, the number of workmen employed on certain contracts in some cases being far in excess of actual requirements.

The Corporation of the City of Adelaide, whose powers had lain in abeyance for nine years, was revived by the Governor in 1851; but even before its revival a great alteration had been made in the political constitution of the colony. In 1851, the old system of Government by an Administrator and a nominee Council was abolished, and a legislature of one Chamber created in its place. This Chamber was composed of sixteen elected, and eight nominee members, four of the latter being Members of the Executive Council, and filling the chief official posts in the province. The other four were appointed by the Governor himself, subject to the approval of the Crown—though this was merely

a matter of form. The new Chamber was designated the Legislative Council, and exercised control over the expenditure chargeable to the general revenue of the colony; whilst the Governor, as representative of the Crown, possessed the disposal of all the income derived from the sale or leasing of public lands. Earl Grey, the then Secretary of State for the Colonies, was the inventor of this form of Colonial Government.

In 1853, the population of the colony numbered 79,000. In the Imperial Act, under which South Australia was founded, it was provided that the inhabitants might frame a Constitution for themselves as soon as they numbered 50,000 souls. In accordance with this provision, and about two years after the inauguration of Earl Grey's scheme of government, the Legislative Council passed a Constitution Bill, under which was to be called into existence, a Parliament, to consist of two Chambers—one elected by the people, and one to be nominated by the Governor as representative of the Crown, the members of the latter being appointed for life. The measure was sent to England for the Royal Assent; but the proposed new Constitution did not satisfy the colonists, and being strongly petitioned against, the Bill was referred back to the province.

Sir Henry Edward Fox Young was promoted to the Governorship of Tasmania, and left the colony to take up the duties of his new office on December 20th, 1854. Under his administration the land revenue increased from £32,935, in 1848, to £383,470, at the conclusion of his term of office. The general revenue increased for the same period from £82,911 to £595,356. The population, in 1848, was 38,666 persons; since that date immigration had added to the muster roll of the colony no fewer than 93,140, while the increase of births over deaths for the same period was 7,897; yet, so great had been the exodus during the gold-fever years, that the total population at the time of Governor Young's departure was only 92,545; many people, in fact, simply used South Australia as a free-passage stepping-stone to the Victorian gold-fields.

Sir Henry's successor did not arrive in the colony for six months, the Government being administered in the interim by the Hon. B. T. Finnis, who had, up to that time, been Colonial Secretary.

Sir Richard Graves MacDonnell assumed the reins of Government on the 8th June, 1855, and surrendered them on the 4th March, 1862; thus serving the longest term of all South Australia's Governors, administering the affairs of the province for a period only three months short of seven years. On his arrival the Governor found the province in the throes of military enthusiasm. The outbreak of the Crimean War, in 1854, had aroused fears of a Russian descent on Australia, and, in common with some of the sister colonies, South Australia made hurried preparations for such a contingency. A strong regiment of foot was enrolled, with a small force of cavalry, and three batteries of artillery, but the arms and equipment were extremely inadequate, while the defences of the port and shipping were almost entirely neglected.

With the conclusion of peace, however, between Russia and the belligerent powers, this sudden accession of military ardour rapidly evaporated.

The colony's affairs were now in a flourishing condition. It had a satisfactory revenue, and politically the only problem before it was the framing of a popular Constitution. After the general election, to ascertain the wishes of the colonists on this important subject, the estimates framed by the Governor were forwarded to the Legislative Council; but instead of being discussed in the ordinary manner, they were referred to a Select Committee composed of six elected members and one nominee. The Committee protracted its sittings for several months while it criticised the Governor's policy, the public service being carried on in the meantime by credit votes. When the Committee dispatched an address to the Governor requesting him to send revised Estimates to the Legislative Council, he replied in a trenchant and masterly manner, and thereby won over to his views the great bulk of the colonists.

The Constitution Act was introduced into the Legislative Council, where it was discussed and finally adopted, whilst the dispute was still proceeding between the Select Committee and the Governor over the Estimates. The Bill was passed in the last session of the old Legislative Council of 1855-6, and, receiving the Royal Assent, was in due course returned unaltered to the colony and proclaimed on the 24th October, 1856. The Constitution was modelled somewhat on English lines, the Parliament consisting of two Chambers, a Legislative Council and a House of Assembly, both of them established on the elective principle. The Upper House was chosen on the basis of a property qualification of electors; the House of Assembly was chosen on the basis of manhood suffrage. The qualifications of an elector for the Legislative Council were a £50 freehold; a lease, registered, having three years to run, or a right of purchase of the annual value of £20, or the tenancy of a house of the clear annual value of £25. Any natural born or naturalised British subject, who had attained the age of 30, and had resided in the Colony for three years, was eligible as a member of the Upper House, which consisted of eighteen members, elected for twelve years. The Council was not subject to dissolution, but one-third of the members were to retire at the end of every third year, the order of retirement being decided by ballot after the first elections had taken place. The members of the Upper Chamber were elected by the whole province voting as one constituency. The House of Assembly consisted of thirty-six members, elected on a basis of manhood suffrage under a registration of six months duration. The Lower Chamber was liable to dissolution by the Governor, failing which event its life was triennial. Members of the Assembly were elected for specified districts into which the colony was divided, and the mode of election for both Houses was by ballot, the principle of which was adopted at the instance of "the father of the ballot" in Australia, the late F. S. Dutton.

Sir Richard McDonnell had never been Governor of a colony with an independent Constitution; yet it was under his auspices that the work of constitutional reform was completed. The Act materially altered his position, and he was not easily reconciled to the changed status in which he found himself. Under the new Constitution he was no longer able to act on his own initiative, but was under obligation to act on the advice of his responsible Ministers. For a while the Governor considered it to be his business to give advice to his Ministers, and to prescribe the policy of the Government; but he soon accepted a more correct view of the situation, and contented himself with the mere formal concurrence in the drafted policy of his responsible advisers.

The first Ministry, which was a makeshift one, lasted for less than four months; the second, nine days; the third, twenty-nine days; and the fourth, two years and nine months. During the term of office of the last mentioned responsible Ministry, that admirable measure known as the Torrens Act, for simplifying the transfer of land, and for securing titles to it, was passed into law. It originated with Mr. (afterwards Sir) R. R. Torrens, whose experience, as Collector of Customs, in the transfer of shipping property, supplemented by the legal knowledge of European land legislation possessed by Dr. Hübbe, enabled him to frame a Bill so well suited to colonial conditions that the transfer of real property could be effected under its provisions with almost as much ease as the transfer of ordinary goods.

The railway connecting Adelaide with its port was completed and opened to traffic during the McDonnell régime, as well as the line from the capital to Gawler, and thence to Kapunda; and a beginning was made in constructing lines for telegraphic communication. Mr. Charles Todd constructed his first telegraph line from Adelaide to the Port, but the immediate revenue therefrom was infinitesimal, a rival line opened by Mr. McGeorge a few weeks previously having captured most of the business. The Government, however, intervened, and bought out Mr. McGeorge's rights for a sum of £80, and caused the line to be removed. The next extension of communication was to Gawler. In less than three years the system had extended as far as Melbourne. To Sir Richard McDonnell the establishment of the works that furnish an excellent supply of water to Adelaide and the suburbs is also attributable; and during his rule in 1861 the province gained an extension of territory (which has, however, never been of much real advantage) by the acquisition of a strip of country known as "No Man's Land," containing 80,000 square miles, and lying between the former boundary of the colony and that of Western Australia, and carrying the western boundary of the province west as far as the 129th meridian of east longitude. The mining industry received a great impetus by the discovery of rich deposits of copper in Yorke's Peninsula, and many mines were opened, of which the most famous were at Wallaroo and Moonta.

In 1856, an engineer named B. H. Babbage, who had been employed on the City and Port Railway, and who professed to have considerable geological knowledge, was sent north to search for gold. He failed to find the coveted indications, but the three expeditions he conducted, and that of Warburton, who was sent out to recall him, added largely to the general stock of accurate information. In the year following Babbage's first expedition, Deputy-Surveyor-General G. W. Goyder was instructed to examine and survey the country which had been discovered by Babbage, Warburton, Swinden, and others, and returned with a glowing description of large fresh-water lakes, tall perpendicular cliffs, and so forth. The Surveyor-General, Captain Freeling, R.E., was at once sent to the scene of the alleged discoveries, but found nothing to justify his deputy's rhapsodical descriptions. It was very plain that Mr. Goyder had either been deceived by the mirage or misled by a rainy season. In June, 1858, John McDouall Stuart, who had been draughtsman with the expedition of Captain Sturt to Central Australia, began a series of explorations that eventually solved the problem of the interior, and culminated in the crossing of the Continent from south to north. He first made repeated examinations of the country between Lake Torrens and Lake Eyre, fixing a new base for northern exploration and discovering a more practicable route. Accompanied by a single white companion and a native, he penetrated so far as 28°20' south latitude, and 134°10' east longitude. In 1860 Stuart again set out, with the intention of crossing the Continent, and had penetrated the interior beyond Mount Denison (about as far north as 21°35' south latitude), discovering and naming Central Mount Stuart *en route*; but exhaustion, scurvy, general sickness, rapid decrease of provisions, hostility of the blacks, and above all, want of water, compelled him to beat a retreat for the settled districts, which he reached after suffering the greatest privations. On his return to Adelaide, the Government organised a fresh expedition and gave Stuart the command. With twelve men and forty-nine horses, he left Chambers' Creek Station on New Year's Day, 1861; but waterless desert and impenetrable scrub stayed the advance of his water-famished and exhausted party when within only 4 degrees of the northern coast, and he was again obliged to return. Once more he was sent north, and that within a month of his arrival in Adelaide. There was keen rivalry between South Australia and Victoria as to which would first reach the northern coast. Burke and Wills had already started, with the advantage of having a shorter route to traverse; but John McDouall Stuart had the knowledge, and experience won from defeat as well as from signal victory. The party left the settled districts early in 1862. On July 24th, of the same year, Mr. J. W. Thring, the third officer, riding somewhat in advance of the party, cried out, "The Sea!" Stuart's diary thus tells the story:—"The beach is covered with a soft blue mud. It being ebb-tide, I could see for some distance, and found it would be impossible for me to take the horses along it. I therefore kept them where I had halted them, and allowed half the party to come

to the beach and gratify themselves with a sight of the sea, whilst the other half remained to watch the horses until their return. I dipped my feet and washed my face and hands in the sea, as I promised the late Governor, Sir Richard McDonnell, I would do if I reached it. After all the party had spent some time on the beach, at which they were much pleased and gratified, they collected a few shells. I returned to the valley where I had my initials cut on a large tree (J.M.D.S.), as I intended putting my flag up at the mouth of the Adelaide." The explorers were royally received on their return to Adelaide. Stuart was given a grant of 1,000 square miles of grazing country and in all about £3,000 in cash. But he died in less than seven years. Crippled, half blind, and utterly broken down, he could struggle forward while work remained to be done, but the numberless privations he had suffered had made a fatal drain on his energy, and he rapidly sank when the battle was over.

When Governor McDonnell left the province, the population had increased to 126,830 from 92,545 in 1854. The revenue had expanded from £453,641, in 1855, to £558,587; the area of land under cultivation in 1853 was 129,692 acres, in 1862 it had grown to 320,160 acres; the number of sheep depastured in the two years named were respectively, 1,768,724 and 3,431,000. In 1854 the imports were valued at £2,147,107; in 1862 their value had decreased to £1,820,656; whilst in the same period the exports had grown from £1,322,822 to £2,145,796.

Sir Richard McDonnell was succeeded in the Government by Sir Dominick Daly, without any interregnum of administration, the change being made on 4th March, 1862. Prior to his arrival in South Australia the new Governor had filled a similar position at Prince Edward's Island.

The first years of Sir Dominick's administration were troubled by the judicial imbroglia brought about by the persistence of Mr. Justice Boothby in regarding himself as the only lawfully appointed judge of the Supreme Court of South Australia. His appointment had been made by letters patent under the great seal of the province by Sir H. E. F. Young, and the exceptional character of the method in which he had received his office caused the judge to scout the claims of his colleagues and question the legality of their acts. Voluminous correspondence passed between the Governor, the Secretary of State for the Colonies, and Mr. Justice Boothby himself, and the quarrel seemed to be interminable. The whole question was so intermixed with constitutional difficulties that no finality could be arrived at. Vain efforts were made to enforce Judge Boothby's retirement, and he was ultimately proceeded against under an Act of George III, which, it was considered, would meet his peculiar case. However, his death which took place a few months after proceedings were initiated against him, brought this unpleasant incident to a close.

On the 6th July, 1863, the Northern Territory, or Alexandra Land as it was then called, until that time a part of the colony of New South-

Wales was, by Royal Letters Patent, annexed to the province of South Australia, as a reward for the enterprise shown in the promotion of the exploring expeditions of Stuart, McKinlay, and others. It was thereupon resolved to found a settlement in this newly acquired domain, and extensive sales of land were immediately held. The first expedition, however, became disorganised, years rolled by while preliminaries were being settled, and the holders of land-orders clamoured for the refund of their payments. At this juncture Mr. Goyder was sent north, with a strong staff of surveyors, to lay out the settlement. He at once selected Port Darwin as the site of a capital, and there formed the ground-plan of the town of Palmerston. The further development of the interior was facilitated by Sir Thomas Elder's importation in 1862, of a breeding herd of 117 camels. It may here be remarked that the first camel introduced into South Australia had been used by the ill-fated Horrocks on his exploring expedition in 1846.

Towards the end of the year 1867, His Royal Highness the Duke of Edinburgh, in command of the "Galatea," paid a state visit to South Australia, and was entertained by the Governor. The royal visitor was received with the most enthusiastic demonstrations of loyalty, and, during his stay in Adelaide, performed the ceremony of laying the foundation-stones of the General Post Office and of the Wesleyan College which bears his name. Five months after the Prince's visit, the Governor, who for some time had been in feeble health, was attacked by a serious illness, and died on the 19th February, 1868. He was buried with military honors, no greater public demonstration ever having been witnessed in the colony.

During Governor Daly's rule, John McKinlay, the explorer, who had already distinguished himself by heading an expedition from Adelaide to Port Denison in Queensland in search of the remains of Burke and Wills, made a notable and perilous exploration of the Northern Territory, when the settlement formed there was in danger of total collapse. Part of the journey was performed in a punt made of saplings, over which the hides of slain horses had been stretched after the meat had been jerked for food. Both alligators and sharks, attracted by the smell of the raw hides, followed, and time after time nearly swamped the frail craft; but after days of danger and hardship the party safely made the entrance to Beatrice Bay. An almost equally perilous voyage was that undertaken by Mr. J. P. Slow in the "Forlorn Hope" from the settlement to Champion Bay, Western Australia—a voyage that added considerably to the knowledge of the country in the neighbourhood of the north-west coast.

On the decease of Sir Dominick Daly, the government was administered by Lieutenant-Colonel F. G. Hamley, of the 50th Regiment, the senior military officer on active service in the Colony, and he held the post of administrator until the arrival, twelve months afterwards, of the Rt. Hon. Sir James Fergusson, Bart. The new Governor took up the reins of office on the 15th February, 1869, and left the Colony for

the Governorship of New Zealand on the 18th April, 1873. During Colonel Hamley's administration, important changes took place in regard to the manner of disposing of the waste lands of the Crown. Prior to this, land had been sold at auction—a system which had created a class of persons known as "land sharks," who attended all Government land sales, bid for and bought all they could secure, and kept it in the hope of receiving speculative prices from the people who required the land for genuine settlement. Settlement was restricted also by the formation of land monopolies favoured largely by the auction method of disposal. By the introduction of a new Land Bill, called "Strangway's Act," an attempt was made to remedy these abuses. Land was sold on credit, the full amount of purchase money being payable within four years from the date of the sale. The limit of selection was 640 acres. New evils, however, arose from the operations of the new Act—the common evils of all Australian land systems, the evasion of the residential provisions and "dummying"—but the general effects of the Act were distinctly beneficial.

An extension of the Northern railway to Burra, 100 miles north of Adelaide, took place during this period, and other schemes for improved internal communication were canvassed, but the greatest achievement under the Fergusson régime was the construction of the transcontinental telegraph line which connected Adelaide with Port Darwin, and consequently with London. The entire distance from the South Australian capital to the northern port is 1,975 miles, and for hundreds of miles at a stretch the interior was without a solitary white inhabitant. Large areas were absolutely destitute of timber, and no less than 19,000 iron telegraph poles had to be used. The line was begun simultaneously at each end, and in less than two years the wires had met, and were connected near the centre of the continent.

Sir James Fergusson had identified himself with all schemes for the advancement of agriculture, and took a most substantial and generous part in useful popular movements, but his claims to estimation as a far-seeing statesman rest rather on his organisation of a bold public works policy, the carrying out of which has helped very largely to develop the productiveness and increase the wealth and prosperity of the province. After his departure Chief Justice the Hon. Sir R. D. Hanson administered the affairs of the colony till the arrival of Mr. (afterwards Sir) Anthony Musgrave, who assumed the reins of office on the 9th June, 1873.

Sir Anthony Musgrave's administration lasted till the 29th January, 1877, a term of three and a half years, during which period there was much political conflict and unrest. At the close of the session of 1874, Mr. James Penn Boucaut, one of the ablest lawyers and foremost politicians of the colony, emerged from the political conflict to power as Premier of a Ministry with a "broad and comprehensive" policy to place before the country. The dominant principle was the development of national resources on a regular plan, and at a cost of £3,000,000,

which Mr. Boucaut proposed to raise as a loan, the interest being provided for by the imposition of increased taxation in the form of stamp taxes and probate and succession duties. Twice the taxation proposals passed the Assembly, and twice were they rejected by the Council, and Mr. Boucaut refused to go on with his public works. His Ministry was removed by a non-confidence vote, and the Hon. John Colton was sent for. This gentleman formed a new Cabinet, and adopted the whole of the Boucaut policy except its proposed taxation. The sum of £3,000,000 was raised on loan, and various new railways were projected, all of which have since been constructed; the Probate and Succession Duties were adopted and became law, but the Stamp Act which had been contemplated was not proceeded with. The Boucaut policy of internal expansion and public works construction was for a series of years the chief political subject, and, indeed, long after Mr. Boucaut, through his having accepted a seat on the judicial bench, had ceased to have any direct connection with it.

Pending the arrival of Sir Anthony Musgrave's successor, Sir William Wellington Cairns, K.C.M.G., the Government was administered by Chief Justice Samuel James Way, who has often filled the same office. Sir W. W. Cairns, who was transferred from Queensland, remained in the colony less than eight weeks, and left behind him hardly a trace of his visit. The only public functions he performed during his stay in the province were the opening of the Victoria Bridge on 24th April, 1877, and his attendance at the inauguration of the Senate of the Adelaide University and the enrolment of its members. He resigned his office on the 17th May following, and the Chief Justice again became Administrator, and remained so for nearly five months. During the administration of the Hon. S. J. Way (July, 1877) the overland telegraph line to Western Australia was completed as far as Eucla, a small port about 160 miles west of the head of the Great Australian Bight.

Sir William Francis Drummond Jervois, C.B., K.C.M.G., arrived in Adelaide on the 2nd October, 1877, and remained in office till the 17th November, 1882. Sir William Jervois held the rank of Colonel in the Royal Engineers, and was Governor of the Straits Settlement when he was appointed to South Australia. He subsequently attained the rank of Lieutenant-General. Besides having distinguished himself as an officer, he was esteemed one of the greatest authorities on fortifications among European experts. He had had many and varied experiences in England, at the Cape, and in India, and afterwards filled the position of Governor of New Zealand.

Almost immediately after the new Governor's arrival, the overland telegraph line from Adelaide to Perth, connecting West Australia with the telegraphic systems of the other colonies and of the world, was completed. It follows the coastline for the most part along Eyre's track over 979 miles of that difficult country first traversed by the foot of white men hardly forty years before, and it joins the South Australian

system at Port Augusta. The next year the first sod of the transcontinental railway from Port Augusta to Port Denison was turned by the Governor, who opened 200 miles of it four years afterwards. At present the works on this line reach a point (Oodnadatta) 737 miles north of Adelaide. On 30th July, 1878, Sir William Jervois laid the foundation-stone of the Adelaide University; and on 12th June, 1881, the two young princes, Albert Victor and George of Wales, paid an unofficial visit to the colony, where they were well received.

Sir William Cleaver Francis Robinson, K.C.M.G., succeeded Lieutenant-General Sir W. F. D. Jervois on 16th February, 1883, and he remained in office a little over six years. The Governor was absent from the colony for short periods on seven separate occasions, and was represented sometimes by the Chief Justice and sometimes by His Honor J. P. Boucaut. Upon the departure of Sir William Robinson for Victoria on 6th March, 1889, the Chief Justice again administered the Government pending the arrival of the Earl of Kintore on 11th April of the same year.

The most noteworthy incident of the Robinson régime was the celebration of Her Majesty's and the colony's dual jubilees, fittingly commemorated by the opening of the South Australian Exhibition on the 21st June, 1887. The exhibition was a great success. It was kept open for six months, and was visited by 789,672 persons. The expense of erecting a permanent building which reverted to the Government, and a portion of which is now used as an Art Gallery, was £33,898, while the total cost of the exhibition was £68,702.

The exhibition was held at the conclusion of a time of severe financial crisis. The market values of all staple commodities had fallen ruinously; mines had become unprofitable and had been closed up; harvests had failed for want of rain; and the continued drought had involved stock-owners in heavy losses. A feverish period of land speculation had been followed by disastrous reaction, and hundreds of investors had been rendered penniless by the failure of the Commercial Bank, and the collapse of other joint-stock associations. Just, however, when they were most required, large metalliferous discoveries were made, the Teetulpa gold-diggings giving employment to thousands, and above all, rich deposits of silver and tin were opened up in the Barrier Ranges in New South Wales, adjoining the South Australian border. Pastoral products, long depressed in value, began to rise, and the season of 1887 opened with an early and copious rainfall extending throughout the settled districts, and bringing with it an assurance of renewed agricultural prosperity.

The Right Hon. the Earl of Kintore, K.C.M.G., arrived in South Australia on the 11th April, 1889, and left his charge on the 16th January, 1895. Several South Australian Governors have taken a keen interest in the exploration of the interior. Notably among Vice-regal enthusiasts of inland discovery were Governors Gawler, Young, and MacDonnell, the last mentioned being particularly anxious to cross

the Continent. The realisation of this ambitious project was reserved for the Earl of Kintore who, in 1891, made the voyage to Port Darwin in the Northern Territory, and returned to Adelaide *via* the telegraph line route. He is the only Governor who has crossed the Continent from sea to sea.

During the early years of his régime a well-organised party, equipped at the expense of Sir Thomas Elder, set out on an exploring expedition to the interior of Australia. The party, under the leadership of Mr. David Lindsay, left Adelaide in April, 1891, but the severe drought which prevailed, coupled with dissensions among the members of the expedition, interfered with the original plans, and the explorers returned to Adelaide. In 1893 the depreciation in price of copper and silver had a depressing effect on the mineral industry of South Australia, and this was further intensified by the influence of the banking crisis in the other states, although its effects were not felt so severely as in Victoria. At this juncture, the Government inaugurated the system of settling people on the land, as was being done in New South Wales and Victoria, and the experiment in South Australia proved far more successful than in the Eastern States. In politics, Mr. C. C. Kingston took up the reins of government and entered on a career, as Premier, which lasted till 1899.

South Australia was the first of the Australian colonies to extend the franchise to women, the Adult Suffrage Bill passing into law at the close of the session of 1894, in spite of keen opposition. The measure received the Royal Assent in March of the following year. At the general elections of 1896 women first exercised their right to the franchise, no less than 66 per cent. of those enrolled voting, and the results showed that the fears of those opposed to the principle were without foundation. A vigorous policy of retrenchment was entered upon in the beginning of 1894, the salaries of members being reduced and additional taxation proposals brought forward, with a view to restoring better equilibrium between revenue and expenditure. Shocks of earthquake more or less severe were experienced at Port Darwin on February 14th, and again on June 17th. The exploration of the interior continued to attract attention, and a scientific expedition to examine the hitherto unexplored portions of the MacDonnell Ranges was fitted out by Mr. W. A. Horn. It was placed in charge of Mr. Charles Winnecke, and left Adelaide on May 3rd. The expedition returned in August, after obtaining a great deal of very valuable scientific and general information. In July of the same year the Government Geologist also explored a wide extent of the Northern Territory.

The financial year 1894-95 showed a deficit of nearly £100,000, but the Treasurer stated that the outlook was very hopeful. With the extension of dairying there was a growing export of butter, the wheat harvest gave signs of a heavy yield, and the grape crop was so luxuriant that difficulty was found in employing the whole of the vintage.

Encouragement was given to settlers by the passing of a "State Advances to Farmers Act," which provided for loans at a low rate of interest, with extended time for repayment. Under this Act a State Bank was established in February, 1896. It may be mentioned that in July following tenders were invited for bonds to the amount of £30,000 at $3\frac{1}{2}$ per cent., and the total applied for reached £59,600. During the session of 1895, in addition to various amending acts, a Federal Enabling Act was passed providing for the election of delegates to the Federal Convention. The Earl of Kintore left South Australia in the beginning of the year, and was succeeded by Sir Thomas Fowell Buxton, who arrived on the 29th of October, the administration in the interim being carried on by the Chief Justice, who had received a commission as Lieutenant-Governor in 1891.

The first four months of 1896 were marked by terrific gales, which wrought great damage to shipping and other property, the 22nd February and 10th April being especially prolific of disaster. At the elections which took place in April Mr. Kingston was again returned to power. Economy in administration was still practised, and at the end of the financial year the deficit was reduced to £11,941. In spite of the drain on the population caused by the exodus to Western Australia settlement on the land was spreading favourably, and this was looked upon as a happy augury for future prosperity. On the 23rd May, 1896, an expedition promoted by Mr. A. F. Calvert, F.R.G.S., left Adelaide under the leadership of Mr. L. A. Wells, for the purpose of exploring the interior. The real point of departure was Cue, Western Australia, whence, after suffering great privations, the main body of the expedition succeeded in reaching the Fitzroy River. From there unavailing attempts were made to penetrate to the interior in the course of which two members of the party, Messrs. Charles Wells and George Jones, lost their lives. Their bodies were recovered later after great difficulty, and the remains of the unfortunate men were accorded a public funeral in Adelaide. On the 17th August, 1896, the Governor opened the Happy Valley Waterworks at Clarendon for the service of Adelaide and the surrounding districts. This magnificent system has a storage capacity of 3,000,000,000 gallons, and its installation involved an expenditure of £500,000.

The year 1897 opened disastrously for South Australia. On the 7th January a terrific hurricane, accompanied by two severe shocks of earthquake and a storm that raged with unabated fury for several hours, practically destroyed the town of Palmerston (Port Darwin), the damage done to property being estimated at upwards of £150,000. Earthquake shocks were also experienced in the southern districts in May, while in February Adelaide was visited by a severe storm, the suburbs being flooded and portions of the intercolonial railway washed away. The year was, however, generally speaking a dry one, both pastoralists and agriculturists suffering heavy losses. There was a decrease in the wool clip, while the wheat harvest was practically a

failure, much of the area remaining unreaped, and a large proportion being cut for hay. In both Houses of Parliament a proposal was carried to afford relief to distressed agriculturists. In spite of these misfortunes there was still a demand for land in the more favoured districts, and the Legislature passed a "Closer Settlement Act" to provide for the purchase of land for selection.

Pursuant to an arrangement arrived at with the other colonies steps were taken to appoint delegates to an Australasian Federal Convention. The election of members of the Convention took place in South Australia on the 14th March, 1897, the whole province voting as one constituency. The Convention opened at Adelaide on the 22nd of the month, the Premier the Hon. C. C. Kingston, being appointed President, and the Hon. Sir R. C. Baker, Chairman of Committees. The proceedings of the Convention are elsewhere described.

The Imperial authorities had decided to appoint a Supreme Court Judge to the Judicial Committee of the Imperial Privy Council, and the selection fell on the Hon. S. J. Way, the Chief Justice and Lieutenant-Governor of South Australia, who received his appointment to the newly-created post on the 22nd January, 1897. On the 17th March following he left for England to fulfil the duties of his position, and on the 19th June, in connection with the celebration of the Record Reign Jubilee, he received the honorary degree of Doctor of Laws from the University of Cambridge, and was subsequently, to the great pleasure of his fellow-citizens, created a baronet.

In 1897, South Australia lost, by death, the services of some of her most important public men. On the 6th March one of South Australia's noblest-hearted benefactors passed away. This was Sir Thomas Elder, G.C.M.G., M.L.C. He it was who introduced a breeding herd of camels into the colony, and made the exploration of the interior practicable and possible. At his own cost he had fitted out several expeditions to open up the country. He contributed large sums to the endowment of the University and its Medical School, established a Conservatorium of Music in Adelaide, and, besides benefiting the province in a thousand ways during his life-time, left to be divided among the various public institutions of South Australia the noble bequest of £155,000. Another death was that of Sir Henry Ayers, G.C.M.G., a South Australian politician of many years standing, and a man closely identified with public affairs and the progress of the province. In addition to being a member of the first Parliament summoned under responsible government, he was seven times a Premier of the colony. He died on the 11th June.

At the referendum in June, 1898, South Australia declared for union, the voting being 35,771 in the affirmative and 17,300 in the negative. Keen disappointment was evinced at the failure of the Bill in New South Wales, and at first sight it appeared as though South Australia were determined to take no further part in the movement. When Parliament met, the Governor's speech stated that it had been deemed inadvisable

for Mr. Kingston to take part in the suggested Conference, but later on opinions changed, and South Australia was represented by its Premier at the Conference in 1899. The wheat harvest at the beginning of the year was a partial failure, but the closing months gave indications of a largely-increased production for the season 1898-99. Sir Thomas Fowell Buxton, who had acted as Governor since 1895, went to England on leave in September, and in December following a cablegram was received announcing his resignation. The Right Hon. Lord Tennyson, K.C.M.G., the new Governor, was sworn in on the 10th April, 1899, the administration during the interval preceding his arrival being carried on by the Lieutenant-Governor.

The electors of South Australia had no less than three questions to decide at the general elections held on the 29th April, 1899. In the first place they had to choose their parliamentary representatives, and in this the final returns disclosed little alteration in the personnel of parties. The election was also made an opportunity for the second referendum on Federation, and South Australia again declared emphatically in favour of union, the voting being 65,990 for and 17,053 against. A referendum was also taken on the question of an extension of the franchise in elections for the Legislative Council, and in this the country decided by a substantial majority in favour of a household suffrage for this chamber. The introduction of a Bill to give effect to this proposal was one of the first steps taken by the Cabinet when the House assembled. Over 90 per cent. of the members took part in the debate and the measure passed all its stages, and, after protracted discussion, was sent on for the Council's consideration.

In South Australia, as in the other states, the consummation of Federation was accompanied by political changes. In November Mr. Kingston was defeated by a vote of non-confidence. Mr. Solomon undertook the formation of a Ministry on the 1st December, and on the 8th, after being sworn in, his Ministry resigned as soon as they met Parliament. Mr. Holder was then sent for, and succeeded in reconstructing the Kingston Cabinet, of which he himself had been Treasurer.

The year 1899 was generally one of brighter prospects for the province. Wheat returns came up to expectations, and the revenue was so satisfactory that the Treasurer was able to announce a surplus sufficient to wipe out the last year's deficit and leave a credit balance. The first Contingent from the State left for South Africa on the 31st October amidst a great display of enthusiasm. On the 19th of the same month a most calamitous shipwreck took place, the "Loch Sloy" being driven ashore at Kangaroo Island, and twenty-six of the passengers and crew being drowned, while one passenger died from exposure. The survivors, who numbered only three, were rescued after suffering great privations.

Although the revenue returns fell short of the Treasurer's anticipations in 1900 there was, nevertheless, a small surplus, and in other respects the position of the state was very satisfactory. In March a

loan of £1,000,000 was floated successfully in London, the amount being over-subscribed. The wheat harvest fell below that of 1898-99 by 325,000 bushels, but was considerably higher than the return for 1897-98, while the exports exceeded those of the previous season by over 3,000,000 bushels. Viticulture remained steadily productive throughout the year, the export trade receiving material assistance from the State Wine Depôt in London. Various amending measures were passed by Parliament, and existing social legislation was added to by the Early Closing Act and Workmen's Compensation Act. Several contingents were despatched to South Africa during 1900, and in addition the gunboat "Protector," with a strong naval contingent, was sent to China to aid in the suppression of the Boxer rebellion. In January the first case of bubonic plague recorded in Australia occurred in Adelaide. During the same month devastating bush-fires swept over the Mount Gambier district, and caused damage to property estimated at £100,000. At intervals during 1900 occasional sharp shocks of earthquake were registered at different stations in the state.

The year 1900-01 showed a deficit of £22,365, but in wheat production there was a decided improvement, and both wheat and flour exports were largely in excess of those of the previous year. The election of several of South Australia's leading politicians to membership of the Federal Parliament brought about a readjustment of state politics, and Mr. Holder gave place as Premier to Mr. Jenkins, who had held office in the Playford, Kingston, and Holder Cabinets. This Ministry was sworn in on the 15th May, 1901, and is still in office.

South Australia was perhaps the first of the Australian States to take up the question of reform and economy in local administration. In the Session of 1901 Mr. Jenkins succeeded in passing an amendment of the Constitution Act, reducing the number of responsible ministers from 6 to 4. (This reduction came into force in March, 1902.) At the same time the number of members of the Legislative Assembly was reduced from 54 to 42, and the Legislative Council from 24 to 18, and the expenses of administration were cut down to meet the altered condition of affairs. In May the Spencer-Gillen expedition set out on a journey across the Continent in search of further information respecting the manners and customs of the Central Australian aboriginal tribes. The expedition was well equipped, and succeeded admirably in its mission, reaching Borooloola (Northern Territory) in the early part of 1902 after spending nearly a year in the interior. One of the most disastrous fires ever known in Adelaide occurred on the 16th April, when warehouse premises were destroyed valued at £80,000. In the Mount Pleasant district serious loss was caused by bush-fires, the settlers in some localities being completely burnt out.

In consequence of adverse climatic conditions in 1902 the wheat harvest suffered considerably, and although rain fell in the middle, northern, and southern districts, production was almost universally retarded. On the 1st April South Australia had the unique experience

of being without a Member of Parliament of either House, the Lower Chamber having ceased to exist under the terms of the Constitution Amendment Act, and the Legislative Council resigning by arrangement, though several of its members had still some years before seeking re-election. Next day the Premier opened the election campaign, and in his speech drew attention to the unsatisfactory state of the finances. The railway receipts showed a great falling off in consequence of the continued drought, while the Customs revenue was adversely affected by the remission of the duties on tea and kerosene. During the early months the deliberations of the Corowa Conference were regarded with great interest in South Australia. It was proposed at this Conference to utilise the waters of the Murray for irrigating lands on the Victorian and New South Wales side of the river, and South Australia feared that navigation on the lower reaches of the river would suffer in consequence. The movement, therefore, was not popular in the state, but as the Commission provides for efficient representation of South Australia, these fears were somewhat allayed.

In the following table will be found a list of the different Ministries in South Australia from the establishment of Responsible Government to the date of the publication of this volume with the date of appointment to and retirement from office of each.

No. of Ministry.	Name.	Period of Office.		Duration.
		From	To	Months. Days.
1	Finniss	24 Oct., 1856	21 Aug., 1857	21 28
2	Baker	21 Aug., 1857	1 Sept., 1857	... 11
3	Torrens	1 Sept., 1857	30 Sept., 1857	... 29
4	Hanson	30 Sept., 1857	9 May, 1860	31 9
5	Reynolds	9 May, 1860	20 May, 1861	12 11
6	Reynolds	20 May, 1861	8 Oct., 1861	4 18
7	Waterhouse	8 Oct., 1861	17 Oct., 1861	... 9
8	Waterhouse	17 Oct., 1861	4 July, 1863	20 18
9	Dutton	4 July, 1863	15 July, 1863	... 11
10	Ayers	15 July, 1863	22 July, 1864	12 7
11	Ayers	22 July, 1864	4 Aug., 1864	... 13
12	Blyth	4 Aug., 1864	22 Mar., 1865	7 18
13	Dutton	22 Mar., 1865	20 Sept., 1865	5 29
14	Ayers	20 Sept., 1865	23 Oct., 1865	1 3
15	Hart	23 Oct., 1865	28 Mar., 1866	5 5
16	Boucaut	28 Mar., 1866	3 May, 1867	13 5
17	Ayers	3 May, 1867	24 Sept., 1868	16 21

No. of Ministry.	Name.	Period of Office.		Duration.
		From	To	Months. Days.
18	Hart	24 Sept., 1868	13 Oct., 1868	... 19
19	Ayers	13 Oct., 1868	3 Nov., 1868	... 21
20	Strangway.....	3 Nov., 1868	12 May, 1870	18 9
21	Strangway.....	12 May, 1870	30 May, 1870	... 18
22	Hart	30 May, 1870	10 Nov., 1871	17 11
23	Blyth	10 Nov., 1871	22 Jan., 1872	2 12
24	Ayers	22 Jan., 1872	4 Mar., 1872	1 10
25	Ayers.....	4 Mar., 1872	22 July, 1873	16 18
26	Blyth	22 July, 1873	3 June, 1875	22 12
27	Boucaut.....	3 June, 1875	25 Mar., 1876	9 22
28	Boucaut.....	25 Mar., 1876	6 June, 1876	2 12
29	Colton	6 June, 1876	26 Oct., 1877	16 20
30	Boucaut.....	26 Oct., 1877	27 Sept., 1878	11 1
31	Morgan	27 Sept., 1878	24 June, 1881	29 27
32	Bray	24 June, 1881	16 June, 1884	35 23
33	Colton	16 June, 1884	16 June, 1885	12 ...
34	Downer	16 June, 1885	11 June, 1887	23 26
35	Playford	11 June, 1887	27 June, 1889	24 16
36	Cockburn	27 June, 1889	19 Aug., 1890	13 23
37	Playford	19 Aug., 1890	21 June, 1892	21 16
38	Holder	21 June, 1892	15 Oct., 1892	3 24
39	Downer	15 Oct., 1892	16 June, 1893	8 1
40	Kingston	16 June, 1893	1 Dec., 1899	77 15
41	Solomon.....	1 Dec., 1899	8 Dec., 1899	... 7
42	Holder	8 Dec., 1899	15 May, 1901	17 9
43	Jenkins	15 May, 1901	.....	... ..

WESTERN AUSTRALIA.

WESTERN AUSTRALIA is the youngest of the six sister states of Australia; but, curiously, it shares with Queensland and the Northern Territory of South Australia the privilege of being first known to Europeans. As early as 1503 it is claimed that a French navigator, Binot Paulmyer, Sieur de Gonnevillle, was blown out of his course, and touched at some portion of the coast, but the evidence in support of the assertion is anything but conclusive. The Portuguese also lay claim to the discovery of the western coast at a later date. But it is to Dutch navigators in the early portion of the seventeenth century that we owe the first really authentic accounts of the western coast and adjacent islands, and in many instances the names given by these mariners to prominent physical features are still retained. By 1665 the Dutch possessed rough charts of almost the whole of the western littoral, while to the mainland itself they had given the name of New Holland. Of the Dutch discoverers, Pelsaert was the only one who made any detailed observations of the character of the country inland.

It was reserved, however, for an Englishman, William Dampier, to make a more thorough examination of the country adjacent to the western coast, and he visited it on two occasions—once in 1688, when he was a member of a company of buccaneers who landed to repair their vessel, and later, in 1699, as an accredited explorer in charge of the "Roebuck." The history of his voyage, published by Dampier shortly after his return to England, represented the country as so barren and inhospitable that no idea was then entertained of utilising it for settlement.

During the interval elapsing between Dampier's two voyages, an accident led to the closer examination of the coasts of Western Australia by the Dutch. In 1684 a vessel had sailed from Holland for the Dutch possessions in the East Indies, and after rounding the Cape of Good Hope, she was never again heard of. Some twelve years afterwards the East India Company fitted out an expedition under the leadership of Commander William de Vlamingh, with the object of searching for any traces of the lost vessel on the western shores of New Holland. Towards the close of the year 1696 this expedition reached the island of Rottnest which was thoroughly explored, and early the following year a landing party discovered and named the Swan River. The vessels then proceeded northward without finding any traces of the object of their search, but, at the same time, making fairly accurate charts of the coast line.

From this time onward the country was visited by various explorers, but the expeditions of Lieutenant King (1818-22) are the most noteworthy, inasmuch as this officer made very careful surveys of the whole of the western coast from King George's Sound to Cambridge Gulf, and continued his observations from this point along the northern shores of the Continent. King's work was so thoroughly and accurately done that his charts and sailing directions still form the basis of those in use at the present day.

Expeditions fitted out by the French Government had at various periods touched at the shores of Western Australia; and, in 1825, the presence of two French vessels, the "Thétis" and "L'Espérance," off the coast, roused the suspicion that France had designs on some portion of the Continent—a suspicion never altogether absent from the minds of the Colonial authorities. At this juncture, therefore, Lieutenant-General Sir Ralph Darling (Governor-General of New South Wales) sent Major Lockyer with a detachment of the 39th Regiment, and a small party of convicts, numbering in all some seventy-five or eighty souls, to found a settlement at King George's Sound. The harbour was selected in preference to a port on the west coast on account of its unique advantages as a naval base. Lockyer's expedition landed at the Sound on the 25th December, 1825.

Twelve months later (17th January, 1827), Captain Gilbert, in H.M.S. "Success," was despatched from Sydney to re-victual the infant settlement, and also to examine the Swan River, with a view to its occupation, the Imperial authorities fearing that they might be forestalled by the French. The "Success" had on board as a passenger Mr. Charles Fraser, the Colonial Botanist of New South Wales. On the 5th March, the expedition reached Rottneest Island, which was explored. On the following day the vessel anchored off the mouth of the Swan River. On the 7th March the "Success" was moored at Berthollet Island (now known as Carnac), and, on the following day, the first gig and the cutter, victualled for fourteen days, and well armed, proceeded up the Swan River, which was explored to its supposed source; the boats experiencing, however, some difficulty in crossing the shallows near the islands which now form part of the causeway. About 15 miles up the stream two gardens were planted, and friendly relations were established with a party of natives by means of presents. The cutter returned to the "Success," and left the gig to make a hasty exploration of another river, to which the French had given the name of the Moreau (now called the Canning), which survey was successfully carried out. The crew of the vessel was subsequently employed in surveying the islands of Rottneest, Berthollet, and Buache, and the neighbouring reefs. On the island of Buache itself was planted a garden, from which circumstance it probably derives its present name of Garden Island; and a cow, three sheep, and three goats were placed thereon. On the 21st March, 1827, the "Success" sailed for Geographe Bay, where she arrived three days afterwards. On the 2nd April King George's Sound was

made, and the settlement planted there was found to be in anything but a satisfactory condition. Leaving the Sound on the 4th April the vessel dropped anchor in Port Jackson on the morning of the 15th May. Captain Gilbert and Mr. Fraser both seem to have been highly impressed with the capabilities of the country around Swan River. Indeed, so encouraging were the reports made by the members of the expedition, that a settlement at the Swan River was finally resolved upon by the Imperial authorities on the earnest recommendation of Governor Darling; and Captain James Stirling, who appears to have been His Excellency's personal representative to the Home Government, was sent to England to receive instructions, and to take charge of the work of organising the expedition, should it be determined upon. In the meantime, about April, 1829, to Captain Fremantle, of H.M.S. "Challenger," who had been despatched for the purpose by Commodore Schomberg, of the Indian Squadron, was entrusted the hoisting of the British flag, and the taking possession of the newly-examined country. Captain Fremantle thereupon proceeded to the coast, and anchored off the Swan River. On the 1st June, 1829, he hoisted the British flag on the north side of the stream, at the locality which now bears his name, taking formal possession in the name of His Majesty King George IV, of "all that part of New Holland which is not included within the territory of New South Wales."

It would appear that Captain Stirling reached England in 1828, for the first Order in Council having reference to the Swan River settlement is dated in the month of December of that year. This Order, for the encouragement of emigration to the new colony offered advantageous terms to persons proceeding to it, at their own expense, during the currency of the year 1829. The Home Government, indeed, refused to incur the cost of a single passage or to undertake the maintenance of emigrants on their arrival in the new land, or their subsequent removal from it if such should be found necessary; but all persons who should arrive before the end of the year 1830, according to a later Order in Council, were promised grants of land, free of quit rent, in proportion to the capital introduced by them, to be invested in the improvement of their holdings, at the rate of 40 acres for every sum of £3 invested—or, 1s. 6d. per acre; choice to be made of situation in the order of arrival. The invested capital was scheduled to comprise:—(1) Stock of every description; (2) all implements of husbandry, and other articles applicable to the purposes of the productive industry or necessary for the establishment of the settler on the land where he was to be located; (3) the amount of any half-pay or pension received from Government. Persons who imported labour were entitled, for the passage of every labouring person brought into the colony, to land to the value of £15—namely, 200 acres; the introducer of labour being, however, liable, in the event of such necessity, for the future maintenance of the work-people introduced. This privilege applied to women, and to children above 10 years of age

—these being classed simply as labourers. A condition was attached that any of these conceded lands, which at the end of twenty-one years had not been sufficiently reclaimed, or satisfactorily improved, should revert absolutely to the Crown. As already stated, the first Order in Council dealing with emigration to the Swan River settlement limited the land privileges to the currency of 1829; the later Order extended the time for the issue of free grants until the end of 1830. But, apparently, the original offer was considered to be more liberal than expedient, as, according to the second Order, it was declared that selection licenses could be granted to settlers on proof of value of property imported, but the fee simple could not be obtained until proof was given that the sum of 1s. 6d. per acre had been expended in the cultivation of the land, or in other solid improvements. It was further stipulated that all granted lands were, within three years of occupation, either to be cultivated or otherwise improved, to a fair proportion of at least one-fourth, or the owners would be liable to the payment of 6d. per acre into the public chest; and should the lands, at the end of seven years, still remain in a state of nature, they were to be forfeited absolutely to the Crown. After the end of the year 1830 further modifications of the free-grant system were introduced, and before long it was totally abolished, land being subsequently obtainable, by purchase only, at varying rates. The land regulations under which the first settlement of the colony was effected, however, largely influenced its early history; and the result of their application is felt even at the present time.

The tempting offers made by the Imperial Government of grants of land, large and small, in proportion to the amount of property introduced, attracted many capitalists, and the consequence was that extensive tracts of the finest territory were granted to purely speculative investors. The efforts of the Colonial Office to obtain emigrants for the Swan River settlement were, therefore, successful beyond all anticipation, the eager competitors for property absolutely given away, knowing, of course, comparatively nothing of the character of the country in which they proposed to settle, or of the hardships, difficulties, and dangers that must of necessity beset them.

The first vessels to sail from England for the settlement at the Swan River were H.M.S. "Sulphur," having on board a detachment of the 63rd Regiment of Light Infantry, and the hired transport "Parmelia," which carried the emigrants and the principal part of the stock and implements. The two ships left England about the 13th or 14th February, 1829. On the 6th June following the "Parmelia" anchored in Cockburn Sound, having on board Lieutenant-Governor Stirling and his family; the Colonial Secretary, Mr. Peter Brown; the Surveyor-General, Lieutenant Roe, R.N.; their wives and families; Mr. and Mrs. H. C. Sutherland, Mr. George Eliot, and other intending settlers, numbering in all sixty-nine. Two days later arrived H.M.S. "Sulphur," having on board Captain F. C. Irwin, in command of a

company of the 63rd Regiment, comprising a staff officer, three subalterns, two sergeants, three corporals, a bugler, and forty-six rank and file. Having left a party of about half its strength to protect the stores, settlers, etc., on Garden Island (Buache), the remainder of the force disembarked on the 17th June and encamped on the north bank of the Swan River (now Rous Head), relieving the party of seamen and marines from H.M.S. "Challenger," which had been left in charge of the British flag planted there by Captain Fremantle on the 1st June. With the landing of the immigrants from the "Parmelia" the history of Western Australia begins.

After the "Parmelia" followed the "Calista," the "St. Leonard," the "Marquis of Anglesea," and, within eighteen months, some thirty other vessels, carrying to the settlement over a thousand immigrants, representing, it is said, £100,000 in money, stock, or goods, on account of which, before the year 1830 had ended, claims for more than a million acres in free grants of land had been presented. Up to the 31st December of the year mentioned there had arrived in the colony, as nearly as can be reckoned, and without counting the detachment of troops and their families, about 1,767 persons, bringing with them stock represented by 101 horses, 583 head of cattle, 7,981 sheep, 66 pigs, 36 goats, and a variety of poultry. Between the 1st September, 1829, and the 30th June, 1830, the value of the property introduced, upon which land was claimed, amounted to £73,260 8s. 3½d., equal, at 1s. 6d. per acre, to 976,805 acres of freehold land, while miscellaneous property, inapplicable to the improvement of land, had been imported to the value of £21,021 2s. 7d., making a total value of £94,281 10s. 10½d.

The best land was appropriated on the free grant system so rapidly and so prodigally that persons arriving within a few months of the first settlement of the colony could find no land available within easy access of the two rivers—Swan and Canning—along whose course settlement was then only possible. There were, of course, at this time no made roads, and the bush tracks consisted solely of dry, heavy sand. Water carriage was, therefore, the sole means of transport for produce. The only way to obtain land in an accessible position, and suitable for agricultural purposes, was for a new arrival to take over a portion of a block already in occupation, guaranteeing to the grantee to perform work in the way of improvements on the part taken sufficient to secure the whole concession—the remainder of the property, in such a case, in all probability would be left permanently in a state of nature. In course of time, and as the result of inability to cope with unaccustomed conditions, numerous would-be settlers left the colony in disgust, but they still retained possession of the immense tracts of land granted to them; hence population was thinly scattered over a wide area, the pick of the territory being unprofitably locked up.

From these re-emigrations it will be seen that many of the earliest settlers were persons entirely unqualified for pioneer life and the

hardships of existence confronting those who essay to "rough it" in a new country. The first immigrants, indeed, comprised mainly gentlemen of culture and good position, their tenderly nurtured families, and indentured servants and agricultural labourers. They included among them retired officers of the Army and Navy, professional men, civil servants, and some of the younger sons of English families of wealth and high social standing. It is not to be wondered at, therefore, that these settlers, landing as they did in a most inclement season, and wholly unprepared for the rude experiences they had to undergo, should have sent home reports of a most gloomy and discouraging nature.

In due course, also, but gradually, it was found that the expectations formed as to the fertility of the soil had been far too sanguine. Food became scarce, and pastoral and agricultural operations languished from want of capital to stock and till the lands. To these drawbacks were added large losses of stock from disease or from eating the poison plant, and it became apparent that the young colony could only with the greatest difficulty maintain itself independent of outside assistance. As a last disaster came serious trouble with the natives. Not only were their houses robbed by their dusky foes, their crops torn up by the roots, and their cattle speared, but even the lives of the disheartened settlers were daily in danger, and it was all but determined on one serious occasion to abandon the infant settlement; indeed, but for prompt action by the Governor, things would have gone ill with a section of the colony from this menacing source. Between Bunbury and Garden Island, Peel's Inlet is the only break in the monotony of the low sandhills which fringe the coast. On the banks of the River Murray, a stream of some importance flowing into this backwater of the ocean, Mr. Peel, one of the earliest of the first settlers, established himself in days gone by, and here, at the small hamlet of Pinjarrah and in its neighbourhood, a small and scattered population is still maintained. This place is memorable in the history of Western Australia as the scene of the most serious of the many skirmishes which in the first few years of settlement took place between the colonists and the aborigines. In the year 1834 the members of the Pinjarrah tribes had committed atrocious murders on several of the few white residents in the district, and in the month of October the Governor, Sir James Stirling, accompanied by Mr. Peel and several other colonists, put himself at the head of a party of military and police, and coming upon the culprits in large numbers on the banks of the Murray, some 10 miles from Peel's Inlet, he engaged them, and after a smart skirmish put them to flight. In this locally celebrated "Battle of Pinjarrah" a considerable number of natives were killed, and several of the settlers more or less seriously injured. The result was, however, that outrages and depredations on the part of the natives almost wholly ceased, and that friendly relations between them and the white population ultimately grew up.

Captain Stirling, the superintendent of the first colonising expedition, was, before departing from England, created Lieutenant-Governor, and a promise was made that a Bill would be submitted to Parliament to make provision for the Civil Government of the new colony, which promise was duly fulfilled when, on the 14th May, 1829, "An Act to provide until the 31st day of December, 1834, for the Government of His Majesty's Settlement in Western Australia, on the Western Coast of New Holland," received the Royal Assent. The officials appointed comprised a Secretary to the Government, a Government Surveyor and Assistant Surveyor, a Harbour-master, a Deputy Harbour-master and Pilot, a Superintendent of Government Farms, Gardens, and Plantations, a Superintendent of Government Stock, a Storekeeper, a Civil Engineer, a Registrar, and a Surgeon—a list strikingly eloquent of the primitive and patriarchal nature of the first settlement, in which several of the functions usually left to private individuals were provisionally discharged by Government.

On the 8th June, 1829, the Lieutenant-Governor issued a warrant for the establishment of a Board of Commissioners, who should examine into and report upon such matters as might be referred to it relative to the management of the property within the settlement, and for the purpose of auditing and passing all public accounts, and demanding, receiving, and duly apportioning all fines, fees, and forfeitures accruing or becoming due to the Government. The Board, as first constituted, consisted of the Harbour-master, Captain Mark J. Currie, R.N., as presiding commissioner; together with the Government Surveyor, Lieutenant John Septimus Roe, R.N.; and Mr. William Stirling, the last-named acting also as registrar and secretary *pro tem*. This body was called the Board of Council and Audit.

By an Order in Council, dated the 1st November, 1830, the first Executive Council of the Colony of Western Australia was constituted. The Order in question, after settling the Constitution of the Council, declared its authority and power to make, ordain, and establish all such laws and ordinances, and to constitute such Courts and officers as might be necessary for the peace, order, and good government of His Majesty's subjects, and others within the settlements. In the constitution of the Executive Council, as set forth in the Order of November, 1830, no change took place until June, 1847, when, under the authority of a Royal Order in Council, the Collector of Revenue was appointed an Executive Officer.

Notwithstanding the fact that a good number of the early settlers had returned to England or departed to the eastern colonies, where the conditions of life were less rugged, steady progress was made by those who remained. The towns of Perth and Fremantle had been much improved, while settlement was extending on the river flats. Higher up the river, farms and gardens had been laid out, and at Guildford the husbandmen brought out by Mr. Peel were turning the rich soil to profitable account. On the upper Swan River; on the Canning, to the

south ; over the hills, at York ; on the River Murray ; at Augusta, and at King George's Sound,—settlement was industriously spreading. Governor Stirling, in a despatch to Sir George Murray, G.C.B., then Secretary for State for the Colonies, writes of the colonists about this time as working with a cheerful confidence in the qualities of the country, and a general belief in its future prosperity ; and for a time the young settlement really did progress with a slow albeit steadfast growth.

In comparison with the eastern colonies, however, which progressed by leaps and bounds, Western Australia seemed to advance with very halting gait. Still, it must be remembered that the western colony was the victim of a peculiar set of circumstances. In the first place, as previously mentioned, the early colonists were not the best fitted for pioneer work in a new country. Then, again, the colony was in an isolated position, cut off by 2,000 miles of unknown country from the eastern settlements, and rarely visited by the ocean carriers of commerce. The discoveries, too, of valuable mineral deposits which had brought wealth and progress to the eastern colonies, had yet to be made in Western Australia. Moreover, the land, except in comparatively restricted areas, was barren, and in many places infested with a plant which poisoned flocks and herds feeding on it, while nearly all the best land was locked up in large grants, owned by persons who were for the most part at little pains to develop them. However, despite all these drawbacks, the small community of settlers was, generally speaking, so united, and consisted of people of such cultured tastes, that the earlier years of the colony's history were, socially, the brightest.

Captain James Stirling, R.N., who held the rank of Lieutenant-Governor, administered the affairs of the settlement from the 6th June, 1829, to September, 1832. The next Lieutenant-Governor was Captain Irwin, the Commandant of the Forces, who continued in office till the month of September, 1833. Then followed Captain Richard Daniell, up to May, 1834, when for a fortnight the colony was administered by Captain Picton Beete, Daniell resuming control of affairs and continuing in office till August, 1834, at which date Captain Stirling (afterwards Sir James Stirling) entered upon his second term, this time as Governor with full rank, which closed at the end of the year 1838.

In the meantime the free-grant land system of settlement, which had been inaugurated with the first days of colonisation, had been working out in anything but a satisfactory manner. Magnificent estates had been lavishly squandered upon propertied immigrants during the first few years of the colony's existence, and the splendid territorial munificence of the Government soon began to show its retarding influence in the country's progress. All the best land, the "eyes" of the districts watered by the Swan, the Canning, and the Avon, as well as the finest patches in the vicinity of the more southern settlements, were gone beyond recall. It is now recognised that if the conditions originally imposed in the making of these grants had been rigidly insisted upon

no abiding mischief might have been inflicted upon the young colony. The Orders in Council, under which the Governor was empowered to act, offered land in extent proportioned only to capital invested in the colony for purposes of absolute improvement. Practically, however, grants of land were made for any and every kind of property for which the immigrant who imported it might choose to make a claim in the form of acreage. Even articles of furniture, art, and plate, were assessed as valuable accretions to the colony's wealth, and acknowledged in donations carved from the public estate. Again, the occupation obligations were carried out neither in the letter nor in the spirit. It is recorded that full and unconditional titles were readily obtained, and that over a million acres of the best portions of those districts which, from the nearness to the chief township and the seaport of the colony, might most easily have been brought into profitable cultivation, became "locked up" in a huge land monopoly. When the poorer emigrants—the labourers and the mechanics, and such servants as had achieved freedom from their indentures—sought to establish themselves upon the soil, they found that they were shut out from these very areas where their enterprise and their labour would have been most productively and usefully applied.

Sir James Stirling gave up the reins of Government at the end of the year, 1838. He was succeeded by Governor John Hutt, whose administration lasted from January, 1839, to December, 1845. The next Governor was Lieutenant-Colonel Andrew Clarke, from February, 1846, to February, 1847. Then came Governor Lieutenant-Colonel Erwin, from February, 1847, to July, 1848, and Captain Charles Fitzgerald, from August, 1848, to June 1855; and the term of office of the last-named officer ushers in a new era in the history of Western Australia. When the colony was founded, the Imperial authorities had made an agreement with the first settlers that no convicts or prisoners were to be transported to the new settlement, as was the case with regard to New South Wales and Tasmania. Some twenty years had rolled by, and Western Australia numbered close upon 7,000 inhabitants; 4,000 acres had been brought into cultivation, sheep had increased to 140,000, cattle to 11,000, imports had reached a value of £45,000, and exports £30,000. Nevertheless, the struggle to make a living was becoming harder and harder, trade was languishing, labour was difficult to obtain, and immigrants did not appear to find the country attractive enough to bring them thither—a result, doubtless, of the manner in which the land was locked up in big estates. "Widespread depression prevailed amongst the colonists, and at last, though with dire misgivings on the part of many, they decided to petition the Home Government for the introduction of convicted prisoners, hoping thus to obtain cheap labour, an abundant expenditure, and a market for their cheap produce." The colonists of Western Australia had no difficulty in gaining a complaisant answer to their petition; for, at this juncture, the Imperial authorities were feeling the pressing necessity of having some oversea settlement suitable for the deportation

thereto of criminals. The first batch of convicts was landed at Fremantle on the 1st June, 1850. Transportation to the colony was continued for about eighteen years, during which time some 10,000 members of the criminal class were added to its population. In the earlier years of the "transportation system" the convicts who were landed in Western Australia did not by any means belong to the worst type of criminal. Some of the shipments, indeed, were selected with special care, and with a view to meeting the requirements of a labour-starved colony. Although there was undoubtedly a sprinkling of hardened villains, a great proportion of those sent out consisted of agricultural labourers who were transported for some petty infraction of the game laws. Prisoners of this class were of great use during their term of sentence, and later on developed into an excellent body of settlers.

Governor Fitzgerald retired from office in June, 1855, and was succeeded in the administration by Arthur Edward Kennedy, afterwards Sir Arthur Edward Kennedy, and Governor of Queensland. Kennedy's term of office came to an end in February, 1862; for ten days or so the Government was administered by Lieutenant-Colonel John Bruce, as Acting-Governor; and then John S. Hampton, took over the control of the colony.

The complaints against the use of bond labour in injudicious directions which were frequently made in Governor Fitzgerald's time disappeared with Hampton's assumption of office. His admirers declare that there was an absolute change for the better all round. He had qualified himself for the position of Governor of a penal settlement by holding an office of authority in Tasmania connected with the convict system of that colony. He was a stern disciplinarian, and was able to gauge to a nicety how to get the maximum of work from the human muscle, and how to employ convict labour to the best advantage. He set to work with a will to improve the colony's means of communication, and succeeded so well that it has been said of him: "The remembrance of Mr. Hampton's administration is perpetuated in miles upon miles of macadamised road, in the covering of many a heavy sand-stretch with well-laid metal, and in bridges and causeways innumerable over river and swamp, from one end of the settled districts to the other."

Governor Hampton surrendered his office in the month of November, 1868, and with the termination of his régime the era of convictism was closed; but with the cessation of transportation, and the maintenance of prison labour, passed away also the large Imperial expenditure—although the withdrawal was gradual. The settlers at first felt this rather keenly, for though willing enough to be cleansed of the convict "taint," they were far from pleased at the loss of its solatium in currency. The "system" had reigned in the colony for about eighteen years; and the settlers' expectation of material advantage accruing from its continuance in their midst had been

fairly satisfied. Nevertheless, beyond giving cheap labour, and a large circulation of money, transportation had done nothing for the general advancement of the colony, and had rather fostered than removed its chief bane— isolation. Transportation had ceased in the case of New South Wales in 1849; in that of Tasmania, in 1852; it had never been introduced into Victoria, South Australia, and (since its birth as a colony) Queensland. The eastern and southern colonies, therefore, looked askance at the distant western settlement.

After the conclusion of Governor Hampton's term of office, the colony was administered, from November, 1868, to September, 1869, by Lieutenant-Colonel John Bruce, the Commandant of the Forces, as Acting-Governor. Frederick A. Weld, was the next Governor, and he ruled the Colony from September, 1869, to December, 1874. During his *régime*, and by an order of the Queen in Council, dated the 3rd April, 1871, the Executive Council was remodelled. The Governor remained President; the Colonial Secretary, the Attorney-General, the Senior Officer in command of the Land Forces, and the Surveyor-General retained their seats, whilst those of the Comptroller-General and Collector of Revenue were abolished.

Governor Weld, who had been trained to political and public life in the progressive and restless colony of New Zealand, saw with dismay the condition of stagnation in which Western Australia seemed perfectly contented to remain. He had been accustomed to a country which enjoyed a considerable measure of freedom and prosperity. Filled with enthusiasm, he conceived it to be his duty to break down the barriers which shut in the colony from intercourse with the outside world, as well as to provide more adequate means of communication between the centres of settlement within it. His first task was to arrange for regular steam communication between Albany, the Vasse, Bunbury, Fremantle, and Geraldton. This was the beginning of a trade which steadily grew, and later on all the intermediate ports between Albany and Cambridge Gulf enjoyed the advantages of a regular and efficient steam service. The Governor next turned his attention to the question of telegraphic communication, and in spite of the apathy of the colonists on the subject, had the satisfaction, before his departure, of seeing all the principal centres of population connected by telegraph lines. The closing act of this energetic Governor and true benefactor to the people whom he governed, was the planting of the first pole of the line of wire which has since brought Western Australia into direct communication with the other colonies of Australasia and with the world. During Mr. Weld's term of office he made a strong attempt to move the colonists in the direction of railway construction, and, though this could not, considering the colony's limited resources, be carried out on anything like an extensive scale at that time, he had the satisfaction of seeing a beginning made with two distinct railway systems, one commencing at Geraldton and the other at Fremantle.

Western Australia owes much to Mr. Weld's practical and progressive administration. In addition to the works already alluded to as carried out during his term of office, various industries, notably mining, were developed; a partially representative Legislature was established; municipal institutions were introduced; an Education Act was passed; and important explorations were successfully conducted by Mr. (now Sir) John Forrest.

It must not be forgotten, however, that useful explorations had been previously carried out, and had greatly furthered the extension of settlement. As far back as the year 1831, Captain Bannister had made an overland journey from Perth to King George's Sound, and his track afterwards became the regular overland route.

In 1837 Lieutenant Grey (afterwards Sir George Grey) set out on an expedition, having for its objective the north-west and western portions of the continent, and although the work was hindered by the opposition of the natives, and by sickness among the exploring party, important additions were made to geographical knowledge. Lieutenant Roe, Surveyor-General of the Colony, made several journeys eastward, and he was followed by various other explorers, but their discoveries were not of great practical utility. In 1839 Grey set out on his second expedition northward, and on this occasion again the members of the party suffered great hardships. Grey claimed to have discovered the Gascoyne, Murchison, Hutt, Bower, Buller, Chapman, Greenough, Irwin, Arrowsmith, and Smith Rivers, but the difficulties and privations met with on the expedition prevented him from making any detailed surveys of his discoveries.

Edward John Eyre's tremendous effort to march round the head of the Australian Bight, with a single black boy, in 1840-1, belongs rather to the history of South Australia than to that of Western Australia. Nevertheless, his exploratory expedition was of value in giving a more thorough and detailed knowledge of the geography of the coast of the latter colony, than that before possessed.

The colonists of the Swan River settlement believed that although their little colony was encircled by a belt of desert land, beyond the desert lay rich agricultural and pastoral country. Various efforts were from time to time made to penetrate this surrounding waste. In 1843 Messrs. Landor and Lefroy made a short excursion from York, but nothing tangible resulted from their exploration. Again, in 1846, three brothers named Gregory set out from Bolgart Spring, the farthest stock-station eastward, with the object of discovering fresh pastoral land. The country passed over in their eastward journey was found, however, to be barren and inhospitable, and interspersed here and there with numerous salt lakes. The explorers next turned their attention to the streams crossed by Grey in his disastrous expedition to Shark's Bay, and, at the mouth of one of these, the Arrowsmith, a seam of coal was discovered.

Another expedition eastward, in charge of Lieutenant Roe, who was accompanied by Mr. H. C. Gregory, set out on the 14th September, 1848. Beyond making further additions to the stock of geographical knowledge, the result of the expedition was unsatisfactory. In December of the same year Governor Fitzgerald, accompanied by Messrs. A. C. Gregory and Bland, proceeded to the scene of the discovery of coal already alluded to. During this expedition a serious conflict arose with the aborigines, in the course of which the Governor was wounded by a spear. In 1858 Mr. F. Gregory made important discoveries of excellent pastoral lands on the banks of the rivers previously crossed by Grey, and his expedition added greatly to geographical knowledge. In 1861 another expedition, led by Mr. F. Gregory, made Nickol Bay, on the north-west coast, the starting point of its explorations. This expedition was very successful, discovering several important rivers, amongst others the Fortescue, Ashburton, De Grey, Oakover, &c., and opening up some splendid pastoral country. Mr. Walcott, who was second in command, also discovered the existence of the pearl-shell beds, which have since proved such a source of income to the colony.

It was not long before enterprising pastoralists occupied the newly-discovered pasture lands. Mr. Padbury, in 1863, sent the first shipment of stock to Butcher's Inlet, and thence occupation rapidly spread eastward to the De Grey River. Subsequently an attempt was made at forming a settlement at Roebuck Bay, but the hostility of the aborigines, coupled with bad seasons and misfortunes generally, led to its abandonment in 1867.

In 1864 a small settlement was established at Camden Harbour, the country round which had been reported as very suitable for colonisation. But from its very inception nothing but disaster was met with. The grass proved unsuitable for stock, the poison-plant was found in abundance, the colonists themselves suffered from ill-health, and the natives were very hostile. Consequently it was decided to abandon the settlement, and the decision was acted on in 1865.

In the tract of country, known as the "Nor'-West," which lies between the De Grey and Ashburton Rivers, there were grouped, by the end of 1867, the original pioneers of the district, some later arrivals, and the remnant of the Roebuck Bay and Camden Harbour experiments. To these must be added the members of a company formed in Melbourne, in 1865, to settle A. C. Gregory's recently-discovered Denison Plains. The colonists of the "Nor'-west" suffered many hardships in the early days of settlement. The decline in the price of wool, and the large expenses coincident with the maintaining of a colony so far removed from the basis of supply proved a heavy strain on their original resources. But later on, with the advent of more favourable seasons, and the rise in price of wool, prospects became brighter, and this division now ranks among the finest pastoral areas in the colony.

In 1869 Mr. (afterwards Sir) John Forrest made his first exploration, in the course of which he penetrated 250 miles farther eastward than

any previous explorer, but the country passed over proved to be extremely inhospitable. Mr. Forrest was next given command of an expedition which had for its object the traversing of the country between Perth and Adelaide, along the shores of the Great Australian Bight. In this expedition he proved that the desert surrounding the tall cliffs of the inlet did not extend for any great distance inland, where, indeed, he met with fine pastoral country, although the absence of permanent surface water proved a great drawback. In 1871 he made a second journey in search of new pastoral country. The one important circumstance made known by these expeditions was the absence of any river which it was thought might have been unwittingly crossed at its mouth by Eyre in 1840.

The tract of country between the Transcontinental Telegraph Line and the Western Settlements now became the area of the keenest exploratory attention. In 1872 Ernest Giles led an expedition from South Australia to the westward, but his progress was stayed by the large dry salt lake, to which he gave the name of Lake Amadeus. In a further expedition his comrade, named Gibson, lost his life in the desert, since known as Gibson's desert.

In 1873 an expedition was fitted out by Messrs. Hughes and Elder, the command of which was entrusted to Colonel Warburton. After suffering incredible hardships the party managed to reach the head of the Oaker River, but the results of the expedition were disappointing. In the same year a party, under the leadership of Mr. Gosse, discovered fine pastoral country in the vicinity of the Marryat and Alberga Rivers, but the barren nature of the country precluded exploration to the westward.

One of the most remarkable journeys in the annals of Australian exploration was that undertaken by Mr. John Forrest in 1874. Colonel Warburton had succeeded in crossing the desert, albeit naked and starving when he reached the coast. John Forrest determined to accomplish the feat, and to accomplish it on more prudent and more successful lines. With this object in view an expedition was fitted out, comprising John Forrest as leader, his brother Alexander, two other whites, and two natives, with ordinary pack and saddle horses. On the 14th April, 1874, the party left Yuin, then the furthest outside station on the Murchison River. For the first six weeks there was little to record. The route lay along river-courses and through well-grassed country. When the explorers struck eastward they were fortunate in discovering some fine wells. Their agreeable experiences lasted until they got into the spinifex country, and then their troubles commenced. On the 8th June the leader started with one black boy to look for water, leaving instructions for the party to follow up in a few days' time. The two travelled 20 miles over undulating sand-hills clothed with spinifex, but were unable to find the priceless fluid. From the top of a low stony rise the view was gloomy in the extreme. Far to the north and east it was all spinifex country, quite level

and destitute of water. They turned back and met the remainder of the party a few miles from the spring at which they had been camped. A retreat was beaten, and the entire expedition fell back upon its former oasis. A day was taken to rest in, and then Alexander Forrest and a black boy went forth on a quest for water towards the south-east. During their absence the natives made an unexpected attack upon the camp, but they were repulsed after a desperate struggle. Alexander Forrest and the black boy had travelled over 50 miles from camp, and, though they had passed over much good grazing country, they had found no signs of water. The explorers now set to work and built a rough hut of stone, in order to ensure safety from the blacks during the night; for their stay at Weld Springs seemed likely to be indefinite, and a fresh attack might be expected at any moment. When the hut was completed, Forrest, taking with him a black boy, started out on a flying journey due eastward. This time they were fortunate in finding a small supply in some clay waterholes, and the whole party thereupon removed to this locality. On the 22nd June the leader started on another quest ahead, and 30 miles distant found a fine supply of water in a gully running through a grassy plain, where there was abundant fodder for the horses. Eight miles to the southward was discovered a small salt lake, to which was given the name Augusta. On the 30th June, John Forrest, while exploring ahead and searching for water, pushed far into the spinifex desert with his horses "knocked up." By the aid of scanty pools of rain-water in the rocks, he managed to push on for some distance, walking most of the way. He reached a range, and from its summit had an extensive but discouraging view. Far as the eye could pierce, the horizon was as level and as uniform as the sea—everywhere spinifex; no hills or ranges loomed in the distance. It was disheartening in the extreme. From time to time this experience was repeated. The supply of water was as precarious as it was priceless. Sometimes one of the brothers, sometimes the other, would find a sparse quantity in the rock-hollows and clay-pans of the desert. Sometimes both would fail. Now and again the finds of water were copious, as in the case of Wandich, Pierre, Weld, and Alexander Springs. Generally, however, they were scanty, and rapidly exhausted. Eventually the explorers got into country which, though anything but desirable as pasture land, nevertheless yielded them water. Here they were within a hundred miles of Gosse's "furthest" westward; and to span this short distance proved a weary work. Repeated excursions resulted only in repeated disappointments and "knocked up" horses. At last a generous shower of rain filled some rock-holes to the north-east of their camp, and after much exertion the whole party managed to reach an old stopping-place used by the explorer Giles, and named by him Fort Mueller. By this time they were also on Gosse's tracks, and the leader was able to congratulate himself upon the successful accomplishment of his task. From this point to the Transcontinental

Telegraph Line the route is practically that followed by Gosse, and on the 27th September Forrest struck the wire some distance north of the Peake Station, thus concluding a most valuable expedition in a highly satisfactory manner. On his arrival at the station Forrest learned that Giles and Ross had both turned their backs upon the inhospitable country which he had traversed in safety and with success.

The history of Western Australia is the history of a succession of pastoral settlements following in the wake of successful exploration, and in this connection it may be remarked that not one of the other colonies presented such terrible natural obstacles to the progress of the pioneer. As settlement extended, Government residents were appointed to the charge of various districts with executive and legal functions, the chief law officer being styled Commissioner of the Civil Court. The Civil Service was expanded gradually, but during the first forty years of the colony's history the system of Government underwent little change. There was little desire during this period for administration of a more popular type. The Governors were anxious to learn the wants of the colonists and where possible to meet them. They maintained personal relations of a friendly social description with the leading settlers, and the views and the expressed wishes of the upper classes had full weight in determining the policy of the Government. The populations of the towns were too small to originate democratic ideals, or to agitate for constitutional reform. It is, of course, obvious that during the convict period personal government was almost a necessity ; but no sooner had transportation ceased than political aspirations began to awaken, and the people evinced a desire to partake more directly in the management of their affairs. In the year 1870 Governor Weld was allowed to introduce a Constitution in which the Executive remained practically the same, but it was assisted by a Legislature, two-thirds of the members of which were returned by the constituencies into which the colony had been divided. This system of administration appears to have been well suited to the circumstances of the country at that time, and, in conjunction with municipal institutions, road boards, and boards of education (which were simultaneously established), served to prepare the people for the exercise of more advanced self-governing powers.

Up to the time of Governor Weld's arrival the Colonial Secretary had held a position practically little removed above that of the Governor's Chief Clerk, but to Mr. F. P. Barlee, who then occupied the post, the new administrator extended a far greater measure of confidence than had been enjoyed by any of the Secretary's predecessors, Mr. Barlee being permitted to assume a virtually ministerial position. When the time approached for the Governor's departure, the Chief Secretary, being desirous of keeping the measure of influence which he had gained, conceived the idea of becoming Premier under a form of Responsible Government. With this end in view he gained over the Governor's support to the scheme, and also enlisted the sympathies of several of the more prominent members of the Legislative Council.

Accordingly, in 1874, resolutions were passed urging the Governor to introduce a Constitution Bill conferring Responsible Government upon the colony. To this His Excellency gave his consent, but differences of opinion arose as to the details of the measure, and the Legislature was dissolved.

Governor Weld continued in office until December, 1874, and was succeeded by William C. F. Robinson, in the month of January in the year following. Upon the meeting of the new Legislative Council resolutions were again adopted expressing a desire for Constitutional change, to which eventually a discouraging reply was received from the Colonial Office. Governor Robinson had received instructions to throw cold water on the movement, but his task was by no means easy until the departure of Mr. Barlee from the colony. The Colonial Secretary, dissatisfied, as he expected to be, with the restricted position in which he found himself with an administrator of the old school, took leave of absence, and subsequently accepted the Government of Honduras. With the withdrawal of its energetic leader, the Responsible Government Party collapsed.

During the early part of Governor Robinson's term of office a noteworthy exploratory journey was made from South Australia at the expense of Sir Thomas Elder, and under the leadership of Ernest Giles, who had twice previously been driven back in his efforts to cross the great Western Australian desert. The expedition set out from Beltana, and travelled to Youldah where a depôt was formed. From the latter place the explorers started on their long and toilsome journey, and eventually reached an out station in Western Australia on the 4th November. From this point Giles retraced his steps to the Transcontinental Telegraph Line, following a track to the northward of the route traversed by Forrest.

Governor Robinson's term of office was extremely uneventful. Instead of stimulating the activities of the colonists, and leading the progressive party as Governor Weld had done, Robinson sought to restrain and modify their ambitions and aspirations. His administration concluded in August, 1877, and for some four months Lieutenant-Colonel Edward Douglas Harvest controlled the affairs of the colony until the arrival of the new Governor, Major-General Sir Harry St. George Ord, in November of the same year.

The new Governor soon found that public opinion had drifted strongly towards responsible government, not from any great dissatisfaction with the local policy pursued by the Governor and his advisers, but rather by reason of the restraints which the policy of the Colonial Office imposed upon a forward movement in local affairs. In the Legislative Council a motion in favour of Responsible Government was again brought forward. It was rejected, but only that an amendment might be substituted plainly intimating that it would soon become impossible to stem the movement if the Secretary of State for the Colonies continued the existing practice of interfering and thwarting the popular longing

for progressive measures. The Governor took advantage of a visit paid by the Hon. John Forrest to England to make, through that gentleman, strong representations upon the mischievous tendency of this obstructive policy. The result was that the officials of the Colonial Office gradually lessened the frequency of their intervention in the affairs of the colony, and authority for several much needed railway works, hitherto held back, was granted and the requisite loans sanctioned. These grievances assuaged, another soon arose respecting the lack of control possessed by the House of Legislature over the expenditure of public money. No real power rested with the representatives of the people in this matter. Estimates indeed were passed, but as a mere matter of form. What moneys the Government thought fit to spend they spent; the Legislature was powerless to prevent them. However, no accusations of wild extravagance could be brought against the Governor and his Executive. They spent no more than they deemed necessary in the interests of the public service. But by making themselves independent of the House for their requirements they completely deprived that body of the power which it would necessarily have exercised had it controlled the public purse. The colonists had, however, to wait for a time in patience for the guardianship of the finances.

Early in 1879 Western Australia sent out another of the exploring parties which formed such a feature, indeed, the salient feature, of her history. The leadership was given to Alexander Forrest, who had accompanied his brother John on two of his great journeys into the interior. Funds were provided by the Government, and horses and equipments by the "Nor'-West" settlers. Alexander Forrest, with a small party, left Anderson's station, on the De Grey River, with a view to proceeding overland to King's Sound, and thence penetrating through the Kimberleys to South Australia. The expedition set out on the 25th February, 1879, and reached Beagle Bay on the 10th April. Success of the most gratifying character attended this trip, though during its latter part the explorers were subjected to great hardships and privations. Leaving Beagle Bay the party followed the coast round to the Fitzroy River (which empties into King's Sound), and journeyed along the course of that stream, tracing it to its point of emergence from the fastnesses of the Leopold Range, and examining the rich pasturage of the adjacent alluvial flats. The Leopold Range for a time barred further progress, so a return was made to the Fitzroy River, and by following up an affluent named the Margaret the explorers were enabled after a time to work round the foot of the range. Shortly after this a fine river was discovered and named the Ord, and this stream was followed to its junction with the Negri, where they left it and continued their way to the Telegraph Line, passing through fairly good country. After leaving the Victoria River the privations of the party commenced, and Forrest and a companion named Hicks pushed on alone, and eventually met a repairing party from which they obtained supplies for their companions. This trip must be considered as one of

the most important in the annals of West Australian exploration, as the country opened up has since been stocked with sheep and cattle, and large mineral wealth has also been developed. The Government Geologist, who accompanied the party, gave it as his opinion that gold-bearing strata would be found in the country lying at the head waters of the Fitzroy and Ord Rivers, and after events have shown the correctness of his surmise.

Major-General Sir Harry St. George Ord was succeeded in the month of April, 1880, by Sir William Cleaver Francis Robinson, who therewith entered upon his second term of office as Governor of Western Australia.

In 1881 a further loan was raised for carrying out the construction of the Fremantle, Perth and Guildford Railway. The first loan was obtained in 1879, but a third was necessary in 1883, and with the proceeds of these loans much was done to extend the railway facilities of the colony, and the Government was able to claim that it had brought every centre of population in the eastern agricultural areas into direct railway communication with the capital and its port. A great deal was expected from the completion of these lines in regard to increased settlement and agricultural expansion; there was, however, very little of either.

In 1883 the Hon. John Forrest, who had succeeded Mr. (afterwards Sir) Malcolm Fraser as Surveyor-General, sailed for Derby, a port in the West Kimberley District, accompanied by several parties of surveyors, and by Mr. E. T. Hardman, of H.M. Geological Survey of Ireland. The object of this expedition was a further and more extended examination of the two Kimberley Districts, and the carrying out of the surveys that had now become absolutely necessary. During this journey the country between the Leopold Range and the coast was examined, its rivers explored, and its geological formation noted and charted. The only metalliferous deposits, however, observed by Mr. Hardman on this trip were ironstone, a poor hematite in large quantities, and in the gravels of the Fitzroy River, minute, dark, heavy grains, which had all the appearance of stream tin.

Sir William Robinson's second term of office as Governor concluded on the 17th February, 1883. Until the 2nd of June of the same year the colony was administered by Chief Justice H. T. Wrenfordsley, and then arrived Sir Frederick Napier Broome who ruled the country some six and a half years.

In 1884 Mr. H. Stockdale set out on an exploring expedition with the object of examining the country in the neighbourhood of Cambridge Gulf. Leaving the Gulf and crossing the range through a natural gap, to which the leader of the expedition gave his own name, the explorers came upon a well-grassed and watered region. Later on the fine stream known as the Lorimer was discovered. Stockdale afterwards reached the Transcontinental Telegraph Line, but two of the party, who refused to proceed and were left behind at a camp with supplies of provisions, were never afterwards heard of.

The year 1884 saw much attention devoted by the Western Australian Government to an examination of the two Kimberleys. By that time it had become apparent that settlement on the river Ord and its tributaries must find an outlet at Cambridge Gulf instead of at Derby, the shipping port for the squattages bordering the Fitzroy, the Lennard, and the Meda Rivers. Accordingly, it was to Cambridge Gulf that Staff-Commander Coghlan, of the Admiralty Survey Department, proceeded. He reported favourably upon the capabilities of the inlet for meeting the requirements of shipping. Meanwhile, Mr. Surveyor Johnstone had been despatched to Derby, accompanied by an efficient staff, Mr. Hardman being again included in the party. During this expedition Mr. Johnstone, crossing the watershed of the Fitzroy River, passed Mount Barrett and followed the river Elvire and the river Ord to the junction of the latter with the river Negri. In the course of his exploratory survey, the geologist found good specimens of copper ore on the Margaret River, and of tin stone in the black sands of several of the streams. Lead also was noted in limestone rocks in the form of galena associated with zinc blende, and showing small traces of silver. Of non-metalliferous minerals, gypsum, agate, chalcedony, garnet, amethyst, opal, pink and yellow topaz, and other gems were discovered, but the chief interest of Mr. Hardman's researches centred in his statements of the gold indications he had found, and of the prospects of unearthing the precious metal in payable quantities. Two thousand square miles of the country through which he passed he declared, in his opinion, to be auriferous in a payable degree. Mr. Hardman made a full report on the Kimberley country, which concluded with the statement that, on the whole, the indications he had met with pointed almost with certainty to the eventual justification of the name of "Terra Aurifera," erroneously said to have been given to these districts centuries ago by the navigators who first landed upon their ironbound coasts.

In 1888-9 Mr. Ernest Favenc explored the headwaters of the Ashburton and Gascoyne. Three important tributaries of the Ashburton were discovered, the Cunningham, Jackson, and James, and splendid pastoral country was opened up. In 1896 Mr. S. Wells, chief of the Calvert Exploration Expedition started from Lake Way to examine the country lying between the Fitzroy and East Murchison Rivers. During this expedition two of the party, Mr. C. F. Wells and Mr. G. Lindsay Jones, lost their lives. In the same year Mr. A. Mason examined the country between Kurnalpi and Eucla, and claimed to have discovered rich pastoral country poorly supplied, however, with surface water. A portion of the area explored had been previously traversed and similarly described by Sir John Forrest in 1870.

On the 20th July, 1896, an expedition equipped and led by the Hon. David Carnegie left Doyle's Well, 50 miles south of Lake Darlôt, to search for auriferous or pastoral country in the great desert lying between latitudes 19° and 28° south, and longitudes 122° and 129°

east, which had hitherto only been crossed from east to west, or *vice versa*. The country passed over was in general extremely inhospitable. One result of the expedition was the proving of the impracticability of a direct stock route between Kimberley and the North Coolgardie fields.

While the "Eastern Railway" was being built, the Government of Western Australia, on the motion of the Legislative Council, made it known that the colony was open to receive offers for railway construction on the land-grant system. By this means it was hoped that, while much needed transit facilities would be obtained without adding to an already comparatively large indebtedness, immigration and settlement would be promoted, and outside capital embarked in developing the resources of the country. As already pointed out, the country had been largely colonised on the eighteen pence an acre value paid by purchasers of land in the form of personal property introduced. The Governor himself received 100,000 acres in lieu of salary, although, when his services were assessed at £800 per annum, he was ultimately paid from the date of his appointment. But this system of settlement left the colony practically and permanently undeveloped, by causing the dispersion over a wide area of a very small population. No wonder, then, that a solution of this matter should have been looked for in the promotion of land-grant systems of railway construction. Various negotiations were entered into and dropped; but a contract was at last signed by Sir Frederick Napier Broome and Mr. Anthony Hordern, of Sydney, for the building of a line to connect Beverley and Albany. Under the terms of this agreement payment was to be made at the rate of 12,000 acres for every mile of completed road, and this concession was handed over to a syndicate of London capitalists who undertook the construction of the line. The lands selected in payment were situated within a belt of 40 miles, on each side of the line, but half the frontage to the railway was reserved by the Government. The line, which has a total length of 243 miles, was opened for traffic on the 1st July, 1889, and in January, 1897, it became the property of the Government, the purchase money amounting to £1,100,000.

Following upon the West Australian Land Company's agreement to construct the Great Southern Railway Line between Beverley and Albany, came another land-grant contract to connect the city of Perth with Geraldton, *via* Gingin, the Victoria Plains, and the Irwin and Greenough Flats. However, the work on this route was temporarily suspended, the original syndicate having become involved in financial embarrassments which necessitated a transfer of the operation of construction to other parties. Other lines were planned to tap the timber forests of the Darling Ranges from various points on the southern coast, one connecting Rockingham with the Jarrahdale Company's Depôt, a second having its base at Bunbury, and a third running to the small shipping port of Lockville, near the Vasse.

During Sir William Robinson's second administration, strong remonstrances concerning the retention by the Governor and his Executive of the power of disbursing the public funds without reference to the people who were taxed to provide them, were addressed to the Secretary of State for the Colonies, who promptly directed the introduction of a Bill for securing to the Legislature further control of the finances. An Act was framed accordingly, under the provisions of which no unauthorised expenditure could take place (except in cases of emergency) without the approval of a Committee of Finance, acting for the House while its members were not in session. The result of this measure was immediately apparent. The people's representatives obtained an influence in the conduct of public business which they had never previously possessed, the Government becoming altogether dependent upon them for supplies, and therefore compelled the more closely to study their wishes, and to give them the constitutional position to which they were rightly entitled. But this measure of reform, sought for in the interests of the old Constitution, and with a view to prolonging its existence, was in itself a main factor in leading to the conclusion that Responsible Government must be obtained.

About the year 1885, during the administration of Governor Broome, the desire for Responsible Government may be said to have become a political aspiration among the residents of the towns and the more settled districts. For an entire decade preceding (from 1875 to 1885) an influential majority of the members of the Legislature had remained opposed to any change, though the country—apart from the Administration—continued to be divided in opinion. Those who opposed reform in the Constitution seemed justified of their convictions, as of late years the old form of Government appeared well-suited to the colony's requirements. Certainly, the appointments made to the Executive had not, in every instance, given the completest satisfaction; but the authorities of the Colonial Office had, in all other matters, almost entirely ceased to intervene in West Australian affairs. The Governor ruled the country with all but absolute power, it is true, nevertheless, he maintained most cordial relations with his Legislature. Indeed, without more than formal reference to the Home Authorities, decisions of the first importance were locally arrived at, works of a serious nature were embarked upon, and various means taken for the development of the colony's resources by the aid of borrowed money. Legislation, too, was free from the control of the Colonial Office, and, so far as its general policy was concerned, Western Australia was to a great extent a self-governed colony. The upper and privileged classes, together with the Civil Service, were, as a rule, opposed to the granting of Responsible Government, but the population in the urban centres enthusiastically supported it. As might naturally have been expected, the reform party steadily gained in numbers and influence. Railway expansion and gold discoveries were knitting the people together, and attracting fresh elements to the country.

In the year 1886 an Act (50 Vic., No. 10) was passed, increasing the number of members of the Legislative Council to twenty-six, nine to be nominated, the northern portion of the Northern District being taken to form the new "Kimberley District." In this year also certain by-elections took place, and as a result the party of reform secured a small majority in the House—a majority which it was evident would go on steadily increasing, and would, in the event of a general election, become very strong, perhaps even overwhelmingly so. The Conservative party, therefore, had to consider what position they should take up; whether the absolute opposition to constitutional change should be persisted in now that the reformers had practically won the battle, or whether an approachment should be made to them. It was eventually decided no longer to oppose the popular wish, but to join with the moderates in endeavouring to obtain the best form of Constitution that experience could suggest. As a result of this decision, Mr. S. H. Parker, in the winter session of 1886, moved a series of resolutions in favour of Responsible Government, and these passed the House by a large majority, only one elected member voting against them.

While the agitation was in progress for free political institutions, the attention of Western Australians, and of the miners of the eastern colonies, was directed to the gold-fields of the north. Hardman's reports had begun to attract attention, though he cannot be said to have been the original discoverer of the precious metal in the two Kimberleys. Shortly before he began his geological researches, some wandering prospectors had found indications of the presence of gold in the country at the head-waters of the Margaret and Ord Rivers. Nevertheless, Hardman's report was of great value, and he never led astray those who were careful to follow his directions. Soon after his return from his second expedition, prospecting was engaged in with some vigour; towards the end of 1885, specimens were brought into Derby from the vicinity of Mount Barrett by several fortunate gold-hunters; and this incident led to the disastrous "rush" that took place in the following year. Mount Barrett was too far distant from a base of supplies to prove anything but the scene of hardship, misery, and failure. It was 300 miles distant from the Port of Derby, and 250 miles distant from Wyndham, newly opened in the Cambridge Gulf. No tracks existed, and a rainy season was certain to cut the diggers off from the coast. But men poured into Wyndham in hundreds, on the road to Mount Barrett, and the Government cautioned the reckless adventurers in vain. Some of the new arrivals were old hands on gold-fields, and came to the "rush" fully equipped and adequately provisioned, but the greater number were without experience—clerks, storemen, citizens, and city dwellers generally, unaccustomed to hardship, and altogether unsuspecting the difficulties, the dangers and the privations they must encounter in such a latitude as that of Mount Barrett. Disappointment met them as soon as they arrived; the alluvial workings had not turned out as expected,

and the gullies, where the first rich finds had been made, were soon exhausted. Luck, however, did not wholly desert a certain proportion of experienced diggers, although the majority of the gold-hunters made barely sufficient to pay current expenses; indeed, many were at the point of starvation. Then the note was sounded to retreat, and the rush back to Wyndham degenerated into a stampede. Nothing but the prudent precautions of the Government averted all sorts of excesses, lawlessness, and riot. By-and-by the unsuitable portion of the population of the gold-fields was drafted off, and the few hundreds of gold-diggers who remained entered upon a systematic examination of the quartz-reefs described by Mr. Hardman as so full of promise. The purging of the field of the incompetent and the inexperienced was not, however, accomplished without cost. The army of the defeated beat a retreat under all the rigours of a cruel climate; great distress was suffered from drought and heat; terrible hardship and pain from lack of provisions; while, on the line of march, many deaths occurred from disease, starvation, sunstroke, and exposure. Those who remained were furnished with only the most rudimentary appliances for the extraction of the precious metal; but the success of the first primitive attempts exceeded the expectations of the most sanguine; while subsequent assays of parcels sent to Melbourne seemed to establish the fact that in the two Kimberleys were some of the richest reefing-fields the world had ever seen. The Government, at all events, showed its faith in the roseate visions of the future of these Northern gold-fields by hastening the construction of a telegraph line from Derby to the auriferous areas, and by adding to the conveniences for shipping at the settlements in King Sound and Cambridge Gulf. The line of telegraphic communication was subsequently continued to Wyndham. Indications of gold began to be found all over the colony; at the head-waters of the De Grey River; in the Darling Ranges, close to the Swan and Canning Rivers; at the Yulgan Hills east of Newcastle; at Paterwangy, near Champion Bay; at the Kendenup Station, near Albany; and at various other localities; but for some time Mount Barrett, Hall's Creek, and the fields reached from Derby and Wyndham in the two Kimberleys, were supposed to be the only payable finds in the colony.

In the month of July, 1887, it was resolved, by an almost unanimous vote of the Legislature, in affirmation of the principle of self-government, that His Excellency be requested to take the necessary steps to eventually secure it. Among the notable events of this year was a terrible hurricane that swept over a great portion of the colony, causing great damage to property; and (in the month of December) the discovery of gold at Yilgarn. The find was an accidental one, at a place called Mugakine; and was confirmed by a subsequent discovery at Golden Valley, in the same district. Southern Cross, one of the centres of the Yilgarn gold-field, was so named by the party who first prospected it, because they had been guided to the spot by night, while following the constellation so designated.

Affairs political were in the meantime trending towards the realization of the efforts made towards Responsible Government. In December, 1888, the Legislative Council was dissolved, and a general election took place in the month of January following, in order that the constituencies might have an opportunity of expressing their views upon the question of the new Constitution. When the Council re-assembled, the resolution favouring Responsible Government for the colony was again carried, this time without a single dissentient voice. The Legislature met in April, and a Constitution Bill, drafted by the Government, was at once brought forward, and, after amendment, was passed and forwarded to the Secretary of State for the Colonies, the Governor (Sir Frederick Napier Broome), Sir Thomas Cockburn-Campbell, and Mr. S. H. Parker being appointed by the Legislature to proceed to England to act as delegates on behalf of the colony when the Act came before the Imperial Parliament. These gentlemen experienced much difficulty in carrying the measure through its various stages, strong opposition having arisen in the centre of the Empire against the granting of Western Australia's desire for self-government. This opposition was mainly, if not altogether, the outcome of a misunderstanding relative to the control of the Crown lands of the colony. It was held by a considerable party in the mother country that such lands were the "heritage of the British people," and should be inalienably held by the central authorities for settlement by the surplus population of Great Britain and Ireland. So demonstrative was the opposition that it appeared for a time as if Responsible Government for West Australia was fated to be seriously jeopardised, and indefinitely postponed.

At the beginning of the year 1888, Perth was connected by telegraph with the far northern settlement of Derby, on King Sound; and in May of the year following, the cable connecting Banjoewangie, in Java, with Broome, in Western Australia (a little to the north of Gantheaume Bay), was laid. Another important gold discovery also distinguished the year 1889. This was the finding of the Pilbarra field, on the De Grey and Oakover Rivers, in the Northern District. The new field was proclaimed in the month of July, 1889, and by the end of the year it had exported 11,170 oz. of gold, valued at £42,446. During the year Yilgarn had produced 1,859 oz., valued at £7,062, making with 2,464 oz. sent from Kimberley, a total export of 15,493 oz., valued at £58,493. From this date the auriferous character of Western Australia was established, the gold increased from year to year, new gold-fields were successively discovered and proclaimed, and a great accretion to the population of the colony was gained from the eastern parts of the Australian Continent. Among the most famous of the continuous finds were the gold-fields known by the names of Ashburton, the Gascoyne, the Murchison, the Dundas, the East Murchison, the East Coolgardie, Coolgardie, the Yalgoo, the West Pilbarra, the Mount Margaret, the North-east Coolgardie, the Broad Arrow, the Peak Hill, the Kanowna, and the Kalgoorlie. One of the most sensational finds

was made in the Coolgardie field by Messrs. Bayley and Ford in 1892; it was christened "Bayley's Reward." One day Bayley, whose party was at the last extremity, appeared in the township of Southern Cross, loaded with several hundred ounces of gold and many rich specimens encrusted with the precious metal, but sadly in want of provisions. This incident led to a wholesale exodus to what is now known as Coolgardie, one of the richest fields in the colony.

Sir Frederick Napier Broome's Administration terminated on the 21st December, 1889, after a rule of six years and nearly seven months. During the Governor's absence on leave to England, from the 11th November, 1884, to the 16th June, 1885, the colony was administered by Chief Justice A. C. Onslow; and during a second absence, from the 1st January to the 21st February, 1888, by the Hon. Sir Malcolm Fraser, who again administered from the 21st December, 1889, to the 20th October, 1890, after Sir Frederick Napier Broome's departure from the colony, pending the appointment, for a third term of Governorship, of Sir William Cleaver Francis Robinson.

In the meanwhile, the battle on behalf of Responsible Government was being waged at Westminster. The Bill providing for a new Constitution was eventually referred to a Select Committee, with the Baron De Worms as chairman, for the purpose of taking evidence. So impressed was this body, after hearing what the representatives of the colony had to urge, and after a calm consideration of the advantages likely to result from giving the Western Australians a free hand in their great national estate—so thoroughly was the Committee convinced of the errors underlying the British popular opposition to the measure, that the Bill was returned to the Imperial Parliament unencumbered by nearly the whole of the clauses to which the Legislature of the colony had previously objected, and a recommendation was made that the full and complete control of the Crown lands should be vested in the local Parliament which it was proposed to create. Thus was Western Australia—"one and undivided"—obtained for its colonisers; a result due to the intelligence and broad-mindedness of a majority of the members of the Select Committee, combined with the untiring exertions of the colonial delegates, assisted by the knowledge and influence of Sir William Robinson, who, as it opportunely happened, was in England during the battle for Responsible Government. Considerable help was also given to the West Australian delegates by the Agents-General for the other Australasian Colonies at a time when, in consequence of delays due to the Imperial Cabinet, the Bill appeared to be in jeopardy. At this juncture the Agents-General, in a body, waited upon the leader of the Government in the House of Commons, and made representations which swept away all final obstacles, and the Bill, enabling Her Majesty "to grant a Constitution to Western Australia," passed its third reading in the Lower British Chamber on the 4th July, 1890, and meeting with no opposition from the Lords, received the Royal Assent on the 15th August following. The present

Constitution of Western Australia differs but little from those of the other Australasian colonies. The Executive power is vested in the Governor, who is appointed by the Crown, and who acts under the advice of a Cabinet composed of five Responsible Ministers. The Executive Council consists of the Governor (who acts as President), the Colonial Secretary, the Attorney-General, the Colonial Treasurer, the Commissioner of Crown Lands, and the Commissioner of Railways and Director of Public Works. Responsible Government was proclaimed in the colony on the 21st October, 1890, on which date the old Legislature was abolished. The new Parliament met on the 30th December following, with Sir John Forrest as Premier.

When the Forrest Ministry assumed office the flow of immigration from the eastern states, and, indeed, from distant lands, still continued, while the agricultural and pastoral industries were rapidly expanding to keep pace with the increased demand for their products. Other branches of primary production, such as timber-getting, also received an impetus from the general wave of prosperity. The output of gold had reached considerable dimensions in 1894, and this was coupled with a correspondingly large accretion to the population. Lack of sufficient water was the great drawback to the development of the gold-fields, and the problem of ensuring a supply occupied the serious attention of the Government. In 1894, the timber industry greatly expanded, and a trade sprang up in jarrah and karri, which now forms one of the main sources of revenue. The Kimberley district suffered, in February, from the most disastrous floods experienced in the history of the state, several lives being lost, and much valuable property destroyed. In June, the first Parliament under responsible government was dissolved, and, at the general elections which followed, the Forrest Ministry was again returned to power. During the ensuing session a dispute arose between the two Houses of Parliament in consequence of the Legislative Council amending a Loan Bill. After a lengthy discussion, the Council withdrew the amendments, but in so doing stated that "it desired it to be distinctly understood that it in no way surrendered any powers, rights, or privileges to which it was legitimately entitled." Fresh discoveries of gold and development of existing fields continued in 1895, and these were accompanied by a further influx of immigration. Although the pastoral and agricultural industries were steadily expanding, the production of food-stuffs was still far below requirements, and a heavy deficiency in wheat and flour had to be made up by importation. In the timber trade, however, Western Australia, though the youngest of the states, found herself at the head of the list as regards exports, the demand for jarrah and karri growing more insistent as the excellent properties of these woods became more widely known. The increase in the gold output and the swelling of all the ordinary sources of revenue enabled the Treasurer to table a budget showing an excess of revenue over expenditure to the amount of £189,000. Sir William Robinson, who remained in the state till the

16th August, 1895, was succeeded as Governor by Sir Gerard Smith, who arrived in December. The administration in the interval was carried on by the Chief Justice, Sir A. C. Onslow. A remarkably large number of fires occurred during this year, those at Coolgardie, Fremantle, and Southern Cross involving a loss of property estimated at £150,000.

A vigorous public works policy was the most noticeable feature of the administration of the state during 1896. Railway construction was rapidly proceeded with, in order to bring the gold-fields into communication with the metropolis. The line to Coolgardie was opened on the 21st March, and the extension to Kalgoorlie was ready for traffic in July. The erection of public buildings in Perth and other centres of population provided employment for a large body of skilled and unskilled workmen. During the year, the Government acquired the private land grant railway between Albany and Beverley, the purchase money paid being £1,100,000, and the Perth Water Works was also taken over from the Perth Water Supply Company, at a cost of £220,000. A strong desire to take up land was in evidence at this period, and a rapid extension of settlement was the outcome. In Parliament the following motions were debated, and carried:—"That the Government take steps to attract farmers and other labourers to the colony," and "That the Government communicate with Dr. Barnardo with a view to his sending young people to the colony." The loan floated in the course of the year was over-subscribed, and matters generally were in such a prosperous condition that the Treasurer was again able to declare a surplus. The chief legislative work was the passing of an Enabling Act to ensure representation at the Federal Convention, though, in order to validate the subsequent election of delegates it was found necessary to hold a special session early in 1897. A somewhat remarkable step was taken during the year by the Governor, who dismissed Mr. Venn (Commissioner of Public Works) from the Cabinet, on account of his having published in the press a minute in which he charged the Premier with a want of loyalty to him in the administration of the Works and Railways Departments. The affair naturally created a sensation, and at a mass meeting held shortly afterwards in Perth the Government were severely criticised and a National Reform League instituted.

In 1897 there was an increased demand for land suitable for settlement, and this was accentuated by the discovery of fresh tracts of excellent pastoral country in the northern districts. The output of gold for the year was far in advance of that recorded for previous years, and West Australia, for the first time, displaced New South Wales in the list of gold-producing countries, coming next to Victoria and Queensland in volume of production. The discovery of tellurides containing gold and silver, which was made at Kalgoorlie and elsewhere, attracted much attention, as it meant a large increase in the output of the precious metal. Signs of continued progress were everywhere apparent. The

erection of buildings in Perth and other towns proceeded rapidly; the harvest returns were satisfactory, and, in spite of increased expenditure to meet expanding wants, there was a surplus of revenue. At the general elections, in April and May, Sir John Forrest was again returned by a substantial majority, his term of premiership eclipsing that of any other Premier of Australia. The new Parliament held a special session to pass a Federal Enabling Bill, the Premier being appointed to convey the resolutions and amendments to the Convention. Heavy rains fell throughout the colony in the early part of the year, and destructive storms and floods occurred on the Murchison in February, while a whirlwind at Bunbury also inflicted serious damage to property. As in the previous year, considerable loss was occasioned by fires in Perth and Fremantle, as well as in the townships on the gold-fields.

At the beginning of the Parliamentary session of 1898 a somewhat peculiar difficulty arose. Mr. Leake, the leader of the Opposition, had proposed an amendment to the Address-in-Reply, which the Government refused to accept as a no-confidence motion. While the debate was in progress the Council also passed a resolution which was antagonistic to the Government. The Premier, however, ignored this, and stated that the Government did not hold office at the pleasure of the Council. A few days later it was announced that the Cabinet had agreed to accept the Opposition amendment as a motion of non-confidence, but on being put to the vote it was defeated by 22 to 6. Later on in the session a Government proposal in connection with the Education Bill was rejected, and the leader of the Opposition thereupon attacked the Government for not resigning when a vital principle in a measure was defeated; but the Premier declined to look at the matter in this light, and the motion for adjournment of the House was defeated on the voices. During the year there was a remarkable increase in the output of gold, and with a production of over a million ounces West Australia in 1898 occupied the premier position amongst the Australasian colonies, having risen from the fourth to the first place in the course of two years. The year also saw a considerable expansion of the railway system through the opening of the Kalgoorlie to Menzies extension, and the taking over of the lines from Mullewa to Cue and Kalgoorlie to Kanowna. But the vigorous public works policy of the past few years received a check when the Treasurer announced a deficit of over half a million. Against this there were, of course, the surpluses of previous years, but, after allowing for these, there was still a debit of nearly £200,000. Cossack, Roeburne, and the surrounding districts were visited by a destructive hurricane in April, several vessels being driven ashore, and damage done to the extent of £15,000. During the year there were further extensive fires in Perth, Coolgardie, and Menzies, accompanied by the loss of much valuable property.

In 1899, the attitude of the Government with respect to Federation met with the disapproval of a section of the community, the

dissatisfaction being most pronounced in the gold-fields area. When, in spite of the efforts of the Opposition, the Bill was rejected, a numerously signed petition was prepared in favour of separating the gold-fields districts from the remainder of West Australia and federating with the eastern colonies. Indeed the gold-fields proved somewhat of a thorn in the side of the Government during 1899. Not only was their representation increased to the number of thirty, against the wishes of the Premier, but serious trouble arose at Kalgoorlie over the old alluvial claim question. Armed police were sent to the field from Perth and arrested a number of men for alleged larceny of ore. A conflict was narrowly averted between the police and alluvialists, and the situation was further strained by subsequent arrests. This difference between the Government and the miners did not tend to make the latter willing to accept the decision of the Ministry regarding Federation, and the agitation grew in intensity, and even spread to the coastal districts. Meetings were held in various centres, and the action of the Government was strongly condemned. The year showed many evidences of returning prosperity, the output of gold being recorded at 1,643,876 oz., or over half a million ounces more than that for 1898, and far in advance of the return from any other state. An event worthy of record here is the liquidation of the Coolgardie Prospecting Syndicate, which took place on the 2nd October, 1899. During its six years of existence the syndicate had opened up such properties as the Great Boulder, Associated Mines, Ivanhoe, and others, and was probably one of the most successful mining "combines" in the world. The year's record of fires included two at Kalgoorlie and one at Geraldton, the total damage being estimated at £20,000, while bush fires devastated the Arthur district. Amongst the other more notable events of the year were the opening of the Coolgardie Exhibition on the 21st March, and the despatch of West Australia's first contingent to South Africa on the 2nd November.

The Separation movement initiated on the gold-fields area as a counter check to the abandonment of the Federation Bill by the Parliament gathered way in the early months of 1900, and the electors in that division were so evidently in earnest in the matter that Sir John Forrest went east to ask for some amendment in the constitution in the direction of securing his state against the loss of Customs revenue, which hitherto had proved the great obstacle, in spite of the concessions made in the Bill approved by the Convention. Shortly afterwards, a special session of Parliament was called together, and passed an Enabling Bill providing for a referendum. The strength of the Federal sentiment was made manifest in the result of the voting, the majority in favour of union being more than two to one. At the referendum, women voted for the first time in the colony, the franchise having been conferred upon them by an Act passed in the previous year. In his budget speech, the Treasurer was able to announce a surplus, and affairs generally were in a prosperous condition, in spite of the fact that heavy

losses were caused in several parts of the colony by bush fires, floods, and storms. On the 22nd March, 1900, Sir Gerard Smith left for England, after a period of office lasting about four years and three months, and on the following day Chief Justice Sir A. C. Onslow took up the duties of administration, which he discharged (except during a short absence, during which Mr. Justice Stone officiated,) until the arrival of the new Governor, Sir Arthur Lawley.

The retirement of Sir John Forrest from the arena of local politics on his acceptance of office in the first Federal Cabinet, in conjunction with other causes, brought about a rather complicated state of affairs. On his resignation, in February, after a second period as Premier, he handed over the duties of his office to Mr. Throssell, whose Cabinet, which was sworn in on the 14th February, consisted, for the most part, of members of the Forrest Ministry. There had, however, been an increase made in the number of electorates by the previous Parliament, and this alteration came into effect at the general election of 1901, and consequently more than half the members of the new House had never sat in Parliament before. Having lost two of his ministers at the poll, and suffered other losses in the strength of his party, Mr. Throssell anticipated defeat by resigning. Mr. Illingworth, leader of the Opposition, was sent for, and, after some trouble, succeeded in forming a Ministry. In this Cabinet, however, Mr. Leake was recognised as having the precedence, and he became Premier, holding office until the 21st November, when a combination of circumstances gave Mr. Piesse, the leader of the party on the left of the Speaker, a narrow majority in the House. Mr. Piesse was unsuccessful in his efforts to form a Ministry, and thereupon advised that Mr. Morgans should be sent for. Mr. Morgans had better fortune, and held his position till the 23rd December, when Mr. Leake again succeeded in displacing him, and held office till his death on the 24th June, 1902. The new Governor, Sir Arthur Lawley, arrived in the state on the 30th April, and was sworn in on the 1st May. Further extensions of the railway system were made during the year by the opening of the Menzies-Leonora line, and the prosperity of the gold-fields was exemplified by a record yield, which eclipsed all previous returns. Trouble in connection with the railway employees at length culminated in a strike which almost paralysed goods and passenger traffic for some time. Happily the strike was not of long duration, as the gold-fields, compelled to draw their supplies from the coast, were threatened with a famine. An exploration party left Perth during April to prosecute further exploration in the Kimberley district, and returned to the metropolis at the close of the year. As a result of their investigations, a large tract of fine pastoral country was located, but the expedition was unsuccessful in finding any traces of mineral wealth.

The early months of 1902 were full of promise of great prosperity. Receipts in almost every instance exceeded the Treasurer's estimate, and the debit balance was completely eliminated. The gold yield for the first quarter was returned at 498,356 ounces, an increase of 96,418

ounces on the corresponding period for 1901. The Parliament closed its labours in February, after the longest session held since responsible government. In spite of the drawbacks occasioned by repeated change of parties, a fair amount of useful legislation was accomplished, including such measures as the Arbitration and Conciliation Act and a Workmen's Compensation Act. In April, the practicability of the Coolgardie Water Supply Scheme was demonstrated by the opening of the supply station at Northam. The scheme consists in the establishment of a reservoir in the coastal district and the conveyance of water along what is probably the most lengthy pipe line in the world. Pumping stations were erected at various spots along the route, and the whole work constitutes one of the largest single contracts undertaken in any of the Australian states. In May, the elections for the Legislative Council were held, the membership of this Chamber having been increased from twenty-four to thirty.

Mr. George Leake, who died on the 24th June, 1902, after a short illness, was succeeded in the premiership by Mr. W. H. James on the 1st July, the members of the new ministry, with one exception, being the same as those of the Leake Government.

Sir Arthur Lawley, who had become extremely popular during his short term of administration, left the state on the 14th August to take up duty as Lieutenant-Governor of the Transvaal. Pending the arrival of his successor, the Chief Justice, Sir E. Stone, assumed office as Lieutenant-Governor.

TASMANIA.

TASMANIA was discovered by Abel Janszen Tasman on November 24th, 1642, and by him was named Van Diemen's Land, after the Governor of the Dutch Possessions in the East Indies, who had fitted out the expedition which Tasman commanded. The ceremony of hoisting a flag and taking possession of the country in the name of the Government of the Netherlands was actually performed, but the description of the wildness of the country, and of the fabulous giants by which Tasman's sailors believed it to be inhabited, deterred the Dutch from occupying the island, and by the international principle of "non-user" it passed from their hands. Some hundred and thirty years after Tasman's voyage the island was again visited—this time by a French expedition under Captain Du Fresne. In 1773, Captain Furneaux, of the "Adventure," one of the great Cook's squadron, anchored in Storm Bay; and later, in 1777, Captain Cook himself visited the same locality. The famous Captain Bligh also touched at the island in 1788—the same year that witnessed the foundation of the settlement at Port Jackson. Again, in 1792, a French expedition under D'Entrecasteaux entered Storm Bay, and surveyed portions of the coast. During the whole of this period it was believed that Van Diemen's Land was only a southward projection of the great Australian Continent, and, indeed, it figured on the maps as such. Its insularity was proved by Lieutenant Flinders, who completed its circumnavigation in the sloop "Norfolk" in 1798. He was accompanied on the expedition by Surgeon Bass, who had previously discovered the strait bearing his name. In 1802 the French expedition under Commodore Baudin visited the island, and it was partly the fear of French occupation that led to the foundation of a British settlement in the new land.

In the month of September, 1803, Lieutenant Bowen was despatched by Governor King in the "Lady Nelson" to establish a settlement at Risdon Cove, or Restdown, as it was sometimes called, which is situated on the banks of the Derwent River, some 4 miles above the site of Hobart, but on the opposite side of the stream. Bowen had been despatched previously—on the 13th June, 1802—in H.M.S. "Glatton" to the island, in order to take possession of the place, and establish His Britannic Majesty's rights thereto. The penal establishment which the Imperial Government had established on the shores of Port Jackson was full to overflowing. About a thousand had been drafted away to Norfolk

Island, but the parent settlement was still somewhat crowded. The Governor-General of New South Wales, therefore, cast his eyes towards Van Diemen's Land as an outlet for the relief of the parent establishment. Besides, the French had to be forestalled; for though the island was included in Phillip's commission, and that of his successors, nevertheless, the very proof of its insularity created it a country separate from New South Wales, liable to lapse from British sovereignty unless actually occupied under authority of the British Crown. Bowen's colonising party was a small one, but it formed the advance guard of a great convict immigration. When the muster was taken on the 27th September, 1803, the total population was only forty-nine. Of these, ten were women and three were children. The convicts numbered twenty-four and the soldiers twelve, but a small party of free settlers, with their wives and children, subsequently arrived. Shortly after the first landing, the settlement was removed from Risdon to Sullivan Cove, and spread slowly along the banks of the Derwent River, the latter name being used in the enumeration of the people on the muster sheets. In the early part of 1804 the little colony received a considerable accession by the transference of Collins' expedition from Port Phillip to the Derwent River.

Collins' commission was of a roving character. He was instructed to proceed to Port Phillip, or to any part of the southern coast of New South Wales, or to the islands adjacent, and there establish his little colony. Collins sailed from England on the 24th April, 1803, in the "Calcutta," having on board 299 male convicts, 16 married women, a few settlers, and 50 men and petty officers of the Royal Marines. This vessel was accompanied by the "Ocean" as a store-ship. Collins had landed at Port Phillip, but his reports of the country were so unfavourable that Lord Hobart, the Secretary of State for the Colonies, at once sent him instructions to break up the settlement and transfer the people under his charge to the Derwent River in Van Diemen's Land. Collins obeyed the orders of his chief with cheerful alacrity, and on the 27th January, 1804, left the disparaged harbour for the new field of his labours. The "Ocean," with the first instalment of the party, which numbered in all 402, anchored in the Derwent on the 30th of the same month; the second detachment arriving by the "Lady Nelson" on the 16th February. Collins landed at the place whereon the city of Hobart now stands, and there and then selected it as the site of his future capital.

Governor-General King, consumed with anxiety to forestall the French in their designs upon Australasian territory, had given instructions to the officer commanding the "Lady Nelson" to sail round to Port Dalrymple, in the north of the island, after discharging his mission with Collins, and to report upon the Tamar River, and the surrounding country, as to their eligibility for the purposes of a military station. The officer did as he was directed, and reported the country as well adapted for settlement. In consequence of this favourable account, an

expedition was made at the close of the year 1804 to Port Dalrymple, the first landing being effected at Outer Cove, now called Georgetown; but the station was shortly afterwards removed to the opposite side of the river, to the indentation known as the Western Arm, where it received the name of York Town. The latter site also did not prove suitable, and this settlement was soon abandoned for the North Esk, where, after some time, it changed its general designation of Port Dalrymple for the specific one of Launceston, a name derived from Governor King's birthplace in Cornwall. The new settlement was placed under the control of Lieutenant-Governor Paterson, and he landed in Van Diemen's Land in the month of October, 1804, with a small party of prisoners and soldiers. At the time when this expedition was despatched to Port Dalrymple, Governor King issued a "general order," in which he proclaimed the division of the island into two independent Governments, designated respectively the counties of Buckingham and Cornwall, the dividing line being the 42nd parallel of south latitude. Each of these Governments was subordinate to King in his capacity of Governor-in-Chief and Captain-General of New South Wales and its dependencies. The two counties still figure on the map of Tasmania, but greatly shorn of their original magnitude, as they have been subdivided into eighteen others. Between Launceston and Hobart there was for some time no communication, and even as late as 1816 the mail took seven days to cross from settlement to settlement.

In the year 1805 Van Diemen's Land received an accession of population from Norfolk Island, the New South Wales Government having determined to evacuate the latter place, and transfer the bulk of the people to the new colony on the Derwent River. New Norfolk, somewhat further up the stream than the old Risdon settlement, still recalls in its name this immigration of the Norfolk Island settlers to Van Diemen's Land. The new-comers received liberal grants of land, but contributed very little to the industrial development of the country, which, for many years, remained dependent on the mother colony of New South Wales for its food supplies. When the failure of the crops occurred at the parent settlement, between the years 1807 and 1810, matters were brought to a painful crisis. The provisions which had been stored in a Government depôt, under the immediate control of the Lieutenant-Governor, were all but consumed, so the convicts were given temporary liberty to enable them to procure food in the shape of the wild denizens of the bush, and it was only by the timely arrival of a cargo of wheat from India that the little colony was saved from a condition of total collapse.

The enfranchisement of the convicts was, however, attended by woful results. Very early in the experience of the settlement serious difficulties had arisen with the aborigines, as it was the custom to term them, though scientists consider that the natives of Van Diemen's Land were not an aboriginal race. On one occasion a party of blacks, about 500 strong, including women and children, were engaged in hunting near the

Risdon depôt, when they were set upon by some of the white settlers, who slaughtered a great number of them, one estimate enumerating the killed at fifty. This horrible outrage of course inspired the natives with sentiments of hatred and revenge, and impelled them to acts of reprisal. These were further stimulated by the abominable treatment meted out to the blacks by the liberated convicts of the famine period during their kangaroo hunts. Collins did his utmost to put down "the murders and abominable cruelties practised upon the natives by the white settlers"; but the means at his command were inadequate for the purpose. Van Diemen's Land, unlike the colonies established on the Australian Continent, managed from the very first years of British occupation to create a native difficulty, which was ultimately to produce much trouble and annoyance, and to occasion a huge expenditure of Imperial funds in its effectual solution.

Lieutenant-Governor Collins died in Hobart Town on the 24th March, 1810, just after Governor Macquarie had taken up his official duties in the mother colony. The sub-government of the Island was administered, until the arrival of Lieutenant-Governor Davey, by Lieutenant Lord and Captain Murray, and afterwards by Lieutenant-Colonel Gilles.

A certain measure of prosperity had by this time been attained by the development of the first rude efforts at agriculture, and by the energetic establishment of the whale fisheries, Tasmania speedily becoming the centre of the latter industry in Australasian seas. Settlement was, however, greatly retarded by the lawless establishment of an organised system of plunder and rapine carried on by gangs of armed men, or bushrangers, as they had begun to be termed; indeed, what of wild romance and gruesome picturesqueness there may be clinging to the early days of "Old Vandemonia" is due to the ruthless extinction of the native race, and the dark deeds of the escaped convicts and expired-sentence men, who carried on a war of brigandage against the property and the persons of the terrorised farmers and stock-owners. They slaughtered sheep and cattle; they burnt down hay and corn stacks; they looted granaries and robbed houses, and then they took to the well-nigh impenetrable jungle of the bush and the fastnesses of the mountains, carrying nameless atrocities into the haunts of the unarmed aborigines. The important part played by these desperadoes in the early history of the Island is still preserved in the ominous names given to some of the geographical features of the interior: Brady's Sugar-loaf and Brady's Look-out are appellations reminiscent of a notorious bandit.

The rule of Governor Davey was notoriously feeble, and the moral condition of the colony in his time was anything but healthy; nevertheless, he did his best for the natives, condemning the atrocities perpetrated upon them, but with little effect. The free people at this time consisted of inland settlers, liberated convicts, escaped prisoners,

bushrangers, sealers and whalers, and runaway seamen. For most of these the law had no terrors, and they gave unbridled license to the exercise of their evil dispositions. It is no wonder, then, that the treatment which these degraded wretches meted out to the aborigines should have been followed by terrible reprisals.

Davey surrendered the administration of the island on the 9th April, 1817, and was succeeded by Colonel Sorell, a man of an entirely different character. The new Lieutenant-Governor has been praised for his energy, his firmness, and his sagacity, and was probably as well fitted for his position as any man upon whom the choice of the Secretary of State for the Colonies could have fallen at the time. His first task was the suppression of bushranging—a work that he put through with a vigorous hand—and he succeeded in well-nigh stamping it out. He also gave grants of land, and lent Government seed and stock, to suitable settlers, and thus encouraged immigration to the little Colony. During Sorell's term of office 300 lambs, from Captain John Macarthur's Camden flock of merinos, were imported into the Island from New South Wales. A few years subsequently the exportation of wool from Van Diemen's Land began, and from that time the proportions of this industry steadily grew.

In 1821, just prior to his return to England, Governor Macquarie visited Van Diemen's Land, and found there a population of about 7,400. The inhabitants of Hobart Town and its immediate neighbourhood were returned as numbering 2,700. There were 15,000 acres of land under cultivation, and the live stock comprised 5,000 head of cattle and 170,000 sheep. The interests of religion and education were being provided for, a newspaper was published, and there existed between Hobart Town and Launceston a fortnightly mail, which occupied a week in transit. A local Court, with a limited jurisdiction, had been established since 1816, in which ordinary citizens shared with professional lawyers the right to plead.

Launceston also had experienced a measure of development, though, of course, much less rapid than its southern rival, Hobart Town. From the early muster-sheets some idea of the progress made at the northern settlement may be gathered. Lieutenant-Governor Paterson assumed control of the station at Port Dalrymple, and exercised authority over the county of Cornwall (half of the island north of the 42nd parallel of south latitude) in the month of October, 1804. He took with him sixty-four non-commissioned officers and privates of the New South Wales Corps, seventy-four convicts, and eight other persons, civil and military officers—146 in all. In the month of August, 1805, the number of persons resident at Port Dalrymple had grown to 301, of whom 155 were convicts. The population fell off slightly during the next ten years, maintaining an average of about 250 only; but in 1815 Launceston, as it was beginning to be called, was recorded as possessing 495 inhabitants; in 1817 these had increased to 610, and in 1819 to 2,115.

Colonel Sorell distinguished his term of office by engaging in various futile efforts for the amelioration of the condition of the aborigines ; but the resources at his command were far from sufficient to enable him to cope effectively with the difficulty, so that by the time he left office little, if any, progress had been made in this direction.

Lieutenant-Colonel Arthur was appointed to the administration of the colony in succession to Sorell in 1824, and entered upon his duties on the 15th May. From the outset his rule appears to have been extremely unpopular, though, under the conditions of settlement then existing in Van Diemen's Land, it would hardly have been possible for a Governor to have done his duty and achieved popularity. About eighteen months after his arrival in Van Diemen's Land, the colony was proclaimed an independent province, and the Imperial Parliament presented the inhabitants with a Constitution of the colonial type of the period, which provided for an Executive and a Legislative Council, with certain circumscribed functions, mainly advisory. The new system was felt by the Governor as a clog upon his government, and he made no pretensions that it was acceptable to him, nor did he in any way modify his methods of ruling. Governor Arthur had no idea of conciliation. He dismissed a popular Attorney-General who opposed him, and adopted extreme measures towards the Press, the liberty of which he strained every nerve to destroy. These actions intensified his already sufficient unpopularity. To the best of his marked ability, however, he strove to promote the interests of religion and education in the colony, and while he directed the Government many churches were built, and many schools were established ; the public finances were adjusted to expenditure in a satisfactory manner ; and, after providing for the disbursement of some £50,000 per annum, he was able to carry forward a surplus. Governor Arthur also turned his attention to the Department of Justice, and for the better administration of the law he divided the island into police districts, with a Stipendiary Magistrate for each district ; yet his severity in the enforcement of the laws undoubtedly was the means of manufacturing criminals of the deepest dye. Many convicts who had been transported from England on trivial charges had their better natures crushed and were completely brutalised by the harsh treatment meted out to them for the smallest misdemeanours. A year after Governor Arthur's appointment to the administration of the island, no fewer than a hundred armed convicts were at large throughout the country districts. The reign of terror, which had been such a distinguishingly infamous characteristic of the days of Governor Davey, was revived and re-established. When night fell, every house that stood by itself in the bush or in the cultivated areas was strongly barred and barricaded, and the safety of the sleeping family was entrusted to one or two of the household, who watched throughout the hours of darkness with firelocks in readiness. One desperado named Brady, whose Sugarloaf and Look-out have already been mentioned, and whose lawless deeds are still a tradition, at the head of a gang of armed

convicts, was at large throughout the country, ravaging and pillaging in all directions. On one occasion this bushranging captain, with a mounted band of outlaws, swept down on the North Coast and captured the town of Sorell; seizing the gaol, they locked the soldiers guarding the place in one of the cells, and liberated the whole of the prisoners. Matters now began to grow desperate. Authority in the island was divided between Colonel Arthur and Captain Brady and other bush-ranging magnates. The struggle was one of law against lawlessness, and constituted power did not always get the better of the conflict. Governor Arthur determined to make a strenuous effort to assert the supremacy of the law. He placed himself at the head of a strong force of military and settlers and hunted down the gangs of outlaws. No fewer than 103 persons suffered capital punishment during the years 1825 and 1826, and organised highway robbery once more ceased to be a reproach to the colony.

The distinguishing feature of Arthur's governorship was, however, the military campaign which he conducted against the aborigines. Governors Collins, Davey, and Sorell had done their utmost to protect the natives against the outrages and ill-treatment of the free whites; but all their efforts to put an end to the frightful state of things that prevailed in this relation had proved in vain. On November 1st, 1828, Governor Arthur proclaimed martial law, and offered a reward of £5 for every adult and £2 for every child captured and brought to head-quarters without suffering any injury. Search parties were at once got together and set forth on the quest. Many captures of aborigines were made by these parties; but, unfortunately, not without fatal conflicts. At this juncture came the gigantic fiasco of the whole enterprise. The scheme was Governor Arthur's own, and cost the Imperial Government the sum of £30,000. This master-stroke of tactics was an attempt to imprison the natives in an ever-narrowing circle. To this end Governor Arthur ordered a military cordon to be drawn across the island of Tasmania from east to west. Quite a large force was pressed into the work. There were 800 soldiers, the police of the colony, upwards of 700 convict servants, and a number of civilians. It was confidently expected that this force was sufficient to drive the aborigines into Tasman's Peninsula simply by advancing against them. There must have been somewhere a hitch in the proceedings, for after the expenditure of the large sum mentioned, the campaign resulted in the capture of a man and a boy, the remainder of the natives having silently slipped through the lines.

During Arthur's term of office the Van Diemen's Land Company obtained its charter of incorporation from the Imperial Parliament, and received grants of land in various parts of the colony amounting to upwards of 400,000 acres, of which 150,000 were situated at Woolnorth, the extreme north-west corner of the Island; 10,000 at Robbin's and Trefoil Islands; 10,000 at Middlesex Plains; 20,000 at Circular Head (now well known for its potato crops); 10,000 at

Hampshire Hills; 150,000 at Surrey Hills; and 20,000 at Emu Bay, besides areas in other different districts. For these concessions the Company was to pay an annual quit-rent of £468 16s., with the option of redemption at twenty years' purchase. During Arthur's rule, banks were established in Hobart Town and Launceston. In 1828 the first land-sales in the island took place, but so low were the prices obtained, that 70,000 acres enriched the Treasury by only £20,000. In the month of January, 1831, the system of issuing free grants of land was abolished. In the year 1835 the district of Port Phillip (now the Colony of Victoria) was settled from Van Diemen's Land—practically from Launceston—a movement that reacted most beneficially upon the prosperity of the northern part of the island. At the same time the development of the internal commerce and industry of the little colony was greatly advanced by the construction, through the medium of convict labour, of roads, bridges, wharves, and other public works. Instead of a fortnightly, there was, in 1835, a bi-weekly mail running between Hobart Town and Launceston, the period of transit having been reduced from seven days to nineteen hours. The penal settlement at Macquarie Harbour had also been given up, and the convicts removed to Tasman's Peninsula. There had also been considerable amelioration in the lot of the victims of the Transportation System, through the introduction of more humane methods.

The Government of Van Diemen's Land was administered by Colonel Arthur for over thirteen years; he assumed office on the 14th May, 1823, and retired on the 31st October, 1836. From the date of his accession to power in the Island until the 3rd December, 1825, he was merely the subordinate officer of the Governor of New South Wales. On the date last mentioned, the Governor-in-Chief, Lieutenant-General Ralph Darling, visited Van Diemen's Land and formally proclaimed its independence. On the 6th of the month Arthur resumed the administration of the colony. An Executive and a Legislative Council were called into existence, the latter being on the same model as that introduced into the other colonies at the earliest stages of their progress. One of the Members of the first Legislature in Van Diemen's Land (1825) was Edward Curr, who formed the settlement at Circular Head for the Agricultural Company to which the Government of George IV had granted the great territorial concessions already alluded to.

From the date of Colonel Arthur's relinquishment of authority, October 30th, 1836, till January 5th, 1837, the colony was administered by Lieutenant-Colonel Snodgrass as Acting Lieutenant-Governor. On the date last mentioned there arrived in the colony the new Lieutenant-Governor, Captain Sir John Franklin, R.N., K.H. Sir John Franklin remained in office till the 21st August, 1843, a period of six years and seven months.

Franklin had, happily, one less of the troubles that afflicted his predecessors. He was worried by no native difficulty. After Governor Arthur's failure to drive the aborigines into Tasman's Peninsula, a

humble bricklayer in Hobart Town, named George Augustus Robinson, by unaided effort, achieved all that force and authority had been powerless to perform. Animated by a splendid enthusiasm for the ill-used natives, he made a spontaneous offer to the Government to undertake the task of supervising the efforts made for their welfare, if the authorities would guarantee him a bare support. In response to this generous proposition he was specially appointed Protector of the black natives of Van Diemen's Land at a salary of £100 per annum. He thereupon set out on a series of journeys throughout the Island. Unarmed and unattended, he travelled among his aboriginal charges throughout the length and breadth of the colony, exhibiting a courage almost sublime in circumstances of extreme danger, and winning the love, the confidence, and the esteem of the most belligerent of the people whom he was authorised by the Government to safeguard. After travelling on foot some 4,000 miles over the wildest and roughest parts of Van Diemen's Land, and without shedding a single drop of native or European blood, he brought the timid natives, who had once held the colony in a state of permanent alarm, into a haven of peace and safety. Ultimately he managed to place on Flinders Island upwards of 200 aborigines. The native settlement at Flinders Island was formed in 1835. In 1847, only twelve years afterwards, the number had dwindled down to 44 persons. These survivors were eventually deported to Oyster Cove, on the main Island; but on the 3rd March, 1869, Guillaume Lanné, the last male of his race, died at Hobart Town, aged 34 years.

One of Franklin's first official acts was the giving of publicity to the proceedings of the Legislative Council. He also endeavoured to bring about agreeable relations between the various parties in the community by his personal influence, his tact, his geniality, and his hearty and conciliatory manners. In all his efforts to ameliorate the social conditions of the colony he was ably seconded by his zealous and talented wife. Sir John Franklin's term of office expired on the 21st August, 1843, and he returned to England. He was immediately succeeded by Sir John Eardley-Wilmot, whose administration forms one of the most unfortunate phases in the annals of the colony. In 1845 there were some two thousand convicts in the settlement at Norfolk Island, controlled by Superintendent John Price. This man's administration of affairs was particularly cruel and merciless, and instead of checking the degraded instincts of his charges, served to aggravate them to fresh deeds of fiendish depravity. The settlement was a pandemonium, and matters went from bad to worse, till at last rumours reached the ears of the Home Authorities. Governor Eardley-Wilmot thereupon received instructions to break up the penitentiary at Norfolk Island, and transfer the establishment to Port Arthur. Although this was carried into effect, the Governor still permitted Commandant Price to retain his office of superintendent. It was not long before Port Arthur earned for itself a name as sinister as that ever

possessed by Norfolk Island, or Macquarie Harbour. The horrors of the "system," as practised there, were so awful that many of the convicts gladly welcomed execution as a relief from them. At an inquiry before a Select Committee it was elicited that in some instances prisoners murdered their comrades with no other motive than to earn a respite by death from their hideous surroundings.

For some little time a feeling had been growing in the colony in favour of the abolition of the "system" and the transfer of the Norfolk Island "irreclaimables" to Van Diemen's Land served still further to accentuate it. There were, of course, as in other countries used as penal settlements, great financial difficulties in the way of reform. The expenditure by the Imperial Government on the maintenance of the penitential establishments was something like £300,000 per annum; but the Secretary of State for the Colonies was resolved upon cutting down this sum, and making the penal stations self-supporting as far as it could possibly be managed. In pursuance of this new policy a stoppage was made in the building of roads, wharfs, and other public works such as had hitherto been carried on at Imperial expense; and the convict labour thus liberated was applied to the clearing of land and the cultivation of crops. The produce thus raised was consumed by the prisoners themselves, and if a surplus remained over it was sold in the open market, to the financial injury of the farmers, who were not only deprived of their ordinary avenues of trade, but were subjected also to an inevitable and ruinous competition. This course of action on the part of the Imperial Authorities gave a severe blow to the agricultural industry, which necessarily reacted on the tradespeople of the colony. As another consequence, the revenue from the sale of Crown lands fell off almost to nothing, the colony drifted deeper and deeper into debt, and fresh sources of revenue from taxation had consequently to be found.

At that time the Legislative Council was in part composed of nominee Members, and six of them—known to history as the "Patriotic Six"—resigned their seats rather than acquiesce in the imposition of fresh burdens upon the people under an irresponsible system of government, and as an emphatic protest against the unconstitutional conduct of the Governor himself in borrowing money from the banks, and spending it without the authorisation of the Legislature. This action on the part of the so-called "Patriotic Six" took place in the month of October, 1845, and in the following year Sir John Eardley-Wilmot received a message from the Hon. W. E. Gladstone, recalling him from the Government of Van Diemen's Land. This course was explained to the unfortunate gentleman to have been taken, "not on account of any errors committed by the Governor in his official capacity, but because rumours reflecting upon his moral character had reached the Colonial Office." Mr. Gladstone, moreover, augmented the harshness of this utterance by refusing to give Sir John the names of his traducers, and thus to enable him to clear himself of the charges laid

to his account. It is, however, significant, that persons holding high positions in the island, such as the Bishop, the Chief Justice, and others in daily intercourse with His Excellency, maintained with warmth and loyalty that the Governor had been blackly maligned without the shadow of a foundation for the aspersions cast upon his character. Sir John Eardley-Wilmot died of a broken heart only eight days after the landing of his successor. At his funeral a notable demonstration was made by the numbers who attended it, and by whom he was held personally in great esteem, respect, and friendship.

Sir John Eardley-Wilmot gave up his office on the 13th October, 1846, and died on the 3rd February, 1847. From the 14th October, 1846, to the 25th January, 1847, the colony was administered, pending the arrival of the next Lieutenant-Governor, by C. J. La Trobe, as Administrator. Mr. La Trobe had already filled a vice-regal position in Victoria. Sir William Thomas Denison, afterwards Governor-General of New South Wales, took over the administration of the colony on the 26th January, 1847, and relinquished it on the 8th January, 1855.

Governor Denison's administration marks a turning point in the history of the colony. One of his first acts after assuming office was the restoration of their seats in the Legislature to the "Patriotic Six," who had resigned their office from conscientious motives, as already narrated. This step received the cordial approbation of Earl Grey, who was then Secretary of State for the Colonies. In other directions, however, the Governor did not acquit himself so well. When Earl Grey desired his advice concerning the advisability of granting Responsible Government, the new Governor expressed himself in no unmeasured terms against the proposal. Again, when the Colonial Office authorities requested his views with reference to the transportation question, Sir William Denison strongly urged that the discontinuance of the "system" was against the best interests of the young colony. The Governor, indeed, made a bid for the support of a very influential party. This was composed of those flock-masters and land-holders, who considered that cheap labour, together with a large annual outlay in the colony of Imperial funds, totally outbalanced all the evils and horrors of convictism. The Governor lent all the weight of his position and official influence to the convict labour people, and did everything in his power to put their views prominently before the Imperial authorities; nay, more, he went even so far as to represent the wishes of the pro-convict party as those paramount in the Island. Fortunately, however, at that particular juncture in affairs, the Colonial Office did not always concur in the expressions of opinion of some of its vice-regal advisers in the Australias; and it even seemed probable at one time that the system would be abolished by the Imperial authorities upon their own initiative. However, these kindly counsels were not of long duration, and the sanguine expectations of the abolitionists were cruelly disappointed by the sudden appearance in the Derwent River, on the

12th November, 1848, of the transport convict-ship "Ratliffe," with 248 prisoners. The people of Hobart Town authorised their leading citizens to wait upon Governor Denison and strongly protest against the landing of any more of the unfortunate wretches in the ports of the colony. The objection was eloquent, but ineffectual. In the course of the year 1849 no fewer than twenty convict transports sailed into the Derwent estuary, bringing with them 1,860 prisoners to add to the population of the Island.

In the meanwhile the Imperial authorities had made attempts to land convicts at various colonial ports, viz., at Cape Town, at Sydney, and at Melbourne. In each instance the inhabitants of these cities had successfully resisted the threatened influx of this undesirable element; hence there appeared the probability that "Vandemonia"—as it was derisively called—would become the sole receptacle of the accumulated moral garbage of the people of the British Isles. But in this emergency the Rev. John West, afterwards editor of the *Sydney Morning Herald*, arose as the champion of the abolitionist party. To him was due in great measure the organisation of the Anti-Transportation League, and his efforts secured the hearty co-operation of the other Australasian colonies. The Governor bitterly opposed the spirit of the league, and actually went so far as to affirm that the continuance of the "system" was both necessary and desirable; but public opinion, not only in Australia, but also in Great Britain itself, had come to the decision that transportation must be abolished, and abolished at once.

Van Diemen's Land shared in the Act passed by the Imperial Parliament in 1854 for the better government of the Australian Colonies. Among its provisions was one for the establishment of a Legislative Council in the Island. This body was to consist of eight Members, nominated by the Governor for the time being, and sixteen to be elected by the people—in all, twenty-four Members; but Sir William Denison was a resolute and consistent antagonist of any measure of Responsible Government, and one of his last acts as the ruler of the colony was one which no Responsible Government would have sanctioned. Prior to bringing into operation the provisions of the Act passed by the Imperial Parliament for the better government of the Australian Colonies, the Governor took upon himself the responsibility of proclaiming certain land regulations, which had the effect of throwing very large areas of valuable territory into the hands of a very small number of lessees. Sir William Denison defended his action by asserting that it was his intention thereby to promote agricultural settlement in combination with pastoral enterprise. His regulations had quite a contrary tendency, and had the effect of preventing enterprise of any kind. The small farmer, the true developer of virgin land, was effectually debarred from access to the soil, and internal expansion and progress was seriously retarded. As one consequence of Denison's land policy, an emigration of young men began, and continued steadily for years; while the domestics of the

neighbouring colonies were also recruited from the ranks of the young women born in the Island. When Mount Bischoff was discovered, there were actually no local diggers to work it, the mines being exploited, with very few exceptions, by Victorian labour imported from Clunes, Creswick, Mount Blackwood, and the Blue Mountain Gold-fields.

The new Legislative Council, established under the Imperial Act passed in 1850, did not assemble for the despatch of business until the 1st January, 1852. One of its first acts was the passing of a resolution condemning the continuance of the system of convict transportation. The passing of this resolution was deeply resented by Sir William Denison, and he denounced it in no undecided terms. Nevertheless, the "Patriots," confident of the moral support of the greater number of the colonists, resolved to take their grievance before Royalty itself, and thereupon addressed a memorial to the Queen, praying her to abrogate the Order in Council authorising transportation to Van Diemen's Land. The Governor forwarded the document, but at the same time advised the Home authorities to the effect that compliance with the request of the petitioners would be against the best interests of the colony, and would in no way improve the moral condition of its people. The Council then met and carried a vote of want of confidence in the Governor. This vote was embodied in a second petition to the Throne, and the humiliating task of forwarding it devolved upon His Excellency. In spite of this, however, Sir William persisted in sending despatches to England belittling the influence and character of the members of the Council. As a matter of fact, the Governor entirely misconceived the strength of the Anti-Transportation movement, and the earnestness of popular sentiment that gave it birth. But, as has been previously remarked, the British authorities were not always in accord with the views of the Governor on matters of colonial policy, and the Duke of Newcastle informed the Council that transportation to Van Diemen's Land had been definitely abolished. The despatch conveying this gratifying intelligence was officially made known through the columns of the *Hobart Town Gazette* of May, 1853.

Meanwhile the discovery of payable gold in New South Wales, in 1851, followed by similar finds in Victoria, caused a wild rush from all parts of Australasia, and indeed of the world, to the gold-bearing localities. The people of Van Diemen's Land were infected by the gold-fever, and an exodus set out to the scenes of the "rushes" which threatened almost to depopulate the island. Amongst those who quitted Tasmania were many of its convict population. In the year 1842 the total population was recorded as 40,767. Under the incessant drain to the gold-fields of Victoria it fell to 22,261. Those who remained in the island, however, reaped a rich harvest from their unadventurousness. In Victoria, consequent upon the great rush of population to the gold-fields of that colony, in combination with the enormous finds of the precious metal, a remarkable inflation of

prices had taken place. This necessarily reacted on the marketable value of every description of produce raised in the island colony. Only limited supplies of food and merchandise were at first available, and the demand was insistent and clamorous. Every kind of grain, and fruit, flour, vegetables, hay and fodder of all sorts, timber, building materials, and the various other necessities of civilised life, commanded prices that sounded bewilderingly fabulous to ears attuned to the narrow needs of a primitive agricultural community. Land increased greatly in value, and the producers who stayed behind prospered exceedingly. The imports and exports of the colony experienced a noteworthy expansion, as did also the public revenue. In 1852 the colony was able to show a surplus of £62,000 over expenditure, while the tonnage of shipping engaged in the external commerce of the island was more than double that of a decade before. In 1853 the value of the colony's imports was upwards of £2,250,000, or some £100 *per capita* of the entire population, and this sum was nearly balanced by the value of the exports.

Affairs were now in such a prosperous condition that the time seemed peculiarly appropriate for the celebration of a jubilee festival. The occasion was commemorative of a double half-century event—the foundation of the colony, and the cessation of transportation to its shores. The day selected for the celebration was August 10th, 1853, and was marked, not only by public festivities, but by religious services in the various churches. To mark a turning-point in the history of the colony, and to break off in a manner all associations with a dark and dishonoured past, the colonists were desirous of changing the name of their island from Van Diemen's Land to Tasmania, in honor of the intrepid Dutch discoverer who first visited its shores; and this change of nomenclature was shortly afterwards legalised by a vote of the Legislature. Nevertheless, although the island was thus dis severed from a name that was redolent of infamy, the evil consequences of the old penal system yet remained. The convict element had been greatly reduced by immigration to Australia, but it was still sufficiently strong to be a standing menace to a peaceful, orderly, law-abiding, and industrious population. When the more hardened of the criminals escaped from confinement, and deliberately embraced a career of rapine and violence in the bush, they hesitated at the commission of no atrocity in the prosecution of their nefarious designs;—indeed, the bushrangers of Tasmania were no whit better than their predecessors in the old penal days of "Vandemonia." Their vile deeds, too, were not only practised in Tasmania; but occasionally escaped convicts crossed over Bass' Straits in stolen boats, and continued their lawless career on the diggings and elsewhere on the mainland.

On the 8th January, 1855, Sir William Thomas Denison was succeeded by Sir Henry Edward Fox Young, who came to the island fresh from the Governorship of South Australia, where he had served a successful term of office extending over six years. On the 17th

January of the same year the Lieutenant-Governorships of Victoria, South Australia, and Tasmania became Governorships. The last mentioned colony became officially so named by legislative enactment in the year 1854. From the foundation of the Island as a British colony under Colonel David Collins, in 1804, to the departure of Sir William Denison, the highest authority in the country bore the official title of Lieutenant-Governor, while the Governor of New South Wales retained the title of Governor-in-Chief. Van Diemen's Land was, however, independent of the mother colony from the date of the establishment of a separate Government in 1825-6; the difference in the rank of the two officials being rather a matter of precedence than connection in any governmental sense, though the Governor-in-Chief was the authority to whom the Lieutenant-Governor was expected to appeal in times of difficulty or perplexity. Sir H. E. F. Young was the first Governor-in-Chief of the Colony of Tasmania, and Sir William Denison was the last Lieutenant-Governor of Van Diemen's Land. Under the rule of the latter, the colony had secured the cessation of transportation; had had bestowed upon it by the Imperial Parliament a larger measure of constitutional self-government; had celebrated its first fifty years of history as a British settlement; and had changed its name in the hopes of a future brighter and better than its past. With the advent of the new ruler, Tasmania may be regarded as in truth definitely finishing with the old order of things, and opening the second volume of its history. Sir H. E. F. Young guided the course of the colony from the 8th January, 1855, to the 10th December, 1861, a period of nearly seven years.

It was a happy and prosperous juncture at which the new Governor took up his duties. The revenue was in a satisfactory condition; discoveries of coal had been made in the island; the timber-getters were busy throughout the colony procuring slabs and shingles and other building materials, together with props for the miners in satisfaction of the large Victorian demands; all interests seemed to be on the up-grade, and there were considerable arrivals of immigrants from Great Britain and Ireland. As a sign of the prosperity of the colony may be mentioned the raising and transmission to London of the sum of £25,000, the donation from the Tasmanians to the fund raised for the relief of the widows and orphans of the soldiers who had fallen in the Crimean War.

A few months after Governor Young's arrival, Tasmania received a full measure of Responsible Government. By an Act of the Imperial Parliament, which received the Royal Assent on the 1st May, 1855, a Constitution was bestowed upon the colony. This provided for the creation of two Houses, both of them elective—namely, a Legislative Council of fifteen members, and an Assembly of thirty members. The functions of the new Parliament included the imposition of taxation, the expenditure of revenue, the complete control of Crown lands, and the absolute management of public business by a responsible ministry

answerable to the people through their representatives. Under the new Constitution the Governor became, of course, merely the representative of Majesty. The Legislative Council passed an Electoral Act to give due effect to the provisions of the Imperial Statute conferring the Constitution, and was then relieved of its restricted functions by the Governor in a farewell address.

In the month of September, 1856, the first general election took place in the Island, and the first Responsible Government of Tasmania was formed. The Cabinet was composed of five members holding office, and one without a portfolio. The first Premier was Mr. W. T. N. Champ, and his colleagues were Messrs. T. D. Chapman, Treasurer; F. Smith, Attorney-General; J. W. Rogers, Solicitor-General; H. F. Anstey, Minister for Lands and Works; and W. E. Nairn, without portfolio. Justice Howe was elected President of the Legislative Council, and Captain Fenton Speaker of the Legislative Assembly.

Suddenly, however, the prosperity of the colony, hitherto so gratifying, declined, and the new Parliament was called upon, almost at the outset of its career, to meet serious financial difficulties. The strangeness of the situation, and the total inexperience of the freshly-elected members, precipitated a crisis, and the two Houses found themselves engaged in an undignified squabble over the imposition of taxation. The Legislative Assembly, like that of the colony of Victoria at a later date, claimed the right to impose and collect Customs duties by a mere resolution of a majority of its own members, without reference to the Upper Chamber. This led, after a tenure of office lasting only four months, to the resignation of the first ministry. The second Responsible Government had even a shorter command of the Treasury benches, and had to succumb after being in power for only eight weeks; but after a reasonable period for experiment—a stage all young Legislatures have to pass through—the new Parliament got genuinely to work, and proceeded to pass measures for the promotion of higher education; for the incorporation of municipalities in country districts; for the settlement of the people upon the land; and for the establishment of telegraphic communication between the northern and southern parts of the Island.

Sir Henry Edward Fox Young's term as Governor-in-Chief of Tasmania ended on the 10th December, 1861, and Colonel Thomas Gore Brown, C.B., entered on the duties of his office on the day following, as Administrator. This position he continued to hold until the 16th June, 1862, when he became Governor-in-Chief, and, as such, ruled the colony until the 30th December, 1868, his total tenure of office lasting a trifle over seven years.

During the years 1862 and 1863, though much was done by way of developing the interior of the colony by the making of roads and the construction of bridges and tramways, and by other methods for bringing the outlying districts into communication with the market centres, questions of finance chiefly occupied legislative consideration. The

press and the public showed also an unusual interest in the discussions that arose, for they concerned, in an emphatic manner, the future welfare of the country, particularly as regards the settlement of the land and the incidence of taxation. The Treasurer of an Administration formed in the year 1863 was Mr. Charles Meredith, who submitted to Parliament a financial scheme for the abolition of all Customs duties (excepting those imposed upon fermented and spirituous liquor and upon tobacco), the freedom of shipping from all harbour dues and wharfage rates, and the creation of revenue by the imposition of an income and property tax of five and one-half per cent. Mr. Meredith's scheme was doomed from the first, owing to the opposition of the landed interest. Had it been carried into effect, its supporters claim that it would have transformed Hobart Town into a maritime *entrepôt* "as populous and prosperous as the towns in the Middle Ages," and have raised Tasmania into a position of premier importance; and subsequent writers declare that it would have averted the undeniable condition of stagnation that for long years brooded over the island, which undoubtedly sprang from the locking-up of the country in huge and unused tracts of magnificent territory. Whatever might have been the result, the proposal was not destined to become law, for the Treasurer's scheme was negatived by the Legislative Assembly, and was not again proposed.

In 1865 a most important and valuable measure was placed upon the Statute Book. This was an enactment framed in the spirit and on the lines of the well-known Torrens Act of South Australia, for facilitating the release and transfer of real estate, and making transactions regarding land almost as simple as those connected with portable commodities. In 1867 an Act was passed which had for its object the re-population of the island. Year after year, numbers of young, hardy, and energetic men left the colony, to push their fortunes in the more favoured provinces of the Australian continent. These were the very men whom Tasmania could least afford to spare. To combat this fatal drain upon the population, an Act was passed, under the provisions of which heads of families who paid their own passage from Europe were entitled to receive land orders of the value of £18 for each person over fifteen years of age, and of £9 for each child of more than one and less than fifteen. However, through the great distance of the colony from the old-world centres of population, the cost of the passage out, and the long period of time occupied in making it (as compared with the short and cheap transit to Canada and the United States, together with the liberal inducements held out to immigrants by those countries), little of value in the way of settlement was achieved by this kind of legislation. At about the same time the Government made a bid for settlers of a different stamp. An area of territory, 50,000 acres in extent, was reserved in the county of Devon, for occupation, under certain conditions, by retired Indian officers and their families. Many old warriors accepted the invitation to settle in the colony, but this

description of aristocratic and fanciful colonisation did little to develop the genuine resources of the country, which continued to suffer from the drain upon its youth, and the lack of suitable immigrants to replace the lost population.

In 1868 H.R.H. Prince Alfred, Duke of Edinburgh, visited the young colony, and the occasion was marked by great demonstrations of loyalty.

Colonel Gore Brown gave up the duties of his office on December 30th, 1868, and from the date of his retirement till the 15th January, 1869, the Government was administered by Lieutenant-Colonel W. C. Fraser. On the date just mentioned the Administrator was relieved by Charles Du Cane, a son-in-law of the celebrated lawyer and orator, Lord Lyndhurst. During Mr. Du Cane's rule a submarine cable was laid across Bass Strait, and messages to the colonies of the mainland were first despatched by it on the 1st May, 1869. A beginning was also made with the railway system of the colony, and the Western Line from Launceston to Perth, Longford, Westbury, Deloraine, and Formby was under active construction. This route was projected as far back as 1862, and the first sod had been turned by the Duke of Edinburgh in 1868.

With the granting of Responsible Government much of the vehemence and picturesqueness of the "Old Colonial Days" disappeared, happily for the welfare of the island, never to return. Deeds of blood and violence gradually became less and less frequent, and the colony receded into a condition of calmness approaching stagnation—a quiescence in which legislation also shared.

In 1870 the Imperial Authorities withdrew the military forces from the various colonies, and for some time there was an outburst of enthusiasm directed towards the enlistment and drilling of volunteers. The census of Tasmania for this year (1870) showed that the population of the island was such as to require a re-distribution of seats, and the Constitution Act was amended to the extent of slightly increasing the number of members, and lowering the franchise for both Chambers, so as to restore the qualification to many persons who had lost it by the mere depreciation that had taken place in the value of their freehold or leasehold property. In 1870 also a contract was signed for the construction of a main line of railway from Launceston to Hobart Town. In 1871 the Governor opened the Western Line to traffic between Launceston and Deloraine, and communication between the latter and the sea was made almost complete by the laying down of a tramway from Kimberley to Latrobe, at the estuary of the River Mersey. These railways were, however, a source of considerable trouble and annoyance to those who initiated them, and those who provided the funds for their construction. At the time when the Launceston to Deloraine line was being built, that part of the island through which it passed was practically virgin country, in which, although there were a number of small holdings, the great bulk of the land was held in large blocks. The land-owners were anxious for a

railway, and to secure it they not only bore the expense of the survey of the line, but also subscribed a sum of £50,000 towards the cost of construction. The Government, however, declined to guarantee the interest on the loan to be raised for building the line, unless the residents of the district through which it was to be laid would agree to the imposition of a special rate upon their property, productive of £32,500, by way of security for repayment of loan interest. The associated landholders consented, and the work of railway construction was entered upon. After the line was made it turned out to be altogether unremunerative, and the Government sued the guarantors for the sum of £36,000, unpaid interest, but eventually agreed to take over the line, write off £48,000, the amount to which interest had accrued, and to debit the district with the sum of £15,000 per annum, as a current contribution to the interest fund.

While the trouble was in progress in connection with the Launceston to Deloraine line, the railway between the northern and southern capitals had been begun. The cost of construction and maintenance of this line was to be made a charge on the whole of the taxpayers of the colony. The land-owners who had guaranteed the interest on the Deloraine line naturally objected to the imposition upon them of a special rate, while the people served by the main line escaped without any special contribution, the sum to be paid by the Government to the company owning the line under the guarantee being drawn from the general revenue. When, therefore, the tax became due, and an effort was made to collect it, the Government found that the people refused to pay. Then legal proceedings were instituted, and fines and penalties threatened, but with little result, save that of further aggravating a difficult situation. Sixty-five of the local magistracy petitioned the Governor for the suspension of the tax and penalties until Parliament could be appealed to. An unfavourable answer being given to this request, twenty-six of the petitioners resigned their commissions. Upon this ensued a unique state of affairs. No fewer than 1,200 distress warrants were issued, and enforced wherever enforcement was possible. The north of the island was practically in a state of siege and the Government was confronted by a people who had determined not to yield. Large quantities of portable goods were seized by the officers of the law and taken to Launceston, a proceeding that greatly angered those who were thus deprived of their property. Parties were organised for the rescue of the effects distrained upon, and indeed so furious had grown the indignation thus stirred up that the dwellers in the town feared loss of life or limb, or homestead, at the hands of the recalcitrant taxpayers. The demonstration grew so turbulent and riotous that the authorities found it necessary to withdraw the police from their customary beats, and to swear in special constables for service in the turbulent districts. The inoffensive and unoffending residents of Launceston had their windows smashed in, their doors battered to fragments, and their fences torn down by the infuriated owners of the

deported chattels. In the country districts the efforts of the police were simply laughed to scorn by men who had not feared to encounter and defeat armed desperadoes. In the end the Government saw that their position was untenable, and the enforcement of the law inexpedient. In the following year an Act was passed which absolved the land-owners of the district from the obligation of raising a special rate to be used for railway purposes. Thus ended a peculiarly painful position, created by the unwise action of a legislative body, for however proper it might have been to impose local taxation to meet the deficiency of earnings on the Deloraine railway, the conditions became entirely altered when the deficiency of other railways became a charge upon the general taxpayer.

In the year 1872 discoveries of gold were made both in quartz reefs and in alluvial deposits at Brandy Creek (afterwards called Beaconsfield), at Lefroy, and at other places which have since become well-known as important gold-fields. Silver and tin were found in abundance, and Mount Bischoff (discovered in 1872 by James Smith) has the proud pre-eminence of being considered the richest tin-mine in the world.

Governor Du Cane left the colony on the 28th November, 1874. Until the arrival of Governor Weld on the 13th January, 1875, the Government was successively administered by Sir Valentine Fleming and Sir Francis Smith.

The next Governor, Mr. F. A. Weld, had received a long training in colonial politics in New Zealand, and had served a successful governorship in Western Australia. With his advent to office in Tasmania he found that changes of Ministry were of almost annual occurrence, that party politics ran high, and that the best interests of the colony were neglected in the scramble for the Treasury benches. A staunch believer in a strong public works policy, the Governor set himself to work to convert the Government of the day to his progressive views, and had the satisfaction, at the end of the year 1877, of obtaining the assent of both Houses to a Bill appropriating the sum of £140,000 to the formation and construction of roads, bridges, wharfs, and telegraph lines in hitherto neglected districts. A succeeding Administration, with Mr. Giblin as Premier and Treasurer, managed to effect a re-organization of the colony's finances, and by the imposition of a tax on real and personal property and the dividends derived from the operations of public companies, an excise duty of 3d a gallon on beer, and a revision of the Customs tariff, brought about an equality between revenue and expenditure.

In the year 1876 the railway line connecting the northern and southern capitals was opened to traffic. On the 8th May of the same year died Truganini, a female aboriginal, the last representative of the Tasmanian race.

During Governor Weld's term of office many important mineral discoveries were made. Amongst these was the famous auriferous quartz reef discovered by William Dalby in 1877, and now worked by the Tasmanian Gold-mining Company.

Governor Weld was called away to the Governorship of the Straits Settlements in the month of May, 1880, and the colony was temporarily administered by the Chief Justice, Sir Francis Smith. He was relieved in the month of October following by Sir J. H. Lefroy, who remained in the colony until the month of December, 1881. With the exception of a sharp conflict between the two Houses of the Legislature over questions of taxation in 1882, there is little left to record of importance. Sir J. H. Lefroy's term of administration ceased on the 6th December, 1881, and on the following day Major Sir George Cumine Strahan was sworn in as Governor, and continued in office till the 28th October, 1886.

During the period extending from 1882 to 1889 valuable discoveries of mineral deposits were made in the western portion of the island, notably silver-lead at Mount Zeehan in 1885; gold and copper at Mount Lyell in 1886; and silver and lead at Heazlewood River in 1887. This period was also marked by considerable activity in railway construction. In 1886 a law was passed which had the effect of greatly extending the franchise. The number of members of both Houses of the Legislature was increased—from 16 to 18 in the Legislative Council, and from 32 to 36 in the Assembly. At the same time the boundaries of the Electoral Districts were re-arranged so as to give more effective representation in accordance with the distribution of population.

Sir George Strahan retired from office on the 28th October, 1886. Until the return from England, in November, of the Chief Justice, Sir William Dobson, the Government of the colony was administered by Judge Giblin. The Chief Justice continued the administration till the arrival of Governor Strahan's successor, Sir Robert Hamilton, who assumed office on the 11th March, 1887.

The unsatisfactory relations which had so long existed between the Government and the Tasmanian Main Line Railway Company were terminated in 1890 by Government purchase of the line for a sum of £1,106,500, payable in 3½ per cent. inscribed stock. The year 1890 also witnessed the foundation of the Tasmanian University. As it was thought that the interests of higher education would be more satisfactorily promoted by a local University, the Council of Education was abolished, and in lieu of the Tasmanian scholarships Parliament granted an annual sum to the funds of the new institution. In June several important discoveries of silver were made and arrangements were immediately entered into for the further development of the deposits. The suspension of the Bank of Van Diemen's Land, which took place on the 3rd August, 1891, was the precursor of numerous failures in city and country. Several financial institutions were compelled to close their doors and business in the last months of the year was depressed and unsatisfactory. This was particularly unfortunate, as the early part of the year gave promise of a large

measure of prosperity. The export of fruit, chiefly to England, had increased three fold in three years, and the West Coast mining districts showed satisfactory development. Mineral production increased through the opening up of the extensive silver deposits in the Zeehan, Dundas, and Heazlewood districts. The General Election took place in May, and the fifth Ministry which had held office since the 30th March, 1887, returned to power with a good working majority. Parliament, which was for the first time elected for three years instead of five as formerly, was opened on the 14th July, the session being remarkable for the number of syndicate bills passed into law. Owing to the fact that the takings on the Tasmanian Main Line were for the first time included in the receipts, the revenue for the year showed a satisfactory surplus, while it was as much as £140,000 in excess of that for 1890.

To meet the requirements of the West Coast mining districts in the matter of transport, a railway line was constructed between Strahan and Zeehan, and was opened for traffic on the 14th February, 1892, while the extension from Zeehan to Dundas was ready on the 25th April following. The Parliamentary session of 1892 saw the downfall of the Fysh Ministry, who were defeated by a majority of four votes on the 15th August. On the 17th a new Ministry was sworn in under the leadership of Mr. Henry Dobson. The incoming Treasurer found the revenue returns hardly encouraging, and at the end of the year was obliged to announce a heavy deficit, which was the forerunner of a period of depression. Sir Robert Hamilton left the colony in November, 1892, the Chief Justice, Sir W. L. Dobson, taking over the administration until the arrival of the new Governor, Viscount Gormanston, in the following year.

Although the acute financial crisis experienced on the mainland in 1893 was not felt so severely in Tasmania, the colony nevertheless suffered to some extent from the prevailing depression. The Tasmanian banks, however, remained secure, and the Australian institutions with branches in the island were amongst those that weathered the storm. But in consequence of the diminished purchasing power of the people, imports greatly decreased and the necessity for economy became every day more apparent. Fortunately the exports showed a great increase, and the inauguration of an export trade in butter gave a great stimulus to dairy farming. The year generally was favourable to agriculture, and the yield of wheat was almost equal to local requirements. There was a large increase in the mineral industry, and the copper deposits at Mount Lyell were beginning to attract attention. But the public revenue, especially as regards the railway receipts, was undergoing serious shrinkage, while the failure to float a loan in London, which had been authorised in 1892, further embarrassed the Government, although a large amount of the money required was subsequently obtained locally. By general agreement the third session of the tenth Parliament, which opened on the 18th July, was to have been devoted chiefly to a consideration of the financial position, but a conflict between the two

Houses interfered with this programme. The Government intended to meet the falling revenue by additional taxation, but after being adopted by the Assembly the proposals were in part amended and in part wholly rejected by the Legislative Council. The chief subject of dispute was a graduated land-tax, which the Council refused to pass, and radically altered the Bill providing for it so as to include 12,000 land-holders previously exempted. This interference with a money bill was resented by the Assembly, and the Government decided to appeal to the country on the question of its taxation proposals. The result of the elections found several of the old members rejected, but all the Ministers and the occupants of the front Opposition bench were returned. It was, however, too late in the year for the proposals to be carried into effect, and the financial statement disclosed a deficit which brought the total debit balance up to £362,118. Parliament, however, dealt with some useful legislation in a Consolidating Mining Act, a Patents Act, and a Crown Lands Act, while the Mount Lyell and Strahan private railway was also sanctioned. Viscount Gormanston arrived in Tasmania in August, and was sworn in as Governor on the 8th of that month.

The first session of the eleventh Parliament was opened on the 27th February, 1894, both sides of the House recognising the question of financial reform as being of paramount importance. The financial proposals, which in the previous session had brought about a Constitutional crisis, were again placed before the House. In Committee the Bill to authorise a graduated land-tax was thrown out and the Government thereupon resigned. Sir Edward Braddon, who had given up the Agent-Generalship the year before to once more enter the arena of local politics, was sent for and succeeded in forming a Ministry, which was sworn in on the 14th April. In consequence of the dissension in the previous Cabinet, the leadership of the Opposition was entrusted to Mr. N. E. Lewis. The new Ministry at once set to work on the financial question. The Income Tax and Probate Bills of their predecessors were adopted in their existing form, the latter being rejected by the Council, and a land-tax was imposed of one penny in the £ on all land. This general tax was adopted as a sort of half measure towards the unimproved capital value basis which was at first mooted. A special session of Parliament was held for three days in November, with the object of passing a tax on the unimproved value of land, but the proposal was thrown out by the Council and the Government were apparently satisfied that in introducing the measure they had redeemed their promise to the country. Financially the colony was still in an unsatisfactory condition, and economy was practised in every direction. The stoppage of public and private works and the restriction of expenditure caused a dearth of employment, and in consequence recourse was had to the land for a means of livelihood. The area under crop was thus increased in 1894, and the agricultural industry received a welcome stimulus. A revival in the timber industry also took place, and a trial shipment of hardwood for paving purposes realised very satisfactory prices in London.

Encouraged by this success further shipments were made, and a trade was established which has since proved a source of considerable revenue. On the 15th November the Tasmanian International Exhibition was opened at Hobart and proved a great success, numerous visitors being attracted from the neighbouring colonies.

The opening months of 1895 were characterised by a more hopeful tone in commercial and industrial relations, and a general improvement took place in the colony's financial position, which was maintained throughout the year. Taken as a whole the year was favourable to agriculture, although prices were low during the first six months. There was a substantial increase in the export of fruit to England and the other colonies, and the butter trade also underwent expansion. The timber trade also grew in importance with the opening up of fresh markets in various parts of the world. A considerable amount of capital was introduced into Tasmania by the steady development of mining, and deep sinking for gold in some instances was attended by very successful results. During the year the financial position of the colony materially improved, and the Treasurer was able to declare a surplus, principally through the increased Customs and Railway receipts. In February, a Conference of Premiers held at Hobart drew up a Federal Enabling Bill, providing for the election of the Federal Convention. The Bill was placed before Parliament in July, but it was deemed advisable to await the decision of the other colonies before proceeding further in the matter. In May the Tasmanian Exhibition was closed, after remaining open for several months and being the means of making the resources of the colony better known to the outside world.

On the whole, the year 1896 was a prosperous one for Tasmania, and it seemed as though the years of depression had been definitely left behind. The railway receipts were again far in excess of expenditure, and the general financial transactions of the year left the Treasurer with a surplus of £47,732 to be applied to the reduction of the deficit. Wheat returns showed a large increase on the yield of the previous year, and for the first time in many years Tasmania had more than sufficient for local requirements. Steady and systematic progress was also noticeable in the mining industry. The importance of connecting the mining districts with the main railway system was recognised by Parliament, and authority was given to a syndicate to construct a railway to the Western Districts on the land grant system. A special Parliamentary session of three days was held in January for the purpose of passing an Enabling Bill providing for the election of delegates to the Convention. The session proper only lasted from July to September, but a number of useful consolidating measures were passed and a further attempt was made to institute the unimproved value of land tax, but without success.

At the beginning of 1897 the General Elections were held, when the "Hare" system of voting was employed for the first time. Practically

three sessions of Parliament were held. The first, in March, lasted only three days and was called together in compliance with the Constitution Amendment Act, which provided that Parliament should meet 90 days after its election. In July, the Draft Commonwealth Bill, as drawn up by the Convention at Adelaide, was discussed and returned with the amendments proposed. The third or general session opened in October, and was characterised by an extraordinary Ministerial crisis. In defiance of the opinion of their own Attorney-General, and in face of strong disapproval from the Opposition, the Government had adopted a certain course of procedure in regard to some land transactions with the Emu Bay Railway Company. A motion of want of confidence was thereupon proposed, but by a clever manipulation of parties the Government succeeded in having added to the motion a sentence stating that the House did not intend to censure Ministers. The motion was carried in this amended form, and the Government under its terms felt justified in still retaining office. They were able, at all events, to point out that their rule was coincident with the continued prosperity of the colony, and another surplus was registered at the end of the year. In consequence of a drought which lasted nearly the whole year, there was a rise in the prices of agricultural and dairy produce, and the production from crops was small. The timber industry, however, still continued to expand and steady progress was noted in mining.

The drought of 1897 was succeeded, in 1898, by a series of destructive bush-fires, which were attended both with loss of life and extensive damage to property. But, though many settlers were burnt out, they returned to their holdings and with indomitable energy set to work to repair their losses. Happily there was an excellent rainfall in winter and spring, which proved particularly beneficial to crops. The financial year was a distinctly favourable one, the expanding revenue enabling a further reduction to be made in the deficit. Parliament met in May, but adjourned shortly after for the taking of the referendum on the Federal question. The result of the voting showed a large majority in favour of the Bill. During the year an extension of the railway between Burnie and Ulverstone was authorised, the line forming a connecting link between the western system and the main line. In 1898 Tasmania lost the services of one of her most esteemed public men by the death of Sir Lambert Dobson, the Chief Justice, which took place on the 17th March.

Early in 1899 Parliament again adjourned for the referendum, which resulted in a heavy majority being polled for union, the voting on this occasion being—Yes, 13,021; and No, 779. The same year witnessed the downfall of the Braddon Ministry, the action of Captain Miles, Minister for Lands and Works, in connection with the Macquarie Harbour Bar scheme resulting primarily in the Minister's resignation of his portfolio and seat, and secondly in the defeat of the Government on a motion of censure. Mr. (now Sir Elliott) Lewis was entrusted with the formation of a Ministry, which was sworn in on the 31st October, and is still in

office. The incoming Treasurer found his task a simple one, and with a revenue swollen by large increases in Customs and Railway receipts, there was a surplus of over £72,000. In October of this year Tasmania despatched her first contingent for service in South Africa.

The year 1900, on the whole, proved to be one of remarkable prosperity for Tasmania. Improved prices were maintained for farm stock, but the seasons were generally unpropitious for agriculture, and light crops resulted in farm and orchard. As regards mining, however, a notable increase in production was recorded, the value of the output being nearly £500,000 in excess of the return for the previous year. During January and February serious damage was occasioned by bush-fires in various districts, while parts of the colony were devastated by floods in August. A short session of Parliament was held in April in compliance with the Act, but the session proper, which began in June, lasted until December, during which period no fewer than 100 measures were passed and placed on the Statute Book. Notwithstanding the extra expenditure in connection with the despatch of troops and the precautions against bubonic plague, the Treasurer had a credit balance at the end of the year, and the total deficit was reduced to £52,555, or considerably less than that at the beginning of the decade. On the 14th August, Viscount Gormanston left for England, and the Chief Justice, Sir John Stokell Dodds, took up the administration, pending the arrival of the new Governor.

The fruit season of 1901 was a record one as regards the quantity shipped to England, while the export of jam was higher than in any previous year. At the beginning of the year the Treasurer anticipated a surplus, but the delay and dislocation caused by the imposition of the Federal tariff changed the aspect of affairs, and a disappointing deficit of £90,000 had to be faced, with a prospect of further losses in 1902. The polling for the Federal elections took place at the end of March, the whole state voting as one constituency under the "Hare" system. On the 3rd July, T.R.H. the Prince and Princess of Wales arrived in Hobart, and during their stay in the island state were received everywhere with great enthusiasm. The new Governor, Sir Arthur Elibank Havelock, who had been appointed in May, reached Hobart on the 8th November, 1901.

In the early months of 1902 a series of interesting conferences took place at Hobart. The Australasian Association for the Advancement of Science met in January, and this was followed by conferences of State Statisticians, Attorneys-General, and Ministers of Agriculture, dealing with matters of interest to the Commonwealth. Considerable dissatisfaction was aroused by the action of the Federal Government, under the provisions of the Postal Act, in refusing to carry letters addressed to "Tattersall," in connection with consultations on horse-races. The Tasmanian Government characterised the action as an undue interference with state rights, as these "sweeps" were legalised and carried on under Government supervision. It is probable that the question will be amongst the first submitted for the consideration of the High Court,

when that tribunal is established. During the first portion of the year Tasmania continued the despatch of contingents to South Africa, the total number of men sent from the island state, up to the last quota for the Australian Commonwealth Horse, being 734.

In the following table will be found a list of the successive Ministries which have held office since the inauguration of Responsible Government in Tasmania, together with the dates of their appointment and retirement :—

No. of Ministry.	Name.	Date of Appointment.	Date of Retirement.	Duration.	
				Months.	Days.
1	Champ.....	1 Nov., 1856	26 Feb., 1857	3	25
2	Gregson.....	26 Feb., 1857	25 April, 1857	1	30
3	Weston.....	25 April, 1857	12 May, 1857	0	17
4	Smith.....	12 May, 1857	1 Nov., 1860	41	20
5	Weston.....	1 Nov., 1860	2 Aug., 1861	9	1
6	Chapman.....	2 Aug., 1861	20 Jan., 1863	17	18
7	Whyte.....	20 Jan., 1863	24 Nov., 1866	46	4
8	Dry.....	24 Nov., 1866	4 Aug., 1869	32	21
9	Wilson.....	4 Aug., 1869	4 Nov., 1872	39	0
10	Innes.....	4 Nov., 1872	4 Aug., 1873	9	0
11	Kennerley.....	4 Aug., 1873	20 July, 1876	35	16
12	Reibey.....	20 July, 1876	9 Aug., 1877	12	10
13	Fysh.....	9 Aug., 1877	20 Dec., 1878	16	11
14	Crowther.....	20 Dec., 1878	29 Oct., 1879	10	9
15	Giblin.....	30 Oct., 1879	15 Aug., 1884	57	16
16	Douglas.....	15 Aug., 1884	30 Mar., 1887	31	15
17	Fysh.....	30 Mar., 1887	17 Aug., 1892	64	18
18	Dobson.....	17 Aug., 1892	14 April, 1894	20	28
19	Braddon.....	14 April, 1894	12 Oct., 1899	65	28
20	Lewis.....	12 Oct., 1899	.....	..	...

NEW ZEALAND.

THE Maori name of New Zealand is "Ao-tea-roa" (the long white cloud); of the North Island, "Te-ika-a-Maui" (the fish of Maui); of the South Island, "Te-wai-pounami" (the place of the greenstone); and of Stewart Island, "Rakiura."

Of all the tribes native to the "seven colonies" the Maoris of New Zealand alone have given serious trouble to the white population. From the visit of Tasman to Murderers' Bay till comparatively modern times, the Maori has been a menace to European colonisation. He alone of all the Australasians dared defend his own with a courage, a pertinacity, and a skill which have extorted the admiration, and frequently compelled the terror of the white invader. Though not aboriginal to New Zealand, he is so identified with the history of the Islands from our first knowledge of them, that it is convenient to consider him briefly before proceeding to trace the progress of European settlement in "Ao-tea-roa."

Much doubt exists as to the ancient cradle of the Maori race. Many theories have been advanced on this subject, but the favourite one appears to be that which gives as their place of origin some island of the Samoan Group, or, as their own traditions designate the place of their exodus; "Hawaiki." The legend runs that a chief of Hawaiki left the island after a civil war, voyaged to Ao-tea-roa, and returned thence to the land of his birth with marvellous accounts of all that he had seen in his adventurous journey, and of the wealth of the new country that he had visited. This daring navigator was named either Kupe or Ngahue; but though traditions vary concerning this, they concur in making him the leader of the expedition that planted his race in its present home. Tasman describes the natives of Golden or Murderers' Bay as being possessed of double canoes, though when the country was annexed, some 200 years afterwards, the Maoris had forgotten how to build them. It is, however, quite possible that they journeyed safely over the thousands of miles of open ocean which separate New Zealand from the tropical islands of the Samoan group in these typical vessels of the South Sea Islands. The Maori race is brown in colour, handsome of feature, and evidently identical with the people who have spread throughout the broad Pacific from Hawaii to Raratonga, and who have in some of the groups mingled their blood with that of inferior Melanesian peoples. Recently a well-known authority has stated that ethnological

investigations seem to point to the conclusion that prior to its occupation of the islands in the Pacific, the Maori race dwelt on some mainland—probably on the plains and foothills of the Himalaya Mountains of India.

When Cook landed he found the islands apparently crowded by a dense population. This appearance was, however, misleading, and merely arose from the tendency of the Maoris to cluster along the shore line and at the mouths of rivers. It has since been computed that the total number of Maoris at that time could not have been more than 150,000, which had decreased to 80,000 by 1840, and has now further shrunk to about half that number. Except on the shores of Cook's Straits, they planted only a few scattered outposts in the South Island. This is the larger island of the two, but it is also the colder, and therein lies the chief secret of the check to the Maori increase. They were a tropical race transplanted into a temperate climate. They showed much the same tendency to cling to the North Island as the negroes in North America to herd in the Gulf States.

Respecting their antiquity as an imported race from a Polynesian home, it is noteworthy that the names of most of their canoes are still remembered, and all the tribes agree in their accounts of the doings of the people of the principal canoes after their arrival in New Zealand; and from these traditional accounts the descent of numerous tribes has been traced. Calculations, based on the genealogical staves kept by the "tohungas," or priests, and on the well-authenticated traditions of the people, indicate that about twenty-one generations have passed since the immigration, which may, therefore, be assumed to have taken place about 525 years ago. The position of the legendary Hawaiki is unknown, but many places in the South Seas have been thus named in memory of the mother-land. The Registrar-General of New Zealand notes that the Maoris speak a very pure dialect of the Polynesian language—the common tongue, with more or less variation, in all the Pacific Islands; and that Captain Cook, when he first visited New Zealand, availed himself of the services of a native of Tahiti, whose speech was easily understood by the Maoris, and who obtained from them much of their traditional history. Cannibalism existed in New Zealand from the earliest periods known to Europeans, and sailors belonging to the expeditions of Tasman, Cook, and others were devoured by the Maori patriots. The custom of eating the bodies of enemies killed in battle obtained up to a very late period. The practice of tattooing was general in the early days of European colonisation, but is now rapidly dying out among the younger generation of Maoris.

The visits of Tasman, Cook, and other voyagers to New Zealand have been described at some length in the chapter of this volume dealing with the Discovery of Australia. It was in virtue of the sovereignty proclaimed by Captain Cook in the year 1770 that the islands of New

Zealand were included as a part of the British dominions in the Royal Commission appointing the Governor of New South Wales in 1787. In the following year Captain Arthur Phillip and his little colony of convicts established themselves on the shores of Port Jackson, New South Wales. As stated in the opening chapter of this work, the choice of New South Wales as the locality for the first penal settlement in Australasia was in some measure due to dread of the ferocity and cannibalism of the old-time Maori.

In 1791 Captain Vancouver anchored in Dusky Bay when on his voyage round the world, and in 1793 Admiral D'Entrecasteaux touched at New Zealand in his search for the unfortunate La Perouse. In the latter year, also, the "Dædalus," under the command of Lieutenant Hanson, was sent by the Governor of New South Wales to cruise about the New Zealand coast with the avowed intention of kidnapping one or more Maoris to teach the convict settlers of Norfolk Island the Maori method of flax-dressing. Unfortunately, one of the captives secured was a priest ("tohunga") and the other a chief ("rangatira"), and they would not admit that they knew anything about such work, and were restored to their homes after several months' detention.

In the year 1793, Sydney whalers began to visit the coasts of New Zealand; and adventurous spirits, honest and outlaw, ran into the ports of the islands for spars and flax, preserved human heads, and other native curiosities. Frightful atrocities were at times perpetrated by the Maoris, although it must be admitted that in some cases the knavery and cruelty of the traders were directly responsible for them. In 1807 a vessel had been taken by the east coast natives, and the entire crew, with one exception, were killed and eaten. In 1809 occurred the "Boyd" massacre, when fifty Europeans were murdered at Poverty Bay; this was an act of retaliatory vengeance dealt out to the passengers and crew of the ship "Boyd" for the flogging of a chief's son. In 1816 the brig "Agnes" was stranded in the same locality, and out of a crew of fourteen all save one were killed and eaten.

A remunerative trade in seal-skins was carried on for a time, these being amongst the first articles of export from the then territory of New South Wales, but the unrestricted slaughter of the animals between 1800 and 1820, caused their capture to be no longer a paying enterprise. There was also a trade in timber hewn near the shores of the Hauraki Gulf, and shipped at profitable prices from Sydney to India and the Cape of Good Hope. The Bay of Islands was also the centre of much activity during the palmy days of the whaling industry.

In 1814 the Church Missionaries appeared, and strengthened the feeling of security which had grown up through trade, though New Zealand continued to have the evil reputation of being the Alsatia of the Pacific. Missionary enterprise was made possible by the growing intercourse between the whites and the Maoris. To the islands flocked deserters and shipwrecked seamen, runaway convicts, and all kinds of nondescript adventurers of the "Bully" Hayes type. Sometimes

they were promptly killed and eaten; sometimes they were adopted by the natives, and speedily sank below the level of the Maoris themselves, marrying one, two, or three wives according to fancy or the esteem in which they were held by their adopted tribesmen. As trade grew up between the whites and the natives, the "Pakeha Maori," or European, who sold his nation-right for a mess of savage pottage, became an object of competition among the islanders, who found him a useful agent and interpreter. During the latter part of the days of Governor King, from 1805 to 1807, the first natives, amongst them several chiefs, voluntarily went to England and to New South Wales. These visits fired the missionary zeal of Samuel Marsden, who resolved upon acting the part of a St. Augustine to the Maoris. In 1807 Marsden accompanied Governor King to England, to enlist the aid of the Church Missionaries' Society in the establishment of a mission settlement in New Zealand. On his return to the Colony in 1810 he brought with him two lay catechists for his mission, Messrs. King and Hall, a carpenter and an iron-worker. When the missionaries arrived in Sydney the air was filled with rumours of rapine and murder, much exaggerated. These arose out of the horror excited by the ghastly outrage known to history as the "Boyd" massacre.

It had been proposed by the merchants of Sydney about this time to form a New Zealand Company in New South Wales, and the preliminary arrangements had been completed before tidings of the massacre came to Port Jackson; but when the tragedy was made known the idea was abandoned, and the catechists for the New Zealand Mission proceeded to Parramatta to wait until the public indignation had subsided. Meanwhile Mr. Kendall came to join the mission, but he also was sent to Parramatta with his wife and family, until continued peace on the New Zealand coast begat renewed confidence. During the time of the disorder in the mother colony, brought about by the quarrels of Governor Bligh with the officers of the New South Wales Corps, a disastrous license appears to have been taken by the shipmasters trading from Port Jackson to New Zealand, which provoked reprisals on the part of the natives, entailing some loss of life.

In the year 1814 Governor Macquarie gave Mr. Marsden leave of absence to go to New Zealand to establish his mission, provided the natives on the east coast of the North Island were reported to be in a peaceful condition. To obtain the necessary information Mr. Marsden despatched the brig "Active" to the Bay of Islands, under the command of Captain Peter Dillon, who subsequently became celebrated for his discovery of the relics of La Perouse and his expedition on the island of Vanikoro. Mr. Kendall accompanied the brig, and several native chiefs returned in her to strengthen the chances of Mr. Marsden's visit. On the Governor's being satisfied with the report, the chaplain departed on his three months' leave of absence. He was accompanied by the catechists, Messrs. King, Hall, and Kendall, and a Mr. Nicholas. Mr. Marsden opened his mission at the Bay of Islands on Christmas

Day, 1814. The natives had made rude preparations for the event by enclosing half an acre with a fence, erecting a pulpit and reading desk in the centre, covered with native mats dyed black, and using as seats for the Europeans some bottoms of old canoes, which were placed on each side of the pulpit. A flagstaff was erected on the highest hill. After the celebration of the service, which was heard with much decorum and attention, Mr. Marsden preached from the passage in St. Luke, "Behold I bring you glad tidings of great joy." The natives, of course, knew not what he said, so that the sermon was, perhaps, more picturesque in its *entourage* than edifying in its effects. At its conclusion the Maoris indulged in their war-dance, and thus Christianity and cannibalism came into contact. New Zealand was practically proclaimed a dependency of New South Wales by the appointment of Missionary Kendall as Resident Magistrate at the mission station.

After visiting the Thames, Mr. Marsden returned to New South Wales, leaving the catechists at the Bay of Islands. He did not again visit the mission until 1819, when an ordained clergyman, the Rev. S. Butler, was appointed to take charge of the station. The mission brig, the "Active," which had been purchased by Mr. Marsden in 1814, was, however, kept running between Fort Jackson and the Bay of Islands, so that the catechists were in constant communication with head-quarters, while the whale ships frequenting the Bay gave some measure of protection by their presence. Acting under instructions from Governor Macquarie, Marsden explored a considerable portion of the northern part of New Zealand. He appears to have been the first European who published a description of the Hokianga River, which had been made known to Governor King from the map of the North Island drawn by the Maoris, Tuki and Huru, on the floor of the Governor's house at Norfolk Island. In the year following he visited New Zealand in H.M. storeship the "Dromedary," which was sent thither to procure spars for topmasts for the Navy. He remained at North Island for several months, exploring the Thames, Tamaki, and Kaipara districts.

The progress of the missionaries in their task of Christianising and civilising the Maoris was at first painfully slow, but it became rapid and general during the ten years preceding the annexation of the islands by the British Crown in 1840.

Marsden had a veritable genius for administration, and he thoroughly believed in the saving efficacy of social organisation. He wished every convert to learn a trade. He himself had been a blacksmith before becoming a chaplain, and his helpers were wielders of tools of iron or steel as well as of the arms of the spirit. He sought to save men's souls by teaching them to dig and delve and to be cunning, in the use of saw and hammer. He saw clearly enough that the future of the Maori, temporal and spiritual, lay in the annexation by the British Crown, and to this end he laboured. His ghostly comfort was material

enough to be weighed and measured, but he was the man for the situation, and he knew it with the stolid obstinacy characteristic of his Yorkshire blood. Naturally perhaps, but nevertheless unfortunately, some of his coadjutors thought otherwise, and sowed seeds of dissension concerning things immaterial to Marsden's organised scheme of temporal salvation. The Maoris, with their keen imagination, were quick to seize upon quibbles, and sects sprang up as quickly as mushrooms. Rival tribes made it a point of honour to select varying and opposing beliefs, and in contemning the adherents of churches other than their own.

The first difficulty that confronted the missionaries was a translation of the Bible. To obtain this they enlisted the services of a notable convert, Hongi, and another Maori chief. Mr. Kendall went to England, accompanied by Hongi: their views, however, were very opposite. The preacher wanted aid to put the Maori language into written form, writing being a mode of communicating thought unknown to the native race. Hongi wanted guns and ammunition to enable him to wreak his vengeance on his household enemies; but no word of this escaped him. In the end each got what he wished for. Mr. Kendall obtained the assistance of Professor Lee, who, with Hongi's help, constructed a grammar and vocabulary of the New Zealand language sufficient for the translation projected. On his arrival in England, Hongi was lionised. George the Fourth gave him a suit of armour, and various admirers presented him with guns and other gifts. On leaving England the Government provided him with a passage to Sydney on his way home. On reaching Sydney Hongi took up his residence with his friend, Mr. Marsden, and there met Hinaki, a neighbouring chief, on a visit to the venerable missionary. It appears that while Hongi was in England one of his Ngapuhi tribesmen had been killed by some connections of Hinaki's people. Here, then, was an immediate opportunity of trying his guns, and testing the invulnerability of his royal suit of armour. Hinaki sued for peace, but Hongi wanted war, and intended to have it. To this end he disposed of all his other presents and converted the proceeds into more muskets and more ammunition. Although Hongi and Hinaki sat at the same table, slept under the same roof, and travelled back to New Zealand on the same ship, none of Hinaki's arguments could induce the blood-lustful chief to abandon his design of having a practical test of the new instruments of warfare which he had procured in England. There was, therefore, nothing left for Hinaki to do but collect his followers on his return home and make the boldest showing possible. When the battle was fought he maintained a brave resistance for some time, but at length the new weapons prevailed, and Hinaki, together with a thousand of his followers, were slain, while numbers were taken captive. Of the slain 300 were cooked and eaten on the battle-field by the victors. Hongi next invaded the territory of the tribes round Mercury Bay, and then proceeded to Kaipara where he made a great

slaughter. In 1822 he again visited the Thames and the Waikato, and ascended the Waipa, where he took several large "pas," and proceeded thence almost to the Wanganui, slaying in this expedition about 1,500 of his enemies. His name spread terror wherever he went, and when remonstrated with by the missionaries he declared his intention of subjugating the whole island. In 1823 he won a victory at Rotorua, when many were slain. In 1827 he declared war against Tara, and the tribe which had been concerned in the "Boyd" massacre, and during the early part of the year his followers plundered and burnt the Wesleyan Missionary Station at Whangaroa. The life of this remarkable savage terminated in March, 1828, from injuries received by a bullet-wound in the preceding year. It has been computed that about 10,000 persons were killed in Hongi's various raids, and some writers have not hesitated to double this estimate.

In the year 1825 the first New Zealand Association was formed in London. It was composed of men of influence, among whom was Lord Durham. A vessel was fitted out for the purpose of exploring the country and conveying settlers to New Zealand. The command of the ship, called the "Rosanna," was given to Captain James Herd, a seaman well acquainted with the New Zealand coast. No later than the year 1822 he had been in the Hokianga River in the ship "Providence," when he witnessed a deed of conveyance of land from native chiefs to one Charles, Baron de Thierry, who, in his absence, was represented by Mr. Kendall. With the exception of Marsden, all the early missionaries seemed determined to do all they could to deprive Great Britain of her sovereignty over the islands. Captain Herd bought two islands in the Hauraki Gulf, and a strip of land at Hokianga. The "Rosanna" arrived in Hauraki Gulf in 1826, reached the Bay of Islands on the 26th October of the same year, and proceeded thence to Hokianga, where a record of this early attempt at colonisation is still preserved in the designation of Herd's Point. A war-dance at one of the places visited by the "Rosanna" was said to have terrified the immigrants, who insisted upon being carried back to England, a stipulation having been made between them and the company before leaving the port of departure, that they should be reconveyed to England if they disliked remaining in New Zealand; and of all the intending settlers, some sixty in number, only four preferred to remain. The "Rosanna" went to Sydney early in the year 1827, where the stores of the expedition were sold by public auction, and Captain Herd, and those of the party who felt disposed to do so, sailed for England. The cost of this venture is said to have been £20,000.

From 1820 to 1830 was a time far surpassing in bloodshed and ruin anything witnessed in the islands before or since—a result of horror due to the fact that the Maoris had thoroughly learnt the lesson instilled into their minds by the bloody victories of Hongi, and not a "brave" in the North Island but possessed his fire-lock. During the decade between 1830 and 1840, however, New Zealand gradually drifted

into a new phase of existence, and began to respond to the dominance of the white man. In England more than one influential believer in the future of Australasia had long been keenly watching the fortunes of New Zealand, and Great Britain was soon to learn that these islands were not indifferent to France also. In 1829 a deputation waited on the Duke of Wellington, then Prime Minister, to urge that New Zealand should be acquired and settled. His Grace, interestedly advised, flatly refused to think of any such thing. It was then that he made the historic remark that, "supposing New Zealand to be as valuable an acquisition to the Crown as the deputation wished to make out, Great Britain had already colonies enough." It is noteworthy that the capital of New Zealand is named after the great man whose sole connection with the colony was a flat refusal to include it in the Empire. The singular indifference of English statesmen to the great possibilities of New Zealand is now a matter for marvel. The truth is, that the missionaries stood in the way of annexation, and they were listened to. They represented the one element of self-sacrifice in a community of greed and lust; but they were, after all, only human. They had tasted of the sweets of power, and represented all the vague majesty of British authority, and they were loth to lose pride of place and privilege—and annexation meant nothing less to them. By a singular obtuseness the Governors of New South Wales gradually relaxed their supervision of New Zealand as a dependency of the mother colony—a sin against patriotism which the governing missionaries in North Island did their utmost to encourage—and "No Man's Land" was rapidly becoming British only by virtue of the nationality of those who exploited it. The white inhabitants of New Zealand comprised at this time four classes—first, the missionaries and their immediate dependents; second, the "Pakeha Maoris" or de-civilised whites who had thrown in their lives and their lots with the native race; third, the whalers and sealers of the South Seas—mere birds of pleasure and passage; and fourth, the traders and others settled at the Bay of Islands. In the last-named beautiful inlet had been founded a marine Alsatia, a Bohemia of villainous license, known as "Kororareka" (now Russell), where, on occasion, as many as a thousand whites indulged in unbridled and brutalising debauchery, no fewer than thirty-five large whaling ships at a time lying off its beach in the Bay. Matters, indeed, had reached such a pitch that the better-disposed of the inhabitants formed themselves into a vigilance committee, each member of which attended the meetings armed with musket and cutlass.

In 1830, so horrible had become the outrages of the traffic in preserved and tattooed human heads, that Governor Darling prohibited the commerce, and, inferentially, the secret murders due to it, by attaching a penalty of £40, coupled with exposure of the name of the trader who should engage in it. The missionaries, utterly powerless to stem or turn this gathering flood of vice and violence, were moved in 1831 to induce the various chiefs of the neighbourhood to petition the

British Government for some protection and repressive aid ; and it was high time, as the annals of the period show, though on rare occasions constituted lawlessness could be enlisted in upholding constituted authority, yet, even then, at the expense of the extinction of every sentiment of pity or mercy. Thus, a Sydney vessel, having eighty convicts on board, anchored in the Bay of Islands, when it transpired that the outlaws had overpowered their guard, and, seizing the craft, managed to navigate her to New Zealand. On their arrival, an old trader named Duke, with the assistance of a number of Maoris whom he had enlisted in his service, immediately boarded the vessel, fought and conquered the felon barrators, and took them back to Sydney, where nine were duly hanged for their offence. A type of the class of ruffians, the most infamous of all, who frequented New Zealand waters at this period was a trader named Stewart. This fiend in human shape formed a most bloodthirsty compact with a Maori chief named Te Rauparaha, famed alike for craft and cruelty. The chief's father had been slain in an incidental fray by the Maoris of Kaiapoi in the South Island, and Te Rauparaha burned to avenge his death. When Stewart arrived in the "Elizabeth," Te Rauparaha hired the vessel to take him, on payment of 30 tons of flax, to Akaroa, which was inhabited by natives of the same tribe as those who had slain his father. The local chief and his friends visited the vessel on Stewart's assurance that he had no hostile Maoris on board, Te Rauparaha and his men concealing themselves in the hold. Then a scene of frightful carnage ensued. The chief and his "rangatiras" were seized, the men warriors and common people butchered, while the remainder were reserved for a worse fate. Te Rauparaha and his followers, flushed with success, landed and fired the village, murdering all they could lay hands upon. Some of the bodies were taken on board and, with Stewart's acquiescence, cooked in the brig's coppers. On returning to Cook's Straits, Te Rauparaha and his men landed, but Stewart retained the captive chief on board the "Elizabeth" until the 30 tons of flax were furnished. When this was received he handed over the chief and his wife, who were tortured to death. Stewart was afterwards arrested in Sydney and thrown into prison, but in spite of Governor Darling's efforts, the prosecution failed through lack of evidence.

It was to put down such ruffians as Stewart and his fellows that the missionaries used their influence with the Maori chiefs to induce them to apply to King William the Fourth for British protection ; though it must not be thought that all New Zealand was one Kororareka, for the mission extended its influence, not only along the coasts, but in many districts of the interior, bringing a large minority of the natives into an outward adoption of Christianity.

Acting on the appeal of the "Confederated Chiefs of North Island," representations were forwarded to the Imperial authorities from the Governor of New South Wales, suggesting the appointment of a British Resident, and, in 1832, Lord Ripon despatched Mr. James Busby, a

civil engineer of New South Wales, who was then on a visit to England, to fill that position. H.M.S. "Imogene" was employed to carry him to his Residency, where he arrived on the 5th May, 1833, and stationed himself at Waitangi, in the Bay of Islands, a short distance from the Piahia Mission Station, under the official ægis of Sir Richard Bourke, Governor of New South Wales. Busby was paid a salary, and provided with £200 a year to distribute in presents to the native chiefs; but he had no real authority, and was not backed by any force. Instead of seeking to extend the dominion of the British Empire, as might be expected from a British Consul, Busby drew up a federal constitution for the Maori tribes, ambitiously designated "The Confederacy of the Thirteen Northern Chiefs," and asked the Colonial Office to abandon all British claims to New Zealand, and to recognise such "confederacy" as the sovereign power of the State; and, stranger still, the proposal was agreed to in London. In 1835 Mr. Busby suggested that the New Zealanders should have a national flag, enabling vessels built in the colony to possess freedom of trade in British ports; and the proposal being also approved, Captain Lambert, in H.M.S. "Alligator," was sent to the Bay of Islands with three patterns of flags for the chiefs to select from. The flag was chosen accordingly, and saluted as the standard of an independent country. Mr. Busby managed to get the chiefs to accept his constitution, and his national flag was ceremoniously run up; but the hoisting of this piece of bunting formed the first and last act in the federation of Maori tribes under parliamentary institutions. From the Bay of Islands H.M.S. "Alligator" proceeded to the west coast of the North Island to punish the Ngatiruanui tribe, who had behaved with inhumanity to the crew of the barque "Harriett," in April, 1834, and who held captive Mrs. Guard, the wife of the Captain, with her children. On board the "Alligator" was a company of the 50th regiment. Mrs. Guard and her children were released; two villages, crowded with a mixed assemblage of men, women, and children, were cannonaded; the habitations in two "pas" and their accumulated store of provisions were burned, and the head of the principal chief, who had been slain, was cut off and kicked by the triumphant soldiers and marines as a football along the beach. Thus did the enlightened white emulate the brutalities of the uncivilised barbarian. In the year 1837 Governor Bourke recalled Busby, on the ground that his appointment to the consulship at Kororareka had not answered the expectations that had been formed.

In 1837 Captain Hobson was in Sydney in command of H.M.S. "Rattlesnake." A serious war was then raging among the native tribes at the Bay of Islands, and Sir Richard Bourke thought it his duty to request Captain Hobson to proceed thither and protect British interests, and to report on the condition of the country. In the report, which attracted considerable attention, Captain Hobson proposed that factories should be established after the manner of the early trading

companies of the English and the Dutch. When making the recommendation he was probably not aware that the Sydney merchants had, in 1815, made a similar proposal to Governor Macquarie. He also recommended that a treaty should be made with the New Zealand chiefs for the recognition of the factories and for the protection of British subjects and property.

It was also in the year 1837 that the New Zealand Association was formed, Mr. Francis Baring being the chairman. Several of those gentlemen who were in the venture of 1825 to Hokianga, were on the Committee, as well as some of those who were active in colonising South Australia. At their head were John Lambton, Earl of Durham, and Edward Gibbon Wakefield. One of the most prominent members was Sir William Molesworth. The movement towards systematised colonisation had a certain disturbing effect upon the Colonial Office. The fact of the matter was, that the Colonial Office had been foolishly committed to the acknowledgment of the "Confederacy of the Thirteen Chiefs," and did not know precisely how to recover the lost ground. Lord Glenelg was willing to grant the Association a charter of colonisation under certain conditions, provided the consent of the chiefs could be obtained. One of these conditions was objected to by the promoters. Lord Glenelg insisted that a certain amount of capital should be subscribed, and a fixed proportion paid before the Association should assume any authority. Lord Durham said the Association would "neither run any pecuniary risk nor reap any pecuniary advantage," and so the negotiations came to an end. In June, 1838, Mr. Francis Baring obtained leave to bring in a Bill for founding a British Colony in New Zealand, and though the first reading was carried by seventy-four votes to twenty-three, it was thrown out on the second reading by a majority of sixty.

In the meantime the islands were being overrun by speculative "land-sharks,"—clever adventurers who, well surmising an impending change in the condition of affairs in New Zealand, hastened to secure some claim, in many cases vague and shadowy enough, to huge estates all over the country. It is alleged that most of the so-called purchases of native lands were altogether fictitious, or else were imperfect and made for absurdly low prices. By the year 1840 it was estimated that some 20,000,000 acres, or nearly a third of the islands, were supposed to have been "acquired" by the "land sharks." The claims arising out of these dubious transactions brought in due course a plentiful crop of confusion, bitterness, and heart-burning. There was at the time no legally constituted authority to deal with such cases, and armed conflict between the Maori warrior chiefs and the sharpers scheming to possess the estates of the tribes was rapidly becoming imminent. Annexation by Great Britain was the only solution of the difficulty; and it is to the credit of Marsden and his assistant, the Rev. Henry Williams, that they had both come to see this clearly. Moreover, there were rumours of no very pleasant character that the French had

designs upon the islands. The missionaries were now on the horns of a dilemma. They had done their utmost to set up a native nation, independent of Great Britain. With a few exceptions they dreaded annexation; but they dreaded annexation by the French most of all.

The burlesque attempt of the quaint adventurer De Thierry to create a kingdom of his own in the North Island was also a factor in precipitating events. This amusing gentleman had endeavoured to enlist the sympathies of his countrymen and his Government, though apparently with small success. His efforts in this direction, however, served to attract French attention to New Zealand as a desirable possession; so when another knight of fortune, also French, by name Langlois, the captain of a whaling ship, appealed to his countrymen to aid him in exploiting the islands, there was a respectable measure of response. Langlois professed to have bought 300,000 acres of land from the natives of the Banks Peninsula, in the South Island. Owing in part to the exertions of this adventurer, a French syndicate, called "The Nantes-Bordelaise Company," was formed to found a French settlement on the shores of the beautiful inlet of Akaroa Harbour, on the island which Langlois declared he had purchased; and in this colonising association one of the shareholders was Louis Philippe. The formation of the French company, as well as the antics of Baron De Thierry, caused no little uneasiness, and all sorts of vague surmises, as to the nature of the intentions of France.

Some time in the year 1838, a public meeting had been held at Kororareka to consider the best means of preserving life and property in the district, and the Kororareka Association was formed for this purpose. When the news of the proceedings at the township capital of the Bay of Islands reached Great Britain, the Colonial Office awoke to the seriousness of the situation, and saw that further delay might prove fatal to British interests in the islands, and the annexation of New Zealand to the Empire was determined upon. Still the proceedings were of the tardiest. In December, 1838, it was proposed that a British Consul should be appointed to reside in New Zealand, and Sir George Gipps, the Governor of New South Wales, was officially informed of the intention; but it was not until the middle of the next year that the selection of a consular agent was made, and it was determined that "certain parts of the islands of New Zealand should be added to the Colony of New South Wales as a dependency of that Government, and that Captain Hobson, R.N., should proceed thither as British Consul to fill the office of Lieutenant Governor." In June and July the arrangements were gazetted; in August Lord Normanby gave the Consul his instructions; and that official at once prepared to proceed with his family in H.M.S. "Druid" to Port Jackson, where he arrived on the Christmas Eve of 1839.

Captain Hobson's instructions were to establish a form of civil government with the consent of the natives; to treat for the recognition of Her Majesty's authority over the whole or any portion of the

islands ; to induce the chiefs to contract that no lands should in future be sold except to the Crown ; to announce by proclamation that no titles to lands acquired from the natives or the dependency would be recognised except such as were confirmed by a Crown grant ; to arrange for the appointment of a commission to determine what lands held by British subjects had been lawfully acquired ; and to appoint a protector to supervise the interests of the Maori population. Captain Hobson was armed with a dormant commission, authorising him, after annexing New Zealand, to govern it in the name of the Queen. In Sydney a Royal Proclamation was issued, under which New Zealand was included within the political boundary of the Colony of New South Wales. Captain Hobson was to act as Lieutenant-Governor, with the Governor of New South Wales as his superior officer. In H.M.S. "Herald" he left Sydney for the Bay of Islands where he arrived on January 29th, 1840, "and was loyally received by the Alsatians." The history of New Zealand, as a portion of the British Empire, dates from that day.

Captain Hobson was accompanied by a Treasurer, a Collector of Customs, a Police Magistrate, two clerks, a sergeant, and four men of the mounted police of New South Wales. As soon as the "Herald" left Port Jackson Sir George Gipps issued three proclamations, the first, already referred to, extending his government to any territory which had been or might be acquired in sovereignty by Her Majesty within the group of islands in the Pacific Ocean commonly called New Zealand ; the second, appointing Captain Hobson Lieutenant Governor of any territory that might be acquired by Her Majesty ; and the third declaring that Her Majesty would not acknowledge as valid any title to land which either had been or should be thereafter acquired in that country, which was not either derived from or confirmed by a grant made in Her Majesty's name or on her behalf. To the land claimants of Sydney the latter proclamation was especially obnoxious, as the traders there had bought large tracts for speculative purposes. In this connection commissioners were subsequently appointed to revise claims put forward by some individuals to large tracts of land purchased in the islands. A Bill was introduced into the New South Wales Parliament during the session of 1840 for the purpose, when Mr. W. C. Wentworth and Mr. James Busby, late Consul at the Bay of Islands, and some others who had purchased land from several New Zealand chiefs, resisted the inquiry. These persons had purchased land to the amount of 10,000,000 acres in the South Island, and 200,000 acres in the North Island, for which they had paid a small sum in cash, and agreed to the further payment of £100 per annum for life to each of the chiefs that had ceded his territory. The claimants were heard at the Bar of the Legislative Council, both personally and by counsel, in defence of their claims, and in opposition to the Bill. Messrs. Wentworth and Busby were heard personally, the others through their counsel, Mr. W. a'Beckett (afterwards Chief Justice

of Victoria) and Mr. Darvall. The principles upon which the Bill was framed and advocated were :—First, that the savages possessed no other right in the country they inhabited than that of mere occupation until they became civilised enough to put it to some proper use—that of cultivation ; consequently they were incapable of giving legal title of land to any other person ; second, that if a country inhabited by men of this description were afterwards taken possession of by any civilised colonising power, the right of pre-emption existed only in that power ; that British subjects, either as individuals or as bodies, possessed no right to form colonies without the consent of the Crown, and that, in the event of their doing so, they became liable to be ousted by the Crown from their possessions. The Bill was passed, and after the Act became law a number of the claimants, comprising subjects of Great Britain, France, and the United States, resident in New Zealand, protested against the enforcement of the measure, and appealed to their respective Governments against the right of the Governor and Council of New South Wales to enact and enforce such a regulation. The Commission, however, was appointed and assumed the title of a Court of Claims, and its decisions, in most instances, were to the effect that the land to which the claimants were entitled was a mere fraction of the quantity said to be purchased, and some claims were disallowed altogether. The occasion of the introduction of this Bill into the Legislative Council of New South Wales was that in the course of the preceding year it was announced to the colony that a Treasury minute had been made sanctioning an advance from the revenue of New South Wales for the expense of the Government of New Zealand as a dependency of the mother colony with a Lieutenant-Governor, the funds so advanced to be repaid out of the revenue received from the territories ceded from time to time by the native proprietors in accordance with the ordinances of the Governor and Council of the older colony for that purpose enacted.

The persons in England interested in New Zealand colonisation were by no means content to put up with failure to obtain parliamentary sanction to their enterprise as already narrated. After the collapse of the Association in 1837, Edward Gibbon Wakefield had journeyed to Canada with Lord Durham, and returning with his chief to England he immediately formed a New Zealand Land Company, of which Lord Durham was Governor, and Mr. Joseph Somes Deputy Governor. The first paragraph in the prospectus of the Company declared its character, and showed that it was not open to the objection made to the Association. It said :—“This Company has been formed for the purpose of employing capital in the purchase and re-sale of lands in New Zealand, and the promotion of emigration to that country.” The capital was £400,000 in 4,000 shares of £100 each, with a deposit of £10 per share. Rusden remarks, in his history of New Zealand, that “a capital of £100,000 was paid up, and 100,000 acres of land in New Zealand had been sold before a title to one had been acquired. They

(the shareholders who paid money) drew lots for sections unknown of lands which the Company was about to seek."

A preliminary expedition was prepared to sail in April, 1839, in the "Tory," a vessel of 400 tons burthen, with the first body of the Company's emigrants, and letters of introduction to Governors of Colonies were solicited at the Colonial Office. The answer was that the Queen would be advised to take measures to obtain by cession the sovereignty of the islands, and that no pledge could be given for the future recognition on the part of the Crown of any titles to land which the Company might obtain by grant, or by purchase from the natives. Nothing daunted, however, by this rebuff, the "Tory" put to sea on the 12th May, under Colonel William Wakefield, of the Spanish Legion, since, after repeated efforts to obtain the help and sanction of the British Government, the Company had decided to go unauthorised. The destination of the expedition was the southern end of North Island. Two days after the departure of the "Tory" the Company's directors announced to the Government that the Association had been re-formed, and Lord Normanby was told that preparations for a very extensive emigration were in progress in various parts of England and Scotland.

The "Tory," which carried an exploring staff, and a cargo of trade for barter with the Maori chiefs, arrived at Queen Charlotte Sound on the 16th August after a rapid passage, for that time, of ninety-six days. Wakefield spent some time in Cook's Strait on land-purchasing expeditions, and carried on a series of negotiations with the Maori chiefs, which led to extensive purchases of territory. On the last day of September, 1839, he took formal possession of Port Nicholson in the name of the company, and the New Zealand flag was hoisted and duly saluted. Colonel Wakefield reported to the Company that he had purchased a territory of many millions of acres, as large in area as Ireland, extending from 38° to 43° south latitude on the west coast, and from 43° to 44° south latitude on the east coast—in short, nearly the whole of what are now the provincial districts of Wellington and Taranaki; that portion of Canterbury which includes Akaroa; and a large slice of Nelson—in exchange for goods valued at something less than £9,000. His purchase embraced localities where the Company's settlements of Wellington, Nelson, and New Plymouth were subsequently formed. It is probable that Colonel Wakefield believed in the validity of his transactions with the Maori chiefs; but it is certain that the latter, for their part, never had the least notion of selling the greater portion of this immense area, though it is equally probable that such chiefs as Te Rauparaha and Rangihaeata, who were parties to the bargains, knew that Wakefield thought that he was buying the country. Fifty-eight chiefs in all signed the deeds of sale. Moreover, it has been pointed out that even if the Maori chiefs who were concerned in the transaction understood what they were doing, they had no right, under native law and custom, thus to alienate the heritage of their tribes. Had Colonel Wakefield's alleged purchases been upheld by the British authorities, the

Company would have become master of nine-tenths of the lands of no fewer than ten powerful tribes. The truth of the matter is that the interpreter of the Company was one Barrett, who had lived many years in Cook's Strait, sealing and whaling, and who had "picked up" sufficient "pigeon" Maori to make himself understood with reference to the simple needs of a very primitive state of existence, but who was utterly unable to translate complex sentences of legal terms employed in acts of title and conveyance into the New Zealand tongue, which frequently requires the employment of words having several meanings. The deeds of sale were written in English, and their true meaning Barrett was absolutely unable to render into Maori, even if he understood it himself. However, after despatching the "Tory," the directors in England, prematurely presuming on the success of their agent, actually proceeded, as we have seen, to sell land to the value of more than £100,000, and to send out emigrants before they knew that a single acre had been assigned. Towards the end of 1839 the Company's preparations were complete, and the first consignment of its settlers was shipped to Port Nicholson, on the shores of which, on January 22nd, 1840, the town of Wellington was laid out.

But other folk were as busily engaged in colonising schemes as Wakefield and his *confrères* were. Langlois, the French whaler, and the "Nantes-Bordelaise" Company gradually brought their plans to completion. In October, 1839, a vessel named the "Comte de Paris," having on board a number of emigrants, left France for New Zealand, and the French frigate "L'Aube" sailed for the same shores simultaneously. They were, however, destined to arrive at the land of promise just late enough to miss its acquisition by a hair's-breadth.

The Company's first settlement, Wellington, was founded on the 22nd January, 1840. Captain Hobson, R.N., afterwards the first Lieutenant-Governor, landed on the 29th of the same month, empowered, with the consent of the natives, to proclaim the sovereignty of the Queen over the islands of New Zealand, and to assume the Government thereof. Immediately after his arrival, he issued an invitation to all British subjects to meet him at the church at Kororareka the next day, where he read two commissions, one extending the limits of New South Wales, and the second appointing him Lieutenant-Governor over such portions of New Zealand as might thereafter be added to Her Majesty's dominions. Two proclamations were also read, the first announcing that Her Majesty's authority had been asserted over British subjects in New Zealand; and the second that Her Majesty did not deem it expedient to acknowledge as valid any titles to land in New Zealand which were not derived from or confirmed by the Crown. Notices in the native language had been circulated on the Friday previous, stating that Captain Hobson would, on February 5th, hold a meeting of the chiefs for the purpose of explaining to them the Royal Instructions he had received, and of placing before them a copy of a treaty he would submit for their adoption. On February 5th and 6th the chiefs

consulted approved of the treaty of Waitangi, or "Water of Weeping," as it is called on account of the proximity of the falls. Tents and a platform were erected at Waitangi, and the northern chiefs were invited to meet and confer with the Queen's representative. Much to the annoyance of the persons promoting the treaty, Bishop Pompallier appeared in full canonicals to oppose the new departure, and this was looked upon as a signal instance of French machiavellianism and designing subtlety. On the other side, Henry Williams, the ablest of Marsden's lieutenants, threw all his weight into the scale, and acted as translator. Waka Nene, a Ngapuhi chief, ably supported him. A strong minority of the Maoris was emphatically hostile. The officials looked on anxiously. Then it was that Waka Nene, the most influential man of his tribe, threw his "mana" on the side of the Government, and spoke strongly and eloquently for annexation. His speech gained the day, and a treaty was drawn up and signed. By the preamble, Queen Victoria invited the confederated and independent chiefs of New Zealand to concur in the three articles of the Treaty on which was based the title of the Crown to the North Island. It may be thus condensed:—The Queen of England, in regard for the Maori people, desiring to preserve for them their rights as chiefs and the possession of their lands, and also having heard that many of her subjects had settled in New Zealand, and that more were about to follow, to prevent troubles arising between the two races, had thought it right to send William Hobson, a captain in the Royal Navy, to be Governor for all parts of New Zealand then or thereafter ceded to her; to effect which object the following articles of agreement were proposed:—

- i. The chiefs of New Zealand cede to the Queen for ever the right of government over the whole of New Zealand.
- ii. Her Majesty the Queen of England confirms and guarantees to the chiefs and tribes of New Zealand, and to the respective families and individuals thereof, the full, exclusive, and undisturbed possession of their land and estates, forests and fisheries, and other properties which they may collectively and individually possess, so long as it is their wish and desire to retain the same in their possession; but the chiefs of the united tribes, and the individual chiefs, yield to Her Majesty the exclusive right of pre-emption over such lands as the proprietors may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and persons appointed by Her Majesty to treat with them on her behalf.
- iii. In consideration for consent to the Queen's Government, the Queen will protect all the Maori people and give them all the rights and privileges of British subjects.

Under this treaty the natives not merely ceded to the Queen the right to purchase such land as the owners were willing to sell, but they ceded also the "pre-emptive right of selection over all lands"; and the practical interpretation put upon this, and rightly so, by each of the Governors,

with the exception of the incompetent Fitzroy, was that the Queen might have the refusal of all lands the natives were willing to sell, and that if the refusal were given no one else should be allowed to buy; in other words, the treaty of Waitangi made the Government sole trader in all native lands sold directly by the Maori tribes, and absolute intermediary between Maori owners and white purchasers. This developed into one of the chief grievances that culminated in the Maori disaffection of the future.

Nearly fifty chiefs signed the treaty on the spot, and within six months, the list of signatures had swollen to 512. This phenomenal subscription was due to the energetic canvass throughout the tribal territories made both by the missionaries and by the Government. Only one chief of first-class rank and standing refused to sign, so that it may fairly be claimed that the Maori race accepted the treaty of Waitangi. The natives were wise in their day and generation, and the white New Zealanders assert that down to the present time they regard the treaty as the "Magna Charta" of their liberties. This State document was of the utmost importance to them. It made the Queen the supreme authority, and guaranteed full possession to the Maoris of their tribal lands; in short, they were thereby recognised, by the power of which they were a kind of feudatory lords, as owners in fee simple of the whole of the islands. One of the ancient lords of the soil subsequently put the Maori sentiment respecting the treaty into these words: "The shadow passes to the Queen, the substance stays with us."

Simultaneously with the drawing up of the treaty of Waitangi, Governor Hobson announced by proclamation to the white settlers that the Crown would not recognise validity of any titles to land not given under the authority and sanction of the Queen. It is difficult to see what other course the Governor could have taken, but at the same time his treaty and his proclamation were bound to paralyse settlement, to exasperate the entire white population, and plunge the infant Colony into a sea of troubles. Outside the official class, everyone was uneasy and alarmed. All the settlers were either land-owners, land claimants, or would-be land purchasers. Yet they found themselves at one and the same time left without titles to all they possessed, and debarred from the right of buying anything more except from the Crown. The Maoris were a warlike race, and had to be treated with consideration, though—as Mr. Reeves points out—"as a rule civilised nations do not recognise the right of scattered handfuls of barbarians to the ownership of immense tracts of soil, only a fraction of which they cultivate for use." However, partly from policy and partly from missionary zeal, 70,000 Maoris, or thereabout, were given a title, guaranteed by the British Crown, to some 66,000,000 acres of valuable land, and the germ was sown of a plentiful crop of troubles. Yet, after all, it was "Waitangi or nothing." Without such a guarantee as that given under the treaty, the missionaries could never have persuaded the Maori chiefs to yield up their recognised sovereignty,

and the islands might easily have become a prey of the first power to whom Maori chieftain sovereignty was no recognised entity. Of course, it is now seen plainly enough that it would have been only just and statesmanlike if the recognition of native ownership had been accompanied by a vigorous policy of land purchase by the Government. But this was impossible. Captain Hobson was sparsely equipped; he received only £60,000 in three years, and did not himself appear to apprehend any pressing necessity for acquiring from the Maoris a sufficiency of land to meet the needs of the settlers.

On May 21st, 1840, British sovereignty was proclaimed over the islands of New Zealand; and not a moment too soon. Captain Hobson had hardly arranged his quarters when a French corvette came into the Bay of Islands to take possession. Finding the British flag planted in the North Island, the French commander determined to try for the South Island and hoist the tricolor at Akaroa. His design was, however, frustrated. When Governor Hobson (who, whatever may have been his shortcomings as a civil administrator, was an able and quick-witted naval officer) learnt of the kindly intentions of the "Aube" towards the southern half of his vice-royalty, he hurried off the British sloop-of-war "Britomart" to Akaroa, in the Banks Peninsula. The French man-o'-war had become separated from her consort, the emigrant ship, "Comte de Paris," and the British sloop managed to dash into the haven of Akaroa first, but by so little that she was engaged in saluting the British ensign only just as the "Aube" sailed into the harbour. The French commander then abandoned the design of seizing New Zealand as a French possession, and the "Comte de Paris" arriving in port, he landed the nucleus of his pioneer colony as a friendly French settlement under the British Crown. This tiny colony of men and women of French birth remained at Akaroa many years, and numbered at one time some 200 settlers. Most of them have since removed to other French colonies in the Pacific, but during their stay at Akaroa they gave a distinctive character to the culture of the soil, and the neighbourhood is still famous for its production of fine varieties of plum, pear, and peach.

New Zealand was now a British possession and a dependency of New South Wales, and its infant troubles speedily began to put in obnoxious appearance. The white population of New Zealand was composed of antagonistic sections, all vehemently opposed. As we have seen, the missionaries joined forces with the Government; but there were the old "Pakehas," or denationalised whites; the lawless Alsatian skippers, traders, whalers and sealers; and the embittered land claimants, new settlers, and speculative "land-sharks" also to be reckoned with. Added to these, there was the highly respectable and influential New Zealand Land Company, with Lord Durham and Edward Gibbon Wakefield at its head. While the Governor was arranging the details of British supremacy, the directors in London, with an energy quite unchecked by any knowledge of the real

cond'tion of the country, kept on sending out ship-load after ship-load of emigrants to the districts around Cook's Strait. When the proclamations declaring the sovereignty of the Queen were made public, more than a thousand passengers had been landed from the Company's vessels in Port Nicholson. These new arrivals had "formed themselves into a Government, elected a Council, appointed Colonel Wakefield President, and had proceeded to enact laws and appoint magistrates." Although the centre of operations was at Wellington, bodies of the Company's settlers were also planted at Wanganui and New Plymouth on the west coast of the North Island, and at Nelson in the South Island. Lord John Russell was in power, and seems to have viewed the Company as a body which might be made nationally useful in promoting a wholesome emigration from the mother country, and in turning to account the barren lands and wastes of the noble colony the Empire had just acquired. Moreover, the merchants and bankers of London continued to urge the Government in the Company's favour. The association received a Royal Charter of Incorporation, and became a joint body with a capital of £300,000, while in consideration of its surrendering every pretension of right or title to all lands acquired under Colonel Wakefield's negotiations with the natives, the Crown agreed to make over to it 700,000 acres of such lands for the purpose of colonisation. These arrangements were made in England. Meanwhile, as soon as Governor Hobson heard of the proceedings at Port Nicholson, "without one hour's delay," he issued a proclamation refusing recognition of the Company's land purchases, and sent thirty men of the 8th Regiment, who had been drafted from New South Wales, and Lieutenant Smart with five of the mounted police of that colony, under the command of Lieutenant Willoughby Shortland, R.N., with soldiers and marines, to put down all acts of insubordination, and to publish a proclamation declaring the provisional government of the Company illegal and usurping, and calling upon all persons, upon their allegiance to the Queen, to withdraw therefrom, and to "submit to the authorities in New Zealand legally appointed." The settlers informed Lieutenant Shortland that they had formed themselves into a Council only until the Governor was enabled to act. There was a good deal of soreness felt as to the treatment meted out to them; nevertheless, the settlers drew up an address of congratulation, which Colonel Wakefield carried to the Bay of Islands and presented to the Governor.

Under the second article of the Treaty of Waitangi, the Maoris are assured of all their territorial possessions, except such lands as they might dispose of to the Crown. It is a question of equity, however, as to how far this article should have been made retrospective. Many of the settlers in New Zealand were not "land-sharks." They had purchased their holdings in all good faith, and had held them for some years; and this was especially the case in regard to the purchases of the New Zealand Company, which had the quasi-approval of the British Government, and which had introduced hundreds of defenceless

settlers of an admirable type to the colony. Whatever opinion may be entertained concerning this question, the fact remains that the Governor assumed the illegality of the Company's title to the waste lands in Cook's Strait, where it had planted its little settlements, and called on the Company to prove its title good, as against the natives, before a legal tribunal specially constituted for the purpose. Governor Hobson was stricken with paralysis during the height of the important business attending annexation. Upon his partial recovery he pursued his inquiries as to the best site for the seat of government, and finally determined to select Auckland, for various reasons, as set forth to the Secretary of State, viz., on account of its central position, the great facility of internal water communication, the facility and safety of its port, and, finally, the fertility of its soil, which was stated by persons capable of appreciating it, the Governor said, to be exceptionally well-adapted for every agricultural purpose. Previously, however, to his fixing the site, he had been assured, in the address presented to him by the inhabitants of Port Nicholson, that they had anticipated as far as possible the wants of the Government, and set apart the most valuable sections of land for the convenience of the public offices and the personal accommodation of His Excellency, feeling assured that, sooner or later, Wellington would become the metropolis and the seat of Government—a prophecy which has had complete fulfilment in fact.

There is no doubt that the refusal of the Government to make Wellington the capital greatly exasperated the Company's settlers at Port Nicholson; but other causes of friction were not hard to discover. It was the Governor's duty to report to Sir George Gipps that the title of the Company to Port Nicholson itself was disputed by the natives, and thus to manifest to the latter his determination honourably to fulfil the conditions of the treaty which, on behalf of the Crown, he had concluded with them. There is no doubt, however, that things were allowed to drift from bad to worse, instead of meeting with prompt settlement. The Government should have dealt at once with each land question between Maori and Company as it arose. Instead of such a course of procedure, a Commissioner was appointed, who did not arrive until months after the Governor, and his final award was not given for years.

The condition of the country was troubled in the extreme. Colonel Wakefield had purchased the land around Port Nicholson from two tribes, known as the Ngatirankawa and the Ngatiawa. These quarrelled among themselves over the goods paid as the price of the territory, and the former treacherously attacked the latter, severely beating them, with a loss of twenty-seven warriors. There were also endless disputes between the settlers and the Maoris concerning the site of the colony at Port Nicholson. It had, in the first place, been foolishly pitched on a spot in the inner harbour upon which blew all the winds from the sea, its bleak situation rendering it the reverse of habitable. A more sheltered site was found, and the settlement removed to it; and then

began the miserable bickerings, which culminated in outrage and pillage in later time. The Maoris denied absolutely the white man's title to the second location, but the settlers resolutely retained their hold upon this land, now known as Wellington, and New Zealand's metropolis. Native title was, moreover, a curious and complex affair. The New Zealanders were twenty independent, hostile tribes, who had waged furious wars with each other for centuries; who had chased each other from "pa" to "pa," now advancing conquerors, now retreating fugitives. Their title rights to their lands were derived or lost through conquest, through re-conquest, through occupancy, through non-occupancy, through slavery, and through accidental spilling of blood. British recognition of the Maori right to the fee simple of the lands of New Zealand instantly revived among the tribes the bitter memories of those title-giving ferocities which had all but extinguished their race. However, to adjudicate in matters affecting native titles, and all disputes arising therefrom, a tribunal was instituted, called "The New Zealand Land Claims Court," and an able and independent lawyer, Mr. Commissioner Spain was appointed to preside, to hear evidence, and to decide in all cases affecting the legality of the Company's purchases in Cook's Strait. His was a task of vast magnitude. Three-fourths of the witnesses would be excited savages, giving contradictory evidence in an unknown tongue; and when the learned Commissioner had struggled through the maze and pronounced judgment, it was infinitely less probable that the pack of disputants would bow to his decision than that they would proceed to tomahawk each other before his face, and practically renew in Court those slumbering ferocities which the Court's inquiries had aroused. A great deal of angry feeling was evoked by the Governor's well-meant but futile attempts to deal out even-handed justice to all alike, and the Press, both in Wellington and in England, under the influence of the Company, misrepresented much that the Governor did, impugning his motives and assailing his administration.

On receipt of Captain Hobson's despatch detailing his acts and proceedings since his arrival in the Colony, Lord John Russell gave his "entire approbation" to all and sundry that had been done, and stated that he would soon transmit Letters Patent, constituting New Zealand a separate Government, with a commission appointing Captain Hobson the first Governor. A charter for establishing in the Colony of New Zealand a Legislative and Executive Council, and for granting certain powers and authority to the Governor, was signed by the Queen on the 16th November, 1840, and published in the Colony on the 3rd May, 1841. The Letters Patent described the new Colony as consisting of the group of islands lying between 34° 30' and 47° 10' south latitude, and 166° 5' and 179° east longitude; and declared that the three principal islands, known as the Northern, Middle, and Stewart's Islands, should in future be designated as New Ulster, New Munster, and New Leinster.

In the year 1837 the New Zealand Association had pointed out the pressing necessity of a bishop for the colony, and the idea had engaged the attention of the New Zealand Land Company; but early in 1841 the proposal was adopted on a regular basis by the Established Church of England, and a Colonial Bishops' Council was formed. The Rev. George Augustus Selwyn, curate of Windsor, was chosen for the position. He sailed by way of Sydney about the end of the year 1841, landed at Auckland, the seat of his diocese on the 29th May, 1842, and soon exerted an important influence upon the affairs of the young colony.

Governor Hobson, who for some time had been suffering from the effects of a paralytic seizure, died at Auckland on the 10th September, 1842, at the age of forty-nine years, and after ruling New Zealand for a little less than three years.

In the interval between Hobson's death and his successor's arrival, Lieutenant Shortland assumed the duties of Governor, and continued acting until December, 1843, when Captain Fitzroy, of "Beagle" fame, came to the colony to act as the representative of Her Majesty. Acting-Governor Shortland, who had previously officiated as Colonial Secretary, was not a success. He ruled by proclamation, with the aid of laws already enacted, and avoided calling the Legislative Council together.

The unfortunate Wairau massacre, which occurred during Shortland's term of administration, had a marked effect in checking immigration to the colony. In consequence of an attempt to enforce a claim to the possession of certain lands supposed to have been legally acquired, Captain Arthur Wakefield and between twenty and thirty of his followers were killed by the Maoris. The incident did incalculable harm to the British "mana" or prestige, and the ill-advised inaction of Captain Fitzroy, who neglected to avenge the massacre, tended still further to deepen the contempt with which the Maoris regarded British suzerainty.

Immediately on his arrival in New Zealand, Captain Fitzroy embarked on an ocean of blunders. He seems at all times to have acted in a most injudicious manner—so injudicious, indeed, that his administration has been described as "The Valley of Humiliation." He publicly rebuked the magistrates who had signed the warrants for the arrest of Te Rauparaha and Rangihacata, the prime movers in the Wairau massacre. Several of the magistrates thereupon resigned, while the exasperated settlers declared that the Governor must be demented. Captain Fitzroy then visited the chiefs at Waikanae and held a conference with them, the bloodthirsty Te Rauparaha being treated with especial consideration. After hearing the Maori version of the Wairau incident, the Governor announced his decision that Wakefield's party were at fault, since they had no proper title to the lands claimed, and Commissioner Spain had not decided on the ownership. The Maoris were overwhelmed with surprise at this decision, and openly jeered at their complaisant judge,

while the virtue of the British "mana" grew weaker than ever. Commissioner Spain, who had come to the Colony in 1841 to preside at a sort of Land Court, was so disgusted with the Governor's dispensation of justice that he virtually resigned his office, and soon after re-emigrated to Australia.

At this time there were seven coastal centres of settlement, namely, the old Alsatian whaling, sealing and trading depôt at the Bay of Islands, Kororareka, lawless and missionary; Waitemate (Auckland) on the Hauraki Gulf, official and missionary; Wellington, on Port Nicholson, the head-quarters of the New Zealand Land Company; Nelson, the second establishment of the Company, at Blind Bay, on the north coast of the South Island; little Akaroa, on Banks Peninsula, in the South Island, a tiny colony planted by French immigrants; Wanganui, another off-shoot of the Company, on the west coast of the North Island; and New Plymouth, the chief centre of white population in the Taranaki Peninsula, also on the west coast of the North Island. The pioneers of Taranaki were sent out by the New Plymouth Company, a colonising society which had been formed in England, and had bought 50,000 acres of land from the New Zealand Company. Governor Fitzroy's blunder over the land grants of Taranaki was to prove a plentiful source of future trouble and the cause of much bloodshed. The New Zealand Company's agents averred that they had purchased from the Maoris the whole of the Taranaki Peninsula, besides other large areas—some 20,000,000 acres—a territory, in fact, as large as Ireland. Mr. Commissioner Spain insisted that the Company should, like other claimants, prove that the signatories of the deeds of sale "had a right" to convey the lands for sale. In England and New Zealand the Commissioner's method of procedure was vigorously opposed by the Company. Colonel Wakefield submitted to the Court six purchase deeds—those of Port Nicholson, Nelson, Taranaki, Wanganui, Porirua and Manawatu—for which he sought to obtain Crown grants. Before taking evidence in the case as to ownership Commissioner Spain informed Colonel Wakefield that to ask the Government for a Crown grant of land, whether the native title were extinct or not, was, under the treaty of Waitangi, *ultra vires*: in other words, it was asking the Crown to perform that which was utterly beyond its powers, as it could not grant that which it did not possess. After many sessions of the Court, the Commissioner reported that the New Zealand Land Company's agents had bought 282,000 acres—71,900 in the Wellington District, 151,000 in the Nelson, and 60,000 at New Plymouth. In the last-mentioned district (Taranaki) the Company claimed the entire territory. The Commissioner's award cut its claim down to 60,000 acres. But even this award was now disputed, and Captain Fitzroy refused to ratify the Crown official's report, and substituted therefor his own judgment that the Company had correctly purchased no more than 3,506 acres. This decision, which Fitzroy had power under the

law to give, caused much discontent among the settlers, who had been induced to leave prosperous homes under a stable Government to adventure their lives and their fortunes in a distant dependency of the Empire.

The case will appear to have been especially hard, on a calm consideration of the manner in which the lands of Taranaki had been purchased. They had been bought from the Waikatos, who had acquired them by conquest, carrying away the original owners into slavery; but the Waikatos had never taken possession of the soil by genuine occupation. When Colonel Wakefield bought them they were altogether vacant. By-and-bye the original owners of these lands, the men of the Taranaki tribe who had been conquered and made bondsmen by the Waikatos, were manumitted through missionary influence with their enslavers, and returned to their tribal heritage, the ownership of which they proceeded to contest with the Company. The Governor regarded the question with hypersensitive delicacy, and decided, as we have seen, that the enlarged and returned bondsmen were the true owners of the soil. He handed the bulk of the disputed territory back to the manumitted tribesmen, penned up the Company's settlers on a paltry strip of country, and temporarily ruined the settlement in Taranaki. By his act he also encouraged the Maoris to be more aggressive and grasping in their demands, gave a severe check to immigration, and dropped a smouldering ember of resentment and racial hatred which was destined to break forth in a devouring flame of violence and devastate the entire province. One immediate effect of Fitzroy's ill-advised action in the Taranaki matter was the utter paralysis of all attempts at cultivation. Many colonists abandoned New Zealand, and those who remained feared that they might be driven any day from the country. They hoarded the remnants of their little means, and kept themselves in readiness to re-emigrate to Australia, South America, or some island of the South Pacific. It is thought that at this period nothing but the knowledge that they might proceed too far—that they might so disgust the white man that he would go away, never to come back save as a conqueror, and thus deprive them of the trade they had learned to prize, with the accompanying luxuries they had learned to lust for—prevented the Maoris from effacing every vestige of European occupation in the islands.

After destroying the Company, Captain Fitzroy set to work to destroy the authority of the Crown. In the Waitangi Treaty there was a clause claiming for the Queen exclusive right of purchase of native lands. The Maori Chiefs demanded that this clause should be rescinded. Governor Fitzroy assented, and the "land-shark" and the speculator were once more free to exploit the soil of the country. By proclamation, the Governor annulled the one clause of the Treaty which had been passed in the interests of colonisation, and permitted private persons to buy land direct from the tribes on payment to the Government of a royalty of 10s. an acre on the quantity purchased. The

natives had discussed the Treaty before signing it, and had come to the conclusion that while the shadow of authority passed to the Queen, the substance of the land remained with them. It might now appear to some acute Maori that the Government wanted the substance as well as the shadow, for the wily buyer declared that he could afford no more than a bare pittance as purchase money, since the authorities received half-a-sovereign for every acre sold. It is not to be wondered at that only 1,795 acres were acquired by the whites under this condition. The royalty being strenuously opposed by both parties alike, the Governor rushed to the other extreme, and reduced the land-sale tax to a penny an acre. Under the altered law, 90,000 acres were acquired by speculators and others, much of which was in the immediate neighbourhood of Auckland, and should have been bought direct by Government for future public benefit. The truth was, that Fitzroy had no money, and knew not what to do to raise revenue. His desperate efforts at finance were a series of appalling blunders. His inefficient treasury was largely replenished from Customs duties; but whalers and timber vessels no longer resorted to the Bay of Islands as they did in the old lawless days of this ocean Alsatia, and trade had greatly fallen off. Both Europeans and Maoris were deeply incensed, and things were rapidly becoming worse instead of better. In May, 1844, the Governor sanctioned an ordinance to issue debentures, and make them a legal tender. This expedient of issuing paper money was contrary to Royal Instructions, and the ordinance was disallowed. In June of the same year His Excellency amended the ordinance of 1841, levying Customs dues, and imposing a duty of 30 per cent. on guns, gunpowder, and weapons of any description, or "any munition of war." Trade became paralysed, and the Governor, at his last extremity, in order to conciliate the Europeans and Maoris of Kororareka, passed an ordinance in September, 1844, repealing all Customs duties at that port. Loud was the jubilation at the Bay of Islands, but louder still were the groans from every other part of the Colony. A cry at once went up from east and west, from north and south, for a similar concession. In an attempt to please everybody the Governor thereupon abolished all Customs duties everywhere within his little realm; though fully nine-tenths of the whole public revenue of the Colony was derived from them. But revenue had to be obtained. There must be a compensating land tax, a tax on stock, and a tax on the number of rooms in dwellings. But the colonists declared, and quite truly, that they possessed no property. A considerable portion of their property in Cook's Strait had been destroyed by the Governor's own policy. They pleaded "no effects," and Customs duties had soon to be resorted to again. A new law, made in April, 1845, repealed the property tax and other imposts of the preceding year.

These sudden changes in the method of taxation particularly exasperated the Maoris stationed at and around the Bay of Islands, and

resulted in the last and worst of the unhappy Governor's misfortunes and blunders—an unsuccessful war. The Maoris had formed a very poor opinion of the Governor, and in order to give him an idea of their power, they invited him to a great banquet given near Auckland, and danced a war-dance before their guest. Their deliberate intention was to terrify and overawe him; and in this they succeeded, for the Governor went away duly impressed.

The initial trouble which led to the first serious conflict between the British and the Maoris appears to have arisen through the amended ordinances, enacted in June, 1844, which imposed the 30 per cent. duty on guns, gunpowder, or weapons of any description, or any "munition of war." The decline of Kororareka's trade was thereby accelerated. The seat of Government was no longer at the Bay of Islands. This was another cause of Maori discontent. The foreign demand for the staple products, timber, flax, and kauri-gum had fallen off to a very large extent. Money was scarce; tobacco, blankets, and ammunition were difficult to procure; the Government had little money wherewith to purchase native lands; and, worse still, the Maoris settled round the Bay of Islands noted with jealousy the increasing prosperity of their hereditary foes, the tribes of the Waikato, and the Ngatiwhatua, stationed in the vicinity of Auckland. This last circumstance, more than any other, incensed the warlike tribesmen of Ngapuhi, the nation whose relations with the British were older than those of any other Maori clan. Their disaffection came to a head in the person of Hone Heke, who, though not a chief of the first rank, had won himself a recognised position by his marriage with the daughter of the renowned Hongi—a position, moreover, which his courage and intellectual gifts helped him to maintain. One of Hone Heke's first acts of lawlessness was the hewing down of the flagstaff erected on the hill of Maiki, overlooking Kororareka; and he was prompted to this action by some foreign whites of the beach-comber type, who persuaded him that, with the removal of this symbol of British influence, prosperity would return to the Bay of Islands and the chiefs of his race. On the morning of the 8th July, 1844, Hone Heke chopped down the flagstaff, and carried away the signal-balls to his "pa" at Kaikohe. This act of overt rebellion threw the people of Auckland into a state of abject terror. Fortunately, the Ngapuhi tribe at that time was divided in sentiment, and Tamati Waka Nene headed the section that stood by the Government. In response to an urgent request from Captain Fitzroy, a force of 160 men of the 99th Regiment, then stationed at Sydney, was sent over, and, accompanied by a detachment of thirty men of the 9th Regiment, proceeded to Kororareka. Meanwhile the Governor had ascertained that Hone Heke's great grievance was the imposition of the Customs' duties. He thereupon declared the Custom House closed, and Hone Heke then sent an apology for his conduct. Later on, at a conference with the chiefs, Hone Heke repeated his assurances of regret, and by way of fine was ordered to deliver up ten old muskets. Instead of retaining the

muskets, in accordance with Maori custom, the Governor, with stupid magnanimity, returned them, and thereby gained the scorn of every true Maori in New Zealand. It was about this time that the Legislative Council, in order to allay native discontent, made a departure from the spirit of the Treaty of Waitangi by allowing the Maoris to sell their lands direct to the settlers.

The flagstaff had now been re-erected, but prosperity was slow in coming, for the whalers had not yet learnt of the repeal of the duties. Hone Heke considered that the entire abolition of the flagstaff, as the symbol of British authority, was needed to bring about the golden age he looked for, and therefore, early in January, 1845, he again hewed it down. For a third time the post was erected, but now it was sheathed with iron, and great preparations were made to defend it. Meanwhile, Hone Heke summoned to his aid the powerful chief Kawiti and various other heads of the Ngapuhi tribe. Again the flagstaff was hewn down, and in the conflict the whites were worsted, several being killed, while the others took refuge on the vessels in the harbour. Soon afterwards Hone Heke's band destroyed nearly the whole of the settlement, and the British "mana" received a blow even more serious than that inflicted upon it by the Wairau massacre.

The ships sailed for Auckland with the soldiers and refugees on the 13th March, and on their arrival the news of the evacuation and destruction of Kororareka caused a panic. Frantic preparations to resist an attack were made at Auckland, Wellington and Nelson, and urgent appeals were sent to Sydney for fresh troops. The natives began to adopt a more arrogant tone than ever towards the "pakehas," and British rule in New Zealand was only saved by the dissensions which sprang up amongst the Maori chiefs. Potatau Te Whero Whero (afterwards first King of the Maoris), for purposes of his own, sided with the whites, and warned Hone Heke not to attack them. Tamati Waka Nene, who was jealous of the great influence wielded by Hone Heke, resolved to crush him, and prepared to make war against him. Several sharp conflicts had already taken place, when Tamati Waka Nene, hearing that troops had arrived, urged the Government to send them on at once. Hone Heke entrenched himself in a strongly-defended "pa" at Mawhe, while Kawiti ambuscaded on a small knoll on the edge of the forest. It was soon found that the "pa" was too strong to be taken without artillery, and the Commandant, Colonel Hulme, returned to Auckland.

Captain Fitzroy then sent to Sydney for more troops and artillery, and early in June Colonel Despard arrived with 200 men of the 99th Regiment, and Major Wilmot brought some cannon from Hobart. Despard was given the command of the expedition, which arrived in the Bay of Islands in June, 1845, and comprised 630 men and 4 guns. Hone Heke had now taken up a strong position in a "pa" at Ohaeawai, and there he was besieged, the attacking force being in the proportion

of three to one. Early in the siege the Maoris made a sortie, and captured a British ensign, which was hung underneath Hone Heke's flag on the "pa." This so enraged Colonel Despard that he determined to make an attempt at storming the position, and on the 1st July, 1845, a force of 200 men advanced to the attack. The result was disastrous, as the British had to retire with a loss of forty men. The British Commander now attempted to force a capitulation by cutting off supplies from the besieged, and by vigorous cannonading; but on the night of the 10th Hone Heke and his followers silently evacuated their position without the loss of a single man, and, according to the ethics of Maori warfare, claimed the victory. There was nothing further to be done, so the British destroyed the palisading and retired to Waimate and thence to Auckland. This caused the British "mana" still further to decline, while the arrogance of the Maoris was inflamed, and Hone Heke was looked on as a hero by his countrymen.

Governor Fitzroy now made an effort to secure a cessation of hostilities; but Hone Heke was too much inflated by his victories, and by the adulation of his followers, to listen to peace proposals, so that after the lapse of about four months the Governor decided on resuming the war. But meanwhile the news of the affair had reached England, and the authorities peremptorily recalled Governor Fitzroy and appointed Captain George Grey to the position.

Grey was only 33 years of age when he assumed the Governorship of New Zealand, but he had already given proofs of marked ability elsewhere, particularly in his administration of the affairs of South Australia, which colony he had effectually dragged from the mire of insolvency in the short space of four years. He arrived in Auckland on the 14th November, 1845. Grey first set about the task of reducing the warlike Hone Heke to submission, and he entered on the work with characteristic energy and vigour. He issued a proclamation, warning the natives to return to their allegiance by a fixed date, and to observe the Treaty of Waitangi, the provisions of which he pledged himself scrupulously to respect. Hone Heke and Kawiti were offered conditions of peace, but refused any terms involving forfeiture of their tribal lands. The Governor now returned to Auckland and caused to be enacted the "Arms Importation Ordinance," which prohibited the Maoris from acquiring arms, gunpowder, or other munitions of war. This step was opposed by some of the settlers, who feared that the new regulations might irritate the "friendlies" and cause them to throw in their lot with the insurgents. However, subsequent events proved the wisdom of the Governor's action. Colonel Despard was put in command of a force of 1,173 men to attack the stronghold of Kawiti at Ruapeka-peka. The friendly chief Tamati Waka Nene, accompanied by Mohi Tawhai and other prominent "rangatiras," assisted the English with a force of 450 Maoris. A small detachment of these "friendlies" made a feigned attack on Hone Heke at Ikorangi, but the main body of the allied forces besieged

Ruapeka-pekā. The investment of the "pa"—which was a model of scientific defence, and the plans of which, preserved in the Auckland Museum, still excite the admiration of military engineers—began on the 21st December, 1845. As usual, it was found that the stronghold could not be stormed, but the besiegers gained possession of it by an accident, when it was left undefended by the Maoris one Sunday during their celebration of divine service. When the surprised natives discovered the British occupation they attempted to regain possession, but were driven back with loss. Although thirty British were killed and thirty wounded in the struggle, the blow given to Hone Heke's "mana" ended the war, and the insurgents soon dispersed. Hone Heke sued for peace, and the Governor granted a pardon to all concerned in the rebellion, on condition that they returned quietly to their tribal lands. The rebel leader's offence was condoned, and since then there has been no further trouble with the natives whose lands lie north of Auckland—the Ngāpuhi and Ngātiwhātua. Hone Heke died a few years later of consumption, a disease which has proved fatal to many of his compatriots. Kawiti, his confederate general, lived for some years longer, but gave no further trouble. Tamati Waka Nene, the friend of the British, received a pension of £100 a year till his death in 1871, and the Government of New Zealand erected a handsome monument over his remains.

The Governor having quelled the disturbance in the north of the Island, now turned his attention to the southern portion. The murderers of Captain Wakefield and his party were still at large, and several murders of settlers by the Maoris had since been committed. Hoping to nip the insurrection in the bud, Captain Grey hastened southward with a detachment of soldiers, but the rebels under Rangihāeata retreated to a strongly fortified "pa," which it would have been impossible to storm. Leaving a garrison to guard the settlers, Grey withdrew, but shortly afterwards the Maoris defeated a party of soldiers under Lieutenant Page, of whom six were killed and four wounded. A detachment of the 99th Regiment was also attacked and suffered heavy loss, several murders were committed by the blood-lustful natives, and a regular panic ensued amongst the colonists in the Wellington district. Rangihāeata meanwhile never gave the troops an opportunity of a decisive engagement, but always fell back when they appeared in strength. Captain Grey now determined on a bold stroke. From information secretly received he had come to the conclusion that Te Rauparaha was in league with the rebels, and he resolved on the capture of that notorious chief. He therefore proceeded to Porirua, and, surrounding his residence by night, caught him and his perfidious companions, and kept them as prisoners on board H.M.S. "Calliope." The Maoris were astounded at the news, and Captain Grey's "mana" was immensely strengthened. Rangihāeata evacuated his "pa" at Pahautanui and retreated up the Horokiwi Valley. Eventually, his followers dispersed, and the rebellion came to an end.

In May, 1846, the great Maori chieftain, Te Heu Heu, the only one of the great chiefs of the North Island who refused to sign the Treaty of Waitangi, was buried alive, with fifty-four of his adherents, in a land-slip at Taupo.

At this time matters were in a peaceful condition, when another disturbance broke out at Wanganui, where most of the disaffected Maoris had gathered after the dispersal of the Rangihaeata and Te Rauparaha faction. On the 16th April, 1847, a midshipman belonging to H.M.S. "Calliope" accidentally shot a Maori "rangatira" through the cheek. Maori custom demanded revenge, and two days afterwards the house of a settler named Gilfillan, 6 miles from Wanganui, was raided, and his wife and four children were slaughtered. The assailants were captured by the "friendlies" and delivered up to justice and four were executed after trial by court-martial. War immediately broke out, and on the 19th May 600 hostile Maoris swooped down on the settlement. Their attack was bravely resisted, and after pillaging the town the assailants retired to a position about 3 miles distant. Meanwhile the Governor received news of the position of affairs, and reinforcements were despatched to the scene. After a few indecisive struggles the natives abandoned the campaign, naively saying, "We cannot remain any longer; we must go and plant our potatoes."

During the troublous period, from the sacking of Kororareka to the conclusion of hostilities at Wanganui, close upon a million of money was expended, while the casualties comprised eighty-five soldiers, seamen, and militia killed, and 167 wounded. The colony now entered upon a period of comparative repose, and enjoyed it for about fourteen years.

Immediately on his first arrival at Wanganui, while skirmishing was going on between the forces and the natives, the Governor received certain official despatches, by which he obtained the first intelligence that the British Parliament had bestowed a new Constitution on New Zealand, and that fresh modes of dealing with native lands were to be adopted concurrently with the new institutions. These despatches had already appeared in the *London Gazette*, and contained language relating to the rights of the Maoris to their lands calculated to provoke a breach of the peace between the two races; and it appeared that language similar in tone and meaning had been employed during the debate in Parliament on the new Constitution, and had, moreover, been republished in the English newspapers which arrived in the Colony at the same time as the despatches. Captain Grey regarded it as quite possible, therefore, that the intention to deprive the Maoris of their lands, which appeared in the new line of policy proposed for adoption, would undo all the work of conquest, lead to a great national combination of the whole of the native tribes, and thus bring about a long, destructive, and costly war. He therefore considered it his duty to return the despatches, and the charter that came with them, to the Home Government, in order that the subject might be more fully considered, and also that delay might be obtained in the promulgation and

enforcement of laws which it was to be feared would give rise to serious complications, if not to great national calamities.

The centre of the North Island was occupied by the Waikato, the Ngatinianiapoto, and the Ngaiteraangi nations—three great tribal confederacies, comprising many thousands of armed men. At irregular distances along the western and eastern sea-coasts were situated isolated and practically defenceless European settlements. The Tamaki district and the shores of the Manukau formed the road by which the northern and the southern tribes went to wage war with one another, and the Governor resolved to occupy this highway of warriors, which was much too near the capital to be consistent with the latter's safety. When the settlement of Kororareka had been looted and burnt, the people of Auckland became absolutely panic-stricken at their own town's defenceless condition; and now, peace being insured, the time seemed opportune to provide for the permanent safety of the capital against attack from a southerly direction. To accomplish this, Captain Grey obtained from England a number of discharged soldiers, who were enrolled for seven years' service in New Zealand, and stationed in four settlements around Auckland. Each man had built for him a cottage on an acre of land, and could, on the completion of seven years' service, obtain from the Government 5 acres more. The first detachment of the new force, which became known as the "New Zealand Fencibles," arrived in October, 1847; and in a few months this military colony, with the wives and children of its members, numbered 2,000 persons. This was an admirable piece of forethought on the part of the Governor, and did much towards allaying the fears of the unwarlike section of Auckland's inhabitants.

For his success in setting things generally to rights in New Zealand, Captain George Grey was knighted. On February the 26th, 1848, Lord Grey wrote to his namesake, saying,—“I have very great pleasure in communicating to you that Her Majesty has been pleased to approve of your being a Knight Commander in the Civil Division of the Order of the Bath, for the great ability and success with which you have administered the affairs both of South Australia and of New Zealand.” When the time for his investiture arrived, the new Knight pleased the Maoris immensely by choosing for his esquires the friendly chiefs Tamati Waka Nene and Te Puni; indeed, the Maoris began to regard the “Pakeha Rangatira” with an affection and an esteem that in some instances well-nigh approached idolatry.

On the establishment of tranquillity the Governor undertook the formation of roads, useful alike in peace or in war, and employed the natives upon their construction. He also settled, as far as possible, all outstanding law claims. Nor did the moral and physical welfare of the Maoris escape his attention. He saw to the establishment of schools for their children, and advised them even on matters pertaining to their health.

Having chastised and educated the Maoris, Sir George turned his attention to the great question of colonisation. During his administration,

the whole of the South (or as it is unnecessarily and officially called, the Middle) Island, and several valuable districts in the North Island, were purchased from the tribes by Messrs. McLean, Mantell, and other officers of the Crown, and thrown open for settlement. Many of the natives were employed in public works, such as road-making, barrack-building, and the rough work of engineering; others were enrolled as policemen; and several "rangatiras" were appointed magistrates to try cases between their own countrymen. The payments the Maoris received for land were frequently made in instalments of stock, and every encouragement was given them in the pursuit of industry and peace. Hospitals were erected for them, and the Governor strove to instil into their minds the principles of sanitation. Under these changed conditions, immigration began slowly to revive. The Company's settlements at Wellington, Wanganui, New Plymouth, and Nelson, which had been in a drooping condition, now began to expand. Otago was settled in 1848; or rather, a commencement of the work of colonisation in that district was made in the month of March in the year named, by the arrival at Port Chalmers of two emigrant ships, sent out by the Otago Association for the foundation of a settlement, by persons belonging to, or in sympathy with, the Free Church of Scotland. In 1849, the "Canterbury Pilgrims," as they are facetiously called, made preparations for their Utopian descent upon the shores of the South Island. In that year was formed in England "The Canterbury Association for Founding a Settlement in New Zealand." On the 16th December, 1850, the first emigrant ship dispatched by the Association arrived at Port Cooper, and the work of opening up the adjoining country was set about in a systematic fashion, the intention of the promoters being to establish a settlement complete in itself, and composed entirely of members of the then United Church of England and Ireland. The sites for the settlements of Otago and Canterbury were secured by Governor Grey, who was present at Lyttelton Harbour to receive the immigrants when they landed.

The period was one mainly of peace and preparation; but there were, nevertheless, excursions and alarms, though they generally resulted in a resort to the ordinary process of the civil law; but both trouble and danger had to be incurred in order to bring the Maoris into line, and induce them to submit their customs and traditions to British ideas of right and legal usage.

In the month of July, 1850, the New Zealand Land Company gave up its charter of incorporation to the Crown. No clear statement of its financial affairs appears ever to have been published. It is stated by its enemies to have received nearly a million of money, all of which was spent save some £30,000 sterling, and to have been indebted, both to its shareholders and the Crown, at the time of relinquishing business, to the extent of about £500,000 sterling. Nevertheless, Crown and colonists were alike indebted to the Company. For the first, it had preserved New Zealand from becoming a penal settlement of France;

the interests of the second it had safeguarded, at a loss both of life and money, from the ill effects of the missionary policy and the rapacity of the protected Maoris. However, the sum of £236,000, owing to the Government by the Company, was cancelled, and another amount of £268,370 was made a charge on the lands of the Colony.

In the year 1851-2, the Australian gold discoveries took place, and gave a marked impetus to trade, agriculture, and every branch of industry in New Zealand; though they also had the effect of drawing from the islands a certain portion of the settlers, who were impatient of the slow methods of making a fortune offered by culture of the soil, and who hastened to the continent to participate in the realisation of the Aladdin's dream which was luring with equal potency the adventurers of civilised Europe, and of uncivilised Asia.

In the year 1852 a representative Constitution was granted New Zealand under the Imperial Act, 15 and 16 Vict. c. 72, framed by Sir John Pakington, the Colonial Secretary, who was mainly guided in his task by the recommendations and suggestions of Sir George Grey. Under the measure, six provinces were created, namely Auckland, Wellington, Nelson, Canterbury, Otago, and Taranaki, the Governor defining their boundaries.

The mention of Otago and Canterbury as provincial districts so early, as defined in the Constitution Act, might lead to the supposition that they were already of political consequence. This, however, was not so. In marking their boundaries Sir George Grey was engaged more in providing for future expansion than for meeting present needs. The first Otago pioneers landed at Port Chalmers on the 22nd March, 1848, from the "John Wickliffe." A second emigrant ship, the "Philip Lang," arrived on the 15th April following. The immigrants who arrived in these vessels comprised a colony of Scotch Presbyterians, their leader being Captain Cargill, a Peninsular veteran, and a descendant of Donald Cargill. The town of Invercargill still preserves the name of the founder of Dunedin. It is noteworthy that in 1898 Otago celebrated her jubilee, and that Captain Cargill's son was then Dunedin's mayor. For years, however, the progress of the new settlement was slow, and it took the colonists a long time to win their way through to the more fertile country which lay beyond the rugged hills that fronted the sea. The newcomers were intensely Scotch, but later the character of the settlement changed, though slowly. The Scotch element did not disappear, even in the wave of gold seekers that swept over the island in 1861; and it has not disappeared yet, although it is much modified. The first pioneers, or "old identities," are, however, becoming rarer with every year, and some aspects of Dunedin are almost cosmopolitan.

Very different from Otago was the sister settlement, Canterbury—the most conservative attempt at colonisation ever recorded in the British annals. The settlement of Canterbury was intended to be an oversea paradise for aristocratic Anglicanism, and owed its existence to the late Lord Lyttelton. The price of land in the Canterbury block

was put down at £3 per acre; of this sum, £1 was to go to the support of the Church and the advancement of education, and £2 was to be spent in the work of developing the settlement. The idea of the "Canterbury Pilgrims" was that of the transplanting to New Zealand of rural England as it then was, with all its social gradations, from an earl and a bishop on the top to a sublimated English labourer on the bottom. This vision of the impossible would not materialise, though every effort was put forth to make it do so. The name of the capital of the province is borrowed from an ancient seat of ecclesiastical learning. The very streets in the Old-World-flavoured city had given them the names of Anglican dioceses throughout the world; but the earl and the bishop liked not the hardships of pioneering, and quickly turned their backs on the facts that confronted a young country which had to deal at first hand with nature. Nevertheless the settlement thrived and grew apace; though not in the way its founders had intended. The features of the South Island in these early years were endowed churches, great pastoral leasehold properties, wealthy territorial magnates, and the absence of a Maori question.

The Governor was sharply attacked for his administration of affairs, and the colonists were especially incensed with him for his action in shelving the Constitution devised for them by Earl Grey. Nevertheless he adhered to the course he had marked out for himself, and, notwithstanding the bickerings and onslaughts stuck steadily to his work and bought land. He acquired the whole of the South Island, and managed to lay his hands upon millions of acres in the North Island. Then came the question, should it be sold or leased to the settlers? Up to the year 1852 the colonists everywhere except in the north dealt with the New Zealand Company, and not with the Crown; but now the Company was no longer—it had disposed of its interests to the Crown for all futurity. Again, the Governor brought odium upon himself, by insisting upon the abolition of the Church endowment system; and altogether his relations with the white population over which he ruled were extremely unhappy at this period. Grey, however, made a blunder in the framing of his Land Regulations in 1853. Under this code the price of land was reduced to 10s. per acre; but no limitations were put upon the area any one person could acquire; consequently the island soon presented a spectacle of ducal estates and royal forests—immense areas, cheaply purchased by wealth, and locked up against colonisation. Grey probably did not foresee this result of his code, but it was destined to have lasting and mischievous effects on the future of the Colony. Nevertheless, Grey's wise and steadfast rule in other respects brought prosperity to the country, and he left it in profound peace. The European population, which numbered 12,774 in 1845, had increased in 1853 to 30,678. The revenue in 1845 was £12,899; in 1853 it amounted to £147,820. The Governor left New Zealand on the last day of the year 1853, after a rule of eight years. He was only 33 years of age when he undertook to restore

peace and order to a country sunk in the mire of financial difficulty and vainly waging an unsuccessful war: when he left that country, his task was fairly and honestly completed, though at the expense of his popularity among his own countrymen.

Lieutenant-Colonel Wynyard, Commander of the Forces, became administrator of the government on Sir George Grey's departure, and brought the New Zealand Constitution into operation. Colonel Wynyard's rule of nearly two years occupied a period of quiet progress, though at one time something like a Maori rising was threatened. This was brought about by the discontent caused by the alleged inadequate punishment of a man named Huntley, who had struck dead a native woman in the town of Auckland. The jury brought in a verdict of manslaughter; but the dead woman's kinsmen clamoured for the life of the slayer, on the old reckoning of blood for the shedding of blood. However, the authorities were inflexible, and the native feeling gradually subsided. During the following year a more emphatic demonstration, occasioned by a somewhat similar crime, was ended only by the execution of the criminal. A settler named Marsden had killed a Maori woman while he was suffering from an attack of *delirium tremens*, and the prisoner was convicted on trial and formally sentenced to death. There was an unusual delay in the carrying out of the extreme penalty of the law, and this gave rise among the natives to a report that the authorities held the life of a Maori in less esteem than that of a white man. Just about this time the native mind became further inflamed by the murder of another Maori by a drunken settler, and 300 men belonging to the tribe of the woman murdered by Marsden made a demonstration, and threatened to cut down the flagstaff from which floated the British ensign. In February, 1856, Marsden was hanged, and the Maori sense of justice satisfied.

It is claimed for the new Constitution, which was mainly the work of Sir George Grey, that it proved, by its having worked without alteration, and for the most part exceedingly well for twenty-two years, that it was peculiarly adapted to the needs of the colony at that time. This is, however, a matter upon which critics of the Colony's political history have declined to agree. Briefly stated, the following are the leading characteristics of its machinery:—A Central Parliament, consisting of two Chambers, and side by side with it six Provincial Councils (one Chamber); over the Parliament, a Viceroy, ruling through Ministers; over each Provincial Council, a Superintendent, elected, like the Council, by the people of his Province; each Superintendent to have a small executive of officials, who were themselves to be Councillors—a species of Provincial Cabinet; the Central Parliament or General Assembly to have an Upper House, called the Legislative Council, to be elected (in Sir George Grey's original draft of the Constitution) by the Provincial Councils. At the last-mentioned provision the Colonial Office demurred, and substituted nomination by the Crown. If the original proposal had been carried into effect,

New Zealand's Senate would have been powerful enough absolutely to eclipse the Lower House. The latter was to be elective, on a liberal though not universal franchise. Grey did not set his own machinery in motion. He called into being the Provincial Council, and left the summoning of the General Assembly to his successor. The first Parliament of New Zealand was summoned by proclamation, dated January 15th, 1854, to meet upon the Queen's Birthday following. Mr. Charles Clifford, of Wellington, was elected Speaker of the Lower House, and Mr. William Swainson, the Attorney-General, was appointed President of the Council. No sooner had the General Assembly met than a difficulty arose: there was no provision made in the Constitution Act for ministerial responsibility, the measure having left it open for the Colony to select the form of its Executive Government; nor had the Colonial Office sent the Governor instructions on the subject. The offices of Colonial Secretary, Treasurer, and Attorney-General were held directly from the Crown, and their holders formed (and were determined to form), with the Governor, the Executive of the Colony. Governor Wynyard took refuge from his difficulty concerning ministerial responsibility by inviting to the Executive Council, Messrs. James Edward Fitzgerald, Henry Sewell, and Frederick Aloysius Weld—all influential members of the House of Representatives. James Edward Fitzgerald was the Colony's first Premier, and on all sides it is agreed that he was entirely unfitted to cope with the peculiar difficulties attending the introduction of Responsible Government. At all events, the arrangement introduced by the Governor refused to work with even a semblance of smoothness. Within a few weeks Fitzgerald was at loggerheads with the permanent officials of the Cabinet, and he and the two other popular Ministers resigned. They were succeeded by Mr. Thomas Spencer Forsaith (formerly a sub-protector of the native population and Government interpreter) as Premier, with Messrs. Edward Jerningham Wakefield, William T. L. Travers, and James Macandrew as his associates. This combination is known to New Zealand political history as the "Clean Shirt Ministry," because its leader innocently informed Parliament that, when asked by the Acting-Governor to form an administration, he had gone upstairs to put on a clean shirt before presenting himself at Government House. The "Clean Shirt Ministry" lived for exactly two days.

Affairs were now at a deadlock, but a compromise was at length arrived at: Colonel Wynyard was to manage, as well as he could, with his Patent Officers until a Bill could be passed and assented to in England establishing Responsible Government, and then the old officials could be pensioned off. More than one Ministry resigned office before the 16th September, on which date the Parliament was prorogued. The address to the Governor, which expressed the willingness of the House to grant supplies to a Government conducted by the old Executive—the compromise agreed upon, pending instructions from England with regard to Ministerial responsibility—was acted upon,

and thus several Bills became law, the most important of which gave the Provincial Councils the management of the waste lands of the several provinces. Next year the General Assembly began business on the 8th August, when the Acting-Governor informed the Parliament that Her Majesty's Ministers had no objection to the establishment of Responsible Government, provided the Colonial Secretary, the Colonial Treasurer, and the Attorney-General were pensioned; and that no enactment was necessary for the initiation of Responsible Government, as the practice rested on usage only.

Notwithstanding Acting-Governor Wynyard's expressed eagerness to introduce Responsible Government, a year passed by before the General Assembly was summoned; and then it transacted merely formal business, as His Excellency had taken upon himself to ordain that there should be a dissolution prior to the assignment of of responsible portfolios. Thus the matter was deferred till the middle of the year 1856, when Colonel Wynyard had left the Colony. During his régime there had been little native trouble, business was brisk, sheep-farming in the South Island was progressing, and New Zealand was growing prosperous through the steady demand for its produce, brought about by the gold discoveries in Australia.

Colonel Thomas Gore Browne, C.B., the next Governor, took up the reins of office on the 6th September, 1855. On the 15th he prorogued Parliament, to enable the people to elect members, from whom responsible ministers could be chosen. The new General Assembly met at Auckland in May, 1856. In the new House of Representatives, Mr. Clifford, of Wellington, was again chosen Speaker. From the 7th May to the 2nd June three Ministries succeeded one another. The first passed a Pension Bill, granting the officers appointed by the Crown two-thirds of their salaries as retiring allowances; and leaving things clear for the exercise of ministerial responsibility. The third, or Stafford Ministry, held office for over five years, and was instrumental in giving a permanent trend to the course of New Zealand's political history. On its first meeting, in 1854, the General Assembly had quickly shown that it was broadly divided into two strongly marked parties—the "Centralists" and the "Provincialists," or those who desired the General Assembly to be paramount in all political matters, and those who were jealous of its power, and desired that both the general and local functions of the Colony should be managed by the Provincial Councils. Edward William Stafford, the organiser of the first stable Ministry, was a "Centralist"; but he held no office himself for some six months after the formation of the Cabinet in June, 1856, assuming the office of Colonial Secretary in the month of November following. Mr. Stafford and three practising lawyers divided the portfolios among them, the others being Messrs. Whittaker, Richmond, and Sewell. Before leaving England, Colonel Browne had had an interview with Lord Elgin, the ex-Governor-General of Canada, who impressed upon the outgoing official the advisableness of absolutely and docilely

following the advice of his responsible Ministers; and this the new Governor intended implicitly to do. But the most troublesome functions of government—the purchase of land and the conduct of all matters specially affecting the natives—were still left to the administration of the Queen's representative. Ministerial responsibility here stopped short. These were affairs of Imperial concern, and, as such, under the direct control of the Viceroy, who was counselled to take the advice of his Cabinet, but not necessarily to follow it. The Native Department remained, therefore, practically a secret service, and on the shoulders of Governor Browne must rest the responsibility of involving the Colony in the disastrous wars that began in 1860, and continued, with intermittent spasms of troubled peace, until 1870.

About the time when the General Assembly first met in Auckland, and the Government of New Zealand was handed over to the white population, the native mind formulated two distinct aspirations: one was the provision of a local form of government for the race; the other was the prevention of further alienation of tribal lands. Both these desires of the Maoris were regarded by the dominant whites as inimical to the welfare and the progress of the country. The natives might have been led, but they could hardly be repressed; and Governor Browne was incompetent to direct the movement which had for goal a sovereign chieftainship over a united Maori nation. The King aspiration was a conundrum to him; and he, unfortunately, essayed its solution at the wrong end. It began to assume meaning and importance shortly after the Governor arrived in the Colony. In native affairs, he at first took a very independent attitude, and assumed a right of personal judgment altogether unjustified by experience. He was the first to discover this; but was unfortunate in his advisers, through whose eyes he soon learned to look at all matters of public policy—native and European. Grey could have diverted the King movement into a useful channel; Browne drove it into a rebellion and a bloody war. As early as 1843, disputes between the settlers of New Plymouth and the natives as to the ownership of certain lands had ended in Governor Fitzroy's deciding that territory acquired by a tribe through conquest did not altogether pass away from the vanquished, but that the latter still retained some claim. As a result of this decision, the original fugitives from Taranaki, dispersed in pre-historic times by the incursions of Te-Whero-Whero and various Waikato chiefs, began to drift back again to their ancestral holdings. Among others came Te Rangitake, or, as he is more commonly called, Wiremu Kingi (William King), chief of the Ngatiawa, with 600 followers from Otaki, to settle down on the lands of their forefathers on the southern bank of the Waitara River, ten miles from New Plymouth. These returned emigrants had a strong disinclination to part with their holdings to the white settlers, who were particularly anxious to purchase them. The native communal ownership also entered into the difficulties that confronted the new Governor. The Taranaki tribes formed an

anti-selling league, and, in order to invest their proceedings with due sanctity, buried a Bible in the ground, and raised over it a cairn of stones to mark the sacred spot. In 1854, a chief named Rawiri Waiaua, who had held himself aloof from this association, on account of his drawing a salary from the Government as an assessor, offered for sale a portion of the Hua block, of which he claimed the ownership. Now this chief was interested, in common with the principal leaguers, in the remainder of the block; and the Government Commissioner urged him to dispose of his entire rights. Waitere Katatore, and the other representatives of the tribe, warned the Commissioner that if he ventured to bring the surveyor's chain upon the land, he would have to come with an armed force, as they were resolved to resist the sale to the death. The Commissioner was, however, insistent; and Rawiri Waiaua, yielding at length against his better judgment, announced his decision to sell his rights. This complaisant part-owner thereupon assembled his fighting men and took the chain upon the land himself. Waitere Katatore appeared on the scene at the head of sixty warriors, and informed Rawiri Waiaua that he had better desist. The latter declined to take the proffered warning, and Katatore commanded his men to fire a volley. The order was carried out, and Rawiri Waiaua and seven of his men were killed, and sixteen wounded. The trouble spread far and wide, panic seized the settlers, and the Government, in the month of August, 1855, sent 450 soldiers of the 58th and 65th regiments, under Major Nugent, to New Plymouth. Governor Grey had then left for England about eight months, and Colonel Wynyard, the officer administering the Government, followed the troops to New Plymouth, accompanied by Tamati Waka Nene, Te Whero-Whero, and Te Puni, all three faithful allies of the British. The Acting-Governor investigated the circumstances of the affair, but declined to avenge the death of Rawiri Waiaua, on the ground that that chief had been killed for offering to sell land to which he possessed no title. A force of 250 soldiers was, however, left at New Plymouth for the protection of the settlement. The inter-tribal war was then resumed by the natives, the Government remaining quiescent. In due course, Waitere Katatore and his half brother were treacherously murdered by a chief named Ihāia (Isaac), who was allowed to go free. Guerilla fighting now continued for about two years. In the encounters that took place, sixty natives were killed and 100 wounded before a truce between the belligerents was made in the month of December, 1856. The Government then recognised that it had made a mistake in not intervening, and the principal chiefs of the North Island were invited by the authorities to a conference with the Governor on native affairs, at Kohimarama, in the neighbourhood of Auckland. About fifty of the head "rangatiras" attended, but as the inaugural address was, in the main, a special argument in support of the sale of land, the Maoris regarded the whole proceedings as a crafty attempt to out-manœuvre them, and more harm than good was done by the meeting. Meanwhile

a movement of the utmost importance was making silent but strong headway among the natives. To weld into a homogeneous whole the tribes leagued together to prevent the sale of native lands, a number of the leading Waikato chiefs, of whom the most celebrated was Tarapipi (Wiremu Tamihana), usually known as William Thompson, determined to elect a king. Drunkenness and its sequent evils were sapping the vitality of the race. The lands of the tribes were slipping from their weakening grasp. Before the war the Maori was alleged to be equal with his European fellow subjects of the Queen. In reality he was looked upon as an inferior and a vanquished alien, and treated with contempt. The most enlightened of the native chiefs, anxious for the salvation of their countrymen, determined to set up a central authority of their own, empowered to arrest some of the evils threatening the continuance of the Maori race. The King movement began to take shape in 1853, when a chief named Matene Te Whiwhi set out for Otaki with several other leading "rangatiras," and visited Taupo and Rotorua to obtain the consent of the more powerful tribes to the election of a sovereign of native blood, and the constitution of some kind of recognised government in the central districts of the North Island, where Europeans had not then settled; but jealousy of his own assumed pretensions defeated the success of Matene Te Whiwhi's mission. The time was, perhaps, not quite ripe, and the "runanga," which met to consider the project, issued the following letter to their countrymen:—"Listen all men! The house of New Zealand is one. The rafters on one side are the Pakeha; those on the other, the Maori; the ridge-pole upon which both rest is God. Let therefore the house be one. That is all!" However, the necessity for some form of central government in the districts inhabited exclusively by the Maoris did not disappear with the enunciation of this oracular utterance; and even the white settlers recognised as much. Indeed, so absolutely was the large and thickly populated Waikato district left to its own devices, that the Rev. Mr. Ashwell, a missionary stationed at Taupiri, stated before a Committee of the new House of Representatives, that during nineteen years prior to the King movement he could not remember more than three or four visits to the territory by any officials; and other districts again had not received even that small meed of attention. In a memorandum dated May 25th, 1861, Governor Browne stated that "some of the most populous districts, such as Hokianga and Kaipara, have no magistrates resident amongst them; and many, such as Taupo, the Ngatiruanui, Taranaki, and the country about the East Cape, have never been visited by an officer of the Government. The residents in these districts have never felt that they are the subjects of the Queen of England, and have little reason to think that the Government of the Colony cares at all about their welfare." Sir George Grey bore somewhat similar testimony. Writing to the Secretary of State, on the 6th December, 1861, he said: "Ten years since, the urgent necessity of introducing simple municipal institutions

among them (the Maoris) was pointed out, and the first step taken to refer their disputes to our courts; but, though various proposals have been made for facilitating a further advance towards these objects, the matter has been practically left nearly where it then was." Briefly stated, the articles of the Treaty of Waitangi had been simply ignored by the British authorities. The measure spoken of by Sir George Grey as a first step towards inducing the natives to refer their disputes to European courts, was an ordinance for appointing Resident Magistrates to exercise jurisdiction in civil cases between white colonists and Maoris in claims where the amount sued for did not exceed the sum of £20 sterling. There were, however, no means provided for enforcing judgment in those cases in which the native was the losing party. For dealing with cases of exclusively native disputes, a number of "rangatiras" were appointed assessors, each party to the suit being at liberty to select one assessor to sit in judgment conjointly with the magistrate. The useful work done by these Courts was extremely limited, and the Government made little effort to improve matters. The cost deterred it, for all the revenues of the colony were needed for the purposes of settlement and white administration. Then, again, the Imperial Government considered that it had done, and was doing, quite enough for the colony, in bearing the expense of the military establishment; and declared that it had no funds to spare to throw away upon the natives. So the policy pursued was the only one possible under the circumstances, namely, that of abstention from interference in all purely Maori concerns. Nevertheless, some attention was paid to the natives by the authorities. A liberal distribution was made of blankets, sugar, flour, and other articles of white "trade," in order to win over and attach to British interests the leading chiefs. This effort at native conciliation has been sufficiently jeered at by the unsympathetic, as "The Flour and Sugar Policy;" yet in the days of its employment it served a by no means useless purpose. Of course, as time went on it became less effective, as the noisiest natives were the recipients of the largest bribes to induce good behaviour. Excessive kindness to any one section of the Maoris irritated its neighbours; and tribal wars became affairs of everyday occurrence. One reflective chief described these quarrels as "a river of blood" flowing through the land. Wiremu Tamihana Tarapipi managed to save his tribe from the utter demoralisation of drunkenness only by ejecting almost every white man living among his people. Even the "Pakehas" who had married Maori women were not exempt from the operation of this regulation, but had to go, and leave their families behind them; and though the chief permitted the settlement of a few mechanics, by whose skill he expected to profit, such as were allowed this privilege had to sign a bond to pay £1 for every native found drunk on their premises. Among the tribes where this precaution was not taken, drunkenness was greatly on the increase

Matene Te Whiwhi had failed to secure the definite acceptance of his proposals in 1853; but the King movement, nevertheless, silently progressed. In May, 1854, another great "runanga" was called together at Manawapou, in the territory of the Ngatiruanui nation. At the place of meeting a council hall was built, 120 feet long and 30 feet wide, with two entrances. This building was called "Taiporohenui," or "The Finishing of the Matter." There a league for the preservation of the native lands, similar to that of Taranaki, was formed, and a tomahawk was passed round to signify that all would agree to put to death any leaguer who should depart from the purpose of the compact. In the year 1856, Te Heu Heu, who had adopted his brother's name on succeeding him in the Taupo chieftancy ten years before, called together another "runanga." The French Standard was hoisted, and several schemes were discussed for the preservation of Maori autonomy. No conclusive decision was, however, arrived at, although it was distinctly proposed that Potatau Te Whero Whero, the great chief of the Waikatos, should be made King. True, he was now broken and enfeebled, but he had once been a famous warrior and a man of might and "mana." The chiefs concerned in the movement disclaimed hostility to Queen Victoria, but they determined to sell no more land. They would not permit the Queen's writ to run beyond their frontier boundary, or boats and steamers to navigate their streams. There was some wild talk also of driving the "Pakehas" into the sea; but this was confined strictly to their own council meetings. Thus, after years of argument, speech-making, negotiation, and discussion, the Maoris were on the eve of taking the final step in the establishment of a native monarchy. And the Government allowed the movement to drift away into vicious channels, instead of controlling it. Serious blunders were made about this time by the authorities; and Wiremu Tamihana, who was still open to conciliation, was effectually estranged by an act of official stupidity.

It is alleged by historians who sympathise with the King movement that the choice of Potatau Te Whero Whero as the Maori monarch was politic, inasmuch as he was not ambitious of the dignity, and was, therefore, unlikely, like Matene Te Whiwhi, to inspire jealousy in the confederating chiefs, and that, moreover, he offered instead to act as arbitrator in land disputes. Wiremu Tamihana, determined to overcome the old chief's scruples, summoned the tribes of the Waikato nation to meet at Rangiriri in the month of April, and instal their King. Governor Browne recognised the political significance of this "runanga," and resolved to attend it. He therefore set out for the Waikato district (the King Country as it was subsequently called) with Mr. (afterwards Sir) Donald McLean, the Native Secretary, and Mr. Richmond, a Member of the Cabinet. He reached Rangiriri at the same time as Te Whero Whero, in whose presence the leading "rangatiras" made speeches to the Governor. They asked for authorised "runangas," a European magistrate, and laws adapted to their circumstances. The Governor replied that he would send a

magistrate to live in the Waikato district for the purpose of making circuit visits to the various native settlements, and, with the aid of the Maori assessors, administering justice. He further promised to have framed a code of laws applicable to the native requirements. The people assembled at the "runanga" cried out "Hurrah," at this assurance, and waved their hats. Potatau Te Whero Whero said that the Governor's words should be his counsel. Colonel Browne then returned to Auckland, hugging the delusion that he had settled the King business effectually. Mr. F. D. Fenton, a well-known solicitor, was sent up as Resident Magistrate for the Waikato and Waipa Districts, and the Governor regarded the affair as ended. In fact, he considered that his offers were a substitute for the proposals of the natives, whereas they regarded His Excellency's action as commendatory and complimentary. They saw nothing contradictory in essence between the declaration of their nationhood under an elective monarch of their own race and the continuance of the Queen's authority in the land, and many of the leading white citizens holding responsible positions in the colony thought similarly. The Governor returned to Auckland, but the "runanga" at Rangiriri was continued. The invited came in fifty canoes, and the conference was inaugurated by the men of the Ngatihaua nation forming four deep in the military fashion, and planting in the centre of a large open space the chosen emblem of Maori sovereignty—a white banner with a red border, bearing as a device two red crosses symbolical of Christianity, and also the inscription, "Potatau, King of New Zealand." About 200 Maoris were present at this ceremony. The Union Jack was hoisted side by side with this new standard, and the speakers emphasised the assurance that the movement for Maori monarchy was in no way a demonstration of disaffection towards England's Queen. Then for several days much talk was indulged in, and the whole party adjourned to Ihumata, a native village on the Manukau, about 8 miles from Auckland, where another "runanga," at which Bishop Selwyn and other clergymen were present, was held. This meeting ended in the acceptance of Potatau Te Whero Whero as King of the new Maori nation, and at the end of the year the recently made monarch abandoned his settlement at Mangare, on the other side of the Manukau River from Onehunga, and went up to live in the Waikato district among his most loyal and fervid subjects. At Ngaruawahia, the capital of "Maoriland," in the month of April, 1858, Te Whero Whero was formally proclaimed King in the presence of about 2,000 people, and saluted as "Potatau the First." It is recorded as a curious fact that his pension continued to be paid up to 31st March, 1860, or within a few months of his death, which took place on the 25th June, 1860, and that even then the Government contributed towards his funeral expenses. In May, 1860, a grand "runanga" was held at Ngaruawahia to complete the establishment of the monarchy. A system of native police, and the nucleus of a standing army were called into being, a Parliament or Council of

Chiefs was summoned, village "runangas" for the administration of justice were instituted, and funds were actually got together for the founding of a native newspaper. After the death of "Potatau the First," his son, Matutaera, was proclaimed King by Wiremu Tamihana, under the title of "Potatau the Second." In after years he adopted the name of Tawhiao, by which he is historically known. For a couple of decades the King movement was destined to form an important factor in native affairs.

Governor Browne had been, in the meantime, guilty of a particularly foolish act. Events were rapidly making for war, and a certain course of procedure on the part of the Government did much to precipitate matters. When Grey came to rule over New Zealand, his first ordinance was one to regulate the importation and sale of arms to the natives. This enactment was virtually repealed in 1857. A certain amount of smuggling had gone on in spite of it. The Government, therefore, should have spent money and used vigilance in enforcing its regulations, instead of adopting the insane course of relaxing them. The result of doing the latter was a rapid increase in the number of guns and the quantity of powder sold to the disaffected Maoris, who purchased many thousand stands of arms and large quantities of ammunition. Ten years of peace and prosperity had made the natives comparatively rich through the supply of produce to the Europeans. Wiremu Tamihana (henceforth known historically as the "Maori King-maker") was a shrewd observer of all that went on, and he subsequently stated that "every vessel from Australia brought cheap guns for the Maori trade."

Governor Browne paid a visit to the settlement early in the year 1859, and declared to the natives that he intended to adopt an entirely new policy in the buying of native lands, and to deal at first hand with individual claimants, disregarding tribal rights and the influence of the "rangatiras." In short, the misguided Governor wanted to enforce the English land system of modern times, and the evolution of generations, on a race of people whose usages regarding land tenure resembled in a great measure those in vogue among the Irish under the Brehon traditions. When the new land policy was inaugurated by the Governor, some thirty million acres or more had been purchased from the Maori owners for the purposes of settlement, but not more than a quarter of a million acres were under cultivation. The people of the Taranaki district were cramped for room, and looked for territory whereon to expand towards the mouth of the Waitara River. This legitimate desire brought about a condition of affairs favourable to the ignition of the native mind by the spark dropped into it by the Waitara land purchase in 1860. Waitara is a little seaport in the Taranaki district, a section of the North Island where the feeling concerning land purchase had always been especially acute. Sufficient territory had been obtained to enable this settlement (Waitara) to expand into a strip of about 20 miles along the

sea coast, with an average width of about 7 miles. During his visit to the district, the Governor, therefore, in order to accommodate the settlers, invited the natives to dispose of their lands. In the meantime the agitation in favour of the King movement so engrossed public attention in the central districts of the North Island, that the new trouble smouldering on the west coast almost escaped notice until it burst forth in the blaze of war. Friction between the two races in this part of the Island was constant and severe on account of the steady refusal of the Maoris to part with their lands, the influence of the Anti-land-selling League, under the presidency of Wiremu Kingi, the head chief of the Ngatiawa nation, being actively exercised to discourage all sales of his people's territory. In 1858 the Taranaki settlers had fruitlessly memorialised the General Assembly to set aside the tribal rights, and allow such natives as were willing to dispose of their individual claims in communal lands to do so. Early in 1859 Wiremu Kingi sent a message to the Governor, declaring that no more land should be sold in the district extending from New Plymouth to Mokau, and requesting him, therefore, to entertain no proposal for the sale of native lands within those limits. It was just after this notification of the great anti-land-selling chiefs that the Governor paid his diplomatic visit to New Plymouth, prepared to carry his new land policy into effect no matter who should oppose him. At a meeting with the natives he stated that he would never consent to the purchase of land which did not carry an undisputed title, but neither would he permit any one to interfere in land sales who had not an interest in the holdings under offer. The Maoris are alleged to have misapprehended his meaning, and to have understood that his intention was to start a new policy by treating with individuals, disregarding the "mana" of the chiefs, and setting aside the tribal rights. However, there was very little misapprehension about the matter, as subsequent events showed that the natives understood him only too well. In response to the Governor's invitation, a native chief named Te Teira, or Taylor, at once got up with his friends and offered to part with the lands (600 acres) which they were occupying at Waitara. It appears, however, that Teira and his adherents had no exclusive right to this block of 600 acres, though they occupied it. The land belonged to the Ngatiawa nation, and was endeared to the people by historical association, being their first landing place some twenty-five or thirty generations before. Areas had been allotted them by their ancestors for the heads of different families, and divided into sub-allotments for individual holders. Teira, however, pressed his offer, and Mr. McLean, the Native Secretary, replied on behalf of the Governor that he would buy, provided a good title could be made out. The Native Department and the Governor sent down Commissioners, who, with Mr. Parris, the land-purchaser for the district, spent nearly a year in the investigation of Teira's title. After inquiry they decided erroneously that the native vendor's title was good, and that Teira's

party had a right to sell the land, and the head chief no right to interfere. The sale was, therefore, completed in due course. A fair price was paid for the block; and, as Wiremu Kingi threatened war, an armed force was sent to occupy it. Then the astute chief of the Ngatiawa made the disputed block over to the King tribes, and herewith became their ally. They did not openly declare war against the Government, but they sent their new protégé numbers of volunteer fighting-men. The Governor, blind to the trend of events, reported to the Secretary of State that while he did not fear that Wiremu Kingi would continue to maintain his assumed right, he had made every preparation to enforce obedience should he presume to do so. Wiremu Kingi did, however, maintain his right, and from this maintenance of his "mana" sprang the Taranaki war of 1860, which lingered until May, 1861, and resulted in the temporary ruin of Taranaki. The land transaction at Waitara is known historically as Governor Browne's Bad Bargain.

Hostilities broke out early in 1860. On the 20th February, in that year, surveyors were sent out to mark the boundaries. By way of protest, the Maoris directed some of their most ill-favoured women to pull up the pegs and cut the chain; though no violence was offered, unless the unwelcome kisses and embraces of the women deserve that name. Ten days later, martial law was proclaimed, and a body of troops, under Lieutenant-Colonel Murray, marched to the Waitara block, ten miles from New Plymouth, for the protection of the surveyors. During the night, Kingi's party built a "pa" commanding the road, and stopped an escort. The Governor then issued a manifesto ordering the evacuation of the "pa" on the pain of instant punishment. The natives evacuated the "pa," and the soldiers destroyed it. A few days afterwards a party of some seventy natives returned and built a stockade on the disputed block. H.M.S. "Niger" had just arrived with a reinforcement of the 65th Regiment, and, on the 17th March, Colonel Gold conveyed to the front a detachment of artillery and three guns, 210 men of the 65th Regiment, a party from the "Niger," with a rocket tube, twenty mounted volunteers, and a company of the Royal Engineers. The Maoris were summoned to surrender, but refused, and the troops opened fire with shot and shell. This was the first irremediable act of hostility in a war which Dr. Featherstone (the Superintendent of the Province of Wellington) pronounced to be unjust and unholy; and which Sir W. Martin (the Chief Justice) utterly discountenanced. On the night following the attack, the troops found that the stockade had been abandoned, but the natives were entrenching themselves in stronger positions, and were well provided with arms and ammunition. The settlers left their homesteads, and, abandoning the open country, took refuge in their town of New Plymouth. Their women and children were mostly shipped off to the south; the men armed and drilled as a militia. The troops also fell back on New Plymouth, and the district was left to the Maoris, who ravaged the whole country-side, sweeping away the labours of some

twenty years with a besom of smoke and flame. The insurgent Ngatiawa chief, who had hitherto held aloof, now overtly joined the movement, while the powerful Ngatiruanui nation also threw in its lot with the malcontents. On the 3rd March, a "pa" on Waireka Hill was unsuccessfully attacked, and the same evening the British forces fell back on New Plymouth. Later on fresh detachments of troops arrived from Australia, so that, by the end of the year, there were 2,300 men in the field, including volunteers. One of the most important of the succeeding events was the attack in June on the Puketakauere, or "L pa," so called from its configuration. In this engagement the British suffered a loss of thirty-four killed and thirty wounded, while the Maori casualties amounted only to six killed and eight wounded. By this time New Plymouth was in a state of close siege, and, although there was a dense forest near the town, fuel had to be procured from Australia. Major-General Pratt now came over from Melbourne to supersede Colonel Gold in the command, and brought with him the remainder of the 40th Regiment. For some time no decisive engagement took place, until the conflict at Mahoetahi, when the enemy lost thirty-four killed and fifty wounded, while the British casualties were four killed and sixteen wounded. Taiporotu, the rebel leader, was killed in the battle. The war terminated a little later during the progress of the siege of Pukerangiora, a truce being negotiated through the instrumentality of Wiremu Tamihana Tarapipi. It has been computed that this outbreak, before it was brought to a peaceful conclusion by Sir George Grey, cost the British sixty-seven killed and 143 wounded, and most of the latter died of their injuries through overcrowding in New Plymouth; while upwards of 200 settlers died through exposure. The total cost of the war to the Imperial Government was about £500,000; while the Colony's expenses occasioned by the campaign reached a total of £20,000. The direct losses of the settlers were estimated to amount to over £150,000.

Sir George Grey landed at Auckland on the 26th September, 1861, for a second time to undertake the government of the province, and on the 3rd October following Colonel Gore Browne left the Colony. The Stafford, or War Ministry, fell in the month of July, 1861, and was succeeded by the Fox, or Peace Ministry. Mr. Fox had been an officer in the Wakefield Land Company, and an ardent agitator for responsible government. He had long been an opponent of Governor Browne's native policy, and now exerted all his influence to aid the new viceroy in obtaining a peaceful settlement. Sir George Grey had a difficult task to perform, for he had not only to contend against the hostility of the Maoris, but also to placate the section of the white population who wished to crush native resistance by an aggressive war. For more than a year the Governor and Premier sought to obtain honourable conditions of peace, but, unfortunately, the Governor had been called in too late, and his "mana" had lost much of its old power. Early in the term of his second Government, Sir George Grey determined that the division of authority between the Governor and his Ministers should be swept away,

and that upon native, as well as upon other affairs, the representative of the Queen should rely solely on the advice of his responsible Cabinet. On the 30th May, 1862, Imperial control over Maori legislation was finally abolished. Meanwhile, matters in the Waikato country were very unsettled, and a visit from the Governor had no appreciable effect. In 1863, the Governor left Auckland for Ngaruawahia, and, although he was well received by the Maoris, his announcement that a steamer was coming to trade on the Waikato River seemed only to increase the mistrust with which the natives regarded all advances made by the Government. The still unsettled Waitara land dispute was a constant cause of irritation, and even the natives of the King country were divided on the matter. One party, led by Wiremu Tamihana Tarapipi, was in favour of a peaceful settlement, but Wiremu Kingi insisted on the retrocession of the Waitara land, and his cause was warmly espoused by Manga Rewi Maniopoto, chief of the Ngatimaniapoto nation. The Governor now caused the title to the land to be carefully examined, and came to the conclusion that it had never been lawfully acquired. In the meantime, a body of natives was in armed occupation of a block of land at Tataraimaka, near New Plymouth, which really belonged to the settlers, and the Maoris refused to leave it until the Waitara block was handed over. The claim of the Colony to the Waitara land was removed by proclamation on the 11th May, 1863, but the restitution was somehow delayed, and the Ngatiruanui still refused to leave Tataraimaka. The Governor tried parleying, but without avail, and then resolved on decisive action. At the beginning of March, 1863, His Excellency, accompanied by General Cameron and a strong force of military, set out for Tataraimaka with the intention of recapturing this block, besides settling the Waitara question. The natives accepted this move as a prelude to war, and Rewi and his supporters at once took action. The police-barracks and a newspaper office were seized, and the Resident Magistrate dismissed. Next, a party of soldiers was surprised and killed in the Taranaki district, and the prospect of peace became hopeless. In spite of the issue of the proclamation removing all claim to the disputed land, and the withdrawal of the troops therefrom, war had recommenced, and it dragged out its weary length over a period of three years. Sir George Grey had received notice that the Maoris intended to make an attack on Auckland, and resolved to forestall them. On the 12th July a small force under General Cameron occupied a position on the Koheroa heights, overlooking the Waikato River. The Maori force was in two divisions, one of which, under Manga Rewi Maniopoto, occupied the forest of Hunua, whence many successful attacks were delivered on the colonial levies. Wiremu Tamihana Tarapipi commanded the other division, which marched down by the course of the Waikato to oppose the invasion. On the 17th July, this force attacked an escort of the 18th Regiment, and defeated it, killing four and wounding ten. On the morning of the same day, the British troops at Koheroa defeated a Maori detachment. After another slight engagement Cameron

concluded that his foes were of no mean calibre, and decided to make more formidable preparations. On the renewal of hostilities, a series of skirmishes culminated, on the 23rd October, 1863, in the action which has been called the "Battle of Bald Hills." During the progress of this conflict there were some desperate hand-to-hand encounters between the Maoris and the soldiers, but, eventually, the native force was driven back with a loss of thirty-two killed, while great numbers of their warriors were also wounded.

On the 30th October, General Cameron, who had been provided with two bullet-proof steamers, one of which was built in Sydney, proceeded to attack Meremere, but the Maoris evacuated this position, and retired to a stronger one at Rangiriri. Here, after a desperate resistance, they were forced to capitulate, but King Potatau the Second and his general, Wiremu Tamihana Tarapipi, made their escape. The Maori loss was between fifty and 150 killed, the number of wounded being unknown, while 183 were taken prisoners and sent to Auckland. The British loss was thirty-five men and two officers killed, and thirteen officers and eighty-five men wounded. A proclamation of peace was now expected, and the enemy fell back from the King's headquarters, and allowed General Cameron to occupy the position without a struggle. But the expected terms were not proclaimed, and the war was renewed. The Maoris were driven from one position to another, but eventually made a most heroic stand at Orakau. Here a force of about 300 natives under Rewi withstood for three days the attacks of a British army of 2,000 men. On the evening of the third day the Maori ammunition was exhausted, so the half-starving natives made a sortie, when the greater part of them were destroyed, but Rewi and a few followers escaped to the hills. The Maori loss was about 200, while the British casualties were sixteen killed and fifty-two wounded. With the reduction of Orakau, Maori resistance practically ceased, and Wiremu Tamihana and Rewi retired to the upper waters of the Waikato, whither they were not pursued. In this long and dilatory struggle, an able general and distinguished officers had been fighting, with vastly superior numbers, a savage foe whose forces at the very highest estimate did not exceed 2,000; whereas General Cameron had ultimately under his control some 10,000 regulars, and was assisted by volunteers and militia of about the same numerical strength. Nor was this their only advantage, for the British were armed with Enfield rifles and had artillery, while the Maoris carried old Tower muskets and shot guns, and the few ship's guns they possessed could hardly be called artillery.

The campaign involved the colony in a debt of £3,000,000, besides Imperial claims made on account of military expenditure, while settlement and industry received a decided check. The conflict brought absolute ruin to the Ngatihaua nation, for nearly all their land was included in the scheme of general confiscation, though the Ngatimaniapoto race, which had practically provoked hostilities, lost very little territory. The new frontier was delimited by a line drawn from Raglan

on the West Coast through the plains of the Upper Waikato to Tauranga, and the lands confiscated by the Government were occupied by military and volunteer settlers. Wiremu Tamihana Tarapipi died of consumption in December, 1866, a little over two years after the conclusion of the war.

Although peace once more reigned in the Waikato country, there was still disaffection in the Tauranga district. The natives in this locality, assisted by straggling parties of Waikatos, entrenched themselves in a strong position about three miles from Te Papa. Their stronghold, called the "Gate Pa," was effectively palisaded, and amply defended by rifle pits. Here a British force of 500 men attacked them, the defending Maoris, as usual, being much in the minority. Early in the siege a detachment attempted to storm the Maori citadel, but the attack was repulsed, and the British lost heavily. Shortly afterwards it was discovered that the natives had evacuated the "pa," and escaped noiselessly under cover of darkness. In this affair the British casualties amounted to 111 killed and wounded, of whom several of the latter subsequently died, while the Maori loss was comparatively slight. The natives made their final stand at Te Ranga, about 3 miles inland from the "Gate Pa," and here they were completely crushed, their forces being almost annihilated.

In the meantime the second Taranaki war had been going on. Early in June, 1863, General Cameron successfully stormed a native stronghold on the Katikara River, some 15 miles from New Plymouth. In March, 1864, a force under Major Butler suffered a repulse before a "pa" at Kaitake. A more serious reverse to British arms occurred in the following April, when detachments under the command of Captains Lloyd and Page were completely routed by the natives. When the bodies of the slain were recovered they were found to be stripped almost naked, and the heads had been severed from the bodies—an act of savagery hitherto unpractised in the warfare between the two races. It was subsequently ascertained that this mutilation was committed by the devotees of a new religion known as "Hau-Hauism," but in the first instance called "Pai Marire" by its adherents. This creed originated in the disordered brain of a native named Te Ua, and was an unsavoury compound of Judaism, Christianity, and old Maori tradition. Amongst other strange things its votaries believed that their priests and prophets possessed superhuman powers, and that invulnerability in battle could be secured by the utterance of the magic word "Hau," accompanied by mesmeric passes of the hand. The Hau-Haus decapitated their slain enemies, and used the heads to ornament a lofty pole known as the "niu," round which they were accustomed to dance, to the accompaniment of wild incantations. Early in April, 1864, they had an opportunity for a practical test of their boasted invulnerability in their attack on the redoubt at Sentry Hill, rear New Plymouth. Here the Hau-Haus suffered a serious reverse, and had to flee for their lives, leaving thirty-four of their number dead or dying on

the field. Notwithstanding this check, the peculiar superstition spread, and in the country round Wanganui, and on the East Coast, between the Bay of Plenty and Hawke Bay, the Hau-Haus proved particularly troublesome.

The colonists now fondly imagined that with the clearing of the disaffected from the Waikato country, and the subjection of the Tauranga natives, the Maori "mana" had received such a blow that further resistance would be abandoned. However, the Hau-Hau superstition was responsible for a continuance of hostilities. Upon the New Zealand militia devolved the work of extirpating it, but most valuable assistance was given by Ropata Wahawaha, Major Kepa, Te Rangi-hiwi-nui, and other friendly chiefs. On one occasion the "friendlies" challenged the Hau-Haus to a pitched battle on the island of Moutua, where, after a desperate engagement, the Hau-Haus were signally defeated, their prophet, Matene, being amongst the slain. The Provincial Government of Wellington later on raised a monument to the memory of their brave allies who had fallen in the encounter. For the remainder of the year 1864 the Colony enjoyed a measure of comparative repose, which was hardly interrupted by the escape of 214 Rangiriri and other prisoners from the island of Kawau, near Auckland, in the month of September. In the November following, the seat of Government was removed from Auckland to Wellington, in consequence of an agitation for a more central position from which to direct the affairs of the Colony.

The year 1865 saw the resumption of hostilities on the West Coast. New Zealand at this time contained a very large and expensive Imperial military force, but the brunt of the war fell on the shoulders of the colonial militia, the friendly natives, and the adventurous spirits who came over from Sydney and Melbourne to take part against a brave but ruthless foe. General Cameron's movements were painfully slow, and this fact, coupled with the tenacity with which he clung to the ocean beach, earned for him from the Maoris the epithet of the "Lame Seagull." Grey's impatience at the General's dilatoriness gave rise to much acrimonious correspondence between the two chiefs. At length the Governor determined on the bold scheme of himself leading a force to attack the insurgents in a stronghold called the Wereroa "pa." On the 21st July, 1865, he successfully accomplished the reduction of this fastness, and about fifty Hau-Haus were taken prisoners. General Cameron resigned his command of the Imperial troops in the following month, and was succeeded by Major-General Trevor Chute. The Hau-Haus were still vigorous on the East Coast, where they committed several atrocious murders, mutilating the bodies of their victims. The great majority of the Maoris, however, were deeply shocked by these horrible acts, and Wiremu Tamihana Tarapipi wrote to Colonel Greer tendering his submission and that of the King Tawhiao. The campaign was now pushed on with much vigour. The conquest of the Opotiki district was completed, while the Waiapu expedition, under Majors

Fraser and Biggs, supported by the friendly chiefs Ropata and Mokena, achieved signal success. The strong Hau-Hau fortress at Hungahungatoroa was reduced, and the insurgents were driven from the "pa" at Waerenga-a-hika. The campaign was brought to a close by a series of brilliant forced marches through the disturbed districts by Major-General Chute, the display of force causing a cessation of hostilities.

Grey's continual conflicts with the authorities rendered his position untenable, and in the month of November, 1866, he was succeeded in the administration by Sir George Ferguson Bowen. In the middle of 1868 the North Island was again plunged into the turmoil of war by an outbreak of natives, led by Titokowaru, which resulted in what is known as the West Coast campaign. Meanwhile another Hau-Hau chief, named Te Kooti, escaped with a band of followers from the Chatham Islands, and, landing near Gisborne, by his courage and ability soon placed himself at the head of a considerable number of warriors. Titokowaru's band ravaged the Patea district. On the 12th July the garrison at Turuturumokai redoubt was defeated by the Maoris, and Captain Ross and nine men were killed. On the 21st August a British force under Colonel McDonnell attacked and captured the Hau-Hau stronghold at Te Ngutu-o-te-manu. Early in September Titokowaru signally defeated the Government forces at Ruaruru, killing nineteen and wounding twenty-five. Shortly afterwards the whites and "friendlylies" were defeated at Moturoa. Titokowaru's "mana" was now in the ascendant, and he set forth on the road to Wanganui, carrying murder and rapine through the districts on his line of march. On the 9th November, 1868, Te Kooti and his band suddenly swooped down on the village of Matawhero. The Hau-Haus engaged in indiscriminate butchery, twenty-nine Europeans and thirty-two friendly Maoris being cruelly murdered. When the news arrived the settlers fled in all directions. The women and children in Gisborne were shipped off to Auckland, and the deserted homesteads at Poverty Bay were given up to the flames by the savage Hau-Haus. Te Kooti and his band retired to the bush, to the hill of Ngatopa, murdering and pillaging on the way. In this stronghold he was attacked by a combined force of "friendlylies" and whites under Ropata and Colonel Whitmore. The Hau-Haus found their position untenable, and during the night evacuated it and plunged into the forest. Thither they were pursued by Ropata and his followers, and numbers were killed or taken prisoners, but Te Kooti himself escaped. Meanwhile Kepa had rendered effective service in harrying the Hau-Haus under Titokowaru. Early in 1869 Lieutenant Gascoigne, his wife, three children and two other whites were murdered, and the Rev. John Whitely, arriving on the scene shortly afterwards, met the same fate. Titokowaru was pursued by Colonel Whitmore and Kepa to the head of the Wanganui River, but he was allowed to remain there, as the authorities had decided on no further action. Te Kooti, however, continued to give trouble, and various punitive expeditions were despatched against him,

but he was eventually left without further molestation, and the Colony thenceforward enjoyed comparative peace.

In June, 1869, Mr. William Fox became Premier, having Mr. Vogel associated with him as Colonial Treasurer. The exhausting war had acutely injured the Colony, and the strain upon its resources had been long and almost incessant. Mr. Vogel, in the Session of 1870, initiated a new policy, which he based on the belief that the native difficulty could be more readily combated by the construction of roads and railways, and by the augmentation of the British population through an influx of immigrants, rather than by the old methods of settlement and provincial government; and he maintained that the entire Colony would be beneficially affected by the stimulating influence of the money borrowed to carry out the new policy. At this time the Constitution practically created by Sir George Grey in 1852, was still in operation, though not without occasional friction. Under this measure the Colony was really a confederation of vestry-officered settlements. The system worked fairly well under the conditions which had developed side by side with isolated coastal colonisation, undertaken by divergent interests, but its great troubles were questions of ways and means. The provinces had to struggle along as best they could on the dribbles of revenue that might be spared by the Central Government; but, under the fearful exactions of an exhausting war, there was very little money to spare to furnish forth even dribbles of revenue. In order, therefore, to provide the needy provinces with a sure source from which to raise funds, they had, from their initiation, been given the virtual control of the Crown lands within their borders, and the profits accruing therefrom. Of course, here was an inequality of endowment that led to innumerable jealousies and much heart-burning. In the South Island, save in Maori-afflicted Nelson, land was high-priced; in the war-torn North Island, low-priced; and the revenues of the various provincial districts were relatively large or meagre, according to geographical situation. Already, in 1870, the Central Government and the Provincial Government owed about £7,250,000 between them. In the case of the former a large amount of money consisted of a war debt; but the Provinces had, at any rate, expended a great deal—especially in Canterbury and Otago—on public works, and in rendering efficient their system of colonisation. Sir Julius Vogel came forward with a proposition to centralise expenditure on a vast and continuous scheme of public works and immigration with the aid of borrowed money. His scheme for borrowing from six to ten millions of money, to be expended on defence, immigration, roads, railways, the purchase and settlement of land, and public works generally, was almost unanimously adopted, and the Colony entered upon its new financial career with hardly a dissentient voice. The Provinces did not, however, with wisdom equal to that of its author, adopt also the saving clause of his great policy, to wit: that the cost of railways should be recouped from a public estate created out of the Crown lands through which the lines should pass. Here selfishness of a provincial type

stepped in. It enabled the Provinces to retain their control of Crown lands for another five years ; but it crippled the public works policy of Vogel, and made its originator a determined opponent of Provincial Government—which he overthrew some five or six years later with the help of the immigrants who were, as one result of his policy, pouring into the country in their hundreds, and who ridiculed the idea that a country containing some five hundred thousand inhabitants, should require nine governments in addition to its general Assembly, when the mighty nation that they had just left could manage much more efficiently with only one. Mr. Vogel's policy, however, certainly worked wonders. At the end of the year 1870 New Zealand contained a white population of 248,000, a number representing a threefold increase since the beginning of the Taranaki war in 1860. The revenue at that date was £464,000 ; during the succeeding ten years it had expanded to £1,384,000. Exports and imports showed a corresponding growth ; and land under cultivation, sheep, and horned cattle had increased seven-fold. From the initiation of the Vogel proposals, and their acceptance by the General Assembly in August, 1870, to October, 1877, the administration remained in the hands of the same party, though with seven different Ministerial combinations, which occasioned a nominal, though not a real change, in the successive Governments. Of this period the following facts are noteworthy :—In 1870 the public debt amounted to £7,840,000, or some £31 per white inhabitant ; in 1877 it had risen to £20,700,000, or £50 per white inhabitant ; but the borrowed money had, among other things, enabled the Government to construct over a thousand miles of railway, besides introducing, by State aid, thousands of immigrants, though many came to the Colony without such assistance.

In the meantime quietness reigned in the native districts ; the price of wool had risen ; gold was being discovered right and left ; and the Colony was advancing with rapid strides. The Maori troubles, too, were all but over. For three years Te Kooti had been a hunted fugitive. In the year 1870 the chase was left almost exclusively to the natives themselves, under Ropata, Topia, Henare Tomoana, and Kepa Te Rangi-hivi-nui. Ropata and Major Kemp (Kepa) drove him from district to district backwards and forwards, across and across the island. Again and again he escaped, and again and again the hue and cry was raised at his heels. He fled through the country lying behind the Bay of Plenty to the almost impenetrable forests south of Opotiki, where his "pa" of Maraetahi was besieged in March, 1870, by 400 friendlies under Kepa, Topia, and Wi Kingi. After a desperate action, in which the arch-rebel escaped barely with his life, his assailants captured his stronghold, recovered 218 of his captives, and took prisoners thirty-five men and seventy-six women and children. Of his followers eighteen were killed. Te Kooti tirelessly, vengefully pursued, now crept, now crawled, now feverishly raced, from lair to lair in the solitude of the forest or in the mountain fastnesses with a little band of some score adherents,

every party he got together being successively scattered. His wife was captured. He was himself shot in the hand. Often and often were his hunters within a few yards of their quarry. In his wild flight from justice and vengeance he was forced to scale snow-clad mountains, to wade the freezing waters of torrents that swept the gorges, to carve and slash a pathway through the tangled growth of the living jungle. But it seemed that he bore a charmed life; he always evaded the supreme humiliation of capture. In the wild territory of the savage Uriwari tribes Te Kooti lost his equally bloodthirsty companion, Kereopa—the murderer and mutilator of the Rev. S. C. Volkner, done to death by the fanatical Hau-Haus at Opotiki. Kereopa, when captured, was most unceremoniously hanged, and the Lutheran missionary, in some small manner, avenged. Emaciated with hunger, feverish with thirst, worn out through want of sleep for fear of capture while he rested, in hourly terror of his indefatigable foe, Ropata, and left with hardly a single follower, Te Kooti betook himself, as a last refuge, to the King country, and there found sanctuary in 1872. He was eventually pardoned, and for some twenty years lived a quiet life, after the hunters had abandoned the chase, dying in peace, if not in sanctity. He often expressed a wish to visit Poverty Bay, the scene of his chief atrocity; but the stern hostility of the settlers caused the Government to forbid his doing so.

The chief interest of the wars between the two races, now brought to a termination by Te Kooti's absolute suppression as a factor in rebellion, lies not in the numerical importance of the men engaged in them, so much as in their racial significance, individual heroism, and the peculiar picturesqueness of the arena of conflict. It is, perhaps, true, that there is something surprising in the fact that mobs of ill-armed and partially-disciplined savages, often outnumbered by three and four to one, sometimes by as many as ten to one, met and repeatedly defeated army corps of the best armed, best drilled, and best disciplined soldiers of Europe; but it must be remembered that the tactics observed in Maori warfare puzzled and baffled soldiers accustomed to march in column and to charge in line, and that the New Zealand natives were, at least, masters in the art of fortification. One who has given the subject no small attention considers that out of the many engagements which took place between the years 1843 and 1870 (excluding the massacre at Poverty Bay), thirty-seven may be classed as of the first importance. Out of these the British arms sustained defeat of an unmistakable character nine times; while the tenth encounter, that of Okaihau, was indecisive. Of twenty-seven victories, those of Rangiriri and Orakau were dearly won. In the double fight at Nukumaru the loss of the British was greater than that of the enemy, and in the assault on the "pa" of Waireka Hill most of the troops had retreated, and heard of the British success only from a distance. Six of the successes were wholly, or nearly wholly, the work of Maori auxiliaries. For the ten years, 1860-70, the cost in lives to the British may be

estimated at 800; to the defeated Maoris at 1,800. There were besides, on both sides, thousands of wounded—very many British—and numerous deaths from the attendant horrors of warfare, such as disease, overcrowding, exposure, hardships and famine.

The native difficulty was, however, melting away with a rapid diminution of the race itself. In 1869 the Maori affairs passed into the hands of a really capable Minister for Native Affairs, the Hon. (afterwards Sir) Donald McLean, who, from the beginning of 1869 to the end of 1876, took almost absolute control of the Government policy in its dealings with and direction of Maori questions. To the great influence of this man with the "friendlies," the colonists largely owed the Maori aid, so actively exercised against Te Kooti in the suppression of the Hau-Hau fanatics. But McLean made his real mark, not as a Minister for War, but as a man who placed a permanent peace between the two races on a true basis. For native service he paid liberally by skilful and profitable land purchase, by paying the respect which their position demanded to the chiefs, and by tact with the people and easy indulgence of their childishness. The wild Ureweris and touchy natives of the interior of the King country he did not molest. Elsewhere his influence was all predominant, and in consequence of his excellent management the Maoris, after the war, proved fairly amenable to civilised usage and British legal methods.

The numerous gold discoveries which had been made were not without a decided influence upon the new era of prosperity opening before the Colony. In 1861 gold had been discovered in the provincial district of Otago, at a time (the period of the Waitara war) when the European population did not number more than some 80,000. But rumours of the presence of the precious metal in the mountains and gullies of the South Island had long been persistent. From 1857 to 1860 some £150,000 worth had been won in the province of Nelson. In the winter of 1861 Gabriel Read, while prospecting in a gully at Taupeka, discovered convincing evidence of a good alluvial field, and dug out with a common butcher's knife, in the space of ten hours, about £25 worth. After sinking hole after hole, for some distance along the line of his discovery, and striking "finds" of gold in all, Read wrote to Sir John Richardson, the Superintendent of the province, and apprised him of his success. For this he was afterwards paid a reward of £1,000. Upon receipt of the news, half the population of Dunedin dashed away to the scene of the "rush." For some years following, the province of Otago became the theatre of "rush" upon "rush," though the physical characteristics of this part of South Island rendered travelling of any kind a matter of the greatest difficulty. The mountains were bleak and treeless, and the obtaining of fuel an impossibility. Nevertheless, thousands poured into the province, though the snows and famine of the winter months drove not a few back again to the warmer coast. In 1863 the export of gold from the Otago fields had risen to more than £2,000,000.

The fields of Otago were in the full tide of their fame and attractiveness when rich "finds" were reported in the west coast districts of the province of Canterbury. Gold had long been known to exist in the wild gorges and well nigh impassable river-beds of this romantic and impenetrable region, but the difficulties of winning it were great indeed. Government surveyors who had been sent to explore the country for the precious metal had been drowned in the ice-cold mountain streams, or had returned to the settlements worn out and famished. In 1864 a man named Albert Hunt had found payable gold in the Greenstone Creek. He was subsequently branded as an impostor, and compelled to fly for his life by a mob of disappointed and maddened diggers. Nevertheless, after events proved the truth of his story. In 1865 hundreds of diggers flocked to the province of Westland, and, braving incredible difficulties, and suffering hardships innumerable, penetrated to every gold-bearing spot on the West Coast. Many lives were lost, but still the quest went on. Much gold was won, and as freely spent. Provisions fetched astonishing prices. For a ton of flour £150 had been paid, and candles were considered cheap at a shilling each. For years, however, returns were so good that £10 per week was regarded as only a fair outlay for the most primitive of food and necessaries. The gold exported from the West Coast of the South Island in 1866 was valued at £2,140,000.

Quickly on the heels of rich "finds" in the southern provinces of Nelson, Otago, Canterbury and Westland, came news of magnificent discoveries at the Thames and in the Coromandel Peninsula, situated on the east coast, in the province of Auckland. They were not alluvial goldfields, but quartz reefs, and thus differed from the workings in the South Island. The exploitation of the auriferous deposits of the Auckland province was long delayed by the successive wars between the settlers and the natives. When such exploitation became possible, the ground-landlords rendered profitable mining problematical by insisting upon high-priced prospecting permits; and it cost the miners as much as £1 per man for the right to seek for gold whose existence was merely guessed at. This short-sighted policy put off the opening up of the Ohinemuri Gold-field until 1875, though years before this the shores of the Hauraki Gulf had been worked with system and profit. The gold fields of New Zealand are, however, no longer exploited by individual effort. To-day so many costly scientific and mechanical processes are called into requisition to win the precious metal from its matrix, that capital is required, and the combined effort of companies necessitated. The approximate gold yield of the Colony up to date is set down at the value of £59,160,000.

One singular and noteworthy characteristic of the gold-fever days in New Zealand was the orderly and law-abiding manner in which the search for the precious metal was conducted. There was little extravagance or excess, few riots—such dual encounters only as are common in

any collection of adventurous spirits—and but one gang of bushrangers—the Burgess gang.

Besides gold, New Zealand possesses many valuable minerals. The most curious of these is undoubtedly kauri gum, of which over £10,775,000 worth has been raised in the Colony since 1853. It was, however, worked long before by the Maoris, who found it more profitable to collect kauri gum than to engage in the wars of Hone Heke against British supremacy. At the present time there are about 7,500 Europeans and Maoris engaged in gum-digging, of whom some 1,700 are Austrians from Dalmatia.

Sir George Ferguson Bowen's term of office as Governor of New Zealand extended from the 5th February, 1868, to the 19th March, 1873. He was succeeded by Sir George Alfred Arney, the Chief Justice of the Colony, as Administrator from the 21st March to the 14th June of the same year, pending the arrival of Governor Bowen's successor, Sir James Fergusson, Bart., P.C., who was just fresh, as in the case of Sir George Grey, from the Governorship of South Australia. Sir James Fergusson governed the Colony of New Zealand from the 14th June, 1873, to the 3rd December, 1874, when he in turn gave place to the Marquis of Normanby.

In the meantime affairs political were culminating towards the accomplishment of Vogel's dream—namely, the abolition of the Provincial Governments and the control of the Crown lands by the Central Parliament. The Colony was at rest, good prices prevailed, much gold was won, and landed estate advanced rapidly in value. Especially was the last-mentioned condition of prosperity the case in the province of Canterbury, where the system of free selection without limitation of area or occupation attracted the speculative buyers. A "boom" in Canterbury lands set in, and hundreds of thousands of acres were bought from the Provincial Government at the fixed price of £2 per acre, and resold at, or held for, a rise.

The revenue of the Provincial Council was greater than it knew how to expend, even extravagantly. Vogel saw his opportunity, and appealed to the old Centralist Party to crush the provinces; but the provinces, particularly Otago and Auckland, resolved to make a strong fight for their old autonomy. In the pleasant islet of Kawau, near the city of Auckland, quietly resided Sir George Grey, deep in the study of Maori traditions and antiquities. Now, the old Constitution that Vogel sought to destroy had been practically Grey's creation, and he burned with indignation in the solitude of his island retreat that sacrilegious hands should be laid upon the instrument by which he had made New Zealand a nation. Forth he came from his studies in 1875, and entered the arena of politics. With wonderful vigour he threw himself into the conflict, mounted the public platform, and spoke with an eloquence that took his hearers by storm. They heard him with admiration, largely mixed with surprise, as no one had hitherto suspected the orator and the poet in the able explorer, the shrewd statesman, diplomatist, and soldier.

The fight was vehement on both sides. The Centralists were led by Major Harry Atkinson, who had won a high place in public esteem as an officer of bush fighters in the many wars with rebel Maoris, and who had greatly distinguished himself on several occasions at Taranaki. He leapt at once to the command of his party. Under his leadership the Provincialists were beaten, the Crown lands passed under the control of the Central Government, and the functions of the Provincial Councils were handed over to Local Boards and organisations.

Julius Vogel left the Colony in 1876, and in the month of October, in the year following, Sir George Grey succeeded in ousting an administration led by Major Harry Atkinson, which had earned for itself the title of "Continuous." The new Premier formed a Ministry mainly composed of young men of great ability; and appealed for the first time to the democracy of the Colony from a platform deliberately advanced and, for the period, essentially socialistic. At this time, and on every available opportunity afterwards, he advocated triennial Parliaments, the principle of one man one vote, a direct land tax, and a land policy based upon Crown leases rather than upon Crown sales, and having especial regard to the restriction of the area that any one man might require. He was, indeed, the direct forerunner of John Ballance; but though he won office on the strength of his policy, he could not carry it into law. Among his colleagues was John Sheehan, Minister of Justice and for Native Affairs, the first of native-born whites elected a representative of the people to the Parliament of New Zealand. Sir George Grey's Ministry was not of long duration, nor was it especially brilliant. It ended its career, at the early age of two years, in 1879, its chief being deposed from the leadership of his party by his own followers. One of the causes of the collapse of the Grey Ministry was a financial depression which visited the Colony at about this time. Prices fell all round, especially those of wool and wheat; and the output of gold failed to keep up to the average of former years. There had, too, been a mad rush for land investments; much money had been borrowed to acquire estate, and to establish speculative businesses; and there was now a strong reaction in prices. The increasing financial tension brought to the ground many a business house of apparent commercial solidity, and it was not before 1894 that affairs took a genuine turn for the better. It is noteworthy of Sir George Grey's democratic programme that, though he himself failed to carry any one of his favoured propositions into law, he had the satisfaction of seeing them all placed upon the Statute Book (some by his friends, some by his opponents) save one,—the election, by the people, of the Governor of the Colony.

A feature of New Zealand politics was the long existence enjoyed by what has been termed the "Continuous Ministry." It came into office about the year 1869, and may be said to have ceased in the month of January, 1891. Out of a period of twenty-one and a half years it held office for some sixteen or seventeen. Sir Edward Stafford turned it out, but for a month only, in 1872; Sir George Grey for two years,

1877-9; Sir Robert Stout for three years, 1884-7. The "Continuous Ministry" represented a shifting series of combinations of politicians by which the Cabinet was modified, every now and again, without ever being intrinsically changed. It came into being under Sir William Fox, with provincial and mildly democratic sympathies. It quarrelled with the provinces, and killed them; and then it became conservative—of the New Zealand type of conservatism. Its leaders were Fox, Vogel, and McLean—1869-72; Fox left it in 1872; Major Atkinson joined it in 1874; Vogel left it in 1876; McLean died in 1877; put out of office by Sir George Grey, it was once more led, for a short time, by Sir William Fox; it came back to power in 1879 as a Hall-Atkinson-Whitaker combination; Hall retired in 1881, but Atkinson and Whitaker continued to direct it to the end. There is another matter to be noticed in connection with the Parliament of New Zealand. For about three decades the Maoris have sent four members of their own race to the House. When speaking they ordinarily use an interpreter; despite which, when discussing affairs concerning their own countrymen, they often display great fluency and become really eloquent.

In the year 1864 the Government had confiscated more land than the settlers could then utilise, and a portion of the alienated territory remained unoccupied. In the province of Taranaki, the unoccupied land fell into the possession of its original Maori owners, who built houses, cultivated farms, and exercised all the other rights of ownership thereon. A promise had also been given to the natives of Taranaki that the Government would give them a certain sum per acre as a solatium for the confiscation of their lands. Time passed on, the occupiers remaining undisturbed and actual ownership and exclusive possession were at times somewhat offensively asserted. Moreover, religious fanaticism gave cohesion to the Maoris who occupied the confiscated lands and caused them to gain adherents from many places until a large settlement became established in the Ngatiruanui country, at a place called Parihaka, under the leadership of a Maori prophet or soothsayer named Te Whiti. For some time it appeared as if the disposal of the disputed lands would result in another outbreak of war, but the decisive action of Mr. Bryce, Minister for Native Affairs, averted such a contingency. At the head of a force of armed constabulary, Mr. Bryce proceeded to Parihaka, where Te Whiti and Tohu allowed themselves to be quietly arrested. They were detained in custody until March, 1883, when they were taken back and placed on the reserves measured out for Maori occupation. Since then the natives have either become reconciled to dominance by the whites, or lack the power and desire to organise further resistance. At the time of the signing of the Treaty of Waitangi the Maoris may have numbered 70,000; at the census of 1858 the returns gave 56,049; at that of 1886 (including half-castes) 41,627; at the census of 1891 the number was returned as 41,993, and at that of 1901 at 43,101.

During the period occupied by the foregoing political and social events, the Colony had several times changed its government. The Marquis of Normanby surrendered the reins of office on the 21st February, 1879. The government was then administered by Chief Justice James Prendergast, till the arrival of Sir Hercules G. R. Robinson, who ruled the colony from the 27th March, 1879, till the 8th September, 1880. During his régime, in the year 1876, Rewi, the hero of Orakau, visited Auckland for the first time in twenty years, and was lionised by the citizens. He returned to the Waikato in company with the Governor, deeply impressed by the marvels wrought by the all-subduing "pakeha." On the retirement of Sir Hercules Robinson, on the 8th September, 1880, Chief Justice Prendergast again administered the Government. He was relieved of his post by the Hon. Sir Arthur H. Gordon, who was Governor of the Colony from the 29th November, 1880, to the 23rd June, 1882; when Chief Justice Prendergast for a third time, administered the Government till the coming of Lieutenant-General Sir William F. D. Jervois, on the 20th January, 1883. It was during Sir Arthur Gordon's period of Governorship, early in the year 1882, that Tawhiao, the "King of the Maoris," came forth from his long seclusion and visited Auckland, where all sorts of honours were lavished upon him. He subsequently visited England, and then returned to his home on the Waikato, where he lived quietly for several years. At the beginning of 1888, Tawhiao held a meeting at Maungakawa, at the invitation of the Ngatihaua tribe, when the following lines of policy were affirmed: "That the Maoris and pakehas shall be as one people; obey the laws of the Queen, and respect them in every way as loyal subjects; and that every native acting contrary to the Queen's laws shall undergo the same punishment as the 'pakeha'; that all natives avoid intoxication and other abuses; that no objection be offered to the Lands Court selling, or otherwise, so long as it is done legally." With this declaration the long dispute between the two races, which lasted from the very beginning of colonisation, may be said to have come to a conclusion.

Legislatively New Zealand has been a country of experiments. As far back as the year 1869 an Act was passed enabling the Government to grant life assurances and annuities on the security of the Colonial revenue, and the Government Insurance Department is now a prominent institution of the State. In 1873 a Public Trust Office was founded, by which it was sought to insure the faithful discharge of trusts, to relieve individuals from the responsibilities of trusteeship, and to substitute a permanent officer of the Civil Service in place of guardians. Notwithstanding the lavishness of its public works policy, the Government of the Colony always manifested a reluctance to divert any of its revenues from the ordinary channels of public expenditure to any costly schemes of coastal defence. New Zealand was more backward in this respect than any of her sister Australian colonies. It is,

perhaps, largely due to the exertions of one of the Colony's Governors, Sir William F. D. Jervois, that much was done to remedy this condition of affairs. Soon after his arrival in the Colony, in January, 1883, His Excellency made a tour of inspection of the coastal defences, with a view to the elaboration of a homogeneous scheme. He subsequently, by lectures and by personal influence, aroused public attention to the risk which the Colony would run in the event of a European war, and under his direction the chief ports have been strongly fortified and furnished with effective battery and torpedo defences. As a direct result of the native wars, there is, and has always been, a large military element in the population; and New Zealand is now one of the best equipped of the Australasian colonies, either for putting down an insurrection within its own borders, or for repelling an attack of a foreign enemy.

The period marked by the Governorship of Sir William F. D. Jervois was probably the worst, in a financial sense, that the Colony had hitherto seen. Prices of staple produce continued to fall year after year. Those who had purchased landed estate with borrowed money for a speculative rise, one after another failed; next came the turn of their mortgagees, and then that of the minor financial companies, whose speculative holdings were unsaleable, and whose funds were exhausted. Responsibility for all this disaster was placed on the shoulders of the Vogel policy of public works and internal expansion; but the mischief was really traceable to several other causes. The truth is, that it was the private indebtedness of individuals at a time of slump after a period of inflation of values, together with an appalling fall in the price of raw products, rather than the spending of borrowed money on reproductive works, that plunged the Colony so long and so deeply in the mire of financial difficulties.

Political life during this period became chiefly a series of expedients for keeping the Treasury from absolute depletion, and carrying on the settlement of the land. The industrial outlook in New Zealand was probably never worse than in the years 1885 and 1886. The policy of retrenchment had been tried before with some results of partial salvation. It was tried again. The salaries of the Governor and the Ministers were diminished, as also were the size and the pay of the House of Representatives; the Customs duties were raised, and the taxes on property were increased. The result of these exertions to restore financial balance was a measure of strained but solvent success, and is creditable to the Hall, Atkinson, and Whitaker Ministry, which was called upon to meet the emergency.

While the provinces had their own Governments, they had also their own Land Laws. With these the General Assembly of the Colony had little to do. Upon the abolition of the provinces, the management of the public lands came into the domain of the central Parliament, and some fifty-four divergent statutes and ordinances had to be repealed. Uniformity could not, of course, be at once secured, as land was under

occupation under nine different systems, representing the methods of dealing with the public estate adopted by nine different Provincial Councils. Gradually these various regulations were brought together in a coherent whole; but it was not before the year 1892 that one Land Act contained the law on the subject, and could be made equally applicable to the whole of New Zealand. According to the Statute Books of 1877 to 1887, the land question was the matter of first importance engaging the attention of New Zealand politicians. It was the one central question, complicated with the claims of native ownership thereto, first-comer settler's ownership, colonising companies' ownership, and Government and provincial ownership—ownership by fraud, by conquest, by purchase, and by confiscation.

One of Sir George Grey's favourite projects was the repurchase by the State of private lands, with or without the owner's consent. Sir George did not remain in public life long enough to see it become law; and there has been fighting over this principle. But Mr. (afterwards Sir) John McKenzie, one of the most masterful and resolute of the Ministers of Lands put in power by the Liberal Party, carried it into law, and administered it with a strenuous ability, which constitutes an effective example to succeeding holders of his portfolio. Under this law the purchase money paid for 107 estates, comprising 448,350 acres, amounted to £2,117,352 at the 31st March, 1902. Other expenses, such as road construction, &c., amounted to £111,776, bringing the total to £2,229,128. An extent of 386,530 acres, held under lease by 2,033 selectors, returns an annual rental of £101,508.

In 1886 the Hon. John Ballance held the portfolio of Minister of Lands. The period was one of intense financial depression, and hundreds of unemployed artisans and labourers wandered about the country, in a state bordering on famine, looking for work. Then it was that this most radical of all New Zealand's statesmen made a courageous attempt to solve the unemployed difficulty by placing the workless upon the soil, and making producers of them. Blocks of Crown land were taken up in various parts of the colony. These were divided into allotments of from 20 to 30 acres, and let to the village settlers on perpetual lease at a rental equal to 5 per cent. on the prairie value of the lands. Some of these experimental farms collapsed, others succeeded. According to latest reports, the village settlers and their families occupy about 42,043 acres, in allotments of an average size of about 21 acres. About £15,000 has been advanced them by the Government, of which sum they have returned some £3,600. The total value of improvements on these lands amounts to £158,800.

Sir William F. D. Jervois' term of office ended on March 22nd, 1889, and the Chief Justice, Sir James Prendergast, was thereupon called to the post of Administrator till the 2nd May of the same year, when the Earl of Onslow arrived to take up the reins of Government. Though the "Continuous Ministry," under Sir Harry Atkinson, was still in power, its strength was already waning, and the old Conservative

strongholds were gradually capitulating to the attacks of the Liberal Opposition, who acknowledged John Ballance as their head. In addition to this, the leaders were succumbing to the effects of their long continued efforts in the public interest. Sir Harry Atkinson's health was breaking down, Sir Frederick Whitaker was fast sinking under the weight of advancing years, and the health of Sir John Hall did not allow him to take office. Thus the Liberals were able to redeem their pledge to widen the franchise, which had been one of their promises ever since Sir George Grey emerged from retirement to organise the party. On the 22nd September, 1889, electors were prohibited by statute from voting in respect of more than one electorate at any election for the House of Representatives. During the Earl of Onslow's administration, about the year 1890, the organised Labour Party made an assault on the political citadel and practically carried it by storm. New Zealand had passed through the old days of pioneering, whaling, sealing, alluvial gold-digging, native warfare, and mammoth pastoral enterprise, when acres were many and men were few. A new civilisation had grown up, fashioned on old-world lines, and ripe with a heavy harvest of old-world troubles. The colony had entered upon a commercial and industrial period, with an ever-present labour trouble, unorganised at first, and inarticulate, but rapidly organising and learning the alphabet of its power. When the organisation was complete, the Labour movement found its voice, and sought to make it heard in the councils of the State. The gold was gone, the lands were all occupied, and the pressure of altered conditions forced into prominence the new factor in politics. Somewhere about this time occurred two great strikes—one in England, thousands of miles distant; the other in Australia, in the very heart of the Newer World. One was the London dockers' strike; the other the great maritime strike of 1890. Smarting under the rebuff that it met with in Australia all along the line, the baffled cause of labour sought redress for its wrongs in Parliament. In none of the Australasian Colonies was the new movement so vehement as in New Zealand. The way, however, had been prepared. The voice of Grey had long been lifted in advocacy of measures deemed by opponents as ultra-democratic.

His successor, John Ballance, was not less ardent in the cause. By profession a journalist, this man, whose claims to the title of statesman are undoubted, had sprung from the people, and was intimately acquainted with their methods of thought, their hopes, and their desires. When opportunity came he was quick to seize it, and the Labour Party, instead of forming an independent opposition, had their path cleared of preliminary obstacles by the presence of a party in Parliament with similar ideals to their own. To this party they allied themselves, and acknowledged John Ballance as their head. The result was immediately apparent. On the 5th December, 1890, the general elections were held, and the constituencies pronounced their verdict with no uncertain voice. No less than twenty members owed their return

to the Labour vote, and Mr. Ballance found himself at the head of a majority which, though much of it was raw material, was sincere and enthusiastic, and devoted to the principles of its leader.

The Atkinson Ministry, after a few weeks of ineffectual delay resigned itself to the inevitable, and on the 24th January, 1891, Mr. Ballance became Premier, having in his Cabinet Mr. Seddon and Mr. Mackenzie, both of whom possessed the physical power and fighting force which their leader lacked.

The legislation initiated by Mr. Ballance, and continued by the Seddon Ministry, may be divided into enactments relating to Finance, to Constitutional Reform, and to Labour. At this time the principal source of direct taxation was the Property Tax. It consisted of a penny in the £ on the capital value of every citizen's possessions, less his debts and an exemption of £500; and was a rough-and-ready method of raising revenue. It was, however, inequitable, as it taxed stock that was frequently unmarketable—an exaction that fell upon values—while incomes, as such, were untouched. Moreover, years of high returns and loss were treated alike. The tax did not discriminate between good seasons and bad, and Mr. Ballance determined to introduce a more equitable system of revenue-raising. Accordingly, in the session of 1891 the Property Tax was abolished, and its place taken by a progressive Land Tax and a progressive Income Tax, which received statutory endorsement by "The Land and Income Tax Assessment Act of 1891," a measure amended from time to time until the law was consolidated by the Land and Income Tax Assessment Act of 1900. These measures instituted a system of taxation on the unimproved value of land and the capital value of mortgages, in conjunction with a tax on incomes in excess of £300 a year. The ordinary land tax is 1d. in the £, with a graduated tax in addition on all estates of the value of £5,000 and over. The rate of Income Tax is 6d. in the £ on the first taxable £1,000, after deducting the £300 exemption and 1s. in the £ on the excess of £1,000. Income Tax is payable by companies at the uniform rate of 1s. in the £. After a bitter conflict the measures passed both Houses, and a light Absentee Tax also became law. During the first session various measures were passed having for their object the alleviation of the lot of the worker. Chief amongst these were—the Employers' Liability Act of 1882 Amendment Act; the Truck Act, prohibiting the payment of wages in goods or otherwise than in money; and a Factories Act, afterwards repealed by a consolidating measure. On the 22nd April, 1891, a proclamation was issued to the inhabitants of Raratonga, notifying the appointment of a British Resident for the protectorate of the Cook Islands.

The Earl of Onslow left the Colony on the 2nd February, 1892, his resignation being received on the 24th of the same month, and the Chief Justice, Sir James Prendergast, acted as Administrator until the arrival of the Earl of Glasgow, who assumed the duties of Governor on the 7th June, 1892. During this year an important constitutional

point was decided with reference to the relative powers of the Governor and the Premier. The Legislative Council of New Zealand is nominated, not elective, and there is no fixed limit to the number of members. Prior to 1891 the nominations were for life. At that time, however, the period of tenure of a seat in the Upper Chamber was reduced to seven years. It was found, also, that the Liberal Party was almost altogether unrepresented in the Council; so, in 1892, Mr. Ballance requested the Governor, the Earl of Onslow, to call twelve fresh councillors. His Excellency demurred at the number. There was then about to be a change of Governors, and the matter remained in abeyance. On the 7th June, 1892, the Earl of Glasgow assumed the governorship; but he proved as obdurate with regard to the fresh appointments as did his predecessor. Mr. Ballance insisted that it was the Governor's duty to accept the advice of his responsible Ministers in this as well as in other affairs. His Excellency did not think so. The matter was then, by mutual consent, referred to the Colonial Office, and Lord Ripon decided in favour of the Premier. Twelve new councillors were accordingly nominated. The submission of this question to the arbitration of Downing-street was attacked by the Conservatives. It was attacked also by Sir George Grey, the democrat; but it was highly approved of by the House of Representatives, and by the people generally.

The Conservatives suffered a severe loss by the death of Sir Harry Atkinson, which took place on the 28th June, 1892, and it was long before the party recovered from this blow. During the year the broadly democratic policy of the Ballance Government found further expression in various legislative enactments. The Employers' Liability Act of 1882 was further amended, and a Contractors' and Workmen's Lien Act was passed, which, under certain restrictions, gives priority of claim for wages against other services, and enables legal proceedings for recovery to be taken before the attached property can be in any way alienated. On the 1st November, 1892, the present Land Act of New Zealand came into force. Under the terms of this measure land thrown open for selection may be either purchased or occupied with the right of purchase or of lease in perpetuity. A special class of settlement is also provided for, called the Small Farm Association, which was at first very popular, but is now superseded by the Improved Farm Settlement, under which areas of forest-clad land are thrown open, the selectors being paid for a time on the improvements, or else the land is cleared at a fixed rate and then balloted for. Up to the 31st March, 1902, 54 settlements, covering an area of 53,906 acres, had been allotted to 493 settlers, the average size of the holdings being 100 acres. The amount paid to the settlers was £71,077, and the value of improvements on the land is estimated at £100,000.

The death of the Hon. John Ballance deprived the Colony of the services of a statesman whose chief aim had been the amelioration of the social condition of the community. His Ministry almost

immediately resigned, and on the 1st May the Hon. Richard Seddon reconstructed the Cabinet on similar lines to those of his late leader.

A measure that Ballance had much at heart was the carrying into law of the principle of one man one vote. He did not live to see it passed. During his lifetime his Electoral Bill was thrown out twice by the Council, and went through only some months after his death. Under this Act, one man has not only one vote, but only one registration; he cannot have his name upon more than one roll. The right to vote by letter was conferred upon shearers, as it had previously been conferred upon seamen, and the franchise was extended to women. This last article only passed the Council by a narrow majority of two, and the Bill became law on the 19th September, 1893. A Workmen's Wages Act was also placed on the Statute Book, but in the direction of democratic legislation the Ministry were less active than usual, mainly in consequence of a split in the camp over the liquor question. The opposing factions were led, respectively, by Mr. Seddon and Sir Robert Stout. The Prohibitionist Party, under Sir Robert Stout, and organised outside the House by two clergymen named Isitt and Walker, considered the time opportune for pressing their demands, as it was thought that the death of Mr. Ballance had sapped the vitality of the Government. Startled by the vehemence of the movement, the Ministry dropped other legislation for the time being, and passed the Alcoholic Liquor Sale Control Act, which provided that new licenses were to be granted, subject to the votes of electors, and that licenses should be reduced or abolished if desired. This hasty measure was of a purely tentative character, and was later on subjected to considerable amendment and expansion. As it now stands, while not satisfying extremists, the measure contains a complete and elaborate system of local option. Publicans' licenses fall in with the death of the triennial Parliaments of the Colony; licensing districts occupy the same areas as electoral districts, and the licensing poll takes place on the same day as the general elections. The poll decides the question of retention, reduction, or abolition of existing licenses, but for the last-named a majority of three to two is necessary. The first local option poll resulted in the closing of seventy houses, and in totally prohibiting the retail of liquor in the Clutha district. Since then, however, the results of the voting have been somewhat unexpected. Although the prohibitionist power has been greatly augmented by reason of the vote being taken on the same day as the general elections, the party has been defeated, except in the Clutha district, by the moderate section advocating the continuance of existing licenses. The general election at the close of 1893 was remarkable from the fact that it was the first occasion on which the female franchise was exercised. There was a rush of women to be put on the rolls, and then the unexpected happened: they did not vote solidly on a Conservative ticket; their vote, on the contrary, buttressed the position of the Liberal Party, which returned to power with a useful majority and increased confidence.

The direct result of the reaffirmation of the Liberal policy was naturally a further development of democratic legislation. The Industrial Conciliation and Arbitration Act, The Factories Act, The Shop and Shop Assistants Act, and amendments of the Conspiracy Law and Inspection of Machinery Acts all belong to the session of 1894. Perhaps the most important of these measures is the first, which, with its subsequent amendments, creates Boards of Conciliation for certain defined districts, and a Central Court of Arbitration, the award of which may be enforced in the same way as a judgment of the Supreme Court.

The Factories Act of 1894, slightly extended by an amending Act in 1896, consolidates and improves upon no less than four previous measures, two of which were passed by the Ballance Government. Under this Act all workshops, where two or more persons are occupied, are declared to be factories, must register, pay an annual fee, and submit to inspection at any hour of the night or day; a master and servant working together count as two hands, and inspectors have absolute power to demand such cubic space, ventilation and sanitary arrangements generally as they may consider needful to preserve life and health. The factory age is 14; there are no half-timers. In New Zealand, primary education is not only free, but compulsory: any child under 15, therefore, must undergo an education test before being allowed to go to factory work. Children under 16 years must be certified by an inspector to be physically fitted for factory work. Women and children under 18, may not work before 7.15 a.m., or after 6 p.m., nor more than forty-eight hours per week. All factory workers (time or piece) are entitled to the half-holiday, after 1 p.m. on Saturday—in the case of time workers, without deduction from wages. The rates of pay and hours of labour have to be publicly notified and returned to inspectors. Overtime may be permitted by inspectors on twenty-eight days a year, but overtime pay must not be less than 6d. per hour extra. Even the huts in which the nomadic shearer lives while working on a sheep-station are placed under the operation of this Act. The Shop and Shop Assistants Act regulates the hours of business in shops, and provides for one half-holiday a week. It also enumerates the working hours, holidays, &c., of clerks employed in banks and mercantile offices. But these measures were not the only class legislation passed during the session. A measure that found much favour with the local small farmer was the Advances to Settlers Act of 1894. Under it a State Board may lend Government money on leasehold and freehold security, but not on urban or suburban lands, unless occupied for farming or market gardening. The loan may amount to three-fifths of the value of the security when freehold, and one-half when leasehold. The rate of interest charged is 5 per cent., but the borrower pays at the rate of 6 per cent., in half-yearly instalments, the extra 1 per cent. being by way of gradual repayment of the principal. Mortgagees must in this manner repay

the principal in seventy-three half-yearly instalments; if able to pay sooner, they can do so. Over three millions of money have been lent under the Act. Other measures designed for the benefit of the agricultural and pastoral community, and passed during the same year, were The Land for Settlements Act, authorising the acquisition of private lands for the purpose of settlement, the Lands Improvement and Native Lands Acquisition Act, and the Dairy Industry Act, the last-mentioned measure regulating the manufacture of butter and cheese, ensuring the purity of the milk used, and providing for inspection and grading for export.

The year 1895 was the culminating point in a period of depression, which had lasted practically since 1870. Although agricultural and industrial production had grown during the interval, the increase had been counterbalanced by a fall in prices of products, and in the value of land. Settlers had for long been forced to go to the financial institutions for assistance, and the high rates of interest were a further source of embarrassment. The breaking strain was reached in 1895, and mortgages were allowed to fall in by many who could no longer hold out against adverse fortune. Values of securities were thereby greatly depreciated, and the Bank of New Zealand, one of the largest of the mortgagors, was compelled to seek assistance from the Government. This was granted by the Bank of New Zealand and Banking Act of 1895, which sanctioned the writing off of the paid-up capital of the bank, together with the proceeds of a first call on the reserve liability, and also the raising of new capital by the issue of preference shares in exchange for Government securities. It was also provided that one of the directors should be appointed by the Governor. In spite of this financial disaster the general results for 1895 were favourable, and the Treasurer was able to declare a surplus at the end of the year, this satisfactory state of affairs proving the precursor of a period of prosperity.

In accordance with the usual rule, the Parliamentary session of 1896, immediately preceding the general elections, was not remarkable for any measures of great importance, the principal enactments being chiefly amendments to existing legislation. The franchise was altered by the abolition of the non-residential or property qualification, and residence alone now entitles an elector to have his name on the roll. The results of the census, taken on the 12th April, necessitated a partial redistribution of seats, and a permanent commission for each of the two islands was constituted under the Representation Act Amendment Act. An amendment of the Land for Settlement Act made special provision for the disposal of highly improved lands acquired by the Government, and ordained that preference should be given to applicants not in possession of any land. The labour legislation comprised amendments to the Acts regulating the Inspection of Machinery, Registry of Shipping and Seamen, the Shop and Shop Assistants Act, and the Trade Unions Act. At the end of July a want of confidence motion, tabled by

the Opposition, was defeated by 40 votes to 18. During the year a special Committee was appointed to inquire into the banking legislation already on the Statute Books, and into the affairs of the Bank of New Zealand and the Colonial Bank. The recommendations contained in the report of this Committee were incorporated in a Bill, but owing to the approaching termination of the session the measure was withdrawn. On the 26th March a terrible mining disaster took place at the Brunner mine, when sixty-five miners were entombed. Altogether, sixty-seven deaths occurred, for which the accident was primarily responsible, the lamentable occurrence being a great shock to the community. In June heavy floods, accompanied by serious loss of property, visited the Manawatu, Hawke's Bay, and Paeroa districts. The general elections, held at the close of the year, resulted in the return of the Seddon Ministry with a good working majority.

The Earl of Glasgow completed his term of office as Governor, and left the Colony on the 6th February, 1897, amid universal regret from all sections of the community, with whom he had made himself extremely popular. Sir James Prendergast took up the duties of the administration until the arrival of the Earl of Ranfurly, who was sworn in on the 10th August. The early months of 1897 were extremely dry, and accompanied by destructive bush fires, but at Eastertide exceptionally severe storms of wind and rain visited the Colony, and destructive floods were experienced, especially in the Rangitikei and Hawke's Bay districts. In these localities one of the heaviest rainfalls on record was registered, with the result that immense volumes of water poured over the country, sweeping away the settlers' houses, and inflicting serious damage. Several lives were lost, and hundreds of cattle and sheep were drowned, while the railway system of the North Island was disorganised by the destruction of bridges and washaways of line that occurred at various points. Off the coast the weather was very stormy, and several disasters to shipping were recorded, the wreck of the "Tasmania," at Mahia Peninsular, involving the loss of ten lives. During the year the Premier visited England, in connection with the Record Reign celebrations, and a contingent of New Zealand troops was also despatched by the Colony. One of the Universities conferred the degree of Doctor of Laws on Mr. Seddon, and Her Majesty created him a Privy Councillor. The year generally was a very prosperous one, and those engaged in the dairy industry, helped by the dry conditions prevailing in Australia, exported a record quantity of produce.

The recurrence of bush fires in all the provinces during the early months of 1898 occasioned much damage to stock and crops, and the year opened unfavourably for agriculturists. The long duel between Mr. Seddon and Sir Robert Stout, the uncompromising seceder to the Opposition ranks, was terminated by the resignation of the latter, in February. Shortly after the reassembling of Parliament, a vote of non-confidence resulted in the defeat of the Opposition by 30 votes

to 24. Under the provisions of the Bank of New Zealand Amendment Act, which finally became law in 1898, the number of directors was increased, the office of President was abolished, and the powers of the Government were strengthened in various ways with respect to the control of the institution. Another important measure, and one which met with great opposition in its passage through Parliament, was the Old Age Pensions Act, which became law on the 1st November, 1898. An Act adjusting and altering the conditions under which divorce could be obtained, and practically placing men and women on an equal footing, was also placed on the Statute Book, Royal Assent to the measure being gazetted on the 13th April, 1899. The Mining Act of 1898 was mainly a consolidating measure, but contained some important amendments in its clauses. Other legislation amended by Parliament through the session comprised alterations to the Industrial Conciliation and Arbitration Act, and the Kauri Gum Industry Act, while the Government maintained its democratic principles by an Act regulating and improving the accommodation for shearers. A Municipal Franchise Reform Act was also passed. Sir George Grey, who for a great portion of his career had been so intimately connected with the Colony's affairs, died in England in 1898, the news of his death arousing a feeling of widespread regret throughout Australasia. In the same year, also, occurred the deaths of Bishop Selwyn, of Melanesia, and Sir Francis Dillon Bell, who was a member of the Executive Council previous to the establishment of Responsible Government, and had for many years been a prominent figure in the public life of the Colony.

Early in 1899 the colony lost the services of another of its foremost politicians, in the person of Sir Julius Vogel, who died on the 13th March. The legislative work of the final session of the 13th Parliament began on the 23rd June, and was of a most extensive character. In all sixty Bills received the Royal Assent, the Immigration Restriction Act was reserved, and no less than ninety-eight were abandoned after advancing various stages. Included in the democratic legislation of the session were measures providing for the prevention of employment of boys and girls without payment, and for the establishment of a Labour Day. A Wages Protection Act was also passed during the year which is connected in its scope with the Truck Act of 1891. The experimental character of the early labour legislation of the Liberal Government was again demonstrated by the necessity of amendment in various directions, the Kauri Gum, Mining, Shipping, and Seamen's Acts all requiring alteration in some particular. As a result of the general elections held on the 6th December the Seddon Government again returned to power with a substantial majority. The first New Zealand contingent, comprising 215 officers and men, was dispatched to South Africa on the 21st October, 1899. Four additional contingents were equipped and sent away in quick succession during the early part of 1900. The second detachment of 258 volunteers left on the 21st January; on the 17th February a third followed, consisting of 264 officers and men; and

the fourth and fifth, numbering 1,060 officers and men, left on March 24th and 31st. Various useful consolidating measures were passed during the parliamentary session, chiefly dealing with Municipal Corporation, Public Health, and Land for Settlement. The Act dealing with the Postal Affairs of the Colony established a wide extension of the penny postage system which affected the whole Colony, and came into operation on the 1st January, 1901. The Old Age Pension Act and the Compensation to Workmen Act were also placed on a more satisfactory basis. European representation in the House of Representatives was increased by the addition of six members, the enactment being post-dated for the next general election. The Native Department showed great activity with respect to procuring the passage of laws granting the Maoris a modicum of self-government, together with a certain power in the management of their own lands, at the same time sweeping away many of the old abuses.

In October the Earl of Ranfurly paid a visit to Cook Island Group, and at Raratonga proclaimed the annexation of the islands to the British Crown, a step towards their inclusion within the territory of New Zealand. Great activity was displayed in the pursuit of dredging for gold during the year, and a "boom" of some consequence arose, though its subsequent bursting for a time injuriously affected the industry.

In January, 1901, the sixth contingent, consisting of 578 officers and men, left for South Africa; and the seventh, comprising 600 officers and men, and known as the "Rough Riders," was despatched on the 6th April. The Duke and Duchess of York visited New Zealand in June, and were everywhere received with enthusiastic demonstrations of welcome. Letters Patent, issued on the 13th May, extended the boundaries of the Colony so as to include the Cook Islands, the 11th June being fixed upon as the date of this extension. The question of Federation occupied attention during the year, but public opinion seemed to be largely against it. A Commission visited Australia for the purpose of taking evidence, but its report, tabled on the 22nd July, was decidedly antagonistic to the proposal. During the year the eight-hour day principle was incorporated in the Coal Mines and Factories Acts, and an experiment in State ownership of means of production was made by the passing of a State Coal Mines Act. An Accidents Compensation Act, and Advances to Settlers Extension Act were also passed, and the Industrial Conciliation and Arbitration Act was amended in the direction of making the Conciliation Boards optional. The Commonwealth Tariff had the effect of curtailing exports to Australia, but this was counterbalanced by the growth of trade with South Africa. The Colony suffered a severe loss by the death, on the 6th August, of Sir John Mackenzie, who had been for many years an ardent supporter of the Ballance and Seddon Governments.

In February, 1902, a further contingent of 1,000 men was despatched to South Africa. At the time of its departure, a ninth was in process

of enrolment, and before this was fairly on its way a tenth had been offered and accepted. Each of these numbered 1,000 men, and with the first battalion of the last of them Mr. Seddon journeyed to South Africa to visit the scene of the war, prior to proceeding to London to take part in the Coronation festivities and the Conference of Colonial Premiers.

In the following table will be found a list of the successive Ministries which have held office in New Zealand from the inauguration of Responsible Government up to the date of publication of this volume:—

No. of Ministry.	Name.	Date of Appointment.	Date of Retirement.	Duration.	
				Months.	Days.
1	Bell-Sewell	7 May, 1856	20 May, 1856	0	13
2	Fox	20 May, 1856	2 June, 1856	0	13
3	Stafford	2 June, 1856	12 July, 1861	60	10
4	Fox	12 July, 1861	6 Aug., 1862	12	25
5	Domett	6 Aug., 1862	30 Oct., 1863	14	24
6	Whitaker-Fox	30 Oct., 1863	24 Nov., 1864	12	25
7	Weld	24 Nov., 1864	16 Oct., 1865	10	22
8	Stafford	16 Oct., 1865	28 June, 1869	44	12
9	Fox	28 June, 1869	10 Sept., 1872	38	13
10	Stafford	10 Sept., 1872	11 Oct., 1872	1	1
11	Waterhouse	11 Oct., 1872	3 Mar., 1873	4	21
12	Fox	3 Mar., 1873	8 April, 1873	1	5
13	Vogel	8 April, 1873	6 July, 1875	26	28
14	Pollen	6 July, 1875	15 Feb., 1876	7	9
15	Vogel	15 Feb., 1876	1 Sept., 1876	6	16
16	Atkinson	1 Sept., 1876	13 Sept., 1876	0	12
17	Atkinson	13 Sept., 1876	15 Oct., 1877	13	2
18	Grey	15 Oct., 1877	8 Oct., 1879	23	23
19	Hall	8 Oct., 1879	21 April, 1882	30	13
20	Whitaker	21 April, 1882	25 Sept., 1883	17	4
21	Atkinson	25 Sept., 1883	16 Aug., 1884	10	22
22	Stout-Vogel	16 Aug., 1884	28 Aug., 1884	0	12
23	Atkinson	28 Aug., 1884	3 Sept., 1884	0	6
24	Stout-Vogel	3 Sept., 1884	8 Oct., 1887	37	5
25	Atkinson	8 Oct., 1887	24 Jan., 1891	39	16
26	Ballance	24 Jan., 1891	1 May, 1893	27	7
27	Seddon	1 May, 1893	.....	.....	.....

THE COMMONWEALTH.

THE question of the federation of the various provinces of Australia was not overlooked by the framers of the first free Australian Constitution, who proposed the establishment of a General Assembly "to make laws in relation to those intercolonial questions that have arisen, or may hereafter arise," and who, indeed, sketched out a tolerably comprehensive federation scheme. Unfortunately, however, that proposition was included with another for the creation of a colonial hereditary nobility, and in the storm of popular opposition and ridicule with which the latter idea was greeted, the former sank out of sight. Again, in 1853, the Committees appointed in New South Wales and Victoria to draw up the Constitutions of their respective colonies, urged the necessity for the creation of a General Assembly; but the Home Government indefinitely postponed the question by declaring that "the present is not a proper opportunity for such enactment." From time to time, since Responsible Government was established, the evil of want of union among the Australian colonies has been forcibly shown, and the idea of federation has gradually become more and more popular. Some years ago (1883) the movement took such shape that, as the result of an Intercolonial Conference, the matter came before the Imperial Parliament, and a measure was passed permitting the formation of a Federal Council, to which any colony that felt inclined to join could send delegates. The first meeting of the Federal Council was held at Hobart in January, 1886. The colonies represented were Victoria, Queensland, Tasmania, Western Australia, and Fiji. New South Wales, South Australia, and New Zealand declined to join. South Australia sent representatives to a subsequent meeting, but withdrew shortly afterwards. The Council held eight meetings, at which many matters of intercolonial interest were discussed, the last having been held in Melbourne, early in 1899. One meeting every two years was necessary to keep the Council in existence. Being, from its inherent constitution, a purely deliberative body, having no executive functions whatever, the Federal Council possessed no control of funds or other means to put its legislation into force, and those zealous in the cause of federation have had to look elsewhere for the full realisation of their wishes. The Council, naturally, ceased to exist at the inception of the Commonwealth.

An important step towards the federation of the Australasian colonies was taken early in 1890, when a Conference, consisting of representatives from each of the seven colonies of Australasia, was held in the Parliament House, Melbourne. The Conference met on the 6th February, thirteen members being present, comprising two representatives from each of the colonies, except Western Australia which sent only one. Mr. Duncan Gillies, Premier of Victoria, was elected President. Seven meetings were held, the question of federation being discussed at considerable length; and in the end the Conference adopted an address to the Queen, expressing their loyalty and attachment, and submitting certain resolutions which affirmed the desirability of an early union, under the Crown, of the Australian colonies, on principles just to all, suggested that the remoter Australasian colonies should be entitled to admission upon terms to be afterwards agreed upon, and recommended that steps should be taken for the appointment of delegates to a National Australasian Convention, to consider and report upon an adequate scheme for a Federal Constitution.

In accordance with the terms of that resolution, delegates were appointed by the Australasian Parliaments, and on the 2nd March, 1891, the National Australasian Convention commenced its sittings in the Legislative Assembly Chambers, Sydney, having been convened at the instance of Mr. James Munro, the Premier of Victoria. There were forty-five members of the Convention altogether, New South Wales, Victoria, Queensland, Tasmania, and Western Australia (which had only recently been placed in possession of the privilege of Responsible Government) each sending seven delegates, and New Zealand three. Sir Henry Parkes, then Premier of the mother colony, was unanimously elected President of the Convention; Mr. F. W. Webb, Clerk of the Legislative Assembly of New South Wales, was appointed Secretary; Sir Samuel Griffith, Premier of Queensland, was elected Vice-President; and Mr. (later Sir) J. P. Abbott, Speaker of the New South Wales Legislative Assembly, was elected Chairman of Committees.

A series of resolutions was moved by the President, Sir Henry Parkes, setting forth certain principles necessary to establish and secure an enduring foundation for the structure of a Federal Government, and approving of the framing of a Federal Constitution; and after discussion and amendment, the resolutions were finally adopted, affirming the following principles:—

1. The powers and rights of existing colonies to remain intact, except as regards such powers as it may be necessary to hand over to the Federal Government.
2. No alteration to be made in State boundaries without the consent of the Legislatures of such States, as well as of the Federal Parliament.
3. Trade between the federated colonies to be absolutely free.

4. Power to impose Customs and Excise Duties to rest with the Federal Government and Parliament.
5. Military and Naval Defence Forces to be under one command.
6. The Federal Constitution to make provision to enable each State to make amendments in its Constitution if necessary for the purposes of Federation.

Further resolutions approved of the framing of a Federal Constitution which should establish a Senate and a House of Representatives—the latter to possess the sole power of originating money Bills; also a Federal Supreme Court of Appeal, and an Executive consisting of a Governor-General, with such persons as might be appointed his advisers. On the 31st March, Sir Samuel Griffith, as Chairman of the Committee on Constitutional Machinery, brought up a draft Constitution Bill, which was fully and carefully considered by the Convention in Committee of the Whole, and adopted on the 9th April, when the Convention was formally dissolved.

The Bill of 1891 aroused no popular enthusiasm, and parliamentary sanction to its provisions was not sought in any of the colonies; thus federation fell into the background of politics.

At this juncture a section of the public began to exhibit an active interest in the cause which seemed in danger of being temporarily lost through the neglect of politicians. Public Associations showed sympathy with the movement, and Federation Leagues were organised to discuss the Bill and to urge the importance of federal union upon the people. A conference of delegates from Federation Leagues and similar Associations in New South Wales and Victoria was called at Corowa in 1893. The most important suggestion made at this Conference was that the Constitution should be framed by a Convention to be directly elected by the people of each colony for that purpose. This new proposal attracted the favourable attention of Mr. G. H. Reid, then Premier of New South Wales, who perceived that a greater measure of success could be secured by enlisting the active sympathy and aid of the electors, and who brought the principle to the test in 1895. In January of that year he invited the Premiers of the other colonies to meet in conference for the purpose of devising a definite and concerted scheme of action. At this Conference, which was held at Hobart, all the Australasian colonies except New Zealand were represented. It was decided to ask the Parliament of each colony to pass a Bill enabling the electors qualified to vote for members of the Lower House to choose ten persons to represent the colony on a Federal Convention. The work of the Convention, it was determined, should be the framing of a Federal Constitution, to be submitted, in the first instance, to the local Parliaments for suggested amendments, and, after final adoption by the Convention, to the electors of the various colonies for their approval by means of the referendum.

In 1896 a People's Federal Convention, an unofficial gathering of delegates from various Australian organisations, met at Bathurst to

discuss the Commonwealth Bill in detail, and by its numbers and enthusiasm gave valuable evidence of the increasing popularity of the movement.

In accordance with the resolutions of the Convention of 1895, Enabling Acts were passed during the following year by New South Wales, Victoria, South Australia, Tasmania, and Western Australia; and were brought into operation by proclamation on the 4th January, 1897. Meanwhile Queensland held aloof from the movement, after several attempts to agree on the question of the representation of the Colony. The Convention met in Adelaide, Mr. C. C. Kingston, Premier of South Australia, being elected President; and Sir Richard Baker, President of the Legislative Council of South Australia, Chairman of Committees; while Mr. Edmund Barton, Q.C., one of the representatives of the mother colony, and a gentleman who had taken a deep interest in the movement, acted as leader of the Convention. The final meeting of the session was held on the 23rd April, when a draft Constitution was adopted for the consideration of the various Parliaments, and at a formal meeting on the 5th May, the Convention adjourned until the 2nd September. On that date the delegates re-assembled in Sydney, and debated the Bill in the light of suggestions made by the Legislatures of the federating colonies. In the course of the proceedings, it was announced that Queensland desired to come within the proposed union; and, in view of this development, and in order to give further opportunity for the consideration of the Bill, the Convention again adjourned. The third and final session was opened in Melbourne on the 20th January, 1898, the Colony of Queensland being still unrepresented; and, after further consideration, the Draft Bill was finally adopted by the Convention on the 16th March for submission to the people.

In its main provisions the Bill of 1898 followed generally that of 1891, yet with some very important alterations. It proposed to establish, under the Crown, a federal union of the Australasian colonies, to be designated the Commonwealth of Australia. A Federal Executive Council was created, to be presided over by a Governor-General appointed by the Queen. The Legislature was to consist of two Houses—a Senate, in which each colony joining the Federation at its inception was conceded the equal representation of six members; and a House of Representatives, to consist of, as nearly as possible, twice the number of Senators, to which the provinces were to send members in proportion to population, with a minimum number of five representatives for each of the original federating states. The principle of payment of members was adopted for the Senate as well as for the House of Representatives, the honorarium being fixed at £400 per annum. The nominative principle for the Upper House was rejected, both Houses being elective, on a suffrage similar to that existing in each colony for the popular Chamber at the foundation of the Commonwealth. At the same time, it was left to the Federal Parliament to establish a federal franchise, which, however,

could only operate in the direction of the extension, not the restriction, of any of the existing privileges of the individual colonies; so that in those States where the franchise has been granted to women their right to vote cannot be withdrawn by the central authority so long as adult suffrage prevails. While the House of Representatives was to be elected for a period of three years, Senators were to be appointed for twice that term, provision being made for the retirement of half their number every third year. The capital of the Commonwealth was to be established in federal territory.

Warmly received in Victoria, South Australia, and Tasmania, the Bill was viewed somewhat coldly by a section of the people of New South Wales, and this feeling rapidly developed into one of active hostility, the main points of objection being the financial provisions, equal representation in the Senate, and the difficulty which the larger colonies must experience in securing an amendment of the Constitution in the event of a conflict with the smaller States. So far as the other colonies were concerned, it was evident that the Bill was safe, and public attention throughout Australasia was riveted on New South Wales, where a fierce political contest was raging, which it was recognised would decide the fate of the measure for the time being. The fears expressed by its advocates were not so much in regard to securing a majority in favour of the Bill, as to whether the statutory number of 80,000 votes necessary for its acceptance would be reached. These fears were proved to be well founded; for on the 3rd June, 1898, the result of the referendum in New South Wales showed 71,595 votes in favour of the Bill, and 66,228 against it, and it was accordingly lost. In Victoria, Tasmania, and South Australia, on the other hand, the Bill was accepted by triumphant majorities. Western Australia did not put it to the vote; indeed, it was useless to do so, as the Enabling Act of that colony only provided for joining a Federation of which New South Wales should form a part.

The existence of such a strong opposition to the Bill in the mother colony convinced even its most zealous advocates that some changes would have to be made in the Constitution before it would be accepted by the people; consequently, although the general election in New South Wales, held six or seven weeks later, was fought on the Federal issue, yet the opposing parties seemed to occupy somewhat the same ground, and the question narrowed itself down to one as to which should be entrusted with the negotiations to be conducted on behalf of the colony with the view to securing a modification of the objectionable features of the Bill. The new Parliament decided to adopt the procedure of sending the Premier, Mr. Reid, into conference, armed with a series of resolutions affirming its desire to bring about the completion of federal union, but asking the other colonies to agree to the reconsideration of the provisions which were most generally objected to in New South Wales. As they left the Assembly, these resolutions submitted—first, that, with equal representation in the Senate, the

three-fifths majority at the joint sitting of the two Houses should give way to a simple majority, or the joint sitting be replaced by a provision for a national referendum; second, that the clause making it incumbent upon the Federal Government to raise, in order to provide for the needs of the States, £3 for every £1 derived from Customs and Excise Duties for its own purposes, and thus ensuring a very high tariff, should be eliminated from the Bill; third, that the site of the Federal Capital should be fixed within the boundaries of New South Wales; fourth, that better provision should be made against the alteration of the boundaries of a State without its own consent; fifth, that the use of inland rivers for the purposes of water conservation and irrigation should be more clearly safeguarded; sixth, that all money Bills should be dealt with in the same manner as Taxation and Appropriation Bills; and seventh, that appeals from the Supreme Courts of the States should uniformly be taken, either to the Privy Council or to the Federal High Court, and not indiscriminately to either; while the House also invited further inquiry into the financial provisions of the Bill, although avowing its willingness to accept these provisions if in other respects the Bill were amended. These were all the resolutions submitted by the Government to the House, but the Assembly appended others in respect to the alteration of the Constitution and the number of Senators, submitting, on the first of these points, that an alteration of the Constitution should take effect, if approved by both Houses and a national referendum; that a proposed alteration should be submitted to the national referendum, if affirmed in two succeeding sessions by an absolute majority in one House, and rejected by the other; and that no proposed alteration, transferring to the Commonwealth any powers retained by a State at the establishment of the federation, should take effect in that State, unless approved by a majority of electors voting therein; and, on the second point, that the number of Senators should be increased from six to not less than eight for each State.

The Legislative Council adopted the resolutions with some important amendments, discarding the suggestion in the first resolution for a national referendum; submitting that the seat of the Federal Government should be established at Sydney; more clearly preserving the rights of the people of the colony to the use of the waters of its inland rivers for purposes of water conservation and irrigation; carrying all appeals from the Supreme Courts of the States to the Privy Council; and declining to affirm its preparedness to accept the financial scheme embodied in the Bill. Further, the House suggested that the plan of submitting proposed alterations of the Constitution to the people by means of the referendum should be altered, and that no rights or powers retained by a State should be afterwards transferred to the Commonwealth without the consent of both Houses of Parliament of that State. The New South Wales Premier decided to submit the resolutions of both Houses to the other Premiers in conference, attaching, however, greater importance to those of the Assembly, as embodying the views

of a House which had just returned from the country. This conference was held in Melbourne at the end of January, 1899, Queensland being represented; and an agreement was arrived at, whereby it was decided that, in the event of a disagreement between the two Houses of Parliament, the decision of an absolute majority of the members of the two Houses should be final; that the provision for the retention by the Commonwealth of only one-fourth of the Customs and Excise revenue might be altered or repealed at the end of ten years, another clause being added, permitting the Parliament to grant financial assistance to a State; that no alterations in the boundaries of a State should be made without the approval of the people as well as of the Parliament of that State; and that the seat of Government should be in New South Wales, at such place, at least 100 miles from Sydney, as might be determined by the Federal Parliament, and within an area of 100 square miles of territory, to be acquired by the Commonwealth, it being provided that the Parliament should sit at Melbourne until it met at the seat of Government. A special session of the New South Wales Parliament was convened to deal with this agreement, and the Legislative Assembly passed an Enabling Bill, referring the amended Constitution to the electors. The Council, however, amended the Bill demanding—first, the postponement of the referendum for a period of three months; second, making it necessary for the minimum vote cast in favour of the Bill to be one-fourth of the total number of electors on the roll; third, deferring the entrance of New South Wales into the Federation until Queensland should come in. These amendments were not accepted by the Assembly, and a conference between representatives of the two Houses was arranged; but this proved abortive, and twelve new members were appointed to the Upper House in order to secure the passage of the Bill. This course had the effect desired by the Government; for the Council passed the Bill on the 19th April, an amendment postponing the referendum for eight weeks being accepted by the Assembly. The Bill received its final assent on the 22nd April, and the 20th June following was appointed as the date of the referendum. The poll resulted in a majority of 24,679 in favour of the Bill, the votes recorded for and against being 107,420 and 82,741 respectively. South Australia on the 29th April had re-affirmed its acceptance of the Bill by a majority of 48,937 votes, in Victoria it was again passed with a majority of 142,848 on the 27th July, while on the same date the Bill passed in Tasmania with a margin in its favour of 12,646 votes. Queensland adopted the measure on the 2nd September by a majority of 6,216. Western Australia still hung back, but at a referendum taken on the 31st July, 1900, the Bill was accepted with the decisive majority of 25,109 votes.

Though the Bill was favourably received by the Imperial Government, certain amendments, the most important of which referred to the appeal to the Privy Council, were proposed by Mr. Chamberlain, the Secretary of State for the Colonies. At a Premier's Conference, held

in Sydney at the end of January, it was decided to send delegates to England from each of the federating colonies, who were to give their joint support to the Bill, but were not to consent to any amendment of its provisions. The six delegates arrived in England in March, 1900, and a series of conferences took place amongst themselves, and also with officers representing the Imperial Government. The most serious ground of contention was Clause 74, which prohibited appeals to Her Majesty in Council in matters involving the interpretation of the Constitution of the Commonwealth or of a State unless the public interests of other parts of Her Majesty's dominions were concerned. On all other questions the right of appeal from Supreme Courts of the States, as well as from the Federal High Court, was left untouched. Mr. Chamberlain proposed that, notwithstanding anything in the Constitution, the prerogative of Her Majesty of granting special leave to appeal might be exercised with respect to any judgment or order of the High Court of the Commonwealth or of the Supreme Court of any State. In other words, the Secretary of State insisted that Clause 74 should be amended so as to maintain the royal prerogative as to appeals on constitutional questions as well as other matters, while at the same time he promised a re-constituted Court of Appeal for the Empire in which the Australian Colonies would find representation. The delegates opposed most strongly the submission of constitutional disputes to the decision of the Privy Council under any pretext. A compromise, supported by four of the six delegates, was therefore agreed upon, by which the consent of the Executive Government or Governments was made a necessary condition precedent to an appeal from the High Court to the Privy Council on constitutional questions. The new arrangement, however, evoked such hostile criticism in the colonies that the Premiers cabled a rejection of it. A fresh compromise was thereupon arrived at, by which it was determined that the right of appeal to the Privy Council, where a constitutional point purely Australian in character was involved, might be granted at the pleasure of the High Court. By this settlement the finality of the decisions of the High Court upon matters of constitutional interpretation is preserved. The arrangement proved satisfactory to both sides, and the amendment was accepted by the legislatures of the federating colonies. Thenceforward no further objection was made to the passing of the measure, and it received the royal assent on the 9th July.

Lord Hopetoun, who had formerly occupied the position of Governor of Victoria, was appointed first Governor-General of the Commonwealth of Australia, and arrived in Sydney on the 15th December. Meanwhile, by royal proclamation, the first day of January, 1901, was fixed on as the date of inauguration of the new Commonwealth. The first Federal Ministry was formed under the leadership of Mr. (now Sir) E. Barton, and was composed of the following members:—

Mr. E. Barton (N.S.W.), Prime Minister and Minister of State for External Affairs; Sir William Lyne (N.S.W.), Minister of State for

Home Affairs; Sir George Turner (Vic.), Treasurer; Mr. Alfred Deakin (Vic.), Attorney-General and Minister for Justice; Mr. C. C. Kingston (S.A.), Minister for Trade and Customs; Sir J. R. Dickson (Q.), Minister for Defence; Sir John Forrest (W.A.), Postmaster-General. Mr. R. E. O'Connor (N.S.W.), and Mr. (now Sir) N. E. Lewis (Tas.) were also appointed as Ministers without portfolio, the former occupying the position of Vice-President of the Executive Council. A few days later Sir James Dickson died after a short illness, and the portfolio of Minister of Defence was assigned to Sir John Forrest, while Mr. J. G. Drake, who held office as Postmaster-General of Queensland, was appointed to a similar position in the Federal Executive. Mr. Lewis only held office in the Commonwealth Cabinet until the Federal elections had taken place, when he resigned, and was succeeded by Sir Philip O. Fysh. The Ministry as above constituted was sworn in on the 1st January, 1901, the ceremony taking place in a specially-erected pavilion in the Centennial Park, Sydney. The festivities in connection with this epoch-making event in Australian history lasted for several days, additional interest being lent to the proceedings by the presence of detachments of troops from Great Britain, India, and the various provinces of Australasia. The death of Queen Victoria, which took place on the 22nd January, 1901, possesses a melancholy interest for these States from the fact that one of the last great public acts of the deceased sovereign was the signing of the proclamation establishing the Commonwealth. Under the Constitution, the control of Customs and Excise in the various States passed over to the Federal authority with the inauguration of the Commonwealth, and attention was at once devoted to placing matters in connection with these services in working order. The taking over of the postal administrations of the States was not finally dealt with till the 1st March, and the same date saw the transfer of the Defence Departments. These were the only divisions of State administration over which the Commonwealth Government thought necessary to assume control, though the Constitution rendered it permissible to take over lighthouses, lightships, beacons, buoys, and quarantine, by the simple act of proclaiming the dates, and without further legislation.

As it was necessary for the Federal elections to take place early in 1901, much detail work was cast upon the Ministry in the shape of arranging for the various preliminaries in connection with recording the votes in the six States. In the first Parliament each State returned six members to the Senate, while section 26 of the Constitution provided for the number of representatives in the Lower House as follows:—New South Wales, 26; Victoria, 23; Queensland, 9; South Australia, 7; Western Australia, 5; Tasmania, 5. Parliament may increase or diminish the number of members, provided that it does not alter the proportion of members to Senators, and does not bring the number of members returned from an original State below five. The chief interest in the elections settled round the question of the fiscal policy of the new

Commonwealth. When the Constitution Act was under consideration, the problem arose of ensuring a sufficient Customs Revenue to enable each State to receive back from the Federal Treasurer an amount equal to what its own receipts would have been, less the net expenditure of the Commonwealth. This necessity was met by the "Braddon Clause," as section 87 was called, providing that during a period of ten years after the establishment of the Commonwealth, and thereafter until further legislative action is taken by Parliament, not more than one-fourth of the net revenue of the Commonwealth from Customs and Excise shall be applied annually towards Commonwealth Expenditure. The balance of three-fourths is to be returned to the States, or applied towards the payment of interest on the debts of the several States taken over by the Commonwealth. Under these circumstances it was recognised that it would be necessary to raise a revenue, certainly over £6,000,000 and more probably approximating £8,500,000, so that the States should be recouped in the manner indicated. It was, therefore, apparent that the elections could not be contested on a clear-cut Freetrade-Protection issue, and the parties divided on the question as to whether the tariff should be revenue-producing alone, or of a more or less protective character. The Prime Minister, in his official declaration of ministerial policy, announced himself in favour of a tariff that would yield revenue without destroying industries, or a policy of "moderate protection." The fiscal issue was made most prominent in New South Wales and Victoria, although in the other States more or less powerful organisations ranged themselves on either side. Representatives of labour, for the most part, took up an independent position.

The elections were conducted as provided by the different State laws. Each State voted as one constituency for the Senate, and in Tasmania and South Australia the same procedure was adopted in voting for the House of Representatives. The elections took place on the 29th and 30th March, each of the opposing parties claiming the victory when the final results were published. From the declared policy of the candidates it appeared probable that the protectionists would have a majority in the Lower House, while the "revenue-tariffists" had a stronger hand in the Senate. The attitude of the Labour Party, which had secured 23 seats in the two Houses, was now of prime importance, but a semi-official statement from one of their number made it clear that the party intended to "retain the balance of power and use their strength only to defeat a government which refused to obey the will of the people." In addition to completing arrangements for the mechanical working of both Houses, preliminary action with regard to the framing of a tariff had to be initiated in the interval between the elections and the meeting of Parliament. The Prime Minister was also called upon to deal with questions affecting the condition of affairs in the New Hebrides, and the ownership of Kerguelen Island, and the policy pursued in these matters showed that the Commonwealth was prepared to take cognisance of subjects that lay outside the dominion of Australia. This

development met with some adverse criticism, but, generally speaking, the introduction into Australian politics of a more-extended range of interests and a broader aspect of national life was hailed with satisfaction.

The ceremony of opening the first session of the first Federal Parliament of the Commonwealth took place on the 9th May, 1901, in the Exhibition Building at Melbourne, which had been specially decorated for the occasion. Under commission from His Majesty King Edward VII., His Royal Highness the Duke of Cornwall and York formally opened the Parliament and in his speech from the throne, reference was made to His Majesty's deep interest in the consummation of Australian union, and eloquent testimony was given to the loyalty and devotion of the Colonies to the Empire. On the same day the Senate elected Sir Richard Chaffey Baker, of South Australia, as its first President, while the House of Representatives elected Mr. Frederick William Holder, also of South Australia, as Speaker. The Governor-General delivered his speech to members of both Houses on the following day, in which an outline was given of the policy of the Commonwealth. In addition to proposals necessary for adapting the recently transferred Customs and Excise, Posts and Telegraphs, and Defence Departments to the new conditions, measures covering a wide range of subjects were promised. Bills establishing a High Court of Australia, a Commission for the execution and maintenance of the provisions of the Constitution relating to Trade and Commerce, and for regulating the Public Service of the Federation were included in the first part of the Government programme, and the selection of the site for a Federal capital was looked upon as a matter of comparative urgency. As regards the fiscal policy, it was stated that "The fiscal proposals of any Government must be largely dependent on the financial exigencies of the States. The adoption of the existing tariff of any one of these States is impracticable, and would be unfair. To secure a reasonably sufficient return of surplus revenue to each State, so as fully to observe the intention of the Constitution, while avoiding unnecessary destruction of sources of employment, is a work which prohibits a rigid adherence to fiscal theories. Revenue must, of course, be the first consideration, but existing tariffs have in all States given rise to industries, many of which are so substantial that my advisers consider that any policy tending to destroy them is inadmissible. A tariff which gives fair consideration to these factors must necessarily operate protectively as well as for production of revenue."

Bills were also promised dealing with the restriction of immigration of Asiatics, and the diminution and gradual abolition of the introduction of labour from the South Sea Islands, while measures were stated to be in preparation providing for conciliation and arbitration in cases of industrial disputes extending beyond the limits of any one State, for the uniform administration of the law relating to patents and inventions, and for a uniform franchise in all federal elections. Amongst

other legislation foreshadowed, but not designed for immediate consideration, were Bills dealing with Old Age Pensions, Banking Laws, Federal Elections, Navigation, Shipping, Quarantine, and the management of State Debts. Reference was also made, and attention promised to the question of the relations of the Commonwealth with the islands of the Pacific, the construction of railways, connecting the eastern states with Western Australia, and also the Northern Territory of South Australia, while with regard to the latter its transference to the Commonwealth was also projected. Mention was also made of such matters as the strengthening of Commonwealth defences, the assimilation of postal and telegraph rates, and the adoption of universal penny postage. After the formal opening of Parliament, both Houses adjourned until the 21st May, when the real work of the session began. Early in the debate on the Address in Reply the Labour Party raised the question of a "White Australia" by moving amendments to the effect that black labour on the sugar plantations of Queensland and northern New South Wales should cease at once, but on the assurance being given that the Ministry had the matter under consideration the amendments were negatived. The address was finally adopted in the Senate on the 31st May, and in the House of Representatives on June 5th, and the way was then clear for practical legislation.

The first measure introduced into the House of Representatives was the Acts of Parliament Interpretation Bill on the 10th May, while in the Senate leave to introduce the Service and Execution of Process Bill was moved for on the opening day. On June 5th notification was given of several bills dealing with such subjects as Pacific Island Labourers, Judiciary, High Court of Procedure, Federal Elections, Federal Franchise, Conciliation and Arbitration, Immigration Restriction, Public Service, Interstate Commission, Acquisition of Property for Public Purposes, Defence, and Customs. On the same date the Postmaster-General introduced the Post and Telegraphs Bill in the Senate.

Early in the session the Senate gave token of its intention to maintain strictly the privileges granted to it by the Constitution. Exception was taken to the first Supply Bill sent from the House of Representatives because the accounts of proposed expenditure had not been incorporated in the measure, but submitted in the form of a schedule. The Bill was returned to the Lower House, which consented to amend it in accordance with the wishes of the Senate. In the House of Representatives deliberations were commenced on the Public Service Bill, and although the Lower House had passed the measure on to the Senate by the end of July it was not till near the close of the session that it finally became law. The second reading of the Customs Bill, a purely machinery measure, passed the Lower House early in July, but the Defence Bill, which proposed to introduce compulsory military service, was shelved. Another measure which met with little success was the Property Acquisition Bill, the various schemes devised for payment for property acquired from individuals or States evoking much

opposition from the State Governments, while the Government did not persevere with the bill to institute the Interstate Commission. During July and August, in addition to Supply Bills, the Acts Interpretation Act and an Audit Act received royal assent, while the State Laws and Records Recognition Bill had been practically finally dealt with, and the Postal Bill (assented to on the 20th November) was also in a fair way towards completion, a novel clause being inserted in the latter measure at the instigation of the Labour Party providing for the employment of white labour only in the carriage of mails. While awaiting the completion of these and of other measures preparatory to the introduction of the tariff, some important legislation was introduced in the shape of the Immigration Restriction Bill and the Pacific Islands Labourers Bill.

Under the Constitution, a period of two years was allowed before the imposition of uniform duties became compulsory, but the feeling, both in Parliament and amongst the people of the various States, was in favour of its early introduction in order to secure adequate adjustment of commercial relations. Before the tariff proposals proper could be tabled, however, various machinery measures, such as the Customs Bill, already mentioned, the Excise Bill, and the Beer Excise and Distillery Bills had to be dealt with. Attention was again devoted to the Immigration Restriction Bill, and the Pacific Islands Labourers Bill. After a long debate the first of these measures was passed, but not quite in the form desired by the labour organisation. The Pacific Island Labourers Bill provides for a gradual lessening of the number of Kanakas employed in the northern plantations up till 1904, and none were to enter Australia after the 31st March in that year, while no agreement was to be made, or remain in force, after the same date in 1906. As it stood, the measure met with strenuous opposition in Queensland, where it was maintained that the sugar industry would be extinguished if the Bill became law. Despite the efforts made, both in Parliament and outside, the Bill passed both Houses practically unamended, and received the royal assent at the end of the year.

While the above-mentioned Bills were before the House, in some form or another, the Treasurer delivered his budget speech, and the tariff was laid on the table by the Minister for Trade and Customs on the 8th October. Reference was made by the Treasurer to the financial considerations involved in constructing the proposals. The Cabinet had decided that £21,000,000 represented the value of goods available for taxation in a normal year, and on this amount duties had been framed to produce £2 7s. 6d. per head of revenue. In a normal year the yield from the Customs was estimated at £7,388,056, which with £1,554,345 from Excise, brought the total to £8,942,401. It was proposed to raise a loan of £1,000,000, and a sinking fund for redemption of loans was to be provided, such fund to be invested in Commonwealth Stock. The Minister of Trade and Customs, upon whom devolved the duty of tabling the tariff, did so with the

declaration that interstate freetrade had arrived. After stating that the tariff was neither freetrade nor protectionist in character, the Minister proceeded to detail the methods under which it had been drawn up. From the total annual value of imports into the Commonwealth, calculated at £63,000,000, various deductions were to be made. The establishment of interstate freetrade took away £29,000,000 from this sum, and it was estimated that the total taxable balance left amounted to £21,000,000. Of this amount the value of narcotics and stimulants was £1,910,000, and the duties proposed on these articles, together with £1,131,000 from excise would yield £4,100,000. From fixed and composite duties averaging 30·94 per cent. £2,020,471 would be raised on £6,530,000 worth of goods, and ad valorem duties ranging from 10 per cent. to 25 per cent. would yield £2,362,211 on £12,583,740 worth of goods, or an average of 18·7 per cent. The excise on sugar was to be charged from the 1st July, 1902, and would cease in 1907, when, according to the terms of the Kanaka Bill, sugar would be produced by white labour. In the course of his speech the Minister indicated that the Government intended to adopt a reasonable system of bonuses to encourage the establishment or extension of industries which were not yet established, or to which protection could not be immediately extended.

It was to be expected that a tariff constructed under such difficulties as beset the framers would not meet with unqualified approval, and immediate signs were not wanting that extensive amendments would be proposed. On the 15th October the Right Hon. G. H. Reid, the leader of the Opposition, moved a vote of censure to the effect that the financial and tariff proposals of the Government did not meet with the approval of the House. After a protracted debate the motion was put to the vote on the 1st November, and resulted in a victory for the Government by a majority of 14, every member of the House being represented.

When finally dealt with in Committee the tariff had undergone extensive alteration. Amongst the more important changes was the abolition of composite duties, a novel form of impost in most of the States, and in many instances the rates were lessened. The duties on tea and kerosene were abandoned, and the placing of these items on the free list deprived the Treasurer of some £500,000 of his anticipated revenue. The abolition of these duties was viewed with dismay by the Treasurers of the smaller States, and Queensland, South Australia, and Tasmania were united in their protest. Assurance was, however, given by the Government that if it were found necessary fresh duties would be imposed at a later date. The tariff finally emerged from the House of Representatives during the second week in April, and the necessary machinery measures were thereupon pushed through. Under the Constitution the Senate has no power to alter the tariff, but it may suggest alterations, and refuse to pass the duties until such suggestions have been acceded to.

The transfer of British New Guinea to the Commonwealth, effected towards the close of 1901, is interesting, as the territory possesses great, though almost undeveloped, resources, while in connection with Commonwealth defences, the position may prove of strategic importance.

One of the disabilities under which the Commonwealth laboured during the first months of its existence was the absence of a Federal Judicature to deal with cases arising out of the administration of the Federal laws. In some instances, of course, the State Courts were appealed to, but there was some doubt as to whether the Commonwealth itself could be sued under the existing legislation. To obviate in some measure this inconvenience, the State Laws and Records Recognition Act and the Service and Execution of Process Act were introduced at the beginning of the session, and the Punishment of Offences Act was also passed to provide that offenders against the Commonwealth might be dealt with by State laws. It was recognised, however, that a Judiciary Bill and High Court of Procedure Bill were still urgently needed. The second reading of the former was moved on the 18th March. This Bill provided for a High Court, with one Chief Justice and four other justices; the principal seat of the Court to be at the Federal capital. Power is given to appoint a judge of the Supreme Court of any State as a judge of the High Court sitting in Chambers, in order to enable the initiatory steps to actual hearing to be proceeded with prior to the visit of a High Court judge. The measure also allots certain Federal jurisdiction to State Courts, and allows the transfer in certain instances of cases from the State Courts to the High Court. Subsequently the Bill was shelved by the Government until a more favourable opportunity presented itself for its discussion.

During 1901 efforts were made, both in Parliament and by public men outside, to have a site fixed on for the Federal Capital. Several localities were suggested and discussed, and the Government of New South Wales obtained reports as to their suitability, but it was not till 1902 that any definite move was made by the Federal Parliament. In February certain members of the Senate made a tour of inspection to several of the suggested sites, while members of the House of Representatives were given a similar opportunity in May. Both excursions were of necessity somewhat hurried, but they at least served the useful purpose of giving members some knowledge as to the localities suggested. The sites visited included Albury, Tumut, Dalgety, Wagga, Yass, Goulburn, Orange, Cooma, Bombala, and Armidale. Towards the close of 1901 a commencement was made with the laying of a Pacific Cable, the Australian terminal of which is at Southport, in Queensland. From this point the line runs to Norfolk Island, thence to New Zealand, to Fiji, to Fanning Island, and to Vancouver. The cable was completed and opened for business in November, 1902. During the adjournment at the end of 1901 the Premier received a request from the Imperial Authorities for 1,000 troops for service in South Africa. This contingent was made up of 348 men each from Victoria and New South

Wales, 116 each from Queensland and South Australia, and 116 from Tasmania and Western Australia combined, the united forces being known, at a later date, as the Australian Commonwealth Horse. When the House met after vacation, the Premier took occasion to refer to the charges made against the people and army of the Empire, and moved resolutions expressive of the determination of the Commonwealth to give all the assistance in its power to His Majesty's Government with a view to a speedy termination of the war. On the 20th January the Government sent another contingent of 1,000 men, and in March a request was received for 2,000 additional troops, and these were also despatched.

At one time it seemed as though the new legislation of the Commonwealth would involve the Federal Government in international complications. By the operation of the Customs Act it was provided that deep sea vessels should pay duty on all stores consumed by passengers and crew during the period between their first touching at an Australian port until they finally left the coast. When a mail steamer arrived at a Western Australian port, therefore, a Customs official boarded the vessel, superintended the removal of sufficient stores to last till the next port of call, and sealed up the storeroom. If on arrival at the next port these seals were found to have been broken, prosecution followed. The first case occurred in connection with an English mail-boat, and the Full Court of Victoria decided in favour of the Commonwealth. The owners of the vessel pleaded that, as they were on the high seas between the ports, the Commonwealth had no jurisdiction. When the law was enforced with reference to the German vessels, the matter was taken up warmly by the authorities in Germany, and representations were made to the British Government on the matter. An amicable settlement was, however, arrived at, both English and foreign steamship companies agreeing to the payment of the duties until the matter had been decided by the Privy Council.

Universal regret was expressed throughout the Commonwealth when it became known in May, 1902, that the Earl of Hopetoun had resigned his office as Governor-General. Lord Tennyson, Governor of South Australia, was appointed to the position in November; but, in accordance with his wishes, will hold office for a period of twelve months only.

In June an Imperial Conference was held in London, the Hon. E. Barton being delegated to represent the Commonwealth of Australia. The subjects for discussion suggested by the Commonwealth included (1) Army and Navy supply contracts; (2) Ocean cables and purchase thereof; (3) Imperial Court of Appeal; (4) Mutual protection of patents; (5) Loss of most favoured nation treatment if preference given to British manufacturers; (6) Imperial stamp charges for colonial bonds. The decisions of the Conference will be brought before Parliament on its re-assembling. In August the Tariff Bill was again under consideration by the Senate. After some three or four months spent in revising the Bill as passed by the House of Representatives, the Senate sent down requests for 103 amendments to be made. Of these

51 were acceded to by the Lower Chamber and the remaining 52 were rejected. The Senate pressed for consideration of its requests, and the Lower House proving obdurate, it was feared that a deadlock would ensue. The conciliatory attitude of both Houses after maturer consideration happily averted this crisis, the Lower Chamber agreeing to a number of the Senate's proposals, while the two Houses compromised as to the main points at issue. The Bill finally became law on the 10th September, a little over eleven months after its introduction.

The important matter of re-arranging the electorates of the Commonwealth was dealt with at the close of the session, and a Commissioner for each State was appointed. The duty of the Commissioner was to divide his State into electorates embracing, as far as possible, equal numbers of electors, deviations from equality on account of special circumstances detailed in the Federal Elections Act being permitted within certain specified limits. The total number of members to which a State is entitled is determined by section 24 of the Constitution Act, which provides that the population of the Commonwealth shall be determined according to the latest statistics, and a quota thereof ascertained by dividing that population by twice the number of the Senate (72). The number of representatives to which a State is entitled being determined by dividing the population by the ascertained quota, any remainder on such division greater than one-half of the quota is taken as entitling a State to one more member. In reckoning the number of people, aborigines are to be excluded as well as all persons of any race disqualified from voting at elections for the more numerous House of Parliament.

This last provision is an extremely important one. It will be found on reference to the Acts governing the exercise of the franchise that several states have an alien exclusion provision; thus Section 6 of the Queensland Act of 1885 provides that "No aboriginal native of Australia, India, China, or of the South Sea Islands shall be entitled to be entered on the roll except in respect of freehold qualification."

The question arises whether it can be said that all persons of any race are disqualified from voting in view of the exception in regard to a freehold qualification. The matter was submitted to the Attorney-General of the Commonwealth, who decided that the provision of the Queensland Act does disqualify all persons of the races named within the meaning of Section 25 of the Constitution, and persons of those races cannot therefore be reckoned for electoral purposes as people of the Commonwealth. This decision affects Queensland, South Australia, and Western Australia only, as the laws in force in New South Wales, Victoria, and Tasmania do not exclude "all persons of any specified race."

The persons disqualified under the various State Acts are the aboriginal natives of India, China, and the South Sea Islands, by Queensland; the aboriginal natives of Asia and Africa, and persons of half-blood, by Western Australia; and the immigrants under the

“Indian Immigration Act, 1882,” in the Northern Territory of South Australia.

In establishing a quota it will be necessary, therefore, to exclude from consideration the aliens disqualified by state electoral laws, and, making this exclusion, the population of the Commonwealth on the 30th June, 1902, was 3,827,859 persons, distributed as follows :—

State.	Population, 30th June, 1902, exclusive of Aborigines.	Aliens, Disqualified by State Electoral Acts.	Population, excluding Aborigines and Aliens.	Number of Representatives.
New South Wales.....	1,391,822	.....	1,391,822	26·2
Victoria	1,206,478	.....	1,206,478	22·7
Queensland	509,585	18,038	491,547	9·2
South Australia	363,686	2,862	360,824	6·8
Western Australia	208,325	3,709	204,616	3·9
Tasmania	172,572	.....	172,572	3·2
Total	3,852,468	24,609	3,827,859	72·

A quota is 53,165, and the number of members which the various states will be entitled to return at the next election is therefore—

New South Wales	26	Western Australia	5
Victoria	23	Tasmania	5
Queensland	9		
South Australia	7		75

The representation at present existing will therefore remain unaltered.

If no regard had been paid to the operation of Section 25 of the Constitution, the population of the Commonwealth, at the 30th June, 1902, exclusive of aborigines, was 3,852,468, distributed as follows :—

State.	Population (exclusive of Aborigines).
New South Wales	1,391,822
Victoria	1,206,478
Queensland	509,585
South Australia	363,686
Western Australia	208,325
Tasmania	172,572

On the basis of the foregoing figures a quota is 53,506, and the representation of each state in the House of Representatives would be the same as already given, except that Queensland would be entitled to 10 members—that is, 1 more than at the present time.

It may be mentioned that if the alien races disqualified by the electoral laws of Queensland or Western Australia had also been disqualified in New South Wales, Victoria, and Tasmania, the number of representatives already existing would still remain unaltered.

CONSTITUTION OF THE COMMONWEALTH.

WHEREAS the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania humbly relying on the blessing of Almighty God, have agreed to unite in one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland, and under the Constitution hereby established :

And whereas it is expedient to provide for the admission into the Commonwealth of other Australasian Colonies and possessions of the Queen :

Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :—

1. This Act may be cited as "The Commonwealth of Australia Constitution Act."

2. The provisions of this Act referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom.

3. It shall be lawful for the Queen, with the advice of the Privy Council, to declare by Proclamation that, on and after a day therein appointed, not being later than one year after the passing of this Act, the people of New South Wales, Victoria, South Australia, Queensland, and Tasmania, and also, if Her Majesty is satisfied that the people of Western Australia have agreed thereto, of Western Australia, shall be united in a Federal Commonwealth under the name of "The Commonwealth of Australia." But the Queen may, at any time after the Proclamation, appoint a Governor-General for the Commonwealth.

4. The Commonwealth shall be established, and the Constitution of the Commonwealth shall take effect on and after the day so appointed. But the Parliaments of the several Colonies may at any time after the passing of this Act make any such laws, to come into operation on the day so appointed, as they might have made if the Constitution had taken effect at the passing of this Act.

5. This Act, and all laws made by the Parliament of the Commonwealth under the Constitution, shall be binding on the Courts, Judges, and people of every State, and of every part of the Commonwealth, notwithstanding anything in the laws of any State ; and the laws of the Commonwealth shall be in force on all British ships, the Queen's ships of war excepted, whose first port of clearance and whose port of destination are in the Commonwealth.

6. "The Commonwealth" shall mean the Commonwealth of Australia as established under this Act.

“The States” shall mean such of the Colonies of New South Wales, New Zealand, Queensland, Tasmania, Victoria, Western Australia, and South Australia, including the Northern Territory of South Australia, as for the time being are parts of the Commonwealth, and such Colonies or Territories as may be admitted into or established by the Commonwealth as States; and each of such parts of the Commonwealth shall be called a “State.”

“Original States” shall mean such States as are parts of the Commonwealth at its establishment.

7. The Federal Council of Australasia Act, 1885, is hereby repealed, but so as not to affect any laws passed by the Federal Council of Australasia and in force at the establishment of the Commonwealth.

Any such law may be repealed as to any State by The Parliament of the Commonwealth, or as to any colony not being a State by The Parliament thereof.

8. After the passing of this Act the Colonial Boundaries Act, 1895, shall not apply to any colony which becomes a State of the Commonwealth; but the Commonwealth shall be taken to be a self-governing colony for the purposes of that Act.

9. The Constitution of the Commonwealth shall be as follows:—

CHAPTER I.

THE PARLIAMENT.

Part I.—General.

1. The legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives, and which is hereinafter called “The Parliament,” or “The Parliament of the Commonwealth.”

2. A Governor-General appointed by the Queen shall be Her Majesty’s representative in the Commonwealth, and shall have and may exercise in the Commonwealth during the Queen’s pleasure, but subject to this Constitution, such powers and functions of the Queen as Her Majesty may be pleased to assign to him.

3. There shall be payable to the Queen out of the Consolidated Revenue Fund of the Commonwealth, for the salary of the Governor-General, an annual sum which, until the Parliament otherwise provides, shall be ten thousand pounds.

The salary of a Governor-General shall not be altered during his continuance in office.

4. The provisions of this Constitution relating to the Governor-General extend and apply to the Governor-General for the time being, or such person as the Queen may appoint to administer the Government of the Commonwealth; but no such person shall be entitled to receive any salary from the Commonwealth in respect of any other office during his administration of the Government of the Commonwealth.

5. The Governor-General may appoint such times for holding the sessions of the Parliament as he thinks fit, and may also from time to

time, by Proclamation or otherwise, prorogue The Parliament, and may in like manner dissolve the House of Representatives.

After any general election The Parliament shall be summoned to meet not later than thirty days after the day appointed for the return of the writs.

The Parliament shall be summoned to meet not later than six months after the establishment of the Commonwealth.

6. There shall be a session of The Parliament once at least in every year, so that twelve months shall not intervene between the last sitting of The Parliament in one session and its first sitting in the next session.

Part II.—The Senate.

7. The Senate shall be composed of senators for each State, directly chosen by the people of the State, voting, until The Parliament otherwise provides, as one electorate.

But until The Parliament of the Commonwealth otherwise provides, the Parliament of the State of Queensland, if that State be an Original State, may make laws dividing the State into divisions and determining the number of senators to be chosen for each division, and in the absence of such provisions the State shall be one electorate.

Until The Parliament otherwise provides, there shall be six senators for each Original State. The Parliament may make laws increasing or diminishing the number of senators for each State, but so that equal representation of the several Original States shall be maintained and that no Original State shall have less than six senators.

The senators shall be chosen for a term of six years, and the names of the senators chosen for each State shall be certified by the Governor to the Governor-General.

8. The qualification of electors of senators shall be in each State that which is prescribed by this Constitution, or by the Parliament, as the qualification for electors of members of the House of Representatives, but in the choosing of senators each elector shall vote only once.

9. The Parliament of the Commonwealth may make laws prescribing the method of choosing senators, but so that the method shall be uniform for all the States. Subject to any such law, the Parliament of each State may make laws prescribing the method of choosing the senators for that State.

The Parliament of a State may make laws for determining the times and places of election of senators for the State.

10. Until The Parliament otherwise provides, but subject to this Constitution, the laws in force in each State, for the time being, relating to elections for the more numerous House of the Parliament of the State shall, as nearly as practicable, apply to elections of senators for the State.

11. The Senate may proceed to the despatch of business, notwithstanding the failure of any State to provide for its representation in the Senate.

12. The Governor of any State may cause writs to be issued for elections of senators for the State. In case of the dissolution of the Senate the writs shall be issued within ten days from the proclamation of such dissolution.

13. As soon as may be after the Senate first meets, and after each first meeting of the Senate following a dissolution thereof, the Senate shall divide the senators chosen for each State into two classes, as nearly equal in number as practicable; and the places of the senators of the first class shall become vacant at the expiration of the third year, and the places of those of the second class at the expiration of the sixth year from the beginning of their term of service; and afterwards the places of senators shall become vacant at the expiration of six years from the beginning of their term of service.

The election to fill vacant places shall be made in the year at the expiration of which the places are to become vacant.

For the purposes of this section the term of service of a senator shall be taken to begin on the first day of January following the day of his election, except in the cases of the first election and of the election next after any dissolution of the Senate, when it shall be taken to begin on the first day of January preceding the day of his election.

14. Whenever the number of senators for a State is increased or diminished, The Parliament of the Commonwealth may make such provision for the vacating of the places of senators for the State as it deems necessary to maintain regularity in the rotation.

15. If the place of a senator becomes vacant before the expiration of his term of service The Houses of Parliament of the State for which he was chosen shall, sitting and voting together, choose a person to hold the place until the expiration of the term, or until the election of a successor as hereinafter provided, whichever first happens. But if the Houses of Parliament of the State are not in session at the time when the vacancy is notified, the Governor of the State, with the advice of the Executive Council thereof, may appoint a person to hold the place until the expiration of fourteen days after the beginning of the next session of The Parliament of the State, or until the election of a successor, whichever first happens.

At the next general election of members of the House of Representatives, or at the next election of senators for the State, whichever first happens, a successor shall, if the term has not then expired, be chosen to hold the place from the date of his election until the expiration of the term.

The name of any senator so chosen or appointed shall be certified by the Governor of the State to the Governor-General.

16. The qualifications of a senator shall be the same as those of a member of the House of Representatives.

17. The Senate shall, before proceeding to the despatch of any other business, choose a senator to be the President of the Senate; and as

often as the office of President becomes vacant the Senate shall again choose a senator to be the President.

The President shall cease to hold his office if he ceases to be a senator. He may be removed from office by a vote of the Senate, or he may resign his office or his seat by writing addressed to the Governor-General.

18. Before or during any absence of the President, the Senate may choose a senator to perform his duties in his absence.

19. A senator may, by writing, addressed to the President, or to the Governor-General if there is no President, or if the President is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

20. The place of a senator shall become vacant if for two consecutive months of any session of The Parliament he, without the permission of the Senate, fails to attend the Senate.

21. Whenever a vacancy happens in the Senate, the President, or if there is no President, or if the President is absent from the Commonwealth, the Governor-General shall notify the same to the Governor of the State in the representation of which the vacancy has happened.

22. Until The Parliament otherwise provides, the presence of at least one-third of the whole number of the senators shall be necessary to constitute a meeting of the Senate for the exercise of its powers.

23. Questions arising in the Senate shall be determined by a majority of votes, and each senator shall have one vote. The President shall in all cases be entitled to a vote ; and when the votes are equal the question shall pass in the negative.

Part III.—The House of Representatives.

24. The House of Representatives shall be composed of members directly chosen by the people of the Commonwealth, and the number of such members shall be, as nearly as practicable, twice the number of the senators.

The number of members chosen in the several States shall be in proportion to the respective numbers of their people, and shall, until The Parliament otherwise provides, be determined, whenever necessary, in the following manner :—

- I. A quota shall be ascertained by dividing the number of the people of the Commonwealth as shown by the latest statistics of the Commonwealth, by twice the number of the senators.
- II. The number of members to be chosen in each State shall be determined by dividing the number of the people of the State, as shown by the latest statistics of the Commonwealth, by the quota ; and if on such division there is a remainder greater than one-half of the quota, one more member shall be chosen in the State.

But notwithstanding anything in this section, five members at least shall be chosen in each Original State.

25. For the purposes of the last section, if by the law of any State all persons of any race are disqualified from voting at elections for the more numerous House of the Parliament of the State, then, in reckoning the number of the people of the State or of the Commonwealth, persons of that race resident in that State shall not be counted.

26. Notwithstanding anything in section 24, the number of members to be chosen in each State at the first election shall be as follows :—

New South Wales...	Twenty-three.	South Australia ...	Six.
Victoria	Twenty.	Tasmania	Five.
Queensland ...	Eight.		

Provided that if Western Australia is an Original State, the numbers shall be as follows :—

New South Wales...	Twenty-six.	South Australia ...	Seven.
Victoria	Twenty-three.	Western Australia...	Five.
Queensland ...	Nine.	Tasmania	Five.

27. Subject to this Constitution, The Parliament may make laws for increasing or diminishing the number of the members of the House of Representatives.

28. Every House of Representatives shall continue for three years from the first meeting of the House, and no longer, but may be sooner dissolved by the Governor-General.

29. Until the Parliament of The Commonwealth otherwise provides, the Parliament of any State may make laws for determining the divisions in each State for which members of the House of Representatives may be chosen, and the number of members to be chosen for each division. A division shall not be formed out of parts of different States.

In the absence of other provision, each State shall be one electorate.

30. Until The Parliament otherwise provides, the qualification of electors of members of the House of Representatives shall be in each State that which is prescribed by the law of the State as the qualification of electors of the more numerous House of the Parliament of the State ; but in the choosing of members each elector shall vote only once.

31. Until The Parliament otherwise provides, but subject to this Constitution, the laws in force in each State for the time being relating to elections for the more numerous House of The Parliament of the State shall, as nearly as practicable, apply to elections in the State of members of the House of Representatives.

32. The Governor-General in Council may cause writs to be issued for general elections of members of the House of Representatives.

After the first general election, the writs shall be issued within ten days from the expiry of a House of Representatives, or from the proclamation of a dissolution thereof.

33. Whenever a vacancy happens in the House of Representatives, the Speaker shall issue his writ for the election of a new member, or if there is no Speaker, or if he is absent from the Commonwealth, the Governor-General in Council may issue the writ.

34. Until The Parliament otherwise provides, the qualifications of a member of the House of Representatives shall be as follows :—

1. He must be of the full age of twenty-one years, and must be an elector entitled to vote at the election of members of the House of Representatives, or a person qualified to become such elector, and must have been for three years at the least a resident within the limits of the Commonwealth as existing at the time when he is chosen :
11. He must be a subject of the Queen, either natural-born or for at least five years naturalised under a law of the United Kingdom, or of a Colony which has become or becomes a State, or of the Commonwealth, or of a State.

35. The House of Representatives shall, before proceeding to the despatch of any other business, choose a member to be the Speaker of the House, and as often as the office of Speaker becomes vacant the House shall again choose a member to be the Speaker.

The Speaker shall cease to hold his office if he ceases to be a member. He may be removed from office by a vote of the House, or he may resign his office or his seat by writing addressed to the Governor-General.

36. Before or during any absence of the Speaker, the House of Representatives may choose a member to perform his duties in his absence.

37. A member may by writing addressed to the Speaker, or to the Governor-General if there is no Speaker or if the Speaker is absent from the Commonwealth, resign his place, which thereupon shall become vacant.

38. The place of a member shall become vacant if for two consecutive months of any session of The Parliament he, without the permission of the House, fails to attend the House.

39. Until the Parliament otherwise provides, the presence of at least one-third of the whole number of the members of the House of Representatives shall be necessary to constitute a meeting of the House for the exercise of its powers.

40. Questions arising in the House of Representatives shall be determined by a majority of votes other than that of the Speaker. The Speaker shall not vote unless the numbers are equal, when he shall have a casting vote.

Part IV.—Both Houses of the Parliament.

41. No adult person who has or acquires a right to vote at elections for the more numerous House of the Parliament of a State, shall, while the right continues, be prevented by any law of the Commonwealth from voting at elections for either House of The Parliament of the Commonwealth.

42. Every senator and every member of the House of Representatives shall before taking his seat make and subscribe before the Governor-General, or some person authorised by him, an oath or affirmation of allegiance in the form set forth in the Schedule to this Constitution.

43. A member of either House of The Parliament shall be incapable of being chosen or of sitting as a member of the other House.

44. Any person who—

- i. Is under any acknowledgment of allegiance, obedience, or adherence to a foreign power, or is a subject or a citizen or entitled to the rights or privileges of a subject or a citizen of a foreign power : or
 - ii. Is attainted of treason, or has been convicted and is under sentence, or subject to be sentenced, for any offence punishable under the law of the Commonwealth or of a State by imprisonment for one year or longer : or
 - iii. Is an undischarged bankrupt or insolvent : or
 - iv. Holds any office of profit under the Crown, or any pension payable during the pleasure of the Crown out of any of the revenues of the Commonwealth : or
 - v. Has any direct or indirect pecuniary interest in any agreement with the public service of the Commonwealth, otherwise than as a member and in common with the other members of an incorporated company consisting of more than twenty-five persons :
- shall be incapable of being chosen or of sitting as a senator or as a member of the House of Representatives.

But subsection iv does not apply to the office of any of the Queen's Ministers of State for the Commonwealth, or of any of the Queen's Ministers for a State, or to the receipt of pay, half-pay, or a pension by any person as an officer or member of the Queen's navy or army, or to the receipt of pay as an officer or member of the naval or military forces of the Commonwealth by any person whose services are not wholly employed by the Commonwealth.

45. If a senator or member of the House of Representatives—

- i. Becomes subject to any of the disabilities mentioned in the last preceding section : or
- ii. Takes the benefit, whether by assignment, composition, or otherwise, of any law relating to bankrupt or insolvent debtors : or
- iii. Directly or indirectly takes or agrees to take any fee or honorarium for services rendered to the Commonwealth, or for services rendered in The Parliament to any person or State :

his place shall thereupon become vacant.

46. Until The Parliament otherwise provides, any person declared by this Constitution to be incapable of sitting as a senator or as a member of the House of Representatives shall, for every day on which he so sits, be liable to pay the sum of one hundred pounds to any person who sues for it in any court of competent jurisdiction.

47. Until The Parliament otherwise provides, any question respecting the qualification of a senator or of a member of the House of Representatives, or respecting a vacancy in either House of the Parliament, and any question of a disputed election to either House, shall be determined by the House in which the question arises.

48. Until The Parliament otherwise provides, each senator and each member of the House of Representatives shall receive an allowance of Four Hundred Pounds a year, to be reckoned from the day on which he takes his seat.

49. The powers, privileges, and immunities of the Senate and of the House of Representatives, and of the members and the committees of each House shall be such as are declared by The Parliament, and until declared shall be those of the Commons House of Parliament of the United Kingdom, and of its members and committees, at the establishment of the Commonwealth.

50. Each House of The Parliament may make rules and orders with respect to—

- I. The mode in which its powers, privileges, and immunities may be exercised and upheld :
- II. The order and conduct of its business and proceedings either separately or jointly with the other House.

Part V.—Powers of The Parliament.

51. The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth, with respect to :—

- I. Trade and commerce with other countries, and among the States :
- II. Taxation ; but so as not to discriminate between States or parts of States :
- III. Bounties on the production or export of goods, but so that such bounties shall be uniform throughout the Commonwealth :
- IV. Borrowing money on the public credit of the Commonwealth :
- V. Postal, telegraphic, telephonic, and other like services :
- VI. The naval and military defence of the Commonwealth and of the several States, and the control of the forces to execute and maintain the laws of the Commonwealth :
- VII. Light-houses, light-ships, beacons, and buoys :
- VIII. Astronomical and meteorological observations :
- IX. Quarantine :
- X. Fisheries in Australian waters beyond territorial limits :
- XI. Census and statistics :
- XII. Currency, coinage, and legal tender :
- XIII. Banking other than State banking ; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money :
- XIV. Insurance, other than State Insurance ; also State Insurance extending beyond the limits of the State concerned :
- XV. Weights and measures :
- XVI. Bills of exchange and promissory notes :
- XVII. Bankruptcy and insolvency :
- XVIII. Copyrights, patents of inventions and designs, and trade-marks :

- XIX. Naturalization and aliens :
- XX. Foreign corporations, and trading or financial corporations formed within the limits of the Commonwealth :
- XXI. Marriage :
- XXII. Divorce and matrimonial causes ; and in relation thereto, parental rights, and the custody and guardianship of infants :
- XXIII. Invalid and old-age pensions :
- XXIV. The service and execution throughout the Commonwealth of the civil and criminal process and the judgments of the courts of the States :
- XXV. The recognition throughout the Commonwealth of the laws, the public acts and records, and the judicial proceedings of the States :
- XXVI. The people of any race, other than the aboriginal race in any State, for whom it is deemed necessary to make special laws :
- XXVII. Immigration and emigration :
- XXVIII. The influx of criminals :
- XXIX. External affairs :
- XXX. The relations of the Commonwealth with the islands of the Pacific :
- XXXI. The acquisition of property on just terms from any State or person for any purpose in respect of which The Parliament has power to make laws :
- XXXII. The control of railways with respect to transport for the naval and military purposes of the Commonwealth :
- XXXIII. The acquisition, with the consent of a State, of any railways of the State on terms arranged between the Commonwealth and the State :
- XXXIV. Railway construction and extension in any State with the consent of that State :
- XXXV. Conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State :
- XXXVI. Matters in respect of which this Constitution makes provision until The Parliament otherwise provides :
- XXXVII. Matters referred to the Parliament of the Commonwealth by the Parliament or Parliaments of any State or States, but so that the law shall extend only to States by whose Parliament the matter is referred, or which afterwards adopt the law :
- XXXVIII. The exercise within the Commonwealth, at the request or with the concurrence of the Parliaments of all the States directly concerned, of any power which can at the establishment of this Constitution be exercised only by the Parliament of the United Kingdom or by the Federal Council of Australasia :

xxxix. Matters incidental to the execution of any power vested by this Constitution in the Parliament or in either House thereof, or in the Government of the Commonwealth, or in the Federal Judicature, or in any department or officer of the Commonwealth.

52. The Parliament shall, subject to this Constitution, have exclusive power to make laws for the peace, order, and good government of the Commonwealth with respect to—

- I. The seat of Government of the Commonwealth, and all places acquired by the Commonwealth for public purposes :
- II. Matters relating to any department of the public service the control of which is by this Constitution transferred to the Executive Government of the Commonwealth :
- III. Other matters declared by this Constitution to be within the exclusive power of The Parliament.

53. Proposed laws appropriating revenue or moneys, or imposing taxation, shall not originate in the Senate. But a proposed law shall not be taken to appropriate revenue or moneys, or to impose taxation, by reason only of its containing provisions for the imposition or appropriation of fines or other pecuniary penalties, or for the demand or payment or appropriation of fees for licenses, or fees for services under the proposed law.

The Senate may not amend proposed laws imposing taxation, or proposed laws appropriating revenue or moneys for the ordinary annual services of the Government.

The Senate may not amend any proposed law so as to increase any proposed charge or burden on the people.

The Senate may at any stage return to the House of Representatives any proposed law which the Senate may not amend, requesting, by message, the omission or amendment of any items or provisions therein. And the House of Representatives may if it thinks fit make any of such omissions or amendments, with or without modifications.

Except as provided in this section, the Senate shall have equal power with the House of Representatives in respect of all proposed laws.

54. The proposed law which appropriates revenue or moneys for the ordinary annual services of the Government shall deal only with such appropriations.

55. Laws imposing taxation shall deal only with the imposition of taxation, and any provision therein dealing with any other matter shall be of no effect.

Laws imposing taxation, except laws imposing duties of customs or of excise, shall deal with one subject of taxation only ; but laws imposing duties of customs shall deal with duties of customs only, and laws imposing duties of excise shall deal with duties of excise only.

56. A vote, resolution, or proposed law for the appropriation of revenue or moneys shall not be passed unless the purpose of the

appropriation has in the same session been recommended by message of the Governor-General to the House in which the proposal originated.

57. If the House of Representatives passes any proposed law and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, and if after an interval of three months the House of Representatives, in the same or the next session, again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may dissolve the Senate and the House of Representatives simultaneously. But such dissolution shall not take place within six months before the date of the expiry of the House of Representatives by effluxion of time.

If after such dissolution the House of Representatives again passes the proposed law with or without any amendments which have been made, suggested, or agreed to by the Senate, and the Senate rejects or fails to pass it, or passes it with amendments to which the House of Representatives will not agree, the Governor-General may convene a joint sitting of the members of the Senate and of the House of Representatives.

The members present at the joint sitting may deliberate and shall vote together upon the proposed law as last proposed by the House of Representatives, and upon amendments, if any, which have been made therein by one House and not agreed to by the other, and any such amendments which are affirmed by an absolute majority of the total number of the members of the Senate and House of Representatives shall be taken to have been carried, and if the proposed law, with the amendments, if any, so carried is affirmed by an absolute majority of the total number of the members of the Senate and the House of Representatives it shall be taken to have been duly passed by both Houses of The Parliament, and shall be presented to the Governor-General for the Queen's assent.

58. When a proposed law passed by both Houses of The Parliament is presented to the Governor-General for the Queen's assent, he shall declare, according to his discretion, but subject to this Constitution, that he assents in the Queen's name, or that he withholds assent, or that he reserves the law for the Queen's pleasure.

The Governor-General may return to the House in which it originated any proposed law so presented to him, may transmit therewith any amendments which he may recommend, and the Houses may deal with the recommendations.

59. The Queen may disallow any law within one year from the Governor-General's assent, and such disallowance on being made known by the Governor-General, by speech or message to each of the Houses of the Parliament, or by Proclamation, shall annul the law from the day when the disallowance is so made known.

60. A proposed law reserved for the Queen's pleasure shall not have any force unless and until within two years from the day on which it was presented to the Governor-General for the Queen's assent the Governor-General makes known, by speech or message to each of the Houses of The Parliament, or by Proclamation, that it has received the Queen's assent.

CHAPTER II.

THE EXECUTIVE GOVERNMENT.

61. The Executive power of the Commonwealth is vested in the Queen, and is exercisable by the Governor-General as the Queen's representative, and extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

62. There shall be a Federal Executive Council to advise the Governor-General in the government of the Commonwealth, and the members of the Council shall be chosen and summoned by the Governor-General and sworn as Executive Councillors, and shall hold office during his pleasure.

63. The provisions of this Constitution referring to the Governor-General in Council shall be construed as referring to the Governor-General acting with the advice of the Federal Executive Council.

64. The Governor-General may appoint officers to administer such Departments of State of the Commonwealth as the Governor-General in Council may establish.

Such officers shall hold office during the pleasure of the Governor-General. They shall be members of the Federal Executive Council, and shall be the Queen's Ministers of State for the Commonwealth.

After the first general election no Minister of State shall hold office for a longer period than three months unless he is or becomes a senator or a member of the House of Representatives.

65. Until The Parliament otherwise provides, the Ministers of State shall not exceed seven in number, and shall hold such offices as The Parliament prescribes, or, in the absence of provision, as the Governor-General directs.

66. There shall be payable to the Queen, out of the Consolidated Revenue Fund of the Commonwealth, for the salaries of Ministers of State, an annual sum which, until The Parliament otherwise provides, shall not exceed twelve thousand pounds a year.

67. Until The Parliament otherwise provides, the appointment and removal of all other officers of the Executive Government of the Commonwealth shall be vested in the Governor-General in Council, unless the appointment is delegated by the Governor-General in Council or by law of the Commonwealth to some other authority.

68. The command in chief of the naval and military forces of the Commonwealth is vested in the Governor-General as the Queen's representative.

69. On a date or dates to be proclaimed by the Governor-General after the establishment of the Commonwealth, the following Departments of the public service in each State shall become transferred to the Commonwealth:—

- Posts, telegraphs, and telephones :
- Naval and military defence :
- Light-houses, light-ships, beacons, and buoys :
- Quarantine.

But the Departments of customs and of excise in each State shall become transferred to the Commonwealth on its establishment.

70. In respect of matters which, under this Constitution, pass to the Executive Government of the Commonwealth, all powers and functions which at the establishment of the Commonwealth are vested in the Governor of a colony, or in the Governor of a colony with the advice of his Executive Council, or in any authority of a colony, shall vest in the Governor-General, or in the Governor-General in Council, or in the authority exercising similar powers under the Commonwealth, as the case requires.

CHAPTER III.

THE JUDICATURE.

71. The judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as The Parliament creates, and in such other courts as it invests with federal jurisdiction. The High Court shall consist of a Chief Justice, and so many other Justices, not less than two, as The Parliament prescribes.

72. The Justices of the High Court and of the other courts created by The Parliament :

- I. Shall be appointed by the Governor-General in Council :
- II. Shall not be removed except by the Governor-General in Council, on an Address from both Houses of The Parliament in the same session praying for such removal on the ground of proved misbehaviour or incapacity :
- III. Shall receive such remuneration as The Parliament may fix ; but the remuneration shall not be diminished during their continuance in office.

73. The High Court shall have jurisdiction, with such exceptions and subject to such regulations as The Parliament prescribes, to hear and determine appeals from all judgments, decrees, orders, and sentences :

- I. Of any Justice or Justices exercising the original jurisdiction of the High Court :
- II. Of any other federal court, or court exercising federal jurisdiction ; or of the Supreme Court of any State, or of any other court of any State from which at the establishment of the Commonwealth an appeal lies to the Queen in Council :

III. Of the Inter-State Commission, but as to questions of law only :
and the judgment of the High Court in all such cases shall be final and conclusive.

But no exception or regulation prescribed by The Parliament shall prevent the High Court from hearing and determining any appeal from the Supreme Court of a State in any matter in which at the establishment of the Commonwealth an appeal lies from such Supreme Court to the Queen in Council.

Until The Parliament otherwise provides, the conditions of and restrictions on appeals to the Queen in Council from the Supreme Courts of the several States shall be applicable to appeals from them to the High Court.

74. No appeal shall be permitted to the Queen in Council from a decision of the High Court upon any question, howsoever arising, as to the limits inter se of the Constitutional powers of the Commonwealth and those of any State or States, or as to the limits inter se of the Constitutional powers of any two or more States, unless the High Court shall certify that the question is one which ought to be determined by Her Majesty in Council.

The High Court may so certify if satisfied that for any special reason the certificate should be granted, and thereupon an appeal shall lie to Her Majesty in Council on the question without further leave.

Except as provided in this section, this Constitution shall not impair any right which the Queen may be pleased to exercise, by virtue of Her Royal Prerogative, to grant special leave of appeal from the High Court to Her Majesty in Council. The Parliament may make laws limiting the matters in which such leave may be asked, but proposed laws containing any such limitation shall be reserved by the Governor-General for Her Majesty's pleasure.

75. In all matters—

- I. Arising under any treaty :
 - II. Affecting consuls, or other representatives of other countries :
 - III. In which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party :
 - IV. Between States, or between residents of different States, or between a State and a resident of another State.
 - V. In which a writ of mandamus or prohibition or an injunction is sought against an officer of the Commonwealth :
- the High Court shall have original jurisdiction.

76. The Parliament may make laws conferring original jurisdiction on the High Court in any matter—

- I. Arising under this Constitution, or involving its interpretation :
- II. Arising under any laws made by The Parliament :
- III. Of admiralty and maritime jurisdiction :
- IV. Relating to the same subject-matter claimed under the laws of different States.

77. With respect to any of the matters mentioned in the last two sections, The Parliament may make laws—

- i. Defining the jurisdiction of any federal court other than the High Court :
- ii. Defining the extent to which the jurisdiction of any federal court shall be exclusive of that which belongs to or is vested in the courts of the States :
- iii. Investing any court of a State with federal jurisdiction.

78. The Parliament may make laws conferring rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power.

79. The federal jurisdiction of any court may be exercised by such number of judges as The Parliament prescribes.

80. The trial on indictment of any offence against any law of the Commonwealth shall be by jury, and every such trial shall be held in the State where the offence was committed, and if the offence was not committed within any State the trial shall be held at such place or places as The Parliament prescribes.

CHAPTER IV.

FINANCE AND TRADE.

81. All revenues or moneys raised or received by the Executive Government of the Commonwealth shall form one Consolidated Revenue Fund, to be appropriated for the purposes of the Commonwealth in the manner and subject to the charges and liabilities imposed by this Constitution.

82. The costs, charges, and expenses incident to the collection, management, and receipt of the Consolidated Revenue Fund shall form the first charge thereon ; and the revenue of the Commonwealth shall in the first instance be applied to the payment of the expenditure of the Commonwealth.

83. No money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law.

But until the expiration of one month after the first meeting of The Parliament, the Governor-General in Council may draw from the Treasury and expend such moneys as may be necessary for the maintenance of any department transferred to the Commonwealth and for the holding of the first elections for The Parliament.

84. When any department of the public service of a State becomes transferred to the Commonwealth, all officers of the department shall become subject to the control of the Executive Government of the Commonwealth.

Any such officer who is not retained in the service of the Commonwealth shall, unless he is appointed to some other office of equal

emolument in the public service of the State, be entitled to receive from the State any pension, gratuity, or other compensation payable under the law of the State on the abolition of his office.

Any such officer who is retained in the service of the Commonwealth shall preserve all his existing and accruing rights, and shall be entitled to retire from office at the time, and on the pension or retiring allowance, which would be permitted by the law of the State if his services with the Commonwealth were a continuation of his service with the State. Such pension or retiring allowance shall be paid to him by the Commonwealth; but the State shall pay to the Commonwealth a part thereof, to be calculated on the proportion which his term of service with the State bears to his whole term of service, and for the purpose of the calculation his salary shall be taken to be that paid to him by the State at the time of the transfer.

Any officer who is, at the establishment of the Commonwealth, in the public service of a State, and who is, by consent of the Governor of the State with the advice of the Executive Council thereof, transferred to the public service of the Commonwealth, shall have the same rights as if he had been an officer of a department transferred to the Commonwealth and were retained in the service of the Commonwealth.

85. When any department of the public service of a State is transferred to the Commonwealth—

- i. All property of the State, of any kind, used exclusively in connection with the department, shall become vested in the Commonwealth; but, in the case of the departments controlling customs and excise and bounties, for such time only as the Governor-General in Council may declare to be necessary.
- ii. The Commonwealth may acquire any property of the State, of any kind, used, but not exclusively used, in connection with the department; the value thereof shall, if no agreement can be made, be ascertained in, as nearly as may be, the manner in which the value of land, or of an interest in land, taken by the State for public purposes, is ascertained under the law of the State in force at the establishment of the Commonwealth.
- iii. The Commonwealth shall compensate the State for the value of any property passing to the Commonwealth under this section; if no agreement can be made as to the mode of compensation, it shall be determined under laws to be made by The Parliament.
- iv. The Commonwealth shall, at the date of the transfer, assume the current obligations of the State in respect of the department transferred.

86. On the establishment of the Commonwealth, the collection and control of duties of customs and of excise, and the control of the payment of bounties, shall pass to the Executive Government of the Commonwealth.

87. During a period of ten years after the establishment of the Commonwealth, and thereafter until the Parliament otherwise provides, of the net revenue of the Commonwealth from duties of customs and of excise, not more than one-fourth shall be applied annually by the Commonwealth towards its expenditure.

The balance shall in accordance with this Constitution, be paid to the several States, or applied towards the payment of interest on debts of the several States taken over by the Commonwealth.

88. Uniform duties of customs shall be imposed within two years after the establishment of the Commonwealth.

89. Until the imposition of uniform duties of customs—

- i. The Commonwealth shall credit to each State the revenues collected therein by the Commonwealth.
- ii. The Commonwealth shall debit to each State—
 - (a) the expenditure therein of the Commonwealth incurred solely for the maintenance or continuance, as at the time of transfer, of any department transferred from the State to the Commonwealth.
 - (b) The proportion of the State, according to the number of its people, in the other expenditure of the Commonwealth.

iii. The Commonwealth shall pay to each State month by month the balance (if any) in favour of the State.

90. On the imposition of uniform duties of customs the power of the Parliament to impose duties of customs and of excise, and to grant bounties on the production or export of goods, shall become exclusive.

On the imposition of uniform duties of customs all laws of the several States imposing duties of customs or of excise, or offering bounties on the production or export of goods, shall cease to have effect; but any grant of or agreement for any such bounty lawfully made by or under the authority of the Government of any State shall be taken to be good if made before the thirtieth day of June, one thousand eight hundred and ninety-eight, and not otherwise.

91. Nothing in this Constitution prohibits a State from granting any aid to or bounty on mining for gold, silver, or other metals, nor from granting, with the consent of both Houses of the Parliament of the Commonwealth expressed by resolution, any aid to or bounty on the production or export of goods.

92. On the imposition of uniform duties of customs, trade, commerce, and intercourse among the States, whether by means of internal carriage or ocean navigation, shall be absolutely free.

But notwithstanding anything in this Constitution, goods imported before the imposition of uniform duties of customs into any State, or into any Colony which, whilst the goods remain therein, becomes a State, shall, on thence passing into another State within two years after

the imposition of such duties, be liable to any duty chargeable on the importation of such goods into the Commonwealth, less any duty paid in respect of the goods on their importation.

93. During the first five years after the imposition of uniform duties of customs, and thereafter until The Parliament otherwise provides :—

- I. The duties of customs chargeable on goods imported into a State and afterwards passing into another State for consumption, and the duties of excise paid on goods produced or manufactured in a State and afterwards passing into another State for consumption, shall be taken to have been collected not in the former but in the latter State :
- II. Subject to the last subsection, the Commonwealth shall credit revenue, debit expenditure, and pay balances to the several States as prescribed for the period preceding the imposition of uniform duties of customs.

94. After five years from the imposition of uniform duties of customs, The Parliament may provide, on such basis as it deems fair, for the monthly payment to the several States of all surplus revenue of the Commonwealth.

95. Notwithstanding anything in this Constitution, the Parliament of the State of Western Australia, if that State be an Original State, may, during the first five years after the imposition of uniform duties of customs, impose duties of customs on goods passing into that State, and not originally imported from beyond the limits of the Commonwealth ; and such duties shall be collected by the Commonwealth.

But any duty so imposed on any goods shall not exceed during the first of such years the duty chargeable on the goods under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty, and all duties imposed under this section shall cease at the expiration of the fifth year after the imposition of uniform duties.

If at any time during the five years the duty on any goods under this section is higher than the duty imposed by the Commonwealth on the importation of the like goods, then such higher duty shall be collected on the goods when imported into Western Australia from beyond the limits of the Commonwealth.

96. During a period of ten years after the establishment of the Commonwealth and thereafter until The Parliament otherwise provides, The Parliament may grant financial assistance to any State on such terms and conditions as The Parliament thinks fit.

97. Until the Parliament otherwise provides, the laws in force in any colony which has become or becomes a State with respect to the receipt of revenue and the expenditure of money on account of the Government of the colony, and the review and audit of such receipt and expenditure, shall apply to the receipt of revenue and the expenditure

of money on account of the Commonwealth in the State in the same manner as if the Commonwealth, or the Government, or an officer of the Commonwealth, were mentioned whenever the colony, or the Government, or an officer of the colony is mentioned.

98. The power of The Parliament to make laws with respect to trade and commerce extends to navigation and shipping, and to railways the property of any State.

99. The Commonwealth shall not, by any law or regulation of trade, commerce, or revenue, give preference to one State or any part thereof over another State or any part thereof.

100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.

101. There shall be an Inter-State Commission, with such powers of adjudication and administration as The Parliament deems necessary for the execution and maintenance, within the Commonwealth, of the provisions of this Constitution relating to trade and commerce, and of all laws made thereunder.

102. The Parliament may by any law with respect to trade or commerce forbid, as to railways, any preference or discrimination by any State, or by any authority constituted under a State, if such preference or discrimination is undue and unreasonable, or unjust to any State: due regard being had to the financial responsibilities incurred by any State in connection with the construction and maintenance of its railways. But no preference or discrimination shall, within the meaning of this section, be taken to be undue and unreasonable, or unjust to any State, unless so adjudged by the Inter-State Commission.

103. The members of the Inter-State Commission—

- i. Shall be appointed by the Governor-General in Council :
- ii. Shall hold office for seven years, but may be removed within that time by the Governor-General in Council, on an address from both Houses of the Parliament in the same Session praying for such removal on the ground of proved misbehaviour or incapacity :
- iii. Shall receive such remuneration as The Parliament may fix ; but such remuneration shall not be diminished during their continuance in office.

104. Nothing in this Constitution shall render unlawful any rate for the carriage of goods upon a railway, the property of a State, if the rate is deemed by the Inter-State Commission to be necessary for the development of the territory of the State, and if the rate applies equally to goods within the State and to goods passing into the State from other States.

105. The Parliament may take over from the States their public debts as existing at the establishment of the Commonwealth, or a proportion thereof, according to the respective numbers of their people as

shown by the latest statistics of the Commonwealth, and may convert, renew, or consolidate such debts, or any part thereof; and the States shall indemnify the Commonwealth in respect of the debts taken over, and thereafter the interest payable in respect of the debts shall be deducted and retained from the portions of the surplus revenue of the Commonwealth payable to the several States, or if such surplus is insufficient, or if there is no surplus, then the deficiency or the whole amount shall be paid by the several States.

CHAPTER V.

THE STATES.

106. The Constitution of each State of the Commonwealth shall, subject to this Constitution, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be, until altered in accordance with the Constitution of the State.

107. Every power of the Parliament of a colony which has become or becomes a State, shall, unless it is by this Constitution exclusively vested in The Parliament of the Commonwealth or withdrawn from the Parliament of the State, continue as at the establishment of the Commonwealth, or as at the admission or establishment of the State, as the case may be.

108. Every law in force in a colony which has become or becomes a State, and relating to any matter within the powers of The Parliament of the Commonwealth, shall, subject to this Constitution, continue in force in the State; and until provision is made in that behalf by The Parliament of the Commonwealth, the Parliament of the State shall have such powers of alteration and of repeal in respect of any such law as the Parliament of the colony had until the colony became a State.

109. When a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid.

110. The provisions of this Constitution relating to the Governor of a State extend and apply to the Governor for the time being of the State, or other chief executive officer or administrator of the government of the State.

111. The Parliament of a State may surrender any part of the State to the Commonwealth: and upon such surrender, and the acceptance thereof by the Commonwealth, such part of the State shall become subject to the exclusive jurisdiction of the Commonwealth.

112. After uniform duties of customs have been imposed, a State may levy on imports or exports, or on goods passing into or out of the State, such charges as may be necessary for executing the inspection laws of the State; but the net produce of all charges so levied shall be for the use of the Commonwealth; and any such inspection laws may be annulled by The Parliament of the Commonwealth.

113. All fermented, distilled, or other intoxicating liquids passing into any State or remaining therein for use, consumption, sale, or storage shall be subject to the laws of the State as if such liquids had been produced in the State.

114. A State shall not, without the consent of The Parliament of the Commonwealth, raise or maintain any naval or military force, or impose any tax on property of any kind belonging to the Commonwealth; nor shall the Commonwealth impose any tax on property of any kind belonging to a State.

115. A State shall not coin money, nor make anything but gold and silver coin a legal tender in payment of debts.

116. The Commonwealth shall not make any law for establishing any religion, or for imposing any religious observance, or for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth.

117. A subject of the Queen, resident in any State, shall not be subject in any other State to any disability or discrimination which would not be equally applicable to him if he were a subject of the Queen resident in such other State.

118. Full faith and credit shall be given, throughout the Commonwealth, to the laws, the public acts and records, and the judicial proceedings, of every State.

119. The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.

120. Every State shall make provision for the detention in its prisons of persons accused or convicted of offences against the laws of the Commonwealth, and for the punishment of persons convicted of such offences, and the Parliament of the Commonwealth may make laws to give effect to this provision.

CHAPTER VI.

NEW STATES.

121. The Parliament may admit to the Commonwealth or establish new States, and may upon such admission or establishment make or impose such terms and conditions, including the extent of representation in either House of The Parliament, as it thinks fit.

122. The Parliament may make laws for the Government of any territory surrendered by any State to and accepted by the Commonwealth, or of any territory placed by the Queen under the authority of and accepted by the Commonwealth, or otherwise acquired by the Commonwealth, and may allow the representation of such territory in either House of the Parliament to the extent and on the terms which it thinks fit.

123. The Parliament of the Commonwealth may, with the consent of the Parliament of a State and the approval of the majority of the

electors of the State voting upon the question, increase, diminish, or otherwise alter the limits of the State, upon such terms and conditions as may be agreed on, and may, with the like consent, make provision respecting the effect and operation of any increase or diminution or alteration of territory in relation to any State affected.

124. A new State may be formed by separation of territory from a State, but only with the consent of the Parliament thereof, and a new State may be formed by the union of two or more States or parts of States, but only with the consent of the Parliaments of the States affected.

CHAPTER VII.

MISCELLANEOUS.

125. The seat of Government of the Commonwealth shall be determined by The Parliament and shall be within territory which shall have been granted to or acquired by the Commonwealth and shall be vested in and belong to the Commonwealth, and if New South Wales be an Original State shall be in that State, and be distant not less than one hundred miles from Sydney.

Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

The Parliament shall sit at Melbourne until it meet at the seat of Government.

126. The Queen may authorise the Governor-General to appoint any person or any persons jointly or severally to be his deputy or deputies within any part of the Commonwealth, and in that capacity to exercise during the pleasure of the Governor-General such powers and functions of the Governor-General as he thinks fit to assign to such deputy or deputies, subject to any limitations expressed or directions given by the Queen, but the appointment of such deputy or deputies shall not affect the exercise by the Governor-General himself of any power or function.

127. In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted.

CHAPTER VIII.

ALTERATION OF THE CONSTITUTION.

128. This Constitution shall not be altered except in the following manner :

The proposed law for the alteration thereof must be passed by an absolute majority of each House of The Parliament, and not less than two nor more than six months after its passage through both Houses the proposed law shall be submitted in each State to the electors qualified to vote for the election of members of the House of Representatives.

But if either House passes any such proposed law by an absolute majority and the other House rejects or fails to pass it or passes it with any amendment to which the first-mentioned House will not agree, and if after an interval of three months the first-mentioned House in the same or the next session again passes the proposed law by an absolute majority with or without any amendment which has been made or agreed to by the other House, and such other House rejects or fails to pass it, or passes it with any amendment to which the first-mentioned House will not agree, the Governor-General may submit the proposed law as last proposed by the first-mentioned House, and either with or without any amendments subsequently agreed to by both Houses to the electors in each State qualified to vote for the election of the House of Representatives.

When a proposed law is submitted to the electors, the vote shall be taken in such manner as The Parliament prescribes. But until the qualification of electors of members of the House of Representatives becomes uniform throughout the Commonwealth only one-half the electors voting for and against the proposed law shall be counted in any State in which adult suffrage prevails.

And if in a majority of the States a majority of the electors voting approve the proposed law, and if a majority of all the electors voting also approve the proposed law, it shall be presented to the Governor-General for the Queen's assent.

No alteration diminishing the proportionate representation of any State in either House of The Parliament, or the minimum number of representatives of a State in the House of Representatives, or increasing diminishing, or otherwise altering the limits of the State, or in any manner affecting the provisions of the Constitution in relation thereto, shall become law unless the majority of the electors voting in that State approve the proposed law.

SCHEDULE.

OATH.

I, A.B., do swear that I will be faithful and bear true allegiance to Her Majesty, Queen Victoria, Her heirs and successors, according to law. SO HELP ME GOD!

AFFIRMATION.

I, A.B., do solemnly and sincerely affirm and declare that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, Her heirs and successors, according to law.

(NOTE.—*The name of the King or Queen of the United Kingdom of Great Britain and Ireland for the time being is to be substituted from time to time.*)

CONSTITUTIONS OF THE STATES AND OF NEW ZEALAND.

NEW SOUTH WALES.

THE present form of government in New South Wales was inaugurated forty-six years ago, the "Act to confer a Constitution on New South Wales, and to grant a Civil List to Her Majesty," having received the Royal assent on the 16th July, 1855. This important statute was proclaimed in Sydney on the 24th November of the same year, and at once came into operation, sweeping away entirely the former system, and constituting an elective representative Chamber—thus, by the granting of equal privileges, making the colonists of New South Wales the equals of their countrymen in other parts of the Empire. The ties which bound the state to the mother country were in no way loosened, for the Constitution Act simply conceded to the people of New South Wales the rights which prevailed in the United Kingdom, namely, of taxing themselves, and of being governed by Ministers responsible to a Parliament elected by popular vote. The authority vested in the Sovereign remains the same as before, though the mode of its exercise is widely different. Prior to Responsible Government, the Sovereign exercised, through the Governor, almost despotic power, this official uniting in himself the executive and legislative functions. Personal liberty and independence were, therefore, to no small degree in his control; but with the establishment of Responsible Government this state of things ceased, and the greatest measure of individual liberty is now found compatible with the full protection of public rights. The readiness with which the people of the state adapted themselves to the forms and practice of their new government was not a little remarkable, and fully justified their assumption of its privileges.

All laws are enacted in the name of the King, "by and with the advice of the Legislative Council and Legislative Assembly," the Governor, as the Royal Deputy, immediately giving the assent of the Sovereign to Acts of Parliament, or, if he should think fit, reserving them for the consideration of His Majesty. In order that the Constitution may be clearly understood, it will be well to consider, under distinct heads, the several elements of which the Government and Legislature consist.

The Governor.

Prior to 1879 the Governor of the state was appointed by Letters Patent under the Great Seal; but in that year the practice was discontinued on the advice of Sir Alfred Stephen, given during the tenure of office of Sir Hercules Robinson. The change was first carried out in the appointment of Sir Augustus Loftus. The office of Governor is now constituted by permanent Letters Patent, and by a standing Commission, instead of as formerly by letters issued *pro hac vice* only. The Governor receives his appointment at present by Commission under the Royal sign manual and signet, which recites the Letters Patent of the 29th April, 1879, as well as the instructions issued (under sign manual and signet) in further declaration of the King's "will and pleasure." The original Letters Patent, thus recited and enforced, declare that the Governor is directed and empowered "to do and execute all things that belong to his office according to the tenor of the Letters Patent, and of such Commission as may be issued to him under our sign manual and signet, and according to such instructions as may from time to time be given to him under our sign manual and signet, or by our order in our Privy Council, or by us through one of our Principal Secretaries of State, and to such laws as are now or shall hereafter be in force in the colony." In accordance with a custom which has long prevailed, no Governor retains his office for a longer period than six years; and should he die or become incapable of performing his duties during his tenure of office, or be removed before the arrival of his successor, or should he have occasion to leave the state for any considerable period, the government is to be administered (1) by the Lieutenant-Governor; or, if there be no Lieutenant-Governor, (2) by an Administrator to be appointed according to the provisions of the Letters Patent and Instructions. The present Lieutenant-Governor is Sir Frederick Matthew Darley, G.C.M.G., C.J., who was appointed by a Commission, dated the 23rd November, 1891; and in recent years the duties of Administrator have been fulfilled by Sir John Lackey, K.C.M.G., President of the Legislative Council.

The Lieutenant-Governor, or, in his absence, the Administrator, is empowered by his Commission to fill the office of Governor during any temporary absence of the Governor from the state; but the Governor may not be absent from the state, except in accordance with the terms of his instructions. Without the King's special leave he may not leave the state for a period exceeding one month at a time, or exceeding in the aggregate one month for every year of his service, unless on a visit to the Governor of a neighbouring state; but, on the other hand, he may leave the state for any period not exceeding one month without its being reckoned as a departure, if he shall have previously informed the Executive Council in writing of his intention, and appointed a deputy to act for him till his return. This deputy must, in the first instance, be the Lieutenant-Governor; but if, from any cause,

the services of the Lieutenant-Governor should not be available, the Governor may appoint whomsoever he pleases as his deputy.

The Governor's functions, according to the Letters Patent, Commission, and Instructions, may be recapitulated as follow :—

The Governor is the custodian of the Great Seal, under which all Crown grants, etc., must pass.

The Governor has the appointment of his own Council—the Executive. He is also to summon that Council, and is ordinarily its President; but in his absence some other member may be nominated to preside. It is usual, however, to appoint some member of the Ministry permanent Vice-President, who presides in the absence of the Governor.

The Governor is the fountain of honour within the state, since to him belongs the power to appoint, in the King's name, all Judges, Justices of the Peace, Commissioners, and other "necessary officers and Ministers"; and, by virtue of his powers as Viceroy, he may remove from the exercise of his office any official so appointed.

The Governor is also the depositary of the prerogative of mercy within the state, having it in his power to pardon, either absolutely or conditionally, any offender convicted in New South Wales. He can also remit fines, penalties, and forfeitures due to the Crown, but he cannot pardon or remit on the condition of the offender voluntarily leaving the state, unless the offence has been a political one only. In all capital cases until recently the final responsibility of deciding whether or not the death penalty should be carried out rested solely with the Governor, but, by a new arrangement which has been agreed to by all the Australasian colonies, such final power is now exercised by the Governor "with the advice of the Executive Council." This places the procedure of these colonies, in regard to capital cases, on similar lines to the system that has for some time past been in force in Canada. Its adoption was suggested and strongly urged by Lord Onslow, the former Governor of New Zealand; and Lord Knutsford, the Secretary of State for the Colonies in the second Salisbury Administration, ascertained the views of the various Australasian colonies upon the subject. It being found that they all accepted the proposal as an improvement upon the practice then existing, a circular despatch was sent to each colony with instructions for its adoption. The new system was first brought into operation in New South Wales towards the end of October, 1892.

The Governor is also vested with the authority of the Crown, enabling him to nominate the members of the Upper House of the Legislature, and to summon, prorogue to a future day, or dissolve "any legislative body" existing in the state. His instructions, however, provide that in the exercise of the above powers he is to act by the advice of the Executive Council in all cases except those whose nature is such that in his opinion the public service "would sustain material prejudice were he to follow such advice," or in matters too trivial to submit to the Council, or "too urgent to admit of their advice being given"; but

in all such urgent cases he must communicate to the Council as soon as practicable the measures taken by him, and his reasons for acting. It is expressly provided, however, that the Governor may, if he think fit, disregard the advice of the Executive and act in direct opposition to the declared will of his advisers, but in such cases he is required to make a full report of the whole circumstances for the information of the Secretary of State for the Colonies.

The Governor acts as Viceroy as regards giving the Royal assent to or vetoing Bills passed by the Legislature, or reserving them for the special consideration of the Sovereign. The instructions deal at large with this matter, but it is usual in practice to be guided to a large extent by the advice of the law officers of the Crown. There are eight different classes of Bills, however, to which the Governor is bound to refuse the Royal assent. They are:—

- (1.) Divorce Bills (that is, private bills divorcing particular persons).
- (2.) Bills making any kind of grant, gratuity, or donation to the Governor.
- (3.) Bills affecting the currency.
- (4.) Bills imposing differential duties, which are not in accordance with the Australian Colonies Duties Act, 1873.
- (5.) Bills apparently contrary to Imperial treaty obligations.
- (6.) Bills interfering with the discipline or control of His Majesty's land or sea forces employed in the state.
- (7.) Bills of great importance, or extraordinary in their nature, whereby the Royal prerogative, or the rights and property of His Majesty's subjects residing beyond the state, or the trade and shipping of the United Kingdom and its dependencies, may be prejudiced.
- (8.) Bills containing provisions to which the Royal assent has already been refused, or which have been once disallowed, unless they contain a clause suspending their operation until the King's pleasure has been signified, or unless the Governor is satisfied that there is urgent necessity for bringing any such Bill into immediate operation, in which case he is empowered to assent to the Bill on behalf of the King, if it is not repugnant to the law of England, or inconsistent with Imperial treaty obligations; and in every such case he is required to transmit the Bill to His Majesty, together with his reasons for assenting to it.

The following Acts of Parliament regulate the action of the Governor in assenting to Bills on behalf of the King, or reserving them for the consideration of the Sovereign:—5 and 6 Vic., cap. 76, secs. 31–32; 7 and 8 Vic., cap. 74, sec. 7; and 13 and 14 Vic., cap. 59, secs. 13, 32, and 33. The effect of these enactments is to deprive any reserved Bill of all force and legality until the King's assent thereto has been formally communicated to the Governor; and power is given to His Majesty to

veto any Bill to which the Governor has assented on his behalf within two years after the receipt of such Bill by the Secretary of State for the Colonies, in which case the Bill is to be declared null and void by message of the Governor, and proclamation. Reserved Bills are to be laid before His Majesty in Council, and the King may allow them or not within a period of two years from the day on which they were reserved by the Governor. The King's assent to reserved Bills may be transmitted by telegram.

By Act 7 Vic., No. 16, all Acts of Parliament which become law are required to be registered by the Registrar-General within ten days of their so becoming law.

The above is a summary of the powers and duties of the Governor, as defined by his instructions and the Letters Patent; but additional duties have been imposed upon him by the Constitution and Electoral Acts. In accordance with these enactments he must summon the Legislative Assembly; appoint the President of the Legislative Council; prorogue or dissolve Parliament; appoint his ministers *proprio motu*; also appoint, with the advice of the Executive, all public officers whose appointment is not vested in heads of departments; issue all warrants for the payment of money; issue the writs for general elections, and, in the absence of the Speaker, issue writs to fill vacancies occurring in the Assembly.

In summoning, proroguing, or dissolving Parliament, the Governor usually acts according to the advice tendered him by the Cabinet; but he is in no way bound to do so, and, as a matter of fact, he has sometimes declined to be guided by his Ministers. This, however, has never happened except in respect to granting a dissolution. As to summoning or proroguing, a difference of opinion is hardly likely to arise. The relations established between the Ministry and the representatives of the people are in accordance with the time-honoured precedents prevailing in Great Britain, which may be thus defined. The Cabinet must be chosen from—“(1) Members of the Legislature; (2) holding the same political views, and chosen from the party possessing a majority in the House of Commons; (3) carrying out a concerted policy; (4) under a common responsibility, to be signified by a collective resignation in the event of Parliamentary censure; and (5) acknowledging a common subordination to one Chief Minister.”

The Imperial rule as to the circumstances under which a Government is bound to resign is as follows:—Censure, involving loss of office, rests entirely with the Lower House, or popular branch of the Legislature; hence, directly a Ministry fails to command a majority of the House of Commons, it must give place to another. Want of confidence in a Cabinet may be shown in three ways: first, by a direct vote of censure, or a specific declaration of want of confidence; second, by a vote disapproving of some act of the Government; or, third, by the rejection of some important measure introduced by the Ministry. In any of these cases Ministers must either resign, or appeal to the country if they can get the Sovereign to sanction a new election.

These rules have been virtually adopted in New South Wales, and the undoubted right of the Governor, as the depositary of the Royal prerogative, to refuse to grant a dissolution, if he think fit, has been more than once exercised. In March, 1877, Sir Hercules Robinson refused to grant a dissolution to Sir John Robertson, and in September of the same year he also declined to enable Sir Henry Parkes to go to the country. The reason alleged in each case was that the Assembly refused to make provision for the expenditure of the year. It will thus be seen that a grave responsibility is thrown upon the Governor in the exercise of the unquestioned right of granting or refusing a dissolution of Parliament, and in the cases mentioned it can hardly be doubted that Sir Hercules Robinson acted within his powers. The Viceroy is the conservator of the rights and interests of the whole population, and it must be evident that grave evils would ensue were a dissolution to take place before supplies had been granted.

The exercise of the prerogative of mercy is such an important function of the Governor, and he is so liable on some occasions to have strong pressure brought to bear upon him in connection with it, that it will be well to quote at length the instructions received a few years ago upon this point. The mode of procedure in capital cases has already been referred to, and in other cases the Governor is instructed not to pardon or reprieve any offender without receiving the advice of one, at least, of his Ministers; and in any case in which such pardon or reprieve might directly affect the interests of the Empire, or of any country or place beyond the jurisdiction of the Government of the state, the Governor must, before deciding as to either pardon or reprieve, take those interests specially into his own personal consideration in conjunction with such advice as aforesaid. In another part of his instructions the Governor is permitted to act in opposition to the advice of the Executive Council "if he see sufficient cause," but he is to report any such matter to the Sovereign without delay.

The Executive.

The Executive Council is now composed of seven salaried Ministers, namely: the Premier and Chief Secretary, the Colonial Treasurer, the Attorney-General and Minister of Justice, the Secretary for Lands, the Secretary for Public Works, the Minister of Public Instruction and Minister for Labour and Industry, the Secretary for Mines and Agriculture, with a Vice-President, and two members without portfolio. These form the Cabinet, and, of course, are responsible to Parliament. The Ministry, as the advisers of the Governor, must also retain his confidence; but, practically, this is seldom likely to be withdrawn, so long as they command a working majority in the Assembly. The Governor may dissolve Parliament although the Ministry have not sustained a defeat, and in this case the continued existence of any Government would depend directly on the vote of the constituencies, but such a contingency can happen but seldom.

Apart from the Vice-President of the Executive Council, who holds no portfolio, it is rare for more than one Minister to be selected from the Upper House, and it will thus be seen that the principle of the responsibility of members of the Government to Parliament is fully carried out. For every act of the Governor as Viceroy some Minister is responsible to Parliament; and even in matters of Imperial interest, where the final onus rests upon the Governor, he himself is responsible to the Imperial Government, whose members are under the control of the House of Commons, so that no loophole is left for the exercise of any arbitrary act. The Crown, except in two instances (appeals to the Privy Council, and the bestowal of titles), acts towards the Executive through its representative, the Governor; and so long ago as the inception of Responsible Government, Earl Grey declared, in an official despatch, that he should make "a judicious use of the influence, rather than of the authority, of his office," which wise maxim has usually been followed. But in extreme cases, such as when his sanction is requested to any illegal proceeding, the Governor is bound, without question, to keep the law, though he may thereby be brought into hostile relations with the Cabinet. Sir Michael Hicks-Beach, in a communication to the Governor-General of Canada in 1879, clearly laid down the doctrine that the Governor of any British Colony "has an unquestionable constitutional right to dismiss his Ministers, if from any cause he feels it incumbent on him to do so." This does not militate against the doctrine of responsibility; for if the Ministry appointed by the Governor do not possess the confidence of Parliament, they cannot hold office, and the Governor will be forced to give way, or else persevere till he can select a Ministry whom the Assembly will accept. The final control will thus be, as in every other case, with the representatives of the people. In matters of routine the Governor will necessarily act on the advice of his Ministers, and in most cases relating to the internal economy of the departments, he will even adopt the individual recommendations of the Ministers by whom they are severally controlled.

As regards matters of purely Imperial interest, the Governor is responsible to the British authorities for their due conservation. If, in consequence of his action in any such matter, he is involved in a dispute with his Ministers, he is bound to refer them to the Sovereign, should his action have been endorsed by the Colonial Office. If his conduct were not approved of in England he would most likely be recalled. It follows from this, that in no case can the Governor be held to be responsible directly to Parliament for his conduct. His Ministers are responsible, but personally he has only to render an account to the Crown itself—that is, to the Imperial Parliament.

The Executive Council cannot discharge any function unless duly summoned by the Governor, and unless at least two members, in addition to the Governor or presiding member, be present to form a quorum. Formal minutes are, of course, kept of all proceedings.

Since the introduction of Responsible Government there have been thirty Ministries; but as four of these became merged into those next succeeding without the resignation of their members, the actual number of cabinets holding power may properly be said to have been twenty-six, whose average tenure of office, excluding the Ministry at present in power, has been about one year and six and a half months. Ten Governments were displaced by votes of censure, expressed or implied; three resigned in consequence of defeat on important measures of policy; two retired on being saved from defeat only by the Speaker's casting-vote, and three others through a motion for the adjournment of the House being carried against them; four, as previously stated, were merged into the succeeding Ministries; five resigned without a direct vote being carried against them, but in consequence of not possessing a working majority; one Government fell to pieces through internal disagreements; and one resigned in consequence of the Governor declining to appoint to the Legislative Council a certain number of its nominees.

The Parliament.

It seems a singular omission in the Constitution Act that no definition is given of the relative powers of the Legislative Council and Legislative Assembly. Such is the fact, but little inconvenience has arisen thereby, since by common consent it has been agreed that the precedents regulating the proceedings and relations, *inter se*, of the two Houses of the Imperial Parliament shall be followed, so far as applicable, in New South Wales. The Constitution Act provides that all money Bills shall be introduced in the Lower House only. The important rule of the House of Commons, affirmed two hundred years ago and constantly enforced ever since, that "all aids and supplies, and aids to His Majesty in Parliament, are the sole gift of the Commons, and it is the undoubted right of the Commons to direct, limit, and appoint in such Bills the ends, purposes, considerations, conditions, limitations, and qualifications of such grants, which ought not to be changed or altered by the House of Lords," is also held to be in force as regards the Parliament of this state, and has generally been recognised and acted upon.

The two Houses, however, do not possess the most important of the privileges of the Imperial Parliament, namely, the right of punishing for contempt, although the Legislative Assembly has, on one occasion, punished one of its members, by expelling him for conduct, beyond its precincts, assumed to be dishonourable. As regards disorderly conduct within the walls of the Chamber, it has been held by the Supreme Court, and affirmed by the Privy Council, that the Assembly only possesses the power of suspending a member for disorderly conduct for the period of the sitting at which he displays such conduct. A member may also be removed from the House by order of the Speaker if he persists in obstruction or contemns the Standing Orders; but fortunately this course has seldom been rendered necessary.

Witnesses may be summoned to give evidence before either House, or before committees of the Council or Assembly, the necessary powers for compelling their attendance having been conferred by an Act passed in 1881. Any person disobeying a summons may be arrested on a Judge's warrant; and the maximum penalty for refusing to give evidence is imprisonment for one calendar month.

The number of members of the Legislative Council is not limited by the Constitution Act, although the minimum number is fixed at twenty-one. It will be seen that this gives power to a Governor to quash any possible obstruction on the part of the Council to the will of the Government and the Lower House by "swamping" the Council. Such a proceeding, however, can hardly be held to be allowable, except under extreme circumstances. As a matter of fact, an attempt to "swamp" the Council was made during one of the premierships of Sir Charles Cowper, but public opinion condemned the course most strongly, although the somewhat peculiar circumstances of the case were thought at the time to justify the Governor's action. The authorities in England severely rebuked the Governor (Sir John Young) for the course he had taken, and since then "swamping" the Council has never been seriously entertained, nor is there much chance that it will ever again be attempted. The principle in fact has been affirmed, on the basis of an understanding entered into between Sir John Young and the leading statesmen of the day (on both sides of the House), that the members of the Legislative Council should be limited to a convenient number, and that no nominations should ever be made merely for the purpose of strengthening the party which happens to be in power. A deadlock between the two Houses is provided against by the universal feeling that the Assembly represents the will of the people, and in such case the Council would certainly have to give way to the deliberate will of the people's representatives. The Council is intended as a check to hasty legislation; and it doubtless acts as a useful "brake" to violent party feeling.

The Legislative Council.

As before stated, the members of the Upper House are nominated by the Governor, the minimum number composing the House being fixed at twenty-one. No limit to the number is fixed by the Constitution Act, but, in accordance with the arrangement already described, the number of members is practically kept down by the exclusion of all purely political appointments. As the number of members of the Assembly has increased to 125, the number of members composing the Council in December, 1901 (seventy-five), cannot be considered an unfair proportion, as the ratio of increase has not been much greater than in the case of the Lower House. Every member of the Council must be of full age, and either a natural-born or a duly naturalised subject. Four-fifths of the members must be persons not holding any paid office under the Crown, but this is not held to include officers "in His Majesty's sea and land forces on full or half pay, or retired officers on pensions."

Though the appointment is for life, a member may resign his seat, and he also forfeits it by absence from the House for two consecutive sessions without leave, by becoming naturalised in a foreign State, by becoming bankrupt, by becoming a public contractor or a defaulter, and by being attainted of treason or being convicted of felony or any infamous crime. The Governor appoints, and, if necessary, removes the President, who may speak in debate, but can only give a casting-vote. An attendance of one-third of the members on the roll was formerly necessary to constitute a quorum, but an Act has been carried reducing the proportion to one-fourth. The Council must hold a sitting at least once in every year, and no greater interval than twelve months must elapse between session and session. The proceedings are regulated by standing orders, which are, in the main, similar to those of the Assembly, the latter being framed on the model of the rules obtaining in the House of Commons. No member may sit or vote till he has taken the oath of allegiance, or the affirmation prescribed in lieu of that oath.

The Legislative Assembly.

In the Session of 1892-3, an Act was passed, entitled the Parliamentary Electorates and Elections Act of 1893, by which the course of procedure in regard to elections for the Legislative Assembly of New South Wales was almost entirely changed. The enactments under which such elections had been conducted up to that time—the Electoral Act of 1880, and the Wentworth Subdivision Act—were repealed upon the passing of the Act of 1893, with the exception of certain provisions which have since been abrogated by proclamation. During the year 1896 several important alterations were made in the 1893 Act in the direction of the extension of the franchise, and of the removal of restrictions placed upon electors changing their residence from one district to another. In 1902 the franchise was extended to women. The main principles of the new electoral system may be thus summarised:—

The number of members of the Legislative Assembly, which had grown by virtue of the Expansion Clauses of the Act of 1880 from 108 to 147, was reduced to 125, and the number of electorates, now denominated Electoral Districts, was increased from seventy-four to 125. Under the new system, therefore, there are exactly as many members as electorates, or, in other words, there are single electorates. This, of course, involved a complete re-distribution of the electorates, and special machinery had to be created in order that this might be done. In accordance with the Act three Commissioners were appointed, to whom was entrusted the duty of dividing the state into 125 districts, each containing as nearly as might be the same number of electors. In order to ascertain the quota of electors to be apportioned to each electorate, the number of resident electors on the roll for 1892-3, which happened to be 282,851, was divided by 125, and the quotient, 2,263, was fixed as the standard number of electors entitled to one representative. In mapping out the new Electoral Districts, the Commissioners were required to form them

so as to include the standard number of electors as nearly as possible; at the same time, in order to avoid inconvenient divisions, a margin of 200 voters either above or below the standard number was allowed, which margin it was permitted, in exceptional cases, to increase to 600 either way, on satisfactory reason for taking that action being furnished by the Commissioners. No adjustment of electorates has taken place since the first made under the Act of 1893; but the Act contemplates re-adjustments shortly after the taking of a census, and also, if necessary, every four or five years. The last census was taken in 1901.

The qualification for an elector is that he must be a natural-born subject who has resided in New South Wales for a continuous period of one year, or a naturalised subject who has resided in the state continuously for one year after naturalisation. It was provided in the principal Act that in either case he must have resided three months continuously in the electoral district for which he claimed to vote; but by the amending Act 60 Vic. No. 25 the period of residence was reduced to one month in the case of a person already on the rolls, and who had but removed from one district to another. Every such person, being of the full age of 21 years, and not otherwise disqualified, is entitled to have his name on the electoral roll, and to have an elector's right issued to him. The disqualifications, under the Constitution Act, apply to persons attainted or convicted of treason, felony, or other infamous offence in any part of His Majesty's dominions, unless they have received a free or conditional pardon, or have undergone the sentence passed on them for such offence; and, under subsequent enactments, to persons in the Naval and Military Service on full pay (except the militia and volunteers), and to persons of unsound mind, or in receipt of public charity. All other disqualifications have now been removed.

Power was given to the Governor under the Act of 1893 to subdivide each electoral district into divisions, and to appoint to each district an Electoral Registrar, with Deputy Registrars for the several divisions. It is one of the duties of these Registrars and Deputy Registrars to issue certificates known as electors' rights to those entitled to them. These electors' rights are printed in red ink upon paper specially prepared to prevent fraudulent imitations, with butts, like cheques, in accordance with the forms shown in Schedule A of the principal and amending Acts. They are bound in books, and numbered consecutively in black figures. Every person who has established his qualification to vote, and who has been placed on the electoral roll, is entitled to receive an elector's right upon signing his name in a book kept for that purpose, as well as on the butt and the face of the right itself. Under the principal Act an elector who removed from one district to another within three months of an election was practically disfranchised; but, as stated above, this period has now been reduced to one month, and until the elector is qualified to vote in the district to which he has removed he may use his right in his old district.

Provision is also made for the issue of a substituted right in the event of a right being lost or defaced. Every elector's right remains in force until cancelled in the prescribed manner. It is provided by the amending legislation of 1896 that an elector who has changed his abode from one district to another may obtain a right for his new district after he has resided one month therein, and may have his name inscribed on the Additional Roll on a declaration by the Registrar of his original district stating that he was enrolled there. When the Registrar of any district grants an application for an elector's right other than in lieu of one held for another district, he inscribes the name of the elector in a Provisional List, copies of which, during the first week of each month, are exhibited at every post-office and police-office within the district, so that objection to any name may be taken and heard at the Revision Court of the district, to be presided over by a Stipendiary or Police Magistrate, specially appointed as a Revising Magistrate. All names passed at the monthly Revision Court are then inscribed on the Additional Roll.

During the first week in August of each year, the Registrar must make out a general list of all persons on the electoral roll for his district, as well as of those to whom electors' rights have been issued since the last roll was printed; and copies of all such lists are exhibited for public inspection at every post-office in the electoral district. Any person objecting to any name upon the list must give to the Registrar, in writing, his reasons for such objection, and the Registrar must notify the same to the person to whom objection is taken. Every Registrar is supplied quarterly, by the District Registrar of Births, Deaths, and Marriages, with a list of all males above the age of 21 years whose deaths have been registered within the quarter in that particular district. As no provision is made for the exchange of these lists of deceased persons between different districts, it is possible for the names of electors who died outside their own districts to remain on the roll, and it is known that this often happens, unless sufficient proof of death is furnished by objectors. The Comptroller-General of Prisons and the Inspector-General of Police must forward quarterly to the Minister charged with the administration of the Act a list of all males above the age of 20 years in any gaol, lock-up, or other place of detention; and the Minister must send to the Registrar of each district such particulars as may be necessary for the purification of the electoral roll for such district. The Registrar must then write on a copy of the electoral roll, against the name of every person on the lists supplied to him as above, the words "dead" or "in custody, disqualified," or simply "in custody" where the particulars supplied do not appear to be such as to disqualify the person. Under the principal Act a Revision Court was held in October each year; but under the amending Act a monthly Revision Court is now held, at which objections may be heard, and claims for insertion on the lists considered; and from the lists, when duly corrected and certified to by the magistrate presiding at the Court, the electoral roll is printed.

In the year 1900 and every third year thereafter the General List is to be made up from the butts of the electors' rights issued to persons "then" entitled to vote.

Writs for the election of members of the Assembly are issued by the Governor in the case of a general election, and by the Speaker, or, in his absence or if there should be no Speaker, by the Governor, in the case of a bye-election. The writs for a general election are required to be issued within four clear days from the proclamation dissolving Parliament, and are made returnable not later than thirty-five days from the date of issue. Parliament must meet not later than seven days from the return of the writs. The polling day for a general election is fixed as the eighteenth day from the date of the issue of the writs.

A person, to be qualified as a candidate, must be the holder of an elector's right. Each candidate must be nominated by at least six electors for the district. The nomination must be made in writing, signed by the nominators, and endorsed by the candidate, consenting to the nomination. No elector can have more than one vote in the state, or, in other words, the "one man one vote" principle is enforced. No elector can nominate more than one candidate. No deposit from a candidate is required. Proper provision is made for the appointment of Returning Officers, substitutes, deputies, poll-clerks, and scrutineers, much as in the Act of 1880. Under the principal Act the poll was open from 8 a.m. to 6 p.m. in the months from October to March inclusive, and from 8 a.m. to 5 p.m. from April to September inclusive; but under the Parliamentary Elections (Polling) Act (No. 20 of 1898) the poll remains open from 8 a.m. to 6 p.m., irrespective of the season of the year when the election is held. Every person claiming to vote must exhibit his elector's right, satisfy the Returning Officer that he is the person on the roll who should possess that right, and demand a ballot-paper. He is then furnished with a ballot-paper, containing the names of the candidates; and his elector's right, as well as the butt, is punctured to denote that he has voted at that election. The elector has then to retire to some unoccupied compartment of the polling-booth, there to strike out the names of all the candidates on the paper except the one for whom he votes, and the ballot-paper, folded so that the names are not visible, but that the puncture can be seen by the Returning Officer or his deputy, is placed by him in the ballot-box. No provision is made whereby an elector can record his vote if away from his own electorate, except where outside polling places have been appointed, under the provisions of the Act, before the issue of the writs. At the close of the poll the votes are counted, and the result declared by a notice signed by the Returning Officer, and posted in some conspicuous position in the principal polling place, and published in some newspaper circulating in the district.

Very stringent clauses against bribery, treating, or intimidation are included in the Act. It is even forbidden to make a wager on the result of an election under a penalty of from £5 to £50. There are also sections providing for the appointment of a Committee of Elections and Qualifications, with powers similar to those conferred by the Act of 1880.

The disqualifications for membership of the Legislative Assembly, provided by the Constitution Act, still remain in force. They are as follow:—

1. He must not be a member of the Legislative Council.
2. He must not hold any office of profit under the Crown, either for a term of years or during pleasure.
3. He must not be in any way interested in any contract for the public service.

By the Constitution Act Amendment Act of 1884, the disqualification of persons holding offices of profit was declared not to apply to the Colonial Secretary or any other member of the Ministry. The third disqualification also does not apply to any contract made by a company consisting of more than twenty persons. If any disqualified person be elected, the election is voided by the House, and should such person presume to sit or vote he is liable to a fine of £500.

By an Act assented to on the 21st September, 1889, members of the Assembly are allowed the sum of £300 per annum to reimburse them for expenses incurred in the discharge of their Parliamentary duties.

Before taking his seat each member must take the oath of allegiance in the prescribed form, or make an affirmation in lieu of it. A member may resign his seat at any time, and he is held to have vacated it under any of the following conditions:—Absence during a whole session without leave, naturalisation in a foreign country, bankruptcy, being a defaulter, or convicted of treason, felony, or other infamous crime.

The Act 37 Vic. No. 7 provides that no Assembly can prolong its existence beyond the term of three years. One session, at least, must be held every year, and twelve months must not elapse between any two sessions. On meeting after a general election, the first business is to elect a Speaker, who has only a casting vote. Twenty members (exclusive of the Speaker) constitute a quorum.

The first Parliament elected under the Constitution Act met on the 22nd May, 1856, just six months after the proclamation of the Constitution. The duration of Parliament, unless it should be previously prorogued, was originally fixed at five years; but in 1874 an Act was passed establishing triennial Parliaments, which has ever since remained law. Since the inauguration of Responsible Government there have been nineteen appeals to the people, so that it will be seen the duration of each Assembly has not averaged even the shorter period of life to which

its existence is now limited. The subjoined table gives the duration of each Parliament elected under Constitutional Government:—

Parliament.	Opened.	Dissolved.	Duration.			No. of Sessions.
			Yr.	mth.	dy.	
First	22 May, 1856...	19 Dec., 1857...	1	6	27	2
Second	23 March, 1858...	11 April, 1859...	1	0	19	2
Third	30 Aug., 1859...	10 Nov., 1860...	1	2	11	2
Fourth	10 Jan., 1861...	10 Nov., 1864...	3	10	0	5
Fifth	24 Jan., 1865...	15 Nov., 1869...	4	9	22	6
Sixth	27 Jan., 1870...	3 Feb., 1872...	2	0	7	3
Seventh	30 April, 1872...	28 Nov., 1874...	2	6	29	4
Eighth	27 Jan., 1875...	12 Oct., 1877...	2	8	15	3
Ninth	27 Nov., 1877...	9 Nov., 1880...	2	11	13	3
Tenth	15 Dec., 1880...	23 Nov., 1882...	1	11	8	3
Eleventh	3 Jan., 1883...	7 Oct., 1885...	2	9	4	6
Twelfth	17 Nov., 1885...	26 Jan., 1887...	1	2	9	2
Thirteenth	8 March, 1887...	19 Jan., 1889...	1	10	11	3
Fourteenth	27 Feb., 1889...	6 June, 1891...	2	3	10	4
Fifteenth	14 July, 1891...	25 June, 1894...	2	11	12	4
Sixteenth	7 Aug., 1894...	5 July, 1895...	0	10	29	1
Seventeenth	13 Aug., 1895...	8 July, 1898...	2	10	26	4
Eighteenth	16 Aug., 1898...	11 June, 1901...	2	9	26	5
Nineteenth	23 July, 1901...	.....	.....	.....	.....	.....
Average.....			2	4	7	3 to 4

The system of one man one vote came into operation on the dissolution of the fifteenth Parliament. At the first election under the new system in 1894, a total poll of 204,246 votes was recorded. The electors on the rolls numbered 298,817, and those qualified to vote in districts that were contested, 254,105. The poll, therefore, represented 80·38 per cent. of effective voters—by far the best percentage of votes recorded at a general election in New South Wales. The second election under the new Act gave a poll of 153,034 votes out of a total enrolment of 238,233 electors in contested constituencies, the proportion of votes cast being 64·24 per cent. At the election held in July, 1901, 195,359 votes were recorded, the electors enrolled numbering altogether 346,184, and those qualified in contested electorates only, 270,861, so that the percentage of votes recorded was 72·13.

The number of males of full age compared with the total population is very large, the proportion at the last Census being 28 per cent. According to the official lists the number of persons enrolled at the general election in 1901 amounted to 25·4 per cent., or over one-fourth of the total population. The average number of electors on the roll per member was 2,769, and the estimated population to each member was 10,977. The subjoined table gives the result of the four general

elections which have taken place since the principle of one man one vote became law :—

Parliament.	Voters on Roll.	Number of Electors to a Member.	Total Members returned.	Members unopposed.	Contested Electorates.				
					Electors on Roll.	Votes recorded.	Percentage of Votes recorded.	Informal Votes.	Percentage of Informal Votes.
Sixteenth.....	298,817	2,296	125	1	254,105	204,246	80.38	3,310	1.62
Seventeenth ...	267,458	2,139	125	8	238,233	153,034	64.24	1,354	0.88
Eighteenth	324,338	2,595	125	3	294,481	178,717	60.69	1,638	0.92
Nineteenth	346,184	2,769	125	13	270,861	195,359	72.13	1,534	0.79

VICTORIA.

UP to the 1st July, 1851, Victoria formed a part of New South Wales, being included with the parent settlement under the name of Port Phillip District. The separation was effected in pursuance of an Act of the Imperial Parliament, dated 5th August, 1850, entitled "An Act for the better government of Her Majesty's Australian Colonies." This measure provided that "the territories now comprised within the said district of Port Phillip, including the town of Melbourne, and bounded on the north and north-east by a straight line drawn from Cape Howe to the nearest course of the River Murray, and thence by the course of that river to the eastern boundary of the colony of South Australia, shall be separated from the colony of New South Wales, and shall cease to return members to the Legislative Council of such colony, and shall be created into and thenceforth form a separate colony, to be known and designated as the Colony of Victoria."

It was also enacted that there should be a separate Legislative Council for Victoria, one third of the number of members to be appointed by Her Majesty and the remainder to be elected by the inhabitants of the colony. Authority was given to the Governor and Legislative Council of New South Wales to determine by Act of Parliament the number of members of which the Legislative Council of Victoria was to consist, and to make provision for dividing the new colony into electoral districts, for appointing the number of members for each district, and generally for carrying on the necessary elections.

The measure provided also that electors should be possessed of freehold estate of the clear value of £100, or be occupiers or three-years leaseholders of the clear annual value of £10 a year.

On the issuing of writs for the first election of members of the Legislative Council of Victoria, the colony was to be accounted as legally established, and the powers of the Governor and Council of New South Wales over the territories comprised in Victoria thereupon ceased.

In accordance with the provisions of the Imperial Act the Governor and Legislative Council of New South Wales passed the Victoria Electoral Act of 1851, which provided that the Legislative Council of Victoria should consist of thirty members, ten to be appointed and twenty elected. The new colony was also divided into sixteen electoral districts.

On the 1st July, 1851, Sir Charles Fitzroy, the Governor-General of Australia, issued the writs for the election of members, and declared the district of Port Phillip to be separated from New South Wales, and established as an independent colony to be known and designated as the colony of Victoria. The constitution thus established continued until the 23rd November, 1855.

At the close of 1852 the Secretary of State for the Colonies forwarded a despatch to Lieutenant Governor La Trobe, in which the Legislative Council of the colony was invited to consider the question of forming a second Legislative Chamber. This suggestion was shortly afterwards acted upon, and on the 24th March, 1854, a Bill "to establish a constitution in and for the Colony of Victoria" was passed and submitted to the Lieutenant-Governor, who at once forwarded it to the Secretary of State. On the 16th July, 1855, the Imperial Parliament passed an Act "to enable Her Majesty to assent to a Bill as amended of the Legislature of Victoria to establish a constitution in and for the Colony of Victoria." The Bill itself appeared as the first schedule to the Imperial Act, and was assented to on the 21st July, 1855. This course of procedure was rendered necessary owing to the fact that the Legislative Council of Victoria had exceeded its powers in passing the Bill before submitting it to the Imperial Government. It was, however, explained by the Secretary of State that the Parliament did not consider it necessary to supersede the Bill by direct legislation, as it was thought that the colonial legislature should be trusted for all the details of local representation and internal administration.

The new "Constitution Act" was formally proclaimed on the 23rd November, 1855, and the first meeting of the new Parliament was held on the 21st November, 1856. This Constitution Act is still in force, although its provisions have been subjected to various amendments, the principal of which were as stated below.

Under the terms of the Act the elective and nominee Council was abolished, and an elective Council and Assembly were established, "with power to make laws in and for Victoria in all cases whatsoever." Subject to certain limitations, the Parliament may alter, repeal, or vary the Constitution." This power, which was conferred by Section 60, has been extensively availed of. Thus, under the Act as originally passed, the Legislative Council consisted of thirty members, elected for ten years, representing six districts. At present, the Council consists of forty-eight members, elected for six years, and representing fourteen provinces. The Legislative Assembly, as first constituted, consisted of

sixty members, representing thirty-seven districts; at present there are ninety-five members, representing eighty-four districts. The property qualification for members and electors of the Upper House has been considerably reduced, while at present no property qualification is required in the case of members and electors for the Legislative Assembly. Amongst other important changes which might be mentioned was the abolition in 1865 of pensions, or retiring allowances, to persons who, on political grounds, retired or were released from certain responsible offices.

The powers and duties of the Governor are very similar in all the states, and the subject is referred to at some length in the previous sub-chapter, dealing with the constitution of New South Wales.

The Governor is, *ex officio*, President of the Executive Council, the other members, consisting of not more than ten Ministers, holding paid offices. There are two legislative chambers—a Legislative Council, consisting of forty-eight members, returned for fourteen provinces; and a Legislative Assembly, composed of ninety-five members, returned from eighty-four districts. Councillors are elected for a term of six years, while members of the Lower House occupy their seats for a period of three years. The qualification for members of the Upper House is the possession of freehold rateable property of an annual rateable value of £100, and a minimum age limit of 30 years. Electors for this Chamber must possess freehold property rated in some municipal district at not less than £10 per annum, or be lessees, assignees, or occupying tenants of property of an annual rateable value of not less than £25. Resident graduates of Universities within the British dominions, legal and medical practitioners, clergymen, certificated schoolmasters, matriculated students of Melbourne University, and naval and military officers are also entitled to vote for the Legislative Council.

For the Legislative Assembly, the qualifications required of members are that they have reached the age of 21 years, and are natural-born subjects of the King, or, in case of aliens, have been naturalised for five years; but judges of Victorian courts, ministers of religion, and persons who have been attainted of treason, or convicted of any felony or infamous crime are not eligible. There is no property qualification required, either for members or electors. Manhood suffrage is the basis on which electors vote, and they must be natural-born subjects, or naturalised for one year prior to the 1st January, or 1st July, in any year, and untainted by crime, while a vote is exercisable in respect of any other electoral district in which one of the following qualifications is held:—being on the roll of ratepayers; owning land or tenements of £50 clear value, or £5 annual value; being joint owners or occupiers of property sufficient to give each the qualification.

Women are not eligible as members or electors of either House of Parliament.

Members of the Legislative Council receive no remuneration for their services, while in the Lower Chamber the members receive "reimbursement of expenses" at the rate of £300 per annum.

Ratepayers in the municipal districts have their names placed on the roll without any action on their own part; but non-ratepayers and freeholders residing in another electorate and not enrolled as ratepayers, must take out "electors' rights." These are issued free of charge for the Assembly, but a fee of sixpence is charged for those relating to the Council. The rights must be renewed every three years. Persons whose names are entered on the Ratepayers' Roll, and freeholders on the General Roll for several provinces or electoral districts, may vote in all such at the same election; but no one may vote more than once in the same province or electoral district, although he may possess several properties rated independently therein.

Of the electoral provinces for the Council, six are represented by four members each, and eight by three members each; and of the electoral districts for the Legislative Assembly, eleven are represented by two members each, and seventy-three by one member each.

Since the inauguration of responsible government in Victoria, there have been eighteen complete Parliaments, the first of which was opened on the 21st November, 1856, and dissolved on the 9th August, 1859, and the eighteenth opened on the 13th November, 1900, and dissolved on the 16th September, 1902. The present Parliament began its sessions on the 14th October, 1902. The table below shows the date of opening and dissolution of each Parliament up till the present time:—

Parliament.	Opened.	Dissolved.	Duration.			Number of Sessions.
			yr.	mth.	dy.	
First.....	21 Nov., 1856...	9 Aug., 1859...	2	8	19	3
Second.....	13 Oct., 1859...	11 July, 1861...	1	9	0	2
Third.....	30 Aug., 1861...	25 Aug., 1864...	2	11	27	3
Fourth.....	28 Nov., 1864...	11 Dec., 1865...	1	0	14	1
Fifth.....	12 Feb., 1866...	30 Dec., 1867...	1	10	17	6
Sixth.....	13 Mar., 1868...	25 Jan., 1871...	2	10	14	4
Seventh.....	25 April, 1871...	9 Mar., 1874...	2	10	15	3
Eighth.....	19 May, 1874...	25 April, 1877...	2	11	8	3
Ninth.....	22 May, 1877...	9 Feb., 1880...	2	8	19	3
Tenth.....	11 May, 1880...	29 June, 1880...	0	1	20	1
Eleventh.....	22 July, 1880...	3 Feb., 1883...	2	6	13	3
Twelfth.....	27 Feb., 1883...	19 Feb., 1886...	2	11	24	4
Thirteenth.....	16 Mar., 1886...	11 Mar., 1889...	2	11	27	3
Fourteenth.....	9 April, 1889...	5 April, 1892...	2	11	27	3
Fifteenth.....	11 May, 1892...	4 Sept., 1894...	2	3	25	3
Sixteenth.....	4 Oct., 1894...	28 Sept., 1897...	2	11	26	4
Seventeenth.....	25 Oct., 1897...	18 Oct., 1900...	2	11	25	4
Eighteenth.....	13 Nov., 1900...	16 Sept., 1902...	1	10	4	3
Nineteenth.....	14 Oct., 1902...	.....	.....	.....	.....	.....
Average.....			2	5	1	3 to 4

The following table gives particulars of the voting at the last five general elections:—

Year.	Legislative Council.				Legislative Assembly.			
	Electors on Roll.	Electors in Contested Districts.	Voters in Contested Districts.	Per-centage.	Electors on Roll.	Electors in Contested Districts.	Voters in Contested Districts.	Per-centage.
1889	151,803	31,134	14,726	47·29	243,730	220,973	147,129	66·58
1892	163,286	25,300	10,536	41·64	278,812	243,585	158,611	65·12
1894	145,629	°	°	°	234,552	196,482	139,501	70·99
1897	133,575	°	°	°	254,155	224,987	158,225	70·33
1900	129,363	15,551	6,388	41·08	280,600	203,200	128,980	63·47

* No contest.

The general elections were held in Victoria on the 1st October, 1902, but particulars for the above table were not available at the time of publication of the present volume.

QUEENSLAND.

QUEENSLAND was formerly included in New South Wales, but was separated from the mother colony by Her Majesty's Letters Patent, dated the 6th June, 1859. The Letters Patent provided that a form of government should be established in Queensland, based on similar lines to that existing in New South Wales, and ordered the constitution of a Legislative Council and Legislative Assembly "to make laws for the peace, welfare, and good government of the colony in all cases whatsoever."

On the 10th December, 1859, Sir George Bowen, the first Governor, landed, assumed the government, and formally proclaimed the establishment of the colony.

The administration is carried on by the Governor with the advice of an Executive Council, consisting of eight salaried members and two members without portfolio. The Premier is usually, but not invariably, the Vice-President of the Executive.

The Orders in Council provided that the Legislative Council should be summoned and appointed by the Governor. As first constituted it consisted of such persons as the Governor nominated, who were to be not fewer than five, and to hold their seats for five years. All subsequent appointments were to be for life. Members of the Council were to be of the full age of 21 years, and natural-born or naturalised subjects of Her Majesty.

It was also provided that four-fifths of the members nominated should be persons not holding any office or emolument under the Crown, except officers of Her Majesty's sea and land forces, on full or half pay, or retired officers on pension. One-third of the members of the Legislative Council, exclusive of the President, are required to form a quorum. The Governor was also authorized by the Orders in Council to summon a Legislative Assembly, to fix the number of members of which it was to be composed, and to divide the colony into electoral

districts. It was also provided that every Legislative Assembly so elected should continue for five years, subject to prorogation or dissolution by the Governor before the expiration of such period. The qualifications of persons who could be elected to the Assembly and of those eligible to vote at elections of members were ordered to be arranged in accordance with the qualifications then in force in New South Wales.

As thus constituted, the Parliament was to have power to make laws for the peace, welfare, and good government of the colony; also to make laws altering or repealing any of the provisions of the Orders in Council, except such as related to the giving and withholding of Royal assent to Bills, the reservation of Bills for Her Majesty's pleasure, the instructions to Governors for their guidance in such matters, and the disallowance of Bills by Her Majesty. The Orders in Council also provided that in the event of any Bill being passed making the Legislative Council elective wholly or in part, it should be reserved for Her Majesty's pleasure, and a copy of the Bill should be laid before both Houses of the Imperial Parliament for at least thirty days before Her Majesty's pleasure should be signified. It was further provided that no alteration in the constitution of the colony could be made unless the second and third readings of the Bill containing such alterations should have been passed with the concurrence of two-thirds of the members for the time being of the Legislative Council and Legislative Assembly, and that such Bill be reserved for the signification of Her Majesty's pleasure thereon; also that all Bills for appropriating any part of the public revenue, or for imposing any new rate, tax, or impost, subject to certain limitations, should originate in the Legislative Assembly; the limitation referred to being that it should not be lawful for the Legislative Assembly to pass any such Bill that had not first been recommended to them by a message from the Governor, sent during the session in which such Bill should be passed. The power of the Legislative Council to alter Money Bills is doubtful, and although it has done so, objection to the course has always been taken by the Queensland Legislative Assembly.

In 1867 the Queensland Parliament passed an Act which consolidated the law relating to the Constitution and embodied the Orders in Council with the exception of two sections, namely, that relating to the giving or withholding of Her Majesty's assent to Bills, and the one referring to the power of altering the Constitution.

This Act is now the Constitution Act of Queensland, the amendments introduced later being of a comparatively unimportant character.

At present the Legislative Council consists of thirty-eight members nominated by the Governor in Council, and contingent on the observation of certain rules of the Chamber, such as attendance at each session, &c.; these members hold their seats for life. The Legislative Councillors receive no remuneration for their services, but are allowed a free railway pass from the date of being sworn in. The qualification has already been stated.

The number of members to be elected to the Legislative Assembly has been altered by various Acts of Parliament. At present there are seventy-two members, representing sixty-one electorates, eleven returning two members each, while the remainder are single electorates. Members of the Assembly receive a remuneration of £300 per annum each, with free railway pass and allowances for travelling expenses. To be qualified for membership of the Legislative Assembly a person must be absolutely free, and qualified and registered as a voter in and for any electoral district. The disqualifications preventing election to the Assembly are:—being a minister of religion; being at the time a member of the Legislative Council; holding any office of profit under the Crown except as member of the Ministry, and excepting also such officers, not more than two, whom the Governor may declare capable of being elected; being in receipt of a pension from the Crown (officers of Her Majesty's army and navy excepted). To possess the right of voting, a person must be 21 years of age and a natural born or naturalised subject of His Majesty; he must also possess a freehold worth £100, or pay rent for a house or land of not less than £10 per annum, or hold a pastoral license from the Crown, or be in receipt of salary at the rate of not less than £100 per annum, or pay £40 per annum for board and lodging, or £10 for lodging alone.

Since the introduction of responsible government in Queensland there have been thirteen complete Parliaments. The first Parliament was opened on the 29th May, 1860, and dissolved on the 22nd May, 1863. The fourteenth Parliament was opened on the 11th July, 1902. At the last general election for the Legislative Assembly in March, 1902, the total number of electors on the roll was 108,548. The number of electors recording votes was returned at 80,076, and the percentage of voters to the total enrolment in contested districts was 78·9.

SOUTH AUSTRALIA.

THE Constitution of the state of South Australia is based upon the Imperial Statute 13 and 14 Vic. c. 59. Under section 32 of that Act the Governor and Legislative Council established thereby were empowered to alter, from time to time, the provisions and laws in force under the said Act for the time being, and to constitute separate Legislative Chambers, in place of the said Legislative Council. The present form of Constitution was embodied in "An Act to establish a Constitution for South Australia, and to grant a civil list to Her Majesty," passed by the old Legislative Council in 1855, and reserved for the signification of Her Majesty's pleasure in January, 1856. By proclamation dated October 24th, 1856, Her Majesty's assent to the Constitution Act, No. 2 of 1855-6, was made known in the colony. This statute provided for two Houses of Parliament—a Legislative Council and a Legislative Assembly. The Legislative Council, which consisted of eighteen members, was elected by the whole province,

voting as a single electorate. Each member was elected for twelve years, but it was provided that at the expiration of each period of four years the first six members on the roll, their places in the first instance having been determined by ballot, should retire, and an election take place to supply the vacancies. The names of the members who were elected to fill their places were inscribed at the bottom of the list, and at the end of a further term of four years six others retired, and the same order was observed in placing the newly-elected members. In this way frequent changes were made in the personnel of the Council, in addition to those which occurred by death, resignation, or other causes, such as bankruptcy, lunacy, etc. The qualification of a member for the Council was that he must be of the full age of 30 years, a natural-born or naturalised subject of Her Majesty, or legally made a denizen of the province, and a resident therein of the full period of three years. For an elector the age was fixed at 21 years, with a property qualification of a freehold estate of the value of £50 ; or a leasehold of £20 annual value, with three years to run ; or occupation of a dwelling-house of £25 annual value, and being registered on the electoral roll of the province for six months prior to the election. The same qualification with regard to citizenship was demanded of both members and electors. By Act No. 236 of 1881 the number of members of the Council was increased to twenty-four, and the province divided into four electoral districts, each returning six members, but from the end of March, 1902, the membership will be reduced to eighteen.

As originally constituted, the House of Assembly consisted of thirty-six members elected for three years. By an amendment of the Constitution Act the number was increased to fifty-four, but in accordance with the scheme of Parliamentary economy the House will consist of forty-two members after the end of March, 1902. The qualification of a member was that he should be entitled to be registered as a voter in and for an electoral district within the province, and that he should have resided in the province for the full period of five years. All that was required of an elector was that he should be 21 years of age, a natural-born or naturalised subject of Her Majesty, and registered on the electoral roll of any electoral district for six months previous to the election.

By the Constitution Amendment Act of 1894 the franchise was extended to women.

The powers of both Houses of Parliament, with one important exception, are similar. The first clause of the Constitution Act requires that all Bills for appropriating any part of the revenue of the province, or for imposing, altering, or repealing any rate, tax, duty, or impost, shall originate in the House of Assembly. By an agreement between the two Houses, the Council may suggest amendments, and if acceptable the Assembly may embody them in a "money" Bill, but the Council has no power to force their acceptance on the Assembly.

The duration of Parliament is for three years, but the Governor, on the advice of his Ministers, or "*ex mero motu*," may dissolve it at any time. Members of both Houses receive £200 per annum each, and a free pass over Government railways. As originally constituted, the Ministry was formed by five members of the Legislature—the Chief Secretary, the Attorney-General, the Treasurer, the Commissioner of Crown Lands, and the Commissioner of Public Works. Later on a sixth Minister was added to the number. Five of these are members of the House of Assembly and one of the Legislative Council. They are removable by adverse vote of the Legislative Assembly, or if the contingency arose to require the exercise of the prerogative they may be dismissed by the Governor. The Ministry formulates the policy to be submitted to the Legislature, and advises the Governor as to his course of procedure. It also forms the Executive Council, over which the Governor "*ex officio*" is President, while the Lieutenant-Governor also occupies a seat. Under the terms of the Constitution Amendment Act of 1901 the number of responsible Ministers has been reduced to four since the 31st March, 1902. The Governor possesses the prerogative of mercy, in the exercise of which he generally follows the advice of his Ministers. By a despatch from the Secretary of State he has been instructed to follow the advice tendered by the Executive; at the same time he retains the power to act on his own initiative in special cases where he deems such a course to be in the interest of the Crown. In such instances he is supposed to report immediately to the Secretary of State, adducing the reason for his action.

Since the inauguration of responsible Government there have been sixteen Parliaments. The first Parliament was opened on the 22nd April, 1857, and dissolved on the 1st March, 1860, while the sixteenth was opened on the 22nd June, 1899. The number of electors on the roll of the Legislative Council at the last general election in May, 1900, was 48,542, and of these, 25,310, or 52 per cent., recorded their votes. At the general election for the House of Assembly in April, 1899, there were 83,698 males and 68,695 females on the rolls, or a total of 152,393. In contested districts the numbers enrolled were 81,570 males and 67,030 females, and of these, 54,972 males and 38,438 females recorded votes, the percentage of males voting being 67·3, and of females, 57·2.

WESTERN AUSTRALIA.

THE Bill enabling Her Majesty "to grant a Constitution to Western Australia," received the Royal assent on the 15th August, 1890. When the measure was first discussed in the Imperial Parliament strong opposition was aroused, chiefly owing to a misunderstanding of questions relating to the Crown lands. It was argued that to hand over the control of such a vast territory to the 45,000 inhabitants thinly scattered over it was a piece of political folly. But, through the exertions

of the colonial delegates then in England, aided by the influence of Sir William Robinson, and supported by the assistance of the Agents-General of the other Australasian provinces, the final obstacles were swept away. In all essential points, the Constitution of Western Australia is similar to those of the other states of Australia.

The executive power is vested in the Governor, who is appointed by the Crown, and who acts under the advice of a Cabinet.

The legislative authority is vested in a Parliament, composed of two Houses—a Legislative Council and a Legislative Assembly.

After the establishment of responsible government, the members of the Upper House were, in the first instance, nominated by the Governor, but it was provided that, in the event of the population of the province reaching 60,000, the Chamber should be elective. This limit was reached in 1893, and the constitution was shortly afterwards amended so as to give effect to the proviso mentioned. There are at present thirty members of the Legislative Council, each of the ten electorates returning three members. The qualification for membership is as follows:—being (1) a man of 30 years of age and free from legal incapacity; (2) a resident in Western Australia for at least two years; (3) a natural-born subject of His Majesty, or naturalised for five years and resident in Western Australia during that period. The disqualifications are:—being (1) a member of the Legislative Assembly; (2) a Judge of the Supreme Court; (3) Sheriff of Western Australia; (4) a clergyman or minister of religion; (5) an undischarged bankrupt; (6) attainted of treason or convicted of felony in any part of the King's dominions; (7) directly or indirectly concerned in any contracts for the public service, except as member of an incorporated trading society; (8) holding an office of profit under the Crown other than that of Minister, President of the Council, or officer of His Majesty's sea or land forces on full, half, or retired pay.

Members of the Legislative Council are paid at the rate of £200 per annum, and are provided with free railway passes. At the expiration of two years from the date of election, and every two years thereafter, the senior member for the time being for each province retires. Seniority is determined (1) by date of election; (2) if two or more members are elected on the same day, then the senior is the one who polled the smaller number of votes; (3) if the election be uncontested, or in case of an equality of votes, then the seniority is determined by the alphabetical precedence of surnames, and, if necessary, of Christian names.

The electoral qualification for the Upper House is as follows:—Being (1) at least 21 years of age, and not subject to legal incapacity; (2) a natural-born or naturalised subject of His Majesty resident in the state for twelve months, or a denizen of Western Australia; (3) either (a) have possessed for at least one year before being registered in his electoral province a freehold estate of the clear value of £100 above all charges or encumbrances; or (b) have been a householder for the last

preceding twelve months of a dwelling of the clear annual value of £25; or (c) be a holder of a leasehold of the clear annual value of £25, the lease having eighteen months to run; or (d) have been a holder of a leasehold for the last preceding eighteen months of the annual value of £25; or (e) be a holder of a lease or license from the Crown at an annual rental of at least £10; or (f) have his name on the electoral list of a municipality or Roads Board in respect of property in the province of the annual ratable value of £25. Foreigners or persons who are not naturalised subjects of His Majesty, or any person attainted or convicted of treason, felony, or any infamous offence in His Majesty's dominions who has not served the sentence for the same, or received a pardon for the offence, are disqualified as electors.

For the Legislative Assembly in Western Australia there are fifty electorates, each returning a single member. The tenure of seat is three years, and members are paid at the rate of £200 per annum, with a free railway pass. The qualification for membership is as follows:— being (a) a man of 21 years of age and free from legal incapacity; (b) a natural-born subject of the King, or naturalised for five years, and resident in Western Australia for two years; (c) resident in Western Australia for at least twelve months. Persons are disqualified by being (a) a member of the Legislative Council; (b) a Judge of the Supreme Court; (c) Sheriff of Western Australia; (d) clergyman or minister of religion; (e) an undischarged bankrupt or debtor whose affairs are in course of liquidation or arrangement; (f) under attainder of treason or conviction of felony in any part of the King's dominions; (g) directly or indirectly concerned in contracts for the public service except as member of an incorporated trading society. Paid officers under the Crown, except officers of His Majesty's sea and land forces on full, half, or retired pay, or political officers, are also ineligible.

The electoral qualification for the Legislative Assembly is as follows:— electors must be 21 years of age, natural born or naturalised subjects of the King, and must have resided in the state for six months and been six months on the roll. They must also be resident in the district or hold freehold estate there of the clear value of £50, or be house holders occupying a dwelling of the annual value of £10, or holders of an annual lease of the value of £10, or holders of a lease or license or Crown lands of an annual rental of £5, or have their names on the electoral list of a municipality or Roads Board in respect of property within the district. Electors for both Houses may be of either sex.

Since the establishment of responsible Government in Western Australia there have been three complete Parliaments. The first Parliament was opened on the 30th December, 1890, and dissolved on the 1st June, 1894. The third Parliament was opened on the 17th August, 1897, and was dissolved on the 15th March, 1901. The present Parliament commenced its sittings on the 28th June, 1901. At the

beginning of 1902 the number of electors on the roll for the Legislative Council was 23,608, and for the Assembly 89,442. The electors on the rolls in contested districts at the general election for the Legislative Assembly in 1901 numbered 83,114, and of these, 33,479, or 40·3 per cent., recorded their votes.

TASMANIA.

THE Constitution of Tasmania is embodied in Act 18 Vic. No. 17, known as the "Constitutional Act," and in the amending acts subsequently introduced, viz., 23 Vic. No. 23, 34 Vic. No. 42, and 48 Vic. No. 54. A form of government is provided for, consisting of a Governor, appointed by the Crown, and a Legislative Council and House of Assembly, elected by the people. These constitute the "Parliament of Tasmania." Amongst the most important of the powers of the Governor are the appointment, according to law, of the members of the Executive, Ministers of the state, judges, commissioners, and other necessary officers. The Governor also possesses the prerogative of mercy, in the exercise of which he is guided by the advice of the Executive. He may dissolve the House of Assembly at any time ; but he cannot adopt this procedure with the Legislative Council, the members of which are appointed for six years. The Governor, in the exercise of his powers, is generally supposed to consult the Executive Council ; but in some cases he may act on his own authority, should he consider that circumstances demand such procedure. In all such cases, however, he is required to report immediately to the Imperial authorities, setting out the reasons for his action. The Governor is not permitted to leave the state for more than one month at a time without first obtaining His Majesty's sanction.

The Legislative Council consists of nineteen members, appointed for a term of six years. Members must be natural-born or naturalised subjects of His Majesty, not holding offices of profit under the Crown, and not less than 30 years of age.

Electors for the Legislative Council must be natural-born or naturalised subjects of His Majesty, 21 years of age, and possessing freehold of the annual value of £10, or leasehold of the annual value of £30, or be graduates in any university in the British dominions, or associates of art of Tasmania, or legal practitioners in the Supreme Court of Tasmania, or legally-qualified medical practitioners, or ministers of religion, or officers or retired officers of His Majesty's land and sea forces not on actual service, or retired officers of the Volunteer Force of Tasmania.

The Legislative Council may, within constitutional limits, originate legislation in respect of any matter, with the exception of bills for appropriating revenue or imposing taxation. The Constitution, however, really leaves to either branch of the Legislature the task of determining the form and extent of its rights and privileges.

Members of the Legislative Council, and also of the House of Assembly, receive an honorarium of £100 per annum, with a free railway pass and the privilege of franking letters and telegrams.

The House of Assembly consists of thirty-eight members, elected for three years. Members must be 21 years of age and natural-born or naturalised subjects of His Majesty. The following list of disqualifications applies to both Houses as regards right of election or membership:—(a) accepting office of profit under the Crown; (b) being a contractor for the Government, except as member of a company of more than six persons; (c) declaring allegiance to any foreign power; (d) holding the office of Judge of the Supreme Court; (e) being insane, attainted or convicted of treason, felony, or any infamous offence. The electoral qualification for the House of Assembly is as follows:—being a natural-born or naturalised subject of His Majesty, and (a) owner or occupier of property as shown on the Assessment Roll, or (b) in receipt of income, salary, or wages, at the rate of £40 per annum, and having received income, salary, or wages equal to £20 during the period of six months immediately prior to claiming a vote. Board and residence, clothing, and services are deemed income under the Act. In computing wages, rations, allowances, and rent are included, on the following scale:—In the case of house allowance, £10 per annum; for rations, £20 per annum; for board and residence, £25 per annum; for house allowance and rations, £30 per annum.

Since the inauguration of responsible Government, there have been thirteen complete Parliaments in Tasmania. The first Parliament was opened on the 2nd December, 1856, and dissolved on the 8th May, 1861. The second session of the thirteenth Parliament commenced on the 28th May, 1901. On the 31st March, 1902, the number of electors on the roll for the Legislative Council was 10,502. In contested electorates the number was 7,613, and of these, 4,919, or 64·6 per cent., recorded votes. On the same date there were 39,495 electors on the roll of the Legislative Assembly. At the last election in contested districts the number of ballot-papers was 26,845. The votes recorded numbered 23,966, or 64·3 per cent. of the enrolment, and there were 618 informal ballot-papers.

NEW ZEALAND.

THE Act of the Imperial Legislature granting representative institutions to New Zealand was assented to in 1852. Under this Act the constitution of a General Assembly for the whole colony was provided for, to consist of a Legislative Council, the members of which were to be nominated by the Governor and a House of Representatives on an elective basis. By the Act of 1852 the colony was divided into six provinces, each presided over by an elective Superintendent, and with a separate Provincial Council, empowered to legislate except on certain

specified subjects. These Provincial Councils, the number of which was afterwards increased to nine, remained as integral parts of the Constitution until 1876, when they were abolished by the General Assembly that body having the power of amending the Constitution Act. The powers previously exercised by Superintendents and provincial officers were delegated to local boards called County Councils, or vested in the Governor.

The Governor is appointed by the Crown, but his salary and allowances are paid by the colony, the present salary being £5,000 per annum. Executive administration is vested in the Governor, and is conducted according to the principles of responsible government. The Governor can appoint or dismiss his Ministers, but his Ministers must possess the confidence of the majority in the House of Representatives. He can assent to bills or withhold assent therefrom, or reserve them for the signification of His Majesty's pleasure. He can summon, prorogue, and dissolve the colonial Parliament. He can send drafts of bills to either House for consideration, and can return bills to either House for specific amendment after they have been passed by both Houses, and before they are assented to or reserved by him. The Commission from the King delegates to the Governor certain powers of the royal prerogative, and provides for the constitution of an Executive Council to advise him in matters of importance, such Executive Council consisting of responsible Ministers for the time being. The number of members constituting the Legislative Council cannot be less than ten, but otherwise is practically unlimited. At present the number is forty-six. Councillors are remunerated for their services at the rate of £150 per annum, payable monthly, and actual travelling expenses to and from Wellington are also allowed. A deduction of £1 5s. per sitting day is made in case of absence, except through illness or other unavoidable cause, exceeding five sitting days in any one session. To be qualified as a member of the Council a person must be of the full age of 21 years, and a British subject either by birth or by Act of the Imperial Parliament or the Parliament of New Zealand. All contractors to the public service to an amount of over £50, and civil servants of the colony are ineligible. Prior to 1891, Councillors held their appointments for life, but on the 17th September of that year an Act was passed making seven years the period of tenure of a seat, though members may be re-appointed.

The House of Representatives consists of seventy-four members, of whom four are Maoris, but it is provided by the Representation Act of 1900 that on the expiration of the present General Assembly the number of European representatives shall be increased to seventy-six. The North Island at present returns thirty-four European members and the Middle Island thirty-six. All the electoral districts return one member each, with the exception of the cities of Auckland, Wellington, Christchurch, and Dunedin, which each return three members. Representatives are remunerated for their services at the

rate of £240 per annum, but £2 per day for every sitting day exceeding five is deducted on account of absence during the session not due to illness or other unavoidable cause. To be qualified for membership of the House of Representatives a person must be of the male sex, duly registered on the electoral roll, and free from the disabilities mentioned in Section 8 of the Electoral Act of 1893. All contractors to the public service of New Zealand to whom any public money above the sum of £50 is payable, directly or indirectly, in any one financial year, as well as civil servants of the colony, are incapable of being elected, or of sitting and voting as members.

Every man or woman of the full age of 21 years, who is either a natural-born or naturalised British subject, and resident in the colony one year, and three months in one electoral district, is qualified to be registered as an elector and vote at elections of members for the House of Representatives. In the Maori districts, adult Maoris are entitled to vote without registration. Under the provisions of the Electoral Act of 1893, the franchise is extended to women of both races in accordance with the qualifications specified above, but women may not be elected as members of the House of Representatives. No person may be represented on more than one electoral roll. The Act also provides that the name of every qualified elector who fails to record his vote shall be removed from the roll after the election. Since the passing of the Constitution Act conferring representative institutions upon the colony of New Zealand there have been thirteen complete Parliaments. The first Parliament was opened on the 27th May, 1854, and dissolved on the 15th September, 1855, and the thirteenth opened on the 7th April, and dissolved on the 24th October, 1899. The first session of the fourteenth Parliament opened on the 22nd June, 1900.

At the general election for the first Parliament, which took place in 1853, the population of the colony numbered 30,000, and the electors on the roll 5,934. At the last general election for the House of Representatives, in December, 1899, the electors on the roll numbered 373,744, of whom 163,215 were females. In the contested districts the male and female electors numbered 202,089 and 157,929 respectively, and the number of male voters was 159,780, or 79 per cent. of males enrolled, while 119,550, or 75·6 per cent., of the female electors recorded their votes.

CHRONOLOGICAL TABLE FOR AUSTRALIA AND TASMANIA.

DATES of events following the establishment of a settlement in New South Wales:—

1788	N.S.W.	First fleet arrives at Botany Bay.—Formal possession taken of Sydney Cove.—Proclamation of the Colony by Governor Phillip.—Settlement founded at Norfolk Island; expedition sent by Phillip.
	Tas.	Bligh visits Van Diemen's Land in the "Bounty."
1789	Tas.	Cox discovers Oyster Bay.
1790	N.S.W.	Second fleet arrives with the New South Wales Corps.
1791	W.A.	Vancouver's explorations.—Discovery of King George's Sound.
1792	N.S.W.	Resignation of Governor Phillip.
	S.A.	D'Entrecasteaux visits Fowler's Bay.
	Tas.	D'Entrecasteaux explores the north-east coast.
	W.A.	D'Entrecasteaux explores the south-west coast.
1795	N.S.W.	Settlement of the Hawkesbury.—Arrival of Captain Hunter.
1797	N.S.W.	Discovery of coal at Illawarra and on the Hunter (or Coal) River.
1798	Vic.	Discovery of Bass' Strait by Bass and Flinders.—Bass visits Western Port.
	Tas.	Circumnavigation of Van Diemen's Land by Flinders.
1799	N.S.W.	Flinders explores the north coast.—Wilson penetrates to the Lachlan River.
	Q'ld.	Flinders makes explorations on the east coast.
1800	N.S.W.	Governor Hunter recalled, superseded by Philip Gidley King.
	Vic.	Lieutenant Grant explores the coast.
	S.A.	Lieutenant Grant sights Cape Northumberland.
1801-2	W.A.	The whole of the western coast examined by Baudin.
1801-3	.....	Survey of Australian coasts by Flinders.
1801	W.A.	Flinders examines the south coast.
1802	Vic.	Discovery of Port Phillip by Murray.—Exploration of Port Phillip by Flinders.
	S.A.	Flinders explores Spencer's and St. Vincent's Gulfs, and meets Baudin at Encounter Bay.
	Tas.	Baudin surveys the east coast.
1803	N.S.W.	First wool sent to England.
	Vic.	Lieut.-Colonel David Collins founds a settlement at Port Phillip.
	Tas.	Bowen lands at Risdon.
1804	N.S.W.	The Castle Hill convict insurrection.—Abandonment of Norfolk Island ordered by British Government.
	Vic.	Collins abandons Port Phillip.
	Tas.	Foundation of the Van Diemen's Land colonies.—Collins founds Hobart Town and Paterson founds York Town.—The assignment system established by Governor King.—Fifty friendly blacks massacred at Risdon, through a mistake of Lieutenant Moore.
1805	N.S.W.	Macarthur starts extensive sheep farming at Camden.
	Tas.	Norfolk Island colonists settled at New Norfolk, Norfolk Plains, etc.

1806	N.S.W.	Severe floods in the Hunter.—Governor King retires and is succeeded by Captain Bligh.
	Tas.	Launceston founded.
1807	N.S.W.	Orders given for final shipment of convicts from Norfolk Island.
	Tas.	Laycock's overland expedition from Launceston to Hobart.
1808	N.S.W.	Deposition of Governor Bligh.
	Tas.	254 settlers from Norfolk Island receive grants of land.
1809	N.S.W.	Arrival of Colonel Lachlan Macquarie.
1810	Tas.	Death of Collins.—Extreme scarcity of provisions; prisoners released and permitted to roam in search of food.
1811	Tas.	Governor Macquarie visits Van Diemen's Land.—Hobart Town laid out.—Lieut.-Colonel Davey appointed Governor.—Van Diemen's Land made a single colony.
1813	N.S.W.	Passage across Blue Mountains discovered by Blaxland, Wentworth, and Lawson.
1814	.....	The name of "Australia" given on the recommendation of Flinders to the great southern continent hitherto known as "New Holland."
	N.S.W.	Creation of Civil Courts.—Hamilton Hume discovers the Berrima and Goulburn districts.
	Tas.	First Law Courts established; jurisdiction limited to personal matters under the value of £50.—Outrages by bushrangers.
1815	N.S.W.	Governor Macquarie lays out the town of Bathurst.
	Tas.	Arrival of first immigrant ship with free settlers.—Coastal explorations of Captain James Kelly.—First exportation of wheat to Sydney.
1816	N.S.W.	Establishment of Bank of New South Wales.
1817	N.S.W.	Oxley explores the interior.
	Q'ld.	Lieutenant King surveys the eastern coast.
	Tas.	Lieutenant-Governor Davey retires, and Colonel William Sorell appointed.
1818-22	W.A.	Lieutenant King surveys the whole western coast.
1818	N.S.W.	Free immigration stopped.
1819	N.S.W.	Commissioner Bigge inquires into the condition of the colony.
1820	Tas.	Colonel Paterson introduces 300 pure Merino sheep from McArthur's flock.
1821	N.S.W.	Governor Macquarie recalled.—Sir Thomas Brisbane appointed.
	Tas.	Governor Macquarie visits Hobart Town.
1823	N.S.W.	The first Australian Constitution.—Explorations by Cunningham.—John Dunmore Lang arrives in Sydney.
	Q'ld.	The Brisbane River discovered by Surveyor Oxley.
	Tas.	Partial separation from New South Wales.
1824	N.S.W.	Freedom of the Press proclaimed.—Trial by jury introduced.—First Land Regulations.—Hume and Hovell explore southward.
	Vic.	Hume and Hovell travel overland from Sydney to Port Phillip.
	Q'ld.	Expedition to prepare Moreton Bay for the establishment of a penal settlement.
	Tas.	Outbreak of convicts at Macquarie Harbour.—Governor Sorell succeeded by Lieut.-Colonel George Arthur.
1825	N.S.W.	Sir Ralph Darling succeeds Governor Brisbane.
	Q'ld.	Captain Logan appointed Superintendent of Moreton Bay.
	Tas.	Formation of the Van Diemen's Land Company and the Van Diemen's Land Establishment.—Van Diemen's Land declared a separate colony.—Initiation of campaign against bushrangers.
	W.A.	Military station established at King George's Sound.
1826	N.S.W.	Darling River discovered by Sturt.—Explorations by Cunningham.

1826	Vic. Q'ld.	Fort Dumaresq founded at Western Port. Official establishment of penal settlement at Moreton Bay.— Governor Brisbane visits the settlement.
1827	N.S.W. Q'ld. Tas. W.A.	The colony becomes self-supporting.—Feverish speculation in land and stock. Cunningham discovers the Darling Downs. Explorations of Henry Hellyer. Exploration by Captain Stirling.
1828-30	N.S.W.	Severe droughts.
1828	N.S.W. Vic. Q'ld. Tas.	Second Constitution. The Western Port settlers return to Sydney. Cunningham discovers a route from Moreton Bay to the Darling Downs, and explores the Brisbane River to its source. Reformation of the Council.—First land sales.—Reward offered for the capture of natives.
1829	{ N.S.W. S.A. W.A.	} Sturt explores the Murray. Founding of the Swan River settlement, Captain Stirling in command.
1830	N.S.W. Vic. S.A. Q'ld. Tas. W.A.	Sturt's overland journey to the south.—Rising of convicts near Bathurst.—The Bushrangers' Act passed through all its stages in one day. Explorations by Sturt. Sturt discovers Lake Alexandrina. Logan murdered by convicts.—Captain Clunie succeeds to the administration of the settlement. Commission to inquire into condition of natives.—George Robin- son undertakes to secure the submission of surviving blacks. —The Black Line. Constitution of first Executive Council.
1831	N.S.W. S.A. Tas. W.A.	Governor Darling superseded by Sir Richard Bourke.—Lord Ripon's Land Regulations.—Sir Thomas Mitchell's explora- tions to the north of Liverpool Plains. Wakefield's first colonisation committee formed.—Captain Collet Barker killed by blacks at St. Vincent's Gulf. Minimum price of land fixed at 5s. per acre by Lord Ripon's regulations. Route from Perth to King George's Sound discovered by Bannister.—Lord Ripon's land regulations.
1832	W.A.	Captain Irwin undertakes the Administration of the Settlement.
1833	W.A.	Captain Richard Daniell succeeds Captain Irwin.
1834	N.S.W. Vic. S.A. W.A.	Trouble at Norfolk Island. Settlement of the brothers Henty at Portland Bay. South Australian Association founded.—The South Australian Act passed. The Battle of "Pinjarrah."—Sir James Stirling appointed Governor, with full rank.
1835	N.S.W. Vic. Q'ld. Tas. W.A.	Mitchell, on his second expedition, establishes the depôt of Fort Bourke on the Darling. Expeditions of Batman and Fawkner to Port Phillip. Captain Fyans succeeds Captain Clunie.—First ship enters Moreton Bay. Native settlement formed at Flinders' Island. The Western Australian Association formed in London.— Memorial against Lord Ripon's regulations addressed to the British Government.
1836	N.S.W.	Mitchell explores the South.—Squatting formally recognised.

- 1836 Vic. Proclamation of Port Phillip District as open for settlement.—
Captain W. Lonsdale first Resident Magistrate.—Sir Thomas
S.A. Mitchell discovers "Australia Felix."
Q'ld. Visit of Backhouse and Walker.
Tas. Governor Arthur recalled.
- 1837 N.S.W. Governor Bourke resigns.—Select Committee on Transportation
appointed in London.
Vic. Sites of Melbourne and Williamstown laid out by Governor
Bourke.—First sale of land.
S.A. First newspaper published in the colony.—Eyre drives a mob of
cattle from New South Wales to Adelaide.
Q'ld. Major Cotton supersedes Captain Fyans.
Tas. The Governorship assumed by Sir John Franklin.
W.A. Explorations by Grey and Lushington in the north-west.
- 1838 N.S.W. Discontinuance of the assignment system.—Arrival of Governor
Gipps.—Speculative mania sets in.
Vic. First census of the settlement (population, 3,511).
S.A. Governor Hindmarsh, recalled, is succeeded by Colonel Gawler.—
Cattle brought overland from New South Wales, along the
Murray route, by Hawden and Bonney.
Q'ld. Abolition of assignment system.—Explorations of the Petries.—
Lieutenant Gravatt succeeds Major Cotton, and a little later
gives place to Lieutenant Gorman.
- 1839 N.S.W. Execution of seven stockmen for participation in a massacre of
blacks.—Count Strzelecki finds traces of gold near Hartley.
Vic. Appointment of Superintendent La Trobe.—First wool ship
leaves for England.
W.A. Governor Stirling succeeded by John Hutt.—Grey's second
exploring expedition in the north.
- 1840 N.S.W. Abolition of transportation to New South Wales.—Important
Land Regulations (proceeds of land sales to be regarded as
a Trust for the benefit of the colony which produces them,
and to be expended in the maintenance of its public works,
and the encouragement of immigration).
Vic. First Land Regulations; soon nullified at Port Phillip by
Gipps.—The northern boundary of the Port Phillip District
fixed at the Murrumbidgee.—Exploration of Gippsland by
Angus McMillan.—Port Phillip petitions for separation.
S.A. Eyre starts on his overland journey from Adelaide to King
George's Sound.—Wreck of the "Maria," and murder of
the survivors by the blacks.
Q'ld. Suspension of transportation.—Break-up of the Penal Settle-
ment at Moreton Bay.—Leslie takes up runs on the Darling
Downs.—Murder of Surveyor Stapleton and his assistants.
Tas. Assignment ceases.
- 1840-51 N.S.W. Depression of varying intensity.
- 1841 N.S.W. Rev. W. B. Clarke finds grains of alluvial gold near Bathurst.
S.A. Gawler recalled in disgrace and succeeded by Captain George
Grey.—Galena discovered in the Mount Lofty Ranges.—
Hostilities with natives on the Murray.
Q'ld. Explorations by the Russells.
Tas. Transportation, which had been discontinued for some time, now
renewed on a large scale.
W.A. Eyre completes his journey overland from Adelaide to King
George's Sound.

- 1842 N.S.W. First Representative Constitution.—Crown Land Sales Act (Imperial).—Disaffection among the natives.
 Vic. Representation granted, to the extent of six members.—Incorporation of Melbourne.
 S.A. Discovery of Kapunda Copper Mines.—The South Australian Act.
 Q'ld. Gipps visits Brisbane, and orders that the width of streets be reduced in subsequent surveys.—Proclamation of free settlement at Moreton Bay.—First open sale of land.—Appointment of a Police Magistrate.
- 1843 N.S.W. Financial crisis marked by the failure of the Bank of Australia.
 S.A. Collapse of the Adelaide City Council.
 Q'ld. Moreton Bay granted Legislative Representation.
 Tas. Governor Franklin recalled, and succeeded by Sir John Eardley Eardley-Wilmot.
- 1844 Vic. Great flood on the Yarra.—John Dunmore Lang's resolution in favour of separation.
 S.A. Sturt's last expeditions inland.
 Q'ld. Leichhardt's expedition from Darling Downs to Port Essington.
 Tas. Explorations of Kentish in the north-west.
- 1845 N.S.W. Mitchell's explorations on the Barcoo.
 S.A. Grey transferred to New Zealand, the government assumed by Colonel Frederic Holt Robe.—Discovery of the Burra Copper Mines.
 Q'ld. Explorations of Mitchell and Kennedy.
 Tas. Price's Norfolk Island Pandemonium broken up.—Resignation of the "Patriotic Six."
- 1846 N.S.W. Governor Gipps is succeeded by Sir Charles Augustus Fitzroy.—Gladstone proposes to revive transportation to New South Wales.
 S.A. Proclamation of North Australia.—State grants made to certain religious bodies.—Expedition and death of Horrocks.
 Q'ld. The founding of "Gladstone," an "exile" settlement at Port Curtis.—Explorations by Leichhardt.—Moreton Bay declared a port of entry.
 Tas. Governor Wilmot recalled by Gladstone.
 W.A. Reports on immigration despatched to the British Government.—Lieut.-Col. Andrew Clarke assumes office as Governor.—Explorations by the brothers Gregory.
- 1847 N.S.W. Crown Land Leases Act.—Lady Fitzroy killed in a carriage accident.
 Q'ld. The s.s. "Sovereign" wrecked on Moreton Island.—Explorations by Burnett and Kennedy.
 Tas. Sir William Denison assumes office as Governor.—Reinstatement of the "Patriotic Six."—Removal of the surviving blacks, 44 in number, from Flinders Island to Oyster Cove.
 W.A. Death of Governor Clarke, whose place is taken by Lieut.-Col. Irwin.
 Crown Land Leases Act.—Earl Grey suggests the formation of an Assembly, in which all the Australian colonies should be represented.
- 1848 N.S.W. Attempts to revive transportation and assignment.—The University of Sydney founded by Act of Parliament.
 Vic. Earl Grey returned as the Melbourne member of the Legislative Council.
 S.A. Governor Robe makes a grant of land as site for an Anglican Cathedral.—Recall of Robe, whose place is taken by Sir Henry Fox Young.

- 1848 Q'ld. Last journey of Ludwig Leichhardt.—Kennedy speared by the blacks.—Chinese imported as shepherds.—The Fortitude incident.
 Tas. Unavailing protests against the landing of convicts from the "Ratcliffe."
 W.A. Captain Charles Fitzgerald, R.N., assumes office as Governor.—Governor Fitzgerald wounded by the blacks.
- 1849 N.S.W. The "Hashemy" incident.
 Vic. Public indignation at the arrival of the "Randolphe" with convicts.
 S.A. Revocation of the North Australian proclamation.
 Q'ld. Convicts per "Hashemy" assigned to squatters on the Darling Downs.
 Tas. Convicts to the number of 1,860 landed in accordance with Earl Grey's probation scheme.
 W.A. Commencement of transportation to Western Australia.
 A suggestion for the formation of a General Assembly of Australia made in the report of a Privy Council Committee on Trade and Plantations.
- 1850 N.S.W. Final abolition of transportation.—Passing of the Australian Government Act.—New South Wales loses her southern province by separation.—First sod of the first Australian railway turned at Sydney.
 Vic. The Constitution Act.—The Murray fixed upon as the northern boundary of Victoria.
 S.A. South Australia obtains representative government.
 Tas. First discovery of coal in the colony.—Tasmania obtains representative government.
 Four of the five Australian colonies obtain representative government (Queensland still a dependency of New South Wales).
- 1851 N.S.W. Hargraves discovers payable gold near Bathurst.
 Vic. Black Thursday (6th February).—Proclamation of Victoria as a separate colony.—Gold discoveries.
 S.A. Depression; withdrawal of specie from the colony.—Abolition of State aid to religion.—The Bullion Act passed.—Revival of the Adelaide Corporation.
 Q'ld. First direct shipment of wool to England.—Agitation for separation from New South Wales.
 Tas. Efflux of population to the gold-fields of "the other side."
 Transfer of the Customs establishments to the Colonial Governments.
- 1852 N.S.W. The town of Gundagai swept away by a flood; 77 lives lost.
 Vic. Convicts Prevention Act passed.—An extra regiment brought from England to keep order.
 S.A. Return of prosperity.—A steamer ascends the Murray to the junction of the Darling.
 Q'ld. Withdrawal of a large proportion of the population towards the gold-fields of New South Wales and Victoria.
 Tas. First Elective Council meets and passes a resolution against transportation.—Gold discovered at Fingal and Tower Hill Creek.
 Transfer of the Australian gold revenue to the colonial exchequer.
- 1853 N.S.W. University of Sydney opened.—Arrival of the first mail steamer from England.
 Vic. Discontent on the gold-fields.
 Q'ld. Moreton Bay declared a residency; with Captain Wickham as first Government Resident.
 Tas. Abolition of transportation.

1853	.....	Establishment of colonial mints.
1854	N.S.W.	War scare and volunteer movement.
	Vic.	Governor La Trobe retires and is succeeded by Sir Charles Hotham.—The Eureka Stockade rebellion.
	S.A.	Departure of Sir Henry Young.
	Tas.	Departure of Governor Denison.
	.....	Creation of a separate Colonial Office.
1855	N.S.W.	Opening of the first Australian railway.—Governor Fitzroy is succeeded by Sir William Denison.—Norfolk Island cleared for the Pitcairn Islanders.—New scheme for the government of the gold-fields.—Introduction of responsible government.
	Vic.	Reforms on the goldfields.—Introduction of responsible government.—Death of Sir Charles Hotham.
	S.A.	Sir Richard Graves Macdonnell assumes office as Governor.—Introduction of responsible government.
	Q'ld.	Gregory's search for Leichhardt.—First navigation of the Fitzroy River.
	Tas.	Sir Henry Edward Fox Young succeeds to the Government.—The Hampton Case.—£25,000 contributed to a fund in aid of English sufferers by the Crimean War.—Introduction of responsible government.
	W.A.	Governor Fitzgerald succeeded by Arthur Edward Kennedy.
	.....	New South Wales, Victoria, South Australia, and Tasmania are granted responsible government.
1856	Vic.	Sir Henry Barkly assumes office as Governor.
	Q'ld.	Grounding of the "Phœbe Dunbar" on Stradbroke Island.—Murders by the blacks.
	Tas.	Opening of the first Parliament.—The name Van Diemen's Land formally replaced by Tasmania.
	W.A.	A. C. Gregory's expedition in search of Leichhardt.—A Select Committee appointed in New South Wales to consider the best means of legislation on matters of common interest.
1857	N.S.W.	Serious floods.—Wrecks of the "Duncan Dunbar" (119 lives lost), and the "Catherine Adamson" (21 lives lost) at Sydney Heads.
	Vic.	Death, by carriage accident, of Lady Barkly.—Abolition of property qualification for members of the Assembly.—Universal manhood suffrage established.
	S.A.	Babbage and Warburton explore northwards.
	Q'ld.	Establishment of Supreme Court sittings.—Garbutt tells his tale of Leichhardt's detention in the interior.—A Select Committee appointed in Victoria to consider best means of legislation on matters of common Australian interest.—Wentworth's draft Bill with proposal for a General Association of the Australian Colonies.
1858	N.S.W.	Establishment of manhood suffrage and vote by ballot.—Telegraphic communication established between Sydney and Melbourne.
	Vic.	Trial of rebel leaders.—The number of members of the Assembly raised to 78.
	S.A.	Torrens' Real Property Act passed.—Series of exploring expeditions begun by Stuart.
	Q'ld.	Brisbane declared a municipality.—Discovery of gold.—The Canoona Rush.—Exploration by Landsborough and Dalrymple.
	Tas.	Establishment of a State system of Public Instruction.
1858-61	S.A.	Series of exploring expeditions by John McDouall Stuart.
1859	N.S.W.	The Northern Province separated.

- 1859 Q'ld. Proclamation of Queensland as a separate Colony with responsible government.—Sir George Bowen appointed Governor.
Tas. State aid to religion abolished.—First submarine cable laid from Circular Head to Cape Otway.
- 1860 N.S.W. Disastrous floods at Shoalhaven and Araluen.
Vic. Burke and Wills start on their journey of exploration.
S.A. The Wallaroo and Moonta copper discoveries.
Q'ld. Bowen founded.—Withdrawal of State aid to religion.
- 1861 N.S.W. Governor Denison succeeded by Sir John Young.—Anti-Chinese riots at Lambing Flat.—John Robertson's Land Acts.—Constitutional Crisis.—Regulation and restriction of Chinese immigration.
S.A. Mr. Justice Boothby claims to be the only legally appointed Judge of the Supreme Court.
Q'ld. Burke and Wills perish in the Great Stony Desert; dispatch of expeditions to search for their remains.—Laws made for the transfer of real estate, and for municipal government.—First census taken.—First despatch of a telegraphic message in the colony.—First State trial (*Regina v. Pugh*) results in a verdict for the defendant establishing the right of free discussion.—A military station established on Albany Island.
Tas. Governor Sir Henry Young succeeded by Colonel Thomas Gore-Browne.
W.A. Explorations of F. Gregory in the North-west.—Pearling grounds discovered.
..... Conference at Melbourne to secure uniformity in collection and compilation of the Annual Statistics of the Australian Colonies.
- 1862 N.S.W. Daring raid on the Lachlan gold escort (£14,000 carried off).—Abolition of State aid to religion.
Vic. Charles Gavan Duffy's Land Act.
S.A. Sir Richard Macdonnell departs.—Stuart crosses the continent from south to north.—Sir Dominick Daly assumes office as Governor.
Q'ld. McKinlay's explorations.—Severe floods on the Fitzroy River.
W.A. Governor Kennedy succeeded by John S. Hampton.—Formation of the first Legislative Council.
- 1863 N.S.W. The outlaw Gilbert and his confederates rob a jeweller's shop in Bathurst, and hold up the town of Canowindra for three days.—Initiation of the Riverina district dispute.
Vic. Retirement of Governor Barkly, who is succeeded by Sir Charles Darling.
S.A. South Australia takes over the Northern Territory.
Q'ld. Extension of the north-west boundary.—Queensland Bank Act passed.
..... Intercolonial Conference held at Melbourne.
- 1864 N.S.W. Frequent outrages by bushrangers.
Q'ld. First railway begun in the colony.—First sugar manufactured from Queensland cane.
- 1864-5 Tas. First successful shipment of salmon ova from England.
- 1865 Q'ld. First railway opened.—Financial depression.
Tas. Act passed to facilitate release and transfer of real estate.
W.A. Petition to the Legislative Council urging the introduction of a measure to establish representative government.
- 1866 N.S.W. Passage of the Public Schools' Act of (Sir) Henry Parkes.

1866	Vic.	Political deadlock.—Governor Darling recalled and replaced by the Right Hon. F. H. T. Manners-Sutton (afterwards Viscount Canterbury).
	S.A.	Introduction of camels for purposes of exploration, etc.
	Q'ld.	Financial crisis.—Hume's search for Leichhardt.
1867	N.S.W.	Departure of Sir John Young.
	Vic.	Import duty imposed on a number of articles with the purpose of affording protection to home industries.
	S.A.	The Governor and Executive Council investigate charges against Mr. Justice Boothby and remove him from the bench.—Visit of the Duke of Edinburgh.
	Q'ld.	Rich gold discoveries at Gympie.
1868	N.S.W.	Lord Belmore takes office as Governor.—Attempt to assassinate the Duke of Edinburgh at Clontarf.—Treason Felony Act passed.
	Vic.	Visit of the Duke of Edinburgh.
	S.A.	Death of Sir Dominick Daly.
	Q'ld.	Departure of Governor Bowen.—Visit of the Duke of Edinburgh.—Act passed to regulate Island Labour traffic.—Colonel S. W. Blackall succeeds to the Government.
	Tas.	The Duke of Edinburgh turns the first sod of the first Tasmanian railway.—Governor Gore-Browne's term of office expires.
	W.A.	Departure of Governor Hampton.—Transportation ceases.
1869	N.S.W.	Select Committee appointed to inquire into existence of alleged conspiracy for treason and murder.
	Vic.	Reduction of the property qualification of members and electors of the Legislative Council.
	S.A.	Sir James Fergusson assumes office as Governor.
	Tas.	Governor Gore-Browne departs and is succeeded by Mr. Charles du Cane.—State aid to religion finally abolished.
1870	W.A.	Mr. (afterwards Sir) Frederick Weld assumes office as Governor.—First explorations of John Forrest.
	N.S.W.	Intercolonial Exhibition held at Sydney to celebrate the 100th anniversary of Cook's landing.
	S.A.	The trans-continental telegraph started.
	Tas.	Amendment of the Constitution.
	W.A.	Grant of representative government to Western Australia.—John Forrest explores from Albany to Port Lincoln.
	.....	Intercolonial Congress held at Melbourne.
1871	Vic.	Increase of import duties.
	S.A.	Death of Lady Edith Fergusson.
	Q'ld.	Death of Governor Blackall.—The Marquis of Normanby assumes office as Governor.
		The Queensland National Bank founded.
	Tas.	Discovery of Mount Bischoff tin mines, and other valuable mineral discoveries.
	W.A.	Further explorations by Forrest.
1872	N.S.W.	Lord Belmore succeeded by Sir Hercules Robinson.—International Exhibition at Sydney.—Death of Wentworth.
	S.A.	Submarine cable laid from Singapore to Port Darwin.—Completion of trans-continental telegraph line.—Strangway's Act passed.
	Q'ld.	Discovery of tin at Stanthorpe, copper at Mt. Perry, and coal at Wide Bay.—Discovery of the Palmer gold-field.
	Tas.	Launceston and Western Railway transferred to the Government.—Completion of direct telegraphic communication with England.
	W.A.	Land Act passed to encourage small settlers and immigrants.

- 1873 Vic. Departure of Viscount Canterbury.—Sir George Bowen assumes office as Governor.—Education Act passed.
- S.A. Governor Sir James Fergusson succeeded by Mr. (afterwards Sir) Anthony Musgrave.
- W.A. Colonel Warburton crosses from the trans-continental telegraph line to the head of the De Grey River.
- Australian Customs Duties Act passed.
- 1874 N.S.W. Triennial Parliaments Act passed.
- S.A. The Boucaut Policy first advocated.
- Q'ld. Dalrymple extends his researches on the north-eastern seaboard.
- Tas. Departure of Governor Du Cane.
- W.A. Explorations of E. Giles.—Departure of Governor Weld.
- 1875 S.A. Wreck of the "Gothenburg," involving the death of Judge Wearing and other well-known Adelaide citizens.—Sudden death of Sir Richard Hanson.—Education Act passed.—Explorations by Giles, Gosse, and Warburton.
- Q'ld. Mr. (afterwards Sir) W. W. Cairns succeeds the Marquis of Normanby in the Government.—The Port Albany Settlement transferred to Thursday Island.
- Tas. Mr. Frederick A. Weld assumes the Government.
- W.A. Arrival of Sir William Cleaver Francis Robinson to assume office as Governor.—John and Alexander Forrest cross the colony from west to east.
- Intercolonial conference at Hobart to secure uniformity of statistical collection and compilation.
- 1876 N.S.W. Completion of telegraphic cable between Sydney and Wellington.
- Vic. Number of members of the Legislative Assembly increased to eighty-six.
- Tas. Railway opened from Hobart to Launceston.—Death of Truganini, the last Tasmanian black.
- W.A. Giles crosses the colony from east to west.
- 1877 Vic. Deadlock on the question of payment of members.
- S.A. Governor Musgrave succeeded by Sir W. W. Cairns.—Inauguration of the Senate of the University of Adelaide.—Resignation of Governor Cairns after two months of government.—Sir W. F. D. Jervois appointed Governor.—Completion of the telegraph line from Adelaide to Perth.
- Q'ld. Sir Arthur Kennedy appointed Governor.
- Tas. Discoveries of gold.
- W.A. Governor Sir William Robinson succeeded by Sir Harry St. George Ord.
- 1878 N.S.W. Unveiling of Woolner's Statue of Captain Cook in Sydney.
- Vic. "Black Wednesday"; wholesale dismissal of civil servants.—Recall of Sir George Bowen.
- S.A. New Crown Lands Act.—Founding of the University of Adelaide.—Rifle Companies Act passed.—First sod of the Trans-continental Railway turned by Sir William Jervois.
- Q'ld. Restriction of Chinese immigration.
- W.A. Agitation for self-government.
- 1879 N.S.W. Sir Hercules Robinson succeeded in the Government by Lord Loftus.—Electoral Act, 1879, passed.—International Exhibition held at the Garden Palace, Sydney.
- Vic. The Marquis of Normanby assumes office as Governor.
- 1880 N.S.W. Public Instruction Act abolishes State aid to denominational education.
- Vic. An International Exhibition held in Melbourne.
- Tas. Governor Weld succeeded by Sir J. H. Lefroy.

1880	W. A.	Departure of Sir Harry Ord.—Sir William Robinson enters upon his second term of office as Governor.
.....		Federal Conference at Melbourne and Sydney.
1881	N.S.W.	Further restriction of Chinese immigration.
	Vic.	Further reduction of property qualification of members and electors of the Legislative Council, and increase in number of members.
	Tas.	Governor Lefroy succeeded by Sir George Cumine Strahan.
.....		Prince Albert Victor and Prince George of Wales visit Australia.
.....		First simultaneous census of the Australasian colonies.
1882	N.S.W.	Destruction by fire of the Garden Palace.—Death of the poet Henry Kendall.
	S. A.	Departure of Sir William Jervois.
1883	N.S.W.	Discovery of silver at Broken Hill.
	Vic.	Completion of railway between Sydney and Melbourne.
	S. A.	Sir William Robinson appointed Governor.
	Q'ld.	Annexation of New Guinea (repudiated by British Government).—Departure of Governor Kennedy, whose place is taken by Sir Anthony Musgrave.
	Tas.	Period of rash mining speculations.
	W. A.	Sir Frederick Napier Broome appointed Governor.
.....		Federal Conference held at Sydney.
1884	N.S.W.	Land Act passed, involving restriction of sales by auction, &c.
	Vic.	Sir Henry Loch succeeds Lord Normanby in the Government.—Appointment of the Public Service Board.
	W. A.	Explorations by Harry Stockdale.
.....		A Federation Bill passed in Victoria.—A similar Bill rejected in New South Wales.
1885	N.S.W.	Military contingent sent to take part in the Soudan Campaign.—Opening of the Broken Hill silver mines.—Governor Loftus succeeded by the Right Hon. Baron Carrington.
	Q'ld.	Agitation for a division of the colony.
	Tas.	Mount Zeehan silver-lead mines discovered.
	W. A.	New Land Act passed.
.....		Formation of the Federal Council of Australia.
1886	N.S.W.	Industrial depression.
	Q'ld.	Discovery of Mount Morgan gold mine.
	Tas.	Gold and copper discovered at Mount Lyell.—Retirement of Sir George Strahan.—Extension of the franchise.
	W. A.	Agitation for self-government.
.....		The Federal Council meets at Hobart.
1887	N.S.W.	The Bulli mining disaster.
	S. A.	The English Government claims £15,516 as interest on an old loan.—Adelaide Jubilee International Exhibition.
	Tas.	Sir R. G. C. Hamilton assumes office as Governor.
	W. A.	Severe hurricane.—Gold discovered at Yilgarn.
.....		Australasian Conference in London.—Australasian Naval Defence Force Act passed.
1888	N.S.W.	Much damage done by bush fires.—Centennial celebrations.—Drastic legislation against Chinese immigration (imposition of a poll tax of £100).—Strike of colliers at Newcastle.
	Vic.	International Exhibition at Melbourne.—Number of members increased in both Houses.
	Q'ld.	Death of Sir Anthony Musgrave.—Sir Henry Wylie-Norman assumes office as Governor.—Railway communication opened between Brisbane and Sydney.—Floods at Rockhampton.
	W. A.	Telegraphic communication opened between Perth and Derby.—Explorations of Ernest Favenc.

- 1888 Centenary of first settlement in Australia.—Conference of Australian Ministers at Sydney to consider the question of Chinese immigration.—Imperial Defence Act passed.
- 1889 N.S.W. Destructive floods.
Vic. Sir Henry Loch succeeded by Lord Hopetoun.
S.A. Governor Sir W. C. F. Robinson succeeded by the Earl of Kintore.
W.A. New Constitution framed.—Opening of the eastern railway.—Discovery of the Pilbarra gold-field.—Departure of Governor Browne.
- 1890 N.S.W. Report of Imperial Commission on Australian Land Defences.
Payment of Members of Parliament.—Strike at Broken Hill.—Maritime and other strikes.—Severe bush fires.—Departure of Lord Carrington.
Vic. Local Government Bill passed.
S.A. Land Act passed, fixing the minimum price of country land at 5s. per acre.
Q'ld. Wreck of the "Quetta" (146 lives lost).—Extensive floods, and terrible hurricanes.—Industrial crisis.
Tas. Establishment of the University of Tasmania.
W.A. Granting of responsible government.—Sir William Robinson enters on his third term of office.
- 1891 Federal Conference held at Melbourne.
N.S.W. Lord Jersey assumes office as Governor.—Thirty-five Labour Members returned to the Legislative Assembly.
..... Federal Convention called in Sydney.—The Colonial Premiers meet at the New South Wales Colonial Secretary's office.
- 1892 N.S.W. Strike at Broken Hill.—Temporary run on the Government Savings Bank.
Vic. Suspension of the Railway Commissioners.
Q'ld. Constitution Act passed, whereby Queensland is divided into two provinces.—Pacific Labourers Extension Act passed.
Tas. Departure of Sir Robert Hamilton.
- 1892 W.A. Discovery of Bayley's Reward at Coolgardie.
- 1893 N.S.W. Sir Robert Duff succeeds Lord Jersey.—The "Royal Tar" sails with the first New Australian colonists.
Vic. Land Act passed, providing for village settlements, homestead associations, and labour colonies.
Q'ld. Terrific storms and floods.—First departures for New Australia.
Tas. Viscount Gormanston takes office as Governor.
..... The Corowa Conference.—Banking crisis in Eastern States.
- 1894 N.S.W. Further Land legislation.
S.A. Adult Suffrage Bill receives Royal Assent.
Q'ld. Disturbances in the Legislative Assembly over the Peace Preservation Bill.—Payment of Members Bill rejected.
..... Serious industrial troubles.
- 1895 N.S.W. Death of Sir Robert Duff.—Viscount Hampden takes office as Governor.—Crown Lands Act of 1895 passed.
S.A. The Earl of Kintore is succeeded as Governor by Sir Thomas Fowell Buxton.
Q'ld. Departure of Sir Henry Norman.—Disastrous floods.
- 1896 Conference of Premiers at Hobart.
S.A. Establishment of the State Bank.—Floods and storms.—Franchise exercised by women in South Australia.—Departure of the Calvert expedition.
Q'ld. Lord Lamington assumes office as Governor.—Sir Henry Norman appointed Agent-General for Queensland.—Gales and floods.—The ferry-boat "Pearl" capsizes at Brisbane (28 lives lost).

1896	W.A.	Explorations of Wells and Carnégie.
.....	.....	The People's Federal Convention held at Bathurst.
1897	S.A.	Earthquake and hurricane in Northern Territory; destruction of the town of Palmerston.—Floods and storms at Adelaide.—Death of Sir Thomas Elder.
1897-98	.....	The Federal Convention holds sessions at Adelaide, Sydney, and Melbourne.
1898	S.A.	Resignation of Sir Thomas Fowell Buxton.
.....	.....	The Federal Bill accepted by Tasmania, Victoria, and South Australia, but rejected by N. S. Wales.
1899	N.S.W.	Governor Hampden succeeded by Earl Beauchamp.
.....	S.A.	The Rt. Hon. Hallam Baron Tennyson becomes Governor of South Australia.
.....	.....	Conference of Premiers at Melbourne.—The Referendum; the Bill is accepted by N. S. Wales, Tasmania, Queensland, Victoria, and S. Australia.
1900	N.S.W.	Departure of Lord Beauchamp.
.....	.....	The Australian Colonies send military contingents to assist the British forces against the Boer Republics.—The Federal Bill receives the Royal Assent (9th July).—The Honorable Edmund Barton, first Federal Prime Minister.
1901	N.S.W.	Readjustment of industrial conditions in many quarters.
.....	Vic.	Opening of the Federal Parliament at Melbourne.—Ejection from the State Assembly of Mr. Findley, member for Melbourne, for alleged disloyalty.
.....	Q'ld.	Departure of Lord Lamington.
.....	.....	Proclamation of the Australian Commonwealth, Lord Hopetoun first Governor-General.—The Federal Parliament opened by the Heir-Apparent to the British Crown, the Duke of Cornwall and York, who visits each State of the Commonwealth.—Contingents sent to S. Africa and to China.
1902	N.S.W.	Arrival of Sir Harry Holdsworth Rawson, K.C.B., the new Governor.—Disastrous explosion at Mount Kembla Colliery, Illawarra District; 95 miners lost their lives.—Jubilee of Sydney University.
.....	Vic.	Agitation for Parliamentary Reform.—Mr. Irvine becomes Premier.
.....	Q'ld.	Arrival of Sir Herbert Charles Chermiside, the new Governor.—Inland mail service interrupted for a time by drought.
.....	S.A.	Reduction of members of Legislative Assembly from 64 to 42 and of Legislative Council from 24 to 18. Ministers reduced from 6 to 4.
.....	W.A.	Opening of pumping station at Northam in connection with Coolgardie water supply scheme.—Departure of Governor Sir Arthur Lawley.
.....	Tas.	Conference of State Statisticians, Attorneys-General, and Ministers for Agriculture.—Strong protest against Federal action with reference to letters addressed to "Tattersall"

CHRONOLOGICAL TABLE FOR NEW ZEALAND.

- 1642 Discovery of New Zealand by Tasman.
- 1769 Cook arrives at Poverty Bay.
- 1770 De Surville kidnaps a "rangatira" (Maori chieftain.)
- 1772 Marion du Fresne killed and eaten by the Maoris.
- 1773 Furneaux enters Queen Charlotte Sound.
- 1790 Chatham Islands discovered by Lieutenant Broughton.
- 1793 Doubtless Bay visited by Lieutenant-Governor King, of Norfolk Island; a rangatira and a tohunga (Maori priest) kidnapped.
- 1795 The "Endeavour" sunk in Dusky Sound.
- 1800 Discovery of Antipodes Island.
- 1806 Discovery of the Auckland Isles.—The "Venus," with a crew of runaway convicts, visits the East Coast.
- 1807 Defeat suffered by Hongi and the Nga-Puhi tribe at Kaipara.—Crew of a vessel eaten on the East Coast.
- 1809 The Boyd massacre.
- 1810 Discovery of Campbell Island.
- 1814 Rev. S. Marsden founds a mission station in New Zealand.—First introduction of horses, cattle, sheep, and poultry.—Appointment of Magistrates for New Zealand.
- 1815 Attempted capture of the "Trial" and the "Brothers" at Kennedy Bay.
- 1816 Two ships wrecked and their crews eaten.
- 1818 Expedition of Hongi and Te Morenga to East Cape.
- 1819-20 Raid on Taranaki and Port Nicholson by Patone, Nene, and Te Rauparaha.
- 1820 Hongi's trip to England.—Coromandel visited by H.M. Store-ship "Coromandel."—Auckland Harbour entered by the "Prince Regent."
- 1821 Fall of Mauinaina Pa (Auckland Isthmus) and Te Totara Pa (Thames) to Hongi.
- 1822 Hongi takes Matakitaiki Pa (Waikato).—Baron de Thierry attempts to buy land at Hokianga.
- 1823 Act passed to extend the jurisdiction of the New South Wales Courts to British subjects in New Zealand.—Capture of Mokoia Pa (Rotorua Lake) by Hongi.
- 1824 Pomare takes Te Whetumatarau Pa, near East Cape.
- 1825 Formation of Lord Durham's (unsuccessful) New Zealand Association.—Hongi defeats Ngati-Whatua at Te Ikaaranganui (Kaipara).
- 1825 Brief settlement at Hauraki Gulf.
- 1827 Destruction of the Whangaroa mission station by Hongi's forces.
- 1828 Death of Hongi at Whangaroa from wounds received at Hokianga.
- 1829 Capture of brig "Hawes" by Maoris at Whakatane.
- 1830 Battle of Taumata-Wiwi (near Cambridge).—Fall of Kaiapohia Pa (Canterbury).—Battle of Kororareka between two Nga-Puhi tribes.—Massacre at Kaiapoi and death of Tama-i-hara-nui at the hands of Te Rauparaha's adherents.

- 1831 Thirteen chiefs appeal for protection to the English Government.—
Waikato captures Pukerangiora Pa (Waitara).
- 1832 Repulse of Waikato at Nga-motu Pa.
- 1833 Appointment of James Busby as Resident Magistrate at the Bay of
Islands.
- 1834 Battle of Haowhenua and Pakakutu near Otaki.—Wreck of the
“Harriet” at Cape Egmont.—Shelling of Waimate Pa near Opuake
by H. M. S. “Alligator.” Thierry announces himself the Sovereign
Chief of New Zealand and defender of its liberties.
- 1835 Formation of the second New Zealand Association.—Formation of a
confederation called “The United Tribes of New Zealand.”—Ngati-
Awa tribes take possession of Chatham Islands.
- 1836 Waikato captures Maketu Pa (Bay of Plenty).
- 1837 Lord Durham and Edward Gibbon Wakefield attempt to revive the New
Zealand Association.
- 1838 The settlers at Kororareka form a vigilance committee.—Arrival
at Hokianga of Bishop Pompallier (R. C.).—Discovery of Pelorus
Sound by H. M. S. “Pelorus.”
- 1839 French whaler “Jean Bart” captured by Maoris at Chatham Islands.—
Founding of the New Zealand Company, and despatch of its first
colonising expeditions.—New Zealand incorporated with New South
Wales, and Captain Hobson appointed first Lieutenant-Governor.—
Battle of Kūkitanga (Otaki).
- 1840 First appearance of a steamer in New Zealand waters.—Arrivals of immi-
grants at Port Nicholson.—Arrival of Captain Hobson, and the sign-
ing of the Treaty of Waitangi.—The Queen’s sovereignty proclaimed
over all New Zealand.—Auckland founded.—The Nantes-Bordelaise
Company send settlers to Akaroa.
- 1841 Auckland proclaimed the seat of government.—Issue of Charter of Incor-
poration to the New Zealand Company.—New Zealand proclaimed
independent of New South Wales.
- 1842 Settlement founded at Nelson.—Arrival of Bishop Selwyn.—Death of
Governor Hobson.
- 1843 The Wairau dispute.—Captain Fitzroy takes office as Governor.
- 1844-5 Governor Fitzroy makes wild experiments in taxation.
- 1844 Hone Heke hews down the flagstaff at the Bay of Islands.
- 1845 Destruction of Kororareka by Heke.—Arrival of reinforcements of troops
from Sydney and Hobart.—Unsuccessful attack on a pa at Ohaeawae.
—Recall of Governor Fitzroy and appointment of Captain George Grey.
- 1846 Capture of Ruapekapeka pa (Bay of Islands) and conclusion of the war
with Heke.—Outbreak of hostilities in the Hutt Valley, near
Wellington.—Seizure of Te Rauparaha at Porirua.—New Zealand
Government Act passed (dividing the colony into two provinces, and
granting representative institutions).—Te Heu Heu overwhelmed
and buried by a land-slip.
- 1847 Minor outbreak at Wanganui.—Arrival of the New Zealand Fencibles.
- 1848 Sir George Grey sworn in as Governor-in-Chief over the islands of New
Zealand and Governor of the provinces of New Ulster and New
Munster.—Founding of Otago.—Severe earthquake at Wellington.
- 1849 Incorporation of the Canterbury Association.
- 1850 Surrender of the New Zealand Company’s Charter.—Founding of Canter-
bury.
- 1851 Final dissolution of the New Zealand Company.
- 1852 Discovery of gold at Coromandel.
- 1852-3 Third Constitution (division of the colony into six provinces).
- 1853 Boundaries of the provinces proclaimed.—Departure of Sir George Grey.
- 1854 Lieutenant-Colonel Wynyard assumes administration of the Govern-
ment.

- 1855 Severe earthquakes on both sides of Cook Strait.—Arrival of Governor T. Gore Browne.
- 1856 Formation of a Maori league against land-selling.—Te Whero Whero proposed as king.
- 1857 First payable gold-field opened at Collingwood, Province of Nelson.
- 1858 New Provinces Act passed.—Te Whero Whero (Potatau I.) proclaimed King of the Maoris.
- 1859 Te Teira offers land at Waitara for sale to the Government.
- 1860 Hostilities begun against Wiremu Kingi te Rangitake.—Capture Waitara Pa.—Engagements at Waireka and Puketakauero.—Defeat of Kingi's Waikato allies at Mahoetahi.—Capture of Matarikorikc Pa.—Death of the Maori King and succession of his son Matutaera (Tawhaiao).
- 1861 Repulse of Maoris by Imperial troops at Huirangi redoubt.—Truce agreed upon.—Gold discoveries at Tuapeka River, Clutha, &c.—Recall of Governor Browne.—Sir George Grey enters upon his second term of office as Governor.
- 1862 First Native Lands Act passed.
- 1863 Wreck of H.M.S. "Orpheus" on Manukau Bar (181 lives lost).—The Imperial Government explicitly relinquishes control over the administration of native affairs.—Assault on a military escort at Tataraimaka.—Defeat of Maoris at Katikara.—Commencement of Waikato war; action at Koheroa (Auckland district).—Capture of Rangiriri Pa.—Railway opened from Christchurch to Ferrymead Junction.—New Zealand Settlements Act passed.—Occupation of Ngaruawahia.
- 1864 Engagement with the Maoris at Mangapiko River.—Defeat of Maoris at Rangiwhia.—Capture of the Orakau Pa.—Engagement near Maketu (Bay of Plenty).—Defeat of the Rawhiti tribes by the Arawa friendlies.—Cameron's repulse at the Gate Pa.—Repulse of the Hauhaus at Sentry Hill (Taranaki).—Battle of Moutoa (Wanganui) and defeat of Hauhaus by friendlies.—Defeat of Maoris at Te Ranga.—Discovery of gold on the west coast of Middle Island.—Escape of Maori prisoners from Kawau.—Wellington chosen as the seat of Government.—Grey confiscates native lands in Waikato.
- 1865 Submission of Maori Chief Wiremu Tamihana te Waharoa.—Removal of the seat of Government to Wellington.—Murder of Volkner by Hauhaus under Kereopa.—Murder of Fulloon and others by Hauhaus at Whakatane.—Capture by Grey of Wereroa Pa, near Wanganui.—Fraser and Te Mokena capture Kairomiromi Pa (Waiapu).—Proclamation of Peace.—Murder of a friendly messenger by Hauhaus at Kakaramea.—Defeat of rebel natives at Wairoa.—Gold discoveries at Hokitika.—Auckland asks for separation.—Native Rights Act and Native Lands Act passed.
- 1866 Defeat of Maoris at Okotuku Pa, west coast of North Island.—Chute captures Putahi Pa and Otapawa Pa.—Escape of prisoners from the hulk at Wellington.—Submission of Te Heu Heu and Herkiekie, of Taupo.—Laying of the Cook Strait submarine cable.—Engagement of Pungarehu.—Natives defeated at Omaranui and Petane (Hawke's Bay).
- 1867 Admission of Maori members (4) to House of Representatives.
- 1868 Arrival of Governor Sir George F. Bowen.—Escape of Te Kooti from the Chatham Islands.—Maoris attack the redoubt at Turuturu Mokai. Engagements at Ngatu-o-te-manu.—Departure from New Zealand of Bishop Selwyn.—Colonial forces repulsed with heavy loss at Moturoa. Massacre of 32 Europeans at Poverty Bay.—Engagements between Te Kooti and the friendlies at Patutahi (Poverty Bay district).

- 1869 Defeat and dispersal of Te Kooti's force at Ngatapa Pa (Poverty Bay).—Murder of Rev. John Whitely and others at White Cliffs.—A foraging party attacked at Karaka Flat.—Defeat of Titokowaru at Otauto.—Outrages by Te Kooti, who captures Mohaka Pa.—First visit to Wellington of the Duke of Edinburgh.—Defeat of Te Kooti at Ahikeru Pa and Oamaru Teangi Pa.—Surrender of Tairua with 122 men, women, and children of the Pakakohe tribe, near Wanganui.—Sentences for treason passed against Maori prisoners.—Storming of Pourere Pa by Lieut.-Colonel McDonnell.
- 1870 Friendlies under Topia and Keepa pursue Te Kooti (Wanganui River).—Capture of Te Kooti's Pa at Tapapa.—Departure of the last detachment of Imperial troops.—Crushing defeat of Te Kooti at Maraetahi.—Second visit of the Duke of Edinburgh to Wellington.—Act passed to establish the University of New Zealand.—Land Transfer Act passed.
- 1871 Death of Tamati Waka Nene.—Capture of Kereopa at Napier.—First appointment of Rangitiras (2) to the Legislative Council.—Public Trust Office Act passed.—Te Kooti takes sanctuary in the King country.
- 1873 Governor Sir George Bowen succeeded by Sir James Fergusson.
- 1874 Abolition of incarceration for debt.—Departure of Sir James Fergusson; the Governorship assumed by the Marquis of Normanby.—Sir George Grey elected to the Assembly as member for Auckland.
- 1875 Abolition of Provinces Act passed.
- 1876 Submarine cable completed between New Zealand and New South Wales.
- 1877 Education Act passed providing for the free and compulsory education of children.
- 1878 Sir George Grey's first land tax passed.
- 1879 Departure of the Marquis of Normanby.—Land dispute with Te Whiti.—Sir Hercules Robinson assumes office as Governor.—Arrest and imprisonment of 180 natives, who had been, by Te Whiti's orders, ploughing lands occupied by Europeans.—Triennial Parliaments Act passed.—Act passed to confer the suffrage on every resident adult male.
- 1880 Governor Sir Hercules Robinson succeeded by Sir A. H. Gordon.
- 1881 S.S. "Taranua" wrecked (130 lives lost).—Severe earthquakes in Wellington.—Arrest of Te Whiti and Tohu.
- 1882 Departure of Sir A. H. Gordon.—Assumption of the Government by Sir J. Prendergast.
- 1883 Arrival of Governor Sir W. F. D. Jervois.—Proclamation of amnesty to Maori political offenders.—Liberation of Te Whiti and Tohu.
- 1885 Opening of New Zealand Industrial Exhibition at Wellington.
- 1886 Volcanic eruptions at Tarawera (101 lives lost).—Destruction of famous Pink and White Terraces.
- 1887 Kermadec Islands annexed to New Zealand.—Australasian Naval Defence Act passed.
- 1889 The Earl of Onslow succeeds Sir W. F. D. Jervois in the Government.—Opening of South Seas exhibition, Dunedin.
- 1890 First election of the House of Representatives under manhood suffrage and on the one man one vote principle.
- 1891 Labour laws: Employers Liability Act, 1882 Amendment Act; Truck Act.
- 1892 The Earl of Onslow succeeded in the Government by the Earl of Glasgow.—Labour laws: Contractors and Workmen's Lien Act.—Passing of the first Land and Income Tax Act.—Land Act, 1892 (lease in perpetuity without revaluation system introduced; occupation with right of purchase; optional method of selection; small farms associations).

- 1893 Bank Note Issue Act passed.—The Electoral Act, 1893, passed conferring the franchise on women.—Success of the prohibitionist party.—Labour laws : Workmen's Wages Act.—Native Land Purchase and Acquisition Act.
- 1894 Labour laws : Conspiracy Law Amendment ; an Act to encourage the formation of industrial union and associations, etc.—Advances to Settlers Act.—Land for Settlement Act (1894) and Lands Improvement and Native Lands Acquisition Act.—Labour laws : Factories Act.—Act for limiting hours of business in shops.—Wreck of the s.s. "Wairarapa" at Great Barrier Island (135 lives lost).
- 1895 Labour laws : Act to regulate the attachment of wages.—Servants Registry Office Act.—Family Homes Protection Act.
- 1896 Brunner Mine explosion (67 deaths).—Land for Settlements Act amended.—Alteration of franchise by abolition of non-residential or property qualification.
- 1897 The Earl of Glasgow succeeded in the Government by the Earl of Ranfurly.—The Hon. R. J. Seddon called to the Privy Council.
- 1898 Death of Sir George Grey.—Act to provide old-age pensions passed.
- 1899 Military assistance rendered to the Empire in the Bcer war.
- 1900 Further military assistance to the Empire.
- 1901 Visit of the Duke of Cornwall and York.—Annexation of Cook Islands.—Departure of the sixth and seventh contingents.—Visit of the Federation Commission to Australia.—Death of Sir John Mackenzie.
- 1902 Eighth, ninth, and tenth contingents despatched to South Africa.—Mr. Seddon proceeds to South Africa and thence to London.—Wreck of the "Ventnor" near Hokianga.—Wreck of the "Elinganite" at the Three Kings.

AREAS AND BOUNDARIES.

THE Australasian colonies comprise the continent of Australia, the adjacent island of Tasmania, and the islands of New Zealand. The group was formerly subdivided politically into seven colonies; but on the 1st January, 1901, the five mainland states and Tasmania became the Commonwealth of Australia, New Zealand retaining its position as a separate colony. The respective areas of the six states and New Zealand are as follow:—

State.	Area in acres.	Area in square miles.
New South Wales	198,848,000	310,700
Victoria	56,245,760	87,884
Queensland	427,838,080	668,497
South Australia	578,361,600	903,690
Western Australia	624,588,800	975,920
Tasmania	16,778,000	26,215
Commonwealth of Australia	1,902,660,240	2,972,906
New Zealand	66,861,440	104,471
Australasia	1,969,521,680	3,077,377

The British Empire, exclusive of territories under protectorates and spheres of influence, extends over an area of 9,093,865 square miles, so that more than one-third of its area lies within the limits of Australia and New Zealand. Australasia is more than twenty-six times as large as the United Kingdom; more than fifteen times as large as France; more than half as large again as Russia in Europe; and almost equal in extent to the continent of Europe or to the United States of America.

The mainland of Australia lies between 10° 39' and 39° 11½' south latitude, and the meridians of 113° 5' and 153° 16' east longitude. Its greatest length is 2,400 miles from east to west, and its greatest breadth, 1,971 miles from north to south. Its area may be approximately stated at 2,946,691 square miles, and its coast-line at 8,850 miles,

equal to 1 mile to each 333 square miles of land—the smallest proportion of coast shown by any of the continents. Tasmania, to the south of the mainland, is separated from Victoria by Bass Straits, about 150 miles wide. New Zealand is opposite the south-eastern coast of Australia, the width of ocean intervening, known as the Tasman Sea, being about 1,100 miles.

New South Wales lies principally between the 29th and 36th parallels of south latitude, and between the 141st and 153rd meridians of east longitude. The length of the state, from Point Danger on the north to Cape Howe on the south, is 680 miles. From east to west, along the 29th parallel, the breadth is 760 miles; while diagonally, from the south-west corner—where the Murray passes into South Australia—to Point Danger, the length reaches 850 miles. The seaboard extends over 700 miles. There are no islands of importance on the coast of New South Wales. Lord Howe Island, some 400 miles north-east of Sydney, forms a portion of the state. The Imperial Government handed over the administration of Norfolk Island to New South Wales in 1897, and in that year a Resident Magistrate was appointed as representative of the New South Wales Government.

Victoria is situated between the 34th and 39th parallels of south latitude; and the 141st and 150th meridians of east longitude. The dividing line between Victoria and South Australia was fixed as the 141st meridian of east longitude, but through an error in survey the present recognised boundary falls about $1\frac{1}{2}$ mile west of the 141st meridian. The mistake tells against South Australia, and the authorities of that state have been demanding for many years a re-adjustment of territory, but there seems little prospect of a disturbance of the present arrangement. The extreme length of Victoria from east to west is 420 miles, and the breadth 250 miles. The coast-line is about 600 miles.

Queensland extends from the 11th to the 29th parallel of south latitude, and from the 138th to the 153rd meridian of east longitude. The boundary line separating the state from South Australia extends northwards along the 141st meridian of east longitude as far as the 26th parallel of south latitude, thence along the 138th meridian of east longitude to the seaboard. This line also requires re-adjustment, the present reputed boundary being in all probability too far eastward. The greatest length from north to south is 1,300 miles, and the greatest breadth is 800 miles. The coast-line is about 2,550 miles. The coast of Queensland in some parts is studded with islands. The largest are Stradbroke and Moreton on the south-east coast; while Thursday Island, on the far north coast, is an important place of call, and has been strongly fortified as one of the lines of defence for the states of the eastern seaboard.

The island of New Guinea lies close to the northern extremity of Queensland, being separated from the mainland by Torres Straits. It is occupied by Dutch, English, and German colonists. The British

colony of New Guinea, in addition to the portion of the mainland proclaimed as British territory, embraces all those groups of islands lying within the 141st and 155th meridians of east longitude, and the 8th and 12th parallels of south latitude. The government is vested in an Administrator and an Executive Council; and towards the expenses of government the three states on the eastern seaboard of Australia contributed each £5,000 annually until the Federal Government took over the territory in 1901, since when the expenses of administration have, of course, been borne by the Commonwealth. By an Act passed in 1887 Queensland engaged for ten years to hold itself primarily responsible for the whole amount of this subsidy, and the State continued to do so up to the time of the transfer of the territory. The area of British New Guinea is estimated to be 90,000 square miles, and the native population at 350,000.

South Australia extends from the 11th to the 38th parallel of south latitude, and from the 129th to the 141st meridian of east longitude. The province of South Australia, properly so called, lies between the 38th and 26th parallels of south latitude, and the 141st and 129th meridians of east longitude; the Northern Territory is bounded by the 26th and 11th parallels of south latitude, and the 129th and 138th meridians of east longitude. The greatest length of the states from north to south is 1,850 miles, and the greatest breadth is 650 miles, with a seaboard of 2,000 miles, of which about 900 miles are washed by the Indian Ocean, the Arafura Sea, and the waters of the Gulf of Carpentaria. The most important islands belonging to the state are Kangaroo Island on the south coast, 85 miles long and 30 broad; Melville Island, off Port Darwin, on the northern coast; Bathurst Island, separated from the last-mentioned by Apsley Straits; and Groote Eyland, in the Gulf of Carpentaria. A stockade was erected by Captain Bremer on Melville Island in 1824, but was abandoned in 1829.

Western Australia consists of the country between the 14th and 35th parallels of south latitude, and the 113th and 129th meridians of east longitude. The greatest length north and south is 1,450 miles, and the greatest breadth from east to west is 850 miles. The coast-line is about 3,000 miles.

Tasmania is an island situated about 150 miles south of Victoria, from which it is separated by Bass Straits. It lies between $40^{\circ} 33'$ and $43^{\circ} 39'$ south latitude, and the meridians of $144^{\circ} 39'$ and $148^{\circ} 23'$ east longitude. Its greatest length from north to south is 210 miles, and its greatest breadth from east to west is 200 miles. There are several small islands which belong to the State. Flinders' Island, in Bass Straits, has an area of 513,000 acres; and King's Island, the chief of the north-west group, contains 272,000 acres. Including the adjacent islands, the area of Tasmania is 26,215 square miles.

New Zealand lies to the east of Australia, its nearest point to the mainland being Cape Maria van Diemen, which is about 1,100 miles from Sugarloaf Point, in New South Wales. New Zealand and its

dependencies lie between the 33rd and 53rd parallels of south latitude, and between 166° 30' east longitude and 173° west longitude. The waters known as the Tasman Sea separate the colony from the continent of Australia.

The North Island, or New Ulster, has a length of about 515 miles, by a breadth of about 250 miles. Its area is estimated at 44,467 square miles, and its coast-line at 2,200 miles. Wellington, the seat of Government, is at the southern extremity of this island. The South or, as it is officially called, the Middle Island or New Munster, has a length of about 525 miles by a breadth of about 180 miles. Its area is 58,525 square miles, and its coast-line measures 2,000 miles. Stewart Island, or New Leinster, lies off the southern extremity of South Island, and has an area of 665 square miles; its greatest length is 30 miles by a breadth of 25 miles.

In 1887 a proclamation was made declaring the Kermadec Islands, lying between the 29th and 32nd parallels of south latitude, and the 177th and 180th meridians of west longitude, part of the colony of New Zealand. Until the 11th June, 1901, a protectorate was exercised by the Imperial Government over the Cook Islands or Hervey Group, but on that date a proclamation was issued extending the boundaries of the colony so as to include this group, and also any other islands lying between 8° and 23° south latitude, and 167° and 156° west longitude, with a further additional rectangle bounded by 17° and 23° south latitude, and 170° and 167° west longitude. The islands bounded by these lines are as follow:—The Cook Group, including Raratonga, Mangaia, Atiu, Aitutaki, Mitiaro, Mauke, Hervey, Palmerston, Savage, Puka-puka, Rakaanga, Manahiki, Penryhn, and Suwarrow.

Including the Chatham Islands, the Auckland Islands, the Campbell Islands, the Bounty Islands, and many others which are dependent, the total area of the colony of New Zealand is estimated at 104,751 square miles.

CLIMATE.

THE Tropic of Capricorn divides Australia into two parts. Of these, the northern or inter-tropical portion contains 1,145,000 square miles, comprising half of Queensland, the Northern Territory of South Australia, and the north-western divisions of Western Australia. The whole of New South Wales, Victoria, New Zealand, Tasmania, and South Australia proper, half of Queensland, and more than half of Western Australia, comprising 1,932,000 square miles, are without the tropics. In a region so extensive, very great varieties of climate are naturally to be expected, but it may be stated as a general law that the climate of Australasia is milder than that of corresponding lands in the Northern Hemisphere. During July, which is the coldest month in southern latitudes, one half of Australasia has a mean temperature ranging from 40° to 64°, and the other half from 64° to 80°. The following are the areas subject to the various average temperatures during the month referred to :—

Temperature, Fahr.	Area in sq. miles.
35° — 40°	300
40° — 45°	39,700
45° — 50°	88,000
50° — 55°	617,800
55° — 60°	681,800
60° — 65°	834,400
65° — 70°	515,000
70° — 75°	275,900
75° — 80°	24,500

The temperature during December ranges from 50° to above 95° Fahr., half of Australasia having a mean temperature below 83°. Dividing the land into zones of average summer temperature, the following are the areas which would fall to each :—

Temperature, Fahr.	Area in sq. miles.
50° — 55°	300
55° — 60°	66,300
60° — 65°	111,300
65° — 70°	74,300
70° — 75°	362,300
75° — 80°	439,200
80° — 85°	733,600
85° — 90°	570,600
90° — 95°	584,100
95° and over	135,400

Judging from the figures just given, it must be conceded that a considerable area of the continent is not adapted for colonisation by European races. The region with a mean summer temperature in excess of 95° Fahr. is the interior of the Northern Territory of South Australia north of

the 20th parallel; and the whole of the country, excepting the seaboard, lying between the meridians of 120° and 140° and north of the 25th parallel, has a mean temperature in excess of 90° Fahr.

Climatically, as well as geographically, New South Wales is divided into three marked divisions. The coastal region, which lies between the parallels of 28° and 37° south latitude, has an average summer temperature ranging from 78° in the north to 67° in the south, with a winter temperature of from 59° to 52°. Taking the district generally, the difference between the mean summer and mean winter temperature may be set down as averaging not more than 20°, a range smaller than is found in most other parts of the world. The famed resorts on the Mediterranean seaboard bear no comparison with the Pacific slopes of New South Wales, either for natural salubrity or for the comparative mildness of the summer and winter.

Sydney, situated as it is midway between the extreme points of the state, in latitude 33° 51' S., has a mean temperature of 63°, corresponding with that of Barcelona, the great maritime city of Spain, and of Toulon, in France; the former being in latitude 41° 22' N., and the latter in 43° 7' N. At Sydney the mean summer temperature is 70·8°, and that of winter 53·9°. The range is thus 16·9° Fahr. At Naples, where the mean temperature for the year is about the same as at Sydney, the summer temperature reaches a mean of 74·4°, and the mean of winter is 47·6°, with a range of 26·8°. Thus the summer is warmer, and the winter much colder, than at Sydney. The highest temperature in the shade experienced in Sydney was 109°, and the lowest winter temperature 36°, giving a range of 73°. At Naples the range has been as great as 81°, the winter minimum falling sometimes below the freezing-point. The mean temperature of Sydney for a long series of years was—spring 62°, summer 71°, autumn 64°, and winter 54°.

Passing from the coast to the table-land, a distinct climatic region is entered. Cooma, with a mean summer temperature of 65·4° and a mean winter temperature of 41·4°, may be taken as illustrative of the climate of the southern table-land, and Armidale of the northern. The first-named town stands in the centre of the Monaro plains, at an elevation of 2,637 feet above sea-level, and enjoys a summer as mild as either London or Paris, while its winters are far less severe. On the New England table-land, the climate of Armidale and other towns may be considered as nearly perfect as can be found. The yearly average temperature is scarcely 56·5°, while the summer only reaches 67·7°, and the winter falls to 44·4°, a range of temperature approximating closely to that of the famous health-resorts in the south of France.

The climatic conditions of the western districts of the state are entirely different from those of the other two regions, and have often been cited as disagreeable. Compared with the equable temperature of the coastal district or of the table-land, there may appear some justification for such a reputation, but only by comparison. The climate of the great plains, in spite of the heat of part of the summer, is very

healthy. The town of Bourke may be taken as an example. Seated in the midst of the great plain of the interior, it illustrates peculiarly well the defects as well as the excellences of the climate of the whole region. Bourke has exactly the same latitude as Cairo, yet its mean summer temperature is 1.3° less, and its mean annual temperature 4° less than that of the Egyptian city. New Orleans also lies on the same parallel, but the American city is 4° hotter in summer. As regards winter temperature, Bourke leaves little to be desired. The mean winter reading of the thermometer is 54.7° , and accompanied as this is by clear skies and an absence of snow, the season is both refreshing and enjoyable.

The rainfall of New South Wales ranges from an annual average of 64 inches at Port Macquarie, on the northern coast, and Kiandra, in the Monaro district, to 9 inches at Milparinka, in the Trans-Darling country. The coastal districts average about 42 inches of rain per annum; on the table-land the mean rainfall is 32 inches, but in the western interior it is as low as 20 inches, while at the ten stations in the far west the average was only 14 inches. The average rainfall of Sydney during forty-two years was 50 inches, while during 1901 a fall of 40 inches was recorded.

The climate of Victoria does not differ greatly from that of New South Wales; the heat, however, is generally less intense in summer and the cold greater in winter. Melbourne, which stands in latitude $37^{\circ} 50'$ S., has a mean temperature of 57.3° , and therefore corresponds with Bathurst in New South Wales, Washington in the United States, Madrid, Lisbon, and Messina. The difference between summer and winter is, however, less at Melbourne than at any of the places mentioned. The mean temperature is 6° less than that of Sydney and 7° less than that of Adelaide—the result of a long series of observations being:—Spring, 57° ; summer, 65.3° ; autumn, 58.7° ; winter, 49.2° . The highest recorded temperature in the shade at Melbourne was 110.7° , and the lowest, 27° ; but it is rare for the summer heat to exceed 85° , or the winter temperature in the day time to fall below 40° .

Ballarat, the second city of Victoria, about 100 miles west from Melbourne, and situated at a height of about 1,400 feet above sea-level, has a minimum temperature of 29° , and a maximum of 104.5° , the average yearly mean being 54.1° . Bendigo, which is about 100 miles north of Melbourne, and 700 feet above the level of the sea, has a rather higher average temperature, ranging from a minimum of 31.2° to a maximum of 106.4° , the average yearly mean being 59.4° . At Wilson's Promontory, the most southerly point of Australia, the minimum heat is 38.6° , and the maximum 96.4° , the average yearly mean being 56.7° .

During the year 1900 the rainfall at Melbourne amounted to 28.09 inches, the second highest total during the last ten years, while for a long series of years it averaged 25.58 inches, with an average of 131 days during the year on which rain fell. At Echuca, during 1900, 15.80 inches fell, and 32.82 at Portland. At Wilson's Promontory the rainfall was 42.80 inches.

As about one-half of the state of Queensland lies within the tropics, it is but natural to expect that the climate should be very warm. The temperature, however, has a daily range less than that of other countries under the same isothermal lines. This circumstance is due to the sea-breezes, which blow with great regularity, and temper what would otherwise be an excessive heat. The hot winds which prevail during the summer in some of the other colonies are unknown in Queensland. Of course, in a territory of such large extent there are many varieties of climate, and the heat is greater along the coast than on the elevated lands of the interior. In the northern parts of the state the high temperature is very trying to persons of European descent.

The mean temperature at Brisbane, during December, January, and February, is about 76° , while during the months of June, July, and August it averages about 60° . Brisbane, however, is situated near the extreme southern end of the colony, and its average temperature is considerably less than that of many of the towns farther north. Thus the winter in Rockhampton averages nearly 65° , while the summer heat rises almost to 85° ; and at Townsville and Normanton the average temperature is still higher.

The average rainfall of Queensland is high, especially along the northern coast, where it ranges from 60 to 70 inches per annum. At Brisbane 50.01 inches is the average of thirty-five years, and even on the plains of the interior from 20 to 30 inches usually fall every year. During 1900, 34.41 inches of rain fell in Brisbane, the number of wet days being 110.

South Australia, extending as it does over about 26 degrees of latitude, naturally presents considerable variations of climate. The southern portions have a climate greatly resembling that of the coast of Italy. The coldest months are June, July, and August, during which the temperature is very agreeable, averaging for a series of years 53.6° , 51.7° , and 54° for those months respectively. On the plains slight frosts occasionally occur, and ice is sometimes seen on the highlands. The summer is the only really disagreeable portion of the year. The sun at that season has great power, and the temperature frequently reaches 100° in the shade, with hot winds blowing from the interior. The weather on the whole is remarkably dry. At Adelaide there are on an average 120 rainy days per annum; during the last sixty years the mean rainfall has been 20.88 inches per annum, while farther north the quantity recorded was considerably less. The country is naturally very healthful, and in evidence of this it may be mentioned that no great epidemic has ever visited the state.

The climate of the Northern Territory of South Australia is extremely hot, except on the elevated table-lands. Altogether, the temperature of this part of the state is very similar to that of Northern Queensland, and the climate is equally unfavourable to Europeans. It is a fact worthy of notice that the malarial fevers which are so troublesome to the pioneers of the northern parts of Australia almost, and in some cases

entirely, disappear after the land has been settled and consolidated by stock. The rainfall in the extreme north, especially in January and February, is exceedingly heavy. The average yearly rainfall in the coast districts is about 63 inches.

Western Australia has practically only two seasons—the winter, or wet season, which commences in April and ends in October; and the summer, or dry season, which comprises the remainder of the year. During the wet season frequent and heavy rains fall, and thunderstorms with sharp showers occur in the summer. The extremes of drought and flood experienced in the other states are almost unknown in Western Australia, but during the summer months the north-west coast is sometimes visited by hurricanes of great violence. In the southern and early-settled parts of the state the mean temperature is about 64°; but in the more northern portions the heat is excessive, though the dryness of the atmosphere makes it preferable to most tropical climates. At Perth, in 1900, the mean temperature was 64°, the maximum being 106° and the minimum 39°; and the rainfall for the same year was 36·61 inches, rain having fallen on 124 days. Observations extending over a period of twenty-two years show the average rainfall at Perth as 33 inches. Although the heat is very great during three months of the year, the nights and mornings are almost always cool, and camping out is not attended with danger owing to there being so little moisture in the air.

Tasmania, protected as it is by its geographical position and by the tempering influence of the surrounding ocean from extremes of heat or cold, enjoys an exceedingly genial climate. The greater part of the island in the settled regions is characterised by a mild and equable temperature, ranging between the extremes of 20° to 44° in winter and 78° to 96° in summer. Spring and autumn are the most pleasant seasons of the year, especially the latter, when the mean reading of the thermometer is about 57°. The mean temperature of Hobart for the last fifty years has been 55°. The richness of its flora is an evidence of the genial nature of the climate of the state, while the purity of its atmosphere is proved by the small proportion of zymotic diseases recorded in the bills of mortality. The hot winds of the continent of Australia are felt in the northern parts of the island only, and even there they are greatly reduced in temperature by their passage across Bass Straits. Generally speaking, all through the summer months there are alternate land and sea breezes which tend to cool the atmosphere even on the hottest days. The climate is fresh and invigorating, and is much recommended as a restorative for those whose constitutions have been enfeebled by residence in hotter climes. Large numbers of tourists in search of health visit the island every summer. The rainfall, except in the mountain districts, is moderate and regular. The average downfall at Hobart for a long series of years was 25·10 inches, with 167 wet days per annum. In 1900 rain fell on 135 days, the total recorded for the year being 19·14 inches.

The climate of New Zealand in some respects similar to that of Tasmania, but the changes of weather and temperature are often very

sudden. As the colony extends over more than 10 degrees of latitude, its climate is very varied. That of the North Island is somewhat similar to the climate of Rome, Montpellier, and Milan; while the Middle or Southern Island more resembles Jersey, in the Channel Islands. The mean annual temperature of the North Island is 57°, and of the Middle Island 52°, while the yearly average of the whole colony for each season is as follows:—Spring, 55°; summer, 63°; autumn, 57°; and winter, 48°. The mean temperature of New Zealand is lower than that of similar latitudes in Europe, though higher than is experienced in America on corresponding parallels. The mean temperature of the South or Middle Island is less by about 5° than that of the North Island. Snow very seldom lies on the ground at the sea-level in the North Island, and only occasionally in the South Island. The summits of Ruapehu, the highest mountain in the North Island, and of the great mountain chain in the South Island, are covered with perpetual snow from an altitude of 7,500 feet above the level of the sea. Ice is occasionally seen in winter-time in all parts of New Zealand. The whole colony is subject to strong breezes, which frequently culminate in gales. The rainfall during 1901 varied very much at the several observing stations. At Auckland it amounted to 38·49 inches, while at Wellington there was a fall of 41·56 inches. At Rotorua, in the North Island, 50·6 inches fell during the year, and at New Plymouth, on the west coast, 58·4 inches were recorded. At Dunedin, on the east coast of the Middle Island, the rainfall amounted to 37·65 inches, while at Hokitika, on the west coast, no less than 134 inches fell during the year. Periods of lasting drought are almost unknown in the colony; indeed, it is very seldom that the records of any station show the lapse of a whole month without rain. The number of days in the year on which rain fell varied from 134 at Lincoln to 245 at New Plymouth.

The following table shows the distribution of rainfall area in Australasia:—

Rainfall.	Rainfall area in square miles.			
	Australia.	Tasmania.	New Zealand.	Australasia.
Under 10 inches ...	1,219,600	.....	.....	1,219,600
10 to 20 „ ...	843,100	9,440	.....	852,540
20 to 30 „ ...	399,900	.....	69,650	469,550
30 to 40 „ ...	225,700	8,380	17,410	251,490
40 to 50 „ ...	140,300	8,380	17,410	166,090
50 to 60 „ ...	47,900	.....	.....	47,900
60 to 70 „ ...	56,100	.....	.....	56,100
Above 70 „ ...	14,100	.....	.....	14,100
Total.....	2,946,700	26,200	104,470	3,077,370

FOOD SUPPLY AND COST OF LIVING.

CONSIDERING the comparatively high rate of wages which prevails, food of all kinds is fairly cheap in Australasia, and articles of diet which in other countries are almost within the category of luxuries are largely used even by the poorer classes. The average quantities of the principal articles of common diet annually consumed in the various states are given below :—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Common- wealth.	New Zealand.	Australasia.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Grain—									
Wheat	357·3	312·8	334·8	380·0	513·1	434·2	349·7	463·2	369·0
Rice	9·7	6·9	17·7	10·2	19·9	6·3	10·0	8·9	9·8
Oatmeal	7·0	6·9	4·1	5·4	10·0	15·6	7·0	9·3	7·5
Potatoes	197·7	250·2	165·3	128·4	179·2	528·1	218·8	495·4	264·9
Sugar	107·8	93·0	123·8	100·2	114·5	90·5	103·5	93·9	101·9
Tea	7·9	6·9	7·4	8·1	9·8	6·2	7·5	6·3	7·3
Coffee	0·5	0·7	0·5	0·8	0·8	0·3	0·7	0·4	0·6
Cheese	3·7	3·2	4·2	2·6	6·2	2·6	3·6	4·3	3·7
Butter	19·6	12·6	12·5	12·2	28·1	12·3	15·8	18·8	16·3
Salt	42·8	17·2	62·7	17·0	18·8	19·3	34·0	34·0	34·0
Meat—									
Beef	166·5	122·1	280·0	127·0	147·3	132·4	165·6	90·0	151·1
Mutton	118·8	75·7	90·0	75·0	147·9	89·8	98·3	110·0	100·5
Pork and Bacon	11·9	11·5	12·5	11·4	28·7	15·7	12·4	12·5	12·4

It will be seen that the consumption of wheat in the Commonwealth is 350 lb., ranging from 313 lb. in Victoria to 513 lb. in Western Australia, the average consumption for Australasia being 369 lb. per head. There is in all the states a tendency towards reducing the consumption of bread-stuffs, the place of bread being taken by potatoes and other vegetables. In Western Australia and in Tasmania the large influx of miners materially increased the consumption of breadstuffs, as shown by the high figures in the above table, but of late years the tendency in these, as in the other states, is towards a smaller consumption. The consumption of rice remains about the same from year to year, the average being 9·8 lb., varying from 6·3 lb. in Tasmania to 19·9 lb. in Western Australia. The use of tea is universal in Australia, but there has been a perceptible decline in the quantity used during the last fourteen years. The consumption is largest in Western Australia, with 9·8 lb. per head,

while South Australia comes next with 8.1 lb. per head. Sugar also enters largely into consumption, the average in the two principal states being 107.8 lb. per head in New South Wales and 93.0 lb. in Victoria. Coffee is not a universal beverage in Australasia, the consumption being only one-twelfth that of tea. It is used most largely in Western Australia and South Australia, where the annual demand amounts to 12.75 oz. per head ; but, like tea, the consumption of this beverage is not now so great as formerly.

In some of the states the consumption of potatoes per head of population may be less than is shown in the table. It is probable that the high average consumption of 528.1 lb. in Tasmania and 495.4 lb. in New Zealand is caused by the failure of the New South Wales and other continental markets to absorb the production of potatoes in excess of local requirements in those states, with the result that a quantity has to be given to live stock and poultry. Under these circumstances, it is impossible to determine with exactitude the quantity entering into the food consumption of the population.

The consumption of meat has been ascertained with exactness for five of the states, but these may be taken as fairly representing the whole group. The average quantity of beef consumed in the Commonwealth during the year amounts to 165.6 lb. per head ; of mutton, to 98.3 lb. ; and of pork, 12.4 lb. ; in all, 276.3 lb. It would thus appear that each inhabitant of Australasia requires daily nearly three-quarters of a pound of meat, and that during the year two sheep are killed for each member of the community, and one bullock to every five persons. It is obvious, therefore, that much meat must be wasted. The consumption in New Zealand cannot be accurately determined, but it is probable that about 212.5 lb. of meat is the average annual consumption per inhabitant, of which beef comprises 90.0 lb. ; mutton, 110.0 lb. ; and pork, 12.5 lb.

The quantity of meat used by the Australasian people, as shown by the above figures, is the most remarkable feature of their diet. The consumption per inhabitant in Germany is 64 lb., while in Australia it is four times that quantity. In the United States, a meat exporting country, the consumption is little more than half that of Australasia. The following table shows the meat consumption per head for the principal countries of the world :—

Country.	Per Inhabitant.	Country.	Per Inhabitant.
	lb.		lb.
Great Britain.....	109	Holland	57
France	77	Sweden	62
Germany	64	Norway.....	78
Russia	51	Denmark	64
Austria	61	Switzerland.....	62
Italy	26	United States	150
Spain	71	Canada	90
Belgium	65	Australasia	264

Judged by the standard of the food consumed, the lot of the population of Australasia appears to be far more tolerable than that of the people of most other countries. This will be seen most clearly from the following table, the particulars given in which, with the exception of the figures referring to Australasia, have been taken from Mulhall's *Dictionary of Statistics*:—

Country.	Lb. per Inhabitant.						Tea and Coffee — Oz.
	Grain.	Meat.	Sugar.	Butter and Cheese.	Potatoes.	Salt.	
United Kingdom	378	109	75	19	380	40	91
France	540	77	20	8	570	20	66
Germany	550	64	18	8	1,020	17	78
Russia	635	51	11	5	180	19	6
Austria	460	61	18	7	560	14	28
Italy	400	26	8	4	50	18	20
Spain	480	71	6	3	20	17	6
Portugal	500	49	12	3	40	17	18
Sweden	560	62	22	11	500	28	112
Norway	440	78	13	14	500	40	144
Denmark	560	64	22	22	410	25	140
Holland	560	57	35	15	820	20	240
Belgium	590	65	27	15	1,050	...	142
Switzerland	440	62	26	11	140	...	110
Roumania	400	82	4	9	80	...	8
Servia	400	84	4	9	80	...	8
United States ...	370	150	53	20	170	39	162
Canada	400	90	45	22	600	40	72
Australasia	386	264	102	20	265	34	126

Taking the articles in the foregoing list, with the exception of tea and coffee, and reducing them to a common basis of comparison, it will be found that the amount of thermo-dynamic power capable of being generated by the food consumed in Australasia is only exceeded by that eaten in Germany, Holland, and Belgium. For the purpose of comparison the figures of Dr. Edward Smith, F.R.S., in his well known work on *Foods*, have been used, and the heat developed has been reduced to the equivalent weight lifted 1 foot high. In estimating the thermo-dynamic effect of food, grain has been reduced to its equivalent in flour, and regard has been paid to the probable nature of the meat consumed. The figures for potatoes are given as they appear in the *Dictionary of Statistics*; but it is a probable supposition that but a small proportion of the quantity over 400 lb. set down for any country is required for human consumption, and the figures relating to some of the countries—notably the three just mentioned—are therefore excessive. The substances specified above are largely supplemented by other foods, both in America and in

Europe, but not more so than in these states, and the figures in the table may be taken as affording an accurate view of the comparative quantity and food value of the articles of consumption in the countries mentioned. To make such a comparison perfectly just, however, the average amount of work which each individual in the community is called upon to perform should be taken into consideration. In Australasia the proportion of women and children engaged in laborious occupations is far smaller than in Europe and America, and the hours of labour of all persons are also less, so that the amount of food-energy required is reduced in proportion. In his *Dictionary of Statistics*, under the heading of "Diet," Mulhall gives a measure of the aggregate amount of work performed by persons doing physical and mental labour, and it would appear that when burnt in the body the food of an average man should be equal to at least 3,300 foot tons of work daily; of a woman, 2,200; and of a child, 1,100 foot tons. For Australasia the average of all persons would be about 2,125 foot tons, whereas from the table just given it would appear that the amount of work to which the daily food consumed by each individual in Australasia is equivalent is not less than 4,199 foot tons.

It must be admitted, however, that the method of comparison adopted in the preceding paragraph is not entirely satisfactory, as the functions of various kinds of food have not been considered. Experiments and observations made in Europe show that a standard may be set up by which the amount of nutrients required to maintain different classes of people may be measured. Professor Voit, of Munich, has ascertained that to sustain a labouring man engaged in moderately hard muscular work there are required 118 grams of protein and quantities of carbo-hydrates and fats sufficient with the protein to yield 3,050 calories of energy. There are 454 grams in a pound avoirdupois, and the calorie is the amount of heat that would raise the temperature of 4 lb. of water 1° Fahrenheit. Applying the ascertained values of the various foods, the consumption of which has just been given, it will be found that the daily consumption per inhabitant is equivalent to 105 grams of protein and 3,195 calories, or about the quantity Professor Voit declares to be sufficient for a labouring man. If allowance be made for the fact that only 40 per cent. of the population are adult males, 33 per cent. women, and 27 per cent. children, the quantity of food consumed in Australasia would appear to be far in excess of the actual requirements of the population, and though the excess may be looked upon as so much waste, it is none the less evidence of the condition of a people whose circumstances permit them to indulge in it.

The consumption of many other articles of common use can be ascertained with some exactness, and this is given for the seventeen specified in the following list. In all cases where the commodities are wholly imported the actual quantities entering into consumption can be given ;

where there is a local manufacture it has been necessary in some instances to make an estimate, but as the data for such are ample the figures given may be taken as fairly reliable.

The principal feature of the table is the high consumption of Western Australia of most of the articles comprised in the list. Amongst the most notable of these are tinned fish, 8·58 lb. per inhabitant, compared with the Commonwealth average of 4·06 lb.; preserved milk 24 lb., compared with 3·45 lb.; onions 29·5 lb., compared with 15·98 lb.; candles 11·57 lb., compared with 4·7 lb.; kerosene oil 7·29 gallons, compared with 3·1 gallons; and soap 20·15 lb., compared with 13·84 lb.

The annual consumption per inhabitant based on the experience of the last two years was:—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
Cocoa and chocolate ...	0·90	0·68	0·39	0·86	0·90	0·67	0·75	0·60	0·72
Currants and raisins ...	4·78	4·93	5·05	6·92	5·49	5·10	5·12	7·64	5·55
Dates	1·23	1·03	0·70	0·50	1·09	0·70	1·00	0·60	0·93
Fish (tinned)	4·68	3·05	4·02	3·19	8·58	3·50	4·06	4·03	4·05
Honey	1·94	0·50	1·43	2·94	1·49	0·55	1·42	0·60	1·28
Maizena (cornflour)	2·39	1·58	0·74	1·23	1·88	0·55	1·70	1·58	1·68
Milk (condensed)	3·52	1·50	2·86	1·39	24·00	1·39	3·45	1·87	3·18
Mustard	0·32	0·27	0·28	0·27	0·33	0·21	0·29	0·35	0·30
Onions	13·43	19·17	17·77	9·50	29·50	8·55	15·98	...	...
Pepper	0·21	0·36	0·26	0·39	0·29	0·26	0·29	0·30	0·29
Sago	0·29	0·30	0·45	0·29	0·21	0·18	0·31	0·50	0·34
Tapioca	1·63	1·09	1·30	1·51	1·71	1·04	1·38	2·73	1·61
Blue (washing)	0·38	0·30	0·26	0·25	0·36	0·32	0·32	0·28	0·31
Candles	4·44	4·41	3·72	4·00	11·57	5·93	4·70	7·58	5·19
Soap	13·77	12·25	16·41	12·00	20·15	15·54	13·84	17·76	14·50
Starch	3·27	3·10	2·50	1·55	1·11	1·44	2·76	2·50	2·72
Kerosene oil	galls. 2·64	galls. 2·92	galls. 3·55	galls. 3·36	galls. 7·29	galls. 1·87	galls. 3·10	galls. 3·26	galls. 3·13

The following table gives the annual consumption of tobacco in Australasia and the principal countries of the world. The use of tobacco is more prevalent in Western Australia and Queensland than in any of the other states, but not to the extent which the figures of consumption would indicate, as both Western Australia and Queensland have a larger proportion of adult males amongst their population than the other states, and the proportionate number of smokers is larger, though the actual consumption per smoker may not be so. Compared

with other parts of the world, the average consumption of Australasia will not appear excessive :—

Country.	lb.	Country.	lb.
Australasia.....	2.50	Austria-Hungary.....	3.77
New South Wales.....	2.67	Italy.....	1.34
Victoria.....	2.13	Spain.....	1.70
Queensland.....	3.00	Holland.....	6.92
South Australia.....	1.91	Belgium.....	3.15
Western Australia.....	4.39	Switzerland.....	3.24
Tasmania.....	2.13	Sweden.....	1.87
New Zealand.....	2.35	Denmark.....	3.70
United Kingdom.....	1.41	Turkey.....	4.37
France.....	2.05	United States.....	4.40
Germany.....	3.00	Canada.....	2.11
Russia.....	1.23	Brazil.....	4.37

Taking Australia as a whole, the consumption of tobacco per inhabitant is much the same now as it was ten years ago ; but there has been a considerable change in the consumption of some of the states. In Victoria there has been a fall in amount consumed per inhabitant of nearly half a pound, and in Queensland of one-third of a pound. In New South Wales and South Australia the consumption has remained the same ; but in Western Australia there has been an increase of one and a fifth pound, in New Zealand of nearly one-third of a pound, and in Tasmania of one-sixth of a pound per inhabitant. In regard to the description of tobacco used, the chief point noticeable is the large increase in the consumption of cigarettes. In 1890 about 88.4 per cent. of the total consumption was of ordinary tobacco ; in 1901 the proportion had fallen to 85 per cent. ; of cigars, the consumption in 1890 was about 8.5 per cent., compared with 6 per cent. at present, and of cigarettes 3.1 per cent. in 1890, compared with 9 per cent. for the year 1901.

All the states except Tasmania manufacture tobacco, and the following figures show the average consumption of the locally-made and of the imported article during the last three years. The average quantity of imported leaf used in the local manufacture is also shown :—

State.	Consumption of locally-made—			Consumption of imported—			Import of Leaf.
	Tobacco.	Cigars.	Cigarettes	Tobacco.	Cigars.	Cigarettes	
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
New South Wales	2,081,186	15,569	288,240	895,956	198,931	79,879	1,296,000
Victoria	1,217,067	92,102	206,697	886,074	104,902	18,226	1,377,642
Queensland	591,364	2,135	21,998	691,484	65,486	64,008	52,768
South Australia	*	*	*	160,486	36,472		505,931
Western Australia	*	*	*	577,618	63,669	62,979	84,380
Tasmania .....	.....	.....	.....	325,890	18,803	17,603	.....
New Zealand	46,540	1,653		1,500,603	78,272	140,086	45,878

* Information not available.

Australasia as a whole compares very favourably with most European countries in the average quantity of intoxicants consumed, as the following statement shows. The figures, which are reduced to gallons of proof spirit from data given in Mulhall's *Dictionary of Statistics*, would appear even more favourable to Australasia were the fact of the large preponderance of males over females in these states made a feature of the comparison :—

Country.	Proof gallons.	Country.	Proof gallons.
United Kingdom	3·57	Portugal	3·00
France.....	5·10	Holland.....	4·00
Germany.....	3·08	Belgium.....	4·00
Russia.....	2·02	Denmark	5·00
Austria	2·80	Scandinavia	4·36
Italy	3·40	United States	2·65
Spain	2·85	Australasia	2·48

The following table shows the average consumption for all the states during the last three years :—

State	Spirits.		Wine.		Beer, &c.		Equivalent in Alcohol (Proof) per Inhabitant
	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant.	
	galls.	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales.	1,032,031	0·77	886,441	0·66	13,911,993	10·43	2·33
Victoria	896,879	0·76	1,923,314	1·62	14,446,805	12·16	2·83
Queensland	517,698	1·08	208,404	0·44	5,452,256	11·41	2·69
South Australia ...	152,681	0·43	614,820	1·72	3,234,551	9·06	2·12
Western Australia.	262,195	1·54	160,971	0·95	4,149,104	24·40	4·98
Tasmania	82,231	0·48	18,981	0·11	1,438,363	8·48	1·61
Commonwealth.	2,943,715	0·80	3,812,931	1·03	42,633,072	11·54	2·60
New Zealand	516,853	0·69	111,610	0·15	6,542,744	8·72	1·86
Australasia	3,460,568	0·78	3,924,541	0·88	49,175,816	11·06	2·48

The largest consumption of spirits per inhabitant is in Western Australia, Queensland being second. Wine is used most freely in South Australia, Victoria, and Western Australia; and beer in Western

Australia. The average consumption of alcohol in the Commonwealth for the last three years amounted to 2·60 gallons of proof spirit per inhabitant, ranging from 4·98 gallons in Western Australia to 1·61 gallons in Tasmania. There was a great diminution in the quantity of alcohol consumed in Australasia in the year immediately following the bank crisis, and in 1895 the consumption fell to 2·1 gallons, as compared with 2·94 gallons in 1891. From 1895 there was a gradual increase, and the consumption for the last five years has ranged between 2·4 and 2·5 gallons.

During the last ten years there has been a considerable change as regards some of the states in the character of the beverages consumed. This change is most noticeable in the consumption of beer in Victoria and Western Australia. In the first-named state during the year 1890 there was a consumption of 21,490,556 gallons of malt liquors; this is equal to 19·21 gallons per head; in 1900 the total consumption had fallen to 14,859,766 gallons, equal to 12·45 gallons per head. In Western Australia the experience was of the opposite character, as the accompanying table shows:—

State.	Consumption of Malt Liquors in 1890.		Consumption of Malt Liquors in 1900.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.
New South Wales	11,710,936	10·63	14,893,700	11·00
Victoria	21,490,556	19·21	14,859,766	12·45
Queensland	3,948,093	10·16	5,805,461	11·84
South Australia	3,385,442	10·63	3,298,004	9·15
Western Australia	501,534	10·63	4,544,367	25·88
Tasmania	1,329,671	9·29	1,564,126	9·06
Commonwealth	42,366,232	13·59	44,965,424	12·00
New Zealand	4,922,577	7·92	6,986,900	9·15
	47,288,809	12·65	51,952,324	11·52

The total consumption of malt liquors for the Commonwealth states showed little increase during the ten years, but there was a considerable increase in New Zealand. The consumption of spirits has declined in all the states except Western Australia and New Zealand, where there has been an increase in quantity and in the volume per inhabitant. For the Commonwealth the decline during the ten years amounted to

162,538 gallons. The following is a statement of the consumption in 1890 and 1900 respectively :—

State.	Consumption of Spirits in 1890.		Consumption of Spirits in 1900.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.
New South Wales.....	1,201,946	1·09	1,103,969	0·82
Victoria	1,110,371	0·99	932,834	0·78
Queensland	613,620	1·58	528,587	1·08
South Australia.....	169,126	0·53	154,955	0·43
Western Australia	58,025	1·23	273,598	1·56
Tasmania.....	92,209	0·64	88,816	0·51
Commonwealth	3,245,297	1·04	3,082,759	0·82
New Zealand	432,882	0·70	549,932	0·72
Australasia	3,678,179	0·98	3,632,691	0·81

The consumption of wine can be determined only approximately. Wine is an article of local production not subject to excise duty, and it is quite possible some wine may be consumed without its production being noted. The following statement gives the probable consumption for the periods named :—

State.	Consumption of Wine in 1890.		Consumption of Wine in 1900.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.
New South Wales.....	802,150	0·73	903,934	0·67
Victoria	1,559,603	1·39	1,543,640	1·29
Queensland	270,508	0·70	184,475	0·38
South Australia.....	554,462	1·74	481,753	1·34
Western Australia	216,860	4·60	169,038	0·96
Tasmania.....	24,073	0·17	19,074	0·11
Commonwealth	3,427,656	1·10	3,301,914	0·88
New Zealand	115,088	0·19	116,188	0·15
Australasia	3,542,744	0·95	3,418,102	0·76

Several descriptions of Australian wines have a natural strength of 30 per cent. of proof spirit, while from analyses which have been made it would appear that the strength of these wines offered for sale varies from 24 to 37 per cent. of spirit. Imported beers range from 13·88 per cent. to 15·42 per cent. in the case of English, and from 9·58 per cent. to 11·76 per cent. of proof spirit in Lager, while the local

manufacture varied according to the make from 6·1 to 13·8, the average being 9·97 per cent. Four of the states manufacture spirits, and five make wine, while beer is brewed in all of them. The average consumption of locally-manufactured spirits, wine, and beer for the last three years has been estimated, and will be found in the following statement :—

State.	Spirits.		Wine.		Beer, &c.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	galls.	galls.	galls.	galls.	galls.	galls.
New South Wales	7,086	0·005	806,609	0·60	12,304,552	9·23
Victoria	197,249	0·17	1,887,284	1·59	13,918,235	11·72
Queensland	67,925	0·14	159,169	0·33	4,979,126	10·42
South Australia	25,067	0·07	609,979	1·71	3,087,006	8·64
Western Australia.....	.....	...	104,199	0·06	3,552,453	20·89
Tasmania.....	.....	...	.....	...	1,369,198	8·07
Commonwealth	297,327	0·08	3,567,240	0·97	39,210,570	10·61
New Zealand .....	.....	...	.....	...	6,361,867	8·48
Australasia	297,327	0·07	3,567,240	0·80	45,572,437	10·25

If the figures in this table be subtracted from those in the tables on the two preceding pages the consumption of imported goods will be found.

EXPENDITURE ON LIVING.

In previous issues of this volume statements appeared showing the annual expenditure of the people of New South Wales and of the other states of the Commonwealth on food, clothing, house rent, and other services usually grouped together under the term "cost of living." The necessity for some such table arose from the circumstance that the states lived under separate tariffs, which in various ways influenced the prices of commodities. But with the uniform system of Customs that prevails throughout Australia, the conditions governing the cost of commodities are, so far as they are affected by the operation of tariff charges, made practically the same.

The explanation of the differences that exist in the total expenditure of the peoples of the various states will be found rather in difference of consumption than of prices, and the extent of this difference in consumption will be seen from a scrutiny of the tables relating to the annual consumption of thirty-four articles of common use given in the earlier part of this chapter.

The cost of providing food, and beverages other than intoxicants, consumed in Australia during the year 1901 may be set down at

£49,235,000. This sum represents the price to the consumer, and covers all charges except that of cooking and preparing the food for the table. The expenditure on wines, spirits, and beer amounted to £14,249,000, so that the total expenditure for all food and beverages was £63,484,000, equal to £16 18s. 11d. per inhabitant, or 11·1d. daily. Excluding intoxicants, the yearly expenditure per inhabitant was £13 2s. 10d., and the average per day, 8·6d. Compared with the cost of food supply in other countries, this sum will not appear considerable, especially when allowance is made for the profusion with which flesh meat is consumed and wasted in Australia.

Of the total cost of food and beverages, viz, £63,484,000, the expenditure on fresh meat is the largest item, being 20·9 per cent. of the whole; bread is 10·9 per cent.; milk, butter, and cheese, 13·6 per cent.; vegetables and fruits, 13·8 per cent.; sugar, 6·2 per cent.; tea, coffee, cocoa, 3·8 per cent.; and wines, beers, and other spirituous liquors, 22·4 per cent. The following is the approximate retail cost of the chief articles that enter into daily consumption:—

	£
Bread	6,943,000
Fresh meat	13,240,000
Vegetables and fruits	8,730,000
Milk, butter, cheese, etc.	8,664,000
Other farm produce	1,042,000
Sugar	3,955,000
Tea, coffee, etc.	2,381,000
Other foods	3,428,000
Non-alcoholic beverages	852,000
Total expenditure on food	£49,235,000
Wines, beer, and spirituous liquors	14,249,000
Total expenditure on food and beverages.....	£63,484,000

The total expenditure on food just given works out at an average of £13 2s. 10d. per inhabitant, which is probably higher than in any other country, but the mere statement of expenditure affords but a partial view of the question, as the earnings of the people must be taken into consideration, otherwise the comparison is of little value. If this be done it will be found that few countries approach Australia in the small proportion of income absorbed in providing food for their people. The following table taken from Mulhall's *Dictionary of Statistics*, shows that while the actual cost of food and drink is £16 18s. 11d. in Australia, as against £14 4s. 9d. in Great Britain, the earnings required to pay for that food are not larger proportionately than in the countries which show most favourably in the table. The number of working days in the year is assumed to be 300, allowing for thirteen days' sickness and fifty-two Sundays. It should, however, be borne in mind that comparisons of this kind are more or less fanciful. The economic condition of a

people is more readily and conclusively ascertained by reference to the actual quantities of foods of various kinds entering into consumption, than by the nominal value of such foods and the proportion of the average income spent in their attainment :—

Country.	Average annual cost of food and beverage.	Ratio of cost of food to earnings.	Days' earnings equal to annual cost of food.
	£ s. d.	per cent.	days.
United Kingdom ...	14 4 9	42·2	127
France	12 4 5	44·0	142
Germany	10 18 5	49·1	148
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	153
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	135
United States	9 17 7	25·3	76
Canada	3 9 0	32·5	97
Australia	16 18 11	37·1	111

The expenditure of Australia coming under the designation "cost of living" amounted in 1900 to £38 Os. 6d., made up of the following items. The expenditure of New Zealand is not included.

Division of Expenditure.	Total Expenditure. £	Per Inhabitant. £ s. d.
Food and non-alcoholic beverages	49,235,000	13 2 10
Fermented and spirituous liquors	14,249,000	3 16 1
Tobacco	3,275,000	0 17 6
Clothing and drapery	21,177,000	5 13 1
Furniture	1,749,000	0 9 4
Rent or value of buildings used as dwellings	14,179,000	3 15 8
Locomotion	5,282,000	1 8 2
Fuel and light	4,528,000	1 4 2
Personal attendance, service, and lodging	6,101,000	1 12 7
Medical attendance, medicine, and nursing	3,890,000	1 0 9
Religion, charities, education (not including state expenditure)	3,121,000	0 16 8
Art and amusement	3,318,000	0 17 9
Books, newspapers, etc.	1,968,000	0 10 6
Postage and telegrams, not incidental to earning the incomes	1,024,000	0 5 6
Direct taxes not falling on trade	1,278,000	0 6 10
Household expenses not included elsewhere	4,801,000	1 5 7
Miscellaneous expenses	3,280,000	0 17 6
Total	£142,455,000	38 0 6

According to Mulhall, the expenditure per inhabitant in the leading countries of Europe and in America is as follows :—

Country.	Expenditure per Inhabitant.	Country.	Expenditure per Inhabitant.
	£ s. d.		£ s. d.
United Kingdom	29 14 9	Norway.....	19 0 0
France.....	23 19 4	Denmark	28 11 5
Germany.....	20 3 4	Holland	20 17 4
Russia.....	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland	18 0 0
Italy	11 11 0	United States	32 16 2
Spain	15 12 6	Canada	23 6 2
Portugal.....	11 5 6		
Sweden	20 8 4	Australia	38 0 6

The expenditure of Australia as compared with population is, according to this table, largely in excess of that of other states, but as expenditure depends upon income, a table such as the above has little meaning unless regard be paid to the amount of income available for expenditure and the purchasing power of money. This latter question is too involved to be dealt with, so far as European and American countries are concerned, within the limits at disposal in this volume. It may, however, be mentioned that so far as the primary food requirements are concerned the purchasing power of money is greater in Australia than in any of the countries mentioned in the foregoing list: house rents, however, are higher, as well as the price of most descriptions of wearing apparel. The question of cost of living is further dealt with in another place.

PRICES OF COMMODITIES.

The area of Australia is so extensive, and the population, except on the sea-board, so scattered, that the determination with any exactness of the average prices of the various commodities consumed is almost a matter of impossibility. No attempt has therefore been made to ascertain the average for the whole continent, and in the following pages the prices refer to the Sydney markets alone. There is a further reason. Until the discovery of gold there were virtually only two important markets in all Australia—Sydney and Hobart—and of these Sydney was much the more considerable. Any comparisons of the prices of commodities extending back beyond 1852 must be based mainly upon the experience of Sydney, although from 1840 onwards there is sufficient information in the chapter on the Industrial Progress of Australia in this volume to enable Sydney prices to be adjusted for Melbourne, Hobart, Adelaide, and the other chief centres of population. For the earlier years the authority of contemporary newspapers has been followed where the official records are obscure or silent, but since 1836 these records have been available, and have for the most part been followed.

The accompanying table exhibits the average prices of eight commodities during each year since 1820 :—

Year.	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.	Cheese per lb.	Sugar per lb.	Tea per lb.	Pota-toes per cwt.	Maize per bushel.
	d.	d.	s. d.	s. d.	d.	s. d.	s. d.	s. d.
1820	5	5½	2 9	1 1	.....	.....	7 3	5 6
1821	6	5½	2 8	1 2	.....	.....	7 3	5 0
1822	5	5½	2 6	1 3	.....	.....	5 9	4 9
1823	3½	5½	2 2	1 2	.....	.....	6 1	2 6
1824	5	5½	3 0	1 4	.....	.....	6 10	4 10
1825	4½	6	2 2	1 5	.....	.....	8 4	5 6
1826	5½	5½	2 4	0 10	.....	.....	9 0	4 0
1827	4½	6½	2 3	1 1	.....	.....	8 0	5 0
1828	6	5	2 6	1 4	.....	.....	18 6	9 0
1829	7	6	1 10	1 1	.....	.....	12 6	7 9
1830	4½	3½	1 0	0 11	3½	2 6	8 0	3 10
1831	4	4½	1 8	0 6	3½	2 6	5 0	3 8
1832	5	5	2 3	0 7	3½	2 6	5 0	4 7
1833	4	3½	1 5	0 6	3½	2 6	10 0	2 11
1834	5	4	1 6	0 6	3½	2 6	14 0	4 4
1835	4	3½	1 10	0 5	3½	2 6	10 0	4 6
1836	5½	3	1 9	0 8½	3½	2 6	7 0	6 9
1837	3	4½	1 9	0 7½	3½	2 6	10 0	4 2
1838	5	5½	1 6	0 8½	3½	1 5	6 0	3 7
1839	11½	4½	2 6	1 1	3½	1 6	10 0	9 0
1840	7½	6½	2 0	1 0	3½	2 6	10 0	5 3
1841	4½	6½	2 6	0 10	3½	3 3	10 0	2 10
1842	5	4½	2 6	1 1½	3½	2 0	7 0	4 9
1843	3½	2½	1 9	0 9	3	2 6	5 0	2 9
1844	2½	2½	1 5	0 4½	2½	1 6	4 0	1 5
1845	2½	2½	1 6	0 6	3	1 6	4 6	2 11
1846	3½	2½	1 8	0 6	4	2 3	3 0	4 1
1847	3½	2½	1 2	0 7	4	2 4	5 10	2 1
1848	3½	2½	1 1	0 8	3½	2 0	4 4	1 8
1849	2½	2½	1 2	0 6½	3½	1 9	3 0	3 9
1850	4½	2½	1 3	0 7	3½	1 10	4 0	4 1
1851	5	2½	1 3	0 7	3½	1 4	6 0	3 7
1852	4½	3	1 3	0 7	3½	1 4	6 0	3 11
1853	6½	3½	1 5½	0 7½	3½	1 4	13 0	9 3
1854	7½	4½	2 3	0 9	5	2 6	18 6	10 0
1855	9	6	2 4	1 3	7	2 5	21 4	8 7
1856	7½	3½	1 11	1 2	5½	2 2½	10 0	3 8
1857	5	3½	2 0	1 0	7½	2 6	14 6	8 2
1858	6	4	2 0	1 0	7	2 6	15 6	6 5
1859	6	4	1 10	1 0	5	2 6	8 0	3 5

FOOD SUPPLY AND COST OF LIVING.

Year.	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.	Cheese per lb.	Sugar per lb.	Tea per lb.	Potatoes per cwt.	Maize per bushel.
	d.	d.	s. d.	s. d.	d.	s. d.	s. d.	s. d.
1860	6½	4	1 6	1 10	5½	2 3	7 6	2 10
1861	6½	3	1 8	0 9	5½	2 4	7 3	5 1
1862	4½	4½	2 3	0 9	4½	2 0	8 0	5 0
1863	4	4½	1 6	0 10	4½	2 0	7 0	3 10
1864	5½	4	1 6	0 8	4½	2 0	5 0	3 11
1865	7½	3	1 9	0 9	4½	2 0	8 0	3 7
1866	6½	3	1 3	1 0	4	2 6	6 0	4 1
1867	3½	2½	1 6	0 7½	4	2 0	7 0	2 5
1868	4	3½	1 3	0 9	4	2 0	9 0	2 11
1869	3½	2	1 6	0 6	4	2 0	4 0	3 8
1870	3½	3½	1 3	0 6	4	2 0	5 0	3 4
1871	3½	2½	1 3	0 7½	4	2 3	4 0	3 0
1872	3½	2½	1 0	0 9	4	1 9	5 0	2 2
1873	4	2½	1 3	0 5	4	1 9	3 6	3 1
1874	3½	4	1 7	0 6	4	1 9	4 9	4 6
1875	3	3½	1 3	0 9	4½	1 9	5 6	4 3
1876	3½	5½	1 3	0 7	4	1 9	4 9	3 1
1877	4	4½	1 6	0 6	4	2 0	4 9	3 4
1878	4	4	1 3	0 6	4	1 9	5 10	4 0
1879	3½	4	0 10½	0 6	3½	1 6	6 0	3 1
1880	3	3½	0 10	0 7	4	2 0	4 3	2 6
1881	3½	3½	0 10½	0 6½	3½	2 0	4 0	3 7
1882	4	4½	1 3	0 8	4	2 0	5 6	5 4
1883	3½	4	1 4	0 10	4	2 0	6 0	4 0
1884	3	4½	1 3	0 9	3½	1 6	6 6	5 0
1885	3	4½	1 9	1 0	3	1 9	5 6	3 11
1886	3½	4½	1 9	1 1	3½	1 9	6 3	3 9
1887	3½	4	1 4	0 10½	3½	1 9	5 0	3 11
1888	3	4	1 7	0 8½	3½	1 6	6 0	3 4
1889	3½	3	1 4	0 9	3½	1 6	9 0	3 7
1890	3½	4	1 0	0 8	3½	1 6	6 0	3 10
1891	3½	4	1 1	0 9	3½	2 0	5 0	2 11
1892	3½	4	1 3	0 8	3	1 6	5 6	3 4
1893	3½	4	1 1½	0 8	2½	1 6	6 4	4 0
1894	2½	3	1 0	0 8	2½	1 6	4 6	2 6
1895	2½	3	1 0	0 8	2½	1 6	4 3	2 9
1896	3	3	1 0	0 8	2½	1 6	5 6	2 7
1897	3	2½	1 0	0 8	2½	1 6	5 3	2 3
1898	2½	2½	1 0	0 8	2	1 6	9 0	2 9
1899	3	3½	1 0	0 8	2½	1 6	9 4	3 4
1900	3	3½	0 11	0 7½	2½	1 4	6 9	3 0

The most noteworthy feature of the history of prices in Australia—the great range of some of the commodities during the year—is not disclosed by the foregoing table. This variation is most noticeable during the early years, and amongst articles of local production, and was the result of the almost complete isolation of the country from the markets of the world. Prior to the discovery of gold, communication by letter with the outside world was at best uncertain, and as late as 1878 the regular mails were made up but once a month. The establishment of telegraphic communication, amongst other results, has had a marked effect on prices, so that except in rare instances, and for goods produced in excess of the demand, the production of Australia no longer determines the prices of goods required for the local markets. Exception must, of course, be made for perishable produce, which is still liable to a great range in price during the course of a single year, as will be shown by some examples hereafter given.

Potatoes have varied in price from year to year. The lowest average for a whole twelvemonth was 3s. 6d. per cwt. in 1873, and the highest was 21s. 5d. in 1855, shortly after the discovery of gold; and it may not be without interest to note that from 1853 to 1855 the price of potatoes was extraordinarily high. Commencing with the year first named, the averages were 13s., 18s. 6d., 21s. 4d., 10s., 14s. 6d., and 15s. 6d. per cwt. With regard to the variation in a single year, the following examples may be cited:—In 1820, from 4s. 6d. to 10s. per cwt.; in 1825, from 4s. to 12s.; in 1829, from 9s. to 26s.; in 1834, from 9s. to 19s.; in 1839, from 7s. to 25s.; in 1854, from 11s. to 24s.; in 1856, from 3s. to 11s.; and in 1888, from 2s. to 24s.

The price of maize has not been subject to very great fluctuation, since, being little used except for horse-feed, this grain is capable of being replaced by other products; nevertheless the prices have ranged from 1s. 5d. in 1844 to 10s. in 1854.

In the list given on pages 369 and 370 are included quotations for bread at per 2-lb. loaf. In most years the price varied somewhat regularly with that of wheat. There are, however, exceptions to this rule, chiefly in the years during which wheat brought an unusually high figure, when the price of bread was generally less than might have been expected. The lowest price at which bread has been retailed was 2½d. in 1849, and the highest was 14d. the 2-lb. loaf, which figure was paid for a short time in 1839.

In addition to the eight commodities which are given on pages 369 and 370, the following list of the average retail prices of articles largely used may not be without interest. The information begins with 1836, beyond which year it is difficult to determine the exact average.

Year.	Bacon per lb.	Eggs per doz.	Rice per lb.	Oat- meal per lb.	Coffee per lb.	Salt per lb.	Beer (Col.) per gal.	Soap per lb.	Starch per lb.	Tobacco per lb. (Col.)	Tobacco per lb. (imp.)
	s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.	s. d.
1836	...	2 2	9	...	...	...	...	4½	...	...	3 3
1837	...	2 6	...	...	1 6	1	1 0	...	...	...	4 0
1838	...	4 0	3	...	...	...	...	...	...	...	...
1839	...	3 0	3	...	1 6	...	...	4½	...	...	3 3
1840	0 10	2 9	2½	...	1 4	...	...	4½	...	...	3 3
1841	0 11	2 3	2½	...	1 4	...	...	4½	...	...	3 3
1842	0 10½	1 11	2	...	1 4	1	1 9	4½	...	...	3 6
1843	0 10	2 0	1½	...	0 10	0½	2 3	...	...	1 4	3 6
1844	0 5½	0 11	1¾	...	0 8½	1½	1 3	3¾	...	...	3 6
1845	0 6½	1 1	3	...	0 7½	1½	1 1	3½	...	1 6	4 6
1846	0 9½	1 3	1½	...	0 10	1½	2 0	5	...	1 9	4 6
1847	0 6½	1 1	3¾	6	1 1	1½	3 4	5	1 0	1 9	4 4
1848	0 9	1 3	3¾	6	1 1	1½	3 3	5	1 0	1 9	4 4
1849	0 8½	1 1	3¾	5¾	1 0	1½	2 8	5½	1 1	2 0	4 7
1850	0 8½	1 4	4	6	1 2	1¾	2 9	5½	1 0	2 7	4 10
1851	0 9½	1 8	4	6	1 3	1½	2 6	5½	1 0	3 8	7 9
1852	1 1	1 6	4	6	1 3	1½	2 6	6	1 0	4 0	8 0
1853	1 2½	2 3	4½	6	1 3	1½	2 4½	6	1 0	4 0	7 6
1854	1 4½	2 9	5	7½	1 6	2½	3 6	8	1 6	4 0	5 6
1855	0 11½	2 8	6	9	1 8	4	4 7	8	1 6	3 0	5 0
1856	0 10	2 2	5¼	7	1 7½	3	3 6	7¼	1 1½	2 6½	5 3
1857	0 9½	1 11	5	7	1 8	2¾	4 0	7	1 0	2 7	5 0
1858	0 7½	2 3	6	7	1 8	4½	4 3	7	1 5	2 6	5 0
1859	0 8½	1 10	4½	7	1 8	2½	4 0	6½	1 0	2 6	5 0
1860	1 0	1 3	5	6	1 6	2½	3 6	7	1 0	2 3	5 0
1861	0 10	1 6	4	6	1 6	2½	3 6	6	0 10½	2 0	5 6
1862	0 10	1 5	3	5	1 5	1½	2 0	4½	0 8	4 6	6 0
1863	0 10½	1 7	3	4	1 4	1½	1 6	4	0 7	3 0	7 6
1864	0 10	1 6	3	4	1 4	1½	2 0	4	0 8	1 6	5 6
1865	0 9¾	1 6	3	4	1 4	1½	2 0	4	0 8	2 6	5 6
1866	1 0	1 6	4	4	1 4	1½	2 0	4½	0 7	2 6	5 0
1867	0 10	1 7	3½	4	1 4	1	1 6	4	0 7	1 9	4 6
1868	0 9½	1 2	4	4	1 4	1½	2 0	4	0 7	1 9	5 0
1869	0 10	1 3	3	4	1 0	1	1 4	4	0 8	1 0	3 6
1870	0 10½	1 4	3	4	1 2	1	1 4	4	0 7	1 3	3 6
1871	0 9½	1 4	2½	2½	1 0	0½	2 3	3	0 4½	1 0	3 0
1872	0 9	1 1	3	3	1 1	0¾	1 4	3	0 5	1 4	3 6
1873	0 9	1 4	2½	2½	1 2	0¾	2 3	3	0 5	2 0	3 6
1874	0 8¾	1 6	3	3¾	1 4	0½	2 0	2¾	0 6	1 9	3 3

Year.	Bacon	Eggs	Rice	Oat-	Coffee	Salt	Beer	Soap	Starch	Tobacco	Tobacco
	per lb.	per doz.	per lb.	meal	per lb.	per lb.	(Col.)	per lb.	per lb.	per lb.	per lb.
	s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.	s. d.
1875	0 9½	1 6	3	3	1 2	1½	3 0	3	0 5	2 0	3 9
1876	0 9	1 0	3	3	1 2	1	2 0	2½	0 5	1 9	3 0
1877	0 9	1 6	3	3½	1 3	1	2 0	2½	0 5	2 0	3 9
1878	0 9	1 3	3	3	1 3	0½	2 0	2	0 5	1 6	3 9
1879	0 8	1 7	2½	2½	1 0	0½	2 0	2	0 5	1 6	3 0
1880	0 7½	1 4	3	3	1 5	0¾	2 0	3	0 5½	2 0	4 0
1881	0 7½	1 0	3	3	1 5	0¾	2 0	3	0 5½	2 0	4 0
1882	1 0	2 0	3½	4	1 5	1	2 0	2½	0 6	3 0	5 0
1883	1 0	1 11	3	4	1 9	1	2 0	3	0 7	3 0	6 0
1884	0 11½	1 11	2½	3	1 4	1	2 0	3	0 6	3 0	5 0
1885	0 10½	1 10	3	3	1 5	0¾	2 0	3	0 6½	3 0	6 0
1886	0 10½	1 8	3½	2¾	1 6	1	2 0	4	0 6½	4 0	5 6
1887	0 10	1 7	3	2¾	1 6	1	2 0	3½	0 6½	4 0	5 6
1888	0 10½	1 7	3	2¾	1 6	1	2 0	3½	0 6	4 0	5 6
1889	0 11	1 8	3	3½	1 6	1	2 0	3½	0 6	4 0	5 6
1890	1 0½	1 6	4	3	2 0	1	2 0	3½	0 5	4 0	6 0
1891	0 10	1 6	3	2½	2 0	1	2 0	3½	0 5	4 0	6 0
1892	0 9	1 6	3	2½	1 10	0¾	2 0	3	0 4½	4 0	6 0
1893	0 11	1 6	3	2½	1 10	0¾	2 0	3	0 4½	4 0	6 0
1894	0 7	1 3	3	2½	1 10	0¾	2 0	3	0 4½	4 0	6 0
1895	0 7½	1 0	2½	2	1 9	0¾	2 0	2	0 4	4 0	6 0
1896	0 7½	1 0	2	2	1 9	0¾	2 0	2	0 4	4 0	6 0
1897	0 8	1 0	2½	2½	1 9	0¾	2 0	2½	0 4	4 0	6 0
1898	0 8½	1 0	2	2½	1 9	0¾	2 0	2½	0 4	4 0	6 0
1899	0 8	0 11	2	2½	1 10	1	2 0	2½	0 3½	4 0	6 0
1900	0 7½	0 11	2½	2½	1 6	0½	2 0	3	0 3½	4 0	6 0

In the quotation of prices in the foregoing tables the figures given are those charged in the retail shops. It is quite possible that produce of all kinds may have been bought at cheaper rates than those stated, but higher rates were also paid, and the figures will be found to represent the fair average rates, having regard to the class of goods consumed. It is of importance to take into consideration the quality of the produce consumed, for very considerable changes in the direction of improvement have taken place in this respect. Thus, the ordinary sugar now used, and obtainable for about 2d. per lb., is a good white sugar, whereas some years ago only a common quality of moist sugar was found on the tables of the people. A very material improvement has been effected in the quality of flour, a large proportion of the

present consumption being roller-made. Salt-butter still forms the bulk of the supply, but it is usually of recent make; while formerly the butter was imported from Great Britain, and was several months old before reaching the dining-table. The candles now used are made of stearine, but the time is not remote when only the common tallow candle was in general use; and so with many other articles of ordinary consumption. The retail prices are those actually paid from day to day, irrespective of the nominal wholesale rates of the commodities in the metropolitan markets.

PRICE-LEVELS OF ARTICLES OF COMMON USE.

A consideration of retail prices would not be complete without a statement of the price-level in different years. This can be given for foods; but at present the data are hardly sufficient to establish an exact series of price-levels, taking into consideration all the elements of ordinary expenditure. The information in regard to foods is given below, the assumption being made that the quantities entering into consumption were the same formerly as at the present day. This assumption, however, is in some respects erroneous; but there appear to be no other means within reach to effect a just comparison. Sugar, tea, coffee, butter, cheese, and potatoes are now more largely used than (say) prior to 1870; but bread, or other forms in which flour is used, and meat, are not consumed so largely. However, when full allowance is made on this score, the following table will still be found to approximate closely to the truth. The price-level is calculated on the prices ruling for beef, mutton, bread, sugar, rice, potatoes, tea, beer, and tobacco:—

Period.	Price-level of principal Articles of Consumption.	
	1821-37 prices =1,000.	1896-1900 prices =1,000.
1821 to 1825	1,000	1,548
1826 ,, 1830	1,000	1,548
1831 ,, 1835	802	1,241
1836 ,, 1840	930	1,440
1841 ,, 1845	676	1,046
1846 ,, 1850	669	1,036
1851 ,, 1855	1,038	1,607
1856 ,, 1860	1,153	1,785
1861 ,, 1865	959	1,485
1866 ,, 1870	753	1,166
1871 ,, 1875	709	1,098
1876 ,, 1880	759	1,175
1881 ,, 1885	756	1,170
1886 ,, 1890	730	1,130
1891 ,, 1895	670	1,037
1896 ,, 1900	646	1,000

During the past forty years prices of food stuffs have changed very slightly, such changes as there have been being in the direction of a reduction, and the average of 1896-1900 was less than at any previous period. Little practical good can be gained by comparing the prices of one period with those of another, unless regard is also paid to the earnings of labour, and as means of comparison are afforded in the chapter of this work dealing with wages, it will be unnecessary to pursue the subject further in this place.

PRICE-LEVELS OF IMPORTS AND EXPORTS.

The following tables have been compiled with the object of showing to what extent Australia has been affected by the variation in the prices of commodities imported and exported during the past forty-one years. The figures refer to New South Wales alone, but they may be accepted as also indicating in a fairly accurate degree the position in which the other states of Australasia stand in regard to this matter. The total value of the exports of each of the states is greatly affected by the prices obtained for certain leading lines of raw produce, of which wool, wheat and flour, tallow, silver and silver lead, hides, leather, tin, copper, coal, fruit, butter, sugar, meat and timber are the most important. The value of these articles represents a total of about seventeen and a half millions or ninety per cent. of the total export of domestic produce.

In the subjoined table the price-level of domestic exports is given for the forty-one years beginning with 1860. In order to ascertain the price-level, all the principal articles of domestic produce exported have been taken, the prices of 1900 have been applied to the quantities of each of the other years, and the result has been compared with the actual total of such year: the level of the year being found by dividing the actual sum obtained into the amount which would have been obtained had the prices of 1900 prevailed. The average for 1900 is assumed to be 1,000, the price-levels or index numbers of the other years being as shown in the table. In order to further facilitate comparison, the average of the five years 1870-74 has been assumed to be 1,000, and the prices of other years have been adjusted to that basis. The average of these years has been taken because the question is frequently raised as to the comparative prices of commodities before and after the demonetisation of silver by Germany in 1873. In compiling the price-level for exports, only articles of insignificant value have been omitted from consideration, and in no year does the value of articles excluded form more than 15 per cent. of the total exports, while in some years the proportion falls as low as 5 per cent., the average of all years being

about 10 per cent. It is considered that this system enables a more reliable estimate of the relative prices to be obtained than that of selecting the prices of certain articles without giving due weight to the quantities of such articles exported.

These figures show that there has been a great fall in the prices of Australian produce exported since 1860, or still greater since 1864, viz., from the index number 1,316 to 682, or over 48 per cent. Marked fluctuations, ranging to about 10 per cent., occurred between 1860 and 1866, when the index number was about the same as in the first-named year. From 1866 to 1870 there was a drop from 1,249 to 879, or about 30 per cent. A rise followed in 1871 to 1,075, or about 22 per cent., after which for four years prices continued fairly steady, until there was a further decline to 887 in 1878. In 1879 the level rose to 921 and for the next four years prices continued without much change, but from 1884 to 1885 there was a fall from 919 to 806. This was succeeded by a fairly even range until 1889, when the level stood at 785. From 1889 there was a steep decline to 532 in 1894, a fall of 32 per cent. for the five years, but in 1895 and 1896 prices recovered a little, and the level rose to 573—an advance of 7·7 per cent. In 1897 there was again a slight fall from 573 to 557, equivalent to 2·8 per cent., but in 1898 the level rose to 590, and in 1899 to 736, a rise of 32 per cent. for the two years. The sharp rise in 1899 was entirely due to the improved price obtained for wool, and the fall in 1900 was mainly caused by the decreased price of that commodity.

Year.	Price-level of Exports.		Year.	Price-level of Exports.	
	1900 prices = 1,000.	Average of 1870-74 prices = 1,000.		1900 prices = 1,000.	Average of 1870-74 prices = 1,000.
1860	1,828	1,247	1881	1,315	897
1861	1,825	1,244	1882	1,357	926
1862	1,921	1,310	1883	1,357	926
1863	1,746	1,191	1884	1,345	919
1864	1,931	1,316	1885	1,181	806
1865	1,767	1,203	1886	1,136	775
1866	1,830	1,249	1887	1,167	797
1867	1,691	1,154	1888	1,132	773
1868	1,692	1,155	1889	1,150	785
1869	1,544	1,053	1890	1,111	758
1870	1,289	879	1891	1,010	689
1871	1,576	1,075	1892	956	652
1872	1,436	979	1893	865	590
1873	1,522	1,037	1894	780	532
1874	1,508	1,028	1895	799	546
1875	1,502	1,027	1896	840	573
1876	1,424	972	1897	816	557
1877	1,306	891	1898	864	590
1878	1,300	887	1899	1,079	736
1879	1,349	921	1900	1,000	682
1880	1,324	903			

It will be seen that the purchasing power of money has steadily increased since 1864 and that 20s. in 1900 would purchase the same articles of domestic export which in 1864 would have cost nearly 39s., prices having fallen 48·7 per cent. during the period of thirty-six years. The greatest decline has taken place in the three staple exports of wool, silver, and coal, many of the minor articles having maintained or increased their price during the last fifteen years.

It must not be supposed that Australia has been a loser by the fall in the prices of its exports to the extent which the price-level shows, because the power of the exports to purchase imports must also be taken into consideration. It will, therefore, be necessary to consider also the price-level of imports. As there exist no reliable data on which price-levels for imports can be based prior to 1870, the table commences with that year :—

Year.	Price-level of Imports.		Year.	Price-level of Imports.	
	1900 prices = 1,000.	Average of 1870-74 prices = 1,000.		1900 prices = 1,000.	Average of 1870-74 prices = 1,000.
1870	1,285	966	1886	1,033	776
1871	1,291	970	1887	1,042	783
1872	1,350	1,014	1888	1,037	779
1873	1,371	1,030	1889	1,080	812
1874	1,357	1,020	1890	1,070	804
1875	1,279	962	1891	1,021	767
1876	1,256	944	1892	979	736
1877	1,208	908	1893	942	708
1878	1,198	900	1894	895	673
1879	1,146	862	1895	886	666
1880	1,155	868	1896	922	693
1881	1,143	859	1897	931	700
1882	1,137	855	1898	942	708
1883	1,156	869	1899	937	704
1884	1,146	862	1900	1,000	752
1885	1,052	790			

It may be said generally that the fall in prices was somewhat in favour of the exports up to the year 1889. Since then the exports have fallen away on the average values at a much more rapid rate than the imports. A clearer view of the operation of the fall in prices will be obtained from the table which is given below, showing the price-levels of imports of merchandise for home consumption and exports of domestic

produce, for periods of five years to the end of 1899, with the relative fall per cent. :—

Period.	Imports.		Exports.	
	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.	Average of five years, 1870-4, prices = 1,000.	Decline in prices in five years, per cent.
1870-74	1,000	.....	1,000	.....
1875-79	915	8·5	940	6·0
1880-84	863	5·9	914	2·9
1885-89	788	8·5	787	13·8
1890-94	737	6·5	645	18·0
1895-99	694	5·8	600	7·0
1900	752	7·5 (rise)	682	13·6 (rise)

It will be seen that, assuming the index number of the five years 1870-74 to be 1,000, the fall in the succeeding five years was 8·5 per cent. for the imports, as compared with 6 per cent. for the exports. The average value of the imports for the five years ending with 1884 was 5·9 per cent. less than in the preceding quinquennial period, whereas the difference in the value of the exports was 2·9 per cent. During the next five years the average value of the imports declined 8·5 per cent., while the fall in the value of the exports was no less than 13·8 per cent., so that the index number for 1885-89 for both imports and exports was practically the same figure. As already mentioned, the fall for the period 1890-94 was much more heavy in regard to the exports than the imports, amounting to 18 as compared with 6·5 per cent.; but during the period 1895-99 the fall in the exports was not much greater than that in the imports, 7·0 per cent. compared with 5·8 per cent. It may, therefore, be said that the period 1895-99 was considerably more favourable to Australasia than the one immediately preceding.

The Australian states and New Zealand are chiefly affected by the fall in prices because they are debtor countries. In the chapter on "Private Finance" will be found certain calculations showing that the annual charge payable by the states and municipalities on their indebtedness to British creditors is £11,523,000, while the earnings of investments made in Australasia by private persons, or drawn by absentees, amount to £4,738,000 per annum. As the whole of the interest on Government and municipal loans has to be paid by exports, irrespective of the fall in prices, and as a large portion also of the interest payable to private investors is in the same category, the fall is a matter of very serious importance to these states. Fortunately the increase of production, as compared with the population, has been so great as to counteract the fall in prices, and if the change in regard to the price of Australian produce which began in 1895 be continued, the condition of these states will be in every respect more hopeful.

INDUSTRIAL PROGRESS.

THE PERIOD PRECEDING THE GOLD DISCOVERIES.

THE discovery of gold in 1851 divides the industrial history of Australia into two periods, the main characteristics of which are absolutely dissimilar. Prior to the discoveries of the precious metal, Australia appeared to be destined for a purely pastoral country. Its distance from the world's markets, and the fewness of its population, militated against any decided progress in agriculture; but the people were encouraged to devote their attention to a fuller development of the pastoral industry by the circumstance that a local market was not necessary. Moreover, the products of both sheep and cattle were so valuable that the heavy cost of carriage to England could be borne, and an ample margin still left to compete successfully with Russia, Germany, Spain, Portugal, and America, the great wool-growing countries of that epoch. This one-sided development of the country's resources was manifestly dangerous to industrial stability, as a succession of drougthy seasons might have had the effect of disturbing the business of the whole country; and this, indeed, was what from time to time actually happened.

Other industries would doubtless have followed in the wake of the great pastoral industry as time went on, and there were not wanting signs that, with an assured market, attention would be given to agriculture, and the manufacture of certain articles of local consumption.

The development of the industries of Australia along their natural lines must undoubtedly have been attended with ultimate success, but the colonists were not content to grow prosperous in such a humdrum way, and early in the forties there was intense speculation in land allotments in towns. Large and small country areas also were disposed of, and redispensed of, at prices far beyond what was warranted by any return that could be obtained from their immediate or prospective use, and many persons grew rich by the tossing backwards and forwards of title deeds. The business of land jobbing was, moreover, encouraged by the action of the local Government which from time to time disposed of considerable areas of land, and frequently altered its policy in regard to the public estate.

Land speculation, carried to excess, has tended on more than one occasion in Australia to a commercial crisis, and the disasters of 1842 and 1843 were undoubtedly attributable to this cause. They were accelerated, however, by the unwise action of the Government in

regard to its financial operations. Having sold much land, the Government was possessed of considerable funds, which were placed with the banks, at one time fully £350,000 being deposited, and the highest rates of interest exacted therefor. The banks accepting these deposits were obliged, on their part, to reissue equivalent sums in discounts, in order to pay the interest demanded of them. They, therefore, readily entered into the spirit of the times, and their willingness to lend stimulated amazingly the dealings in land purchase. It thus happened that business was transacted in a vicious circle. The Government, by selling land, thereby accumulated an amount of money, which was deposited with the banks, the money so deposited being loaned by the latter to their customers for the purpose of buying more land from the Government, the latter depositing the sums paid to them, which again was loaned for the purpose of land buying; and by this means the business of speculation was kept alive so long as the Government maintained its balance with the banks. The immigration policy of the Government, however, made large calls upon it, and the Treasury found itself compelled to withdraw its deposits upon very short notice. To meet this sudden call, the banks were compelled, to the utmost inconvenience of their customers, immediately to restrict their discounts and curtail advances, and it was this sudden contraction of credit that gave the initial downward impulse to the money market. The issue could hardly have been otherwise than as happened; and a financial crisis immediately resulted. The year 1842 was one of acute financial distress. In Sydney, property of all kinds became unsaleable, and many business houses, including some of the principal ones, became insolvent. For nearly two years the failures were at the rate of from fifty to sixty a month. A similar condition of affairs prevailed in Melbourne, and the distress was also keenly felt in Adelaide and Tasmania. The local prices of all descriptions of produce were ruinously low, and were still further depressed by reason of the large number of bankruptcies involving forced sales of real property, stock, wool, furniture, ships—indeed, of everything which promised a return, however small. Historians of that period relate cases of enforced sales at which sheep brought very small prices—as little as 6d. being obtained for them; while cattle occasionally realised only 7s. 6d., and valuable horses only £3 each. Boiling down, meat canning, and other devices were resorted to in order to revive the commerce of the country from the stagnation and lethargy into which it had fallen; yet, notwithstanding all expedients, the outlook steadily became more gloomy, prices continued seriously to decline, and speculation was at a standstill. South Australia was the first to emerge from the all-pervading depression. In 1844, copper arrived in Adelaide from the Kapunda Mine, and in 1845 the famous Burra Burra Mine was discovered. Other finds came in quick succession. Population was speedily attracted, and as the mines yielded beyond all expectation a season of prosperity at once ensued. The discovery of copper in South Australia proved to be of advantage to the rest

of Australia. Labourers and others were attracted to Adelaide from the neighbouring provinces, though not in such large numbers as would have relieved the labour markets. The men employed in the copper mines were able to earn 7s. per day, which at the time was considered a very high wage. Skilled mechanics were not so well remunerated; plasterers were paid from 4s. to 7s., very few getting the higher wage; painters' wages ranged from 4s. to 5s. 6d.; blacksmiths' from 4s. to 5s.; wheelwrights' 5s. to 5s. 6d. Carpenters' wages ranged from 5s. 6d. to 6s. 6d. per day—the highest rates paid to mechanics; bricklayers and masons earned from 5s. 6d. to 6s. per day. Farming hands were paid 10s. to 12s. per week with rations and sleeping accommodation, and were in much request. Domestic servants were in demand at wages varying from £14 to £22 per annum with board and lodging, and the supply was insufficient. The wages quoted were greatly in excess of those obtained prior to the discovery of copper and about 20 per cent. higher than for similar employment in New South Wales.

The average wages paid in New South Wales prior to 1851 were as indicated in the accompanying statement. Inferior workers, of whom there was naturally a considerable proportion, considering the origin of a large part of the population, did not receive within 20 per cent. of the rates quoted:—

Trade or Calling.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.
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Males, per day, without board and lodging.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Carpenters	5 0	4 0	4 0	5 2	5 6	5 3	4 9	4 6
Smiths	5 0	4 0	4 3	5 2	5 6	5 3	4 9	4 6
Masons	5 0	4 0	4 0	5 2	5 6	5 3	4 9	4 6
Bricklayers	5 0	4 0	4 0	5 2	5 6	5 3	4 9	4 6
Wheelwrights	4 0	3 6	3 3	4 8	5 0	5 3	4 9	4 6

Males, per annum, with board and lodging.

	£	£	£	£	£	£	£	£
Farm labourers	15	15	18	20	23	21	18	18
Shepherds	14	14	17	20	23	21	18	18

Females, per annum, with board and lodging.

	£	£	£	£	£	£	£	£
Cooks	15	15	18	20	22	21	17	17
Housemaids	15	15	15	17	17	17	14	13
Laundresses	12	12	15	17	19	18	15	15
Nursemaids	10	10	12	15	16	14	9	9
General servants	12	12	16	16	18	16	12	14
Farm-house servants	10	10	12	16	17	16	12	11
Dairy-women	10	10	12	16	17	16	12	11

These rates show a great reduction on those obtaining in 1841, in which year mechanics' wages stood at 7s. 6d. to 8s. per day, and those of farm servants at £25 a year. In the Port Phillip district wages

were generally higher than in Sydney, as also were those of Tasmania. A schedule of the latter is given below. The fall in wages was in a measure compensated for by a lowering of the price of provisions. During this period the average price of beef in the Australian cities ranged from 2½d. to 6¾d. per lb., and of mutton from 2d. to 3d. per lb. The price of flour ranged from 14s. to 24s. per 100 lb. These prices were very greatly below those paid prior to the crisis. Bread, for example, in 1839 sold at 11½d. the 2 lb. loaf; in 1843 the price was 3½d., and thereafter it did not rise higher than 5d. until after the gold discoveries. House rents, however, continued high.

Throughout the period the demand for pastoral and agricultural labour was always fairly keen, and the stream of bounty-paid immigrants was maintained in spite of the fall in wages and the restriction in employment. The immigrants, however, were mainly of the agricultural class—shepherds, gardeners, and useful mechanics for country employment,—who were readily absorbed by the community. The condition of the mechanics who clung to the towns was one of great distress. Inferior men could not earn more than 2s. 6d. per day, and at no time was the average for good men more than 5s., while even at those rates employment was at times difficult to obtain.

In Tasmania wages were maintained at a higher level than in New South Wales, and in the undermentioned trades the ruling rates per day were:—

Year.	Bricklayers.	Carpenters.	Masons.	Quarrymen.
	s. d.	s. d.	s. d.	s. d.
1839	7 6	7 6	7 6.	5 6
1840	7 6	7 6	7 6	5 6
1841	6 6	6 6	7 0	5 1
1842	7 0	7 0	8 0	5 6
1843	7 0	7 0	7 0	5 0
1844	5 0	5 0	4 6	3 0
1845	6 0	6 0	5 0	4 0
1846	5 6	5 6	5 6	3 0
1847	4 11	4 10	4 10	3 0
1848	4 10	4 8	4 10	3 2
1849	6 0	6 0	6 0	3 6
1850	5 6	5 6	5 6	3 4

The financial crisis of 1842 did not affect Tasmania in the same degree as it did New South Wales, since in the island colony there had been less land jobbing and riotous speculation. The fall in wages in 1844 was accompanied, and, in a measure, brought about, by a fall in the cost of living. It is difficult to determine the retail prices of the various commodities in common use, and to account for the causes of the great variation apparent from year to year. The price of flour, for example, seemed to have a very ill-defined relation to the price of wheat. In 1839, wheat was sold throughout the year at 26s. per bushel, and

flour at 24s. per cwt.; in 1840 the prices were: Wheat 9s. per bushel, and flour 30s. per cwt.; and in 1841, wheat 7s. per bushel, and flour 21s. per cwt. The price of tea was 1s. 6d. per lb. in 1839, and 2s. 6d. and 3s. 3d. in the two following years, and similarly with regard to other articles.

The following were the market prices of six of the leading commodities:—

Year.	Fresh Meat.	Sugar.	Tea.	Rice.	Wheat.	Potatoes.
	per lb. d.	per lb. d.	per lb. s. d.	per lb. d.	per bush. s. d.	per cwt. s. d.
1838	5 $\frac{1}{4}$	3 $\frac{1}{2}$	1 5	3	8 9	6 0
1839	4 $\frac{1}{4}$	3 $\frac{1}{2}$	1 6	3	26 0	10 0
1840	6 $\frac{1}{4}$	3 $\frac{1}{2}$	2 6	2 $\frac{1}{2}$	9 0	10 0
1841	6 $\frac{1}{4}$	3 $\frac{1}{2}$	3 3	2 $\frac{1}{2}$	7 0	10 0
1842	4 $\frac{1}{2}$	3 $\frac{1}{2}$	2 0	2	6 6	7 0
1843	2 $\frac{1}{4}$	3	2 6	1 $\frac{1}{2}$	3 6	5 0
1844	2 $\frac{1}{4}$	2 $\frac{1}{2}$	1 6	1 $\frac{3}{4}$	3 3	4 0
1845	2 $\frac{1}{4}$	3	1 6	3	3 3	4 6
1846	2 $\frac{1}{2}$	4	2 3	1 $\frac{1}{2}$	5 0	3 0
1847	2 $\frac{1}{2}$	4	2 4	3 $\frac{1}{4}$	4 10	5 10
1848	2 $\frac{1}{2}$	3 $\frac{3}{4}$	2 0	3 $\frac{1}{2}$	3 6	4 4
1849	2 $\frac{1}{4}$	3 $\frac{3}{4}$	1 9	3 $\frac{1}{4}$	4 1	3 0
1850	2 $\frac{1}{4}$	3 $\frac{1}{2}$	1 10	4	4 9	4 0

About the year 1849, the labour market in Sydney was relieved in some measure by the emigration to California which commenced immediately on the announcement of the discovery of gold in that country. But as an amount of ready cash was needed before a person could emigrate, the most distressful part of the local population was little affected by the Californian mines, and it is difficult to imagine what would have happened had not the discovery of gold, in 1851, occurred so opportunely. In an instant the face of everything was changed, as if by the wand of a magician, although the full influence of the discoveries was not felt until the following year.

During the period anterior to the gold discoveries agriculture was entirely subsidiary to sheep and cattle raising, being confined to supplying the wants of the handful of persons scattered round the coastal fringe who then comprised the population of these States. The country was, therefore, dependent upon outside sources for the supply of the greater part of the food stuffs required for ordinary consumption. Signs were not wanting, however, of an early extension of the cultivation of wheat, particularly in South Australia. The plains around Adelaide yielded magnificent crops of the cereal, and when a method of harvesting was discovered which enabled the farmers to gather the crops, in spite of the looseness of the grain in the ear and the extreme brittleness of the straw, the future of the industry at once became more hopeful.

Naturally the manufacturing industries did not make much progress. Manufacturing for export was out of the question, handicapped as the infant settlements were by distance from the centres of civilisation. What industries there were had been called into being by the isolation of the country. The largest number of establishments of any kind were flour mills, of which there were in 1848 about 223; of these 87 were worked by steam, 53 by water, 42 by wind, and 38 by horse-power. The next in importance were establishments for the treatment of leather; then came breweries and distilleries, soap and candle works, iron foundries, brick-works and potteries, and ship and boat building, in the order named. As late as 1848 the industrial establishments of Australia were as comprised in the following list, and the employment afforded did not in all probability exceed 1,800 hands:—

Distilleries	2	Blacking manufactories	2
Rectifying and compounding	2	Meat preserving and salting works	5
Breweries	51	Potteries	9
Sugar refineries	2	Glass works.....	1
Soap and candle works	30	Copper smelting works	1
Tobacco and snuff factories.....	5	Iron and brass foundries, &c.	27
Woollen mills	8	Gas works	1
Hat manufactories	4	Ship and boat building, repairing	12
Rope works	7	Flour mills	223
Tanneries.....	62	Oatmeal, groat mills.....	1
Salt works	5		
Starch manufactories	2		

Of the 479 establishments, 272 were in New South Wales, 41 in the Port Phillip district, 99 in Tasmania, and 67 in South Australia. There were possibly a few others in Western Australia, information in regard to which has not been recorded.

Whale-fishing, although now almost unknown in Australian waters, at one time held a very important place amongst the industries of the country. From 1791 onwards there are records of the take of vessels engaged in the industry. In the twenties there were whaling stations belonging to Sydney merchants in various parts of the southern seas, and whale-fishing was afterwards carried on from a Tasmanian base at Frederick Henry Bay and from Portland Bay, Victoria. The colonists of Western Australia had also engaged in the whale fishery, which appears to have been continued by them until the whales had practically disappeared from local waters. The practice of Australian whalers of killing the calves, in order to secure the capture of the mothers, did great damage to the fishery by wastefully thinning out the product, and in 1843 the animal was remarked as becoming somewhat shy and scarce in southern seas. By the year 1847, the industry was declining in southern waters generally, and Australian shipping was engaging more exclusively in the carrying trade, and in time the whaling industry was prosecuted mainly by American vessels. The value of the total quantity of whale oil exported from New South Wales has been estimated at about £3,000,000, and from Tasmania at about £1,200,000.

The principal exports during the year preceding the gold discoveries were wool, tallow, oil, skins, bark, and salt beef. Wool has been one of the staple products of the country from the earliest days of the century, although in some years the product of the fisheries was equally important. Trade was almost wholly confined to the United Kingdom, and in ten years, 1841-50, the quantity of wool exported to that country was:—

	lb.		lb.
1841	12,959,671	1846	26,056,815
1842	17,433,780	1847	30,034,567
1843	17,589,712	1848	35,774,671
1844	24,150,687	1849	39,018,221
1845	21,865,270	1850	41,426,655

The value of the wool trade for the year 1850 was £1,992,369, and the shares of the present States, according to quantity and value, were:—

	lb.	Value.
New South Wales ..	14,270,622	788,051
Victoria	18,091,207	826,190
South Australia ..	2,841,131	113,259
Western Australia ..	368,595	16,000
Tasmania	5,855,103	248,869
Total	41,426,655	1,992,369

Sperm oil was principally exported from Sydney and Hobart, the value of the trade in 1850 being £65,499, a slightly larger quantity being despatched from Hobart than from Sydney. The value of tallow exported was £311,900, of which £167,858 was sent from Sydney, and £132,863 from Melbourne. In 1850 South Australia was already a copper producing country of some importance, and its export of metal and ore had reached £275,090. Flour was also becoming an item of export worth considering in South Australia and Tasmania, the former having exported in 1850 wheat and flour to the value of £41,491, and the latter £34,565, besides providing for the local consumption.

In 1850 the export of domestic produce, including products of fisheries, from each division of Australia was:—

	£
New South Wales ..	1,158,858
Victoria	1,022,064
South Australia ..	570,816
Western Australia ..	30,000
Tasmania	558,000

INDUSTRIAL PERIOD—1851-8.

The Gold Discoveries.

The attention of the people of Australia during the period extending from the year 1851 to 1858 was chiefly directed to gold-seeking. The whole period was one of rapid growth and great change. It is chiefly

interesting politically on account of the initiation of responsible government in New South Wales, Victoria, South Australia, and Tasmania, and commercially, because of the construction of the first railroads and the establishment of steam communication with Great Britain.

The discovery of gold not only put an end to the depression of the previous period, but it effected a revolution in all industrial relations. According to contemporary evidence, the supply of labour in many occupations speedily became exhausted, and there were more persons desirous of hiring labourers than there were labourers to be hired. The diggings drained not only Melbourne and Sydney, but Adelaide, Hobart, and every other Australian centre. Most branches of industry and all public works were at a standstill. In New South Wales the sheep and cattle stations were deserted by their hands very shortly after the first great discoveries were made, and for a time it was impossible, in some parts of the colony, to care for the flocks except by the employment of aborigines. In South Australia, during 1852 and 1853, the crops would have remained unharvested if it had not been for the assistance of the blacks, so great was the exodus of farming hands. In Victoria, where the greatest quantity of gold was found, for a brief period no other occupation than gold seeking was thought of, until it was discovered by the reflecting part of the population that trade offered even greater and surer prizes, and there as well as elsewhere every department of industry received a direct stimulus. In Tasmania the people became so infected with the epidemic that there was danger of the island becoming depopulated. The able-bodied men left by every boat, and Bass's Straits became in a brief period a populous waterway from the home of hardship and toil to the visionland of wealth. So great was the exodus that some of the country districts were utterly deserted by the male inhabitants.

The eight or nine years characterised by the rage of the gold fever exercised a very great economic effect on the condition of the working classes; for had there been no discovery of gold it is not improbable that, with respect to both the standard of living and the remuneration of labour, the conditions existing prior to 1850 would have long remained without any great change for the better. In those days the standard of labour in England was the practical test of the condition of the working classes in Australia, who were thought well off simply because their earnings enabled them to enjoy comforts beyond the reach of their fellows in the Old World. Since the gold era this has been changed, and the standard now made for themselves by Australian workers has no reference to that of any other country. The attractions of the gold-fields had also a marked subsequent effect upon industries of an absolutely different character. Many men, of all sorts of trades and professions, who were drawn to these shores by the prospect of acquiring enough of the precious metal to ensure their independence, remained in the country, and pursued less exciting and less precarious callings, while gold-miners themselves in many cases ceased the exploitation of

the mineral which was to have made them rich, and turned their attention to the winning of silver, copper, tin, coal, and other minerals.

Another effect of the gold rush must not be lost sight of. Although Australia had ceased to be a place open to the reception of British convicts, yet the old settled parts were permeated with social and economic ideas begotten of the transportation era. The men who had been convicts, or who were born of convict parents, were a considerable element in the population, while the employers had, for the most part, at one period or other of their career, been masters of bond labour. A few years changed all this. It was as if Australia had been newly discovered. Certainly the country was recolonised, and the bond population and their descendants became a small minority of the population which every year made more insignificant, until at the present day it is only in out of the way corners that there is anything to remind the observer that any part of Australia was at one time a penal settlement.

The gold fever brought to Australia not only young, stalwart, enterprising men of great endurance, and capable of adapting themselves to almost any conditions of life, but also multitudes of others whose chief idea was that wealth could be acquired almost without exertion. Unable to endure the hardships of the digger's lot, without trade or profession, and capable of only the lightest manual labour, they mostly drifted back to the chief towns ; and there was speedily presented the strange spectacle of thousands of unemployed clamouring for government work, while the more stalwart labourers were earning extraordinary wages in the gold-fields.

At the height of the gold discovery the earnings of miners in some cases were prodigious. The Gold Commissioners of New South Wales estimated the average earnings of diggers to have been about £1 per day ; and a comparison of the gold yield with the numbers of licenses issued confirms this calculation. In Victoria the average was probably much higher, and a contemporary calculation fixes the earnings at £42 10s. per month for each miner licensed to dig. Making allowance for illicit digging, there seems ample proof that in the first half of 1852 the average of all miners could hardly have been less than 30s. per day. At one period 50,000 persons held licenses in Victoria and 31,000 in New South Wales ; and if allowance be made for the great number of persons who evaded payment of the license fee, the number of gold diggers could scarcely have been less than 100,000 in a total male population in Victoria and New South Wales of 229,562.

The effect of the discoveries on wages was immediate and extraordinary. Governor La Trobe of Victoria, in a despatch, under date 12th January, 1852, remarks on the difference in the wages payable immediately before and after the gold discoveries. The wages of shearers rose from 12s. in 1850 to 20s. in 1851 ; of reapers, from 10s. to 20s. and 25s. per acre ; of common labourers, from 5s. to 15s. and 20s. per day ; of coopers, from 5s. to 10s. ; of shipwrights, from 6s. to 10s. ; of wool-pressers, from 3s. 6d. to 7s. and 8s. per day ; sailors, from

£4 to £9 a month (from £50 to £100 being offered for the run to England); stokers, from £12 to £20 a month; men cooks, from 20s. and 25s. to £2 and £3 a week; waiters at hotels, from 20s. to 40s. and 50s. a week; ostlers and stable-men, from 21s. to 50s. a week; men servants in town, from £25 and £30 to £50 and £70 per annum, and none to be had even at these wages; men servants in the country, from £20 and £25 to £35 and £40; salesmen, shopmen, &c., from 25s. and 35s. to 40s. and 70s. a week; porters, from 12s. and 15s. to 25s. and 35s. a week; the increase in the wage of female servants was 25 per cent.; of clerks in banks and mercantile houses, 20 to 50 per cent.; but the figures given by the Governor denoted only the beginning of the advance in wages. Prices rose in response to the altered conditions. From December, 1850, to December, 1851, the prices of provisions, etc., had risen as follows:—Bread, 4 lb. loaf, from 5d. to 1s. 4d. and 1s. 8d.; butter, from 1s. 2d. to 2s. and 2s. 6d.; cheese, from 8d. and 1s. 4d. to 2s. and 3s.; fresh meat doubled; salt meat rose from 1½d. to 2½d.; ham, from 8d. and 1s. to 1s. 6d. and 2s. 6d.; bacon, from 6d. and 8d. to 2s. per lb.; fowls and ducks, from 3s. and 3s. 6d. to 5s. and 6s. a couple; potatoes, from 8s. to 12s. and 15s. a cwt.; tobacco, from 2s. 6d. and 4s. to 7s. and 8s. a lb.; groceries generally, 25 per cent.; vegetables, from 50 to 100 per cent.; spirits, wine, beer, etc., from 30 to 50 per cent.; confectionery, 50 per cent.; fruit, 100 per cent. The following are the percentage rates of increase on the prices of some of the supplies furnished under contract for the Government service of Victoria:—Candles, 60 per cent.; fresh beef, 33½ per cent.; salt pork, 25 per cent.; bread, 50 per cent.; tea, about 21 per cent.; sugar, 10 per cent.; soap, 20 per cent.; milk, 75 per cent.; new horse-shoes, 150 per cent.; cost of removing old ones, 350 per cent.; printing, 100 per cent.; saddlery, 75 per cent.; for boots and shoes no tender could be obtained. “Old furniture,” remarks the Governor, “sells at about 75 per cent. advance upon the former price of new. Scarcely any mechanic will work; those few who do, receive an advance on former wages of from 200 to 350 per cent.”

The condition of things just described may be looked upon as chaotic, but every month saw the prices of commodities and the remuneration for labour more systematised. As the gold discoveries continued, the wages continued to rise, but there was an essential difference between the conditions of 1851 and 1853. In the former year, men's ideas of the amount of the wages they should receive were, on the one hand, tempered by the remembrance of the wages paid in England and in the colonies before the discovery of gold, and on the other they were excited by the boundless possibilities of easily acquired wealth which loomed before the successful digger, and their demands rose and fell according to the exigencies of the employer. In 1853 the condition of things became more settled. Wages on the average were higher than in previous years, but there was a recognised scale for the payment of the principal classes of labourers and mechanics. In 1853, carpenters, wheelwrights, and bricklayers received, in Melbourne, 15s. per day with

board and lodging; masons, without board and lodging, 26s. 9d. per day; bricklayers, 25s. per day; smiths and wheelwrights, 22s. 6d. per day. This would seem to fix the cost of board and lodging at about £3 10s. per week. In the following year the wages of wheelwrights reached 30s. per day; bricklayers, 30s. per day; but the pay of carpenters and other mechanics remained about the same. In the following table the wages given are those ruling in Sydney during the period named. It must be remembered, however, that in some instances the wages quoted were merely nominal, as, owing to the dearth of labour, there was a suspension of many trades which flourished before the gold discoveries, and prices quoted are those paid to the remnant who remained in town:—

Trade or Calling.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.
<i>Males, per day, without board and lodging.</i>								
	s. d.	s. d.	s. d.	s. s.	s. s.	s. s.	s. s.	s. s.
Bricklayers	6 0	9 0	15 6	25 to 30	18 to 25	16 to 18	12 to 16	10/6 to 11/6
Blacksmiths	6 8	9 0	12 9	20 to 25	14 to 16	8 to 13	10 to 14	10/6
Carpenters	6 5	9 0	12 6	15 to 20	12 to 15	12 to 15	10 to 12	10 to 11
Coopers .....	.....	.....	.....	15 to 20	10 to 12	12 to 14	12 to 14	.....
Cabinetmakers .....	.....	.....	.....	15 to 20	12 to 15	12 to 15	12 to 14	.....
Farriers .....	.....	.....	.....	12 to 15	10 to 12	9 to 12	10 to 12	.....
Plumbers and glaziers .....	.....	.....	.....	16 to 20	12 to 15	12 to 15	12 to 15	.....
Joiners .....	.....	.....	.....	17 to 20	12 to 15	12 to 14	12 to 15	.....
Ironfounders .....	.....	.....	.....	16 to 20	14 to 16	12 to 14	11 to 13	.....
Locksmiths .....	.....	.....	.....	18 to 22	16 to 18	12 to 15	10 to 13	.....
Quarrymen .....	.....	.....	.....	18 to 21	16 to 18	12/6 to 16	14 to 16	.....
Shoemakers .....	.....	.....	.....	.....	14 to 22	12 to 14	10 to 12	.....
Wheelwrights	6 4	9 0	15 0	18 to 20	14 to 16	12 to 14	12 to 14	10 to 11
Plasterers .....	.....	.....	16 0	25 to 30	14 to 16	13 to 17	13 to 15	.....
Painters .....	.....	.....	.....	13 to 16	8 to 13	10 to 12	8 to 12	.....
Stonemasons	7 8	9 0	16 0	25 to 30	.....	12/6 to 15	13 to 15	10/6 to 11
<i>Females, per annum, with board and lodging.</i>								
	£	£	£	£	£	£	£	£
Cooks	16 to 25	18 to 25	24	28	28	25	23	26
Housemaids	14 to 18	14 to 18	17	22	22	21	17	23
Laundresses	7 to 12	15 to 18	20	28	28	24	23	26
Nursemaids	9 to 15	16 to 18	17	18	18	18	18	19
General servants	14 to 18	16 to 18	18	23	23	22	23	25
Farm-house servants .....	.....	13	14	15	25	22	20	25
Dairy-women .....	.....	13	14	15	25	22	20	25

In Adelaide, from the time of the discovery of gold, wages were not only daily advancing, but some industries came to a complete standstill. In wheat farming, for example, it was impossible to procure white labour at all, and, as already remarked, settlers were glad to hire the aborigines to gather in their crops, and for this work they were paid at the rate of 10s. an acre. As mentioned elsewhere, Tasmania lost a large portion of its adult population to Victoria, but those who remained behind prospered exceedingly. Everything the island produced found a ready market and at highly remunerative prices.

Prices of articles of ordinary consumption in Victoria have already been alluded to. All over Australia the prices of provisions and of all articles of clothing were, during this golden era, largely increased; indeed, there was hardly a commodity in the market, whether of use or

of luxury, the price of which might not be described as "fancy." In 1853 bread sold in Sydney at 3½ to 4d. per lb., but certain lines of provisions were fairly reasonable; for instance, tea was quoted at 1s. 4d. per lb., sugar at 3½d., fresh meat at 3d., butter at 1s. 3d., potatoes at 6s. per cwt., brandy at 23s. per gallon, and imported beer at 5s. per gallon; flour, however, was quoted at 3d. per lb., the price per ton ranging between £20 and £27. House rents, of course, rose with the influx of population. In Melbourne, the sudden increase of population raised house rents to an unparalleled height, and for a considerable time a large proportion of the community lived in tents. This, of course, gave an extraordinary stimulus to building, and partly from this reason, and partly on account of the mercantile failures consequent on the over-trading of 1853 and 1854, the year 1855 witnessed a heavy fall in rents, so that in that year they did not exceed half the amount paid three years previously.

In Sydney, the number of persons requiring house room was so much in excess of the accommodation available in habitable dwellings that the census of 1856 enumerates no fewer than 709 houses as being in occupation although still in the hands of the builder. As illustrative of the exigencies of the time in this particular, it is interesting to note that out of 39,807 dwellings 1,709 were tents, 31 were drays, and 64 were ships used as residences. Of the total number of habitations in New South Wales, 23,709 were built of wood, and of such inferior materials as bark, slabs, wattle and daub, and the like, and 225 of iron, while more than one-third of the dwellings were roofed with bark and thatch. Owing to the dearth and dearness of skilled labour, a large number of houses were imported in pieces, ready to be put together with little or no carpentering work beyond making the foundations and driving the nails. Some of these were still to be seen in the vicinity of Sydney and other towns until within recent years.

The discovery of gold had an almost immediate effect in establishing Melbourne as the largest city of Australia, and Victoria as the most important State. The total trade of Victoria, New South Wales, and South Australia with places outside their boundaries during the eight years was as given in the following table. The preponderance of Victoria is evident.

Year	New South Wales.		Victoria.		South Australia.		Tasmania.		Western Australia.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imp.	Exp.
1851	£ 1,563,931	£ 1,796,912	£ 1,056,437	£ 1,422,909	£ 690,777	£ 602,037	£ 641,609	£ 665,700	£ 56,598	£ 26,870
1852	1,900,436	4,604,034	4,069,742	7,451,549	798,811	1,787,741	860,488	1,509,883	97,304	24,181
1853	6,342,397	4,523,346	15,842,637	11,061,544	2,336,290	2,241,814	2,273,397	1,756,316	126,735	31,645
1854	5,981,063	4,050,126	17,659,051	11,775,204	2,147,107	1,322,822	2,604,630	1,433,021	128,260	34,109
1855	4,668,519	2,884,130	12,007,939	13,493,333	1,370,938	988,215	1,569,797	1,428,629	105,320	46,314
1856	5,460,971	3,430,830	14,962,209	15,489,760	1,366,529	1,665,740	1,442,106	1,207,802	122,938	44,740
1857	6,729,408	4,011,952	17,256,209	15,079,512	1,623,022	1,958,572	1,271,087	1,354,655	94,532	59,947
1858	6,059,368	4,186,277	15,108,249	13,989,209	1,769,351	1,512,185	1,328,612	1,151,609	144,932	78,649

The excess of the imports is very marked in the years immediately following the discoveries, and indicates the inflow of capital accompanying the immigrants who poured into the country from Europe and elsewhere. During the eight years included in the foregoing table the excess of arrivals over departures was at least 450,000, probably more; and if each of these immigrants brought with them not more than £25, their capital alone would represent £11,250,000. The imports comprised manufactured goods and articles of luxury, and the exports were almost exclusively gold and wool, and other raw material, the produce of the pastoral industry. As already mentioned, the product of the southern fisheries had greatly fallen off by the beginning of the period, and the export of oil, etc., averaged for five years between £25,000 and £30,000 per annum. In 1858 the exports of the fisheries had fallen to £1,450; in 1859 to £532; and in 1860 to £136. With the last-named year, the industry, around which cluster so many historical associations, and which is so peculiarly reminiscent of the early days of Australian settlement, practically disappears, although a few trifling essays have, from time to time, been made to revive it in southern waters, and small quantities of oil are still exported.

The actual export of gold from Australia cannot now be stated with exactness. The figures given in the following table show the exports in excess of the imports registered in the Customs houses, but doubtless there was a large export of which no account was rendered to the authorities, for, though the influx of population was great, the departures were also numerous, and every ship that left Melbourne carried with it more or less gold in the possession of returning diggers.

Year.	Net Export of Gold from—	
	Victoria.	New South Wales.
	£	£
1851	508,013	468,336
1852	6,912,415	2,660,946
1853	11,090,643	1,781,172
1854	9,214,093	773,209
1855	11,070,270	654,594
1856	11,943,458	689,174
1857	10,987,591	674,477
1858	10,107,836	1,104,175

The figures for Victoria are from the Customs returns, and in the earlier years are probably far below the actual amounts. Competent authorities estimate the yield of 1852 at fifteen millions, or about eight millions in excess of the official returns.

The foregoing table explains the tremendous attraction which the southern colony possessed for the population of the Australasian group. The imports into Victoria during 1854 were no less than £17,659,051; it is therefore easy to understand how it happened that, for a period, the parent colony was quite eclipsed by the growth of its own off-shoot, and that the commerce of the South Pacific gravitated to Melbourne. During a single month as many as 152 ships arrived in Port Phillip, conveying thither 12,000 immigrants.

Agriculture was greatly neglected during the days of the gold fever. In New South Wales about one-third of the area went out of cultivation, the acreage falling from 198,000 acres in 1850 to 131,000 acres in 1852; in Victoria there was a reduction from 52,000 acres to 34,000 in the same period; in Tasmania and South Australia there were also considerable reductions in the area cropped. The check to the industry was, however, only temporary, as the ultimate effect of the gold discoveries upon agriculture was extremely stimulating. In Victoria, especially, there was a great expansion. In 1853 the breadth of land cropped was 34,000 acres; in six years this had been increased to 419,000 acres. In 1857 the cultivated area in Victoria exceeded that of New South Wales by 50,000 acres, a superiority which was afterwards greatly added to and is maintained to this day.

The progress of agriculture in each State may be seen from the following figures:—

AREA UNDER CROP.

Year	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	Total.
	acres.	acres.	acres.	acres.	acres.	acres.
1850	198,056	52,341	64,728	7,419	168,820	491,364
1854	131,857	54,905	129,692	13,979	127,732	458,165
1858	223,295	298,960	264,462	20,904	229,489	1,037,110

The principal crops grown were wheat, oats, potatoes, and hay, chiefly wheaten and oaten; but there were signs of attention being paid, especially in Victoria and Tasmania, to fruit-growing and other forms of culture requiring less land and more labour.

The influence of the gold discoveries on the pastoral industry was twofold—on the one hand retarding its development by depriving it of labour, and on the other, encouraging it by the creation of a demand for carcase meat. Before the discoveries, fat sheep sold in the Melbourne market at 10s. to 12s., in 1852 the price was 30s., and higher prices were subsequently obtained. During the whole period the value of the

carcase steadily gained on that of the wool, and it is not surprising, therefore, that the increase of the flocks was arrested. This was especially the case in Victoria, where the number of sheep depastured fell from 6,589,923 in 1851 to 4,577,872 in 1855. In New South Wales the number of sheep fluctuated according to the requirements of the southern districts, but there was no tendency for the flocks to increase. In 1859 the number of sheep depastured fell to 5,162,671, or three millions below the figures of some previous years, a result brought about by the demand for restocking in Victoria, and the opening up of new country in Queensland.

In the first years of the colony's history the coastal belt only was available for settlement, but with the crossing of the Blue Mountains, in 1813, a new horizon stretched before the pastoral imagination, and with each successive discovery by Oxley or Cunningham or Mitchell or Hume, plain was added to plain of pasture, and the paths of the explorers were dotted with chains of squattages. In the earliest years of pastoral settlement it was customary for stock-breeders to drive their herds to the nearest unoccupied good country when they increased beyond the grazing capabilities of their pasturages. In this manner the river-courses in the western districts became stocked, and the country bordering them occupied. The practice came into vogue when cattle were decreasing in value, and when, therefore, it was absolutely necessary to breed them at the least expense. These herds were, however, inferior in strain. They frequently became wild and unmanageable, and it was only with the influx of population during the gold fever days, when high prices were paid for meat, that they acquired any value. The cattle, nevertheless, showed that the interior country was good for stock-grazing, and proved that land which had hitherto been regarded as a desert was very fattening pasture; for they had discovered "salt-bush," a fodder plant which retains its vitality when other kinds of herbage have long withered away. The grazing value of the river country, or Riverina, has never since been challenged.

There were in effect three great waves of pastoral settlement which swept over Australia. The first is that just alluded to, which flowed over the inland plains between the colonies of New South Wales, Victoria, and South Australia. The second rolled farther north, and beyond the occupied country, as far as the central basin of the continent. The third went still northward to the downs of Queensland. The first migration of stock arose from the demands for meat made by the gold-diggers. The success of this pioneer movement inspired the second experiment, which was prompted by the demand for wool. The third essay in pastoral settlement was occasioned by the maintained and increasing value of all squatting property.

The first of these migrations alone concerns the industrial history of the gold period, and began immediately the first fever of discovery had abated, and was the chief factor in producing the agrarian agitation which marked the following decade.

The following is a statement of the values of the chief articles of pastoral produce exported in the years named :—

Year.	Wool.	Tallow and Lard.	Skins and Hides.
	£	£	£
1851	1,979,527	237,402	32,284
1855	3,170,640	152,376	69,602
1859	4,236,693	48,085	271,349

The actual number of stock depastured in Australia was as follows:—

Year.	Sheep.	Horned Cattle.	Horses.	Swine.
1851	17,515,798	1,924,482	167,220	109,911
1852	18,002,140	2,075,256	186,092	132,093
1853	17,191,146	2,141,526	183,360	123,033
1854	17,249,581	2,256,639	208,133	112,062
1855	17,065,979	2,697,390	231,056	131,431
1856	16,193,035	3,054,592	262,448	212,582
1857	17,091,798	3,180,042	289,027	217,352
1858	17,205,653	3,217,600	332,381	196,636
1859	15,443,617	3,275,850	353,388	245,367

Upon the manufacturing industry the first effect of the gold rush was disastrous; but there was an immediate change, especially in Victoria, where the camps of the diggers soon became thriving towns. It was to the population attracted to the country by the gold discoveries that the manufactories owed their subsequent revival and the labour required to operate them. The statistics of these States are not complete enough to enable a statement of the progress of the manufacturing industry to be given; but it is evident, from the rapid increase, after the year 1855, in the number and variety of establishments, that the ultimate effect of the gold discoveries upon the manufacturing industry was extremely stimulating.

Reference has already been made to the opening up of steam communication with England in 1852, during which year the "Chusan," the "Australia," and the "Great Britain"—the last-named the largest ship afloat at that time—visited Australia. In 1856 a steam service, of anything but a satisfactory character, was carried on by the Peninsular and Oriental Company and the Royal Mail Company; but the days of efficient ocean communication were still to come. These early essays, however, had no small effect in encouraging the colonists to agitate for something better, and proposals were made for the establishment of a line of mail-packets *via* Panama, but they did not bear fruit until the year 1866.

The history of railway construction is elsewhere dealt with. It was not until 1846 that the people of Australia began to awaken to the

advantages of railroad communication, and not until two years afterwards that a company was formed to construct a railway from Sydney to Parramatta and Liverpool. This line was commenced in 1850 and partly completed in 1855. Meanwhile, the discovery of gold had been made, and attention was directed to railway construction in Melbourne, and in 1854 the first line in Australia was opened for traffic; it ran from Melbourne to Port Melbourne, and was $2\frac{1}{2}$ miles long. For some years railway construction languished, the enthusiasm of its advocates being doubtless considerably damped by the reflection that the short line from Sydney to Parramatta—only 14 miles in length—cost £700,000, or £50,000 a mile. The progress of railway construction is shown by the following figures, which give the length of line open for traffic in the years named :—

Years.	Miles.	Years.	Miles.
1854	$2\frac{1}{2}$	1857	117
1855	$16\frac{1}{2}$	1858	132
1856	$32\frac{1}{2}$	1859	171

With steam communication with other parts of the world, and the introduction into Australia of the railway system, new markets were being created for the trade in coal, although it was not before the subsidence of the gold fever that they began to be availed of. The quantity of coal raised in 1852 was 67,404 tons, and in 1858 over three times as much, viz., 216,397 tons. In 1850 and 1851 the price of coal ranged from 9s. to 10s. per ton; in 1852 it had risen to over 80s. per ton, although it did not remain for an extended period at this high figure. The quantity and value of the production of this mineral during the period under review were as follow :—

Year.	Quantity raised.	Average price per ton.	Approximate total value.
	tons.	s. d.	£
1852	67,404	10 11	36,885
1853	96,809	16 2	78,059
1854	116,642	20 6	119,380
1855	137,076	13 0	89,082
1856	189,960	12 5	117,906
1857	210,434	14 1	148,158
1858	216,397	15 0	162,162

The whole of this coal was mined in New South Wales.

During the whole of this period considerable activity was shown in testing the navigable waters of the Continent, and repeated efforts were

made to open up communication by way of the rivers Murray and Darling, which, of course, had a corresponding influence on the great pastoral industry by affording means of cheap transit for the leading staple of the interior. In 1853, W. R. Randall, in his small steamer, the "Mary Anne," was the first to proceed up the Murray, and eventually he reached Maiden's Punt, as the crossing from Echuca to Moama was then named. In the same year Captain Cadell proceeded in a steamer up the Murray to near Albury "with the greatest ease and success." This voyage attracted marked attention, and was the cause of the inauguration of regular steam-service on the river. Captains Cadell, Johnson, and Robertson, and Mr. Randall, subsequently followed up the original essays in the direction of inland river navigation by steaming up the courses of the Murrumbidgee, the Darling, the Barwon, and the Edwards, thus making accessible to population, and opening up to the wool-growing industry, an enormous expanse of territory. In the north, A. C. Gregory (in search of Leichhardt), Dalrymple, and other explorers, were successively unlocking to the squatters, who followed closely in their wake, the broad areas of pasturage, whose almost immediate occupation advanced the northern congeries of squatting localities, known as the Moreton Bay District, in rapid strides to the dignity of the Colony of Queensland. It is noteworthy, and distinctly characteristic of the period, that by the year 1854 the purchase of land for agricultural purposes had almost ceased, territory being taken up instead in large tracts by pastoral lessees for grazing purposes.

The population of Australia in 1850 was 480,120; in 1855 it had risen to 821,452, and in 1860 to 1,141,563. The tendency to crowd into the cities was already visible; in 1861 Melbourne held 139,916 people, and Sydney 95,789, or together 235,705, a total representing one-fifth of the population of the Continent.

INDUSTRIAL PERIOD—1859-62.

The three years, 1860-62, may be regarded as a transition period, during which the country was undergoing the process of recovery from the days of excitement and dreams of chance, when the wealthy speculator of one moment became the beggared adventurer of the next, and the outcast of many years the millionaire of as many months. The community was vaguely restless, as though beginning to realise that the golden era of its recent experience was drifting into a prosaic period of sterner conditions and slower and more arduous growth. There were many, however, still in the daily expectation of hearing of new discoveries as rich as those of the previous decade, and these refused to accept the conditions of settled industry, while the rumours of a new find was sufficient to entice them away from the employment they chanced at the time to be following.

The production of gold in 1859 was nearly ten and a half millions, of which one and a quarter million was from New South Wales, and the

balance from Victoria. The following was the yield during the four years embraced in this period :—

Year.	Victoria.	New South Wales.	Other Districts.	Total.
	£	£	£	£
1859	9,122,868	1,259,127	730	10,382,725
1860	8,626,800	1,465,373	.....	10,092,173
1861	7,869,812	1,806,171	... ..	9,675,983
1862	6,633,124	2,467,780	12,442	9,113,346

It will be seen that, in spite of the improvement in New South Wales, the total gold won was steadily declining. The earnings of the working miner were diminishing at even a greater ratio than the foregoing figures indicate, with the natural and immediate result that there was a return of gold-seekers to their original or other pursuits. Agriculture naturally received more attention, but many successful miners made investments in squattages, and both for farming and grazing there arose a persistent demand for the acquisition of State lands on more equitable terms than had hitherto prevailed in Victoria and New South Wales.

The renewal of attention to agrarian pursuits was general throughout Australia. Victoria and South Australia had about equal areas under tillage, although the value of crop was, perhaps, greatest in the first-named. Victoria had benefited most by the gold discoveries, both directly and indirectly, and was now in all important respects the leading State. It was the chief financial centre, and had the largest population, trade, acreage under tillage, and mining yield, as well as a larger number of sheep, and perhaps sheep of a better class than possessed by any of its neighbours. New South Wales stood first in regard to the possession of cattle and horses; Queensland and South Australia had already large interests in live stock, especially in sheep and cattle; and Tasmania depastured more sheep than it does at the present time, while the number of cattle and horses in the State was considerable. The following were the numbers of stock of each class at the close of the year 1862 :—

State.	Sheep.	Cattle.	Horses.
New South Wales	6,145,651	2,620,383	273,389
Victoria	6,764,851	576,601	86,067
Queensland	4,553,353	637,296	36,532
South Australia	3,431,000	258,342	56,251
Western Australia	295,666	36,887	12,099
Tasmania	1,616,225	83,143	20,742
Total... ..	22,806,746	4,212,652	485,080

The area under crop at the close of the year 1862 was 1,549,255 acres. In South Australia the acreage was 494,511; in Victoria, 465,430; in New South Wales, 302,138; and in Tasmania, 253,050. The beginning of an important industry was made in Queensland, though the area in crop was only 6,067 acres, while in Western Australia the cultivated area was 28,059 acres. The importance already assumed by South Australia is very noticeable, and from this period that State and Victoria continued to make, for twenty years, rapid and almost equal progress, until in 1892 the superiority in agricultural interests fell to Victoria, where it has remained. Although New South Wales had many advantages over the southern States, its agricultural progress was astonishingly slow; in point of fact, its position was little in advance of Tasmania so far as concerned acreage, and probably below it in point of value.

The permanent effect of the gold discoveries on the industries of Australia is best seen in the trade returns, and especially in the figures relating to exports. In 1850 the total value of exports from Australia was £3,584,000; in 1856, when the gold production was at its height, the value was £21,794,000; in 1861 it was £23,166,607; and thereafter the values showed a constant tendency to increase. The phrase that the gold discoveries "precipitated Australia into nationhood" is no poetic exaggeration, but an actual fact.

The progress made in railway construction during this period was far from satisfactory. The Governments of the different States were not wanting in enterprise, but it was difficult to obtain money at a rate of interest sufficiently low to warrant them in borrowing; and even if loans at moderate rates could be raised, the prospect of sufficient traffic being obtained to make the railways pay was not assured. In 1862 the length of line open for traffic was 368 miles, viz., 214 miles in Victoria, 98 miles in New South Wales, and 56 in South Australia.

Allusion has been made to the demand for land which set in after the more easily worked gold deposits had been exhausted and erstwhile gold-seekers were compelled to look round for other means of livelihood. The beginning of the sixties marks the inception of the agrarian legislation and agitation for cheap land that has persisted in every State to the present day. New South Wales led the way by passing a law, under the provisions of which land was obtainable by free selection before survey. Sir John Robertson's Land Act—the measure referred to—came into operation in 1861, and the new principle it initiated had lasting, if not immediately apparent, effect on the condition of the working classes, giving them opportunities for employment not previously open to them. The main principle of the measure, which did so much to assist recovery from the dead level of conditions that prevailed at the time, is embodied in the following clause:—"Any person may, upon any Land Office day, tender to the Land Agent for the district a written application for the conditional purchase of any such lands, not less than 40 acres nor more than 320 acres, at the price of 20s. per acre,

and may pay to such Land Agent a deposit of 25 per centum of the purchase money thereof. And, if no other application and deposit for the same land be tendered at the same time, such person shall be declared the conditional purchaser thereof at the price aforesaid."

The free selector of any portion of Crown lands had three years' credit for the payment of the remainder of his purchase-money. Should he, after that time, be unable or disinclined to make payment, liberty was granted him to defer instalments for an indefinite period on paying 5 per cent. interest per annum on the principal amount remaining unpaid. It was also provided that the purchaser of any area of land from 40 to 320 acres should be entitled to three times the extent of his purchase for grazing ground, so long as it should not be claimed by any other free selector. Certain conditions were imposed regarding residence, which came to be more honoured in the breach than in the observance.

No other State dealt so lavishly with its waste lands as did New South Wales. The amendments made by Victoria were more cautious, and it was not until 1869 that the principle of free selection, as in vogue in New South Wales, was adopted. The pressure of population from abroad was not so great in Tasmania, South Australia, and Western Australia as to compel agrarian legislation of a revolutionary character, and in each of these States the amendments in the law, though frequent, were such as to conserve the public estate. In the period under review Queensland was only beginning its career as an independent State, and having a vast territory to dispose of, which did not offer the same attractions as were offered by the southern provinces, its land legislation was marked by extreme liberality to the intending settler.

The period 1859-62 was peculiarly one of transition so far as wages were concerned; there were no recognised trade rates, and even in the same year there were occasional variations, sometimes as many as four in the daily wages of artisans. An example of this may be given for the year 1861. In that year the daily wages of masons working in Melbourne fell from 14s. in April to 13s. in July and 12s. in October, and the wages of bricklayers were, in the same months, 12s., 11s., and 10s. per day. Other trades were somewhat similarly affected. The following were the current wages in the closing months of the years named, in Melbourne and Sydney:—

Trade or Calling.	1860.		1861.		1862.	
	Melbourne	Sydney.	Melbourne	Sydney.	Melbourne	Sydney.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Masons	14 0	11 6	12 0	10 0	10 0	10 0
Plasterers	11 0	10 6	10 0	11 0	8 0	10 0
Bricklayers	12 0	10 6	10 0	11 0	8 0	13 0
Carpenters	11 6	10 6	10 0	10 0	8 0	10 0
Blacksmiths	11 0	10 6	10 0	10 0	10 0	10 0
General Labourers	7 6	6 0	6 0	6 0	5 6	6 0
General Servants (female)	per week.	per week.	per week.	per week.	per week.	per week.
	10 0	8 6	11 0	9 0	12 0	10 0

The wages of female servants were in addition to board and lodging. The figures just given mark the transition from the high rates of the gold-discovery period to those payable under modern conditions. There was, naturally, considerable reluctance on the part of wage-earners to accept the new conditions, and there was considerable fluctuation in wages before a distinct understanding was arrived at between employers and employed.

The prices of commodities fell with the decline in wages, although not to so great an extent, but rents were adjusted to the new conditions. It is not easy to give average prices in each part of Australia at this period; for, although price lists are available, it is difficult, if not impossible, to be certain that the goods mentioned therein are identical with those quoted in similar lists for other places. Speaking generally, the prices of agricultural and dairy produce were lower in Melbourne than in Sydney; agricultural produce was also of lower price in Adelaide than in Sydney. Beef and mutton were cheaper in Sydney than elsewhere. Imported goods were, on the whole, of lower price in Melbourne than in the other capital cities—that is to say, in the retail shops,—the wholesale prices being much the same. The following are the average prices of some of the principal articles of consumption in the retail shops of Sydney during the year named:—

Article of Consumption.	1860.	1861.	1862.
	s. d.	s. d.	s. d.
Wheat, per bushel	8 0	6 6	7 0
Bread, 1st quality, per lb.....	0 3½	0 4	0 2½
Flour, per lb.....	0 3½	0 3	0 3
Rice, per lb.	0 5	0 4	2d. to 4d.
Oatmeal, per lb.	0 6	0 6	0 5
Tea, per lb.	2 3	2 4	1/6 to 2/6
Coffee, per lb.	1 6	1 6	1/4 to 1/6
Meat, fresh, per lb.	0 4	0 3	0 4
Butter, fresh, per lb.	1 6	1 8	2 3
Cheese, English, per lb.	1 6	1 7	1 6
Potatoes, per cwt.	7 6	7 3	8 0

INDUSTRIAL PROGRESS—1863—1872.

During this period of Australia's history the industrial and social conditions now obtaining were gradually evolved. The El Dorado dreams of ten years before almost entirely faded from men's minds, and although large discoveries of gold were made both during this period and afterwards, the impulse towards gold-seeking never again became a dominating passion amongst any large class in the community. All the States had, owing to the increased demand for freehold land consequent upon the large influx of population at the time of the gold discoveries, altered their laws with the avowed object of affording men of small

means the opportunity of acquiring land on easy terms, and in the ten years following the passing of the Robertson Lands Acts 11,260,547 acres were disposed of by the six Australian States. Victoria sold 3,607,791 acres, New South Wales 3,969,273 acres, South Australia 2,250,552 acres, and Tasmania 542,061 acres.

It is interesting to note that, taking Australia as a whole, about one-eighth of the land sold by the States was placed under cultivation. The proportions, however, were very different in the different States. In Victoria, it was about one-seventh, in South Australia one-fourth, while in New South Wales it was less than one-thirtieth. These proportions give an indication of the lines upon which the States were progressing. Victoria and South Australia were becoming important agricultural communities, Tasmania was developing grazing and agriculture together, while New South Wales, neglecting agriculture, paid more and more attention to sheep-farming. Gold-mining still maintained a position of great importance in Victoria, but even in that State, at the middle of the period, the industry, measured by the value of its production, ranked below both agriculture and stock-rearing. In 1866 Queensland appears for the first time as a gold producer, and small quantities were obtained in South Australia and Tasmania. The value of the gold exported from Australia in 1859 was £10,382,725; in 1866 it had fallen to £7,103,667.

During this period the coal mining industry of New South Wales was beginning to obtain some importance. In 1858 the quantity of coal raised barely exceeded 100,000 tons; in 1862 it reached about 300,000 tons; and from 1866 to the end of the period the quantity varied from 500,000 to 600,000 tons.

South Australia was helped very much by its copper industry. In the days preceding the gold discoveries the value of copper won did not fall far short of £400,000. The immediate effect of the gold discoveries, as already indicated, was to deprive South Australia of its able-bodied men, especially its miners. By 1854 the value of copper won had fallen below £100,000. With the subsidence of the first excitement of the gold discoveries, labour again returned to the province. In 1856 the output reached £400,000, and remained between that figure and £450,000 up to the year 1861. From 1861 onward the industry received considerable impetus, and the output in 1866 reached the large total of £824,000. Although the following years do not show so valuable a production, the output declining in 1868 to £624,000, the actual quantity of copper won had not diminished, the fall being due to a decline in the price of the metal.

The climatic conditions of the period in some of the States were not such as to encourage the progress of rural occupation. This was especially the case as regards New South Wales. The year 1862 was one of drought and bush fires. The drought persisted till February, 1863, and was succeeded by heavy rains which deluged the eastern portion of the Continent. Floods were recorded from Rockhampton on

the north to Gippsland on the south, and in the Hawkesbury Valley the water rose 27 feet above its normal level. In New South Wales the floods were succeeded by a long spell of dry weather, which lasted into the opening month of 1865. Farmers petitioned Government to be released from claims for seed-wheat advanced during the previous year; crops in many parts of the interior were totally destroyed by rust and drought, and in the north by continued rain—for floods were again submerging many districts,—and efforts were being made to provide accommodation for the houseless poor. The floods, which covered a period of six months, extending from February to July, caused rivers to overflow their banks, swept bridges away, and destroyed a vast amount of property. The year 1866 was normal as regards the seasons, but unsettled conditions again prevailed in 1867. In this year the floods were attended by loss of life as well as by destruction of property. Lines of railway were closed in consequence of the heavy rains, and public works in some districts were greatly damaged. The distress of the settlers who had been “washed out” called so loudly for relief that public meetings were held for the purpose of raising subscriptions. The Colonial Secretary and others hastened to the inundated districts with succour, and the butchers and bakers of Sydney sent meat and bread to those who had been rendered destitute. Dry weather supervened from October, 1867, to January, 1868, followed by heavy rains which inundated the valleys of the Hawkesbury and the Hunter. The year 1869 began with a severe drought, and the 13th February was proclaimed by the Government a day of humiliation and prayer for rain. The pastoral industry was severely affected, and the whole country suffered. In 1870 floods prevailed throughout the State; traffic was stopped and much property destroyed. A Flood Relief Committee was formed, and, notwithstanding the presence of many unemployed in Sydney, great efforts were made to send succour to the “washed-out” settlers. The month of November in this year was specially fraught with disaster from floods. The calendar was simply a record of inundations which were general throughout the State.

The effect of the vicissitudes of the seasons is seen in the returns of the acreage cropped in the States chiefly affected. In New South Wales, from 1861 to 1864 the increase of cultivation was barely 20,000 acres; there were large increases in the two succeeding years, but the area was not retained in cultivation, and the year 1871 showed less tillage than 1866. From 1861 to 1865 the seasons in Victoria were on the whole adverse to the farmer, but subsequent years up to the end of the period under review were distinctly favourable. Tasmania is not subject to adverse seasons, but from 1861 to 1865 the climatic conditions were such that no progress was made as regards area under crop. In Queensland little progress is observable up to 1865, in which year the area cropped did not exceed 15,000 acres. Contrary to the experience of the eastern States, South Australia enjoyed a succession of fair seasons, interrupted by a few that were exceptionally good, and the area devoted

to tillage made regular progress, being checked only in one year (1868) of the period between 1861 and 1871. As will be seen from the table in regard to acreage under crop, the position of South Australia was higher even than that of Victoria. The following is a statement of the area cropped in each State in the years named :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total. Commonwealth States
	acres.	acres.	acres.	acres.	acres.	acres.	acres.
1861	260,798	439,895	4,440	486,667	27,018	163,385	1,382,203
1866	451,225	592,915	24,433	739,714	43,159	167,866	2,019,312
1871	417,801	937,220	59,969	1,044,656	58,324	154,445	2,672,415

The progress of the sheep-breeding industry was continuous up to the year 1868, the seasons which proved so adverse to the farmer being, on the whole, favourable to the grazier; but from 1868 to 1871, which were good farming years, the seasons were against sheep rearing. The most important economic change observable in the period is the reversal of the positions of New South Wales and Victoria. In 1865 the number of sheep depastured in Victoria exceeded that of New South Wales by about three quarters of a million; in 1871 the superiority was with the last mentioned State to the extent of six and a quarter millions. The following is a statement of the numbers of sheep and cattle depastured in the years named :—

State.	Sheep.			Cattle.		
	1861.	1866.	1871.	1861.	1866.	1871.
New South Wales....	5,615,054	11,502,155	16,278,607	2,271,923	1,771,809	2,014,888
Victoria	6,239,258	8,833,139	10,002,331	628,092	598,968	799,509
Queensland	4,093,381	7,278,778	7,403,334	560,196	919,414	1,168,235
South Australia	3,088,356	3,911,600	4,412,055	265,434	123,820	143,463
Western Australia	270,576	481,040	670,909	33,705	41,323	49,593
Tasmania	1,714,498	1,722,804	1,305,489	87,114	88,370	101,540

In spite of the large fall in the gold returns, the exports of the States increased considerably during the period. There was a steady improvement in the quantity of wool and other pastoral produce exported, and the prices obtained were well sustained during the whole period. Victoria held the first place in regard to the value of the trade, both of imports and exports, although at the end of the period its advantage over the mother State was very greatly reduced. It was in this period that Victoria adopted the policy of Protection, which it has since strictly adhered to, though, as will be seen from the historical sketch of the State, that policy was not adopted without a severe legislative struggle. The

customs tariff of February, 1867, imposed duties on a number of articles with a view of affording protection to native industries, and four years later (May, 1871) the duties were increased upon many articles with the view of affording further protection.

The position of Melbourne at the end of the period under review was undoubtedly imposing. The population, 206,780, was far greater than that of any other city in Australia, its nearest rival, Sydney, having a population of only 137,776. But Melbourne's superiority was founded on a stronger basis than that of mere population. Early in the sixties the city became the financial centre of Australia. The enormous sums won at the goldfields were poured into its banks, and filled their coffers to repletion, and fields for investment were eagerly sought after. The Riverina district of New South Wales first attracted attention, and speedily became the property of Melbourne residents, either absolutely or by way of mortgage. From New South Wales their enterprise extended to Queensland and across the sea to New Zealand, until Melbourne was without a rival in the field of Australian finance. The gradual working out of the gold-fields did not alter Melbourne's position. The gains derived from its investments, and the profits flowing to it as the financial centre of the Continent, were greater even than those flowing from the gold-fields in the days of their highest production.

The position acquired by Melbourne was not at the expense of Sydney. It is true that the latter was the chief seat of Australian enterprise in the days preceeding the gold discoveries; but it lost nothing by those discoveries, although its position was now second to Melbourne.

The climatic disturbances affecting New South Wales have been alluded to; but it must not be supposed that no progress was achieved during the period. Agriculture, it is true, made only slight advance, and no beginning had yet been made of manufacturing on a large scale, but the great pastoral industry had thriven, in spite of adverse seasons, and Sydney, on its part, had greatly benefited thereby. The stoppage of immigration was severely felt in some of the industries of the State, and immigration lecturers were sent to England to attract attention to the resources of New South Wales. There was, as is frequently the case in Australia, a demand for labourers in some pursuits in excess of the supply, while there was a dearth of employment in other branches of industry. All the trades connected with the pastoral industry were fully employed; those connected with the building industry, depending for their expansion upon an increase of population were in a very different condition, especially in Sydney. In 1866 there was very keen distress amongst mechanics; and the Government of the State established relief works at Haslem's Creek, where considerable numbers of men were employed clearing and forming a large area to serve as a cemetery. Later in the same year rumours of rich gold discoveries in the Weddin Mountains attracted many of the workers away from the city, and so relieved the tension of the labour market. Queensland was troubled about the same time with a large

number of persons willing to work, for whom no employment was available; but the Queensland difficulty differed from that of New South Wales, both as to its origin and the class affected. The want of employment arose from a neglect of the ordinary canons of good government. It was the credit of the Government that was impaired, general business remaining unaffected. A brief description of the position of affairs at this period will be found in the historical sketch of Queensland in the early part of this volume. The persons who felt the crisis most acutely were the unskilled labourers discharged from public works by reason of the inability of the Government to pay its way. A return to the principles of sound finance, which of course was not accomplished in a moment, removed the cause of the crisis and with it the labour difficulty.

Wages for like employment were fairly level throughout Australia during the whole period, the tendency being for the rate for skilled tradesmen to fall to 8s. per day, and that for general labourers to 5s. per day. The following tables show the wages in some of the principal mechanical trades, and for day labourers and general servants, paid in 1862 and 1871 in the cities of Melbourne, Sydney, Adelaide, and Hobart. It will be seen that a considerable range is shown for most of the rates paid in Melbourne. There were two reasons for this: First, there was a greater range in the quality of the workmen than in the other cities; and, secondly, the Melbourne artisan resisted the inevitable fall in wages more strenuously than did his fellows in the other cities.

Class of Workers.	1861.				1871.			
	New South Wales.	Victoria.	South Australia.	Tasmania.	New South Wales.	Victoria.	South Australia.	Tasmania.
	s. d.	s. s.	s. d.	s. d.	s. d.	s. s.	s. d.	s. d.
Carpenters	10 0	8 to 10	9 0	7 0	8 6	8 to 10	8 0	6 6
Blacksmiths ...	10 0	8 to 12	10 0	9 6	8 6	8 to 10	8 0	6 6
Bricklayers	13 0	8 to 12	10 0	8 6	9 0	8 to 10	8 0	6 0
Masons	10 0	8 to 12	9 0	7 9	8 6	8 to 10	8 0	6 6
Day labourers ...	5 6	5/7	6 0	7 0	5 0	5/-	5 6	4 0

The lower rates shown for 1871 were not accepted without demur, and meetings were held at various places to protest against the reduction in wages; but protests were unavailing when there were large numbers of qualified men unable to obtain employment even at the rates objected to.

The ratio of wages of female servants was well maintained during this period, the slight fall observable in 1866 being more than recovered. Farm labourers and shepherds suffered a slight reduction in wages towards the end of the period, as large numbers who had quitted their employment on the sheep and cattle stations for the gold-fields returned

to their former pursuits. The following are the weekly wages, the rates being in addition to board and lodging provided by the employers :—

	1861.		1866.		1871.	
	s.	d.	s.	d.	s.	d.
Farm labourers	13	0	11	6	10	9
Shepherds.....	13	0	13	0	11	9
Cooks (female).....	11	0	10	0	11	6
Housemaids.....	9	0	9	0	9	0
Laundresses.....	11	0	10	0	10	9
Nursemaids.....	8	0	7	0	8	0
General servants (female).....	10	0	9	0	9	0
Farm house-servants and dairywomen ...	8	6	9	0	9	0

The year 1861 is notable in labour matters, as witnessing a crucial stage in the agitation against the admission of the Chinese to Australia—an agitation which for many years has been an important factor in determining the trend of domestic and industrial legislation. The discovery of gold brought to Australian shores great numbers of these aliens. In 1852 they began to arrive, for prior to that year their presence, except at the seaports, was practically unknown. Victoria was the first place of settlement chosen by them. Although their number at the census of 1854 was not greater than 2,000, the local Legislature took alarm, and passed an Act limiting the number of Chinese to be brought into the country to one for every 10 tons of a vessel's cargo. Five other Acts were passed between 1855 and 1864, regulating the influx of these Asiatics. In 1856 the number in Australia was 26,000, and of these 24,000 were in Victoria, the rest being in New South Wales. In 1859 the Chinese inhabitants in New South Wales and Victoria numbered 37,000, or about $4\frac{1}{4}$ per cent. of the population. The Chinese were almost wholly adult males, and if this number be compared with the adult male population of the two States it will be found that the proportion in the year named was not less than $11\frac{1}{2}$ per cent. Victoria had the largest share of these aliens. In 1861 there were about 38,300 Chinese in New South Wales and Victoria, viz., 12,988 in the first-named, and 24,732 in the latter State. Thenceforward the Chinese population of Victoria rapidly declined, and the majority of those leaving crossed the Murray into New South Wales.

The arrival of Chinese was at no time viewed with equanimity by the whites; but with large numbers of disappointed gold-seekers in the country there was a growing feeling of resentment, and in 1861 matters in regard to this class of immigration reached a crisis. The gold-field opened up at Burrangong, in New South Wales, proved extraordinarily rich; a great rush set in to that place, and large crowds of the Chinese flocked to the diggings there. The miners received this influx of Asiatic fossickers with very bad grace, and convened a public meeting for the purpose of deciding whether "Burrangong was a European or a Chinese territory." They likewise addressed a petition to the Assembly, complaining of the swamping of the field by thousands of Chinese. This agitation against the alien miners resulted in continuous riotings. The unfortunate foreigners were ejected from their claims, their tents were

burned, and they were generally ill-used. The Government, determined to uphold order at any cost, despatched to the scene of the riots—a place called Lambing Flat—a mixed force of artillerymen, with two 12-lb. field-pieces, some men of the 12th Regiment, and some members of the mounted police force. The Premier, Mr. (afterwards Sir) Charles Cowper, also visited the field and addressed a monster meeting of the miners, sympathising with their grievances, but informing them that no redress could be obtained until riot and confusion had entirely ceased. When the Premier had returned to Sydney the excitement rapidly ceased. A new rush to a locality named Tipperary Gully lured away 6,000 miners from the scene of their former disputes, and the Chinese departed to other fields. Thus ended the first labour conflict between the Europeans and the Chinese, who from that date onward became a growing menace to the character of the settlement of the Australian States.

At the beginning of the period a Select Committee was appointed by the Parliament of New South Wales to inquire into and report upon the state of the manufacturing and agricultural industries. On the 12th December, 1862, this Committee brought up a report which stated that, from the evidence taken, it was shown that manufactures had not increased during twenty years; that many which had flourished in the past were not in existence; and that in consequence thousands of youths were wandering about the streets in a state of vagrancy, instead of learning some useful trade. This statement is, however, too sweeping to be accepted literally, and is not supported by any evidence of value. It may be taken, however, as indicating the popular opinion of the day, and perhaps as a tribute to the superior condition of affairs on the Victorian side of the Murray and in South Australia. The slight progress made in agriculture in New South Wales, and the more rapid development of Victoria and South Australia, have already been noticed. In regard to manufactures, none of the States could claim a strong position. If there were nothing else against the manufacturers, there was the absence of a local demand for the products, without which the maintenance of industries in their early stages is always difficult, and sometimes impossible. Owing to the imperfection of the statistics it is impossible to speak with exactness of the amount of employment afforded by the manufacturing industries of 1861. So far as the records now existing enable an estimate to be made, the persons employed in the year 1862, in what are now classified as manufacturing industries, were:—

New South Wales.....	12,225
Victoria	6,405
Queensland.....	4,966
South Australia.....	5,066
Western Australia	373
Tasmania.....	3,372

The chief industries in New South Wales were the grinding or dressing of grain, sugar-making, distilling, and boat-building. In

Victoria, flour and grain mills gave employment to 552 persons, no other industries being on a like scale. In 1871 a very considerable change is observable. Victoria is no longer a minor State, and as regards manufactures it is in every important respect superior to New South Wales. It is still difficult to speak with certainty as to the number of persons employed, but the following may be taken as a fair approximation:—

New South Wales	...	...	...	...	13,583
Victoria	...	...	...	...	19,569
Queensland	...	...	...	...	5,518
South Australia	...	...	...	...	5,629
Western Australia	...	...	...	...	414
Tasmania	...	...	...	...	3,747

In Victoria the largest employment was afforded by breweries, clothing factories, saw-mills and joinery works, boot factories, tanneries, iron foundries and engineering establishments, and potteries and brick-works; but there were many others of growing importance. In New South Wales the industries on the largest scale were tobacco factories, sugar-mills, tanneries, brick-works, saw-mills, iron foundries and engineering establishments, clothing factories, flour-mills, and coach-building establishments. The state of the industries throughout Australia cannot, however, be gauged from a mere statement of hands employed. Most of the industries were on a small scale. In the four less populous States, the average number of hands to each establishment was not more than three or four, and only in the capital cities was there a considerable employment of machinery.

The prices of the principal articles of consumption were greatly reduced in this period as compared with those of previous years following the gold discoveries; rents also showed a great reduction. Taking the seven articles in common use, prices for which have been given for other periods, the following were the averages for Sydney:—

RETAIL PRICES IN SYDNEY.

Year.	Bread per 2 lb. loaf.	Rice per lb.	Beef per lb.	Sugar per lb.	Beer (Col.) per gal.	Butter per lb.	Potatoes per cwt.
	d.	d.	d.	d.	s. d.	s. d.	s. d.
1859	6	4½	4	5	4 0	1 10	8 0
1860	6½	5	4	5½	3 6	1 6	7 6
1861	6½	4	3	5½	3 6	1 8	7 3
1862	4½	3	4½	4½	2 0	2 3	8 0
1863	4	3	4½	4½	1 6	1 6	7 0
1864	5½	3	4	4½	2 0	1 6	5 0
1865	7½	3	3	4½	2 0	1 9	8 0
1866	6½	4	3	4	2 0	1 3	6 0
1867	3½	3½	2½	4	1 6	1 6	7 0
1868	4	4	3½	4	2 0	1 3	9 0
1869	3½	3	2	4	1 4	1 6	4 0
1870	3½	3	3½	4	1 4	1 3	5 0
1871	3½	2½	2½	4	2 3	1 3	4 0

The prices stated above are for articles of good quality. Cheaper articles of low quality went into consumption, but not to any very considerable extent. Bread, for example, was retailed in some places at one penny per loaf less than quoted, while low grade sugar was also retailed at about one penny per pound less than shown. The same remarks apply to the following statement of prices for Melbourne during the same period. The figures in most cases are approximate. It is always difficult in dealing with prices to determine if the quality of the articles is the same in each year compared. It must be understood that the prices given have reference to the total quantity entering into consumption. In some years there was an extraordinary range in the figures quoted. Thus, in 1859, potatoes sold at 37s. 4d. per cwt., and in 1860 at 32s. 8d. per cwt. for a short period; but it is probable that very little entered into consumption at these prices, especially as bread was, weight for weight, much cheaper.

RETAIL PRICES IN MELBOURNE.

Year.	Bread per 2 lb. loaf.	Rice per lb.	Beef per lb.	Sugar per lb.	Fresh Butter per lb.	Potatoes per cwt.
	d.	d.	d.	d.	s. d.	s. d.
1859	7	4	7 to 10	4½	2 10	9 4
1860	6	3½	4½ ,, 6	4	2 6	9 4
1861	5	3½	3½ ,, 4½	4	1 6	9 4
1862	4	3½	3 ,, 6	4½	2 3	4 8
1863	4	3½	4 ,, 7	4½	2 6	9 4
1864	6	3½	4 ,, 6½	4½	1 3	4 8
1865	6	3½	4 ,, 9	5½	3 0	4 8
1866	4½	3½	4 ,, 9	5½	3 0	4 8
1867	4½	4	2 ,, 7	4½	1 8	4 8
1868	5	3½	2 ,, 6½	4½	1 7	9 4
1869	4½	3½	3 ,, 7	4½	2 2	10 0
1870	3½	3½	3 ,, 6	4½	1 9	4 8
1871	3½	3½	4 ,, 8	4½	0 10	8 2

The prices of commodities in the Adelaide market were, on the whole, less than in Melbourne, but wages ruled higher in the latter city, although, as affairs became settled after the gold rushes had subsided, prices tended to become level in the great centres of population. Bread was usually cheaper in Adelaide than elsewhere, and meat cheaper in Sydney, while potatoes and other vegetables, as well as butter and cheese, were, towards the end of the period under review, of less price in Melbourne. Imported goods varied in price with the duties payable; nevertheless importers continued to keep a semblance of equality in quotations in the various cities by adapting the quality of the goods to the prices obtainable.

The following statement refers to Adelaide:—

RETAIL PRICES IN ADELAIDE.

Year.	Bread per 2 lb. loaf.	Rice per lb.	Beef per lb.	Sugar per lb.	Fresh Butter per lb.	Potatoes per cwt.
	d.	d.	d.	d.	s. d.	s. d.
1859	6	3	5½	5	2 1	8 10
1860	5½	3	6	5	1 8	8 9
1861	3½	3	4½	5	0 11	6 0
1862	3½	3	4½	5	1 0	8 0
1863	3½	3	4¾	5	1 0	10 0
1864	5	3	5	5	1 0	7 3
1865	5	3	7½	5	1 8	8 0
1866	4	3	7¼	5	2 1	7 10
1867	3	3	4¾	5	1 1	5 8
1868	4½	3	3½	5	1 3	5 0
1869	3½	3	4	5	1 6	8 3
1870	4	3	5	5	1 0	4 9
1871	3½	3	4	5	0 10	3 10

The monetary position during the period was very peculiar. Up to 1861 interest allowed on deposits for twelve months by the banks was 5 per cent. In the year named the rate was reduced to 4 per cent., and remained unchanged until 1863, when it was increased to 6 per cent. for some and 6½ per cent. for other banks, private companies offering as much as 7 per cent. These high rates continued till August, 1867, when the interest fell to 5 per cent., and during the following year was reduced by successive stages to 3½ per cent. In the succeeding year the rate was increased, first to 4½ per cent. and then to 5 per cent., at which figure it remained until 1871, when there was again a reduction to 4 per cent.

The money market was much disturbed owing to the necessities of some of the State Governments. There was a large amount of New Zealand Government debentures bearing interest at 8 per cent. on sale in Sydney, and the New South Wales Government was so pressed for

money that, at one time, it found itself compelled to place its 5 per cent. debentures at £70 per £100 of stock, allowing for redemption in twenty-eight years at par. This was equal to paying nearly $7\frac{1}{2}$ per cent. interest.

The Governments of several of the States favoured the policy of assisted immigration, and during the ten years 1861-1870, 135,702 persons arrived in Australia, wholly or partly at the public expense. Of these, 18,165 came to New South Wales, 46,594 to Victoria, 56,586 to Queensland, 13,730 to South Australia, and 627 to Tasmania. The total accession of population from abroad during the same period was 173,277, viz., 68,191 to Queensland, 45,539 to New South Wales, 38,935 to Victoria, 17,949 to South Australia, and 5,891 to Western Australia; Tasmania, however, lost 3,228 persons by emigration. Though the country badly needed opening up, little progress was made during this period in railway extension, the average length of line opened being rather less than 80 miles a year.

During this period business was very much disturbed in New South Wales owing to the depredations of the bushrangers. From 1860 to 1870 was the great bushranging epoch in the State's history, which memorialised such unworthy names as those of Frank Gardiner, the Clarkes, Dunn, Johnnie Gilbert, Ben Hall, Morgan, Power, "Thunderbolt," and O'Malley. The existence of this dangerous bushranging pest was a source of keen embarrassment to the Government, and a standing challenge to every Ministry which accepted office.

INDUSTRIAL PERIOD—1872-1893.

The twenty-two years from 1872 to 1893 do not call for such lengthened notice as former epochs, inasmuch as the statistics to be found in various parts of this volume give a detailed illustration of the progress made during the period. The preceding period had closed somewhat tamely. Population was not being attracted in any great numbers; the demand for land was not by any means so great as might have been expected from a consideration of the facilities afforded for its purchase, nor was there any extensive cultivation upon the land which was bought. The efforts that were made for the development of the country were not well sustained, except, perhaps, in Victoria, while railway construction was almost suspended. Expenditure by the Government on public works, either from revenue or from the proceeds of loans, was small, while little private capital found its way to the country. In such circumstances the industrial condition could not be said to have been hopeful. Nevertheless, causes were at work which were to affect materially the progress of Australia, especially of the eastern States.

The great discoveries of gold during the early fifties had given strength to the opinion that mining would speedily and permanently oust pastoral pursuits from the first position amongst the industries of the country. This expectation was soon disproved. From 1872 to

1893 the position of Australia as a gold-producing country greatly declined. In Victoria, the chief producer, the yield of the precious metal fell away from over £5,000,000, at the beginning of the period, to a little over £2,300,000 towards its close. In New South Wales the industry, which seemed very promising in 1872, in which year it yielded £1,644,000, fell away to less than one-fifth of that quantity in 1888. Queensland, on the other hand, began to display the richness of its gold mines. In 1872 the mines of that State already showed the respectable yield of £500,000; this was rapidly increased, and in 1878 the value of gold obtained exceeded a million sterling, and ten years later it was two and a half millions. This satisfactory condition of things was due to large discoveries of the precious metal at Rockhampton and Gympie, and subsequently to the wonderful deposits found at Mount Morgan. Tasmania could scarcely be called a gold-producing country at the beginning of this period; but in 1877 the famous quartz reef, afterwards worked by the Tasmanian Gold Mining Company, was discovered, and in 1879 the yield reached a quarter of a million sterling, and, although it fell away in subsequent years, the discovery was most opportune. The gold discoveries in Western Australia do not belong to this period, but the long-accepted dictum that the country was without minerals was fully disproved, and in 1893, the year which closes the epoch under review, the gold won was valued at £421,000.

The chief coal-fields in the vicinity of Newcastle, New South Wales, yielded in 1872 about 1,000,000 tons; this was increased in 1891 to over 4,000,000 tons; and as 370 tons represents the employment of one man in or about the mines, the benefit of the additional output may be estimated. Queensland, Victoria, and Tasmania also began during the period to open up their coal-fields, but the value of the combined output of the three States, in 1893, was under £200,000.

Valuable deposits of other minerals were also worked to a considerable extent. In New South Wales, tin and copper were mined for during the whole period, the greatest value of production being £568,000 for tin in 1881, and £473,000 for copper in 1883. The quantity of these metals obtained was largely influenced by the weather conditions, which in some years were most unfavourable, while the extraordinary fluctuations in the price of the metals in the European markets also adversely affected their production.

Mining for silver became an important industry in New South Wales in 1885, and for the following year the yield of silver and lead, the two metals being found in conjunction, was about half a million sterling; in 1891 the value of the output was £3,600,000, and in 1893 it was still over £3,000,000.

In South Australia, copper-mining was an important industry, and added much to the wealth of the State, although towards the close of the period the output was greatly diminished, chiefly through labour disturbances. Queensland produced large quantities of tin and copper in the earlier years, but towards the end of the period, both metals

being affected by a fall in price, the output, especially of copper, was considerably smaller. In Tasmania, there was an opportune discovery of tin at Mount Bischoff in 1871, when the island stood badly in need of an impetus to trade, and this important find marks the beginning of a new era in the mining and industrial history of the State. The discovery of gold in Tasmania has already been alluded to. Valuable lodes of silver-lead and copper were found in the western parts of the island, notably silver-lead at Mount Zeehan in 1885, gold and copper at Mount Lyell in 1886, and silver and lead at Heazlewood in 1887.

Taking Australia as a whole, agriculture made great progress from 1873 onwards. In 1872 the area under crop, exclusive of that devoted to grass, was 2,491,023 acres; in 1880 this had been increased to 4,583,894 acres; in 1890 to 5,430,221 acres. Of the larger States, the least progress was made by New South Wales, if progress be measured by acres under crop. In the ten years, from 1872 to 1882, the breadth of land devoted to the plough was increased by 247,689 acres, as compared with 709,479 acres in Victoria, and 1,267,482 acres in South Australia. The smallness of the population in Western Australia precluded any attempt at cultivation on a large scale, while Tasmania, with its small home market, and entrance barred to the markets across the straits, made very little progress, the area under crop in 1893 being only 179,000 acres, as compared with 156,000 acres twenty years previously. So early as 1852, South Australia had produced sufficient wheat for its own requirements, and was exporting its surplus, part to Great Britain, and part to New South Wales and other States with deficient production, while, so far as foodstuffs were concerned, Victoria also became independent of outside assistance in 1877. The value of the country's production, however, is not to be estimated merely by the acreage under crop. The maize and sugar crops of New South Wales, estimated by their yield, would represent four times their area in wheat land. A more exact idea of the condition of the agricultural industry may be obtained from the figures relating to the value of production. Judged by this standard, the production of Victoria stood easily first during the whole period, while New South Wales and South Australia, with almost equal values, were second and third. In 1871 the return from agriculture in the Commonwealth States was £8,941,000, equivalent to £5 7s. 2d. per inhabitant; in 1881 the value had increased to £15,519,000, or £6 17s. 9d. per inhabitant; while in 1891 the production reached £16,480,000, or £5 3s. 6d. per inhabitant. This satisfactory result was obtained in spite of a fall of about one-third in the prices of agricultural products. Further details in regard to agriculture will be found in the chapter dealing specifically with this question.

When the development of the pastoral industry during this period is considered, it will be readily understood how it happened that certain States, well fitted for agriculture, showed comparatively little progress in the breadth of land brought under tillage. Leaving aside for the present the question of prices, and considering only the volume of

production, it will be found that this period was the one, of all others, most favourable to the pastoral industry. Taking Australia as a whole, the following figures, giving the number of cattle and sheep and the weight of the wool clip at various periods, illustrate the position of the industry :—

Year.	Cattle.	Sheep.	Wool.
	No.	No.	lb.
1871	4,277,228	40,072,955	211,413,500
1881	8,010,991	65,078,341	324,286,100
1891	11,029,499	106,419,751	543,495,800
1893	11,546,833	99,799,759	601,085,000

The favourable position of the pastoral industry was maintained almost throughout the period in spite of a considerable fall in the prices of the staple articles of production. This was especially the case in New South Wales and Queensland. In New South Wales the wool-clip in 1871 weighed about 74,000,000 lb.; in 1892 it was nearly five times that weight. In Queensland the chief interest was cattle-grazing, and the number of cattle increased nearly sixfold in twenty years—that is to say, from 1,168,000 in 1871 to 6,192,000 in 1891. The first check to this prosperous state of affairs was brought about by the fall in prices. High prices for all classes of local produce obtained in 1875; but from that year to 1877 there was a reduction equal to about 14 per cent. Nevertheless, at the reduced prices the industry was highly profitable, especially as the flocks tended to increase largely in numbers. Good prices prevailed until 1884, but there was a further fall of 16 per cent. in the ensuing two years. In 1886 the country began to feel the effects of price reduction, which almost counterbalanced the larger returns due to the increase in the number of stock depastured. From 1886 to 1890 prices continued with little change, but from 1890 to 1894 there was a steady decline, the fall in the four years being equal to 30 per cent. During the nineteen years, 1875 to 1894, the total decline was equivalent to 49 per cent., and affected all descriptions of pastoral products; and as there was no corresponding reduction in the cost of production, and little in the cost of transport, the reduced prices proved a very severe blow to the staple industry of the country.

The various manufacturing industries prospered over the greater portion of this period. The number of hands employed in Victoria in 1873 was 24,495; in 1880 the number had increased to 38,141; in 1885 to 49,297; and in 1889 to 57,432. This was the year of greatest prosperity in Victoria. Thenceforward the manufacturing industry greatly declined, and in 1893 the number of hands employed was 39,473, or no greater than in the year 1883. In New South Wales, also, there was considerable impetus given to the manufacturing industry, which in 1889 gave employment to 45,564 persons; but, influenced by the same

causes that affected Victoria, the number of persons employed fell away in 1893 to 38,918.

In the earlier years of the period the expenditure of borrowed money by the States was very moderate; but as money became easier to obtain in the London markets, the various Governments availed themselves of their opportunities to the fullest extent. The public debt of New South Wales in 1871 stood at about $10\frac{1}{2}$ millions; in 1881 it was still below 17 millions; from 1881 to 1891 it rose to 53 millions, showing an increase of 36 millions in ten years. During the greater part of this period New South Wales had an abundantly large land revenue, which was expended for current purposes; this, added to a huge loan expenditure, rarely less than £4,000,000 a year, gave the State a predominating influence in the labour market of the Continent.

In Victoria there was much the same condition of affairs, except that the Government had not any considerable revenue from the sale of its public lands. In 1871 the public debt in Victoria stood at 12 millions; in 1881 at $22\frac{1}{2}$ millions, and in 1891 at $43\frac{1}{2}$ millions. In some years, considering the number of the population, the loan expenditure was prodigious, although never on so lavish a scale as in New South Wales. The largest outpouring in any one year from loan funds was in 1890, when £4,134,000 was expended. Queensland also indulged in borrowing on a scale much beyond its requirements. From 1872 to 1882 the expenditure from loan funds was nearly £900,000 a year. From 1882 to 1892 it averaged between one and two millions. In South Australia the State expenditure from loans during the period 1872 to 1892 was scarcely ever less than one million a year, in some years rising to as much as $1\frac{3}{4}$ million. Western Australia was the only State in which the loan expenditure was kept within reasonable proportions, its total debt in 1891 being only £1,613,000. In Tasmania, from 1880 to 1890, $4\frac{1}{2}$ millions was added to the public debt, expenditure slackening off after 1891.

In the eastern States the year 1892 was the first to show a restricted loan expenditure, the total for the five States, which in 1889 had been over 11 millions, and in 1890 about 10 millions, falling to less than 3 millions—equivalent to a shrinkage of at least 7 millions. This sudden contraction of expenditure had a most serious effect upon the labour market, and at least 40,000 men, accustomed to look to the Government or to contractors working under the Government for their employment, were thrown upon the labour market, which immediately became disorganised. Indeed, so far as New South Wales was concerned, the labour market was disorganised even in 1888, a state of affairs which did not altogether result from the cessation of expenditure on public works. Large numbers of persons had been attracted from the other States by the extravagant expenditure and vigorous immigration policy of preceding years, and on the Government reducing their expenditure from extravagance to moderation, thereby involving a decrease of about three millions sterling, some 15,000 men were left without employment.

To mitigate the distress consequent upon the inability of the community to absorb so much labour thus thrust upon it, the Government started relief works, still further attracting the unemployed to the vicinity of Sydney, and an expenditure of nearly £400,000 was incurred upon useless works before they were abandoned.

As affecting the industrial condition of the country, the importation of private capital for investment, in addition to that brought by persons taking up their abode in the State, was almost as important as the introduction of money by the various State Governments and by the local governing bodies. During the twenty-two years under review, the amount of private capital sent to New South Wales for investment, in excess of what was withdrawn, amounted to some 19 millions, and the money brought by persons coming to the country was over 23 millions. The bulk of the capital sent for investment came within the five years 1886-1890, and with the assistance of what was expended by the State during the same period and the preceding one, helped to bring about the industrial inflation so characteristic of those years. The investments made during 1871-1885 in Victoria by persons outside that State were very moderate in their amounts, and were probably not greater than the investments of Victorians in other States. During the years 1886-1890, entirely different conditions prevailed. In the short period of five years the private capital introduced or withdrawn from investments outside the State exceeded £31,500,000—a prodigious sum when the population of the State is considered; and when it is remembered that during the same five years the borrowings of the State Government and of the local bodies exceeded 17 millions, it is easy to understand the extraordinary inflation which arose, especially in Melbourne and the surrounding district. Every branch of industry was affected by the large amounts of capital available in the Melbourne market, and wages, rent, and the price of land reached very high figures. Speculation was carried on to the point where it became gambling, and all classes of real property assumed fictitious values. As illustrative of this, it may be mentioned that the rental value of Melbourne and suburbs during the boom period was £6,815,315, which became reduced when the boom collapsed in 1893 to £5,847,079. In Sydney the inflation brought rental values of the metropolitan district to £6,067,882, which was reduced by the year 1897 to £5,022,910. All the States except Western Australia and South Australia were the recipients of the attention of the British investor. Queensland received nearly nine millions of private capital in the five years 1881-85, large investments being also made in the immediately preceding quinquennial period. From 1885 onwards, however, there was a tendency in Queensland to withdraw capital. Tasmania received about one million pounds during the five years 1871-1875 for investment on private account, and in the subsequent five-yearly periods the amount invested varied between £400,000 and £500,000. These sums were not larger than the island State could readily absorb. There can be no doubt whatever that

during many years Australia received more capital, both public and private, than could be legitimately utilised, and no small portion of it was necessarily devoted to purposes purely speculative. Many persons became suddenly rich by land speculation; on the other hand, as the land which they sold had a productive value far short of the interest represented by the purchase money, many of the purchasers, of whom there were thousands, became embarrassed, and it was some years before they could free themselves from their difficulties. The financial institutions, which had greatly assisted to promote the speculations, became involved also, and by the failure of their customers to redeem mortgages, these institutions, including several of the banks, became the possessors of a large amount of property on which advances had been made beyond all possibility of recovery. There was, however, an evil of greater consequence than the temporary inflation of values. It will be readily conceived that the introduction of capital within the limits of absorption, and the application of it to productive purposes, are conducive to true progress; while, on the contrary, the over-introduction of capital, however applied, means arrest of progress. An example of this may be taken from the history of New South Wales during this period. Of the twenty-two years comprising this industrial period, 1885 and 1886 witnessed the largest introduction of capital, namely, £11,470,000 in the former, and £10,028,000 in the latter year. It is therefore not astonishing to find that the value of domestic produce exported in those two years, when compared with the population, was less than in any other period since the discovery of gold. It must not, however, be supposed that the money introduced by the State or by private persons was to any large extent absolutely wasted. The States carried out many public works of a remunerative character and highly beneficial to the community generally, and the foundations of many important industries were laid by private enterprise during the period. It is true many private investors suffered great loss by the fall in prices which subsequently occurred, but this was a private evil and not a national one. The most detrimental effect produced by the "boom," as it is called, was the withdrawal of large bodies of men from productive purposes and the derangement in the labour market which immediately ensued. From the point of view of wages and cost of living, the greater part of this period was an extremely prosperous one, improving year by year from 1872 onwards. At no period, except in the five golden years, 1853-7, were wages so high, and at no previous period was the purchasing power of money so great. The tide of improvement reached its highest level just before 1885, and in 1886 the signs of a reaction were visible. This was unfortunately coincident with the fall in prices already spoken of. The profits of capital became reduced and employers immediately attempted to reduce wages. In 1886 and the five years following, many strikes and trade disputes occurred. In New South Wales, in 1886-87, work in some of the southern district collieries was suspended for nearly twelve months by strikes and disputes; in 1888 the coal

miners in the northern districts were on strike for several months ; and in 1888 and 1889 the completion of various large public works threw out of employment some 12,000 men—no inconsiderable proportion of the unskilled labour of the country. In 1890 the maritime and pastoral industries were disturbed by strikes and disputes, very hurtful to the community in general and the working class in particular ; and in 1892 another disastrous strike occurred, causing the silver-mines at Broken Hill to remain idle for nearly three months.

The bulk of the production of Australia is for export, and a very small proportion of the produce of the pastoral industry, with the exception of meat, is consumed in the country. The mineral products are also almost entirely exported, and there is a surplus production of bread stuffs. The prices, therefore, which the Australian producer can obtain for his produce are determined by prices and conditions in Europe or America, over which he can exercise little or no control. As a consequence, with a fall in prices of staple produce, employers almost invariably seek to balance their accounts by a reduction in wages ; and under existing conditions it is practically necessary, if production is to continue, that the employees' wages should fall with the prices obtained for the commodity produced. In 1891 and the following years, Australia as a whole was face to face with a falling off in the quantity of production, and a decline in prices. The wage-earners were slow to concede the necessity of wages sharing in the general decline, and this was the root difficulty which caused the labour troubles preceding the crisis of 1893. It has been attempted in some quarters to fix upon the Labourers' Unions the responsibility for the events of that year. When it is remembered that the country was entirely over-capitalised, that land values had risen exorbitantly in the principal cities, and that the banks and financial institutions were largely concerned in maintaining the position of speculators, and were themselves, contrary to the spirit of the law and of their charters, the holders, either as mortgagees in possession or directly, of large squattages and landed properties in the cities and towns, it is easy to conceive that if the working classes had obediently acquiesced in all the demands for a reduction of wages, the crisis would still have happened. In the light of subsequent events, it must be confessed that the crisis was by no means the disaster which has been pictured. On the contrary, as will be seen from other parts of this volume dealing with the progress of production, all the producing interests of the State can look back to this time as a period of general awakening, and general production has made far greater progress since 1893 than ever before, in spite of adverse seasons and persistently low prices.

The flourishing condition of the pastoral industry throughout the greater portion of this period gave a marked impetus to the export trade. In 1872 the total value of the exports of the six States amounted to £32,212,000 ; this was an extremely large showing for a population of only 1,708,502. In 1875 the value of exports had grown to

£38,704,000, representing £20 11s. 3d. per head of population; in 1880 it reached £42,671,000 or £19 6s. 8d. per head of population; in 1885 it was £44,722,000 or £16 15s. 1d. per head; and in 1891 the total reached the enormous figure of £63,138,800, which is equivalent to £19 14s. per head of the population. These figures of course include re-exports and interstate trade; but when every allowance is made on these accounts it will still be found that the production of Australia, as measured by its exports, compared very favourably with that of any country in the world. The year 1891 represented the summit of Australian trade up to that time. In the following year there was a considerable falling off. This, however, was due more to the decline in prices than to any failure in production. The imports into Australia represent the return for the exports in addition to the proceeds of loans raised by the States and the investments made by foreign capitalists, less the interest and earnings of investments held by persons living outside its boundaries. The value of the imports fluctuates considerably, and in years of heavy borrowing shows very large figures; thus, in 1885 the imports exceeded the exports by £11,179,000, in 1889 by £9,305,000, and similarly in respect to other years.

After a long period of neglect the Governments of the various States began in 1873 to attend to the expansion of their railways. In 1872 the mileage in operation was 1,122; in 1874 it had risen to 1,346, and from this time onwards progress was rapid. Within four years the mileage open for traffic was doubled, and in ten years was quadrupled, the mileage in 1884 amounting to 5,694; and by the end of the period under consideration—that is, the year 1893—the length open for traffic exceeded 10,300 miles.

The expansion of general business during the same period may be gauged with considerable accuracy from the extension of the banking facilities. During the twenty-two years under review, banks were opened in every important centre of Australia, and it is estimated that in 1893 there was one bank or branch in operation for every 3,000 of the population. The deposits in 1872 were 23 millions; in three years they had increased 50 per cent; in seven years they had doubled; and in eleven years the increase was threefold—that is to say, in 1884 the sum on deposit reached £69,936,000. In 1891 the business of the banks reached its highest point, and the amount of money deposited was, in round numbers, 100 millions, equivalent to £31 4s. 2d. per head of population. This enormous sum, however, was not derived wholly from the Australian people, as large amounts were obtained in the United Kingdom and transmitted to Australia for investment. After 1891 the banking business slackened off, and in 1893 the great financial crisis occurred, of which mention has been made so frequently, and was accompanied by a very large withdrawal of deposits, chiefly by persons resident in the United Kingdom. In 1895 the amount on deposit was reduced to 86 millions, which included a considerable sum, estimated at about 54 millions, locked up in reconstructed banks. The

crisis of 1893 involved the suspension of thirteen banks, of which six had their head-quarters in Victoria, two in New South Wales, three in Queensland, and two in London. Coincident with the increase in the money placed with the banks of issue was a very large increase in the deposits in the Savings or people's banks. In 1872, the sum on deposit was £3,810,000; in 1880 it had risen to £5,867,000; in 1885 to £10,199,000; and in 1891 to £15,477,000. From this point it leaped to £18,100,000 in 1893, but the increase was not entirely due to working class deposits, as it represented to some extent money withdrawn from the banks of issue at the time of the crisis. At the highest point in the period, namely, the year 1893, the total deposits represented £5 9s. 5d. per inhabitant; and although this figure has since been greatly exceeded, it was considered at the time, and justly so, a tribute to the earning capacity of the Australian working population and an index of its material condition.

During the twenty-two years from 1872 to 1893 the population of Australia was practically doubled. The greater portion of the increase was due to births, the excess of persons arriving over those departing, though important in some of the States, being not very considerable for Australia, taken as a whole. Several of the States, notably New South Wales and Queensland, maintained the policy of assisted immigration during the larger portion of this term, and in New South Wales alone nearly 50,000 persons were introduced in the ten years preceding 1886, and in Queensland the average number per annum brought to the country at the public expense from 1873 to 1892 was 9,746. Various important changes took place in the positions of the States in regard to population. During nearly the whole of this period Victoria had the premier position, but at the close of 1891 New South Wales took the lead and South Australia yielded the third place to Queensland in 1884. Western Australia was still far in the rear. Established before any of the other States except New South Wales and Tasmania, the population of this huge province did not in 1893 amount to more than 65,000—a condition of affairs due almost entirely to its isolation and the absence of mineral discoveries. Western Australia was on the eve of reaping great benefits from its gold discoveries, but the record of these and of the great influx of population which resulted therefrom belongs to the succeeding period.

It is impossible within the limits of this chapter to give a statement of the wages paid in all industries, or even in the leading industries of the various States. The illustrations given are therefore confined to the rates paid in certain well-known trades, and these it is thought will indicate sufficiently well the general condition of wages in the other trades. In considering these examples it should be remembered that wages in Australia do not always indicate the condition of the productive industries of the country; and especially is this the case when, as from 1882 to 1889, the Governments of the States are large borrowers and large employers of labour. Wages, generally speaking, rose rapidly

after 1872, and reached a high level in 1874, thenceforward remaining stationary till 1883, when there was a distinct rise, and continuing fairly level at the advanced rates until 1889. From a labour point of view, these seven years may be considered amongst the best Australia has experienced. During this period carpenters received 11s. a day in Sydney, and from 10s. to 12s. in Melbourne; blacksmiths from 10s. to 14s. in Melbourne and 10s. in Sydney; bricklayers, 12s. 6d. in Sydney and from 10s. to 12s. in Melbourne; stonemasons, 11s. 6d. in Sydney and from 10s. to 12s. in Melbourne; plasterers, 12s. in Sydney, and about the same in Melbourne, and 11s. in Adelaide; painters, 11s. in Sydney, 10s. in Melbourne, and 9s. in Adelaide; boilermakers, up to 14s. in Melbourne; and navvies employed on public works, 8s. in New South Wales, 7s. in South Australia, and from 6s. to 7s. in Victoria. In 1890 wages made their first decided move downwards, and, compared with the previous year, there was a fall equivalent, on an average, to 1s. per day. Consequent on the financial crisis of 1893, wages again fell, and continued falling, until, so far as most trades were concerned, they touched their lowest point in 1895, although for some workers—notably navvies and common labourers—the period of acute depression lasted a year or two longer.

The following is a statement of the average daily wage paid in the four leading cities from 1872 to 1879:—

Trade.	Average daily wage paid in—			
	Melbourne.	Sydney.	Adelaide.	Brisbane.
	s. d.	s. d.	s. d.	s. d.
Carpenter.....	9 9	9 11	8 8	10 3
Bricklayer.....	10 0	10 10	9 0	10 4
Mason.....	10 9	10 7	9 2	9 0
Plasterer.....	10 0	10 11	9 10	10 0
Painter.....	9 0	9 3	9 0	9 10
Blacksmith.....	11 2	10 3	8 10	10 3
Boilermaker.....	11 0	9 6	9 0	10 6
Navy or common labourer.....	6 3	7 1	6 9	6 0

Taking the wages as a whole, those paid in Sydney and Brisbane average about the same figure. In the building trades the wages paid

in Sydney and Brisbane were superior to those in Melbourne; but in the iron trade, such as blacksmithing, boilermaking, and the like, the wages in Melbourne were higher than in any of the other cities. Throughout the whole of this period the wages paid in South Australia were distinctly lower than in the other States, except navvies' wages, which were very nearly equal to those paid in New South Wales.

From 1880 to 1891 the average wages in Melbourne, Sydney, and Brisbane were fairly uniform, but in Adelaide the ruling rates were some 10 per cent. below those of the neighbouring States. Navvies and others employed on public works in New South Wales received on an average about 8s. per day throughout the whole period of thirteen years extending from 1879 to 1891. Considering the cost of living, this is the highest wage ever paid in Australia for this description of labour. In Victoria and Queensland the rates touched 7s. 6d.; in South Australia, 7s. The following represent the average wages from 1880 to 1891:—

Trade.	Average daily wage paid in—			
	Melbourne.	Sydney.	Adelaide.	Brisbane.
	s. d.	s. d.	s. d.	s. d.
Carpenter.....	10 7	10 3	8 6	11 0
Bricklayer.....	10 9	11 4	9 0	11 0
Mason.....	10 10	10 10	9 2	9 10
Plasterer ..	10 9	11 3	10 6	10 0
Painter	9 0	9 10	8 10	10 0
Blacksmith.....	11 8	10 6	9 6	11 0
Boilermaker.....	11 10	9 10	9 6	11 0
Navvy or common labourer.....	6 9	8 0	6 6	6 0

From 1892 to 1896, which was a period of great disturbance, wages remained higher in South Australia than in any of the other States, the reduction from the average of the previous years in the case of this State not being very great; whereas in Victoria, in New South Wales, and in Queensland the reduction in some cases was as much as 25 per cent., and work was much more difficult to procure. The iron trades in Victoria, in spite of the general fall, maintained a strong position during this period, but the building trades generally reached a very low level. Carpenters in Melbourne received 7s. 5d., compared with 8s. 11d. in

New South Wales and 8s. 4d. in Queensland. Bricklayers received 7s. 6d. in Victoria, 9s. 5d. in New South Wales, 9s. in South Australia, and 9s. 3d. in Queensland; blacksmiths, however, were paid 10s. 6d. in Victoria, 8s. 6d. in New South Wales, and about the same in South Australia and Queensland. Navvies were paid at the rate of 6s. a day in all the States.

Trade.	Average daily wage paid in—			
	Melbourne.	Sydney.	Adelaide.	Brisbane.
	s. d.	s. d.	s. d.	s. d.
Carpenter	7 5	8 11	8 6	8 4
Bricklayer	7 6	9 8	9 0	9 3
Mason	8 6	8 11	9 0	11 2
Plasterer	7 8	8 6	8 10	8 10
Painter	6 8	8 0	8 0	7 6
Blacksmith	10 0	8 6	8 6	8 4
Boilermaker	10 6	9 0	10 0	8 4
Navy, or common labourer	6 0	6 0	6 0	6 0

The approach of the crisis of 1893 was heralded by many signs. Deposits were shifted from bank to bank; there was a run on the Savings Bank at Sydney, an institution guaranteed by the State; mortgagees required additional security from their debtors; bankruptcies became frequent; and some of the banks began to accumulate gold against the evil day. The building societies and financial institutions in receipt of deposits, or so many of them as were on an unsound footing, failed at an early period of the depression; so also did the weaker banks. There was distrust in the minds of the depositors, especially those whose holdings were small; and the banks, even long before the crisis arrived, were subjected to the strain of repaying a large proportion of their deposits as they fell due. The crisis, however, was by no means a sudden crash; even when the failures began to take place they were spread over some considerable period, the time between the failure of the first bank and that of the last being sixteen weeks.

The first noticeable effect of the crisis was a great scarcity of employment. Wages fell precipitously, as also did rents. There was almost a complete cessation of building, and large numbers of houses in the chief cities remained untenanted, the occupants apparently moving to lodgings, or more than one family living in a single house. Credit became greatly restricted, with the result that all descriptions of speculative enterprise came to an end; and by reason of the lowering of wages and decline in profits, the demand for most articles of domestic consumption declined also. This is seen in the fact that in 1894 there was a reduction in the imports into Australia of £4,300,000. The manufacturing industry was the first to feel the effects of the crisis,

and there was a reduction in the average number of persons employed in the two leading States which may be set down at not less than 25,000. This reduction, however, was spread over four years. The closing of the factories was not general; the establishments were kept open, but there was a dismissal of workmen and a restriction of output. Lack of employment in the factories had an immediate effect on the coal-mining industry, the output of coal being about one-fourth less in 1893 than in the previous year.

The crisis was felt in the large cities more keenly than in the country districts, and in Melbourne more severely than in any other capital. The change of fortune proved disastrous to many families, previously, to all appearances, in opulent circumstances; but by all classes alike their reverses were borne with the greatest bravery. In its ultimate effects the crisis was by no means evil; on the contrary, its true meaning was not lost upon a business community that required the chastening of adversity to teach it a salutary lesson, and a few years after its first effects had passed away business was on a much sounder footing than had been the case for very many years.

The banks of issue showed large withdrawals of deposits, practically the whole of the money received from the United Kingdom being withdrawn as it became due; so that in 1898 the Australian banks had on deposit £17,175,000 less than in 1891, their highest point before the crisis occurred. There were also large withdrawals of local deposits, but the bulk of these found their way into the Post Office and other Government Savings Banks.

The compensations which followed the crisis were many, and the country would have recovered with surprising quickness from the blow which the credit of the community and of all its financial institutions had received, were it not for the adverse seasons which afflicted the great pastoral industry.

Prior to the crisis the extent of credit given to storekeepers and other tradespeople was on the whole much greater than sound experience warranted, and one of the first results was to put trade on a sound basis, and to abolish most of the abuses of the credit system. Attention was almost immediately attracted to productive pursuits, and the recovery made by the country as a whole, though slow at first, owing to the depression in the pastoral industry, was steady. Renewed attention was given to agriculture, especially in New South Wales, where, in 1901, 1,450,000 acres were devoted to the plough in excess of the area cultivated in 1893. In Victoria there was an increase of 870,000 acres, in Queensland 210,000 acres, and some slight extensions in the other States.

There was also a complete revival in the mining industry. The production of gold in New South Wales was almost doubled, and was largely increased in Victoria, Queensland, and Tasmania. In Western Australia the great gold discoveries which have placed that State at the head of Australian gold-mining, and amongst the leading gold

producers of the world, were made subsequent to the crisis. Taking Australia as a whole, the output of gold in 1893 was £6,215,472; in 1901 it reached a total of £14,190,000.

It was unfortunate that this time of financial distress should have been succeeded by a period of low prices for articles of local production, and that the great pastoral industry should have suffered from untoward seasons. The sheep depastured in Australia in 1893 numbered 99,800,000; in 1899 the total was reduced to 74,300,000; and it is more than probable that when the losses of the disastrous season of 1902 come to be counted up, the number will be found to have still further decreased.

During the years 1894 and 1895 prices reached their lowest level, but a slight recovery took place in the following two years, and this was succeeded by still further improvement, so that at the present time the average level is about equal to that of 1891.

In 1894 the total value of the imports into Australia was £41,930,720, equivalent to £12 6s. 8d. per inhabitant. These figures are far below those recorded in previous years. The imports in 1889, for example, were valued at £62,551,992, or at the rate of £20 13s. 7d. per inhabitant. It must be borne in mind, however, that extensive borrowing took place during 1889, and a considerable proportion of the imports was due to loan money brought to the country by the States, and to deposits in the banks, which were subsequently withdrawn during the financial crisis. From 1895 onward a material expansion took place in the trade of the States, and in 1900 the value of the exports was higher than at any previous period, thus showing that the country had completely recovered from the financial paralysis of 1893. It must be conceded that from every point of view sound industrial progress has been made during the last few years, and this is all the more gratifying when consideration has been given to the fact that, in some part or other of the Continent, the main industries—those of sheep and cattle raising—were during the greater portion of the period seriously hampered by adverse weather conditions.

The progress of the manufacturing industries is dealt with at some length in another portion of this volume, and need not be further referred to here. It may be stated, however, that the ground lost during the financial crisis has been more than recovered, and the amount of employment afforded is now greater than ever before in the history of these States.

The movement in wages from 1896 to 1901 was distinctly upward. Carpenters, for example, were in 1896 paid 8s. per day in Sydney, while in 1900 their wages were 9s. 6d., and in 1901, 10s. Though wages in Melbourne at these periods were lower than in Sydney, their upward movement has been even greater, for in 1896 carpenters' wages in Melbourne ranged between 6s. and 7s. per day, the greater number being employed at the lower figures, while in 1900 the accepted rate was 8s. 3d., and in 1901 10s. As regards other trades connected with

building, there has also been a marked improvement, and the rates of 1901 approach very closely those paid in 1891—that is to say, before the changes accompanying the financial crisis began to be felt.

The building trades suffered more heavily than any others during the period of financial disaster, and their recovery was also more protracted. Over speculation in the business was in part responsible for the crisis; and even after its immediate effects had passed from sight, there was still great reluctance to embark capital in this form of investment, although a reasonable return seemed to be fairly assured. Building operations being therefore carried on only in cases of necessity, and when exceptional profits were looked for, the wages of the artisans employed were less affected by the return of better times than might otherwise have been expected. In other branches of industry there was a marked revival, and wages shared in the upward movement.

Federation undoubtedly is a strong force in the direction of increased production and larger employment of capital, and an expansion of industrial activity should follow in its train; but the pastoral industry, which is the key to the industrial condition of Australia, was seriously affected during 1902 by the adverse climatic conditions which prevailed over a great part of the Continent. The numbers of sheep and cattle have greatly decreased, and a poor return is looked for during the coming season. The finances of the States invariably suffer when there is a falling off in pastoral production. Already the Treasuries of some of the States are depleted, and it is probable that the upward tendency of wages, which has been going on uninterruptedly since 1896, will be arrested.

LAND AND SETTLEMENT.

IN each of the Commonwealth States and New Zealand a different system has been adopted to secure the settlement of an industrial population upon the Crown lands, the conditions upon which land may be acquired being of a more or less liberal nature according to the circumstances in which the province has found itself placed. The legislation of Victoria, Queensland, and Tasmania, which at one time formed part of New South Wales, bears a strong resemblance to that of the mother state, practically the same form of conditional occupation with deferred payments being in existence in all four states. In the other provinces, however, the influence of New South Wales was not so directly felt, and new experiments were made. South Australia, for instance, was originally settled upon the Wakefield system—alike remarkable for its originality and its failure. In Western Australia and New Zealand, under pressure of a different set of circumstances, settlement was effected by legislation of a novel character. An attempt is made here to give a description of the Land Laws of Australasia, although the radical changes which are constantly being made render the task of giving a serviceable account of the various systems a somewhat difficult one. During the past ten years, numerous Acts affecting State lands have been placed on the statute book, and, at the date of the publication of this volume, New South Wales, Victoria, and Tasmania contemplate amending legislation; so that it is impossible to say how long the information given in this chapter can be taken as representing the latest phases of land legislation in Australasia.

NEW SOUTH WALES.

With the progress and development of the state, the Land Laws of New South Wales have naturally undergone considerable alteration. In the earliest period alienation was effected by grants, orders, and dedications, the power of disposal resting solely with the Governor. In August, 1831, the principle of sale by auction was introduced, the minimum price for country lands being fixed at 5s. per acre. This was raised to 12s. in 1839, and to 20s. in 1843, power being given in the latter year to select, at the upset price, country portions for which a bid was not forthcoming at auction, or upon which the deposit paid at the time of sale had been forfeited. This was the first appearance of the principle of selection in the laws of the state, but it was limited to lands which had been surveyed for sale by auction.

The discovery of gold in 1851, and the consequent rush of population to Australia, greatly altered the conditions of colonisation. As the interest in gold-digging declined, so did the desire for settlement on the land increase, and the question had to be dealt with in an entirely new spirit, to meet the wants of the class of immigrants desirous of being placed upon the soil. The agitation which thus sprang up resulted in the passing of the Crown Lands Act of 1861, under the leadership of Sir John Robertson. This measure was designed to secure the establishment of an agricultural population side by side with the pastoral tenants. With this object in view an entirely new principle was introduced—that of free selection in limited areas before survey, coupled with conditions of residence and improvement—and country lands were sold at 20s. per acre, payable by annual instalments carrying interest.

The occupation of waste lands for pastoral purposes was at first allowed under a system of yearly licenses. Any person could apply for such a license, the extent of the run which it was desired to occupy being limited only by the boundaries of the surrounding stations. The fee was fixed at £10 per annum for a section of 25 square miles, with £2 10s. for every additional 5 square miles. This system of yearly licenses was succeeded by one under which the squatter was given fixity of tenure, the fee payable being calculated upon the stock-carrying capacity instead of upon the area of the run. Still another system was inaugurated by the Occupation Act of 1861, the period of tenure being limited to five years in all but first-class settled districts, and the whole of the pastoral leases left open to the operations of the free selectors. But such evils were found to result from this system that in 1884, in 1889, in 1895, and again in 1901, so far as the western division is concerned, Parliament was led to adopt amendments which are now in force, and which, while maintaining the principle of selection before survey, aim at giving fixity of tenure to the pastoral lessee and obtaining a larger rental from the public lands, while at the same time securing land to *bonâ-fide* settlers on terms and conditions within the reach of all.

For the purposes of land administration, the state is split up into three divisions, each of which is subdivided into land districts. In the eastern and central divisions one or more of these land districts form a local division, the administration of which is entrusted to a Local Land Board, comprising a chairman and not more than two assessors, the control of the western division being vested in the Western Land Board. The decisions of these Local Land Boards may be appealed against to the Land Appeal Court. This Court is composed of a President and two members appointed by the Executive, and its decisions in matters of administration have the force of judgments of the Supreme Court; but whenever questions of law become involved, a case may be submitted to the Supreme Court, upon the written request of the parties interested, or by the Land Appeal Court of its own initiative. The judgment given in this appeal is final.

Under the Acts at present in force, land may be acquired by the following methods :—(1) By conditional and additional conditional purchase with residence ; (2) by conditional purchase without residence ; (3) by classified conditional purchase ; (4) by the preferent right of purchase attached to conditional leases ; (5) by improvement purchases on gold-fields ; (6) by auction sales ; (7) by after auction sales ; (8) by special sales without competition ; and (9) by homestead selection.

The maximum area which may be conditionally purchased differs in the eastern and central divisions. In the western division land can only be occupied under lease, or alienated by auction.

Eastern Division.

The conditions for the purchase and occupation of Crown lands are more restricted in the eastern division than in the central and western divisions. Nevertheless, any person above the age of 16 years may, upon any Crown lands not specially exempted, select an area of 40 to 640 acres, together with a lease of contiguous land not exceeding thrice the area of the conditional purchase. The combined area of purchase and lease must not, however, exceed 1,280 acres. The price demanded is £1 per acre, of which 2s. must be deposited when application is made, and the balance, together with interest at the rate of 4 per cent., paid by instalments of 1s. per acre per annum. Payment of instalments commences at the end of the third year, and after the expiry of the period of enforced residence the balance may be paid in one sum at any time. The selector must reside on his selection for a period of ten years, and within three years erect a substantial fence around the land ; in some cases, however, other permanent improvements are allowed in lieu of fencing. He is restricted to one selection during his lifetime ; but after the expiry of the residential period he may purchase additional areas contiguous to his original purchase up to the maximum area, or he may purchase his conditional leasehold. In such a case, however, he must extend his period of residence, and enclose his additional purchase. Married women judicially separated may select in their own right ; and minors taking up lands adjoining the selection of their parents may fulfil the condition of residence under the paternal roof until the age of 21 in the case of males and 24 in that of females.

A conditional leasehold, in conjunction with a selection, may be held for twenty-eight years. The rental is fixed by the Land Board. The leasehold must be enclosed within three years ; one fence, however, may enclose both the conditional purchase and the lease. A lease may at any time be converted into a purchase. The term of residence on the conditional purchase and leasehold must aggregate ten years from the date of application.

When land is conditionally purchased without residence, the maximum area is limited to 320 acres, and no conditional lease is granted. The selection must be enclosed within twelve months after survey, and within five years additional improvements must be made to the

value of £1 per acre. The price demanded is £2 per acre, and the deposit and instalments payable are twice as high as those required in the case of an ordinary conditional purchase. No person under 21 years of age may select land on non-residential conditions; and anyone who takes advantage of the provisions permitting the acquirement of a conditional purchase without residence is not allowed to make any other conditional purchase.

Special areas may be thrown open to selection under special conditions. The price is not less than £1 10s. per acre, and the maximum area which may be taken up is 320 acres. Non-resident selectors are charged double the rates payable by those who reside on the land.

At the close of 1899 an Act was passed introducing a new feature in the form of classified conditional purchases. Under this system land set apart for conditional purchase or conditional lease becomes available for conditional purchase at prices specified at the time of notification, whether above or below £1 per acre. The area which may be selected in the Eastern Division is restricted to 640 acres. The conditions as to residence and improvements are similar to those in the case of an ordinary conditional purchase.

The capital value of conditional purchases and conditional leases applied for prior to the 30th December, 1899, and held *bonâ fide* for the applicant's sole use and benefit may be the subject of reappraisement up to an area, sufficient, in the opinion of the Local Land Board, to enable him to maintain a home thereon, provided the application therefor was lodged prior to the 30th December, 1901.

Central Division.

In the central division land may be conditionally purchased on terms as to residence, fencing, improvements, price, and mode of payment similar to those which govern selection in the eastern division. The maximum area which may be selected is 2,560 acres, and a conditional lease in the proportion granted in the eastern division may be secured, but the aggregate area of both selection and lease must not exceed 2,560 acres. The area which may be purchased without residence, and the conditions in regard thereto, are the same as in the eastern division. Within special areas the maximum extent of a selection has been fixed at 640 acres.

The system of classified conditional purchases applies to this Division and the area that may be selected, and the conditions of residence and improvements imposed are similar to those in respect of ordinary conditional purchases.

Western Division.

The western division embraces an area of 79,970,000 acres, watered entirely by the Darling River and its tributaries. This part of the state is essentially devoted to pastoral pursuits.

The administration of the western division by the "Western Lands Act of 1901" is vested in a Board of three Commissioners, entitled

“The Western Land Board of New South Wales,” and all Local Land Boards constituted prior to the 1st January, 1902, cease to have jurisdiction within the area. The Commissioners, sitting in open Court, are empowered to exercise all the powers conferred upon Local Land Boards by the Crown Lands Acts, and for all purposes of the Crown Lands Acts shall be a Local Land Board in all cases, as well as in any cases that may be or are required to be referred to any Local Land Board under the provisions of any Act, now or hereafter in force.

Subject to existing rights and the extension of tenure referred to in a subsequent paragraph, all forms of alienation, other than by auction, and leases, prescribed by the Crown Lands Acts, ceased to operate within the Western Land Division from the 1st January, 1902.

Before any Crown lands in the western division, not held under lease, shall become available for lease, the Commissioners must recommend the areas and boundaries of the land to be offered for lease and the rent to be charged therefor, and, should there be any improvements on the land, determine the amount to be paid for them. The Minister may, by giving thirty days' notice in the *Government Gazette*, declare such lands open for lease, and applications therefor must be made to the Commissioners on a prescribed form, accompanied by a deposit at the rate of 20 per cent. on the amount of the first year's rent, as notified in the *Government Gazette*, and the Commissioners may recommend a lease to such applicant as they shall consider most entitled to it. Upon the issue of a lease the notification thereof is published in the *Government Gazette*, and within one month therefrom the successful applicant must pay the balance of the first year's rent and execute the lease within the time and manner prescribed.

The registered holder of a pastoral, homestead, improvement, scrub, or inferior lease or occupation license of land in the western division, or in the event of any such holding being mortgaged, then any owner of the equity of redemption in the same, may apply before the 30th June, 1902, to bring his lease or license under the provisions of the “Western Lands Act of 1901.” In cases where no application is made to bring the lease or license under the provisions of the Act, such lease or license is to be dealt with as if the Act had not been passed, and the Commissioners as constituted are to be deemed the Local Land Board to deal with such cases.

All leases issued or brought under the provisions of the “Western Lands Act of 1901” expire on the 30th June, 1943, except in cases where a withdrawal is made for the purpose of sale by auction or to provide small holdings, when the Governor shall, after report by the Commissioners, add to the remainder of the lease such term as may be considered reasonable as compensation, but in no case shall it exceed six years.

The rent on all leases current after the commencement of the Act is determined by the Commissioners for the unexpired portion of such leases. No rent or license fee is to be less than 2s. 6d. per square mile

or part thereof, and in no case shall the rent or license fee be fixed at a higher rate than 7d. per sheep on the carrying capacity determined by the Commissioners. In the case of new leases, the rents are determined for periods not exceeding ten years, and in the case of leases extended under the provisions of the Act for periods ending 30th June, 1930, and 30th June, 1943. The rent fixed in the case of existing leases, and for the first term in the case of new leases, cannot on reappraisal be either increased or decreased more than 25 per cent. on the first reappraisal, and the provision applies at each subsequent reappraisal to the rent last determined.

Homestead Selection.

Among the special features of the Act of 1895 was the introduction of the principle of classification and measurement of lands prior to selection. Under this system suitable land is set apart and rendered available for the purposes of the selector. The appropriation of areas for homestead selection is another prominent feature of the Act. The tenure of such a selection is freehold, subject to perpetual residence and perpetual rent, and the construction of a dwelling-house at a cost of not less than £20. Six months' rent and part of the survey fee must be lodged when application is made. Until the grant issues, the rent is fixed at $1\frac{1}{4}$ per cent. on the capital value of the land; afterwards, it is raised to $2\frac{1}{2}$ per cent., and the selection is subject to reappraisal every ten years. Provided an application is made before the 31st December, 1900, the capital value of homestead selections applied for, on or before 29th December, 1899, may be reappraised. In cases where the application for the homestead selection is of a subsequent date, reappraisal may be made before the selection is confirmed, or within twelve months after, but not later. Tenant-right in improvements is secured, and the holding may be so protected that it cannot by any legal procedure, or under any circumstances, be wrested from the selector. This form of alienation ceased to operate within the Western Land Division from the 1st January, 1902, existing rights being preserved.

Settlement Leases.

Another departure under the Act referred to is the provision for settlement leases for agricultural and grazing purposes. Under this form of tenancy, lands gazetted in any division as available for settlement lease are obtainable on application, accompanied by a deposit consisting of six months' rent and survey fee. Of agricultural land the maximum area which may thus be taken up is 1,280 acres, and of grazing land, 10,240 acres. The lease is issued for a period of twenty-eight years, and the conditions which attach to it are that the lessee shall reside on the land throughout the term, and fence it in during the first five years. Provided an application is made before the 31st December, 1900, the capital value of settlement leases applied for on or before the 29th December, 1899, may be reappraised. In cases where

the application for the settlement lease is of a subsequent date, reappraisal may be made before the lease is confirmed, or within twelve months after, but not later. Tenant-right in improvements is secured to the outgoing lessee, who may, during the last year of the term, convert a portion not exceeding 1,280 acres into a homestead selection. This form of lease ceased to operate within the Western Land Division from the 1st January, 1902, existing rights being preserved.

Scrub and Inferior Lands.

The principle of improvement leases secures, in the Eastern and Central Divisions, the utilisation of scrub or inferior lands that would otherwise remain unoccupied, the form of lease having ceased to operate in the Western Division since the 1st January, 1902, subject to existing rights being preserved and the extension of tenure referred to later on. The term for which such a lease is issued is twenty-eight years, except in those cases in the western division brought under the provisions of the "Western Lands Act of 1901," when the lease expires on the 30th June, 1943, and the rent is determined according to the circumstances of each case, the object being to secure the profitable occupation of otherwise valueless lands. The maximum area obtainable is 20,480 acres. The outgoing lessee has tenant-right in improvements, and may, during the last year of the term of his lease, convert into a homestead selection 640 acres on which his dwelling-house is erected.

Pastoral and other Leases.

Under the Act of 1884 pastoral leases were surrendered to the Crown, and divided into two equal parts. One of these parts was returned to the lessee under an indefeasible lease for a fixed term of years; the other half, called the resumed area, might be held under an annual occupation license, but was always open to selection—by conditional purchase in the eastern and central divisions, and by homestead lease in the western division. Under the Act of 1895, the tenure of pastoral leases in the western division was fixed at twenty-eight years, but if the leases are brought under the "Western Land Act of 1901," they expire on the 30th June, 1943. In the central division a pastoral lease extends to ten years. In certain cases a further extension ranging up to five years has been secured by virtue of improvements effected; beyond this, however, the Crown has power to further extend the term of the lease for the remainder of a pastoral holding where a portion of such holding has been resumed for the purpose of settlement. Tenant-right in improvements made with the consent of the Crown is secured to the outgoing lessee. If in the western division he may, during the last year of his lease, convert into a homestead selection 640 acres on which his dwelling-house is erected. When application is made for an occupation license for the expired leasehold area, a license-fee, equal in amount to the sum formerly payable as rent, must be lodged as a deposit. This form of lease ceased to operate in

the Western Land Division since the 1st January, 1902, subject to existing rights being preserved and the extension of tenure referred to.

In addition to pastoral leases, special leases on favourable terms are granted of scrub lands, snow lands—that is, lands covered with snow during a part of the year,—and inferior lands. Annual leases for pastoral purposes, and residential leases on gold and mineral fields, are also granted; and special leases are allowed in certain cases. Within the Western Land Division all forms of lease prescribed by the Crown Lands Act ceased to operate on the 1st January, 1902, subject to existing rights and the extension of tenure provided in respect of pastoral, homestead and improvement leases, and occupation licenses. Within that division all new leases are to be submitted to competition and expire on 30th June, 1913.

Auction Sales.

Auction sales to the extent of not more than 200,000 acres in any one year are permitted. The upset price is fixed by the Minister for Lands. For town lands it must not be less than £8 per acre; for suburban lands, £2 10s.; and for country lands, £1 5s. Special terms can be made for the purchase of land on gold-fields, and for reclaimed lands.

Labour Settlements.

In the middle of 1893 an Act was passed to establish and regulate labour settlements on Crown lands, following the example set by New Zealand, and imitated by several other colonies. Under this Act the Minister may set apart certain areas for the purpose of establishing labour settlements. A settlement is placed under the control of a Board, which enrolls such persons as it may think fit to become members of the settlement; makes regulations concerning the work to be done; apportions the work among the members; and equitably distributes wages, profits, and emoluments after providing for the cost of the maintenance of the members. Any trade or industry may be established by the Board, and the profits apportioned among the enrolled members. A Board is constituted as a corporate body, with perpetual succession and a common seal; and the land is leased to the Board as such, in trust for the members of the settlement, for a period of twenty-eight years, with right of renewal for a like term.

When a Board has enrolled such a number of persons as the Minister for Lands may approve, it may apply for monetary assistance on behalf of the members of the settlement. The Minister has power to grant an amount not exceeding £25 for each enrolled member who is the head of a family dependent upon him; £20 for each married person without a family; and £15 for each unmarried person. On the expiration of four years from the commencement of the lease, and at the end of each year following, 8 per cent. of the total sum paid to the Board becomes a charge on its revenues, until the total amount advanced, with interest at the rate of 4 per cent. per annum, has been repaid.

VICTORIA.

During the earlier period of the colonisation of Victoria, then known as the District of Port Phillip, in New South Wales, the alienation of Crown lands was regulated by the Orders in Council of the mother state, to which reference has already been made. In the year 1840, however, the upset price of country lands, which in New South Wales was limited to 12s. per acre, was specially raised to 20s. in the District of Port Phillip. The Orders in Council continued in force until 1860, when the system of free selection of surveyed country lands was inaugurated, the uniform upset price being fixed at £1 per acre. No condition was required to be fulfilled by the selector other than that of making a cash payment for the whole of his purchase—or for one-half only, the other half being occupied at a yearly rental of 1s. per acre, with right of purchase at the original price. In 1862 a new Act was passed. Large agricultural areas were proclaimed, within which land could be selected at a uniform price of £1 per acre. Modifications were introduced in the mode of payment; the maximum area which could be selected by one person was limited to 640 acres; and it was stipulated that certain improvements should be effected or part of the land placed in cultivation. This Act was amended in 1865, when the principle was introduced of leasing Crown lands within agricultural areas, with right of purchase after the fulfilment of certain conditions as to residence and improvements; and a new provision was added to meet the demand for land adjacent to gold-fields.

The legislation in force was, however, superseded by the Land Act of 1869 and the Pastoral Act of the same year. Until that time the free selection system in the state had been limited to certain lands proclaimed within agricultural areas, and to allotments previously surveyed, thus avoiding the conflict which was then beginning to take place in New South Wales between the selector and the pastoralist. Under pressure of a sudden increase in the demand for land, arising from the enormous immigration into Victoria which had followed the discovery of gold, and the necessity for the people finding other means of employment, and other and more permanent sources of income, the Victorian Legislature adopted the system in vogue in the neighbouring state, with modifications to suit the local conditions. The Act of 1869, which was amended in 1878, was further amended in 1884, the main tendency of the latter amendment being towards the restriction of the further alienation of the public estate by limiting the area which might be sold by auction, and substituting for the existing method of selecting agricultural land a system of leasing in certain defined areas, and at the same time conserving to the lessee the privilege of acquiring from his leasehold the fee-simple of 320 acres under the system of deferred payments. A portion of the public domain, known as the "Mallee Scrub," comprising some 11½ million acres wholly or partly covered with various species of stunted trees, was separately dealt with by the Mallee Pastoral

Leases Act of 1883. The land legislation of 1869, and the special enactment just referred to, were again modified by the Acts of 1890, 1891, 1893, 1896, 1898, and 1900, the whole being consolidated as the "Land Act, 1901," which came into force on the 31st December, 1901.

The Land Act of 1869 is inoperative as to future selections, but concessions as to payments of arrears of rent, the option of converting their present leases into perpetual leases, and of surrendering part of and obtaining new leases on better terms for the balance of their holdings, have been granted to selectors thereunder by the most recent legislation.

For the purposes of land administration, the state is divided into districts which are merely arbitrary divisions, and in each district there are land offices under the management of land officers. As occasion requires, the land officers hold board meetings to deal with applications for, and any matter pertaining to, Crown lands.

Unalienated Crown lands are divided into the following classes:— Good agricultural or grazing land; agricultural and grazing lands; grazing lands; inferior grazing lands; pastoral lands (large areas); swamp or reclaimed lands; lands which may be sold by auction (not including swamp or reclaimed lands); auriferous lands; State forest reserves; timber reserves; and water reserves. Provision is made for a reclassification of lands within the first, second, third, and fourth classes, where it is recognised that an inequality exists, and for this purpose Land Classification Boards are constituted, each Board to consist of three members who will be officers of the Lands Department or other competent persons. Land may be acquired in the following manner:—

(1) By the lessee of pastoral lands, by selection of a homestead up to 640 acres of land not superior to third-class land out of his leasehold at 10s. per acre; (2) by the lessee of a "grazing area" who is entitled to select thereout an agricultural allotment, obtaining a perpetual lease of the allotment in lieu of a license; (3) by licensee or lessee of an agricultural allotment on the surrender of his license or lease, obtaining in its stead a perpetual lease; (4) by the holder of a mallee allotment, eligible to select an agricultural allotment thereout, obtaining a perpetual lease instead of a license; (5) by perpetual leases of any Crown lands available as agricultural or grazing allotments, or mallee lands available as agricultural allotments, or swamp, or reclaimed lands; (6) by purchase at auction of town or country lands within specified areas; (7) by purchase at auction of detached portions of Crown lands of an area not exceeding 50 acres; (8) by the holder of a residential agricultural allotment under license within mallee territory; (9) by farm allotment under conditional purchase lease, within areas required for the purpose of closer settlement.

Pastoral Lands.

Pastoral leases are granted to the person first lodging an application after public notice has been given that the land is available, and expire

on 29th December, 1909. The maximum area is 40,000 acres, and the minimum 1,920 acres. Should more than one application be lodged, the right to a lease is sold by public auction, after at least one month's notice has been given in the *Government Gazette*, and the highest bidder by way of premium is, on payment of same, entitled to the lease. The annual rent reserved on every lease of pastoral lands is computed at 1s. per head of sheep, and 5s. per head of cattle, the number of such sheep or cattle to be determined by the grazing capacity of the area, and the rent must be paid in advance every six months. The lessee cannot assign, sublet, or subdivide without the consent of the Board in writing; he must destroy all vermin and noxious growths, and keep in good condition all improvements on the land; and he must not destroy growing timber, except for fencing purposes or for building on the land, without the Board's consent. The Crown has the right to resume any portion of the area required for any railway or public purposes, and may issue licenses to enter on the land to obtain timber, stone, earth, &c. The right is reserved to other pastoral lessees to pass over the area, and the Governor may at any time by proclamation grant to the public the use of any track leading to a public road or track. The lessee is also required to erect swing gates where there is a fence across any track required by any other pastoral lessee or the public. Upon compliance with all conditions the lessee may select 200 acres of first-class, or 320 acres of second-class, or 640 acres of third-class land, or 960 acres of fourth-class land, as a homestead. Upon the expiration of a lease the lessee is entitled to payment from an incoming tenant for all fences, wells, reservoirs, tanks, and dams—but such payment shall be determined in the manner provided by the Lands Compensation Acts—and all other improvements revert to the Crown.

Agricultural and Grazing Lands.—Grazing Areas.

Agricultural and grazing lands are leased in "grazing areas" of first, second, third, or fourth-class land, to any person of the age of 18 years and upwards, for any term of years expiring not later than 29th December, 1920. No such lease can be granted for more than 200 acres of first-class, or 640 acres of second-class, or 1,280 acres of third-class land, or 1,920 acres of fourth-class land; but the lease may comprise two or more "grazing areas," provided the total acreage does not exceed the maximum limit of any class. The rent is fixed at 3d. per acre for first-class, 2d. per acre for second-class, and 1d. per acre for third-class lands, and $\frac{1}{2}$ d. per acre for fourth-class lands; but an additional rent of 4 per cent. per annum on the capital value of any substantial and permanent improvements on the "grazing area" at the date of the commencement of the lease is imposed. On the expiration of the lease the incoming tenant is required to pay to the late lessee the value of all improvements, effected during the currency of the lease, calculated to increase its capacity for carrying sheep or cattle; but the sum to be paid in respect of such improvements must not be more than

10s. per acre of the "grazing area" if first-class, or 7s. 6d. per acre if second-class, or 5s. per acre if third-class land, or 2s. 6d. per acre if fourth-class land. All other improvements revert absolutely to the Crown, unless specially provided for in the lease of the "grazing area." The rent is payable half-yearly in advance, and the lessee cannot assign, sublet, or subdivide, without the consent of the Board; he must destroy all vermin and noxious growths and keep in good condition all improvements on the land. The lessee cannot ring or destroy, or, except for the purpose of fencing, or building, or domestic use on the land, cut down any timber thereon, without the consent of the Board, and he must enclose the land with a fence and keep it in good repair. The Crown may resume possession at any time of any of the land which may be required for public or mining purposes, or for removal of material or timber, or for industrial purposes, on payment of reasonable compensation. Every other lessee of a "grazing area" and his agents and servants have the right of ingress, egress, and regress to and from his "grazing area" through, from, and to any public road or track. The lessee, after the issue of the lease, may, if the "grazing area" consist of first-class land, select not more than 200 acres thereof as an "agricultural allotment"; if of second-class land, an "agricultural allotment of" of 320 acres; and if of third-class land a "grazing allotment" of 640 acres. A lessee of a "grazing area" in respect of which no rent is due, and who has reasonably and sufficiently fulfilled the conditions and covenants of his lease, may surrender any part of his "grazing area" in order that a new "grazing area" lease of such surrendered part may be granted to his wife or any eligible child, without public competition.

Agricultural Allotments.

Residence licenses are issued to any person of the age of 18 years and upwards, who has not made a selection under the Land Acts, or who is not in respect of the license applied for or any part thereof an agent, servant, or a trustee for any other person, or who has not at any time entered into an agreement to permit any other person to acquire by purchase or otherwise the applicant's interest therein, to occupy an "agricultural allotment" not exceeding in the aggregate 200 acres of first-class or 320 acres of second-class land. The period of license is six years, and the fee for occupation is 1s. per annum in the case of first-class land, or 9d. per annum in the case of second-class land for each and every one acre or part thereof, payable half-yearly in advance. The licensee cannot assign, transfer, or sublet; he must enclose the land with a fence and keep it in repair; and he must effect substantial and permanent improvements to the value of 20s. per acre, or fractional part of an acre, where the land is first-class, and 15s. an acre, or fractional part of an acre; where the land is second-class, during the currency of the license. The licensee must enter into occupation within twelve months from the issue of the license, and occupy the agricultural allotment for not less than five

years during its currency. If a licensee satisfactorily prove that the home of his family is situate upon the land held by him under residential license, the Board may consent, for a specified period, to substituted occupation by the wife or any stated child over the age of 18 years ; or, if he has no wife or child, by the father or mother of the licensee, provided he or she is dependent on him for support. A licensee may, in each and every year of the term of residence on residential license, apply to the land officer of the district to register a written notice of intention to absent himself from the agricultural allotment for a period or periods not exceeding on the whole three months, and any absence between the registered dates is not deemed a breach of the condition of occupation. If the conditions be complied with, the licensee is entitled at any time within twelve months after six years from the commencement of the license to obtain a Crown grant upon payment of the difference between the amount of rent actually paid and the entire sum payable for the purchase of the land, or obtain a lease for a term of fourteen years. The Crown may resume any portion of the land during the currency of the license that may be required for public or mining purposes, subject to the repayment of moneys paid by the licensee to the Crown or expended by him on the land resumed.

Non-residential licenses for a period of six years are issued to persons similarly qualified on identical conditions, with the exception that the improvements to be effected are 6s. 8d. per acre, or fractional part of an acre each year of the license on first-class land, and 5s. per acre, or fractional part of an acre for each of the first three years of the license in respect of second-class lands.

The licensee or lessee of an agricultural allotment may surrender his license or lease, and in its stead obtain a perpetual lease. The rent chargeable therefor to 29th December, 1909, is based upon the unimproved value of the land, which is assumed at £1 per acre if first-class and 15s. per acre if second-class land ; thereafter the rent is fixed by the Board at the end of every successive ten years. The holder of an agricultural allotment who desires to establish and cultivate a vineyard, hop-garden, or orchard may, during the term of his license or lease, upon payment of the difference between the amount of rent actually paid and the entire purchase-money payable in respect of any part, not more than 20 acres, of his allotment, obtain a Crown grant of such part subject to such covenants, conditions, exceptions, and reservations as the Governor may direct.

Grazing Allotments.

Licenses, either residential or non-residential, are issued to persons, qualified in a similar manner to those entitled to hold agricultural allotments, to occupy an allotment of third-class land not exceeding 640 acres, or 960 acres of fourth-class land. The period of license is six years, and the rent payable 6d. per acre for third-class land, and 3d. per acre for fourth-class land, half-yearly in advance. In the case of a residential license, the

licensee must enter into occupation within twelve months from the issue of the license, and occupy the grazing allotment for not less than five years during the currency of the license. If a licensee satisfactorily prove that the home of his family is situate upon the land held by him under residential license, the Board may consent, for a specified period, to substituted occupation by the wife or any stated child over the age of 18 years ; or, if he has no wife or child, by the father or mother of the licensee, provided he or she is dependent on him for support. A licensee may, in each and every year of the term of residence on residential license, apply to the land officer of the district to register a written notice of intention to absent himself from the grazing allotment for a period or periods not exceeding on the whole three months, and any absence between the registered dates is not deemed a breach of the condition of occupation. Substantial and permanent improvements must be effected to the value of 10s. per acre, or fractional part of an acre, on third-class lands, or 5s. an acre on fourth-class lands in respect of residential licenses, and 3s. 4d. each year of the first three years for each acre, or fractional part of an acre, in the case of non-residential licenses of third-class lands, or 1s. 8d. in the case of fourth-class lands. The licensee cannot assign, transfer, or sublet ; he is required to keep the land free from vermin, and must enclose the land and keep the fence in repair. The Crown may resume any portion of the land during the currency of the license that may be required for public or mining purposes, subject to the repayment of moneys paid by the licensee to the Crown or expended by him on the land resumed. If the conditions be complied with, the licensee is entitled, at any time within twelve months after six years from the commencement of the license, to obtain a Crown grant upon payment of the difference between the amount of rent actually paid and the entire sum payable for the purchase of the land, or obtain a lease for a term of fourteen years, at a yearly rent of 6d. for each acre of third-class land, or 3d. per acre for fourth-class lands. The holder of a grazing allotment, who desires to establish and cultivate a vineyard, hop-garden, or orchard, may, during the term of his license or lease, upon payment of the difference between the amount of rent actually paid and the entire purchase-money payable in respect of any part, not exceeding 20 acres, of his allotment, obtain a Crown grant of such part, subject to such covenants, conditions, exceptions, and reservations as the Governor may direct. Any person who is entitled to select a grazing allotment may apply for a perpetual lease of the allotment in lieu of the license.

Perpetual Leases.

Perpetual leases may be granted over any Crown lands available as agricultural or grazing allotments ; over mallee lands available as agricultural allotments ; and over swamp or reclaimed lands. They may also be granted to holders of grazing areas who are entitled to select

thereout an agricultural or grazing allotment; to holders of mallee allotments or parts thereof eligible to select an agricultural allotment; to holders of permits or leases to occupy allotments on swamp lands; and to village settlers on other than swamp lands who may desire to surrender the same and obtain perpetual leases in lieu thereof. No person is allowed to hold by transfer or otherwise more than 600 acres of first-class, or 960 acres of second-class, or 1,920 acres of third-class land, or 2,880 acres of fourth-class land, outside the mallee country. The rent on every perpetual lease, outside mallee and swamp or reclaimed lands, to 29th December, 1909, is $1\frac{1}{4}$ per cent. on the unimproved value of the land, which is deemed to be £1 per acre for first-class, 15s. per acre for second-class, 10s. per acre for third-class land, and 5s. per acre for fourth-class land. For every successive period of ten years the value, exclusive of all improvements made by the lessee, will be such amount as may be fixed by the Board, and the annual rent will be $1\frac{1}{4}$ per cent. of such value. The rent must be paid yearly in advance. The lessee must destroy all vermin within two years, and keep the land free from vermin and noxious growths; he must enclose the land within six years, or sooner if called upon under the Fences Act, 1890; he must reside for six months on the land, or within 5 miles thereof during the first year, and eight months during each of the four following years. In the event of the cultivation by the lessee of one-fourth of the area during the first two years, and one-half before the end of the fourth year, the residence covenant ceases to operate. Improvements must be effected to the value of 10s. per acre on first-class, 7s. 6d. per acre on second-class, and 5s. per acre on third-class land, or 2s. 6d. per acre on fourth-class land, before the end of the third year, and further improvements to a like value before the end of the sixth year of the lease. The lessee may not transfer, assign, mortgage, sublet, or part with the whole or any portion of the area within six years; and any portion required for railways, roads, mining, or other public purposes may be resumed on payment for non-removable improvements thereon or cost of removable improvements. A perpetual lessee whose rent is not in arrear may surrender his lease within six months after 29th December, 1909, or within six months after any successive period of ten years, with a view of obtaining an agricultural or grazing allotment license, either residential or non-residential. The improvements made will be credited to the licensee, and should there be a mortgage on the perpetual lease, the licensee may, after the issue of the license, give to the mortgagee a license lien on his improvements to the full amount due on the mortgage at the time of surrender.

Lands within Auriferous Areas.

Licenses to reside on or cultivate lands comprised within an auriferous area may be granted for a period not exceeding one year, and for areas not exceeding 20 acres, at an annual license fee of 1s. per acre. No person can hold more than one license. The license is subject to

the following conditions :—Right to use surface of land only ; licensee not to assign or sublet without permission of the Minister ; licensee either to reside on or fence the land within four months from date of license and cultivate one-fifth of area, allowance being made for any portion occupied by buildings ; miners to have free access to any part of the land without making compensation to the licensee for surface or other drainage ; and notices to be posted on the land by the licensee indicating that it is auriferous.

Grazing licenses, renewable annually at the option of the licensee, are issued for a period expiring not later than 29th December, 1905, for areas not exceeding 1,000 acres, at a rent to be fixed by appraisalment. The licensee may, with the consent of the Minister of Mines, enclose the whole or any specified part of the holding with a fence, which may be removed by him upon or at any time before the expiration of his license ; but such fence must be removed, without compensation, by the licensee when so ordered by the Board. Free access to such area must be allowed at all times to miners and other persons specially licensed to enter thereon ; the ringbarking of the timber on the land by the licensee is strictly forbidden ; and the licensee is subject to a penalty, not exceeding £20, if he fails to place upon the outside of the corner posts of the fence, if any, enclosing the lands such distinguishing marks as may be prescribed.

Auction Lands.

Lands comprised within certain areas notified in a schedule attached to the Act of 1891, and lands within proclaimed towns or townships, or within any city, town, or borough proclaimed before the passing of the Lands Act of 1884, may be sold at auction, the upset price for town lands being determined in the proclamation for sale, and that for country lands, £1 per acre. The maximum area that may be sold in any one year is 100,000 acres. Of the price, 12½ per cent. must be paid in cash, and the balance in forty half-yearly instalments, carrying interest at 4 per cent. per annum. Where, in the opinion of the Board, it is undesirable that the residue of the price of any land should be paid for by instalments extending over twenty years, such residue may be made payable in any number of half-yearly instalments less than forty. Stringent provisions are enacted prohibiting agreements preventing fair competition at auction sales. Isolated portions of Crown lands not exceeding 50 acres and not adjoining other Crown lands, or any portion of Crown lands not exceeding 3 acres required for a site for a church or for any charitable purpose, may be sold at auction.

Swamp Lands.

The swamp or reclaimed lands comprise the areas known as Condah, Koo-wee-rup, Moe, Panyzabyr, Mokoan, Black Swamp, Borodomanin, and Brankeet, Greta, Kelfeera, and Pieracle Swamps, and any swamp

or reclaimed lands that may be proclaimed as such in the *Government Gazette*. The lands are divided into allotments of an area not exceeding 160 acres, and may be leased for twenty-one years, or be leased under perpetual lease at a rental of 4 per cent. on the value of the land, or be leased under conditional purchase lease, or be disposed of by sale at public auction, subject to general conditions of sale. Every lease for twenty-one years, every perpetual lease, every conditional purchase lease, and every contract of sale for an allotment of swamp or reclaimed lands contains the condition that the lessee or purchaser shall make substantial improvements on the land to the extent of 10s. per acre in each of the first three years and keep open all canals and drains. The condition of residence is not obligatory in all cases. For determining the rent on the upset price the Board will fix the value of each allotment. Village settlers on swamp, or reclaimed lands may surrender their permits or leases, and acquire in place thereof perpetual leases or conditional purchase leases. In the event of a perpetual lease being granted, the annual rent thereon till 29th December, 1909, will be 4 per cent. on the price of the land as fixed in the surrendered permit or lease, the improvements at time of surrender to be credited towards compliance with conditions of new lease. In the event of a conditional purchase lease being granted, the price to be paid will be that fixed in the surrendered permit or lease, carrying interest at $4\frac{1}{2}$ per cent. per annum.

Lands enhanced in Value.

Where Crown lands are enhanced in value by the proximity of a railway, or of waterworks for irrigation purposes, etc., the Governor is empowered to increase the minimum sum per acre for which such lands may be sold, as well as the minimum amount of rent or license fee, by not less than one-eighth nor more than double the sum. But where lands have been sold, leased, or licensed at an enhanced price, and the works by reason of which the extra payment has been demanded have not been constructed within ten years from the date of the Order in Council fixing the enhanced price, the additional sum paid must be returned.

Forest Lands.

Land situated within the State forests, and timber and water reserves, cannot be alienated, except as hereinafter provided; and the administration of the Forest Domain of the Crown is placed in the hands of local Forest Boards, which are empowered to receive fees for licenses to cut or remove timber. Where any person has made his home, or the home of his family, for a period of five years on forest lands, whether permanently reserved or not, and has effected thereon improvements of the value of not less than £2 per acre, he may apply to purchase an area not exceeding 10 acres at a price to be determined by appraisal; and if there be no mining or other valid objection a Crown grant may issue.

Mallee Lands.

The territory known generally as the "Mallee" is situated in the north-western district of the state, and comprises an area of about 10,000,000 acres. The mallee land bordering on the plain country is mostly of a light chocolate and sandy loam character, and in its natural state is covered with mallee scrub, interspersed with plains lightly timbered with box, oak, and pines. The scrub can be cleared at a moderate expenditure, and the land is well adapted for wheat-growing. The smaller areas are known as "mallee allotments," and the larger areas, extending further north and where the soil is more sandy in character, as "mallee blocks." The "blocks" are practically in their natural state, are many square miles in extent, and are used for pastoral purposes only.

Mallee Blocks.

The "mallee blocks" are of various sizes. One portion of a block may be held for five years under an occupation license, and the other under lease for a period expiring not later than the 1st December, 1903. The lease is granted for a period of twenty years. For the first five years the rent payable is at the rate of 2d. per head of sheep and 1s. per head of cattle depastured on the land; for the second five years twice this amount; and for the remainder of the term at an additional increase equal to one-half the amount payable during the second period of five years; but in no case may the yearly rent be less than 2s. 6d. for each square mile or part of a square mile of land. Leases issued after the 20th February, 1896, have the rent fixed by the Board. The lessee cannot assign, subdivide, or cultivate any part without the consent of the Board of Land and Works; he must destroy the vermin upon the land, and fulfil certain other conditions. The Government retain the right of resuming the land after giving due notice, compensation for improvements effected being given on assessment. Licenses may be granted to enter on the block to obtain timber, stone, earth, &c., and other lessees may cross the area to get to any public road or track.

Mallee Allotments.

The mallee allotments are situated on the southern and eastern fringe of the mallee territory, and have a maximum area of 20,000 acres, and are leased for terms expiring not later than 30th November, 1903.

No assignment of the lease of a mallee allotment by operation of law can take effect without the consent of the Board, and the lessee without such consent cannot execute any mortgage or lien thereon. The lessee is required, within six months of the granting of the lease, to take up his residence on the land or within 5 miles thereof, and to remain there for at least six months in the first year, and nine months during each of the next four years; or, instead, to cultivate at least one-fourth of the allotment within two years, and at least one-half before the end of the fourth year. In the event of the insolvency or death of the lessee,

residence is not obligatory on the assignee, executor, or administrator. Without the consent of the Board, the lessee cannot clear or cultivate any part of his allotment, and not more than five crops in succession may be raised, after which for one year the land must be allowed to lie fallow. A uniform rental of 1d. per acre per annum is now charged in all cases where the Board's consent has been obtained to clear and cultivate.

It is provided that the lessee may select out of his mallee allotment an agricultural allotment not exceeding 640 acres, either under license or perpetual lease. When this is done the remainder of the mallee allotment may be resumed, compensation being awarded for improvements only. Should the lessee have actually resided on the land and destroyed the vermin thereon, the period of six years for which the agricultural allotment license is issued may be so shortened as not to exceed the length of such residence, conditionally on the payment of the license fees.

Agricultural Allotments under License or Perpetual Lease.

Any person of the age of 18 years or upwards may select 640 acres of first-class, or 1,000 acres of second-class land, or 1,280 acres of third-class land, or 1,600 acres of fourth-class land, out of any area made available as an agricultural allotment under residential or non-residential license or perpetual lease. A similar concession is made to any holder of a mallee allotment who may make application at any time before the 30th November, 1903, to select out of his mallee allotment a similar area in like manner. The period of residence attached to residential licenses is five years. When the area is first-class land, the purchase money in full for a residential license is £1 per acre, and the license is for a term of six years, at a yearly rent of 1s. per acre; the improvements at the expiration of the license must be of the value of £1 per acre. If all the conditions be complied with, the licensee is entitled, at the expiration of the license, to a lease for fourteen years at the same rent, or to a Crown grant at any time, on paying the difference between the amount paid and £1 per acre. If the applicant prefer, he may obtain a license at a reduced rental of 6d. per acre per annum for the term of six years, with a lease for thirty-four years at 6d. per acre yearly. When the area is second-class land, the purchase money in full is 10s. per acre, and the license is for a term of six years at a yearly rent of 6d. per acre, and the lease for fourteen years at the same rent, or a license may be issued, with conditions varied in these respects, that the rent shall be 3d. per acre yearly for six years, with a subsequent lease for thirty-four years at the same rent. The improvements at the end of the six years must be of the value of 10s. per acre. A non-residential license on first-class land is granted for a term of six years at 1s. per acre per annum, and the lease for a period of fourteen years at the same rent. Improvements to the value of 6s. 8d. per acre must be made in each of the six years. The period of non-residential license on second-class land

is six years, at an annual rent of 6d. per acre, and the lease is for fourteen years at the same rent. Improvements to the value of 3s. 4d. an acre must be made during each of the first three years. Except for the purpose of building, fencing, or other improvements, the licensee may not cut or remove any live pine, box, or red gum, on the land.

Perpetual leases of mallee country are issued, in areas not exceeding 1,920 acres, at a yearly rental not to exceed 2d. per acre to 31st December, 1903, and thereafter as the Board may determine. The rent must be paid yearly in advance, and the lessee must destroy any vermin on the land, and within two years have made a complete clearance of such pests, while during the remainder of his lease he must see that the land is kept free from them. Within six months, the lessee must reside on or within 5 miles of the land, and do so for a period of eight months in each of the second, third, fourth, and fifth years. In the event of the lessee cultivating one-fourth of the area within two years, and at least one-half within four years, the residence condition ceases to operate.

Vermin Districts.

Under the Land Act of 1890, districts which are proclaimed as vermin-infested are, for the purpose of securing the extinction of these animal pests, administered by local committees appointed by the owners, lessees, and occupiers of the lands. In order to secure the erection of vermin-proof wire-fencing, a fencing rate may be levied, and the Minister has power to deduct 5 per cent. of the amount levied in vermin districts for the purpose of erecting a vermin-proof fence between the mallee country and the mallee border.

Wattle Cultivation.

During 1890 legislation was enacted having for its object the granting of leases of any unoccupied Crown lands for the cultivation of wattle-trees, for any term not exceeding twenty-one years, at a rent of 2d. per acre per annum for the first seven years, 4d. per acre for the second seven years, and 6d. per acre for the remainder of the term. A lease is not granted for more than 1,000 acres; and the rent is payable half-yearly in advance. The lessee covenants not to assign, sublet, or divide the lease without the consent of the Board of Land and Works; to keep all improvements in repair during each of the first six years following the year after the granting of the lease; to sow or plant wattle-trees or any other approved tannin-producing trees or plants on at least one-fifth of the land leased, and within six years to occupy the whole area in a similar manner. He must within two years enclose a third, within three years two-thirds, and within four years the whole of the land leased; and he is required to keep the fence in good repair, and to destroy all vermin which may be upon the land. The lessee may select out of his lease an agricultural or grazing allotment under license or perpetual lease.

Village Settlements.

Under the Settlement on Lands Act of 1893 there may be set apart and appropriated for the purposes of village communities any lands not alienated from the Crown, provided they are not auriferous or permanently reserved for any purpose. Such lands are surveyed into allotments of 1 to 20 acres each, according to the quality of the soil and the situation. Subject to certain restrictions, any person of the age of 18 years may obtain a permit to occupy a village community allotment for a period not exceeding three years. The rent is merely nominal, but conditions are laid down with the object of ensuring *bona-fide* occupancy. On the expiration of the permit a lease may be obtained, provided the conditions of the permissive occupancy have been fulfilled. The lease is granted for a period of twenty years. The lessee must pay in advance, every half-year, rent equal to one-fortieth of what is regarded as the price of the allotment, which is to be not less than £1 per acre. Within two years from the date of the lease he must have brought into cultivation not less than one-tenth, and within four years, one-fifth of the land; and within six years, have effected substantial improvements of a permanent character to the value of £1 for every acre leased. He must also keep all improvements in good repair; and he cannot assign, transfer, or sublet the land, or borrow money on the security of his lease without the consent of the Board of Land and Works. He must reside personally on the land, and use it for agriculture, gardening, grazing, or other like purpose. Any person in occupation of an allotment under permit or lease may surrender the same, and acquire the land under a perpetual lease, or a conditional purchase lease. In the event of the land being granted under perpetual lease, the rental thereon to 29th December, 1909, will be 250 per cent. on the price set out in the original permit or lease; should the land be granted as a conditional purchase lease, the price to be paid is that fixed in the surrendered permit or lease carrying interest at $4\frac{1}{2}$ per cent. per annum.

Homestead Associations.

Areas of similar lands to the foregoing may also be set apart and appropriated for occupation by members of associations or societies; but no proclamation can remain in force for a longer period than three years in the case of a society, nor for more than six months in the case of an association, after the survey and subdivision of the block; and land in any block not occupied or leased at the expiration of these periods becomes unoccupied Crown land again. No block of land set apart for the purposes of associations or societies can exceed in area 2,000 acres. A block is subdivided into lots of not more than 50 acres each, and the number of persons to be located in each block must not be less than one for every 50 acres of its total area. A permissive occupancy of a section may be granted to any member of an association or a society for a period of three years. The rent is a nominal one, and after proof of fulfilment of conditions a lease may be obtained by the member, provided he is of the

age of 18 years. The lessee covenants to pay the annual rent and the cost of survey; to repay all moneys advanced by the Board; to bring into cultivation within two years not less than one-tenth, and within four years not less than one-fifth of the land; and within six years to effect substantial improvements of a permanent character to the value of £1 for every acre leased. He must also keep the improvements in good repair; and he cannot assign, transfer, or sublet the land, or borrow money upon it without the consent of the Board of Land and Works. He must personally reside on his section or its appurtenant township allotment, and use the land for agriculture, gardening, grazing, dairying, or other like purpose. Adjoining to or within every block of land appropriated in this manner, an area of not more than 100 acres may be set apart for the purposes of a township, and the Board of Land and Works may subdivide it into allotments not exceeding 1 acre, in order to provide a township allotment for each homestead selection. Power is reserved to alienate the fee-simple of those allotments not required for the purpose; and every settler may, within one year from the commencement of his permit or lease, obtain a lease of such an allotment, with the right to a Crown grant in fee on making the payment prescribed.

Labour Colonies.

Areas of similar land, not exceeding 1,500 acres in extent, may also be set apart for the purpose of labour colonies, to be vested in five trustees, appointed by the Governor. For the purpose of aiding the trustees, provision is made whereby persons subscribing to the funds of such a colony may annually elect a committee of management, consisting of four members. The joint body (trustees and committee) is empowered, on a day to be determined in each case by the Minister, to admit to such a colony any person who shall be entitled to such benefits as the rules of the colony may prescribe. The trustees and committee of each colony must establish and conduct the same; and they have all the powers and authority necessary to enable them to improve the position of the colony and make it self-supporting. They may establish and maintain any industry they please, and dispose of the proceeds thereof. A subsidy of £2 for every £1 received by the trustees and committee from public and private subscriptions is payable by the Government. The moneys received are to be disbursed in the payment of allowances for work to persons employed in the colony; in the construction and maintenance of necessary buildings; and in purchasing provisions, clothing, building materials, stock, seed, and agricultural implements.

Besides the foregoing provisions, there are numerous others, dealing with minor interests, which in a general statement of this kind it is not necessary to recapitulate.

Acquisition of Land for Closer Settlement.

The acquisition of private lands for the purpose of closer settlement is an entirely new feature in Victorian land legislation. The Board of

Lands and Works may, subject to the approval of Parliament, purchase for the Crown, blocks of good agricultural private land in any farming district. The portion of the acquired land to be disposed of is to be subdivided into farm allotments of a value not exceeding £1,000 each, which are to be available under conditional purchase lease. Any person of the age of 21 years, who is not already the holder of land of the value of £1,000, or who would not thereby become the holder of land exceeding such value, may be granted a farm under conditional purchase lease. The price of the land to be disposed of is to be so fixed as to cover the cost of original purchase, cost of survey and subdivision, the value of lands absorbed by roads and reserves, and the cost of clearing, draining, fencing, or other improvements which the Board may effect prior to the disposal of the land as farm allotments. The purchase money, with interest at $4\frac{1}{2}$ per cent. per annum, must be paid by sixty-three or a less number of half-yearly instalments. The conditional purchase lease may be for such a term of years (not exceeding thirty-one and a-half) as may be agreed upon between the lessee and the Board. The lease is subject to the following conditions:—Improvements to be effected to the value of 10s. an acre, or if the Board so determines, to the value of 10 per cent. of the purchase money, before the end of the third year of the lease, and to the value of a further 10s. an acre, or if the Board so determines, to the value of a further 10 per cent. of the purchase money before the end of the sixth year of the lease; personal residence by the lessee, or by his wife, or any child not less than 18 years of age, on the allotment for eight months during each year of the first six years; lessee not to transfer, assign, mortgage or sublet within the first six years; and such other conditions and covenants relating to mining, cultivation, vermin destruction, and other matters as may be prescribed by regulation. Upon or at any time after the expiration of the first six years of the lease, provided all conditions have been complied with, the lessee may, on payment of the balance of the principal, acquire the fee-simple of his farm allotment.

QUEENSLAND.

The land legislation of New South Wales in force on the date when the Moreton Bay District was formed into the colony of Queensland, gave place soon after that event to a new system of settlement, better adapted to the requirements of the newly constituted province. Following to a certain extent the lines adopted by their neighbours, the Queensland legislators introduced into their regulations the principle of free selection before survey, and of sales under the deferred payment system. Having to dispose of a vast territory which, not being endowed with so temperate a climate, had not the same attractions as the southern provinces, it was considered necessary to exercise greater liberality in offering the land than was shown to settlers in the other states. Large areas and small prices were therefore features of Queensland land sales.

Most liberal, also, were the provisions to facilitate the exploration and occupation for pastoral purposes of the vast interior country, and the Pastoral Act of 1869 led to the occupation by an energetic race of pioneers of nearly the whole of the waste lands of the province. The rapid development of the resources of the state, and the consequent increase of population, necessitated later on a revision of the conditions under which land might be alienated or occupied; but although the tendency has been to curtail the privileges of the pastoralists, the alienation of the public estate by selection—conditional and unconditional—has been placed under enactments of a still more liberal character than those which existed in the earlier days. Under pressure of the new social movement, Queensland has followed in the wake of New Zealand and South Australia, and has granted to the working classes great facilities for acquiring possession of the soil. The regulations at present in force are based upon the legislation enacted under the Crown Lands Act of 1884, and its subsequent amendments in 1886, 1889, 1891, 1893, 1897, and 1900.

Land may be acquired in the following manner :—(1) By conditional selection: agricultural homesteads from 160 to 640 acres, at prices ranging from not less than 20s. for 160 acres to less than 15s. per acre for 640 acres, and agricultural selections up to 1,280 acres, at a price determined by the proclamation rendering the land available for settlement—residence in both cases to be personal or by agent; (2) by unconditional selection, at prices one-third greater than those payable in respect of agricultural selections, the area being limited to 1,280 acres; (3) by grazing-farm selection up to 20,000 acres, the period of lease ranging from fourteen to twenty-eight years at a varying rental, $\frac{1}{2}$ d. per acre being the minimum; (4) by scrub selection of areas not exceeding 10,000 acres for a term of thirty years, at rentals ranging from a peppercorn to 1d. per acre; and (5) by purchase at auction, of town lands at an upset price of £8 per acre, suburban lands at £2 per acre, and country lands at £1 per acre for land classed as agricultural, and 10s. per acre for any other.

The state is, so far as is necessary, divided into Land Agents' Districts, in each of which there are a Public Lands Office and a Government Land Agent with whom applications for farms must be lodged. Applications must be made in the prescribed form, and be signed by the applicant, but they may be lodged in the Lands Office by a duly authorised attorney. There is connected with the Survey Department, in Brisbane, an office for the exhibition and sale of maps, and there full information respecting lands available for selection throughout the state can be obtained on personal application. Plans can also be obtained at the District Offices.

The conditions under which country lands may be acquired for settlement by persons of either sex over 16 years of age—married women excepted, unless they are judicially separated or possess separate estate—are substantially as stated below.

Grazing Farms.

Areas of land already surveyed are available for selection as grazing farms over a great extent of territory within accessible distance of the seaboard. Intending settlers can obtain up to 20,000 acres on lease, for a term of fourteen, twenty-one, or twenty-eight years, at an annual rent varying according to the quality of the land, $\frac{1}{2}$ d. an acre being the minimum. This rent is subject to reassessment by the Land Court after the first seven years, and subsequently at intervals of seven years, but it cannot be decreased at any reassessment, nor can it be increased by more than one-half of the rent for the period immediately preceding. The applicant must first obtain an occupation license, which is not transferable, and which may be exchanged for a lease for the balance of the term of fourteen, twenty-one, or twenty-eight years as soon as the farm is enclosed with a substantial fence, which must be done within three years, or such extended time, not exceeding two years, as the Land Court may allow. The lease may be transferred or mortgaged after the expiration of five years from the commencement of the lease, and the farm may be subdivided, or, with the consent of the Land Court, sublet. The land must be continuously occupied by the lessee or his agent for the whole term of the lease, and cannot be made freehold. The Commissioner may issue a license to a group of two or more selectors, enabling any one of the selectors to perform the condition of occupation in respect of any of the selections as well as on his own behalf, but the number of selectors personally residing is not at any time to be less than half the whole number interested. One-fifth of the cost of survey, ranging from about £30 for a farm of 2,560 acres to about £65 for 20,000 acres—subject to increase or decrease according to locality—must be paid with a year's rent when application is made for the farm, and the balance in equal instalments without interest.

Grazing Homesteads.

Lands available as grazing farms are also open for selection as grazing homesteads at the same rental and for the same term of lease. An application to select as a grazing homestead takes precedence of a simultaneous application to select the same land as a grazing farm. The conditions and other provisions mentioned in respect of grazing farms are applicable also to grazing homesteads, with the exception that during the first five years of the term of a grazing homestead the condition of occupation must be performed by the continuous personal residence of the selector on the land.

Agricultural Selections.

The more accessible lands near lines of railway, centres of population, and navigable waters, are set apart for agricultural farm selection in areas up to 1,280 acres. The period of license is five years, during which the selector must fence in the land, or expend an equivalent sum in effecting other substantial improvements. As soon as the improvement

condition has been complied with, a lease is issued for a term of twenty years from the date of the license, with right of purchase at any time after continuous occupation of the lease for a period of five years. The annual rent is one-fortieth of the purchasing price specified in the proclamation declaring the land open, and varies according to the quality and situation of the land, its natural supply of water, etc. The selector must occupy the land continuously, either in person or by agent, who must be a person qualified to select a similar selection, for the whole term of the lease. The cost of survey, ranging from about £10 to £12 for a farm of 160 acres to £20 to £40 for a farm of 1,280 acres, must be borne by the selector.

When land is taken up as an agricultural homestead, the area is restricted to 160 acres, 320 acres, or 640 acres, according as the price specified in the proclamation is determined at not less than 20s., less than 20s. but not less than 15s., or less than 15s. per acre respectively. The selection must be enclosed within a period of five years, or permanent improvements effected at an expenditure dependent on the capital value of the land. The applicant is entitled to a lease for a period of ten years, at a rental of 3d. per acre; but he may acquire the fee-simple of the land on the terms prescribed in the proclamation, after the expiration of five years from the commencement of the lease.

Two or more selectors of agricultural homesteads may associate for mutual assistance under license from the Land Board. A selector may perform conditions of residence for himself and any other member of the association, provided that at least one-half of the whole number of selectors interested are in actual occupation; and any sum expended on permanent improvements on any one homestead in excess of the required amount may be credited to any other farm or farms in the group. In other respects the conditions are similar to those governing agricultural homesteads.

Village Settlements.

With regard to village settlement, special provision is made by law for the settlement of little communities, so that settlers may live together in townships for mutual convenience, on allotments not exceeding 1 acre in extent, and with farms of 80 acres in close proximity to their residences. The freehold of these farms may be secured generally on the same terms as those upon which agricultural farms not exceeding 160 acres in area may be acquired, with the additional privileges that residence on an allotment in the township is held to be equivalent to residence on the farm, and one-fifth of the required improvements may be made on the allotment.

Unconditional Selection.

Areas of land are also available for unconditional selection at prices one-third greater than those payable in respect of agricultural selections. The term of lease is twenty years, and the annual rent one-twentieth of the purchasing price, which may not be less than 13s. 4d. per acre. At

any time during the currency of the lease the freehold may be acquired. As the term implies, no other conditions than the payment of the purchase money are attached to this mode of selection—the maximum area allowed to be selected being 1,280 acres. The proportion of cost of survey, on the same scale as for agricultural selection, must be deposited with the first instalment of purchase money at the time of application, the balance to be paid in equal annual instalments.

Scrub Selections.

Lands which are entirely or extensively overgrown with scrub are available for selection in four classes, determined by the extent of scrub. The area selected must not exceed 10,000 acres, and the term of lease is thirty years, the rent ranging from a peppercorn per acre in the first five years, $\frac{1}{2}$ d. an acre for the next succeeding ten years, and 1d. per acre for the remaining fifteen years in respect of lands in the first class, to a peppercorn for the first twenty years, and 1d. per acre for the remaining ten years in relation to those of the fourth class. During the period of lease under which the selector pays a peppercorn rent the whole of the scrub must be cleared—a proportionate area in each year—and the land enclosed. Compensation is paid in respect of clearing on any land resumed, but upon determination of the lease the clearing improvements revert to the Crown.

Auction Lands.

The alienation in fee of allotments in towns is restricted to areas ranging from 1 rood to 1 acre, at an upset price of £8 per acre; while in respect of suburban lands, areas of 1 to 5 acres may be acquired within 1 mile of town lands, and the limit is extended to 10 acres in regard to lands situated over 1 mile from such town lands, the upset price being £2 per acre. In respect of country lands, the maximum area that may be sold in any one year is limited to 150,000 acres in lots not exceeding 320 acres, and the upset price is fixed at £1 per acre for land classed as agricultural, and not less than 10s. per acre for any other. A deposit of 20 per cent. is to be paid at time of sale, and the balance, with deed, assurance, and survey fees, within one month thereof.

Co-operative Settlement.

The Co-operative Communities Land Settlement Act of 1893 provides for the setting apart of a portion of Crown lands for the purposes of a group or association of persons for co-operative land settlement, and the condition annexed thereto is that the group shall consist of not less than thirty persons, each of whom is eligible to apply for and hold land under the provisions of the Crown Lands Act of 1884. It is requisite that the group shall be recognised by the Minister, and the rules of the community must be deposited with him. None but natural born or naturalised subjects are eligible to become members of a group, and no person may be a member of more than one community. It is open to a group to register itself under the Friendly Societies Act of

1876; and in such case certain provisions at law dealing with the internal government of the community become inoperative.

The area available for a co-operative community is set apart by proclamation, and cannot exceed in area more than 160 acres for each member. The proclamation specifies and defines the name of the group; the persons included therein; the boundaries and a description of the area; the improvements to be made; the period for which the area is set apart (not exceeding twelve nor less than six years); and the rent payable for the land. A sum equal to at least 2s. 6d. per acre must be expended during each of four equal portions of the lease, and failing that, resumption of the land and consequent dissolution of the group ensue.

No member of a co-operative community possesses an individual interest or property in the improvements effected on the land, the same being vested in the Minister; but on the expiry of the lease, with the conditions satisfactorily performed, the members, on payment of the proclaimed price (if any) and deed and assurance fees, are entitled to a deed of grant in fee-simple of so much land as was specified in the proclamation, the division of the area being left to the members themselves. In certain cases the acquisition of freehold may be prohibited by the rules of the group, and provision is made for dissolution when the membership falls below a certain number.

Labour Colonies.

Provision is also made for the proclamation of Labour Colonies. The area granted to a colony, which must not exceed 10,000 acres in extent, is vested in five trustees, who are empowered to establish and manage any trade or industry. A subsidy not exceeding £1,000, either conditionally or otherwise, may be granted to a labour colony from Parliamentary appropriations for such purposes.

SOUTH AUSTRALIA.

The settlement of the state of South Australia was the outcome of an attempt to put into actual practice one of those remarkable theories which logically seem founded upon apparently solid ground, but which are apt to weaken and give way when subjected to the pressure of hard practical facts. The policy by which a wealthy colony was to be created in a few years on the edge of a supposed desert continent, was based upon principles enunciated by Edward Gibbon Wakefield, in a pamphlet published in England about the year 1836. The main idea of his scheme of colonisation was the sale of land in the new possession at a high price, and the application of the amount thus realised to the introduction of immigrants, whom the landowners would at once employ to reclaim the virgin forest, and create wealth and abundance where

desolation existed. But although Wakefield had fairly calculated upon the results which would follow the action of man if left to himself, the part which Nature might be expected to play was not taken into consideration, and the scheme quickly proved an empty failure and a distressful speculation for the many whom its apparent feasibility had deluded into investing their means in the lands of the new colony. Had not the discovery of great mineral resources occurred at an opportune time, the exodus into the eastern colonies of the immigrants imported or attracted to South Australia would have emptied the province of its population, and considerably retarded the progress of a territory not inferior in natural resources to other portions of the Australian continent.

Steps were soon taken to modify the Wakefield system, but it was only in 1872 that an Act was passed more in conformity with the legislation of the neighbouring states, and giving to the poorer classes of the population a chance to settle upon the lands of the Crown under fair conditions. The Lands Act of 1872, adapted as it was to the needs of the time, gave way to other measures, and the regulations now in force are those of the Crown Lands Act of 1888, as amended in 1889, 1890, 1893, 1894, 1895, 1896, 1897, 1898, and 1899.

General Provisions.

The law as it now stands gives power to the Government to alienate Crown lands in the following manner:—(1) By auction, town lands, Crown lands within hundreds, and special blocks may be alienated, but no sales of country lands may be made at a price of less than 5s. per acre; a deposit of 20 per cent. is required at time of sale, the residue to be paid within one month therefrom; (2) by lease with right of purchase, the period of lease being twenty-one years, with option of renewal for a further period of twenty-one years, and right of purchase exercisable at any time after the expiration of the first six years of the term, at a price of not less than 5s. per acre. The grant in fee-simple of any land cannot be construed to convey any property in any mineral or mineral oil in or upon the land, the same being reserved by the Crown, although authority may be given to persons at any time to search for and remove any of the minerals reserved.

Leases with Right of Purchase.

No lands may be leased unless they have been surveyed; and the area that a lessee may at any one time hold with a right of purchase is restricted to 1,000 acres. No lease with right of purchase, or perpetual lease, can be granted of lands of such value that the purchase money will exceed £5,000 unimproved value. The Land Boards are entrusted with the duty of classifying lands, and of fixing the area of blocks, the price and annual rent at which each block may be taken up on lease with right of purchase, and the annual rent at which such block may be taken

up on perpetual lease. Applications must be made in writing to the Commissioner, and must cover a deposit equal to 20 per cent. of the first year's rent of the block which it is desired to take up. All applications are dealt with by the Land Board, which has power to subdivide or to alter the boundaries of blocks, and to decide what price or annual rent shall be payable. A lessee must execute his lease and pay the balance of the first year's assessment and prescribed fees within twenty-eight days after the acceptance of his application has been notified and the lease has issued, otherwise he forfeits the deposit paid and all rights to a lease of the land.

Leases with right of purchase are granted for a term of twenty-one years, with the right of renewal for a similar term. Purchase may be made at any time after the first six years. The price must not be less than 5s. an acre.

The rent chargeable on a perpetual lease for the first fourteen years is fixed by the Land Board and notified in the *Government Gazette*, and for every subsequent period of fourteen years a revaluation is made. Every lease contains a reservation to the Crown of all minerals, timber, and mineral oils in or upon the land. The lessee undertakes to fulfil the following conditions:—(1) To pay rent annually; (2) to pay all taxes and other impositions; (3) to fence in the land within the first five years, and thereafter to keep the fences in repair; (4) to commence forthwith to destroy and to keep the land free from vermin; (5) to keep in good order and repair all improvements which are the property of the Crown; (6) to keep insured to their full value all buildings which are the property of the Crown; and (7) to give access to the land to persons holding mining licenses or mineral leases.

A pastoral lessee may surrender his lease for a perpetual lease where the unimproved value of the land comprised therein, together with that of all other lands held by him, does not exceed £5,000, or where, in the opinion of the Commissioner, the land is suitable only for pastoral purposes, and the carrying capacity thereof unimproved, and of all other lands held by the lessee under any tenure does not exceed 5,000 sheep. The annual rent of the perpetual lease in such case is to be determined by the Surveyor-General, subject to the approval of the Commissioner, according to the actual value, irrespective of the amount of the right of purchase granted in respect thereof.

Sale of Lands.

All Crown lands within hundreds which have been offered for lease and not taken up, may be offered for sale at auction for cash within two years of the date on which they were first offered for lease. Other lands may be sold at auction for cash, and not upon credit or by private contract, the Commissioners fixing the upset price of both town and country lots offered; but no country lands may be sold for less than 5s. per acre.

Pastoral Leases

The administration of the law in respect of pastoral lands is controlled by a Pastoral Board consisting of three members, including the Surveyor-General. Legislation passed in 1899 provides that in future pastoral leases the classification hitherto existing is abolished, and the term of such leases is to be forty-two years, subject to a revaluation of the rent for the second twenty-one years, the rent to be determined by the carrying capacity of the land for the depasturing of stock, the value of the land for agricultural and other purposes, and the proximity and facilities of approach to railway stations, ports, rivers, and markets. Pastoral leases current at the time of the passage of the legislation referred to are divided into three classes. Class A includes all pastoral lands within district A, the boundaries of which are set out in the Schedule to the Pastoral Act of 1893; Class B includes similar land in district B; and Class C includes all pastoral lands to the south of the 26th parallel of south latitude, and not included in Classes A and B. Leases in Classes A and B have a currency of twenty-one years, and in Class C of twenty-one years, with a right of renewal for a similar term at a revaluation.

No mining by the lessee is allowed, but he may use the surface of the land for any purpose, whether pastoral or not. Improvements are valued solely in connection with their worth to the incoming lessee, and may in no case exceed in value such as are necessary for the working of a run of 5,000 sheep in Class A, of 10,000 sheep in Class B, or of 30,000 sheep in Class C, or a proportionate number of cattle, five sheep being taken as the equivalent of one head of cattle. Revaluations may be made during the currency of a lease if, by the construction of Government works in the neighbourhood, such as railways and waterworks, the land should have received an enhanced value. Leases are granted to discoverers of pastoral lands, or to any person for inferior lands, for forty-two years—the first five years at a peppercorn rental; the next five years at 1s. per annum per square mile; and the remainder of the term at 2s. 6d. per annum per square mile. For all other leases the minimum rent is fixed at 2s. 6d. per annum per square mile, together with 2d. for each sheep depastured in Classes A and B, and 1d. for each sheep in Class C. Provision is made for the resumption of leases and the granting of compensation. All disputed cases are decided according to the terms of the Arbitration Act, 1891.

A pastoral lessee may surrender his lease for a perpetual lease where the unimproved value of the land comprised therein, together with that of all other lands held by him, does not exceed £5,000, or where, in the opinion of the Commissioner, the land is suitable only for pastoral purposes, and the carrying capacity thereof unimproved and of all other lands held by the lessee under any tenure does not exceed 5,000 sheep.

In cases where the area held by an outgoing lessee is reduced by subdivision below a certain minimum, the improvements are to be

valued for the protection of such lessee as if the area were of the minimum carrying capacity, and any difference between their value and that paid by the incoming lessee is to be borne by the Commissioner. The Commissioner is not bound to recover improvement moneys or to protect improvements, and any moneys paid to an incoming lessee for depreciation of improvements are to be laid out in their repair; but a lessee may be released from the liability to repair improvements provided others in lieu thereof are made to the satisfaction of the Commissioner.

The lessee covenants to stock the land, before the end of the third year, with sheep, in the proportion of at least five head, or with cattle, in the proportion of at least one head, for every square mile leased; and before the end of the seventh year to increase the stock to at least twenty sheep or four head of cattle per square mile, and to maintain the numbers at that rate. In addition, pastoral leases granted subsequent to 28th January, 1899, contain a covenant binding the lessee to expend in improvements such sum, not to exceed 10s. per mile per annum as shall be recommended by the Pastoral Board, and approved by the Commissioner, the covenant to cease so soon as an expenditure of at least £3 per mile in improvements has been made on the land.

In cases where the Commissioner is satisfied that the country is waterless or infested with vermin, the covenant relating to stocking the land may be qualified, provided that a sum equal to £5 per square mile of the leased land has been expended in the destruction of vermin or in the construction of water improvements. Where artesian water yielding not less than 5,000 gallons per diem is discovered, the lessee is entitled to a remission of five years' future rent in respect of an area of 100 square miles surrounding such well, but this concession cannot be claimed on account of more than four wells on any one run.

Forfeiture of a lease does not take effect until after three months' notice has been given to the lessee, who may thereupon apply for relief to the Tenants' Relief Board, which consists of a Judge of the Supreme Court assisted by two assessors. After consideration of all matters affecting the question, the Board may determine as they think fit.

Working-men's Leases.

A new feature has been introduced into the land legislation of the state, in response to the claims of the working classes. It is enacted that certain lands of the province may be surveyed into blocks exceeding 20 acres in area, so long as the unimproved value does not exceed £100, and leased under the conditions affecting leases granted with the right of purchase and perpetual leases. No one except a person who gains his livelihood by his own labour, and who has attained the age of 18 years, is entitled to a working-man's lease. Either husband or wife may hold a working-man's block, but not both at the same time. The rent is payable annually in advance. The lessee is bound to reside on the land for at least nine months in every year, but residence by his

wife or any member of his family is held as a fulfilment of the residential condition. Working men's leases situated within a radius of 10 miles from the Post Office, Adelaide, cannot be taken up with the right of purchase.

Exchange of Lands.

Crown lands may be exchanged for any other lands, notwithstanding the existence of any lease that may have been issued in connection with the former. The Crown lands proposed to be given in exchange may be granted in fee simple or under perpetual lease.

Village Settlements.

Twenty or more persons of the age of eighteen and upwards may form an association for the purpose of founding a village settlement. The memorandum, on approval of the Commissioner, is deemed to be registered, and the association becomes a corporate body, with the right to sue and to be sued. The proclamation sets forth the name, situation, and boundaries of the village; the names of the villagers and of the trustees of the association; the maximum area to be allotted to each villager; and the nature and aggregate value of the improvements to be made on the land, and the period within which they are to be effected. Within two months of the publication of the proclamation constituting a village, the Commissioner is to issue to the association a perpetual lease thereof. The conditions attached are that, after the first six months from the date of issue of the lease, at least one-half of the villagers shall reside upon and utilise the land in the manner prescribed; that during each of the first ten years the sum of 2s. per acre at least shall be expended in improvements, which are to be kept in good repair; and that the lands are not to be sub-let. The Commissioner may make advances to registered associations, to the extent of £100 for each villager, for the purchase of tools or to effect improvements, such advances to be repaid in ten equal yearly instalments, with interest at the rate of 5 per cent. per annum. Power is vested in the Commissioner to expel from an association any villager who has become liable to expulsion under the rules; to control and direct the expenditure of any money advanced; to call upon a trustee to resign where the welfare of the association calls for such action; and to require an association to increase the number of villagers so that it may not be less than the number who signed the rules when first registered—the total to be not more than 500.

Registration of Homesteads.

The Homestead Act of 1895 has for its object a simple method of securely settling homesteads for the benefit of settlers and their families. It is essential that applicants for the registration of their homesteads should be residing, and have resided for at least one year prior to making the application, on the land to be registered. Homesteads with improvements thereon of the value of more than £1,000, or

in respect of which the applicant is not either the owner of an unencumbered estate in fee-simple or the holder of a perpetual lease from the Crown, are not eligible for registration. The effect of registration is to settle the homestead for the benefit of the settler and family until the period of distribution, either under his will, or when his children have all attained the age of 21 years. No alienation or attempted alienation by the settler or his family has any force or effect other than as provided for, and their interest continues unaffected to the value of £1,000 only. Provision is made for the leasing of the homestead, but for no period longer than three years. Registration may be rescinded should the settler become bankrupt or make an assignment for the benefit of his creditors within twelve months from the date of registration; and a similar course may be adopted in the event of his death within a like period and should it be shown that the estate is insufficient for the payment of his debts and liabilities without recourse to the homestead. The Act applies to land brought under the provisions of the Real Property Act of 1886, as well as to land not subject to that Act.

Closer Settlement.

With a view to the encouragement of closer settlement in the public interest by facilitating the acquisition by the Crown of large estates for subdivision and letting for agricultural purposes at reasonable rents, power is given to the Commissioner to acquire such. The price to be paid for lands compulsorily taken is not to exceed the unimproved value of the land, together with the value of the improvements thereon, with an additional 10 per cent. for compulsory resumption.

Mining Areas.

Provision is made for the issue of business and occupation licenses. Business claims cannot be more than $\frac{1}{4}$ acre in townships nor more than 1 acre on other lands, and they must not be situated within 5 miles of any Government township, except they come within a gold-field. The cost of a business license is 10s. for six months or £1 for a year. Occupation licenses of blocks not exceeding $\frac{1}{2}$ acre are granted for a period of fourteen years, at an annual rental of 2s. or less.

THE NORTHERN TERRITORY.

The Northern Territory of South Australia includes the whole of the lands situated to the north of the 26th degree of south latitude, bounded by Queensland on the east, Western Australia on the west, and the Ocean on the north. This portion of the Continent is under the administration of a Resident, appointed by the Government of South Australia; and the alienation and occupation of lands within the Territory are conducted under regulations enacted by the South Australian Legislature, in accordance with the Northern Territory Crown Lands Consolidation Act of 1882.

It is provided that lands may be purchased for cash, without conditions, in blocks not exceeding 1,280 acres, for 12s. 6d. per acre. They may also be bought under the deferred payment system to the same maximum area, and at the same price, payable in ten years, together with an annual rent of 6d. per acre.

Leases for pastoral occupation may be issued for a term not exceeding twenty-five years, for blocks up to 400 square miles, the annual rental for the first seven years being 6d. per square mile, while 2s. 6d. per square mile is charged during the remainder of the term.

In order to encourage the cultivation of tropical produce, such as rice, sugar, coffee, tea, indigo, cotton, tobacco, etc., special provisions have been enacted. Blocks of 320 acres to 1,280 acres may be let for such purposes at the rate of 6d. per acre per annum. If, on the expiration of five years, the lessee can prove that he had cultivated one-fifth of his area by the end of the second year, and one-half by the end of the fifth year, he is relieved from all further payment of rent, and the amount already so paid is credited to him towards the purchase of the land in fee.

WESTERN AUSTRALIA.

The first regulations referring to land settlement in Western Australia were issued by the Colonial Office in 1829, at the time when Captain James Stirling was appointed Civil Superintendent of the Swan River settlement. The first special grants were made in favour of Captain Stirling himself for an area of 100,000 acres near Geographe Bay; and of Mr. Thomas Peel, for 250,000 acres on the southern bank of the Swan River and across the Channing to Cockburn Bay—Mr. Peel covenanting to introduce at his own cost 400 immigrants into the state by a certain date. Persons proceeding to the settlement at their own cost, in parties in which the numbers were in the proportion of five females to every six male settlers, received grants in proportion to the amount of capital introduced, at the rate of 40 acres for every sum of £3. Capitalists were granted land at the rate of 200 acres for every labouring settler introduced at their expense, but these grants were subject to cancellation if the land was not brought into cultivation or reclaimed within twenty-one years. These regulations were amended by others of a similar nature, issued on the 20th July, 1830. In 1832, however, the mode of disposing of Crown lands by sale came into force, the regulations issued in that year assimilating the system of settlement to that in force in the colonies of New South Wales and Van Diemen's Land. Other alterations were made from time to time, until in October, 1898, an Act amending and consolidating the laws relating to the sale, occupation, and management of Crown lands received assent.

For the purposes of administration, the state is divided into six divisions, namely, the South-west division, the Western division, the North-west division, the Kimberley division, the Eucla division, and

the Eastern division. Land may be acquired in the following manner:— (1) By auction of town and suburban lands in all divisions, at an upset price to be determined by the Governor; (2) by conditional purchase— (a) by deferred payments with residence within agricultural areas in all divisions; (b) by deferred payments with residence on any land other than agricultural in the south-west division; (c) by deferred payments with residence on any land within 40 miles of a railway within the eastern and Eucla divisions, at a price of not less than 10s. per acre, payable in twenty yearly instalments, and in areas not exceeding 1,000 acres nor less than 100 acres; (d) by deferred payments without residence within an agricultural area, also over any other land within the south-west division, or within 40 miles of a railway within the eastern and Eucla divisions, which may from time to time be declared open to selection; (e) by direct payment without residence within agricultural areas of not less than 100 acres nor more than 1,000 acres, at a price of not less than 10s. per acre, 10 per cent. of which is to be paid on application and the balance within twelve months of date of the commencement of the license, by four equal quarterly instalments; (f) by direct payment without residence, for gardens, in all divisions, of areas of not less than 5 nor more than 50 acres, at not less than 20s. per acre; (g) of poison lands; (h) working-men's blocks; (i) free homestead farms; (j) of grazing lands, second and third class lands.

Auction Lands.

Town and suburban lands in all divisions may be sold by public auction, at an upset price to be determined by the Governor-in-Council. Any person may apply to the Commissioner to put up for sale by auction any town or suburban lands already surveyed, on depositing 10 per cent. of the upset price, which is returned if such person does not become the purchaser. Should the purchaser not be the applicant, he must pay 10 per cent. on the fall of the hammer, the balance of the purchase money, in the case of town lots, by two equal instalments at the end of three and six months; in the case of suburban lots, by four equal quarterly instalments, subject to alteration by regulation, the Crown grant and registration fees being payable with the last instalment. All suburban land is sold subject to the condition that each lot shall, within two years from the date of sale, be enclosed with a fence of a prescribed description.

Conditional Purchase.

In all the divisions, agricultural areas of not less than 2,000 acres are set apart by the Governor-in-Council. The maximum quantity of land which may be held by any one person is 1,000 acres, and the minimum 100 acres. The price is fixed at 10s. an acre, payable in twenty yearly instalments of 6d. an acre, or sooner, in the occupier's option. Upon the approval of an application, a lease is granted for twenty years. Within six months the lessee must take up his residence

on some portion of the land; and make it his usual home without any other habitual residence, during, at least, six months in each year for the first five years. The lessee must within two years from the date of the commencement of his lease fence at least one-tenth of the area, and within five years enclose the whole of the land, and must, within ten years, expend upon the land, upon prescribed improvements, in addition to the exterior fencing, an amount equal to the full purchase money. After the lease has expired, provided that the fence is in good order, and the improvements have been maintained, and the full purchase money has been paid, a Crown grant is given.

Land may be purchased outside agricultural areas in the south-west division, also within 40 miles of a railway within the eastern and Eucla divisions, by free selection, on deferred payments with residence, and otherwise subject to all the conditions required within agricultural areas as already stated.

Under the fourth mode of purchase, the applicant is subject to all the conditions, except that of residence, imposed under the first mode, but he has to expend twice the amount on improvements in lieu of residence.

By the fifth mode, land of a minimum extent of 100 acres and a maximum of 1,000 acres, within an agricultural area, and not more than 5,000 acres outside an agricultural area, may be applied for at a price (not less than 10s. per acre) fixed by the Governor-in-Council. Within three years the land must be enclosed, and within seven years a sum equal to 5s. per acre must be spent on improvements, in addition to the exterior fencing.

For garden purposes, small areas of not less than 5 acres nor more than 50 acres (except in special cases) may be purchased within all divisions at 20s. per acre on condition that within three years the land shall be fenced in, and one-tenth of the area planted with vines or fruit-trees or vegetables.

Lands infested with poisonous indigenous plants, so that sheep or cattle cannot be depastured thereon, are available for conditional purchase, in areas of not more than 10,000 acres nor less than 3,000 acres, at a price not less than 1s. per acre, payable half-yearly, at the rate of one-thirtieth of the total purchase money per annum. Upon approval of the application, a lease for thirty years is granted, subject to the conditions that the lessee shall, within two years, fence one-tenth, and within five years enclose the whole area, with a fence of the prescribed description, and, during the term of his lease, eradicate the whole of the poisonous indigenous plants. At the expiration of the lease, or at any time during the currency of the same, provided all the conditions have been complied with, the fencing properly maintained, and the full balance of the purchase money and fees paid, and provided that the land has been rendered safe for depasturing cattle and sheep at all seasons, and has continued so for a term of two years, a Crown grant of the land issues. A pastoral lessee has the first right to select land within his lease under this mode.

Every person who does not own land within the state in freehold, or under special occupation, or conditional purchase, or a homestead farm, who is the head of a family, or a male who has attained the age of 18 years, is entitled to obtain a lease of lands set apart for working-men's blocks. The maximum area that may be selected by one person is, if within a gold-field, $\frac{1}{2}$ an acre, or 5 acres elsewhere. The price of the land is not less than £1 per acre, payable half-yearly, at the rate of one-tenth of the total purchase money per annum. The application is to be accompanied by a deposit of half a year's rent, and, on approval, a lease for ten years issues. Within three months from the date of the lease, the lessee must take personal possession and reside upon it during at least nine months in each of the first five years of the lease; possession and residence may, however, be performed by the lessee's wife or a member of his family. Within three years the land must be fenced, and within five years an amount equal to double the full purchase money, in addition to his house and exterior fencing, must be expended on the land in prescribed improvements. At the expiration of the lease, or at any time after five years from commencement of lease, provided all the conditions have been complied with, and the fencing and improvements maintained, and the full purchase money and fees paid, a Crown grant issues.

Any person who does not already own more than 100 acres of land within the state, in freehold or conditional purchase, and being the head of a family, or a male who has attained the age of 18 years, may apply for a free homestead farm of not more than 160 acres, from lands declared open for such selection within the south-west division, and within 40 miles of a railway in the eastern or Eucla division, not being within a gold-field. The application is to be accompanied by a statutory declaration and a fee of £1, and, upon approval, an occupation certificate authorising the applicant to enter upon and take possession of the land for the term of seven years is issued. Within six months from the date of the occupation certificate, the selector must take personal possession of the land, and reside upon it for at least six months in each year for the first five years of the term. Within two years from the date of the certificate, a habitable house must be erected of not less than £30 in value, or the selector must expend £30 in clearing, or clearing and cropping, or prepare and plant 2 acres of orchard and vineyard. Within five years, one-fourth of the land must be fenced and one-eighth cleared and cropped. Within seven years, the whole must be enclosed, and at least one-fourth cleared and cropped. At the expiration of seven years, provided the conditions have been complied with, a Crown grant issues on payment of the usual fees.

Leases for thirty years of second and third class lands are granted, called grazing leases, but which are really another form of conditional purchase. The maximum area allowed to be taken up is 3,000 acres of second-class, and 5,000 acres of third-class, land, and the minimum in both cases is 1,000 acres; and if one person selects two leases in different

classes, the total quantity must not exceed 4,000 acres. The price of second class land is not less than 6s. 3d. per acre, and of third class land 3s. 9d. per acre, payable half-yearly at the rate of 2½d. and 1½d. per annum respectively. The lessee is required to pay one-half the cost of survey in ten half-yearly instalments. Within six months from the date of the commencement of the lease, the lessee must take possession of the land and reside upon it during at least six months of the first year, and nine months in each year of the next four years. Residence may, however, be complied with by the lessee's agent or servant. Within two years from the date of the commencement of the lease, the lessee is required to fence at least one-tenth of the area contained therein, and within five years to fence the whole of the land, and within fifteen years to expend upon the land in prescribed improvements an amount equal to the full purchase money in addition to the exterior fencing.

Pastoral Lands.

Pastoral lands are granted on lease, which gives no right to the soil or to the timber, except for fencing and other improvements on the land leased, and the lands may be reserved, sold, or otherwise disposed of by the Crown during the term. The following are the terms of pastoral leases in the several divisions; all leases expire on the 31st December, 1928, and the rental named is for every 1,000 acres:—
 South-west division.—In blocks of not less than 3,000 acres, at 20s. per annum for each 1,000 acres or part of 1,000 acres; if, however, the land is in that part of the division situated eastward of a line from the mouth of the Fitzgerald River in the direction of Mount Stirling, the rental is 10s. per annum for each 1,000 acres or part thereof.
 Western and north-west division.—In blocks of not less than 20,000 acres, at 10s. per annum for each 1,000 acres or part thereof.
 Eucla division.—In blocks of not less than 20,000 acres, at 5s. per annum for each 1,000 acres or part thereof.
 Eastern division.—In blocks of not less than 20,000 acres, at the following rental:—For each 1,000 acres or part thereof, 2s. 6d. for each of the first seven years, and 5s. for each of the remaining years of the lease.
 Kimberley division.—In blocks of not less than 50,000 acres when on a frontage, nor less than 20,000 acres when no part of the boundary is on a frontage, at a rental of 10s. per annum for each 1,000 acres or part thereof. Any lessee in the Kimberley Division, or in that part of the south-west division situated to the eastward of a line from the mouth of the Fitzgerald River in the direction of Mount Stirling may obtain a reduction of one-half the rent due for the remaining years of his lease, who at any time during its term shall have in his possession within the division ten head of sheep or one head of large stock for each 1,000 acres leased. Except in the south-western division, a penalty of double rental for the remaining portion of the lease is imposed, should the lessee within seven years, have failed to comply with the stocking clause.

Any Crown land within a gold-field or mining district, not required to be reserved for any public purpose, may be leased for pastoral purposes in blocks of not less than 2,000 acres at a rental of 10s. per 1,000 acres. In the event of the land, or any portion of it, being taken for an agricultural area, the lessee is only entitled to three months notice.

Miner's Homestead Leases.

Any miner resident on a gold-field, being not less than 18 years of age, may apply for a miner's homestead lease of any Crown lands within the limits of a gold-field set apart for the purpose. The area which may be taken up is as follows:—Within 2 miles of the nearest boundary of any town site or suburban area, 20 acres; and beyond 2 miles from such boundary, 500 acres; and the aggregate area applied for by any one person within the same gold-field shall in no case exceed 500 acres. Upon the approval and notification of the lease in the *Government Gazette*, the applicant is entitled to enter upon and occupy the land; but if at the expiration of six months he has not used or occupied the land, either by himself residing upon it, or by enclosing one-tenth part of it with a substantial fence, or by substantial improvements upon the land, or by carrying on some manufacture upon or in connection with the land, he is deemed to have abandoned it. The lessee is required, within three years from the date of survey of the land, to fence the whole of it with a substantial fence, not being a bush fence, sufficient to resist the trespass of great stock; and within five years from the said date to expend upon the land in prescribed improvements an amount equal to 10s. per acre. If the area does not exceed 20 acres, the annual rent is at the rate of 2s. for every acre or part of an acre; if the area exceeds 20 acres, the annual rent is at the rate of 6d. per acre or part of an acre, payable during the first twenty years of the lease, and thereafter an annual rent of 1s. The minimum annual rent for the first twenty years to be reserved by any lease shall not be less than 10s.

TASMANIA.

In the earlier period of the occupation of Tasmania, from 1804 to 1825, the island was administered as a part of New South Wales, and its settlement was subject to the regulations affecting the disposal of the Crown domain in that colony. After its constitution under a separate administration, the regulations issued from the Colonial Office for the settlement of the Crown lands in the mother colony were made applicable also to Tasmania. New measures were introduced after self-government had been granted to the province, but they became so complicated and cumbersome that in 1890 the necessity was felt of passing an Act consolidating into one comprehensive and general measure the twelve Acts then in force. Amendments of the 1890 Act have, however, been made in 1895 and 1900.

The business of the Lands and Survey Departments is now transacted by virtue of the Crown Lands Act of 1890, and its amendments in 1895 and 1900, under which, for the convenience of survey operations, the island is divided into fifteen districts. Lands of the Crown are divided into two classes—town lands and rural lands, the latter being further subdivided into first-class agricultural lands and second-class lands. Lands which are known to be auriferous, or to contain other minerals, and such lands as may be necessary for the preservation and growth of timbers, are dealt with under separate sections; and the Governor-in-Council is empowered to reserve such lands as he may think fit for a variety of public purposes.

Land may be acquired in the following manner:—(1) By selection of rural lands in areas of not less than 15 nor more than 320 acres, at an upset price of £1 per acre, with one-third added for credit; (2) by selection of rural lands of not less than 15 nor more than 50 acres, at an upset price of £1 per acre, with one-third added for credit; (3) by selection of lands within mining areas—if situated within 1 mile of a town reserve, of an area of not less than 1 nor more than 10 acres; and if at a greater distance than 1 mile, of not less than 10 nor more than 100 acres—the upset price of first-class lands being not less than £1 per acre, payable in fourteen years, and that for second-class lands not less than 10s. per acre, payable in ten years; (4) by auction—(a) of town lands at the upset price notified in the *Gazette*, (b) of second-class lands at an upset price of 10s. per acre in lots of not less than 30 nor more than 320 acres, (c) of second-class rural lands at an upset price of not less than 10s. per acre (maximum area 320 acres), (d) of third-class rural land at an upset price of not less than 5s. per acre, in lots of not less than 60 acres nor more than 320 acres; (5) as settlement areas by any persons, styled “the purchasing body,” in areas not exceeding 1,000 acres.

In the rural division any person of the age of 18 years may select by private contract at the price and upon the terms set forth hereunder:—

One lot of rural lands not exceeding 320 acres nor less than 15 acres.

	£	s.	d.
100 acres at 20s.	100	0	0
Add $\frac{1}{3}$ for credit	33	6	8
	133	6	8

Payable as follows:—

	£	s.	d.
Cash at time of purchase	3	6	8
First year	5	0	0
Second year	5	0	0
Third year	10	0	0
And for every one of the eleven successive years to the fourteenth year inclusive at the rate of £10 per annum.....	110	0	0
	133	6	8

The same proportions are allowed for any greater or smaller area than 100 acres; but credit is not given for any sum less than £15. Additional selections may be taken up, provided the total area held by one selector does not exceed 320 acres. Selection by agent is not allowed.

Sales of Land on Credit.

Any person of the full age of 18 years, who has not purchased under the Crown Lands Acts, may select and purchase one lot of rural land of not more than 50 acres nor less than 15 acres; and on payment of a registration fee of £1 an authority is issued to the selector to enter upon and take possession of the land, which must be done in person within six months from the date of issue of certificate. The purchase money, which is calculated on the upset price of £1 per acre, together with the survey fee, and with one-third of the whole added for credit, is payable in fifteen annual instalments, the first of which is due in the fourth year of occupation. A condition of purchase is that the selector shall expend a sum equal to £1 per acre in effecting substantial improvements (other than buildings) on the land, or reside habitually thereon for the full term of eighteen years, before a grant deed is issued. Where a purchaser is unable to pay the instalments as they become due, they may be deferred for any period up to five years on payment of interest at the rate of 5 per cent., if all other conditions have been fulfilled; and the selector may take possession of his land as soon as his application has been approved by the Commissioner and the survey fee paid.

The conditions in connection with the credit system are as follow:—The purchaser must commence to make improvements on the expiration of one year from the date of contract, and during eight consecutive years must expend not less than 2s. 6d. per acre per annum, under penalty of forfeiture. Any surplus over 2s. 6d. per acre spent in any year may be set against a deficiency in another year, so that £1 per acre shall be spent in the course of the eight years. In the event of improvements to the full amount being made before the expiration of the eight years, the purchaser may pay off any balance due, discount being allowed. Payment of instalments may in certain cases be postponed, but under such circumstances interest must be paid at the rate of 5 per cent. per annum. In certain cases the time for making the improvements may be extended for two years. Should an instalment not be paid within sixty days after becoming due, the land may be put up to auction, the defaulter having the privilege of redeeming his land up to the time of sale by payment of the amount due, with interest and costs. If land sold at auction by reason of default should realise more than the upset price, the excess is handed to the defaulter. Land purchased on credit is not alienable until paid for, but transfers are allowed. For five years after alienation land is liable to be resumed for mining purposes, compensation being paid to the occupier. All grant-deeds contain a reservation by the Crown of the right to mine for minerals.

Second-class lands may be sold by auction at the upset price of 10s. per acre in lots of 30 to 320 acres, the latter being the maximum quantity which any one purchaser can hold under the Act on credit. One-half of the purchase money is to be expended in making roads. Improvements, other than buildings, to the value of 5s. per acre are to be effected by the purchaser, beginning at the expiration of one year from the date of contract, and to be continued for the next five years at the rate of 1s. per acre per annum, the deed of grant issuing only when the amount of 5s. per acre has been expended. Non-fulfilment of the conditions entails forfeiture. Where the purchaser has fulfilled the conditions, but is unable to complete the purchase of the whole, a grant may issue for so much as has been paid for upon the cost of survey being defrayed. On approval of the application by the Commissioner, and payment of the survey fee, the selector may at once enter into possession.

Third-class lands may be sold by auction at an upset price of not less than 5s. per acre, and in lots of not less than 60 acres nor more than 320 acres. Within one year from the sale of the land, the purchaser must begin to effect substantial improvements other than buildings on the land, and continue in each year during the five consecutive years thereafter to effect such substantial improvements to the value of 1s. for every acre of land so purchased.

Rural lands not alienated and not exempt from sale may be sold by auction. Town lands are sold only in this way. Ten shillings per acre is the lowest upset price, and agricultural lots must not exceed 320 acres. Lands unsold by auction may be disposed of by contract. No private lands may be sold by private contract within 5 miles of Hobart or Launceston.

Mining Areas.

Mining areas may be proclaimed, within which land may be selected or sold by auction, in lots varying with the situation—from 1 to 10 acres if within a mile from a town, and up to 100 acres if at a greater distance. In such cases residence for three years is required, and in default the land is forfeited to the Crown. Occupation licenses are granted to holders of miners' rights or residence licenses for cultivation or pasture within areas withdrawn from the operation of the Crown Lands Act, in lots of not more than 20 acres, for a period of two years at 5s. per acre, on terms prescribed by regulation, and an area not exceeding $\frac{1}{2}$ of an acre may be sold by auction, the person in occupation having a preferential right of private purchase at the upset price fixed by the Land Commissioner. A deposit of one-sixth of the purchase money must be made on the approval of the sale, the balance to be paid in eleven equal monthly instalments.

Land selected or bought within a mining area is open to any person in search of gold or other mineral, after notice has been given to the owner or occupier, to whom compensation must be made for damage

done. Persons who occupy land in a mining town, under a business license, and who have made improvements to the value of £50, may purchase one quarter of an acre at not less than £10 nor more than £50, exclusive of the value of improvements and cost of survey and deed fee.

Residence licenses may be issued to mining associations for a period of 21 years at 10s. for each year of the term. The same party may hold two licenses if the areas are 5 miles apart.

Grazing Leases.

Grazing leases of unoccupied country may be offered at auction, but such runs are liable at any time to be sold or licensed, or occupied for other than pastoral purposes. The rent is fixed by the Commissioner, and the run is put up to auction, the highest bidder receiving a lease for fourteen years. The lessee may cultivate such portion of the land as is necessary for the use of his family and establishment, but not for sale or barter of produce. Should any portion of the run be sold or otherwise disposed of, a corresponding reduction may be made in the rent, which is payable half-yearly in advance. A lease is determinable should the rent not be paid within one month of becoming due. In the event of the land being wanted for sale or any public purpose, six months' notice must be given to the lessee, who receives compensation for permanent improvements. Leases for not more than fourteen years may be granted for various public purposes, such as the erection of wharfs, docks, etc. Portions of a Crown reserve may also be leased for thirty years for manufacturing purposes.

NEW ZEALAND.

The first settlements in New Zealand were founded upon land obtained from the various native tribes, and the task of distinguishing between the few *bona-fide* and the numerous bogus claims to the possession of land thus acquired was the first difficulty which confronted Captain Hobson when, in 1840, he assumed the government of the colony. Trading in land with the natives had, from 1815 to 1840, attained such proportions that the claims to be adjudicated upon covered 45,000,000 acres—the New Zealand Company, of which Mr. Edward Gibbon Wakefield, of South Australian fame, was the managing director, claiming an estate of no less than 20,000,000 acres in area. In the year 1840, the Legislature of New South Wales passed a Bill empowering the Governor of that state to appoint a Commissioner to examine and report upon all claims to grants of land in New Zealand—all titles, except those allowed by Her Majesty, being declared null and void. This Bill, before receiving the Royal assent, was superseded by an Act of the local Council, passed in 1841, under which the remaining claims were settled, and new regulations were

adopted for the future disposal of the Crown lands. When, later on, the colony became divided into independent provinces, each district had its own regulations, but in 1858 an Act was passed by the General Assembly embodying all the regulations under which land could be alienated or demised in the various provinces of the colony. This Act was repealed in 1876, and the enactments of 1885, 1887, and 1888 which followed have been superseded by the Lands Act of 1892 and its Amending Acts of 1893, 1895, 1896, 1897, and 1899, under which the Crown lands are now administered. For convenience the colony is divided into ten land districts, each being under the direction of a local Commissioner and a Land Board.

Classification of Lands.

Crown lands are divided into three classes:—1. Town and village lands, the upset prices of which are respectively not less than £20 and £3 per acre; such lands are sold by auction. 2. Suburban lands, being lands in the vicinity of any town lands, the upset price of which may not be less than £2 per acre; these lands are also sold by auction. 3. Rural lands, being lands not reserved for towns and villages, classified into first and second class lands, which may be disposed of at not less than £1 per acre for first-class, and 5s. an acre for second-class lands; such lands may be either sold by auction after survey, if of special value, as those covered with valuable timber, etc., or be declared open for application as hereafter described. Pastoral lands are included within the term "rural lands," and are disposed of by lease. No person can select more than 640 acres of first-class or 2,000 acres of second-class land, inclusive of any land already held; but this proviso does not apply to pastoral land.

Mode of Alienation.

Crown lands may be acquired as follows:—(1) At auction, after survey, in which case one-fifth of the price must be paid down at the time of sale, and the balance, with the Crown grant fee, within thirty days; and (2) by application, after the lands have been notified as open to selection, in which case the applicant must fill up a form and make the declaration and deposit required by the particular system under which he wishes to select.

After lands have been notified as open under the optional system they may be selected for cash, on condition that first-class lands shall within seven years be improved to the amount of £1 per acre, and second-class lands to the amount of 10s. per acre. One-fifth of the price is payable at the time of application, if the land is surveyed, and the balance within thirty days, if the land is surveyed; or if the land is unsurveyed, the survey-fee, which goes towards the purchase of the land, and the balance within thirty days of notice that survey is completed. A certificate of occupation issues to the purchaser on the final

payment being made, and is exchanged for a Crown grant so soon as the Board is satisfied that the improvements have been completed.

After notification, lands may be selected for occupation, with right of purchase, under a license for twenty-five years. At any time subsequent to the first ten years, and after having resided on the land and made the improvements hereafter described, the licensee can, on payment of the upset price, acquire the freehold. If not purchased after the first ten and before the expiry of the twenty-five years of the term, the license may be exchanged for a lease in perpetuity. The rent is 5 per cent. on the cash price of the land. A half-year's rent must be deposited with the application, if for surveyed land, and this sum represents the six months' rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the cost of survey is to be deposited, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey. Residence on and improvement of the land are compulsory, as hereafter described. Land held on deferred payment may be mortgaged under the Government Advances to Settlers Act of 1894.

Perpetual Leases.

Lands notified under the optional system may be selected on a lease for 999 years (or in perpetuity), subject to the undernoted conditions of residence and improvements. The rental is 4 per cent. on the cash price of the land. In the case of surveyed lands, the application must be accompanied by half a year's rent, which represents that due on the 1st day of January or July following the date of selection. In the case of unsurveyed lands, the cost of survey must be deposited, and is credited to the selector as so much rent paid in advance, dating from the 1st day of January or July after thirty days' notice of completion of survey. Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures. Crown lands may be leased to any society for the establishment of industrial, rescue, or reformatory homes, for a period of twenty-one years, with perpetual right of renewal at an annual rental of 5 per cent. on the capital value, subject to such conditions as the Minister may deem fit to prescribe. In the event of default, the land, with any improvements thereon, reverts to the Crown.

Conditions of Tenure.

Under all systems—excepting cash purchases or pastoral and small grazing-run leases—residence and improvements are the same. Residence is compulsory (with a few exceptions mentioned in the Act), and must commence on bush or swamp lands within four years, and on open or partly open lands within one year from the date of selection. On lands occupied with a right of purchase, residence must be continuous for six

years in the case of bush or swamp lands, and for seven years in the case of open or partly open lands; on lease-in-perpetuity lands it must be continuous for a term of ten years. The Board has power to dispense with residence in certain cases, such as where the selector resides on adjacent lands, or is a youth or an unmarried woman living with his or her parents. The term "residence" includes the erection of a habitable house to be approved of by the Board.

Improvements are the same for all classes of land—excepting cash purchases or pastoral and small grazing-run leases—and are as follow :— Within one year from the date of the license or lease the land must be improved to an amount equal to 10 per cent. of its value; within two years, to the amount of another 10 per cent.; within six years, to the amount of another 10 per cent., making 30 per cent. in all within the six years; and in addition to the foregoing, it must be further improved to the amount of £1 an acre for first-class land, and for second-class to an amount equal to the net price of the land, but not more than 10s. an acre. Improvements comprise the reclamation of swamps, the clearing of bush, cultivation, the planting of trees, the making of hedges, the cultivation of gardens, fencing, draining, the making of roads, wells, water-tanks, water-races, sheep-dips, embankments or protective works, or the effecting of any improvement in the character or fertility of the soil, or the erection of any building, etc.; and cultivation includes the clearing of land for cropping, or clearing and ploughing for laying down artificial grasses, etc.

Under the existing regulations, any group of persons numbering not less than twelve may apply for a block of land of not less than 1,000 acres nor more than 11,000 acres in extent; but the number of members must be such that there shall be one for every 200 acres in the block, and no one may hold more than 320 acres, except of swamp lands, of which the area may be 500 acres. The price of lands within a special settlement is fixed by special valuation, but it cannot be less than 10s. an acre. The rental may not be less than 4 per cent. on the capital value of the land; the tenure is lease in perpetuity. Residence, occupation, and improvements are generally the same as already described, and applications have to be made in the manner prescribed by the regulations.

Improved Farm Settlements.

Special regulations are in force for this class of settlement, and those who form settlements are selected from the applicants by the Commissioner, preference being given to married men. The area of the farms may vary from 10 to 200 acres, according to locality, and no settler can select more than one farm. The land is leased for 999 years at a rental of 4 per cent. on the capital value, to which is added 5 per cent. on the amount advanced by Government for clearing, grassing, etc. Residence for the first ten years is compulsory, and the improvements to be effected are similar to those on perpetual leases.

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follow:—Such settlements may be divided into—(1) Village allotments not exceeding 1 acre each, which are disposed of either at auction or upon application as already described, with option of tenure, the cash price being not less than £3 per allotment; and (2) homestead allotments not exceeding 100 acres each, which are leased in perpetuity at a 4-per-cent. rental on a capital value of not less than 10s. per acre. Where a village-settlement selector has taken up less than the maximum area prescribed, he may obtain an additional area in certain cases without competition on the same tenure and terms as the original holding. Residence, improvements, and applications are the same as already described. The leases are exempt from liability to be seized or sold for debt or bankruptcy. The Governor is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Grazing Areas.

Small grazing runs are divided into two classes: first-class, in which they cannot exceed 5,000 acres; and second-class, in which they cannot exceed 20,000 acres in area. These runs are leased for terms of twenty-one years, with right of renewal for a like term, at a rent of $2\frac{1}{2}$ per cent. on the capital value of the land, but such capital value cannot be less than 5s. per acre. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Lands Office, together with a deposit of six months' rent, representing that due on the 1st day of March or September following selection. A selector may not hold more than one small grazing run, nor may he hold any freehold or leasehold land of any kind whatsoever over 1,000 acres, exclusive of the area for which he applies under this system. The lease entitles the holder to the grazing rights and to the cultivation of any part of the run, and to the reservation of 150 acres around his homestead through which no road may be taken; but the runs are subject to the mining laws. Residence is compulsory on bush or swamp land within three years, and on open land within one year; and it must be continuous to the end of the term, though this latter condition may in certain cases be relaxed. Improvements are necessary as follow:—Within the first year, to the amount of one year's rent; within the second year, to the amount of another year's rent; and within the next four years, to the value of two years' rent;—making a sum equal to four years' rental to be spent on the run in six years. In addition to this, a first-class run must be improved to an amount of 10s. an acre, and a second-class run to an amount of 5s., if the land be under bush. After three years' compliance with these conditions, the run may be divided among the members of the selector's family who

are of the age of 17 years and upwards, and new leases may be issued to them on the terms and subject to the conditions of residence and improvements contained in the original lease.

Pastoral Leases.

Purely pastoral country is let by auction for a term not exceeding twenty-one years; but, except in extraordinary circumstances, no run can be of a carrying capacity greater than 20,000 sheep or 4,000 cattle. Runs are classified from time to time into those which are suitable for carrying more than 5,000 sheep (let as above), and into pastoral-agricultural country, which may either be let as pastoral runs, generally for short terms, or be cut up for settlement in some form. Leases of pastoral-agricultural lands may be resumed without compensation at any time after twelve months' notice has been given. No one can hold more than one run unless it possesses a smaller carrying capacity than 10,000 sheep or 2,000 cattle, in which case the lessee may hold additional country up to that limit. Runs are offered at auction from time to time, and half a year's rent must be paid down at the time of sale, representing that due in advance on the 1st March or September following; and the purchaser has to make the declaration required by the Act. All leases begin on the 1st March; they entitle the holder to the grazing rights, but not to the soil, timber, or minerals. A lease terminates over any part of the run which may be leased for another purpose, purchased, or reserved. The tenant must prevent the burning of timber or bush, and the growth of gorse, broom or sweet-briar, and destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years. In case it is determined again to lease any run, it must be offered at auction twelve months before expiry of the term, and if, on leasing, it is purchased by some person other than the previous lessee, valuation for improvements, to be made by an appraiser, must be paid by the incoming tenant, to an amount not greater than three times the annual rent, except in the case of a rabbit-proof fence, which is valued separately. Runs may also be divided with the approval of the Land Board. Where a lessee seeks relief, and the application is favourably reported on by the Board, the whole or part of one year's rent payable or paid may be remitted or refunded, or the lease may be extended, or a new lease or license issued in lieu thereof. The Minister may also postpone payment of rent or sheep rate where a tenant has applied or signified his intention of applying for relief.

Acquisition of Land for Settlement.

The administration of the law in respect of the acquisition of land for settlement is vested in a Board styled the Board of Land Purchase Commissioners, and consisting of the Surveyor-General, the Commissioner of Taxes, and the Commissioner of Crown Lands for any district

in which it is proposed to acquire land, the Land Purchase Inspector, and a member of the Land Board of the district. The duties devolving upon the Board are to ascertain the value of any lands proposed to be acquired, and to report to the Minister as to their character and suitability for settlement, and as to the demand for settlement in the locality. Land may be compulsorily taken for the purposes of the Act. The rent of land acquired and disposed of under the Act is at the rate of 5 per cent. on the capital value of the land, and the capital value is to be fixed at a rate sufficient to cover the cost of the original acquisition, together with the cost of survey, subdivision, and making due provision for roads. Where land acquired contains a homestead, a lease in perpetuity of the homestead and land surrounding it, not exceeding 640 acres, may be granted to the person from whom it was acquired, on conditions prescribed, at a yearly rental of 5 per cent. on the capital value of the land, such capital value to be determined in the manner set forth above.

A large area, principally in the North Island, remains in the hands of the native race, and this land may be acquired for settlement after a report upon its character, suitability for settlement, and value, has been made by a Board specifically appointed for the purpose. On notification, the land becomes Crown land, subject to trust for native owners.

AUSTRALASIAN SETTLEMENT.

The particulars given in the foregoing pages will have made the fact abundantly clear that the main object of the land legislation, however variously expressed, has been to secure the settlement of the public estate by an industrious class, who, confining their efforts to areas of moderate extent, would thoroughly develop the resources of the land; but where the character of the country does not favour agricultural occupation or mixed farming, the laws contemplated that the State lands should be leased in blocks of considerable size for pastoral occupation, and it was hoped that by this form of settlement vast tracts which, when first opened up, seemed ill-adapted even for the sustenance of live-stock, might ultimately be made available for industrial settlement. To how small an extent the express determination of the legislators to settle an industrious peasantry on the soil was accomplished will presently be illustrated from the records of several of the provinces; but in regard to pastoral settlement the purpose was fully achieved.—large areas, which were pronounced even by experienced explorers to be uninhabitable wilds, have since been occupied by thriving flocks, and every year sees the great Australian desert of the early explorers receding step by step. The following statement shows the area of land alienated by each province, the area leased, and the area neither alienated nor leased at the close of 1901. The term "alienated" is used for the purpose of denoting that the figures include lands granted

without purchase. The area so disposed of has not been inconsiderable in several provinces :—

State.	Area.	Area alienated or in process of alienation.	Area leased.	Area neither alienated nor leased.
	acres.	acres.	acres.	acres.
New South Wales	198,848,000	48,003,857	126,938,678	23,905,465
Victoria	56,245,760	23,770,519	17,161,359	15,313,882
Queensland	427,838,080	16,325,132	279,986,645	131,526,303
South Australia	578,361,600	14,181,108	191,552,174	372,628,318
Western Australia	624,588,800	6,816,334	97,455,927	520,316,539
Tasmania	16,778,000	4,893,961	1,470,621	10,413,418
Commonwealth	1,902,660,240	113,990,911	714,565,404	1,074,103,925
New Zealand	66,861,440	23,969,677	15,916,779	26,974,984
Australasia	1,969,521,680	137,960,588	730,482,183	1,101,078,909

The proportions which these figures bear to the total area of each province are shown below :—

State.	Area alienated or in process of alienation.	Area leased.	Area neither alienated nor leased.
	per cent.	per cent.	per cent.
New South Wales	24·15	63·83	12·02
Victoria	42·26	30·51	27·23
Queensland	3·82	65·44	30·74
South Australia	2·45	33·12	64·43
Western Australia.....	1·09	15·60	83·31
Tasmania.....	29·17	8·76	62·07
Commonwealth	5·99	37·55	56·46
New Zealand	35·85	23·81	40·34
Australasia	7·00	37·09	55·91

The figures in the foregoing table disclose many grounds for congratulation. Of 1,902 million acres which comprise the area of the Commonwealth, 829 millions, or 43·54 per cent., are under occupation for productive purposes, and of an extent of 1,969 millions, the area of Australasia, no less than 868 millions, or 44·09 per cent., are similarly occupied, and there is every probability that this area will be greatly added to in the near future. New South Wales shows the least area returning no revenue, for out of nearly 200 million acres only 24 million remain unoccupied, and much of this is represented by lands which the State has reserved from occupation, and which are used for travelling stock or for various public purposes, including lands reserved for future settlement along the track of the great trunk line of railways. The state of Tasmania has 62 per cent. of its area unoccupied, the western part of the island being so rugged as to forbid settlement. Settlement in Western Australia is only in its initial stage; much of the area of the State is practically unknown, and a large part of what is known is thought to be little worth settlement. Much the same thing was

confidently predicted of western New South Wales and South Australia, though, as subsequent events proved, the forebodings were untrue. In South Australia, including the Northern Territory, only 35·67 per cent. is in occupation. New Zealand, favoured also with a beneficent climate, has nearly half its area not utilised—a circumstance entirely due to the mountainous character of its territory.

The practice of sales by auction without conditions of settlement was a necessary part of the system of land legislation which prevailed in most of the provinces; but this ready means of raising revenue offered the temptation to the Governments, where land was freely saleable, to obtain revenue in an easy fashion. The result of the system was not long in making itself felt, for pastoralists and others desirous of accumulating large estates were able to take advantage of such sales, and of the ready manner in which transfers of land conditionally purchased could be made, to acquire large holdings, and in this manner the obvious intentions of the Lands Acts were defeated. Notwithstanding failures in this respect, the Acts have otherwise been successful, as will appear from the following table, as well as from other pages in this volume. It is unfortunate that detailed information regarding settlement can only be given for three of the states of the Commonwealth, viz., New South Wales, South Australia, Western Australia, and for New Zealand, and that in respect of Western Australia the information is deficient in regard to the area of the holdings. The figures given for Western Australia in the table refer to the year 1900, for South Australia to the Census year of 1891, and New South Wales and New Zealand to the year 1901:—

Size of Holdings.	New South Wales.		South Australia.		Western Australia.	New Zealand.	
	Number of Holdings.	Area of Holdings.	Number of Holdings.	Area of Holdings.	Number of Holdings.	Number of Holdings	Area of Holdings.
1 to 100 acres.....	37,988	acres. 1,173,837	6,804	acres 183,443	1,926	36,478	959,462
101 to 1,000 acres.....	26,962	9,499,726	10,618	4,711,060	3,019	23,755	7,737,050
1,001 to 5,000 acres.....	4,554	9,218,413	2,394	4,623,937	607	2,854	5,849,516
5,001 to 20,000 acres.....	938	9,249,779	481	4,737,253	111	627	5,811,728
20,001 acres and upwards..	357	17,476,070	58	1,974,995	36	268	15,150,133
Total.....	70,829	46,617,825	20,355	16,230,688	5,699	63,982	35,507,880

Out of the 46,617,825 acres set down to New South Wales in the foregoing, 42,598,221 acres are in the actual occupation of the owners, and 4,019,604 acres are held under rent. In New Zealand the proportion was not stated at the last Census. In South Australia only 5,510,289 acres are occupied by the owners, while 10,720,399 acres, or 66 per cent., are rented. The most remarkable feature of the table is that in New South Wales about one half the alienated land is owned by 703 persons or institutions, in South Australia by 1,283, and in New Zealand by less than 500.

LOCAL GOVERNMENT.

MUNICIPAL INSTITUTIONS.

ONLY of recent years has the question of Local Government received the attention which its importance demands, the States of the Commonwealth that have adopted general systems being Victoria, Queensland, South Australia, and Tasmania. New Zealand, however, has also for a number of years been divided into districts with local governing powers. It will be noted, from the information given in the following pages, that the Acts controlling Local Government vary considerably, especially as regards the election of representatives and presiding officers, method of valuation, and rating powers; and the particulars available in regard to each State are not sufficiently exhaustive to admit of the making of any effective comparison between the systems of the different provinces.

The first portion of this chapter is devoted to an account of the local bodies operating under the various Municipal Acts, while the particulars relating to Boards and Trusts, for the establishment and control of which special Acts have in most cases been passed, will be found in the second part.

NEW SOUTH WALES.

The first Act providing for the establishment of a Local Council in this State was passed in 1842, when the City of Sydney was incorporated. In 1867, the Municipalities Act became law, but as that Act left it optional for any district to become constituted as a municipality, only a small proportion of the area of the State is incorporated.

Under the provisions of the original Acts, the aldermen were elected by the ratepayers (except in the City of Sydney, where both owners and occupiers voted), and the mayors were chosen by the aldermen. By legislation enacted in 1900 the franchise was extended to tenants and lodgers in the city of Sydney, and a similar extension is proposed in the Bill to amend the Municipalities Act of 1867.

The legislation of 1900 and 1901 relating to municipal matters consisted of two important measures, viz., the Sydney Corporation Amending Act and the Municipalities Amendment Bill. Under the provisions of the first-mentioned Act, the City of Sydney is divided into twelve wards, each returning two aldermen, instead of into eight wards, each represented by three aldermen, as heretofore. The mayor is still to be

elected by the aldermen, as the proposal to provide for his election by the citizens was not carried. Other important amendments are those providing (1) for the abolition of auditors elected by citizens, with the substitution of Government inspectors to audit the accounts ; and (2) for the resumption of land for the opening or enlarging of streets or public places. The rating powers have not been altered, the general rate remaining at not more than 2s. in the £ of the annual value, but lighting and other special rates may also be imposed, if necessary.

The Municipalities Act of 1867 provided that the general rate should not exceed 1s. in the £ of the annual value, but that special rates could be levied, so long as the general and special rates together did not come to more than 2s. in the £. A further charge, limited to 6d. in the £, could be made for street-watering, and an additional rate for water supply, where necessary, the amount not to exceed 1s. in the £. The amending Bill proposes to give power to the councils to increase the general rate to as much as 1s. 6d. in the £ of the annual value if necessary, but the special rates still remain as quoted in the original Act. A most important alteration in the principles of municipal taxation is the authority to be conferred on the municipalities to levy their rates on the unimproved capital value of the land instead of on the annual value of all property, provided that the ratepayers agree to the alteration by a special vote. The assessment of the unimproved value must not exceed 2d. in the £ of the assessed capital value. The Bill referred to has not yet been passed into law, but was before Parliament when this volume went to press.

New South Wales, as already indicated, is the most backward of the states in regard to local government. The principle of self-government is on all sides recognised as a sound one, and various measures to secure its application have from time to time been placed before Parliament, but so far the Legislature has not succeeded in giving effect to the manifest wishes of the constituencies. The total area incorporated at the close of the municipal year 1900 was only 2,849 square miles, so that it will be seen that a large area still remains under the control of the central government in New South Wales. For this some justification is claimed on account of the largeness of the territory and the sparseness of the population residing in the unincorporated areas ; but this is hardly tenable, seeing that both these conditions exist to a greater degree in Queensland, where the whole territory is under local government. The total area still unincorporated in New South Wales amounts to 307,851 square miles.

The total capital value of all property in municipalities is returned as £124,546,200, and the annual value as £7,905,760, so that the annual return from property is about 6·35 per cent.

Taking the municipalities as a whole, the following particulars in regard to the number of municipalities, the area incorporated, and the annual and capital values of property assessed for municipal purposes,

will not be without interest. The figures relate to all municipalities, and cover eleven years :—

Year.	No. of Municipalities.	Area Incorporated.	Annual Value.	Capital Value.
		acres.	£	£
1890	158	1,527,772	7,792,350	127,212,046
1891	165	1,564,406	8,356,803	134,009,758
1892	168	1,637,046	8,697,503	144,277,400
1893	171	1,660,675	8,929,475	150,938,000
1894	175	1,683,990	8,460,674	151,226,000
1895	182	1,754,941	7,895,645	136,202,100
1896	183	1,767,079	7,603,735	127,499,700
1897	183	1,767,749	7,430,120	122,787,000
1898	184	1,768,500	7,379,350	120,625,600
1899	184	1,768,500	7,412,100	121,213,800
1900	190	1,823,522	7,905,760	124,546,200

The annual and capital values of Sydney and suburbs since 1891 are shown below :—

Year.	Sydney and Suburbs.		Year.	Sydney and Suburbs.	
	Annual Value.	Capital Value.		Annual Value.	Capital Value.
	£	£		£	£
1891	5,851,589	99,224,810	1897	5,022,910	88,464,400
1892	6,013,697	106,891,100	1898	4,965,400	86,927,600
1893	6,067,882	110,061,000	1899	4,995,200	87,464,000
1894	5,686,197	108,951,000	1900	5,069,630	88,116,600
1895	5,352,920	96,692,200	1901	5,188,700	90,060,600
1896	5,141,990	91,427,100			

A reference to these figures will show the depreciation which has taken place in the value of real estate during the past few years, but it is satisfactory to note that the year 1900 shows an increase compared with the previous year; while the annual value for 1901 exceeds that of any previous year since 1895, and the capital value is higher than in any year since 1896.

The values of five of the principal towns are given in the subjoined table, and for the purposes of comparison, the corresponding figures for 1891 are shown. With regard to Broken Hill, it should be remembered that the mines were not fully developed in 1891, and although the capital value in 1899 had increased by about £364,000, the values in the years 1894 and 1895 were stated to be £2,952,000, and £2,862,000 respectively, but for 1897 the figures declined to £1,232,600, which was practically the value in 1899. The annual and capital values shown for 1900 include the assessments on the output of the silver mines, but the mining companies successfully

appealed against the rating of their products. The annual and capital values of the dwellings and shops for 1900 would be about £158,000 and £872,000 respectively :—

Town.	1891.		1900.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Bathurst	69,426	735,710	54,465	931,000
Broken Hill	136,217	865,580	562,290	3,103,900
Goulburn	88,200	930,000	61,510	945,400
Newcastle and suburbs ...	411,028	5,525,500	326,005	5,176,700
Parramatta	83,986	1,692,000	62,270	1,245,300

The revenues of municipalities are derived chiefly from rates, but under the Act of 1867 the Government allows an endowment for the first fifteen years following incorporation, the scale being £ for £ of general rates received during the first five years, 10s. per £ during the next five years, and 5s. per £ for the remaining period. The Government also contributes grants in aid of roads and other works, and occasionally a special endowment is given. Rates are levied on nine-tenths of the annual value of improved property, and on 5 per cent. of the capital value of unimproved land, except in the City of Sydney, where the maximum percentage on unimproved is 6 per cent. The following table shows the receipts during 1900, the Government endowments and grants being specified :—

Total receipts—	£
Government.....	44,882
Rates	471,415
Other Revenue	262,974
Total	<u>779,271</u>
Receipts per inhabitant in incorporated area—	£ s. d.
Government.....	0 1 0
Rates	0 11 0
Other Revenue	0 6 1
Total	<u>0 18 1</u>

The burthen of rates is, therefore, 1s. 2½d. per £ of annual improved value, and about 2d. per £ of estimated unimproved capital value.

The total expenditure for the same period amounted to £836,601, distributed as follows :—

	£
Public works, services, and improvements.....	472,538
Interest on loans and overdrafts	138,789
Repayments of loans	96,634
Salaries and office expenses	73,728
Payments to sinking funds.....	13,558
Other expenditure	41,354
	<u>£836,601</u>

The proportion of the expenditure incurred for salaries and office expenses was 8.81 per cent., and for interest on loans and overdrafts it was about 16½ per cent., while the average rate of interest payable on the liabilities was 4.69 per cent.

The amount of loans and secured overdrafts outstanding on the 5th February, 1900, was £2,730,934, of which £1,344,004 was due to investors in London, principally by the city of Sydney, while of the balance, £18,849 was floated in Victoria, and £1,368,081 in New South Wales. The unsecured overdrafts amounted to £229,843, so that the total liability on which interest was payable was £2,960,777. The interest charged ranged from 3½ to 8 per cent. for the secured loans, and from 4 to 8½ per cent. on the unsecured overdrafts. Against the total liability, sinking funds have been established, the total amount at the credit of such funds being £322,059.

VICTORIA.

In Victoria a comprehensive system of local government has been in force for many years. In 1842 the Act of the Legislative Council of New South Wales, which incorporated Sydney, also constituted Melbourne a municipality, and in 1874 the general system was inaugurated. Under this system the State is divided into cities, towns, boroughs, and shires, and the total area under local control is 87,322 square miles, only 562 square miles remaining unincorporated.

The councillors are elected by the ratepayers, and the mayors of cities, towns, and boroughs, or presidents of shire councils, are elected by the councillors. A general rate of not more than 2s. 6d. or less than 6d. in the £ of the annual value may be imposed, but special rates may be levied, provided that general and special rates together do not exceed 2s. 6d. in the £. A further special rate, limited to 6d., may also be charged for works in particular parts of any district.

The number of municipalities with the annual and capital values of property assessed for local purposes for the ten years ending with 1900, were as follows :—

Year.	No. of Municipalities.	Annual Value.	Capital Value.
		£	£
1891	197	13,265,543	194,313,646
1892	198	13,733,770	203,351,360
1893	201	13,605,990	197,366,940
1894	203	12,779,600	189,461,350
1895	207	11,676,079	174,984,851
1896	208	10,641,200	167,197,780
1897	208	10,393,000	168,427,700
1898	208	10,345,535	171,253,984
1899	208	10,152,500	168,611,906
1900	208	10,283,500	169,911,900

The total capital value of property assessed for municipal purposes in 1900 was £169,911,900, while the annual value was £10,283,500, the figures for Melbourne and suburbs being £60,255,735 and £4,042,497 respectively. The values for the metropolitan district since 1891 are given below, and it will be noticed how great has been the decrease during the period under review, though the annual value for 1900 shows a small increase over that of the previous year, while the capital value for the last year is the lowest for the decade:—

Year.	Melbourne and Suburbs.		Year.	Melbourne and Suburbs.	
	Annual Value.	Capital Value.		Annual Value.	Capital Value.
1891	£ 6,533,717	£ 87,939,287	1896	£ 4,209,515	£ 60,962,705
1892	6,815,315	92,358,629	1897	4,168,182	60,352,040
1893	6,639,014	88,510,328	1898	3,968,888	60,404,877
1894	5,847,079	78,916,730	1899	3,973,357	60,626,915
1895	4,984,596	66,824,384	1900	4,042,497	60,255,735

The annual and capital values for the five principal provincial centres for 1891 and 1900 will be found in the following statement, the annual return from property having been estimated at 7 per cent.

City, Town, or Borough.	1891.		1900.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Ballarat	171,484	2,449,771	156,790	2,239,857
Ballarat, East.....	78,264	1,118,057	78,340	1,119,143
Bendigo	167,305	2,390,071	188,850	2,697,857
Geelong	92,697	1,324,243	87,870	1,255,286
Geelong, West	28,317	404,529	26,140	373,428

The revenue of the local governing bodies is chiefly derived from taxation, under the headings of general and special rates (which are levied on the net annual value), licenses, dog fees, market and weighbridge dues, &c. The total amount collected from all sources during the year was £1,236,124, of which £165,837 was contributed by the Government, either as endowment or special grant, while the amount of rates received was £709,122, and £144,572 was received from licenses; fees, &c., the total local taxation thus being £853,694. The balance, £216,593, includes sanitary fees amounting to £47,288, and also £51,962 received as rents of municipal property. The receipts per inhabitant in incorporated areas amounted to £1 Os. 11d. The amount received as rates shown above represents a tax of 1s. 2½d. in the £ of annual value, and 1½d. per £ of the estimated unimproved capital value.

The total expenditure for the year was £1,200,805, of which £731,471 were spent on public works, &c., while the amount paid for interest was £181,496. The payments to sinking funds were £16,495, and the repayments of loans from revenue, £12,872, the principal items in the balance being—salaries, £134,178, representing 11·17 per cent. of the total, and printing, &c., £21,125. The proportion paid as interest on loans and overdrafts was about 15 per cent. of the total, while the average interest payable on loans and overdrafts amounted to about £4 13s. 2d. per cent.

The municipal loans outstanding were £3,827,437, and the bank overdrafts amounted to £70,656, giving a total interest-bearing liability of £3,898,093. The total liabilities were £4,135 719, other items being—arrears due to sinking funds, £20,403; overdue interest on loans, £18,583; and amounts due on contracts, £72,932. The assets totalled £3,444,925, the chief items being—municipal property, £2,191,257; sinking funds, £646,092; outstanding rates, £205,698; and bank balances and cash in hand, £57,144.

QUEENSLAND.

The beginning of local government in Queensland was the proclamation constituting Brisbane a municipality, the date of which was the 6th September, 1859, or about three months prior to the separation of the colony from New South Wales. A general system of government by local authorities was inaugurated in 1878, when the colony was divided into boroughs, shires, and divisions.

The aldermen, councillors, and members are elected by ratepayers in boroughs, shires, and divisions respectively, while mayors of boroughs and chairmen of shires and divisions are chosen by the representatives.

Under the provisions of the original Act, the rates were levied on the annual value, and the maximum general rate was 1s. in the £ for boroughs, shires, and divisions, but the minimum was 6d. per £ for boroughs and shires, and 4d. per £ in divisions. Special rates could also be imposed for sewerage, drainage, lighting, street-watering, or particular works. By an amending Act passed in December, 1890, the rates thenceforward were to be charged on the unimproved capital value of the land, the maximum being 2d. in the £ for boroughs and shires, and 1½d. in the £ for divisions, while the minimum is ½d. in both cases. The separate rates may still be charged, and if waterworks have been established a further rate may be imposed for that service.

The total area controlled by local bodies is 668,252 square miles, leaving only 245 square miles unincorporated. The total capital value was estimated at the beginning of 1901 to be £42,722,000. This represents the value of land without improvements; if improvements had been considered, the capital value would have been approximately £70,631,000, and the annual value £4,485,000.

The unimproved capital value is now slightly less than it was ten years ago, as will be seen by the following statement, which shows the assessed value during each year since 1891 :—

Year.	Assessed Value of Unimproved Property.	Year.	Assessed Value of Unimproved Property.
	£		£
1891.....	49,154,977	1896	40,810,384
1892.....	44,188,693	1897	41,009,739
1893.....	43,427,923	1898	41,486,971
1894.....	41,772,975	1899	42,195,693
1895.....	40,821,733	1900	42,722,000

The capital values of Brisbane and some of the other large boroughs are given below for 1891 and 1900 :—

Municipality.	1891.	1900.
	Unimproved Capital Value.	Unimproved Capital Value.
	£	£
Brisbane	8,800,350	5,842,280
South Brisbane	2,605,840	1,422,640
Other Brisbane Suburbs	6,067,359	3,818,298
Rockhampton	1,323,600	1,064,710
North Rockhampton	190,500	155,930
Townsville	1,590,000	874,740
Toowoomba	711,420	599,300

North Rockhampton has been included, as it is a suburb of Rockhampton.

The receipts for the year 1900 amounted to £640,622, the chief sources being—Government endowments, grants, and loans, £220,925, and rates, £268,478 (levied, as already stated, on the unimproved capital value), leaving £151,219 derived from other sources. The amount collected for rates represents 1s. 10½d. per £1 of the annual value and 1½d. per £ of capital value. The expenditure for the same period was £653,187, the amount spent on public works being £401,708, while repayments of loans and interest amounted to £103,432, salaries and office expenses to £54,960, or 8·41 per cent. of total, and all other disbursements £93,087.

The outstanding loans, including overdue instalments payable to the Government, amounted to £982,406, the whole of which, with the exception of the loans of the city of Brisbane (£305,000), and part of the indebtedness of South Brisbane (£105,000), is due to the

Government, as no local body, except the two mentioned, is allowed to borrow from outside sources. The amount of other liabilities was £196,869, making a total of £1,179,275 owing by local bodies.

The total assets on the same date were given as £1,448,590, the only item specified being outstanding rates, which amounted to £122,153.

SOUTH AUSTRALIA.

Adelaide, the capital of South Australia, was proclaimed a municipality as far back as 1840, and was thus the first local body established in Australasia. The present general system of corporations and district councils was instituted in 1887.

In all cases the councillors and mayors are elected by the citizens, the representatives not being empowered to choose their presiding officer. The rates are assessed on the annual value, and the general rate must not exceed 1s. in the £; while lighting rates are limited to 4d., and park improvement rates to 3d. Water rates may also be imposed where necessary, and special rates for works in particular portions of municipalities.

The total area incorporated at the close of the last municipal year was 42,493 square miles, leaving 337,577 square miles still under the control of the central government. The unincorporated territory consists chiefly of the unsettled portion of the State, as the populous centres have all been brought under municipal government. The figures in this chapter relating to South Australia are in all cases exclusive of the Northern Territory.

The annual and capital values of all the incorporated districts for the past ten years are as shown in the following table:—

Year.	Annual Value.	Capital Value.
	£	£
1890	2,535,714	39,388,200
1891	2,543,526	39,509,540
1892	2,538,094	39,425,160
1893	2,561,806	39,793,490
1894	2,552,820	39,653,900
1895	2,494,326	38,745,300
1896	2,463,564	38,267,460
1897	2,485,995	38,615,890
1898	2,518,688	39,123,720
1899	2,553,415	39,663,150
1900	2,576,729	39,928,780

The capital value of the incorporated districts as shown above is estimated at £39,928,780, and the annual value at £2,576,729.

Adelaide, and its suburbs are the largest corporations, and the following were the values of the most important centres for 1900, compared with those for 1891 :—

Corporation.	1891.	1900.
	Annual Value.	Annual Value.
	£	£
Adelaide	392,819	429,369
Unley	79,061	113,828
Port Adelaide	78,177	102,045
Kensington and Norwood	68,941	75,512
Hindmarsh	44,808	55,532
St. Peters	39,296	51,347
Semaphore	43,800	50,014
Glenelg	37,018	37,398
Thebarton	22,502	29,289
Brighton	11,040	10,471

The total receipts for 1900 were £348,768, the amount contributed by the Government as subsidy and grants being £115,073, while the rates collected were £142,207, leaving £91,488 from other sources. The rates collected which are levied on the annual value equal 1s. 1½d. in the £ of the annual value and 1½d. per £ of unimproved capital value. The expenditure was £346,081 the amount spent on works being £190,124, while salaries and office expenses absorbed £31,669, or 9·15 per cent. and miscellaneous services, £124,288.

The loans outstanding at the close of 1900 amounted to only £78,400. These loans, with the exception of £6,000 owing by the corporation of Kensington and Norwood, were floated by the Adelaide City Council. The interest payable ranges from 3 to 6 per cent., the average being 4·60 per cent.

WESTERN AUSTRALIA.

The great resources of this State have only been made manifest during recent years, and the limited population, compared with the vast area of the province, has prevented any great extension of local government.

The first Municipalities Act was passed in 1871, but only a few districts were incorporated under it. In 1895, the existing Act became law, and a considerable increase in the area locally controlled has resulted from its provisions. The local bodies are termed Municipalities, Road Boards, and Health Boards; the latter may be established within or outside municipal boundaries.

The Municipal Act provides for the election of both councillors and mayors by the ratepayers. With regard to Road Boards, however, the members are elected by the ratepayers, and the chairmen by the members.

The general rate imposed in municipalities must not exceed 1s. 6d. in the £ of annual value, and a special rate of 3d. in the £ may be levied under the Health Act. In the City of Perth, however, an additional rate is charged for water-supply; this rate must not exceed 1s. in the £ of annual value. In the Road Board districts the general rate is limited to 1s. in the £ of annual value.

The total area of municipalities is only slightly over 100 square miles. The remainder of the State comprises 975,820 square miles, a large proportion of which is still under the central government. The Road Board districts occupy a considerable area, but as the general government exercises a certain amount of control over the expenditure, these districts cannot be said to be endowed with full local government.

The capital value for the year 1900 was estimated at £7,860,600, and the annual value at £943,300. The figures for some of the most important towns are given below. The particulars for 1891 are not available, but it may be said generally that since 1895, the earliest year for which figures are obtainable, there has been a considerable increase both in the annual and capital values. The following table shows the capital values for 1895 and 1900. The annual values as shown in the official figures range from 10 to 13 per cent. of the capital values, but as this return from property in old settled districts like Perth and Albany seems improbable, and as the assessments are on the annual value the capital values cannot be said to have been properly ascertained, and, therefore, are not given.

Municipality.	Annual Value.	
	1895.	1900.
	£	£
Perth	95,852	286,083
Albany	26,013	29,884
Fremantle	71,579	111,818
„ North.....	*	20,081
„ East	*	18,269
Coolgardie	21,570	56,539
Kalgoorlie	*	86,954

* Not incorporated.

The total receipts for 1900 amounted to £221,155, included in which is the sum of £59,828 given by the Central Government as subsidy and special allowances. The general and special rates received were £82,301, while the remainder, £79,026, represents £43,939 collections from rents, license fees, &c., and £35,087 proceeds of loans. The disbursements in

the same year came to £216,997, of which the large proportion of £146,569 was spent on works and improvements. The other important items are:—Salaries and office expenses, £14,547, or 6·70 per cent.; and interest on loans and overdrafts, £13,351; leaving £42,530 expended on other services, including £9,921 for payments to sinking funds.

The amount shown for rates represents a tax of 1s. 9d. per £ of annual value, and 4d. per £ of estimated unimproved capital value.

The total liabilities at the close of the year were £330,070, the principal item being outstanding loans, which amounted to £293,600. The unsecured overdrafts amounted to £2,111, the balance, £34,359, being due for amounts owing on contracts, outstanding accounts, &c. Against the loan indebtedness, however, must be placed the accumulated sinking fund, which amounts to £39,308.

The assets on the same date were estimated at £320,466. The largest proportion of this amount is accounted for by the value of landed property, plant, and furniture, which was stated to be £229,017. The outstanding rates amounted to £12,675; while other important items were:—Bank and cash balances, £26,553, and sinking fund, £39,308, leaving £12,913 for other assets.

TASMANIA.

In this State, the city of Hobart was incorporated by a special Act in 1852, and in 1858 the Rural Municipalities Act was passed which provided for the establishment of corporations throughout the Colony. The whole area is not under the provisions of this Act alone, as there are other bodies, notably Town Boards and Road Trusts, which are authorised to control outlying districts.

In the urban municipalities—Hobart and Launceston—the aldermen are elected by the ratepayers, and the mayors by the aldermen. The ratepayers in the rural districts also elect their representatives, who are termed councillors, and the latter have the privilege of choosing their presiding officer, who is called warden.

The general rate in each class of corporation is limited to 1s. 6d. in the £ of the annual value, while special rates may be levied in rural districts, provided that the general and special rates together do not exceed 1s. 6d. in the £. Police and road rates may also be imposed in addition to municipal rates.

The area of municipal districts may be set down as 10,615 square miles, leaving 15,600 square miles under the control of the other local bodies, or of the central government. The total capital value at the close of 1900 was estimated at £29,770,300, and the annual value at £1,417,547. These figures may be somewhat over-stated, as the same property may be rated by more than one of the local authorities. The values of the two principal municipalities will be found below, and a reference to the corresponding particulars for 1891 will show that

Tasmania has not been very much affected by the depreciation of property, which was so severely felt in the mainland States :—

Municipality.	1891.		1900.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Hobart.....	174,950	2,915,833	173,565	2,892,750
Launceston.....	135,168	2,252,800	126,470	2,107,833

The total receipts of Municipalities, Town Boards, and Road Trusts for 1900 were £157,570, the proportion contributed by the central government being only £23,537. The bulk of the collections consisted of rates (which are levied on the annual value), the amount of which was £91,915; and the remainder, £42,118, was accounted for by fees, licenses, proceeds of loans, &c. The total expenditure for the same year amounted to £158,576, but no details relating to this sum are available. The collections for rates are equal to 1s. 3½d. in the £ of annual value, and 1¼d. per £ of the estimated unimproved value.

The total loans outstanding at the close of 1900 for the local bodies under review amounted to £561,002, and in the majority of cases sinking funds have been established for the extinction of the debts, the total amount accumulated at the end of 1900 being £57,048.

NEW ZEALAND.

In New Zealand an Act was passed in 1852 which divided the colony into six provinces, the local administration being vested in provincial councils. This system continued till 1876, when the provincial system was abolished, and the whole colony, except the area within the forty-one boroughs then existing, was subdivided into counties, each county having full control of its local affairs.

The provisions for election differ in the boroughs and counties. In the former bodies both the councillors and mayors are elected by "burgesses," but in counties, the councillors are elected by the "county electors," and the chairmen by the councillors. The rating powers are also different. In boroughs, the rates are in most cases levied on the annual value, and the general rate is limited to 1s. 3d. in the £. Special rates may also be imposed, but general and special rates together must not exceed 1s. 3d. in the £. In counties, and in a few of the boroughs (the latter having taken advantage of the "Rating on Unimproved Value Act of 1896"), the rates are charged on the capital value, and the general rate must not exceed three farthings in the £ in counties or boroughs where road boards or town districts exist, and six farthings in other local areas. Separate rates may also be levied, provided the general and special rates do not exceed three farthings and six farthings

in the £ respectively ; and extra rates for special works, for interest and sinking funds on loans, and, where necessary for hospitals and charitable aid, may be charged.

In addition to the boroughs and counties, road districts and town districts have been proclaimed, and the area locally governed may practically be set down at 104,471 square miles, the total area of the Colony.

The capital value for 1901 may be estimated at £138,591,347, and the annual value at £6,427,000. The remarks with regard to the overstatement of the values in Tasmania may also be applied to New Zealand, as the boundaries of the various districts may overlap in some cases.

The distribution of the population of New Zealand differs from that of the Commonwealth. In the Australian States, especially those in the eastern portion of the continent, the great majority of the people are centred in the metropolitan areas, and consequently the capital and annual values are proportionately great in the chief cities. In New Zealand, however, there are four large centres of population, and the values of the assessed properties are shown below. The figures for 1891 are also shown, and it will be noticed that the values have on the whole largely improved, as New Zealand, like Tasmania, did not experience the great depreciation which took place in some of the other States after the Bank reconstructions in 1893 :—

Borough.	1891.		1901.	
	Annual Value.	Capital Value.	Annual Value.	Capital Value.
	£	£	£	£
Wellington	315,709	5,261,816	458,052	7,634,200
Auckland	297,468	4,956,800	335,537	5,592,300
Dunedin	251,870	4,197,833	246,600	4,110,000
Christchurch	195,251	3,254,183	236,798	3,946,600

The total receipts for 1901 amounted to £1,721,055, the Government contributions being £326,486, inclusive of loans. The collections from rates were £660,982, (which are levied chiefly on capital values) and from other sources £733,587, represented chiefly by fees for licenses and rents. The expenditure for the same period was £1,630,830, the amount spent on works being £981,466 ; on hospitals and charitable aid, £71,877 ; on management, £122,540 or 7·51 per cent. of the total ; and on other services, £454,947. The contributions to sinking funds and repayments of loans are not shown separately in the total expenditure, and the amounts disbursed under these heads are, therefore, not available. The rates collected represent 2s. 0½d. per £ of annual value, and 1¾d. per £ of estimated unimproved value.

The total loans outstanding at the close of 1901 for the bodies referred to amounted to £4,165,637, and the sinking fund was £371,021,

the net indebtedness, therefore, being £3,794,616. The annual charge for interest and sinking fund is approximately £235,308, the rates of interest ranging from $3\frac{1}{4}$ to 7 per cent.

COMPARISON OF CITIES.

Estimated by the annual value of its ratable property, Sydney is, and has been for many years, the second city of the British Empire; next comes Glasgow, and then Melbourne, as Manchester, exclusive of Salford, is valued at £3,394,879. None of the other Australasian cities ranks high on the list, but the extreme value of property in relation to population in the Australasian population centres as compared with the principal British cities, will be seen from the following table:—

Cities and Towns.	Population.	Annual Value.	
		Total.	Per Inhabitant.
Australasia—			
		£	£ s. d.
Sydney	481,830	5,069,630	10 10 5
Newcastle and suburbs	46,744	326,005	6 19 6
Melbourne	461,617	4,042,497	8 15 2
Ballarat and Ballarat East	39,920	235,130	5 17 10
Brisbane	119,900	1,098,362	9 3 3
Adelaide	160,690	1,154,703	7 3 8
Perth	36,200	390,388	10 15 8
Hobart	34,580	173,565	5 0 5
Wellington	50,273	485,995	9 13 4
United Kingdom—			
London (County)	4,536,063	39,768,491	8 15 4
Glasgow	735,906	5,027,000	6 16 8
Manchester (including Salford)	765,459	4,362,992	5 14 0
Liverpool	686,332	3,787,364	5 10 5
Edinburgh	316,479	2,542,640	8 0 8
Birmingham	522,132	2,735,426	5 4 9
Leeds	428,953	1,741,373	4 1 2
Bristol	328,836	1,578,300	4 16 0
Sheffield	410,120	1,579,857	3 17 1
Bradford	279,809	1,421,200	5 1 7
Newcastle-on-Tyne	214,803	1,299,388	6 1 0
Belfast	348,965	1,160,051	3 6 6
Cardiff	164,420	1,058,294	6 8 9
Nottingham	239,753	1,003,000	4 3 8
Hull	240,739	1,004,702	4 3 6
Dublin	289,108	844,476	2 18 7

The populations of the Australasian cities and towns are the estimates at the dates of the annual valuations of the incorporated districts and not the present populations.

BOARDS AND TRUSTS IN NEW SOUTH WALES.

In addition to the municipalities, there are bodies known as Boards or Trusts whose function it is to construct and supervise certain works which have been established for the benefit of districts generally

comprising one or more of the ordinary municipalities. These bodies are usually composed of members representing respectively the central Government, the municipalities affected, and other persons directly interested in the particular undertakings; and as a rule they raise the funds necessary for carrying out the works they control, by means of rates on the assessed value of the properties benefited, just as do the municipalities.

In New South Wales there are the Metropolitan Board of Water Supply and Sewerage, having charge of the water supply, which it assumed in 1888, and of the sewerage system, which it has controlled since 1889, and the Hunter River District Board of Water Supply and Sewerage, formed in 1892. The Wollongong Harbour Trust, which was instituted in 1889, was the only one of the kind in the state up to the year 1900—the works connected with shipping, and the improvements to navigation, at Sydney, Newcastle, and other ports, having always been carried out at the expense and under the supervision of the central Government. The Wollongong Trust, however, failed, and its powers have been assumed by the Government. During the year 1900, an Act was passed for the establishment of a Harbour Trust for the port of Sydney, and in the same year the Wharfs Resumption Act became law, which enabled the Government to acquire certain wharf properties in Darling Harbour; these wharfs, and others, originally the property of the Government, will be controlled by the Harbour Trust. There is a Metropolitan Fire Brigades Board, on which the municipalities within the metropolitan area are represented, and towards the annual expenses of which they contribute one-third. The fire insurance companies and the State are also represented, and contribute equally with the municipalities in maintaining the Fire Brigade Board. Thirty-seven country boards have also been established under the Fire Brigades Act of 1884, four of which are, however, within the area administered by the Metropolitan Board, and contribute to its funds. There are Irrigation Trusts at Hay and Balranald. A similar trust at Wentworth has been taken over by the Government, and the dissolution of the Balranald trust is under consideration.

The Country Towns Water Supply and Sewerage Act of New South Wales was passed in 1880. Under the provisions of this measure municipalities outside the area under the control of the Metropolitan and Hunter District Water Supply and Sewerage Boards were entitled to construct, or to have constructed for them by the Government, works for water supply and sewerage, provided the construction of the same were approved by the Governor-in-Council, and the municipalities agreed to pay back the original cost of the works, with interest at the rate of 4 per cent. per annum. The Government were to pay the certified cost of the works, and the municipalities were to repay the Government by instalments extending over a period of sixty years. Under the operations of this Act twenty-four water-supply works have been carried out by the Government (exclusive of Richmond, now administered by

the Metropolitan Board of Water Supply and Sewerage), and three by municipal councils, while works in ten other places were in course of construction on the 31st December, 1900, including additions to existing works. The amount advanced by the Government to local bodies under the Act to the end of 1892 was £370,549, and instalments to the amount of £85,886 were then overdue. It was found that the liability of some of the municipal councils was too heavy for their resources, and in 1894 an amending Act was passed distributing the payments over 100 years and reducing the interest to $3\frac{1}{2}$ per cent. On the 31st December, 1900, the total amount expended by Government, inclusive of interest, stood at £769,046, viz. : £565,236 for works completed under Government control ; £27,344 for works carried out under the supervision of municipal councils ; and £176,466 for works still in course of construction. Of the total amount of £592,580 due on account of completed works to the 31st December, 1900, £19,266 had been repaid, and £76,698 had been remitted by Government, leaving the debt at £496,616, which is repayable by annual instalments of £17,960.

BOARDS AND TRUSTS IN VICTORIA.

In Victoria the port of Melbourne is under the control of a Harbour Trust, which was established as far back as 1877. A Tramway Trust, representing twelve of the metropolitan municipalities, viz. :—Melbourne, Prahran, Richmond, Fitzroy, Collingwood, South Melbourne, Hawthorne, Kew, St. Kilda, North Melbourne, Brunswick, and Port Melbourne, has been formed under the provisions of an Act passed in 1883. This body was entrusted with power to construct tramways through the streets of the municipalities interested, the requisite funds being raised by loans on the security of the tramways and the revenues of the municipal bodies connected with the undertaking. The trustees had the option either of working the tramways themselves or of leasing them to a private company. They adopted the latter alternative, and the tramways are being worked on a thirty-two years' lease, commencing from 1884. In 1891 the Melbourne and Metropolitan Board of Works was established for the purpose of constructing and supervising all works connected with water supply, sewerage, and drainage in Melbourne and suburbs. The Government is not directly represented on this Board, which differs from the Metropolitan Board of Water Supply in Sydney, of which three members are nominated by the State. The reason for this difference is that in New South Wales the Government constructed the works and is responsible for the debt incurred in doing so, while in Victoria the Board carries out the work of construction, in addition to the maintenance and management to which the operations of the Sydney Board are confined. Throughout Victoria there are Water Works Trusts and Irrigation and Water Supply Trusts. During 1899-1900 there were seventy-one Water Works Trusts and thirty-two

Irrigation and Water Supply Trusts. The Government authorised an advance of £1,206,674 for the former service, and for the latter £1,441,400, and the amounts outstanding in June, 1900, were £730,422 and £384,090 respectively, the large sum of £720,252 having been written off during the year. As in New South Wales, the municipal bodies are represented on the Fire Brigade Boards, and bear a proportionate share of the expenses.

The Government of Victoria, prior to the establishment of the Trusts for Water Works, Irrigation, and Water Supply, advanced money from the Public Loans Account to local bodies requiring assistance to construct these works. The amount advanced for the development of the services to June, 1900, including arrears of interest capitalised, was £404,214, which has to be repaid into a sinking fund, or by annual instalments. The amount outstanding on the date mentioned was only £137,636, owing to large sums having been written off during the year. The figures just given are exclusive of the advances to the city of Ballarat for the water-supply works, as these are now under a special commission. The outstanding debt of the Ballarat Water Commission on the 30th June, 1900, was £328,197. Under a special Act the Government have power to advance funds to shires for the construction of tramways, and £60,811 had been so advanced up to June, 1900. The Government, under two different Acts, can also make advances to shires for the purchase of rabbit-proof fencing. The amount so advanced to June, 1900, was £192,370, of which £36,749, was outstanding on that date.

BOARDS AND TRUSTS IN OTHER STATES.

In Queensland the water supply service forms part of the local government system; the works are proposed by the municipal bodies, but the Government constructs and supervises them, and when completed hands them over to the local authorities with their attendant liabilities. The latter form a debt to the State which is repaid in instalments. The total cost of construction to 31st December, 1900, was £1,096,716, and the amount due to the Government on the same date was £794,318.

In South Australia there are no Boards or Trusts of any importance beyond the municipal bodies already mentioned; extensive municipal powers exist, however, for raising loans for the construction of local works, and each corporation and District Council is constituted a Board of Health.

In Western Australia there are Road Boards, Local Boards of Health, and a Metropolitan Water Works Board.

In Tasmania seven Marine Boards, forming part of the local government system, have been established in different parts of the State, and there are fifteen Water Trusts in connection with municipal bodies. The rural police come under the local government system, the ratepayers

who enjoy the benefits of police protection being obliged to bear the cost of administration. The control of the police is, however, under officers appointed by the central government.

In New Zealand there are, in addition to the ordinary forms of municipal government, River and Harbour Boards, which are established throughout the colony. The number of these at the end of 1900 was respectively thirty and twenty-six. There is a Drainage Board at Christchurch, while there are fifteen Land Drainage Boards, and a Water Supply Board at Waimakariri—Ashley.

Complete returns of the Boards and Trusts in each state are not readily obtainable; the following table, however, gives important details in connection with some of these bodies:—

Board or Trust.	Receipts.			Expenditure, including Interest.	Out-standing Loans.
	Government.	Other.	Total.		
New South Wales—	£	£	£	£	£
Metropolitan Board of Water Supply and Sewerage .....	...	314,278	314,278	333,353	6,967,923
*Hunter District Water Supply and Sewerage .....	...	26,356	26,356	30,723	480,689
Victoria—					
Melbourne Harbour Trust .....	...	143,362	143,362	148,612	2,000,000
Melbourne and Metropolitan Board of Works .....	...	269,213	269,213	337,079	7,002,737
Melbourne Tramways Trust.....	...	483,452	483,452	385,650	1,650,000
Fire Brigade Boards	15,629	33,812	49,441	51,049	130,000
Water Works Trusts .....	...	...	...	...	730,422
Irrigation and Water Supply Trusts .....	...	...	...	...	334,090
Ballarat Water Commission .....	...	...	...	...	328,127
Queensland—					
Water Works, Brisbane.....	6,532	58,152	64,684	54,519	476,581
" " Country Towns.....	2,717	53,014	55,731	52,999	317,737
Western Australia—					
Road Boards.....	48,749	14,349	63,098	55,581	.....
Boards of Health in Municipalities..	2,502	27,722	30,224	29,378	.. ..
" " outside Muni- cipalities	1,723	3,955	5,678	5,263	.....
Metropolitan Water Works Board.	8,144	24,084	32,228	32,032	372,852
Tasmania—					
Marine Boards	34,700	30,568	65,268	63,927	80,339
Light-houses	585	47,584	8,169	8,410	.....
Water Trusts	1,500	7,390	8,890	6,990	33,200
Road Trusts	5,097	20,317	25,414	24,663	1,200
Town Boards.....	10,535	17,772	28,307	28,328	43,175
New Zealand—					
River Boards	208	26,202	26,410	17,791	43,670
Harbour Boards	6,389	693,568	699,957	571,777	4,035,331
Drainage Boards	2,476	24,832	27,308	27,059	200,000
Water Supply Boards.....	1,000	3,163	4,163	3,116	21,200

* Water supply only.

† Including £1,239 from other Governments.

The Melbourne Tramways Trust shows an expenditure on working and interest of £385,650; to this should be added £37,733 placed to reserve, £48,000 paid in dividends, and £12,069 carried forward in excess of the amount brought over from the previous year.

The amounts shown in the foregoing table under Road Trusts and Town Boards in Tasmania are included in the figures given on page 491. The outstanding loans for Tasmania are gross, sinking funds amounting to £16,142, £1,270, £415, and £2,929 respectively being established in connection with the debts of Marine Boards, Water Trusts, Road Trusts, and Town Boards. In New Zealand, also, sinking funds amounting to £9,871, £370,951, £34,184 and £791 respectively, exist in connection with the liabilities of River, Harbour, Drainage, and Water Supply Boards.

The outstanding loans of the Boards and Trusts of New South Wales constitute part of the public debt. This is true also with regard to the amounts for Victoria, except the loans of the Tramway Trust and the Melbourne Harbour Trust, the Fire Brigades Boards, and part of the loans of the Melbourne and Metropolitan Board of Works, which are not guaranteed. The liabilities shown for Queensland and Western Australia, and a small portion of the Tasmanian indebtedness, also form part of the public debt of those states; but the amounts given for New Zealand are not included in the debt of the Central Government. In the foregoing table the advances made by the Governments to the borrowing bodies are included.

TOTAL REVENUE OF LOCAL BODIES.

The total revenue of all local bodies was as follows, the receipts from the various Governments being distinguished from the ordinary receipts:—

State.	Receipts from Government.	Other Receipts.	Total.
	£	£	£
New South Wales	44,882	1,075,023	1,119,905
Victoria	181,466	2,000,126	2,181,592
Queensland	230,174	530,863	761,037
South Australia	115,073	233,695	348,768
Western Australia	91,566	266,912	358,478
Tasmania.....	75,954	217,664	293,618
Commonwealth	739,115	4,324,283	5,063,398
New Zealand	336,559	2,142,334	2,478,893
Australasia.....	1,075,674	6,466,617	7,542,291

INDEBTEDNESS OF LOCAL BODISE.

The following table shows the total indebtedness of local bodies in each of the states for which returns are available. The figures include the liabilities to the Government. It must also be explained that the liabilities of Road Trusts and Town Boards in Tasmania have been included with municipalities :—

State.	Outstanding Loans.		
	Municipalities.	Boards, Trusts, &c.	Total for local purposes.
	£	£	£
New South Wales	2,730,934	7,448,612	10,179,546
Victoria	3,900,934	12,267,691	16,168,625
Queensland	982,406	794,318	1,776,724
South Australia	78,400	.....	78,400
Western Australia.....	275,100	372,852	647,952
Tasmania	561,002	113,864	674,866
Commonwealth	8,528,776	20,997,337	29,526,113
New Zealand	4,165,637	4,300,201	8,465,838
Australasia	12,694,413	25,297,538	37,991,951

For the amounts that have just been given the local bodies are responsible directly to their creditors in part, and the general governments hold themselves directly liable for the balance. In the following table is given a division of the indebtedness of local bodies into the sum due to the State and that due to the public. It may be mentioned that the amount owing to the State is included with the general debt of the state; and in order to estimate the total State and municipal indebtedness the figures in the second column only have to be added to the figures given later on under State Finance.

State.	Amount of Corporation Indebtedness included in the Public Debt.	Loans of Local Bodies floated in open market.	Total Indebtedness.
	£	£	£
New South Wales	7,448,612	2,730,934	10,179,546
Victoria	4,121,672	12,046,953	16,168,625
Queensland	1,366,724	410,000	1,776,724
South Australia .....	.....	78,400	78,400
Western Australia.....	372,852	275,100	647,952
Tasmania	160,614	514,252	674,866
Commonwealth	13,470,474	16,055,639	29,526,113
New Zealand	902,769	7,563,069	8,465,838
Australasia	14,373,243	23,618,708	37,991,951

STATE AND MUNICIPAL RATES AND LAND VALUES.

The extent of the charges on land levied by the various corporations and other local bodies as rates will have been gathered from the foregoing pages; in addition thereto a land tax is levied by the General Government in all the States except Queensland and Western Australia, and the income tax imposed by Victoria, South Australia, and Tasmania, includes income derived from land and its use; in New South Wales, however, incomes derived from the use and occupancy of land are untaxed. In Tasmania, a police rate is also imposed, based on land values, the rates being 9d. in the £ on freehold, and 4½d. in the £ on Crown Lands. The following table shows the collections for rates and the other taxes mentioned, and also the capital values of property and of land and improvements, with the amount per £ on the value of unimproved land which the rates would equal:—

State.	Amount of Rates and Land and Property taxes collected.	Capital Value.		Amount per £ of—	
		Unimproved Land.	Land and Improvements	Unimproved Land.	Land and Improvements.
	£	£	£	d.	d.
New South Wales	1,107,650	142,617,000	263,052,000	1·86	1·01
Victoria	1,165,860	112,396,000	204,294,000	2·49	1·37
Queensland	374,887	35,887,000	63,796,000	2·51	1·41
South Australia	340,640	34,080,000	56,060,000	2·44	1·48
Western Australia	124,847	8,813,000	14,360,000	3·40	2·09
Tasmania	173,942	16,488,000	26,243,000	2·53	1·59
Commonwealth	3,287,826	350,281,000	627,805,000	2·25	1·26
New Zealand	1,028,607	61,466,000	111,105,000	4·02	2·22
Australasia	4,316,433	411,747,000	738,910,000	2·51	1·40

VITAL STATISTICS.

BIRTHS.

THE total number of births in each state, and the rate per thousand of the population during the year 1901 are shown in the following table:—

State.	Births.			Birth-rate.
	Males.	Females.	Total.	
New South Wales.....	19,149	18,726	37,875	27·60
Victoria	15,876	15,132	31,008	25·77
Queensland	7,231	7,022	14,303	28·36
South Australia.....	4,687	4,424	9,111	29·09
Western Australia	2,946	2,772	5,718	30·49
Tasmania	2,570	2,360	4,930	28·39
Commonwealth	52,509	50,436	102,945	27·06
New Zealand	10,471	10,020	20,491	26·30
Australasia.....	62,980	60,456	123,436	26·93

The variation in the birth-rates disclosed in these figures is not very considerable, and may be set down as due for the most part to the larger proportion of married women found in some states than in others. Taking the general average for the last five years (27·31) the birth-rate of Australia will be found lower than that of most European countries, and very much below the former experience of these states, as the following statement shows.

The number of births in each state and in the whole of Australasia, in quinquennial periods from 1861 to 1900, was as follows:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	79,958	92,643	106,543	127,572	158,965	183,300	197,566	183,582
Victoria	123,353	131,052	136,363	132,347	140,258	172,307	180,852	155,437
Queensland	11,761	22,622	29,279	37,535	48,979	70,150	72,863	70,963
South Australia ..	30,472	35,067	36,398	46,310	56,618	53,200	53,093	47,179
Western Australia	3,352	3,724	4,033	4,611	5,446	7,696	10,242	22,399
Tasmania	15,454	14,679	15,313	17,165	21,425	23,710	24,794	23,404
Commonwealth	264,350	299,787	327,929	355,540	431,601	515,363	539,410	502,964
New Zealand	26,611	46,770	59,891	83,205	96,482	94,071	91,410	94,685
Australasia ..	290,961	346,557	387,820	453,745	528,173	609,434	630,820	597,649

The average birth-rates per thousand of population for each state during the same periods were as follow:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	42·71	40·70	39·05	33·53	37·65	36·36	32·93	27·93
Victoria	43·30	39·27	35·69	31·43	30·76	32·72	30·93	26·22
Queensland	43·07	43·91	40·81	36·72	36·37	38·81	35·15	30·49
South Australia ..	44·14	40·60	37·24	38·23	38·52	34·48	31·54	26·59
Western Australia	39·07	33·86	31·30	32·97	34·57	36·88	30·77	23·73
Tasmania	33·80	29·65	29·72	31·54	35·02	34·59	32·84	28·28
Commonwealth	42·29	39·46	36·85	35·09	34·92	35·02	32·32	27·62
New Zealand	33·22	42·23	40·02	41·32	36·50	31·22	27·66	25·74
Australasia ..	41·92	39·84	37·34	36·33	35·21	34·43	31·55	27·31

It is a matter of common knowledge that for some years past the birth-rate in Australasia has been declining, and so important is the subject—not only as regards the growth of the population, but also as affecting general progress—that in 1899 the author made a special investigation into the question of childbirth in Australia, but more particularly with reference to New South Wales. The conclusions arrived at with respect to that state, however, may be held to obtain for all the others, seeing that the conditions of living do not differ

materially in any of them. During the course of the investigation it was found, first, that for all women the proportion of fecund marriages is decreasing; second, that amongst fecund women the birth-rate is much reduced as compared with what it was twenty years ago, and third, that Australian-born women do not bear so many children as the European women who have emigrated to these states. Further investigation amply bears out the first and second conclusions, but the inferior fecundity amongst Australian women is open to doubt, more extended observation rather supporting the opposite view. It was also found that the decline had been persistent and regular since 1881, and this restriction of births in a young country like Australia, where immigration is discouraged, is a matter which must have far-reaching results although its economic effects are only beginning to be seen, and should claim the serious consideration of all thoughtful people.

Particulars relating to illegitimate births will be found in the chapter headed "Social Condition."

DEATHS.

The following table shows the total number of deaths and the rate per thousand of the population during the year 1901 :—

State.	Deaths.			Death-rate.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	9,327	6,694	16,021	12·94	10·28	11·68
Victoria	9,035	6,869	15,904	14·83	11·56	13·22
Queensland	3,838	2,169	6,007	13·65	9·72	11·91
South Australia	2,289	1,776	4,065	15·68	9·97	11·20
Western Australia	1,653	866	2,519	14·03	12·42	13·43
Tasmania	994	811	1,805	11·04	9·71	10·40
Commonwealth	27,136	19,185	46,321	13·54	10·66	12·18
New Zealand	4,418	3,216	7,634	10·78	8·71	9·89
Australasia	31,554	22,401	53,955	13·07	10·33	11·77

The death-rate of Australia is much below that of any of the European states, and is steadily declining. Every year sees an advance in the sanitary condition of the people in the large centres of population, and to this cause may be ascribed the greater part of the improvement in the death-rate shown in the following tables, but there are other causes. The decline in the birth-rate elsewhere alluded to has an immediate effect on the death-rates. In ordinary years about 30 per cent. of the deaths are of children under one year, and the decline in the birth-rate from 35 to 27 per thousand, which has happened during the last ten years, means a reduction of 1 per thousand in the death-rate.

Comparing the death-rate of males and females separately, New Zealand shows the lowest rates amongst both sexes, followed by Tasmania. South Australia has the third position in regard to general rate, but the highest rate for males.

The number of deaths in each state and in the whole of Australasia, in quinquennial periods from 1861 to 1900, is shown in the following table:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	31,561	36,466	40,909	53,256	66,103	71,457	70,802	77,783
Victoria.....	49,452	55,136	59,759	62,811	66,811	84,648	82,056	81,328
Queensland.....	5,751	9,312	12,869	17,284	25,731	28,040	26,581	29,202
South Australia..	10,840	12,963	15,475	18,026	21,616	19,361	20,535	21,174
Western Australia	1,399	1,711	2,068	2,003	2,709	3,332	5,430	11,943
Tasmania.....	6,953	6,962	8,060	8,994	9,790	10,389	10,123	10,313
Commonwealth	105,956	122,550	139,140	162,374	192,760	217,227	221,527	231,743
New Zealand....	10,001	13,328	19,354	25,254	29,074	29,746	33,525	36,151
Australasia..	115,957	135,878	153,494	187,628	221,834	246,973	255,052	266,894

The average death-rates of each state for the periods shown in the above table are given below, but the statement does not afford a just comparison between them as no account is taken of the ages of the people:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	16·88	16·05	14·99	16·09	15·66	13·80	12·80	11·85
Victoria.....	17·36	16·52	15·64	14·92	14·65	16·07	14·04	13·72
Queensland.....	21·06	18·07	17·94	16·90	19·10	15·52	12·82	12·51
South Australia..	15·70	15·01	15·83	14·90	14·71	12·55	12·20	11·93
Western Australia	16·31	15·55	16·03	14·32	17·19	15·97	16·31	15·32
Tasmania.....	15·20	14·06	15·64	16·52	16·00	15·16	13·41	12·46
Commonwealth	16·98	16·01	15·58	15·54	15·36	14·51	13·27	12·73
New Zealand....	14·36	12·05	12·93	11·83	11·00	9·87	10·14	9·56
Australasia..	16·75	15·62	15·26	15·04	14·79	13·95	12·76	12·20

If this table be compared with that showing the birth-rates, it will be observed that the experience of Australasia corresponds with that of

other countries, viz., that a low birth-rate and a low death-rate accompany each other, so that although the birth-rate has been declining it has had an effect in reducing the death-rate, as indicated on the preceding page, and the balance in favour of births has not been reduced so much as it might have been. From the next table, which shows the mean natural increase in various countries during the decennial period 1890-1899, it will be seen that the case of Australasia is much better than that of any of the countries of the United Kingdom or Europe, for notwithstanding that the birth-rate of these countries in some cases is higher, the death rate is so much higher as to more than outweigh any advantage in that respect.

Country.	Birth-rate.	Death-rate.	Excess of Births per 1,000 Inhabitants.
New South Wales	31.11	12.49	18.62
Victoria.....	29.33	14.20	15.13
Queensland	33.55	12.93	20.62
South Australia	32.37	12.23	20.14
Western Australia.....	29.28	15.96	13.32
Tasmania.....	30.99	13.29	17.70
Commonwealth	30.86	13.25	17.61
New Zealand.....	27.02	9.86	17.16
Australasia	30.21	12.68	17.53
England and Wales	30.09	18.36	11.73
Scotland	30.67	18.80	11.87
Ireland.....	23.01	18.13	4.88
United Kingdom.....	29.32	18.38	10.94
Denmark	30.45	17.77	12.68
Norway	30.36	16.45	13.91
Sweden	27.22	16.38	10.84
Austria	37.24	27.06	10.18
Hungary	40.50	30.28	10.22
Switzerland	27.70	18.98	8.72
German Empire.....	36.15	22.47	13.68
Prussia.....	36.82	22.08	14.74
The Netherlands	32.66	18.62	14.04
Belgium	28.84	19.19	9.65
France	22.18	21.59	0.59
Italy	35.59	24.65	10.94

In regard to the above table it must be stated that, had the figures of any of the last four years been taken as the basis of comparison, the gain by natural increase in Australasia would have been below that of some European countries, where the decline in the birth-rate, although distinctly evident, has not been so great as in Australasia.

INDEX OF MORTALITY.

So far consideration has only been given to the actual death-rates as they are obtained by taking the proportion which the number of deaths bears to the number of inhabitants. It is well known, however, that the death-rate of a country is affected by more than the salubrity of its climate, the degree of perfection to which the sanitary condition of its cities and towns and villages has been brought, and the nature of the industrial pursuits of its people. It is known that the ages of the people considerably affect the death-rate of a country; that, for instance, one which has a large proportion of young people will, other things being equal, have a lower death-rate than another which has a comparatively large proportion of old persons; and it is this fact that statistical science now seeks to take into account in establishing the rates of mortality of the various countries of the world. In order to have a comparison of the mortality of the principal countries on a uniform basis, the International Statistical Institute, in its 1895 session, held at Berne, decided to recommend the population of Sweden, in five age-groups, as ascertained at the census of 1890, as the standard population, by which the index of mortality should be calculated. Applying the co-efficient of mortality in each age-group in the Commonwealth and New Zealand to the age constitution of the standard population, the "index of mortality," as distinguished from the actual "death-rate," is found as given below for each of the two years 1899-1900. How greatly the ages of the people of a country affect its mortality will be evident from the fact that whereas in 1900 the death-rates in Australasia ranged from 9.43 in New Zealand to 12.76 in Western Australia, a difference of 3.33 per thousand, the range of the indexes of mortality was 4.16 per thousand, namely, from 11.61 in New Zealand to 15.77 in Western Australia.

State.	1899.	1900.
New South Wales	15.34	14.57
Victoria	16.13	14.82
Queensland	15.23	14.25
South Australia	15.05	12.98
Western Australia	19.37	15.77
Tasmania	16.64	14.56
New Zealand.....	12.42	11.61
Australasia	15.20	14.04

AGES AT DEATH.

A detailed statement of the ages at death of the males who died during the year 1900 in the various states is given below. The figures for South Australia in this and subsequent detailed tables refer to the province proper exclusive of the Northern Territory.

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
Under 1 year.....	2,004	1,645	834	471	395	223	5,065	810	6,454
1 and under 2 years..	335	319	108	79	82	26	937	110	1,047
2 " 3 " "	89	85	40	22	14	10	260	46	306
3 " 4 " "	72	53	27	19	7	7	185	34	219
4 " 5 " "	48	56	24	7	3	4	142	33	175
5 " 10 " "	186	205	71	62	16	2	562	96	658
10 " 15 " "	100	138	63	39	13	21	434	70	504
15 " 20 " "	240	168	140	45	24	34	651	112	763
20 " 25 " "	322	208	223	62	77	33	985	147	1,132
25 " 30 " "	299	271	193	72	98	35	968	147	1,115
30 " 35 " "	235	331	206	57	109	19	1,003	132	1,140
35 " 40 " "	371	354	208	75	122	36	1,106	156	1,322
40 " 45 " "	460	341	218	95	103	37	1,254	156	1,410
45 " 50 " "	465	310	185	85	63	46	1,159	163	1,327
50 " 55 " "	364	306	173	94	64	33	1,039	187	1,226
55 " 60 " "	475	402	215	95	64	31	1,232	248	1,550
60 " 65 " "	575	500	193	117	57	54	1,556	301	1,837
65 " 70 " "	620	821	208	131	66	56	1,902	419	2,321
70 " 75 " "	535	794	152	126	41	6	1,734	311	2,045
75 years and upwards	948	1,158	181	240	66	253	2,846	461	3,307
Unspecified.....	8	12	18	1	4	....	43	....	43
Total.....	8,951	8,627	3,678	1,994	1,487	1,071	25,808	4,153	29,961

Similar information respecting the deaths of females in 1900 is given in the following table:—

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
Under 1 year.....	1,742	1,291	622	440	290	106	4,551	650	5,201
1 and under 2 years..	303	271	128	68	59	30	859	95	954
2 " 3 " "	96	84	47	24	13	10	274	47	321
3 " 4 " "	64	67	37	15	7	12	202	30	232
4 " 5 " "	42	53	25	9	6	9	144	25	169
5 " 10 " "	147	191	62	43	9	29	481	77	558
10 " 15 " "	126	117	47	37	9	20	356	90	446
15 " 20 " "	158	180	57	81	16	34	526	117	643
20 " 25 " "	239	231	80	73	44	32	704	139	843
25 " 30 " "	252	297	99	61	46	26	781	129	919
30 " 35 " "	285	317	96	70	51	29	848	131	979
35 " 40 " "	279	337	102	83	47	39	892	130	1,022
40 " 45 " "	249	285	90	70	39	41	733	97	830
45 " 50 " "	215	204	73	56	13	28	589	123	712
50 " 55 " "	214	227	64	55	22	24	606	124	730
55 " 60 " "	245	233	75	67	15	33	718	161	879
60 " 65 " "	289	405	84	76	17	35	906	167	1,073
65 " 70 " "	306	480	85	93	13	54	1,036	228	1,264
70 " 75 " "	272	461	73	110	10	59	935	160	1,145
75 and upwards.....	643	866	121	224	24	122	1,940	327	2,267
Unspecified.....	1	1	2	1	3	....	8	....	8
Total.....	6,167	6,588	2,069	1,730	753	832	18,189	3,047	21,236

The next table shows the ages of all the persons who died during 1900 :—

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
Under 1 year	3,836	2,936	1,456	911	688	389	10,216	1,469	11,685
1 and under 2 years ..	623	590	284	147	141	56	1,796	205	2,001
2 " 3 " ..	185	169	87	46	27	20	534	93	627
3 " 4 " ..	136	150	64	34	14	19	387	64	451
4 " 5 " ..	90	109	49	16	9	13	286	58	344
5 " 10 " ..	333	396	183	105	25	51	1,043	173	1,216
10 " 15 " ..	286	255	110	76	22	41	790	160	950
15 " 20 " ..	393	343	197	126	40	68	1,177	229	1,406
20 " 25 " ..	561	499	303	140	121	65	1,689	286	1,975
25 " 30 " ..	551	568	292	133	144	61	1,749	276	2,025
30 " 35 " ..	580	648	302	127	151	43	1,856	263	2,119
35 " 40 " ..	650	691	310	163	169	75	2,058	286	2,344
40 " 45 " ..	700	626	308	174	142	78	2,037	253	2,290
45 " 50 " ..	680	514	258	141	81	74	1,743	201	2,039
50 " 55 " ..	573	533	287	149	86	62	1,645	311	1,956
55 " 60 " ..	720	685	290	162	79	64	2,000	409	2,409
60 " 65 " ..	864	995	277	193	74	89	2,492	463	2,960
65 " 70 " ..	926	1,301	293	229	79	110	2,938	647	3,585
70 " 75 " ..	807	1,255	225	236	51	145	2,719	471	3,190
75 and upwards	1,591	1,964	302	464	90	375	4,786	788	5,574
Unspecified	9	13	20	2	7	....	51	....	51
Total	15,118	15,215	5,747	3,774	2,240	1,903	43,997	7,200	51,197

The ages of the people were ascertained at the census of March, 1901, and a comparison of the foregoing figures with the numbers living at each age can now be made. Using the same age groups as for the index of mortality given on page 503, the following rates are obtained. For age 0 (under 1 year) the number of births during the year has been used in place of figures deduced from the census results :—

Age Groups.	Deaths in each Age Group per 1,000 living.								
	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
Under 1 year	103.27	95.39	98.37	99.27	126.15	79.98	99.94	75.16	95.96
1 and under 20	3.47	4.02	4.11	3.46	4.81	3.45	3.77	3.03	3.65
20 " 40	5.37	6.17	7.46	5.10	7.33	4.63	5.97	4.42	5.71
40 " 59	12.55	12.92	14.03	10.59	14.45	10.82	12.67	10.38	12.23
60 and over	56.79	58.01	47.14	49.18	51.32	68.52	55.97	46.01	54.15

The superiority of New Zealand is manifested at every age group ; for ages up to 40, Tasmania ranks second, but for all ages taken together South Australia stands before the island State. For children of 1 year Victoria shows a more favourable mortality than any State, except New Zealand and Tasmania ; at other ages, Victoria is behind New South Wales. The mortality of infants under 1 year of age may be

measured accurately by comparing the deaths with the number of births; this is a most sensitive and reliable test of the healthiness and sanitary condition of a country, since at this early age children are most susceptible to the attacks of disease. The following table shows for each State the number of deaths of children under 1 year of age, and the rate per 1,000 births, since 1870, arranged in five-year periods:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.	1901.
DEATHS under 1 Year.							
New South Wales	11,036	14,626	19,709	21,586	21,930	20,819	3,929
Victoria	16,981	15,865	17,043	22,582	20,221	17,299	3,192
Queensland	3,596	5,068	6,732	8,339	7,496	7,337	1,458
South Australia	5,758	6,516	7,594	5,593	5,227	5,266	911
Western Australia .....	.....	.....	.....	939	1,332	3,488	737
Tasmania	1,560	1,830	2,331	2,437	2,337	2,284	439
Commonwealth ...	38,931	43,905	53,409	61,476	58,543	56,493	10,666
New Zealand	6,390	8,432	8,733	7,924	8,005	7,578	1,463
Australasia	45,321	52,337	62,142	69,400	66,548	64,071	12,129
RATE per 1,000 Births.							
New South Wales	103·58	114·65	123·98	114·64	111·00	113·40	103·74
Victoria	124·53	119·87	121·51	131·06	111·81	111·29	102·94
Queensland	122·82	135·02	137·45	118·87	102·88	103·39	101·94
South Australia	158·20	140·70	134·13	105·13	98·67	111·62	99·99
Western Australia .....	.....	.....	.....	109·15	130·05	155·72	128·89
Tasmania	101·87	106·61	108·75	102·78	94·26	97·59	89·05
Commonwealth ...	119·47	120·55	123·48	117·51	107·96	112·32	103·61
New Zealand	106·69	95·60	90·51	84·23	87·57	80·03	71·40
Australasia ...	118·09	116·53	118·88	113·71	105·51	107·21	98·26

In spite of all the sanitary improvements that have been effected in recent years, the rate, as judged from the last quinquennial period, does not seem to have decreased very appreciably in any of the states except South Australia and New Zealand. In South Australia the rate was very high in the earlier years, the reason given being that the deaths of several children 1 year old were wrongly included by the registering officers with those under 1 year. In every state except New Zealand, where the mortality has declined more or less regularly over the whole period, and Victoria, where it was stationary during the last two periods, the death-rates of infants have risen during the last period; in Western Australia the increase has been very serious, to the extent of nearly one-fifth in five years.

CAUSES OF DEATH.

The system of classifying the causes of death adopted in Australasia is that arranged by Dr. William Ogle on the basis of the older system of Dr. William Farr, his predecessor as Superintendent of the Statistical Department of the Registrar-General's Office, England. Under this classification deaths are divided into eight classes, namely, deaths from specific febrile or zymotic diseases, from parasitic diseases, from dietetic diseases, from constitutional diseases, from developmental diseases, from local diseases, from violence, and from ill-defined or unspecified causes. The following were the assigned causes of death of the 51,197 persons who died in Australasia during 1900 :—

Classification	New South Wales.	Vic-toria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	New Zea-land.	Aus-tral-asia.
Specific febrile or zymotic diseases—								
Miasmatic diseases.....	893	753	427	174	195	105	421	2,968
Diarrhoeal diseases.....	568	403	335	212	117	42	199	1,876
Malarial diseases.....	7	2	31	1	20	1	....	62
Zoogenous diseases.....	2	....	....	....	....	....	....	2
Veneral diseases.....	57	50	25	10	2	5	24	182
Septic diseases.....	150	126	51	26	29	15	61	458
Total.....	1,677	1,843	869	423	363	168	705	5,548
Parasitic diseases.....	60	41	19	14	11	4	23	172
Dietetic diseases.....	159	93	169	18	47	4	71	561
Constitutional diseases.....	2,332	2,829	904	662	246	278	1,356	8,607
Developmental diseases.....	1,708	1,493	404	413	176	329	699	5,222
Local diseases—								
Diseases of nervous system....	1,535	1,460	533	386	168	223	760	5,065
Diseases of organs of special sense.....	12	15	9	1	....	2	10	49
Diseases of circulatory system..	1,262	1,704	510	433	141	243	848	5,141
Diseases of respiratory system..	1,613	1,782	563	401	227	177	802	5,565
Diseases of digestive system.....	1,848	1,855	734	359	345	128	647	5,916
Diseases of lymphatic system and ductless glands.....	26	20	8	7	1	2	24	88
Diseases of urinary system.....	626	702	232	139	70	68	287	2,124
Diseases of organs of generation	48	47	13	12	9	3	25	157
Diseases of parturition.....	191	105	62	35	23	24	51	491
Diseases of organs of locomotion	32	38	13	17	7	5	16	123
Diseases of integumentary system.....	41	43	21	6	5	3	14	133
Total.....	7,234	7,771	2,698	1,796	906	878	3,484	24,857
Violence—								
Accident or negligence.....	992	854	491	205	216	104	406	3,358
Homicide.....	50	34	15	1	11	1	11	123
Suicide.....	145	101	91	33	37	16	68	491
Execution.....	1	1	....	1	....	....	....	3
Violent deaths not classified..	38	....	....	....	....	....	....	38
Total.....	1,226	990	597	210	264	121	575	4,013
Ill-defined and not specified causes..	722	655	87	208	137	121	287	2,217
Grand Total.....	15,118	15,215	5,747	3,774	2,240	1,903	7,200	51,197

Comparing the figures of the total deaths in each class and order with the population the following results are obtained. The figures represent the number of deaths per 100,000 living based on the experience of the last three years.

Classification.	Number of deaths per 100,000 living.		
	Males.	Females.	Total population.
Specific, febrile, or zymotic diseases—			
Miasmatic diseases.....	109·08	106·09	107·67
Diarrhœal diseases.....	53·65	47·32	50·68
Venereal diseases.....	5·17	3·21	4·25
Septic diseases.....	5·77	17·05	11·07
Other specific, febrile, or zymotic diseases	2·33	0·33	1·39
Total.....	176·00	174·00	175·06
Parasitic diseases.....	4·58	4·17	4·38
Dietetic diseases.....	18·15	8·62	13·67
Constitutional diseases.....	209·85	184·69	198·03
Developmental diseases.....	130·63	104·80	118·49
Local diseases—			
Diseases of nervous system.....	127·06	106·09	117·21
Diseases of circulatory system.....	125·58	96·75	112·04
Diseases of respiratory system.....	164·26	121·89	144·36
Diseases of digestive system.....	139·87	136·07	138·09
Diseases of urinary system.....	59·46	32·14	46·63
Diseases of organs of generation.....	0·34	7·33	3·62
Diseases of parturition.....		23·47	11·02
Diseases of organs of locomotion.....	3·65	2·68	3·19
Diseases of integumentary system.....	3·77	3·02	3·42
Other local diseases.....	3·31	4·07	3·67
Total.....	627·30	533·51	583·25
Violence—			
Accident or negligence.....	108·83	37·02	75·11
Homicide.....	2·76	2·11	2·45
Suicide.....	17·90	4·45	11·58
Other deaths from violence.....	0·63	0·14	0·41
Total.....	130·12	43·72	89·55
Ill-defined or not specified causes.....	57·25	52·25	54·91
Grand total.....	1,353·88	1,105·76	1,237·34

SPECIFIC FEBRILE OR ZYMOTIC DISEASES.

The deaths from specific febrile or zymotic diseases were not so numerous in 1900 as in the years preceding, representing only 12·30 deaths per 10,000 of the population, as against 21·70 in 1898, accounted for by the comparative immunity from measles, scarlet fever, whooping cough, and diphtheria during last year. Under this class are included the highly infectious diseases—measles, scarlet fever, whooping-cough, and diphtheria—which are especially fatal to children; diarrhœal diseases, chiefly fatal to persons at the extremes of life; and typhoid (enteric) fever, whose ravages are very severe.

It would be interesting to compare the fatality of these diseases in the various States in proportion to the number of cases occurring, but unfortunately the necessary information is lacking. In some of the States legal enactments provide for the notification of infectious diseases, but they are not rigidly enforced, and doubtless many cases escape notice.

In New South Wales, since the beginning of 1898, under the provisions of the Public Health Act of 1896, notification of the three diseases scarlet fever, diphtheria, and typhoid has been compulsory, and careful record has been kept of the number of cases and deaths, the averages for the three years 1898 to 1900 being shown below:—

Disease.	Number of cases notified.	Number of Deaths.	Fatality per cent.
Scarlet Fever	2,875	39	1·4
Diphtheria	987	97	9·8
Typhoid	3,176	377	11·9

The experience of London during the nine years 1891-99 is also given.

Disease.	Number of cases notified.	Number of Deaths.	Fatality per cent.
Scarlet Fever	21,973	872	4·0
Diphtheria	11,646	2,259	19·4
Typhoid	3,432	599	17·4

MEASLES.

Measles, which is mainly a children's disease, was the cause in 1900 of the deaths of 140 persons, equal to a rate of 0·31 per 10,000 living. The following tables show the number of deaths in each State from this disease, and the death-rate per 10,000 living, in five-year periods since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	311	200	293	885	734
Victoria.....	1,809	271	336	148	696	827
Queensland	179	36	102	4	302	261
South Australia	356	18	240	8	291	83
Western Australia .....	.....	1	129	nil	27	41
Tasmania	132	3	66	1	49	59
New Zealand	*359	10	246	85	526	204
Australasia .....	.....	650	1,369	539	2,776	2,209
DEATH-RATE per 10,000 living.						
New South Wales .....	.....	0·94	0·47	0·57	1·48	1·12
Victoria	4·73	0·66	0·81	0·28	1·19	1·39
Queensland	2·50	0·35	0·76	0·02	1·46	1·12
South Australia	3·64	0·15	1·63	0·05	1·73	0·47
Western Australia .....	.....	0·07	8·19	0·00	0·81	0·53
Tasmania	2·56	0·06	1·08	0·01	0·65	0·71
New Zealand	*2·90	0·05	0·93	0·28	1·59	0·55
Australasia .....	.....	0·52	0·91	0·30	1·38	1·01

* Four years, 1872-75.

With regard to the diseases which are almost solely confined to children, the true rates are somewhat obscured by stating the proportion of deaths to the whole population, since the prevalence of the diseases will vary in each State according to the proportional number of young children in each. It has, however, been necessary to state them as above, because there is no means of making an accurate estimate of the numbers living at the ages most affected. Comparing the rates as they appear, it will be seen that measles has been more prevalent since 1891 than during the preceding fifteen years, and it seems to be most common in the first three States shown in the table. Although the disease is in evidence every year, it usually occurs as an epidemic, and, according to the records, the outbreaks occur with more or less regularity and severity about every five years. Measles was epidemic in nearly all the States in 1875 (when the attack was very severe), in 1880, in 1884 (when Western Australia suffered heavily) in 1889, in 1893, in 1898, and in 1899.

SCARLET FEVER.

The deaths resulting from scarlet fever during 1900 numbered only 60, or at the rate of 0·13 per 10,000. In the table below are shown the number of deaths and the death rates in each State arranged quinquennially since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	1,295	476	404	460	244
Victoria	1,455	2,646	282	148	172	230
Queensland	77	37	19	73	31	157
South Australia	626	520	141	27	56	47
Western Australia .....	.....	.....	.....	nil.	1	4
Tasmania	72	304	49	9	8	38
New Zealand	*58	333	312	96	40	18
Australasia .....	.....	5,185	1,279	757	768	738

DEATH-RATE per 10,000 living.

New South Wales .....	.....	3·91	1·13	0·78	0·77	0·37
Victoria	3·81	6·44	0·59	0·28	0·29	0·39
Queensland	1·07	0·36	0·14	0·40	0·15	0·67
South Australia	6·40	4·30	0·96	0·17	0·33	0·26
Western Australia .....	.....	.....	.....	0·00	0·03	0·05
Tasmania	1·40	5·59	0·80	0·13	0·11	0·46
New Zealand	*0·47	1·79	1·18	0·32	0·12	0·05
Australasia .....	.....	4·20	0·86	0·43	0·38	0·34

* Four years, 1872-75.

The rate of mortality from scarlet fever for the first ten years shown in the table was much higher than that recorded for measles, but, in spite of the highly infectious nature and difficulty of isolation of the former disease, the death-rate has since been consistently lower than that of the latter. From 1871 to 1880 the rate of mortality from scarlet fever was high, but during the next five years a great decrease was manifested, and later there was a further decline, while during the last fifteen years the rate has been practically constant, but with a tendency to rise in Victoria, Queensland, and Tasmania. In Victoria the extremely high rate for 1876-80 was caused by a very virulent outbreak of the disease in 1876, and in Tasmania an outbreak in 1877 largely increased the rate; in fact, during the three years 1875, 1876, and 1877 all the States were more or less affected by an epidemic of scarlet fever. In Queensland the disease has never been very prevalent, and in Western Australia it is virtually unknown.

WHOOPIING-COUGH.

A curious fact in connection with whooping-cough, the third of the diseases of infancy and childhood, is that the mortality resulting from it is higher in the case of girls than of boys. During 1900 whooping-cough was responsible for 401 deaths (182 males and 219 females), equal to 0·89 deaths per 10,000 of the population, the male rate being 0·74 and the female 1·03. The table below shows the number of deaths and the death rates in each State since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	676	632	979	1,157	947
Victoria	1,053	921	701	691	851	498
Queensland	117	198	184	306	381	454
South Australia	181	211	341	263	279	264
Western Australia .....	.....	nil.	19	65	57	80
Tasmania	99	84	59	89	79	88
New Zealand	*465	589	592	443	752	245
Australasia .....	... ..	2,679	2,528	2,836	3,556	2,576
DEATH-RATE per 10,000 living.						
New South Wales .....	.....	2·04	1·50	1·89	1·93	1·44
Victoria	2·76	2·24	1·47	1·31	1·46	0·84
Queensland	1·63	1·94	1·37	1·69	1·84	1·94
South Australia	1·85	1·74	2·32	1·70	1·66	1·49
Western Australia .....	.....	0·00	1·21	3·12	1·71	1·03
Tasmania	1·92	1·54	0·96	1·30	1·05	1·06
New Zealand	*3·75	2·76	2·24	1·47	2·28	0·67
Australasia .....	.....	2·15	1·69	1·60	1·78	1·18

* Four years, 1872-75.

The death-rate from whooping-cough, which has never been remarkably high, declined after the second quinquennium (1876-80), and thenceforward remained fairly constant during the next fifteen years. For the last five years, however, the returns show a further gratifying decrease, in spite of the fact that the disease was mildly epidemic during 1898 and 1899. Generally speaking, whooping-cough seems to have been most prevalent in New South Wales, South Australia, and New Zealand; but it is gradually decreasing in these States, and, in fact, throughout Australasia, with the single exception of Queensland, where the tendency during the last twenty years has been towards an increase. On the whole, the rates up to the last period are very even amongst themselves in all the States. In Western Australia the rate rose regularly to a maximum during 1886-90—a very severe epidemic being experienced in 1886—and then declined.

DIPHThERIA.

Diphtheria, the last of the febrile diseases mentioned which mainly affect children, caused, in 1900, a total of 374 deaths, at the rate of 1·07 per 10,000 persons living. In the following table are shown the number of deaths, and the death rates in each State since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	1,109	1,005	1,325	1,753	584
Victoria.....	1,609	1,431	681	1,885	994	892
Queensland	246	170	224	530	551	273.
South Australia	379	329	387	570	513	153.
Western Australia .....	.....	11	28	19	38	79
Tasmania	124	329	96	182	208	65
New Zealand	*535	316	525	542	577	289
Australasia .....	.....	3,695	2,946	5,053	4,634	2,335
DEATH-RATE per 10,000 living.						
New South Wales .....	.....	3·35	2·39	2·56	2·92	0·89
Victoria.....	4·21	3·48	1·43	3·58	1·70	1·50
Queensland	3·43	1·66	1·66	2·93	2·66	1·17
South Australia	3·88	2·72	2·63	3·69	3·05	0·86
Western Australia .....	.....	0·79	1·78	0·91	1·14	1·01
Tasmania	2·41	6·05	1·57	2·66	2·76	0·79
New Zealand	*4·32	1·48	1·99	1·80	1·75	0·79
Australasia .....	.....	2·96	1·96	2·85	2·32	1·07

* Four years, 1872-75.

The present rates for diphtheria, as compared with those of twenty or twenty-five years ago, show a decrease. The decline, however, has been by no means regular, owing to the fact that this disease, in common with the others affecting children, sometimes occurs as an epidemic. Thus the increase in the rates during 1886-90 over those prevailing in the previous five years was due to an epidemic in nearly all the provinces in 1890.

The decreased mortality during the last twenty years, from the four diseases just mentioned, together with croup, represents a gain of about 6 children to the population in every 10,000 persons living. This improvement is very gratifying, since it may be taken that cases of these diseases, which are particularly liable to be attended with dangerous after-effects in the shape of lung and other local troubles, are not so numerous, and that in consequence the general health of the people is better. Tasmania seems to have suffered most from diphtheria, until the last ten years, during which the death-rate was the lowest in Australasia, having declined from 2·76 to 0·79.

CROUP.

Croup, although classed as a disease of the respiratory system, was formerly classified with the zymotic diseases, and is included here on account of its similarity to diphtheria, and the confusion which often arises between them, and of the deaths set down to a combination of both. It is a disease that may be said to affect children only, and in 1900 caused the death of 92, or 0·20 per 10,000 of the population. In the subsequent table are shown the number of deaths and the death-rate in each State since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	968	971	951	683	278
Victoria	647	1,250	795	1,209	458	199
Queensland	273	324	483	382	239	103
South Australia	258	330	443	192	145	45
Western Australia .....	.....	24	31	45	64	26
Tasmania	80	76	113	112	101	29
New Zealand	*281	277	334	340	304	186
Australasia .....	.....	3,249	3,170	3,231	1,994	866

DEATH-RATE per 10,000 living.

New South Wales .....	.....	2·92	2·31	1·84	1·14	0·42
Victoria	1·69	3·04	1·66	2·30	0·78	0·34
Queensland	3·81	3·17	3·59	2·11	1·15	0·44
South Australia	2·64	2·74	3·01	1·24	0·86	0·25
Western Australia .....	.....	1·72	1·97	2·16	1·92	0·33
Tasmania	1·55	1·40	1·85	1·63	1·34	0·35
New Zealand	*2·27	1·30	1·26	1·13	0·92	0·51
Australasia .....	.....	2·61	2·11	1·83	1·00	0·40

* Four years, 1872-75.

Generally speaking, deaths from this disease show a steady and consistent fall from the earliest period, although in some of the States, especially Victoria and South Australia, the rates fluctuate slightly. The greatest decline has taken place in New South Wales, Victoria, Queensland, and South Australia, until at the present time croup is about equally prevalent throughout Australasia. If croup and diphtheria be taken together, as they usually are, the rates generally have declined to the extent of over 4 per 1,000 during the last twenty years.

DIARRHOEAL DISEASES.

Diarrhoeal diseases, comprising cholera, diarrhoea, and dysentery, carry off mostly young children and old persons. In 1900 these diseases were fatal to 1,876 persons, equal to a death-rate of 4.16 per 10,000 living. The number of deaths and the death-rates in each State in quinquennial periods since 1870, are shown below.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	3,913	4,775	4,323	3,794	3,622
Victoria	6,030	5,006	4,886	5,489	3,290	2,679
Queensland	1,618	2,469	3,833	2,865	2,125	1,779
South Australia	1,628	1,620	2,105	1,388	1,079	1,205
Western Australia .....	.....	140	106	251	323	794
Tasmania	437	512	474	605	354	309
New Zealand	*1,528	2,375	1,879	1,789	1,280	1,363
Australasia .. .....	.....	16,035	18,058	16,710	12,245	11,751

DEATH-RATES per 10,000 living.

New South Wales .....	.....	11.82	11.34	8.34	6.32	5.52
Victoria	15.78	12.18	10.23	10.42	5.63	4.52
Queensland	22.56	24.15	28.46	15.85	10.25	7.62
South Australia	16.65	13.39	14.32	8.99	6.41	6.79
Western Australia .....	.....	10.01	6.73	12.03	9.70	10.18
Tasmania	8.48	9.41	7.75	8.83	4.69	3.73
New Zealand	*12.33	11.13	7.11	5.94	3.87	3.71
Australasia .. .....	.....	12.86	12.04	9.44	6.02	5.37

* Four years, 1872-75.

The high death-rates of earlier years are not surprising, and may be ascribed to the hard fare and exposure incidental to the development of the pastoral and mining industries. This will be evident from a comparison of the present rates in Queensland, South Australia, and New South Wales with those of former periods. In all the States there has been a marked improvement during the last twenty years, with the exception of Western Australia, where the rough conditions of life prevailing on the goldfields exert an adverse influence on the rates. The most noticeable improvement has occurred in Queensland, where the rate has declined from 24.15 to 7.62 during the last twenty years. That temperature and climate have an effect on the death-rates from these diseases is proved from the fact that they are much more prevalent and more fatal in summer than in any other season of the year, and that in Tasmania and New Zealand, where the climate is mild and

genial, the rates are much lower than in Queensland and Western Australia, where the climate is very warm, and in some parts tropical, while the other States, whose climates are fairly temperate, show rates between the two extremes.

The decline in the number of deaths from diarrhoea may be in part due to the fact that of late years more skilful diagnosis in some cases makes possible the ascription of death to ailments of which diarrhoea may be only a symptom.

TYPHOID (ENTERIC) FEVER.

Seeing that typhoid is entirely a filth disease, the poison of which is propagated by sewage, and that it yields readily to sanitary precautions, it is a matter of very great regret that the annual mortality, although steadily declining, should still be so heavy. In 1900 typhoid was responsible for 1,054 deaths in Australasia, or at the rate of 2.33 per 10,000 living, as against the English rate of 1.99 for 1899, which was the highest recorded there for six years. The table below shows the number of deaths from this disease, and the death rate in each State, arranged in five-year periods since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales .....	.....	1,722	2,132	2,307	1,533	1,968
Victoria	1,799	2,174	2,364	3,209	1,571	1,722
Queensland	424	525	1,303	990	513	747
South Australia	372	446	632	566	369	512
Western Australia .....	.....	.....	.....	59	500	1,379
Tasmania	156	184	213	401	230	251
New Zealand.....	*632	739	626	674	561	511
Australasia .....	.....	5,790	7,270	8,206	5,277	7,090
DEATH-RATE per 10,000 living.						
New South Wales .....	.....	5.20	5.06	4.46	2.56	3.00
Victoria	4.71	5.29	5.18	6.09	2.69	2.90
Queensland	5.91	5.14	9.67	5.48	2.48	2.20
South Australia	3.80	3.69	4.30	3.67	2.19	2.89
Western Australia .....	.....	.....	.....	2.83	15.02	17.69
Tasmania	3.03	3.38	3.48	5.85	3.05	3.03
New Zealand.....	*5.10	3.46	2.37	2.24	1.70	1.39
Australasia .....	.....	4.69	4.90	4.64	2.64	3.24

* Four years, 1872-75.

It will be observed that the rates over the whole period covered by the table show a decline, and although the last quinquennial period

shows an apparent increase it was almost entirely confined to Western Australia. The disease is of an epidemic nature, but still the rates do not fluctuate greatly, and during the last five years the rates in all the States, excluding Western Australia, were fairly uniform, ranging from 1.39 in New Zealand to 3.03 in Tasmania. An epidemic occurred in the year 1889 in New South Wales, Victoria, Queensland, and Tasmania, and the disease seems to have since been more prevalent in the last-mentioned State than in any other. In Western Australia typhoid was almost unknown prior to the gold rush in 1894, when the disease may be said to have commenced. The maximum was soon reached, for in 1895 the death-rate was 35.46 per 10,000. With improved sanitation the rate is steadily declining, and although the table shows an apparent increase in the last quinquennial period, it must be remembered that, as previously stated, the disease was comparatively unknown prior to 1894, and this accounts for the lower rate of the period 1891-1895. The rapid decline of the death-rate may be seen when it is stated that in 1895 it was 35.46 per 10,000, for the period 1896-8 only 25.38, while in 1900 it had fallen to 7.29.

In England and Wales since the measures which have been taken to improve the drainage and water supply the rate has steadily fallen from 3.74 in 1871-75 to 1.76 in 1896-99.

PARASITIC DISEASES.

The deaths from parasitic diseases in Australasia during 1900 numbered 172, equal to a death-rate of 0.38 per 10,000 living. The chief disease of this group is hydatids, which was responsible for 91 deaths, or 0.21 per 10,000 of the population, and was most common in New South Wales, where the rate was 0.30.

DIETETIC DISEASES.

Dietetic diseases in 1900 carried off 561 persons, or at the rate of 1.24 per 10,000 living, the chief contributing causes being privation and intemperance.

CONSTITUTIONAL DISEASES.

The next class of diseases is the constitutional, which caused in 1900 8,607 deaths, giving an average of 19.08 per 10,000 living. Of these diseases, phthisis and cancer stand out most prominently, and deserve special consideration.

PHTHISIS.

Phthisis claims more victims in Australasia than any other disease, but notwithstanding this fact the death-rates are lower than in the other countries of the world. This is all the more gratifying when it is considered that the Australian climate is undoubtedly favourable to people suffering from pulmonary complaints, and that thereby many

persons afflicted with the disease, or predisposed to it, are attracted to this country in the hope of obtaining relief. It is estimated that of the total persons who die of phthisis in Australasia, 7 per cent. do so after less than five years' residence. In 1900 phthisis caused 4,011 deaths in Australasia, equal to a rate of 8·89 per 10,000 living. The following table shows the number of deaths and the death-rates in each State since 1870, arranged in five-year periods :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales	2,532	3,363	4,805	5,127	5,198	5,225
Victoria	4,594	5,397	6,428	7,662	7,751	7,049
Queensland	784	1,330	2,332	2,412	2,266	2,117
South Australia	872	1,244	1,558	1,640	1,667	1,544
Western Australia	*89	120	135	194	250	534
Tasmania	522	536	658	671	658	578
New Zealand	*1,080	1,805	2,418	2,529	2,693	2,886
Australasia .. .. .	.....	13,795	18,334	20,235	20,483	19,933

DEATH-RATE per 10,000 living.

New South Wales	9·28	10·16	11·41	9·90	8·66	7·96
Victoria	12·02	13·13	14·10	14·55	13·26	11·89
Queensland	10·93	13·01	17·31	13·35	10·93	9·07
South Australia	8·92	10·28	10·60	10·63	9·90	8·98
Western Australia	*8·58	8·58	8·57	9·30	7·51	6·85
Tasmania	10·13	9·85	10·76	9·79	8·72	6·98
New Zealand	*8·72	8·46	9·15	8·39	8·15	7·85
Australasia	10·09	11·06	12·22	11·43	10·24	9·11

* Four years, 1872-75.

For the first half of the period covered by the table, phthisis seems to have been on the increase; but since 1885 it has steadily decreased, and the mortality rate is now lower than that of England—where the rate is over 13 per 10,000 living—or of any European country. The decline is general, and is evidence of the more skilful treatment of the disease and the effectiveness of the preventive measures taken against it. Phthisis has always been most prevalent in Victoria, but the rate is fairly uniform throughout the rest of Australasia. In Queensland the rate is adversely affected by the peculiar liability of the Pacific Island labourers to contract the disease, while the Maori population of New Zealand is also extremely susceptible to its ravages. Western Australia has, on the whole, had the lowest rate, but there is little difference between it and several of the other States.

CANCER.

Next to phthisis, cancer is the most deadly of the constitutional diseases, and in 1900 was the cause of the death of 2,596 persons, or at the rate of 5·76 per 10,000 living. In the table below are shown the number of deaths and the death-rates in each State since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales	772	934	1,146	1,876	2,587	3,548
Victoria	1,245	1,712	2,065	2,799	3,621	4,086
Queensland	125	225	336	508	731	1,071
South Australia	199	352	475	592	803	968
Western Australia	*16	23	52	85	102	248
Tasmania	249	255	308	341	371	459
New Zealand	*262	526	806	1,270	1,725	2,153
Australasia .....	.....	4,027	5,188	7,471	9,940	12,533
DEATH-RATE per 10,000 living.						
New South Wales	2·83	2·82	2·72	3·62	4·31	5·41
Victoria	3·26	4·16	4·53	5·32	6·19	6·89
Queensland	1·74	2·20	2·49	2·81	3·53	4·59
South Australia	2·04	2·91	3·23	3·84	4·77	5·45
Western Australia	*1·54	1·64	3·30	4·07	3·06	3·18
Tasmania	4·83	4·69	5·04	4·98	4·91	5·55
New Zealand	*2·11	2·46	3·95	4·22	5·22	5·85
Australasia	2·76	3·23	3·46	4·22	4·97	5·73

* Four years, 1872-75.

It will be observed that with some slight irregularity the death-rate from cancer has steadily risen in Australasia over the whole period covered by the table, the largest increases being shown by Victoria and New Zealand. For the first half of the period Tasmania had the highest rate, but so rapid has been the progress of the disease in Victoria and New Zealand that the rates in both are now higher than that of Tasmania. With the exception of the period from 1881 to 1890, Western Australia has always shown the lowest rates.

Although part of the increase may arise from the fact that more skilful diagnosis in recent years enables cancer to be ascribed as the cause of death in obscure malignant diseases more often than was formerly the case, yet after making due allowance on this score, the conclusion must inevitably be arrived at that the spread of the disease is a dread reality.

DEVELOPMENTAL DISEASES.

The deaths from developmental diseases in 1900 were 5,222 or 11·57 per 10,000 persons living, and of these deaths, 2,557, or 5·67 per 10,000

living, were ascribed to the vague cause, old age. Premature birth was set down as the cause of death of 1,716 infants, a mortality equal to 14·09 per thousand children born alive, or 1 in every 70.

LOCAL DISEASES.

Local diseases in 1900 were the cause of 24,857 deaths, and averaged 55·11 per 10,000 living. This group comprises diseases of the various systems and special organs of the body, the principal being diseases of the nervous system and of the circulatory system, which are further considered below. Under this heading also are classified diseases of the respiratory system, which caused 5,565 deaths, equal to 12·34 per 10,000; of the digestive system, responsible for 5,916 deaths, or 13·12 per 10,000; and of the urinary system, the deaths from which numbered 2,124, equal to a rate of 4·71 per 10,000.

DISEASES OF THE NERVOUS SYSTEM.

It has been asserted that coincident with the advance of civilisation there has been an increase in diseases of the nerves and brain, but from the figures in the following table showing for each State the number of deaths, and the death-rates, since 1870, it will be seen that such has not been the case. Moreover, it has been ascertained that deaths from apoplexy and convulsions in proportion to population are now less frequent than formerly. In 1900 the total deaths from diseases of the nerves and brain numbered 5,223, or at the rate of 11·58 per 10,000 living.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales	5,881	6,844	8,522	8,432	8,256	7,938
Victoria	6,503	7,029	7,414	8,585	7,852	7,382
Queensland	1,656	2,190	2,684	3,005	2,778	2,790
South Australia	2,068	2,249	2,645	2,177	2,127	2,086
Western Australia	*230	309	296	379	510	802
Tasmania	1,133	1,238	1,577	1,388	1,210	1,142
New Zealand	*1,850	2,614	3,244	3,320	3,528	3,842
Australasia .....	.....	22,473	26,382	27,286	26,261	25,982
DEATH-RATE per 10,000 living.						
New South Wales	21·56	20·67	20·23	16·28	13·76	12·10
Victoria	17·02	17·10	16·26	16·30	13·43	12·45
Queensland	23·09	21·42	19·93	16·63	13·40	11·95
South Australia	21·15	18·59	17·99	14·11	12·64	11·76
Western Australia	*22·17	22·09	18·79	18·16	15·32	10·29
Tasmania	21·99	22·75	25·78	20·25	16·03	13·80
New Zealand	*14·93	12·25	12·27	11·02	10·67	10·45
Australasia	18·61	18·02	17·59	15·42	13·13	11·87

* Four years, 1872-75.

A study of the table shows that the death-rate for diseases of the nervous system in Australasia has decreased by considerably more than one-third during the last twenty-five years, representing a gain of nearly 7 persons to the population in every 10,000 living. Amongst the various States the rates are now fairly even, only ranging from 10·29 in Western Australia to 13·80 in Tasmania. Until the last period the rate had been consistently lower in New Zealand than in any other State, while, since 1875, Tasmania has always had the highest rate.

DISEASES OF THE CIRCULATORY SYSTEM.

Diseases of the heart, which now command more attention than previously on account of their more frequent occurrence, and also on account of the better knowledge of the organ which now exists, were responsible in 1900 for 5,141 deaths, or 11·40 per 10,000 living. The following table shows the number of deaths and the death-rates in each State since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales	2,197	2,755	3,262	4,289	4,826	5,724
Victoria	3,138	3,666	4,453	6,198	7,365	8,056
Queensland	444	536	991	1,406	1,575	2,353
South Australia	649	934	1,180	1,359	1,605	1,995
Western Australia	*102	147	201	239	408	743
Tasmania	499	578	700	799	875	1,089
New Zealand	*795	1,422	1,762	2,284	2,767	3,824
Australasia .....	.....	10,088	12,549	16,574	19,421	23,789

DEATH-RATE per 10,000 living.

New South Wales	8·05	8·32	7·74	8·23	8·04	8·72
Victoria	8·21	8·92	9·77	11·77	12·60	13·59
Queensland	6·19	5·73	7·36	7·78	7·60	10·08
South Australia	6·64	7·72	8·03	8·81	9·53	11·24
Western Australia	*9·83	10·51	12·76	11·45	12·26	9·59
Tasmania	9·69	10·62	11·44	11·66	11·60	13·16
New Zealand	*6·42	6·66	6·67	7·58	8·37	10·40
Australasia	7·53	8·09	8·37	9·36	9·71	10·87

* Four years, 1872-75.

It will be seen that deaths from the diseases of the organs of circulation have steadily and rapidly increased during the last twenty-five years. It is questionable whether the increase shown is not partly due

to more skilful diagnosis, as many deaths formerly attributed to old age are now assigned to some more definite cause. The highest death-rates prevail in Victoria and Tasmania, and there is a wide range between the rates of these States and that of New South Wales, which is only 8·72 per 10,000 living.

DEATHS IN CHILDBIRTH.

Included under the heading of local diseases are diseases of parturition, which, together with puerperal fever, a septic disease of the zymotic group, comprise the causes of death of women in childbed. In 1900, deaths from these diseases averaged 1 in every 190 births, which differs slightly from the ratio to confinements, as some births are multiple. The table below gives the number of deaths from these diseases in each State since 1872, and the deaths per 1,000 births, the usual method of stating the rate :—

State.	1873-77.	1878-82.	1883-87.	1888-92.	1893-97.	1898-1900.
NUMBER of Deaths.						
New South Wales	*448	555	833	824	1,336	798
Victoria	997	899	895	916	943	419
Queensland	189	244	311	368	317	188
South Australia	208	255	241	217	263	145
Western Australia	32	27	31	25	58	92
Tasmania	123	74	88	88	106	75
New Zealand.....	367	435	582	464	459	252
Australasia .....	.....	2,489	2,981	2,902	3,482	1,969
DEATH-RATE per 1,000 Births.						
New South Wales	*6·43	3·99	4·79	4·24	6·96	7·26
Victoria	7·42	6·74	5·96	4·96	5·61	4·56
Queensland	5·75	6·07	5·33	5·00	4·43	4·41
South Australia	5·32	5·00	4·22	4·06	5·13	5·28
Western Australia	7·48	5·54	4·86	3·01	4·32	5·90
Tasmania	7·88	3·94	3·85	3·62	4·39	5·31
New Zealand.....	5·13	4·68	5·99	5·06	4·96	4·40
Australasia .....	.....	5·18	5·27	4·60	5·68	5·49

* 1875-77.

The rate showed a tendency to decline up till 1893, since when it has risen. The statistics presented above, however, are not absolutely to be relied upon, for the reason that medical attendants do not take sufficient care when furnishing the certificate required of them by law to state the real cause of death; for instance, it is believed that the word *puerperal* is omitted in many cases, especially of pyæmia and

septicæmia where death occurred in childbirth. It is absurd to suppose, as the rates indicate, that there is a greater degree of risk attached to childbirth in New South Wales than in the other states, the only assurance that can be given being that since 1890 the figures for New South Wales are absolutely correct.

DEATHS FROM VIOLENCE.

Deaths by violence in 1900 numbered 4,013, or at the rate of 8·90 per 10,000 living. Of these, more than 83 per cent. were the results of accidents or negligence, and more than 12 per cent. were due to suicide, the latter being more fully dealt with in the chapter "Social Condition."

ACCIDENTS.

The total number of persons who died in 1900 from accidents was 3,358, or 7·45 per 10,000 living. The following table shows the number of deaths in each State from this cause, and the death-rates since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
NUMBER of Deaths.						
New South Wales	2,982	3,569	4,174	4,542	4,520	4,852
Victoria	3,908	3,539	3,662	4,612	4,262	4,016
Queensland	1,134	1,389	1,874	2,639	2,349	2,681
South Australia	610	877	919	1,038	912	1,141
Western Australia	*106	184	184	277	400	1,000
Tasmania	492	497	441	551	500	583
New Zealand.....	*1,259	2,200	2,216	2,369	2,494	2,415
Australasia .....	.....	12,255	13,470	16,028	15,437	16,688

DEATH-RATE per 10,000 living.

New South Wales	10·93	10·78	9·91	8·77	7·53	7·39
Victoria	10·23	8·61	8·03	8·76	7·29	6·77
Queensland	15·81	13·59	13·91	14·60	11·33	11·49
South Australia	6·24	7·25	6·25	6·73	5·42	6·43
Western Australia	*10·22	13·16	11·68	13·28	12·02	12·83
Tasmania	9·55	9·13	7·21	8·04	6·62	7·04
New Zealand.....	*10·16	10·31	8·38	7·86	7·55	6·57
Australasia	10·10	9·83	8·98	9·06	7·72	7·63

* Four years, 1872-75.

The death-rates from accidents have fallen considerably, as the table shows, but they are still by no means low, and none of the States

exhibits so small a rate as that of England and Wales, viz., 5·9 per 10,000 living. Western Australia and Queensland, which have the most scattered populations, show the largest rates, while South Australia, where accidents seem always to have been less frequent than in the other States, shows the lowest rate. The most common accidents appear to be fractures, contusions, and drowning, the last mentioned causing a large number of deaths in Queensland every year, the high rate during 1886-90 in that State being due to the great number of people (340) who were drowned in 1890.

MARRIAGES.

The number of marriages and the marriage-rate per thousand of the population for each State during the year 1900 are shown below :—

State.	Marriages.	Marriage-rate.
New South Wales	10,538	7·68
Victoria	8,406	6·99
Queensland	3,341	6·62
South Australia	2,309	6·36
Western Australia	1,821	9·71
Tasmania	1,338	7·71
Commonwealth	27,753	7·30
New Zealand	6,095	7·82
Australasia	33,848	7·39

During 1900 the marriage-rate of Australasia increased from 7·06 to 7·39 per thousand, while in each of the States it was higher than the average for the preceding ten years, and this may be looked upon as a sure sign of returning prosperity.

The number of marriages in each state and in the whole of Australasia, in quinquennial periods from 1861 to 1900, was as follows :—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales ..	16,920	18,271	21,210	25,904	35,737	38,671	39,924	45,909
Victoria	22,237	22,902	24,368	25,410	33,589	42,832	37,717	39,245
Queensland	3,689	4,648	6,276	7,466	11,632	15,271	13,526	15,479
South Australia ..	6,226	6,435	7,472	10,682	12,379	10,334	10,656	10,942
Western Australia ..	765	825	835	978	1,112	1,495	2,332	7,902
Tasmania	3,340	3,143	3,290	4,087	5,005	4,796	4,524	5,598
Commonwealth ..	53,177	56,227	63,451	74,533	99,454	113,399	108,709	125,075
New Zealand	7,240	9,955	12,050	16,220	18,102	18,097	20,210	26,418
Australasia	60,417	66,182	75,501	90,753	117,556	131,496	128,919	151,493

The average marriage-rates for each State during the same periods are given below. The table shows the ratio of marriages to population; to ascertain the ratio of persons married it is necessary to double the figures:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales ..	9.04	8.04	7.77	7.82	8.46	7.47	6.64	7.00
Victoria	7.81	6.86	6.38	6.03	7.37	8.13	6.48	6.62
Queensland	13.51	9.02	8.75	7.30	8.64	8.45	6.53	6.63
South Australia	9.02	7.45	7.04	8.83	8.42	6.70	6.29	6.17
Western Australia ..	8.92	7.53	6.48	6.99	7.06	7.16	7.01	10.13
Tasmania	7.30	6.35	6.39	7.51	8.18	7.00	5.87	6.76
Commonwealth ..	8.54	7.36	7.12	7.21	8.02	7.66	6.50	6.87
New Zealand	10.39	9.00	8.05	7.60	6.85	6.00	6.11	7.18
Australasia	8.73	7.61	7.27	7.28	7.84	7.43	6.44	6.92

During the five years ended 1895 the marriage-rate fell considerably in Australasia. With the exception of New Zealand it was lower in every State than during the preceding quinquennial period, and lower everywhere than during the five years 1881-85, while during the last five years the rate rose again in every State except South Australia. This is another proof of the truth of the oft-repeated statement that commercial depression always exerts an adverse influence on the marriage-rate. The abnormal rise in the case of Western Australia is what might be expected from the large number of men whom the industrial activity in that State has placed in a position to take upon their shoulders the responsibility of a household.

As marriage is the great institution by which the birth-rate is controlled, and through which the population is regulated, it will not be out of place to consider the fertility of marriages in Australasia. The two chief elements influencing this are the age at marriage of the parents, especially of the mother, and the duration of married life. The mean age at marriage of bridegrooms in Australasia is a little over 29 years, and of brides about 24.5 years, and it is known that these ages have been increasing for some years past. As regards, the duration of married life, it is not possible to speak with certainty; all that is known is that the length of lifetime of married persons surpasses that of the unmarried—both male and female. The fertility of marriages is reckoned by the number of children to each marriage; and as the difference between the mean age of mothers and the mean age of brides in Australia is between 5 and 6 years, the average number of children to a marriage has been computed for the following

table by dividing the number of legitimate births during each quinquennium by the number of marriages during the preceding five years :—

NUMBER of Children to a Marriage.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	5.59	5.76	5.87	5.01	4.80	4.28
Victoria	5.77	5.20	5.26	4.88	3.99	3.89
Queensland	6.12	5.75	6.29	5.76	4.54	4.93
South Australia	5.53	6.66	5.19	4.19	4.97	4.25
Western Australia	4.72	5.32	5.35	6.62	.....	.....
Tasmania	4.68	5.01	5.01	4.56	4.93	4.88
Commonwealth.....	5.63	5.53	5.55	4.95	4.48	4.25
New Zealand.....	5.94	7.15	5.77	5.03	4.86	4.48
Australasia	5.68	5.79	5.59	4.96	4.53	4.29

Western Australia has been excluded from the table during the latter years, as the sudden influx of population since the discovery of the gold-fields has unduly increased the number of births to be divided by the number of marriages of the preceding five years, and would have the effect of making the marriages of that State appear more fertile than they really are. Of course, the above means of determining the fecundity of marriages is only to be used in the absence of more direct methods; still the results cannot be very far from the truth, as is proved by the case of New South Wales, where accurate computations have shown the number of children to be expected from the present marriages to be only 4.04. The table shows that, on the whole, the fertility of marriages has been steadily declining since 1885, which bears out what has been before remarked in dealing with this question.

Particulars relative to divorce in Australasia will be found in the chapter headed "Social Condition."

POPULATION.

ON the 26th January, 1788, Captain Phillip arrived in Sydney Harbour, bringing with him an establishment of about 1,030 people all told. Settlement soon spread from the parent colony, first to Tasmania in 1803, and afterwards to other parts of the continent and to New Zealand. At the census of 1901 the population of Australasia, exclusive of aborigines and Maoris, was 4,544,434, distributed as follows:—

State.	Males.	Females.	Total.
New South Wales	710,005	644,841	1,354,846
Victoria	603,720	597,350	1,201,070
Queensland	276,230	220,366	496,596
South Australia	184,422	178,182	362,604
Western Australia	112,875	71,249	184,124
Tasmania	89,624	82,851	172,475
Commonwealth	1,976,876	1,794,839	3,771,715
New Zealand	405,992	366,727	772,719
Australasia	2,382,868	2,161,566	4,544,434

If to these numbers, which principally comprise the people of European descent, there be added an estimated population of 153,000 Australian aborigines in an uncivilised state in Western Australia, South Australia, and Queensland, and of 43,000 Maoris in New Zealand, the total population of Australasia at the date of the census would be about 4,740,000.

The growth of the population of Australasia from the date of the first settlement is shown in the following table. An official enumeration of the people was made in most of the years quoted:—

Year.	Commonwealth.		New Zealand.		Australasia.	
	Population.	Annual Increase per cent.	Population.	Annual Increase per cent.	Population.	Annual Increase per cent.
1788	1,030	.....	.....	.....	1,030	.....
1801	6,508	15·25	.....	.....	6,508	15·25
1811	11,525	5·88	.....	.....	11,525	5·88
1821	35,610	11·94	.....	.....	35,610	11·94
1831	79,306	8·34	.....	.....	79,306	8·34
1841	206,095	10·02	5,000	.....	211,095	10·28
1851	403,889	6·96	26,707	18·24	430,596	7·39
1861	1,153,973	11·07	99,021	14·00	1,252,994	11·27
1871	1,668,377	3·75	256,393	9·98	1,924,770	4·39
1881	2,252,617	3·05	489,933	6·69	2,742,550	3·60
1891	3,183,237	3·52	626,658	2·49	3,809,895	3·34
1901	3,771,715	1·71	772,719	2·12	4,544,434	1·78

The high rate of increase prior to 1831 arose from the small number of people on which the increase was calculated; while between 1831 and 1841, it was due to the policy of State-aided immigration which was then in vogue. The discovery of gold, which proved a strong incentive towards emigration to Australia, accounted for the high rate during the period from 1851 to 1861. The rate of increase since 1861 shows a regular decline during each decennial period, and from 1891 to 1901 the annual increase was only 1.78 per cent, which is but slightly in excess of the natural increase due to the excess of births over deaths.

The chief factor determining the increase of population in Australia prior to 1860 was immigration, and until recent years the States of Queensland and Western Australia gained more largely from this source than from births; but taking the whole period of forty-one years from 1861 to 1901 embraced in the following table, the two elements of increase compare as follows:—

Arrivals from abroad in excess of departures.....	780,895
Births in excess of deaths	1,910,392

The population of each State (exclusive of aborigines, a few in New South Wales and Victoria excepted) at the last five census periods, and at the end of 1901, is shown below:—

State.	1861.	1871.	1881.	1891.	1901.	31st Dec., 1901.
New South Wales...	350,860	503,981	751,468	1,132,234	1,354,846	1,379,700
Victoria	540,322	731,528	862,346	1,140,405	1,201,070	1,208,710
Queensland	30,059	120,104	213,525	393,718	496,596	510,520
South Australia ...	126,830	185,626	279,865	320,431	362,604	364,800
Western Australia..	15,691	25,353	29,708	49,782	184,124	194,890
Tasmania	90,211	101,785	115,705	146,667	172,475	174,230
Commonwealth	1,153,973	1,668,377	2,252,617	3,183,237	3,771,715	3,832,850
New Zealand.....	99,021	256,393	489,933	626,658	772,719	787,660
Australasia ...	1,252,994	1,924,770	2,742,550	3,809,895	4,544,434	4,620,510

In order to show the great differences in the growth of the population of the individual States during the last ten years, the appended table has been prepared, giving the population at the end of each year since 1892.

Year.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Austral- asia.
1892	1,191,790	1,168,890	409,040	333,860	58,670	150,380	650,430	3,963,060
1893	1,214,550	1,170,450	417,970	343,050	65,060	150,530	672,260	4,039,870
1894	1,239,250	1,182,630	428,540	347,220	82,070	152,600	686,130	4,118,440
1895	1,262,270	1,186,300	441,110	350,810	101,240	154,930	698,710	4,195,370
1896	1,278,970	1,180,710	450,300	351,600	137,950	150,280	714,160	4,272,970
1897	1,301,780	1,183,090	400,430	352,370	161,920	163,870	729,090	4,352,520
1898	1,323,139	1,183,370	471,510	355,210	168,130	168,320	743,460	4,413,130
1899	1,344,680	1,189,670	482,400	359,290	171,030	172,220	756,500	4,475,190
1900	1,364,090	1,197,890	498,250	361,350	180,150	172,980	770,680	4,545,390
1901	1,379,700	1,208,710	510,520	364,800	194,800	174,230	787,660	4,620,510

The total populations, at the end of each of the last ten years, of the six States which form the Australian Commonwealth are given below :—

1892	3,312,630	1897	3,623,460
1893	3,367,610	1898	3,669,670
1894	3,432,310	1899	3,718,690
1895	3,496,660	1900	3,774,710
1896	3,558,810	1901	3,832,850

The populations quoted for the various States for the years 1892 to 1901 differ slightly from estimates previously published, a slight change having been made in the distribution in order to bring them more into line with the census figures. The corrections are slight, as the figures had been previously adjusted on a basis agreed upon at a conference of Statisticians, held at Sydney in February, 1901; it was ascertained that the allowance for unrecorded departures had been insufficient, and a recomputation was, therefore, necessary.

The following table gives the total increase in each State during the forty-one years, 1861–1901, distinguishing the natural increase arising from the excess of births over deaths from the increase due to the excess of arrivals over departures :—

State.	Excess of—		Total Increase.
	Births over Deaths.	Immigration over Emigration.	
New South Wales.....	702,646	328,508	1,031,154
Victoria	645,082	25,781	670,863
Queensland	217,678	264,786	482,464
South Australia	223,393	17,295	240,688
Western Australia.....	34,107	145,556	179,663
Tasmania.....	87,486	←) 1,031	86,455
Commonwealth	1,910,392	780,895	2,691,287
New Zealand	415,549	292,400	707,949
Australasia	2,325,941	1,073,295	3,399,236

(—) Excess of Emigration over Immigration.

The information conveyed by the above figures is important, as illustrating, not only the movement of population but also the effect upon immigration, of local influences, such as the attraction of liberal land laws, the fertility of the soil, the permanence of employment, and the policy of assisted immigration. But a bare statement of the gross

increase to each state from immigration is apt to be misleading, since the original density of population must be deemed a factor affecting the current of immigration. The following figures show the density of population per square mile in each State at the time of taking the census on the last five occasions and also at the close of 1901 :—

State.	1861.	1871.	1881.	1891.	1901.	31st Dec., 1901.
New South Wales.....	1·13	1·62	2·42	3·65	4·36	4·44
Victoria	6·15	8·32	9·81	12·98	13·66	13·75
Queensland	0·04	0·18	0·32	0·59	0·74	0·76
South Australia	0·14	0·20	0·31	0·35	0·40	0·40
Western Australia.....	0·02	0·03	0·03	0·05	0·19	0·20
Tasmania	3·44	3·88	4·41	5·59	6·57	6·65
Commonwealth	0·39	0·56	0·76	1·07	1·27	1·29
New Zealand	0·95	2·45	4·69	6·00	7·39	7·54
Australasia	0·41	0·63	0·89	1·24	1·48	1·50

At the close of the year 1901 the population of Australasia, including the native races, only reached a density of 1·54 persons per square mile—a rate which is far below that of any other civilised country ; and excluding Australian aborigines and Maoris, the density was only 1·50 per square mile. But a comparison of the density of population in Australasia with that in older countries of the world is of little practical use, beyond affording some indication of the future of these States when their population shall have reached the proportions to be found in the old world. The latest authoritative statements give the density of the populations of the great divisions of the world as follows :—

Continent.	Area in square Miles.	Population.	Persons per square Mile.
Europe	3,742,000	372,925,000	99·66
Asia	17,101,000	830,558,000	48·57
Africa	11,510,000	170,050,000	14·77
America	14,805,000	132,718,000	8·96
Australasia and Pacific Islands.	3,457,000	5,907,000	1·71
Polar Regions.....	1,732,000	82,000	0·05
The World	52,347,000	1,512,240,000	28·89

From the earliest years of settlement there was a steady if not powerful stream of immigration into these States; but in 1851, memorable for the finding of gold, the current was swollen by thousands

of men in the prime of life who were attracted to the shores of Australia by the hope of speedily acquiring wealth. By far the greater number of these new arrivals settled in Victoria, which had just been separated from New South Wales, and for some years afterwards Victoria had an unprecedented addition to its population. The vast changes which took place will be evident when it is stated that in 1850, just prior to the gold rush, the population of the northern and southern portions of New South Wales was:—

Port Phillip (afterwards Victoria)	76,162
Remaining portion of the Colony	189,341

While five years afterwards the population of each was:—

Victoria	364,324
New South Wales	277,579

Victoria enjoyed the advantage in population and increased its lead yearly until 1871, when its inhabitants exceeded in number those of New South Wales by no less than 229,654. But from that time almost every year showed a nearer approach in the numbers of the inhabitants of the two States, until at the census of 1891 Victoria had a lead of only 8,171, while at the end of that year New South Wales had the greater population by about 5,800. By the end of 1901 the parent State had increased its lead to nearly 171,000. In considering the question of increase of population, attention should be paid to the density as well as to the actual number of the population; in regard to the case in point, the density of Victoria is 13·75 per square mile, and in New South Wales only 4·44.

New Zealand and Queensland, and Western Australia also in recent years, owe much of their remarkable progress to the discovery of gold. In New Zealand the gold fever broke out in 1861, when the population numbered only 99,021, and the period of its activity extended over many years. At the end of 1901 the population had reached 787,660 souls, exclusive of Maoris, or almost eight times that of 1861. In Queensland the attractive force of the goldfields was exerted at a later date, and was a powerful factor in stimulating the growth of population in that State; while the development of Western Australia during the past eleven years has been wholly due to the gold deposits discovered there, the population increasing from the small number of 46,290 at the end of 1890 to 194,890 at the end of 1901. The great rush of a few years ago has moderated considerably, but the net increase by excess of immigration over emigration during 1901 amounted, nevertheless, to 11,541—a much higher gain than in any other State; and in view of the vast mineral possibilities of the State it will not be surprising if fresh discoveries should at any time be made, and immigration on an extensive scale again set in.

Much of the increase of population, especially in New South Wales, Victoria, Queensland, and New Zealand, was due to the State policy of assisted immigration. The following table shows the number of all

immigrants introduced into Australasia either wholly or partly at the expense of the State, up to the end of 1901 :—

State.	Prior to 1881.	1881 to 1901.	Total.
New South Wales	177,234	34,738	211,972
Victoria	140,102	.....	140,102
Queensland	52,399	116,317	168,716
South Australia	88,050	7,298	95,348
Western Australia.....	889	6,243	7,132
Tasmania.....	18,965	2,734	21,699
Commonwealth	477,639	167,330	644,969
New Zealand	*100,920	14,658	*115,578
Australasia	578,559	181,988	760,547

* Exclusive of a number prior to 1870, of which no record can be found.

Queensland and Western Australia are the only States that at present assist immigrants ; New South Wales ceased to do so in 1888, Victoria practically ceased assisted immigration in 1873, South Australia in 1886, Tasmania and New Zealand in 1891.

The following table shows the increase of population by excess of immigration over emigration for the five decennial periods ended 1900, and for the year 1901 :—

State.	1851-60.	1861-70.	1871-80.	1881-90.	1891-1900.	1901.
New South Wales	123,097	45,539	109,341	164,205	16,167	6,744 ^c
Victoria	398,753	38,935	12,672*	112,097	108,795*	3,784*
Queensland	†	68,191	73,849	101,525	17,247	3,974
South Australia	33,024	17,949	34,569	17,004*	16,623 ^c	1,596 ^c
Western Australia	7,187	5,891	638*	10,170	118,592	11,541
Tasmania	6,767	3,228*	1,427*	5,572	73*	1,875 ^c
Commonwealth ..	568,828	173,277	203,022	376,565	26,515	1,516
New Zealand	44,742	118,637	132,976	9,453	27,211	4,123
Australasia	613,570	291,914	335,998	386,018	53,726	5,639

* Denotes excess of emigrants. † Included in New South Wales figures.

It will be seen that Australasia has gained but little by excess of immigration over emigration during the past eleven years. For the period 1881-90 the gain from this source was 386,018 ; but in the ensuing period it fell to 53,726, and in three of the States there was an actual loss by emigration. Of all the States, Western Australia alone seems to attract intending emigrants from other countries, and but for excess of arrivals shown by that State during 1901, Australasia would

again have suffered a net loss by emigration as in the two preceding years.

If the results for the last eleven years be compared, it will be seen that there was an exodus both from Victoria and South Australia, the former losing 112,579 persons, and the latter 18,219, by excess of emigration, while Tasmania also lost 1,948 persons from the same source. The gain in the other States was very limited, with the exception of Western Australia, where there was a net increase of 130,133 persons; the remaining States showed an increase of only 67,978 persons. The following table shows the increase of population by excess of arrivals over departures in each State for the twenty-two years ending 1901 :—

Year.	New South Wales.	Victoria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	Common-wealth.	New Zealand.	Austral-asia.
1881	16,673	4,976	*4,009	12,055	401	1,166	31,262	1,970	33,232
1882	16,034	6,563	17,043	*3,679	94	587	36,642	2,375	39,017
1883	27,278	6,597	34,371	4,266	436	689	73,637	8,657	82,294
1884	23,944	8,525	18,620	2,750	871	816	53,051	7,724	60,775
1885	24,829	9,027	7,056	*9,280	1,628	*388	32,872	2,757	35,629
1886	18,073	15,436	7,695	*8,819	3,738	*302	35,821	*199	35,622
1887	7,202	15,445	11,527	*3,008	2,049	1,797	35,012	211	35,223
1888	6,633	25,757	5,651	*8,325	*1,196	*383	28,137	*10,548	17,589
1889	8,241	9,794	4,340	*2,346	578	1,172	21,779	*700	21,079
1890	15,298	9,977	*769	1,857	1,571	418	23,352	*2,794	25,558
1891	17,158	5,256	*2,375	*1,878	6,073	3,303	27,537	*3,745	23,792
1892	3,969	*11,490	*727	2,981	4,473	*3,846	*4,640	4,953	313
1893	*1,560	*12,484	231	3,041	5,223	*2,995	*8,544	10,410	1,866
1894	919	*12,648	1,891	*2,288	15,968	*844	2,998	2,260	5,258
1895	*840	*14,400	2,848	*3,014	18,401	*649	2,346	897	3,243
1896	*3,967	*22,054	818	*5,175	35,948	1,648	7,218	3,270	10,488
1897	*173	*13,804	1,240	*4,748	22,592	1,853	6,960	2,758	9,718
1898	1,789	*11,197	3,390	*1,398	3,958	2,229	*1,229	2,689	1,460
1899	390	*8,130	3,135	*864	50	1,430	*3,989	1,885	*2,104
1900	*1,518	*7,844	6,796	*3,280	5,906	*2,202	*2,142	1,834	*308
1901	*6,744	*3,734	3,974	*1,596	11,541	*1,875	1,516	4,123	5,639

* Denotes excess of departures.

The great bulk of the movement of population within recent years, shown above, is only interstate; and it is evident that immigrants are not attracted to these shores from abroad, the long sea voyage and cost of passage probably being the chief deterring reasons.

AGES OF THE PEOPLE.

The ages of the people, as ascertained at the census of 1901, were as shown by the following statement, in which the population has been arranged in five-year groups. There is the same tendency in Australia as in other countries for the people to state their ages at the nearest decennial or quinquennial period, hence it is necessary to adjust the

census figures before they can be stated under individual ages. The grouping in five-year periods, as indicated below, although not entirely satisfactory, is sufficiently accurate for practical purposes. The following table shows the ages of males, exclusive of Aborigines:—

Males.

Age Group.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.
Under 5	80,308	66,786	31,307	20,260	10,441	10,702	219,804	44,324
5 and under 10 ..	84,189	72,051	31,908	22,756	8,891	11,160	230,955	43,314
10 " 15 ..	81,582	67,374	29,005	22,193	7,505	10,649	218,308	43,100
15 " 20 ..	70,423	58,882	23,684	20,007	7,088	9,388	189,472	42,456
20 " 21 ..	12,754	10,428	4,830	3,618	1,957	1,764	35,351	8,559
21 " 25 ..	49,694	40,144	19,760	13,023	9,884	6,497	139,002	32,637
25 " 30 ..	56,273	45,461	23,634	13,771	15,822	7,276	162,237	35,307
30 " 35 ..	52,596	46,024	22,639	12,945	14,845	6,422	156,071	29,694
35 " 40 ..	52,335	46,718	22,083	12,013	12,441	6,262	151,852	24,301
40 " 45 ..	44,930	37,104	18,419	11,371	8,722	5,273	125,819	21,589
45 " 50 ..	33,338	24,130	13,046	9,033	5,220	3,760	88,527	19,134
50 " 55 ..	25,615	15,336	10,187	6,767	3,453	2,797	67,155	15,413
55 " 60 ..	19,634	13,339	7,981	5,386	2,311	1,996	52,597	13,711
60 " 65 ..	16,733	14,970	6,783	3,992	1,767	1,729	45,974	12,803
65 " 70 ..	13,005	16,080	4,131	2,872	1,101	1,292	38,481	10,160
70 " 75 ..	7,772	11,772	2,230	2,282	692	1,123	25,871	5,348
75 " 80 ..	3,578	5,738	959	1,290	290	756	12,611	2,285
80 " 85 ..	1,853	2,452	453	646	140	459	6,033	1,050
85 and over	800	775	143	247	36	199	2,200	375
Unspecified (children)	277	502	5	....	8	....	792	24
Unspecified (adults)	2,286	2,054	3,043	....	261	120	7,764	403
Total	710,005	603,720	276,230	184,422	112,375	89,624	1,976,376	405,992

In the next table similar information is given regarding females.

Females.

Age Group.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.
Under 5	78,553	65,162	30,687	19,817	10,234	10,163	214,616	42,482
5 and under 10 ..	81,940	70,495	30,947	22,612	8,856	10,864	225,720	42,422
10 " 15 ..	80,097	66,618	28,557	21,599	7,320	10,487	214,678	42,125
15 " 20 ..	70,736	59,704	22,792	20,162	5,849	9,063	188,306	42,358
20 " 21 ..	13,457	11,622	4,368	3,727	1,278	1,836	36,238	8,583
21 " 25 ..	51,361	45,987	16,818	13,813	6,001	6,313	140,293	33,377
25 " 30 ..	56,043	52,818	18,284	14,253	8,677	6,561	156,636	33,233
30 " 35 ..	46,697	43,160	15,958	12,368	7,298	5,576	136,057	27,272
35 " 40 ..	41,593	43,394	13,705	11,213	5,322	5,217	120,444	21,217
40 " 45 ..	33,436	33,554	10,710	9,690	3,391	4,467	95,154	17,347
45 " 50 ..	24,001	21,900	7,402	7,277	2,151	3,094	65,725	13,997
50 " 55 ..	19,327	17,590	6,042	5,573	1,673	2,379	52,589	11,991
55 " 60 ..	15,376	15,157	4,918	4,545	1,177	1,885	43,058	9,963
60 " 65 ..	12,192	14,299	3,957	4,026	908	1,725	37,107	8,017
65 " 70 ..	9,237	13,840	2,400	3,051	570	1,321	30,419	6,028
70 " 75 ..	5,202	8,949	1,382	2,280	279	910	18,402	3,236
75 " 80 ..	2,844	4,230	705	1,262	133	514	9,688	1,679
80 " 85 ..	1,674	2,064	343	698	56	302	5,037	852
85 and over	673	751	127	310	25	147	2,038	340
Unspecified (children)	44	372	11	....	15	....	442	15
Unspecified (adults)	447	1,384	253	....	31	27	2,142	193
Total	644,841	597,360	220,366	173,182	71,249	82,851	1,794,339	366,727

In the following table the ages of the total population, exclusive of aborigines are shown.

TOTAL POPULATION.								
Age Group.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.
Under 5	158,861	181,948	61,094	40,077	20,675	20,865	434,420	86,806
5 and under 10 ..	166,135	142,546	62,855	45,308	17,747	22,024	456,675	85,736
10 " 15 ..	161,679	183,992	57,562	43,702	14,825	21,136	432,986	85,225
15 " 20 ..	141,159	118,586	46,476	40,169	12,937	18,451	377,778	84,814
20 " 21 ..	26,211	22,050	9,193	7,345	3,235	3,600	71,639	17,142
21 " 25 ..	101,055	86,131	36,578	26,836	15,885	12,810	279,295	66,014
25 " 30 ..	112,316	98,279	41,918	28,024	24,499	18,837	318,873	63,540
30 " 35 ..	99,293	94,784	38,597	25,313	22,143	11,993	292,128	56,966
35 " 40 ..	93,928	90,112	35,788	23,226	17,763	11,479	272,296	45,518
40 " 45 ..	78,366	70,658	29,129	20,967	12,113	9,740	220,973	38,936
45 " 50 ..	57,339	45,930	20,448	16,310	7,371	6,854	154,252	33,131
50 " 55 ..	44,942	35,926	16,229	12,340	5,131	5,176	119,744	27,404
55 " 60 ..	35,010	30,496	12,899	9,831	3,488	3,851	95,655	23,674
60 " 65 ..	28,925	29,269	10,740	8,013	2,675	3,454	83,081	20,320
65 " 70 ..	22,242	29,920	6,531	5,923	1,671	2,613	68,900	16,188
70 " 75 ..	12,974	20,121	3,612	4,562	971	2,033	44,273	8,584
75 " 80 ..	6,422	9,963	1,664	2,552	423	1,270	22,299	3,964
80 " 85 ..	3,457	4,516	796	1,344	196	761	11,070	1,902
85 and over	1,478	1,526	270	557	61	346	4,238	715
Unspecified (children)	321	874	16	....	23	....	1,234	39
Unspecified (adults) ..	2,733	3,433	3,296	....	292	147	9,906	601
Total	1,354,846	1,201,070	496,596	362,604	184,124	172,475	3,771,715	772,719

These figures show remarkable differences in the constitution of the population of the various States; these differences, however, will be more readily apprehended by considering the population in the conventional groups of dependent and supporting ages. The figures, therefore, have been arranged so as to show the number of males at the dependent ages from infancy to 15 years; at the supporting ages, from 15 to 65; in the old-age group, from 65 years upwards; and at the military ages, from 20 to 40 years:—

State.	Dependent Ages, up to 15 years.		Supporting Ages, 15 and under 65.		Old Ages, 65 and over.		Military Ages, 20 to 40 years.	
	Number.	Proportion of total male population.	Number.	Proportion of total male population.	Number.	Proportion of total male population.	Number.	Proportion of total male population.
New South Wales	246,079	34.79	434,325	61.30	27,098	3.82	223,652	31.61
Victoria	206,211	34.30	358,136	59.57	36,817	6.13	189,375	31.50
Queensland	92,220	33.76	173,046	63.34	7,910	2.90	92,946	34.02
South Australia	65,209	35.36	111,876	60.66	7,337	3.98	55,370	30.02
Western Australia	26,837	23.33	83,510	74.16	2,259	2.01	54,949	48.80
Tasmania	32,511	36.32	53,104	59.40	3,829	4.28	28,221	31.53
Commonwealth	669,067	33.99	1,214,057	61.68	85,196	4.33	644,513	32.74
New Zealand	130,738	32.24	255,604	63.02	19,218	4.74	130,498	32.13
Australasia	799,805	33.69	1,469,661	61.91	104,414	4.40	775,011	32.65

It will be seen that the age constitution of the male population is much the same in all the States with the exception of Western Australia. In the latter State the males in the supporting ages represent 74·16 per cent. of the male population, while the average for the remaining States is only 60·92 per cent.; the male dependents in Western Australia constitute 23·83 per cent., and those who have reached old age only 2·01 per cent. of the total male population. In the other States there is no marked difference in the various groups, excepting that Victoria shows a much larger proportion of aged males than any other State. The proportion of population in the dependent groups ranges from 32·44 per cent. in New Zealand to 36·32 per cent. in Tasmania; the variation is a trifle greater in the supporting ages, the proportion for Tasmania being 59·40 per cent. as against 63·34 per cent. in Queensland. In the old age group there is a wider margin, the proportions ranging from 2·90 per cent. in Queensland to 6·13 per cent. in Victoria. Western Australia and Queensland show the greatest proportions of males at the military ages, the other States being remarkably even. On the 31st March, 1901, there were 644,500 men in the Commonwealth who could be called upon to perform military service, and 130,500 in New Zealand.

The female population of Australasia may be conveniently grouped in four divisions, namely, dependent ages from infancy to 15 years; reproductive ages, from 15 to 45; mature ages from 45 and under 65; and old ages from 65 years. The numbers of each class in the different States at the time of the census are shown below :—

State.	Dependent Ages, up to 15 years.		Reproductive Ages, 15 and under 45.		Ages of 45 and under 65.		Old Ages, 65 years and over.	
	Number.	Proportion of total female population.	Number.	Proportion of total female population.	Number.	Proportion of total female population.	Number.	Proportion of total female population.
		per cent.		per cent.		per cent.		per cent.
New South Wales	240,506	37·34	313,323	48·63	70,806	11·00	19,535	3·03
Victoria	202,275	33·96	295,239	49·57	68,846	11·56	29,234	4·91
Queensland	90,191	40·08	102,635	46·63	22,319	10·14	4,957	2·25
South Australia	64,028	35·93	85,132	47·78	21,421	12·02	7,601	4·27
Western Australia	26,410	37·09	37,316	53·11	5,914	8·31	1,063	1·49
Tasmania	31,514	38·05	39,033	47·13	9,083	10·97	3,194	3·85
Commonwealth	655,014	36·55	873,178	48·72	198,479	11·07	65,584	3·66
New Zealand	127,029	34·66	183,387	50·03	43,968	12·00	12,135	3·31
Australasia	782,043	36·23	1,056,565	48·94	242,447	11·23	77,710	3·60

The age constitution of the female population shows more general variation in the various States than that of the male population, but Western Australia does not differ from the other States in any marked degree. In the dependent group there is a considerable margin, for while in Victoria it comprises but 33·96 per cent. of the total female population, in Queensland it constitutes 40·98 per cent. In the reproductive ages Queensland has the smallest proportionate number, representing 46·63 per cent. of the population, as against 53·11 per cent. in Western Australia. The next age group embraces females aged 45 and under 65, and in Western Australia these comprise 8·31 per cent. only, as against 12·02 per cent. in South Australia. In the old age group Victoria has again the largest proportion with 4·91 per cent., while Western Australia only shows 1·49 per cent.

From a consideration of the two preceding tables it will be evident that in Western Australia a fairly large element of the male population consists of married men whose wives and families are living elsewhere, for while the number of males above the dependent age is 85,769, the females of corresponding ages number only 44,793. This is borne out by the information referring to the conjugal condition of the people of Australasia, which appears later on in this chapter.

As regards some of the States great changes have taken place in the age constitution of the population during the ten years from 1891 to 1901, and a notable feature is the decline in the proportionate number of dependents. This decline is general throughout Australasia, and when it is considered that 93 per cent. of the increase of population during the ten years was due to natural increase by excess of births over deaths, the decline in the birth rate is evidenced in a striking manner. The number of males and females in each of the conventional age groups at the census of 1891 is shown below:—

Males.

State.	Dependent Ages, up to 15 years.	Supporting Ages, 15 and under 65.	Old Ages, 65 and over.
New South Wales	217,991	373,346	16,666
Victoria	199,599	374,871	23,619
Queensland	74,180	145,960	3,639
South Australia	64,004	97,293	5,504
Western Australia.....	8,480	19,948	1,086
Tasmania.....	28,975	44,215	4,297
Commonwealth	593,229	1,055,633	54,811
New Zealand	126,531	197,979	8,367
Australasia	719,760	1,253,612	63,178

<i>Females.</i>				
State.	Dependent Ages, up to 15 years.	Reproductive Ages, 15 and under 45.	Ages of 45 years and under 65.	Old Ages, 65 years and over.
New South Wales.. ...	213,198	239,503	51,551	11,699
Victoria	195,315	262,512	68,172	15,752
Queensland	72,407	79,391	15,772	2,369
South Australia	62,174	68,796	17,536	5,124
Western Australia	8,249	9,148	1,921	375
Tasmania.....	28,299	30,568	7,745	2,429
Commonwealth ...	579,642	689,918	162,697	37,748
New Zealand	123,889	131,451	32,430	6,011
Australasia	703,531	821,369	195,127	43,759

Comparing the results obtained from these figures with those already arrived at in the preceding pages the proportion of population in the different groups at each census period was as shown below.

<i>Males.</i>						
State.	Under 15 years.		15 and under 65.		65 and over.	
	Per cent. of male population.		Per cent. of male population.		Per cent. of male population.	
	1891.	1901.	1891.	1901.	1891.	1901.
New South Wales	35·85	34·79	61·41	61·39	2·74	3·82
Victoria.....	33·37	34·30	62·68	59·57	3·95	6·13
Queensland	33·15	33·76	65·22	63·34	1·63	2·90
South Australia	38·37	35·36	58·33	60·66	3·30	3·98
Western Australia	28·73	23·83	67·59	74·16	3·63	2·01
Tasmania	37·39	36·32	57·06	59·40	5·55	4·28
Commonwealth	34·82	33·99	61·96	61·68	3·22	4·33
New Zealand	38·01	32·24	59·48	63·02	2·51	4·74
Australasia	35·34	33·69	61·56	61·91	3·10	4·40

There has been a decrease in the proportion of males at dependent ages in all the States with the exception of Victoria and Queensland. The largest decrease is shown in Western Australia where the proportion has fallen from 28·73 per cent. in 1891 to 23·83 per cent. in 1901. The changes were more general in the supporting ages, for while South Australia, Western Australia, Tasmania, and New Zealand show increases, the proportions in the other States decreased. In 1891 Western Australia had the highest proportionate population at supporting ages with 67·59 per cent., but in 1901 this had been increased to 74·16 per cent., a proportion greatly in advance of that for any other State. In regard to the population which has reached old age the

proportions in most of the States have increased, and Victoria with 6·13 per cent. maintains the position occupied in 1891 by Tasmania when 5·55 per cent. of the population of the latter State were aged 65 years and over.

The proportions of female populations in the various groups at the two periods under review were as follow :—

State.	Under 15 years.		15 and under 45.		45 and under 65.		65 and over.	
	Per cent. of female population.		Per cent. of female population.		Per cent. of female population.		Per cent. of Female population.	
	1891.	1901.	1891.	1901.	1891.	1901.	1891.	1901.
New South Wales	41·32	37·34	46·42	48·63	9·99	11·00	2·27	3·03
Victoria	36·05	33·96	48·46	49·57	12·58	11·56	2·91	4·91
Queensland	42·61	40·98	46·72	46·63	9·28	10·14	1·39	2·25
South Australia	40·47	35·93	44·78	47·78	11·41	12·02	3·34	4·27
Western Australia	41·89	37·09	46·45	53·11	9·76	8·31	1·90	1·49
Tasmania	40·99	38·05	44·27	47·13	11·22	10·97	3·52	3·85
Commonwealth	39·43	36·55	46·93	48·72	11·07	11·07	2·57	3·66
New Zealand	42·17	34·66	44·74	50·03	11·04	12·00	2·05	3·31
Australasia	39·89	36·23	46·57	48·94	11·06	11·23	2·48	3·60

The proportionate number of female dependents decreased in each of the States during the ten years, and the average for Australasia was only 36·23 per cent. in 1901 compared with 39·89 per cent. in 1891. In Queensland alone the proportion of women at reproductive ages shows a decline during the period; the greatest increase is shown in Western Australia, where the proportion is now much higher than in any other State. There are many changes in the proportions of female population in the various States at ages from 45 to 65, but the general average for Australasia is much the same, in fact the figures for the Commonwealth show exactly the same proportion as existed ten years ago. A general increase is noticeable in all the States regarding the number of females aged 65 and over, the only exception being Western Australia.

CENTRALISATION OF POPULATION.

One of the most notable problems in the progress of modern civilisation is the tendency of the population, everywhere exhibited in the chief countries of the world, to accumulate in great cities. Not only is this apparent in England, France, and other countries where the development of manufactures has brought about an entire change in the employments of the people, and has necessarily caused the aggregation of workers in towns, but it is seen also in the United States, the most favoured country for the agricultural labourer. It is noticed, too, that in all new countries there is a tendency for immigrants to locate themselves in and near the great cities, and Australia is no exception to the rule.

The progress of the chief cities of Australasia has been remarkable, and has no parallel among the cities of the old world. Even in America the rise of the great cities has been accompanied by a corresponding increase in the rural population, but in Australia, perhaps for the first time in history, was presented the spectacle of magnificent cities growing with marvellous rapidity, and embracing within their limits one-third of the population of the states of which they are the seat of government. The abnormal aggregation of the population into their capital cities is a most unfortunate element in the progress of these states, and as regards some of them is becoming more marked each year.

One satisfactory feature in connection with the growth of population in the chief cities of Australia is that such increase has not taken place through absorption of the rural population. In all new countries the tendency has been for immigrants to settle in or near the principal towns which mostly lie near the seaboard, and the fact that these States possess no good navigable waterways leading from the interior tends still further to the aggregation of population in the cities.

The increase in the population of the chief cities of Australasia and the estimated numbers of their inhabitants at the various census periods, are shown in the following table, which illustrates the remarkable progress referred to:—

City.	1841.	1851.	1861.	1871.	1881.	1891.	1901.
Sydney	29,973	53,924	95,789	137,776	224,939	383,283	487,900
Melbourne.....	4,479	23,143	139,916	206,780	282,947	490,896	494,129
Brisbane.....	*829	2,543	6,051	15,029	31,109	93,657	119,428
Adelaide.....	†8,480	‡14,577	18,303	42,744	103,864	133,252	162,261
Perth.....	.....	.....	.....	5,244	5,822	8,447	36,274
Hobart .....	.....	.....	19,449	19,092	21,118	33,450	34,626
Wellington....	.....	.....	.....	7,908	20,563	33,224	49,344

* In 1846. † In 1840. ‡ In 1850.

The aggregation of population is most marked in the cases of Melbourne and Adelaide, while Sydney is also conspicuous. The other cities are not so remarkable, the proportion of the people resident in Wellington especially being very small. The proportion of population in each capital compared with that of the whole State is shown below for the last four census periods.

City.	1871.	1881.	1891.	1901.
	per cent.	per cent.	per cent.	per cent.
Sydney	27·34	29·93	33·86	35·90
Melbourne	28·27	32·81	43·05	41·13
Brisbane	12·51	14·57	23·79	23·73
Adelaide	23·03	37·11	41·59	44·75
Perth	20·68	19·60	16·97	19·70
Hobart	18·76	18·25	22·81	20·08
Wellington.....	3·08	4·20	5·30	6·39

Although Wellington is the capital of New Zealand it is exceeded in population by Auckland, Christchurch and Dunedin. Still, even in the largest of these cities—Auckland—the population is not more than 8·70 per cent., and in the four together is only 29·25 per cent. of that of the whole colony.

The following is a list of the cities and most important towns of Australasia, with their populations on the 31st March, 1901. In all but the most important towns, where the suburbs are included, the populations quoted are those of the boroughs or municipal districts :—

City or Town.	Population.	City or Town.	Population.
New South Wales—		South Australia—	
Sydney	487,900	Adelaide	162,261
Newcastle	54,991	Port Adelaide.....	20,089
Broken Hill	27,500	Port Pirie.....	7,983
Parramatta	12,560	Mount Gambier	3,162
Goulburn	10,612		
Maitland	10,073	Western Australia—	
Bathurst	9,223	Perth	36,274
Orange	6,331	Fremantle	20,448
Albury	5,823	Kalgoorlie	6,652
Tamworth.....	5,799	Boulder	4,601
Lithgow	5,268	Coolgardie	4,249
Grafton.....	5,147	Albany	3,594
Wagga Wagga	5,108		
Victoria—		Tasmania—	
Melbourne	494,129	Hobart.....	34,626
Ballarat	43,823	Launceston	21,218
Bendigo.....	30,774	Queenstown.....	5,051
Geelong	18,239	Zeehan	5,014
Eaglehawk	8,367	Beaconsfield.....	2,658
Warrnambool	6,404		
Stawell	5,318	New Zealand—	
Castlemaine	5,703	Auckland	67,226
Maryborough	5,622	Christchurch	57,041
Queensland—		Dunedin	52,390
Brisbane	119,428	Wellington	49,344
Rockhampton	18,326	Napier	8,774
Townsville	12,717	Wanganui	7,329
Gympie.....	11,959	Nelson	7,010
Maryborough	10,159	Palmerston North	6,534
Toowoomba	9,137	Timaru	6,424
Ipswich.....	8,637	Invercargill.....	6,215
Mount Morgan	6,230	Oamaru	4,836
Charters Towers	5,523	New Plymouth	4,405
Bundaberg	5,200	Thames.....	4,009

The above statement shows clearly where the people have settled, for excluding the capitals, there are only five cities in the whole of Australasia with a population of over 40,000, viz., Newcastle, 54,991; Auckland, 67,226; Dunedin, 52,390; Ballarat, 43,823; Christchurch, 57,041; and of these five, three are in New Zealand.

BIRTHPLACES.

One of the subjects of inquiry at the census of 1901, as at previous enumerations, was the birthplaces of the population. The result of the tabulation shows that while there are differences in the component parts of the population in the several states, these differences are slight, and the great majority of the people in Australasia—to the extent, indeed, of fully 95 per cent.—are of British origin. Probably the population of Australasia is more homogeneous than that of most European countries; for even in Queensland, where people of foreign descent are proportionately more numerous than in any of the other states, they only amount to 8.71 per cent. of the total population. The subjoined table shows in a condensed form the results of the tabulation of the birthplaces of the population of each state, the figures being exclusive of aborigines:—

Birthplaces.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	
New South Wales	977,176	22,408	24,868	4,146	14,122	2,075	6,492	
Victoria	56,019	875,645	10,272	10,308	39,491	7,949	12,583	
Queensland	14,968	3,010	282,861	607	2,595	288	1,271	
South Australia	22,059	21,924	2,384	271,671	16,250	887	1,575	
Western Australia	887	1,479	190	958	52,363	96	190	
Tasmania	7,577	15,363	1,308	817	1,750	136,629	3,720	
Australia, State not specified	468	1,000	10	935	81	14	1,222	
Total, Commonwealth ..	1,079,154	940,829	321,911	289,442	126,952	147,938	27,053	
New Zealand	10,589	9,022	1,571	712	2,704	1,193	616,106	
Total, Australasia	1,089,743	949,851	323,482	290,154	129,656	149,131	543,159	
England	126,117	113,426	68,589	37,787	25,380	12,658	111,964	
Wales	3,622	3,705		1,092	912	284	1,765	
Scotland	30,717	35,772		19,934	6,736	5,397	2,986	47,858
Ireland	59,945	61,462		37,036	11,245	9,862	3,887	49,524
Total, United Kingdom ..	220,401	214,365	126,150	56,860	41,551	19,815	205,111	
India and Ceylon	2,957	1,938	1,476	1,336	842	607	1,286	
Canada	1,063	993	404		267		1,439	
Other British Possessions ..	1,933	1,553	857		871		1,497	
Total, British Empire ..	1,316,097	1,168,700	452,378	348,350	173,187	169,553	752,402	
German Empire	8,716	7,615	13,166	6,663	1,527	773	4,217	
France and Possessions	2,129	953	370	226	280	58	610	
Russia	1,262	958	454	253	400	37	484	
Austria	667	404	240	164	418	23	1,874	
Switzerland	454	903	441	105	118	19	333	
Denmark and Possessions ..	1,368	1,022	3,161	262	320	155	2,120	
Sweden and Norway	3,190	2,206	2,142	942	1,174	219	2,827	
Italy	1,577	1,526	347	316	1,354	50	428	
Other European Countries and Possessions.	1,910	1,321	682	466	989	129	870	
United States of America ..	3,130	2,141	1,315	523	1,085	237	1,671	
Chinese Empire	9,993	6,230	8,472	3,253	1,475	484	2,902	
Other Foreign Countries ..	948	373	11,964	336	1,288	41	246	
Total, Foreign Countries.	35,344	25,652	43,254	13,509	10,378	2,223	18,582	
Born at Sea	1,967	1,561	634	541	317	1	1,203	
Unspecified	1,438	5,157	330	204	242	698	442	
Total	1,354,846	1,201,070	496,596	362,604	184,124	172,475	772,719	

It will be seen at a glance that natives of the Australasian states formed three-fourths of the population, and that the great majority of the Australasian-born population were natives of the particular state in which they were enumerated, the only exception being in the case of Western Australia. The percentage of the people born in the state in which they were resident at the time of the census, of those born in the other states, and of the total Australasian-born population to the total population of each state, are shown below :—

State.	Percentage to Total Population of—		
	Natives of State of Enumeration.	Natives of other States.	Australasian-born Population.
New South Wales	72·20	8·32	80·52
Victoria	73·22	6·20	79·42
Queensland	57·01	8·19	65·20
South Australia	74·96	5·10	80·06
Western Australia	28·64	41·87	70·51
Tasmania	79·54	7·28	86·82
New Zealand	66·83	3·50	70·33

These figures show that proportionately the largest Australasian-born population is to be found in Tasmania, where nearly 80 out of every 100 of the inhabitants were born in the state, and over 86 per cent. were Australasians. In Queensland, on the contrary, nearly one-third the population were natives of countries outside Australasia, and only 57 per cent. were Queenslanders by birth. The low proportion of native-born in this state is due to the policy of state assisted immigration, which is still in force, the addition to the population from this source during the twenty-one years ended with 1901, amounting to 168,716 souls. The exodus of population from other parts of the Continent to Western Australia is evidenced in a striking manner, as persons born in the other Australasian states, comprised 42 per cent. of the population. The following figures set forth still more clearly the extent to which each state is indebted for population to its neighbours :—

State.	Number of Natives of other six States enumerated.	Number of Natives enumerated in other six States.	Gain to State.	Loss to State.
New South Wales	112,099	74,111	37,988	.....
Victoria	73,206	136,622	.....	63,416
Queensland	40,602	22,739	17,863	.....
South Australia	17,548	65,079	.....	47,531
Western Australia	76,912	3,809	73,103	.....
Tasmania	12,488	30,535	.....	18,047
New Zealand	25,831	25,791	40	.....

Next to the Australasian-born population, natives of the United Kingdom were by far the most numerous class in each State. The following table shows the percentages of natives of England and Wales, Scotland, and Ireland to the total population of each state :—

State.	Natives of—			
	England and Wales.	Scotland.	Ireland.	United Kingdom.
New South Wales.....	9·58	2·27	4·43	16·28
Victoria	9·79	2·99	5·14	17·92
Queensland.....	13·82	4·02	7·58	25·42
South Australia.....	10·73	1·86	3·10	15·69
Western Australia ...	14·30	2·94	5·36	22·60
Tasmania	7·54	1·74	2·26	11·54
New Zealand	14·73	6·20	5·63	26·56
Australasia	11·19	3·29	5·02	19·50

It was to be expected that the percentage of natives of the United Kingdom would be highest in Queensland which has introduced a large number of assisted immigrants during the last twenty years. Although natives of England and Wales are numerically stronger, yet if the composition of the population of the United Kingdom be taken into consideration, it will be seen that Scotch and Irish colonists are proportionately much more numerous than those of English birth. A curious feature of the information is the apparent preference on the part of Irishmen for Queensland and Scotsmen for New Zealand.

The number of natives of parts of the British Empire other than the United Kingdom and Australasia enumerated in these states was very small, amounting only to the following percentages of the total population :—In New South Wales, 0·44 per cent. ; in Victoria, 0·38 per cent. ; in Queensland, 0·55 per cent. ; in South Australia, 0·37 per cent. ; in Western Australia, 1·07 per cent. ; in Tasmania, 0·35 per cent. ; and in New Zealand, 0·54 per cent. ; average for Australasia, 0·47 per cent. Natives of Canada and of India and Ceylon make up the majority of this class, which numbered only 21,319 altogether. It is not considered necessary to give a complete tabulation of natives of all foreign countries, and only the more numerous are given in these pages. Immigrants from Germany are by far the most numerous. The Chinese are next in point of numbers, followed by Scandinavians, while natives of the United States, France and Italy are also fairly numerous. Polynesians constitute a considerable section of the community in Queensland, but are almost unknown in some of the other States. The percentages to the total population of each State of natives of Germany, of the Scandinavian Kingdoms (Sweden and Norway and

Denmark), and of the total foreign-born population, are shown in the subjoined table :—

State.	Percentage of—		
	Germans.	Scandinavians.	Total Foreign-born Population.
New South Wales	0·64	0·33	2·61
Victoria	0·64	0·27	2·15
Queensland	2·65	1·07	8·71
South Australia	1·84	0·26	3·73
Western Australia.....	0·83	0·81	5·65
Tasmania.....	0·45	0·22	1·29
New Zealand	0·55	0·64	2·41
Australasia	0·94	0·28	3·28

It will be seen that both Germans and Scandinavians are proportionately most numerous in Queensland, where together they amount to 3·72 per cent. of the population. Germans are also very numerous in South Australia, and Scandinavians in Western Australia and New Zealand.

The remainder of the population, whose birthplaces were stated, is made up of those born at sea ; the persons whose birthplaces were unspecified, numbered 8,511, and have been excluded from consideration in computing the proportions arrived at in the preceding pages. The proportion of the population born at sea to the total population of each state is shown below :—

State.	Persons born at Sea. Per cent.
New South Wales.....	0·15
Victoria	0·13
Queensland.....	0·12
South Australia.....	0·15
Western Australia.....	0·17
Tasmania	
New Zealand.....	0·16
Australasia.....	0·14

From the returns of those states where the people born at sea have been classified into those born of British and of foreign parentage, it appears that the great majority are of British parentage.

CONJUGAL CONDITION.

At a conference of statisticians held at Sydney, during February 1900, it was decided to tabulate the conjugal condition of the people, as ascertained by the census of 1901, under the heads of "Never

married," "Married," "Widowed," and "Divorced"; but this decision was not adhered to by South Australia and Tasmania, where the divorced were probably included under the heading of unmarried. For the sake of comparison a similar classification has therefore been made in the tabulation of the other states. The people who returned themselves as "divorced" on the census schedules were very few in number, and it is reasonable to assume that the numbers were wide of the truth, owing to the reluctance on the part of many people whose marriage bonds had been severed to return themselves as "divorced" in the census schedules. The information given below is not absolutely correct, as the returns of Victoria are not yet complete, but the figures have been estimated from those of the other states, having due regard to the different age constitution of the population.

The following table shows the number of males in each state under the headings of "Unmarried," "Married," and "Widowers"; and the proportion of each to the male population. The figures are exclusive of aborigines, a few in Victoria and New South Wales excepted, and the proportions are calculated only on the number of those persons whose conjugal condition was set down :—

Males.

State.	Unmarried.		Married.		Widowers.		Total.
	Number.	Proportion of Male Population.	Number.	Proportion of Male Population.	Number.	Proportion of Male Population.	
		per cent.		per cent.		per cent.	
New South Wales ...	486,977	68·59	203,527	28·66	19,501	2·75	710,005
Victoria	412,512	68·31	172,590	28·58	18,781	3·11	603,883
Queensland	196,740	71·34	72,213	26·19	6,812	2·47	275,765
South Australia	124,566	67·54	54,754	29·69	5,102	2·77	184,422
Western Australia ...	77,567	68·91	32,063	28·49	2,932	2·60	112,562
Tasmania	60,952	68·24	25,807	28·89	2,560	2·87	89,319
Commonwealth ...	1,359,314	68·79	560,954	28·39	55,688	2·82	1,975,956
New Zealand	273,113	67·90	118,475	29·45	10,653	2·65	402,241
Australasia	1,632,427	68·64	679,429	28·57	66,341	2·79	2,378,197

The figures show that only 28·39 per cent. of the male population of the Commonwealth is married. The rates are fairly uniform throughout Australasia with the single exception of Queensland, where unmarried males form 71·34 per cent. of the male population. The following table

shows similar information regarding the female population of Australasia :—

<i>Females.</i>							
State.	Unmarried.		Married.		Widows.		Total.
	Number.	Proportion of Female Population.	Number.	Proportion of Female Population.	Number.	Proportion of Female Population.	
		per cent.		per cent.		per cent.	
New South Wales ...	403,293	62·54	206,319	32·00	35,229	5·46	644,841
Victoria	369,789	61·89	194,434	32·55	33,235	5·56	597,458
Queensland	138,568	62·91	71,469	32·45	10,218	4·64	220,255
South Australia	112,122	62·92	55,341	31·06	10,719	6·02	178,182
Western Australia	41,046	57·65	27,043	37·98	3,112	4·37	71,201
Tasmania	52,593	63·57	25,460	30·78	4,672	5·65	82,725
Commonwealth ...	1,117,411	62·26	580,066	32·32	97,185	5·42	1,794,662
New Zealand	230,510	62·94	117,821	32·17	17,902	4·89	366,233
Australasia	1,347,921	62·38	697,887	32·30	115,087	5·32	2,160,895

The smallest proportion of unmarried females is in Western Australia, where the largest proportionate number of adult males is to be found. From the foregoing figures it will be seen that unmarried males are largely in excess of unmarried females in each state. The following table shows the excess of unmarried males over females, and the number of unmarried females to 1,000 unmarried males :—

State.	Excess of Unmarried Males over Unmarried Females.	Number of Unmarried Females to 1,000 Unmarried Males.
New South Wales	83,684	828
Victoria	42,723	896
Queensland	58,172	703
South Australia	12,444	900
Western Australia	36,521	529
Tasmania	8,359	869
Commonwealth	241,903	821
New Zealand	42,603	844
Australasia	284,506	825

The proportion of unmarried females is lowest in Western Australia and Queensland, the two States which have gained most through immigration during the past ten years, and is highest in South Australia, Victoria, and Tasmania, where the gain has been small. As the population of the two states first mentioned has been largely recruited from the other states it is evident that the movement of population has been chiefly of unmarried males animated by a desire to better their position.

Amongst the widowed, females largely outnumber males, as was to be expected from the higher death-rate and the proportionately larger number of males remarried.

NATIVE RACES.

At the census of 1901 only 47,296 aborigines were enumerated, of whom 43,611 were full-blooded aborigines or half-castes in a nomadic condition, and 3,685 were half-castes living in a state of civilisation, and these have been included in the general population. The following table shows the distribution of each class amongst the various States.

State.	Number of Aborigines.		
	Full-blooded and nomadic Half-castes.	Civilised Half-castes.	Total.
New South Wales	4,287	3,147	7,434
Victoria	271	381	652
Queensland	6,670	*	6,670
South Australia	27,123	•	27,123
Western Australia.....	5,260	*	5,260
Tasmania.....	.....	157	157
Total	43,611	3,685	47,296

* Included with full-blooded aborigines.

These figures only represent aborigines enumerated at the census, and except in Victoria, Tasmania, and New South Wales, they must not be taken as indicating the strength of the aboriginal population. The native aboriginal race is extinct in Tasmania, and practically so in Victoria where the number recorded was only 271. The aborigines in New South Wales totalled 7,434 at the census of 1901, and as their number was 8,280 ten years previously, they are apparently decreasing at a rate slightly in excess of 1 per cent. yearly. In Queensland only 6,670 aborigines were enumerated, but their full strength is estimated at 25,000, while in South Australia, although 27,123 were enumerated the total number cannot be far short of 50,000. The census of Western Australia included only those aborigines within the bounds of settlement, and as large portions of this, the greatest in area of all the Australian States, are as yet unexplored it is evident that the number shown, 5,260, gives no idea as to the total aboriginal population. It is estimated that the aborigines in Western Australia are fully 70,000 in number, which would make the total aboriginal population of the continent about 153,000. The difficulty of enumerating the aborigines, even in the civilised area of Australia, will be apparent when their migratory habits are considered; and as by far the greater portion of their number lives outside the bounds of civilisation, in practically unexplored territory, this estimate of their numerical strength is

advanced with the utmost diffidence. The Maoris, who are popularly supposed to be the original natives of New Zealand, are quite a different race from the aborigines of Australia. They are gifted with a considerable amount of intelligence, are quick at imitation, and brave even to rashness.

Their numbers, as ascertained at various census periods, were as follow :—

Year.	Males.	Females.	Total.
1881	24,368	19,729	44,097
1886	22,840	19,129	41,969
1891	22,861	19,132	41,993
1896	21,673	18,181	39,854
1901	23,112	20,031	43,143

The figures for 1901 include 31 Morioris, who are supposed to be a branch of the same race as the Maoris. It is thought that both races came from the islands of the Pacific, but the Morioris preceded the Maoris by many years. They held possession until the arrival of the Maoris, whose superior numbers enabled them to overcome the original possessors, and drive them from the mainland to the surrounding isles, and it is only in the Chatham Islands that a small remnant of their race is left.

In the totals given for 1896 and 1901 there are included 3,503 and 3,123 half-castes respectively, who were living as members of Maori tribes. It is said that when New Zealand was first colonised, the number of Maoris was fully 120,000; but this, like all other estimates of aboriginal population, is founded on very imperfect information. So far as the above table shows, their number has been almost stationary during the last twenty years; in fact, during the last quinquennial period there was an increase of 3,289 persons.

ALIEN RACES.

The number of aliens in Australasia at the time of the census cannot be ascertained, as only in New South Wales and Queensland was the information shown. The figures for these two States were as follows :—

Alien Races.	In New South Wales.	In Queensland.
	No.	No.
Chinese.....	11,263	9,313
Pacific Islanders.....	467	9,327
Japanese	161	2,269
Hindoos and Cingalese	1,681	939
Other aliens.....	1,261	1,787
Total.....	14,833	23,635

These figures show that the aliens number 10·95 per 1,000 of the population, exclusive of aborigines, in New South Wales, and 47·59 per 1,000 in Queensland. In the other States the proportions would not be so large, as the employment afforded by the sugar industry is responsible for the introduction of the Pacific Islanders to Queensland in such large numbers, and to a considerable extent for the influx of Hindoos into New South Wales.

The further immigration of Pacific Islanders to Australia is now restricted by the Pacific Islands Labourers Bill. This Act is particularly directed against the continued employment of these aliens on the sugar plantations, and under its provisions only a certain limited number will be allowed to enter Australia up to the 31st March, 1904. After that date their further immigration is prohibited, and all agreements for their employment must terminate on the 31st December, 1906, when any Pacific Islander found in Australia will be deported.

The influx of Hindoos and other Eastern races has long caused a feeling of uneasiness amongst the people of Australia, and restrictive legislation was already in force in some of the States prior to federation. One of the first measures passed by the Federal Parliament was the Immigration Restriction Act, which provides for the exclusion of any person who, when asked to do so, fails to write out and sign a passage of fifty words in a European language specified by an officer of the Customs. The Act does not apply, however, to persons in possession of certificates of exemption, to His Majesty's land and sea forces, to the master and crew of any public vessel of any Government, to any person duly accredited by any Government, to a wife accompanying her husband if he is not a prohibited immigrant, to all children under 18 years of age accompanying their father or mother if the latter are not prohibited immigrants, or to any person who satisfies an officer of the Customs that he has been formerly domiciled in the Commonwealth.

The number of Chinese in the various States had increased so rapidly prior to 1880 that it was deemed expedient by the Governments to enact prohibitive laws against the immigration of these aliens, and their migration from one State to another. For several years a poll-tax of £10 was imposed, but this was not considered sufficiently deterrent, and in New South Wales, in accordance with the most recent legislation on the subject, masters of vessels are forbidden under a heavy penalty to bring more than one Chinese to every 300 tons, and a poll-tax of £100 is charged on landing. In Victoria, Queensland, and South Australia no poll-tax is imposed, but masters of vessels may bring only one Chinese to every 500 tons burden. The Western Australian Act was similar to that in the three last-named States until recently, but has now been superseded by the Coloured Immigrants Restriction Act. Tasmania allows one Chinese passenger to every 100 tons, and imposes a poll-tax of £10. In New Zealand an Act similar to the Tasmanian Act was in force until 1896, when the poll-tax was raised to £100, and the number of passengers restricted

to one for every 200 tons burden. These stringent regulations have had the effect of greatly restricting the influx of this undesirable class of immigrants, and at the census of 1901 they numbered only 36,088, as against 42,521 ten years previously. The following table shows the number of Chinese in each State at the five last census periods :—

State.	1861.	1871.	1881.	1891.	1901.
New South Wales	12,988	7,220	10,205	14,156	11,263
Victoria	24,732	17,935	12,128	9,377	7,242
Queensland	538	3,305	11,229	8,574	9,313
South Australia	40	*	4,151	3,997	3,253
Western Australia.....	.....	*	145	917	1,552
Tasmania .....	.....	*	844	1,066	608
Commonwealth	38,298	28,460	38,702	38,077	33,231
New Zealand .....	.....	*	5,004	4,444	2,857
Australasia .....	.....	.....	43,706	42,521	36,088

* Information not available.

The decrease in the Chinese population will be more apparent when it is stated that in 1901 they only numbered 7·94 per 1,000 of the population in Australasia as against 11·16 in 1891.

NATURALISATION.

The Acts relating to the naturalisation of aliens do not differ very materially in any of the states. In New South Wales, Victoria, South Australia, Western Australia, and New Zealand aliens may hold and acquire both real and personal property, but may not qualify for any office nor have any rights or privileges except such as are expressly conferred upon them, while in Queensland and Tasmania they may hold personal property, but lands for twenty-one years only.

In every state except New South Wales, South Australia, and Queensland every alien of good repute residing within the state who desires to become naturalised may present a memorial signed by himself, and verified upon oath, stating his name, age, birthplace, residence, occupation, and length of residence in the state, and his desire to settle therein, together with all other grounds on which he seeks to obtain the rights of naturalisation, and apply for a certificate, which the Governor may grant if he thinks fit. After the letters of naturalisation have been received and the oath of allegiance taken, the holder becomes entitled to all the privileges which are conferred upon subjects of His Majesty. In New South Wales it is insisted that the applicant must have resided there for at least five years before he can be naturalised, and he must present, together with his own statutory declaration stating his name, age, birthplace, occupation and residence,

a like declaration of some other person as to his term of residence in the state; in South Australia six months' residence is compulsory, while in Queensland an Asiatic or African alien must be married and have his wife living in the state, and must have resided in the state for three years, when he must present a similar memorial to that cited above. If the application is granted, he becomes entitled to all privileges except that of becoming a member of the Legislature.

In all the states any alien woman marrying a natural-born subject becomes and is deemed to be naturalised, and any person resident in the state who has obtained a certificate of naturalisation in any British possession, and who presents such certificate, and further satisfies the Governor that he is the person named in the certificate, and that such was obtained without fraud, may be granted a certificate of naturalisation without any further residence in the state being required of him.

The rights of naturalisation are refused the Chinese in some of the states, viz., New South Wales, Victoria, Queensland, and Western Australia. Germans have availed themselves most largely of the privileges, having taken out about one-half of the certificates granted.

The number of naturalised persons in New South Wales at the census date was 3,619, of whom 3,265 were males and 354 females. Of this total no less than 1,512 males and 218 females were Germans, representing nearly 47 per cent. of the whole number. The information is not available for any of the other Commonwealth states; but in New Zealand the number of naturalised persons was 4,672.

The number of persons naturalised in Australasia during 1900 was 1,929, distributed amongst the various states as follows:—

State.	Germans and other German-speaking nations.	Scandinavians.	Chinese.	Others.	Total.
New South Wales ...	103	79	.....	138	320
Victoria	154	73	.....	165	392
Queensland	165	60	.....	127	352
South Australia	88	47	.....	40	175
Western Australia ...	118	61	22	201	402
Tasmania	4	1	7	9	21
Commonwealth...	632	321	29	680	1,662
New Zealand.....	86	50	4	127	267
Australasia	718	371	33	807	1,929

EDUCATION.

IT would have been strange if communities so prosperous as the Australasian States had neglected to provide for the education of the children. This duty, so vitally affecting the welfare of the people, has been recognised as one of the most important which the State could be called upon to discharge. In every province of the group, ample provision has been made for public instruction—such provision, indeed, in some cases, extending far beyond what has been done in most of the countries of the old world. In addition to a system of primary education, in all the states there are grammar and high schools, by means of which those who have the desire may qualify for the higher studies of the University. So bountiful is the provision made by the State that in most cases the cost of education is merely nominal, and the poverty of the parents ceases to be an excuse for the ignorance of the children. It is true that in the very early days of colonisation but little attention was paid to education; but so soon as the sharp struggle for bare existence was over, attempts were made to provide means of instruction for the rising generation, and the foundations were laid of an educational system that is in the highest degree creditable to these young communities. The religious bodies were naturally the first to build schools and provide teachers; but there was always a large proportion of persons who objected to denominationalism, principally those who belonged to denominations which were not subsidised by the State; hence there arose a national or non-sectarian system, which has in the course of time almost monopolised the educational field.

In all the Australasian provinces the State system of education is secular. Compulsory clauses find a place in the Acts of the various states; but the enforcement of these is not everywhere equally strict. In Victoria, for example, compulsory attendance at school has been rigorously insisted upon, while in Queensland the principle of compulsion has been allowed to remain almost in abeyance, and in the other states it has been enforced with varying degrees of strictness. In Victoria, Queensland, New Zealand, Western Australia, and South Australia the primary education provided by the State is entirely free of charge to the parents; in New South Wales and Tasmania

small fees are charged, but these are not enforced where the parents can reasonably plead poverty.

The statutory school-age in each State is as follows :—

New South Wales	over 6 and under 14 years.
Victoria	„ 6 „ 13 „
Queensland	„ 6 „ 12 „
South Australia	„ 7 „ 13 „
Western Australia	„ 6 „ 14 „
Tasmania	„ 7 „ 13 „
New Zealand	„ 7 „ 13 „

In New South Wales, for many years, a dual system of education was in existence. The four State-aided denominations—the Church of England, Roman Catholic, Presbyterian, and Wesleyan bodies—had schools supported by annual votes from Parliament, administered under the control of the head of each denomination for the time being. There were also National schools, likewise supported by the State, but under the control of a Board appointed by the Government. This plan was found to be costly and wasteful in the extreme, for in many country towns there were in existence several small and inefficient competing schools where the total number of children was not more than sufficient for one well conducted establishment. So strongly was this evil felt that changes in the law were made from time to time, until at length the denominational system was abolished altogether, and one general and comprehensive plan of public instruction adopted in its place. This reform was not accomplished without much agitation, extending over a considerable period. A league was formed with the object of securing the establishment of secular, compulsory, and free education, and in 1880, under the auspices of Sir Henry Parkes, the measure establishing the present system became law. Education in the public schools is now non-sectarian, though facilities are afforded to clergymen to give religious instruction within specified school-hours to children whose parents belong to their denomination and desire that this instruction shall be given. It is compulsory, and free to all who cannot afford to pay, while a merely nominal fee is charged to those who are in a position to contribute towards the cost of the teaching of their children. For secondary education there are a number of superior and high schools entirely supported by the State, besides numerous colleges, grammar schools, and denominational schools which obtain no assistance from the Government, excepting the Sydney Grammar School, which receives a statutory endowment of £1,500. Scholarships and bursaries have been founded in connection with many of these schools. The University of Sydney, which is liberally endowed by private individuals as well as by the State, grants degrees which rank with those of Oxford and Cambridge. Educational affairs in

the State are under the direction of a Minister for Public Instruction. In 1902 two Commissioners were appointed by the Government of New South Wales to visit Europe and America and report upon the best educational methods pursued in those countries. Special attention will be devoted by this Commission to the question of technical education.

In Victoria, under an Act passed in 1872, a system of free, compulsory, and secular primary education is in force, under a Minister of Public Instruction, who is responsible to Parliament. The compulsory clause is very strictly enforced, especially in the large towns, and education is entirely free as regards the ordinary subjects of primary instruction, while the teachers are allowed to impart instruction in additional subjects, for which a small fee is payable. The teaching of religion is strictly forbidden during school-hours, and at no time must a State teacher give religious instruction. At the close of 1901 an important Bill to amend the Education Act was passed. The main provisions of this measure were designed to strengthen the compulsory clauses of the Act, and to raise the age at which children can be excused from attendance at school to 14 years. No certificates of exemption can be granted to a child below 12 years of age. A Director of Education has been appointed who will, subject, of course, to the Minister, administer all laws relating to education. Secondary education is almost entirely in the hands of private or denominational establishments. The higher education is supplied by the University, with its affiliated colleges.

The Education Department in Queensland is administered by the Secretary for Public Instruction. The Act now in force was passed in 1875, and is of a tolerably liberal character, primary education being secular and free. An Amendment Act came into operation in 1898, extending the range of subjects taught in State schools and reducing the number taught in the Provisional schools. In July, 1900, seven attendance officers were appointed, and steps taken to put in operation the provisions of the Act of 1875 regarding regular attendance at school. These officers did excellent service during the year, but, with a view to economy, it is proposed to retire them in 1902, and relegate their duties to the police. The public schools are divided into two classes, termed State and Provisional schools. A State school must have an average daily attendance of not less than thirty children, and the local district must contribute one-fifth of the cost of establishing, maintaining, repairing, and making additions to the building. In 1899, Provisional schools which had previously received a subsidy not exceeding £50 for any single school, and not more than half the cost of new buildings and furniture, were placed on the same footing with regard to Government grants as the State schools. Secondary education is provided by grammar schools, which are liberally assisted by the State. The State has no University of its own, but sends a fair number of students to the Universities of Sydney and Melbourne. The system of extension lectures in connection with the University of Sydney has been extended to

Queensland; and the Government has given consideration to the question of the establishment of a University in Brisbane.

The South Australian system of primary education, which was introduced in its present form in 1878, is very similar to the systems already described. Public instruction in the State is presided over by a responsible Minister, with an Inspector-General and other officials. It is compulsory, secular, and free. Until the end of 1891 a small weekly fee was payable by all parents able to do so; but at the beginning of 1892 primary instruction was made free until the scholar reached the age of 13 years or had been educated to the compulsory standard, and in 1898 the remaining fees were abolished by the Minister for Education. Children who have attained a certain standard of education are exempt from compulsory attendance. Religious instruction is not allowed except out of ordinary school-hours. There are two secondary schools in connection with the Department—the Advanced School for Girls at Adelaide, where pupils are prepared for the University Public Examinations, and the Agricultural School, where boys are prepared for entrance to the School of Mines and Agricultural College. In addition there are numerous high-class private and denominational establishments; and the University of Adelaide, though small, is efficient.

Under the Elementary Education Act of 1871, primary education in Western Australia is imparted in Government schools, which are entirely supported by the State. An Amendment Act passed in 1893 placed educational affairs in the State under the control of a responsible Minister, and afforded facilities for special religious teaching, half-an-hour per day being allotted to clergymen for the instruction of children of the same denomination. Another Amendment Act which came into force in 1894 abolished payment by results, and gave powers for the enforcement of compulsory attendance. Until 1895, private schools were also assisted from the public purse, on condition of submitting to Government inspection in secular subjects; but towards the end of that year an Act was passed abolishing the system of annual grants to denominational schools, and providing that during the year 1896 the State should hand over, as compensation for the abolition of these subsidies, the sum of £15,000, to be divided between the schools in like proportions to those which governed the distribution of the annual vote in 1895. Under the regulations of 1895, children were entitled to free education on account of inability to pay the fees, of living more than 1 mile from school, of having made 400 half-day attendances in the previous year, or of other reasons approved by the Minister, but the Education Act which came into operation in 1899 gave free education to all children of compulsory school age. There is a high school at Perth, which is subsidised by the State; and further encouragement is given to secondary instruction by the institution of scholarships which are open to competition.

In Tasmania the Treasurer holds the portfolio of Education, and has especial charge of matters relating to primary instruction. The

permanent head of the department is styled Director of Education. There are public schools in every country town throughout the State, and several in Hobart and Launceston. The principle of compulsion is in force in these two towns, the school age being from 7 to 13 years; and special religious instruction is given by the Church of England clergy out of school-hours. Secondary education was at one time encouraged by exhibitions, but none have been granted since 1893. The University of Tasmania was established in 1890, and at first was merely an examining body, but in the beginning of the year 1893 a building was acquired and teaching provided for the purpose of enabling students to graduate in Arts, Science, and Laws. The first degree, one of B.A., was taken in 1894. The Government grants the institution an annual subsidy, the amount voted by Parliament in 1901 being £4,000.

Education at the public schools of New Zealand is free (except that at such as are also district high schools fees are charged for instruction in the higher branches) and purely secular. The attendance of all children between the ages of 6 and 13 years is compulsory, except in cases where special exemptions have been granted. There is a separate Department of Education, presided over by one of the responsible Ministers of the Crown, as in the other provinces of Australasia. The whole colony has been divided into school districts, each presided over by a local Board, and a capitation grant of £3 15s. per head is paid by the State for every child in average attendance, and, in addition, 1s. 6d. per child in support of scholarships, with other grants for school-buildings, training of teachers, etc. In districts where there are few or no Europeans, native schools are maintained for the Maori children. High schools, colleges, and grammar schools provide the means for acquiring secondary education; and the University of New Zealand, like those of the Commonwealth states, is empowered to confer the same degrees as the Universities of Oxford and Cambridge, except as regards Divinity. It is, however, only an examining body, the undergraduates keeping their terms at the affiliated colleges—the University of Otago, the Canterbury College, the Auckland University College, and the Victoria College at Wellington.

STATE SCHOOLS.

Exclusive of the native schools established by the New Zealand Government for the instruction of the Maori children, there were 8,689 public schools in Australasia at the close of the year 1901. The number in operation in each of the states, as well as in New Zealand, will be seen on reference to the table given below. As a rule, secondary education is provided by private institutions, and the figures quoted may be taken as representing primary schools; but in New South Wales there

are five high schools, which it is customary to include with the others. The secondary schools in New Zealand are excluded from the returns :—

State.	State Schools.	Teachers employed, exclusive of Sewing Mistresses.		
		Males.	Females.	Total.
New South Wales	2,818	2,829	2,244	5,073
Victoria	1,948	1,897	2,665	4,562
Queensland	960	1,102	1,208	2,310
South Australia	706	402	916	1,318
Western Australia	242	238	339	577
Tasmania	338	225	435	660
Commonwealth	7,012	6,693	7,807	14,500
New Zealand	1,677	1,406	2,217	3,623
Australasia	8,689	8,099	10,024	18,123

In all the States, with the exception of Victoria, there has been a steady increase in the number of State schools during the past few years. In Victoria the reverse has been the case, for since 1891 the number in operation has decreased from 2,233 to 1,948. This is the result of a scheme of retrenchment, initiated at that time, by which there has been an amalgamation of schools in large centres of population; and in other districts schools have been closed and the pupils conveyed to other institutions at the cost of the State. Under the first part of this scheme no fewer than 84 schools have been converted into adjuncts to others in the neighbourhood. At these adjuncts—which are not included in the number of schools set down in the table—instruction is now imparted only to young children, in junior classes. The system of conveyance, brought into operation under the second part of the scheme, has been the means of closing 270 schools, an allowance being made by the State to parents to defray the cost of conveyance of their children to schools further removed from their place of abode. Notwithstanding the reduction in the number of schools during the past five years, consequent on the above retrenchment policy, the increased proportion of average attendance shows that educational facilities are well distributed.

The 960 schools in Queensland include 441 State schools, 80 special provisional schools, 435 ordinary provisional schools, and 4 schools at benevolent establishments. In compliance with a resolution of the Legislative Assembly, the provisional schools, which had previously been receiving a subsidy not exceeding £50, and not more than half the cost of new buildings and furniture, were placed on the same footing as State schools in regard to subsidy. By this step the State assumed the responsibility for four-fifths of the cost of building and

equipment without limitation as to the amount. For Western Australia, the returns for years prior to 1896 included State-aided denominational schools. From these establishments the Government subsidy was withdrawn at the end of 1895, and thenceforth they are not included in the returns of the Education Department. The private schools are, however, examined by the Departmental inspectors in order to ascertain that sufficient instruction is given in arithmetic, writing, reading, spelling, and geography, while the various registers are supplied to the principals free of cost. This should be borne in mind when comparing the figures with those given for previous years, otherwise the extension of public instruction in that State would seem to be incommensurate with the growth of population. As a matter of fact, the progress has been rapid, and 19 new State schools were opened in 1901.

As shown in the previous table, the total number of teachers employed in the 8,689 State schools was 18,123—8,099 males and 10,024 females—exclusive of sewing-mistresses, of whom there were 74 in New South Wales, 415 in Victoria, 13 in South Australia, 48 in Western Australia, and 176 in New Zealand. New South Wales is the only State where employment is afforded to a greater number of male teachers in comparison with females; in all the other provinces there is a large preponderance of female instructors. In most of the States provision is made for the training of teachers. In New South Wales, the Fort-street Training School for male students had 28 students in training in 1901, 15 of whom held full-scholarships, 10 held half-scholarships, and 3 were non-scholarship students; while at the Hurlstone Training School for female students there were 37 students in residence, 15 of whom held full-scholarships, 10 half, and 12 non-scholarships. At the Fort Street Training College, residence and board and lodging are not provided, but full-scholarship students receive an allowance of £72 per annum, and half-scholarship £36, while no allowance is granted to non-scholarship students. The Hurlstone College is a residential institution, and scholarship students receive free board and lodging with an allowance of £1 per month, half-scholarship students pay £15 a year and receive an allowance of 10s. per month, and non-scholarship students pay £30 per annum. The Victorian Training College, which was closed for some time in accordance with the policy of retrenchment, was re-opened in 1900. On the 1st January, 1901, there were 50 students holding scholarships, while 7 others paid fees for the training received. There were 38 students in the training college in South Australia. A scheme for the more efficient training of pupil-teachers has been arranged, under which, for the first two years of their course, these young people will not be required to teach, but will receive instruction at the Pupil Teachers' School. For the third and fourth years they will engage in practical teaching, and may then be entered as students at Adelaide University for a period of two years. In New Zealand, teachers are trained at normal schools in Christchurch and Dunedin and at the Napier Training School. An interesting experiment in

connection with the training of teachers was the holding of a Summer School in Victoria at the close of 1901. About 600 teachers applied for permission to attend, and of these 120 were selected. Lectures on such subjects as Principles of Education, Kindergarten, &c., were given by experts, and the experiment proved so successful that it is intended to make the institution an annual one.

ENROLMENT AT STATE SCHOOLS.

The quarterly enrolment of pupils at the State schools of Australasia for the year 1901 and the proportion such figures bear to the total population is given in the following table :—

State.	Quarterly Enrolment.	Percentage of Population.
New South Wales.....	212,725	15·50
Victoria	194,125	16·13
Queensland	89,510	17·74
South Australia.....	57,744	15·90
Western Australia.....	20,484	10·92
Tasmania	19,236	11·08
Commonwealth	593,824	15·61
New Zealand	132,869	17·05
Australasia	726,693	15·86

It will be seen that the largest percentage of the population enrolled at State schools was to be found in Queensland, and the lowest in Western Australia. Such a comparison, however, is of very little value, because the proportion which the children of school age bear to the total population varies considerably in the different States, being as low as 14 per cent. in Western Australia, up to 17 per cent. in Queensland and South Australia, and 19 per cent. in New South Wales. In Western Australia, which is still at its pioneer stage, there must of necessity be a much smaller percentage of dependent children than in the more widely settled states.

More important, perhaps, than the number of children enrolled is the average attendance. This, for scholars at the State schools during the year 1901, was 558,127, representing about 64 per school and 31 per

teacher, and 12·18 per cent. of the population of Australasia. The figures for the individual states will be found appended :—

State.	Scholars in average attendance.			
	Total.	Per School.	Per Teacher.	Per-centage of popula-tion.
New South Wales	154,404	55	30	11·25
Victoria	147,020	76	32	12·22
Queensland	70,432	73	30	13·96
South Australia	43,789	62	33	12·06
Western Australia	16,426	68	28	8·76
Tasmania	14,259	42	22	8·21
Commonwealth	446,330	64	31	11·73
New Zealand	111,797	67	31	15·14
Australasia	558,127	64	31	12·18

According to the official returns, the proportion of the quarterly enrolment of scholars in average attendance was highest in New Zealand, the percentage for which colony was 85·1. This was followed by Western Australia with 80·2 per cent., while Queensland was third with 78·7 per cent. The percentage for Victoria was 75·8; for South Australia and Tasmania, 74·1; and for New South Wales, 72·6. The percentage of the population of New Zealand—15·14—shown as in average attendance at the State schools, it must be remarked, is rather higher than it should be, on account of a number of Maori children attending the ordinary schools in districts where there are none established for the “natives,” while the basis on which the proportion has been calculated is the population exclusive of aborigines. Still, when full allowance has been made on this score, the percentage is higher than is found in any other State. The “Native” schools in New Zealand, of which the number was 91, had a teaching-staff of 158, exclusive of 14 sewing-mistresses, in 1901, with an enrolment of 3,273 and an average attendance of 2,592 scholars, and the expenditure on the schools during the year amounted to £23,316. Of the 3,273 children enrolled at these schools, 2,632 were Maoris 303 were half-castes, and 338 were Europeans.

COST OF PRIMARY EDUCATION.

The official reports of the various States show that during the year 1901 the cost of administration and maintenance of the State schools of Australasia was £2,335,042, while the revenue from fees, rents, sales of books, etc., amounted to £104,730, leaving a net cost to the State of £2,230,312, excluding a sum of £232,006 expended on school premises. Assistance to private schools where primary or secondary education is

given is not included in these figures. The expenditure for each of the States will be found below. In the case of New Zealand, the amounts given in the table represent the disbursements of the Education Boards, and not the actual capitation grant received from the Government during 1901, as the former figures more accurately represent the cost of the State schools for the twelve months. From the total cost to the State in that colony, the receipts from the Education Reserves, £40,971, have not been deducted, as the capitation grant is now reduced by an amount equivalent to the rents derived from these reserves, so that practically they are paid into the Consolidated Revenue. The figures do not give the whole expense to the State, as most of the principal teachers enjoy residences for which no rent charge is made. In the case of New South Wales, the annual value of these residences is about £38,000 :—

State.	Expended on Administration and Maintenance.	Receipts from Fees, Rents, &c.	Net Cost to State, excluding Premises.	Expended on School Premises.
	£	£	£	£
New South Wales.....	694,158	76,617	617,541	57,663
Victoria*	665,577	11,087	654,490	36,040
Queensland	252,388	.....	252,388	33,820
South Australia	153,641	3,846	149,795	13,656
Western Australia.....	69,566	1,211	68,355	28,751
Tasmania.....	59,618	10,945	48,673	8,143
Commonwealth.....	1,894,948	103,706	1,791,242	178,073
New Zealand	440,094	1,024	439,070	53,933
Australasia	2,335,042	104,730	2,230,312	232,006

* Year ending 30th June, 1901.

In the States of Victoria, Queensland, South Australia, Western Australia, and in the Colony of New Zealand, primary education is free; in the other States a small fee is charged, but, as will be seen from the table, the revenue derived from this source is very small in Tasmania. In New South Wales the fee charged is 3d. per week for each child, the sum payable by one family being limited to one shilling; and the receipts amount to a considerable sum annually, totalling £76,617 in 1901. Free education is, of course, given to those children whose parents cannot afford to pay for them, and the number of children so treated during last year was 28,114—equal to 11·6 per cent. of the gross enrolment of distinct pupils; the average for the last five years being 12·6. In Tasmania, at the beginning of 1901, new regulations came into force, under which school fees, which had till then constituted part of teachers' incomes, are paid into the Treasury, the teachers receiving, by way of compensation, an addition to their salaries to an extent and for a period exactly defined. Free education is

granted in cases of necessity, and for this purpose free public schools were established in Hobart and Launceston; but as it was considered that this system affixed a brand of pauperism to the children making use of them, they have now been abolished, and the pupils find free education at the ordinary schools. In 1899 an Education Act was passed in Western Australia, which had for its chief object the granting of free education to all children of compulsory school age. The work of compulsion was also systematised, and the returns for 1901 show the highest percentage of attendance for any year since 1870.

Although primary instruction is free in Victoria, Queensland, South Australia, Western Australia, and New Zealand, yet Queensland is the only State where no fees were received in 1901; but, as pointed out on a previous page, the State receives contributions from local districts towards the construction of school buildings, the amount of such contributions in 1901 being £2,901. In Victoria fees are charged for instruction in extra subjects, such as book-keeping, shorthand, algebra, Euclid, French, Latin, Science, &c. During last year extra subjects were taught in 118 schools, and the fees collected represent £2,415 of the sum of £11,087 shown above, the balance, consisting of £8,672, being made up of fines, rents, and the amount realised by the sale of publications; and although not directly applied by the State towards the reduction of departmental expenditure, has been so treated here. In South Australia the receipts during 1901 included £3,733 from sale of books and school materials, and sundry receipts amounting to £113.

It will be seen from the above table that, excluding the expenditure on school premises, the net cost of public instruction in Australasia in 1901 was £2,335,042. This is equivalent to £3 19s. 11d. for each child in average attendance during the year; while, if the expenditure on buildings is taken into account, the amount reaches £4 8s. 3d. per child. The figures for each of the six States and for the colony of New Zealand are presented below:—

State.	Net Cost to State, per scholar in average attendance.	
	Excluding School Premises.	Including School Premises.
New South Wales	£ s. d. 3 19 11	£ s. d. 4 7 5
Victoria	4 9 0	4 13 11
Queensland	3 11 8	4 1 3
South Australia	3 6 3	3 12 7
Western Australia.....	4 3 3	5 18 3
Tasmania.....	3 8 3	3 19 8
Commonwealth	4 0 0	4 8 0
New Zealand	3 18 6	4 8 2
Australasia	3 19 11	4 8 3

Expenditure on education in a large State like Western Australia, with a sparse but rapidly-expanding population, must of necessity be proportionately higher than in the older settled Eastern States. The figures for administration are also swollen by reason of the fact that private schools are inspected by the Departmental officers, and also receive various registers free of cost. With the exception of Western Australia, where there was a decrease amounting to 10s. 1d. per scholar, all the States show an increase in expenditure on administration and maintenance per child in average attendance as compared with the figures for 1897-98. For New South Wales the increase amounted to 6s. 10d. per scholar; for Victoria, to 6s. 11d.; for Queensland, to 4s. 10d.; for South Australia, to 5s. 2d.; for Tasmania, to 12s. 8d.; and for New Zealand, to 1s. 10d.

ENCOURAGEMENT OF SECONDARY EDUCATION.

Before passing to the consideration of private schools, reference may be made to the encouragement of secondary education by the State, apart from grants to the Universities. In New South Wales there are numerous private colleges of a high class, and there are four State High Schools—two for boys and two for girls—where higher education may be obtained at a moderate cost; as well as 113 Superior Schools, in the higher classes of which pupils are prepared for the public examinations. In 1901 the expenditure on the High Schools amounted to £6,596. A scheme of scholarships for the Sydney Grammar School, for High and Superior Schools, and for the University, is in existence. In 1901, 105 candidates were successful at these examinations. Fifty-one secured scholarships and 40 bursaries for High and Superior Schools; 5 bursaries at the Sydney Grammar School; and 9 University bursaries.

In Victoria, as previously pointed out, extra subjects are taught for a small fee at 118 of the public schools. For the encouragement of secondary education, 200 scholarships were granted from 1886 to 1890, but in 1891 the number was reduced to 100, and in 1892 to 75. Consequent on the retrenchment policy already alluded to, these scholarships were abolished in 1893, but the principals of private colleges offered a large number of exhibitions to children attending State schools. The Department, however, decided to introduce paid scholarships similar to those withdrawn in 1893; and under the new scheme, 60 exhibitions of the annual value of £10 are awarded, the first examination for which was held in December, 1900. There were 72 scholarships awarded in 1901 to State school pupils by principals of the various secondary schools. The Department annually bestows a number of exhibitions to the University on pupils who have gained scholarships at

secondary schools. At the examinations for these exhibitions, held in January, 1901, 19 candidates were successful. There are at present 70 exhibitions.

Steps have recently been taken in Queensland to add to the curriculum of the State schools, in order that they may be brought more into line with the superior public schools of New South Wales. Secondary education, however, has long been provided for by the liberal endowment of the private grammar schools, and by a system of scholarships for these schools, which at present number ten. Each school is subsidised to the extent of £1,000 annually; and the total amount of endowments and grants by the State to these institutions to the end of 1901 was £276,535. At the annual examinations for scholarships, 198 boys and 81 girls competed, while three exhibitions to universities were gained by grammar school pupils. In the last quarter of 1901 there were altogether 108 State scholars in attendance at the various grammar schools. Of the 72 exhibitions granted since the year 1878, when they were first instituted, 54 have been gained by students who had previously won scholarships from State schools.

In South Australia the Advanced School for Girls was attended by 133 pupils in 1901. The fees amounted to £1,218, and the expenditure to £1,338, so that there was a loss on the year's transactions of £120, against which must be set the fact that 35 bursary-holders were taught free. There are twelve bursaries for this school annually awarded to State school pupils. Six University scholarships of the value of £35 each are annually awarded to day students on the recommendation of the University Council, and 18 other scholarships of £10 each are awarded to evening students. There are also available 24 exhibitions and 24 bursaries for boys and girls, and 20 junior scholarships are also offered annually to pupils attending schools under the Minister. In Western Australia there is a high school for boys at Perth, which in 1901 received Government aid to the extent of £1,083. In 1901 the number of pupils on the roll, including boarders, was 96, and the average daily attendance was 93. Two State scholarships for this school, valued at £75 each and tenable for three years, are awarded annually. The Government also offers annually ten bursaries of the value of £10 to children attending the elementary schools of the State—five to boys, and five to girls. In Tasmania a system of exhibitions was at one time in force, but none have been granted since 1893. New Zealand has 25 incorporated or endowed secondary schools, with a regular teaching staff of 157, and a visiting staff of 54. At the end of 1901 there were 2,899 pupils on the rolls, and the average attendance for the year was 2,744. The receipts for 1901 amounted to £53,330, including £23,300 derived from interest on investments and rents of reserves, and £26,280 from fees. These schools, it should be noted, are not supported directly by the State. Some have endowments of land, and others receive aid from the rents derived from the Education Reserves administered by the School Commissioners.

PRIVATE SCHOOLS.

At the end of 1901 there were 2,763 private schools in Australasia, with a total teaching staff estimated at 9,159. The total number of pupils on the rolls was 165,499, and the average attendance, 131,679. Below will be found the figures for the individual States and for New Zealand. At the end of 1895, the Government subsidy was withdrawn from the assisted schools in Western Australia, and, thenceforward, information respecting these institutions is incorporated in the returns for private schools:—

State.	Schools.	Teachers.	Enrolment.		Average Attendance.
			Total.	Percentage of Population.	
New South Wales...	889	3,353	60,282	4·39	48,137
Victoria	884	2,652	48,150	4·00	35,857
Queensland	159	603	14,180	2·81	11,985
South Australia ...	230	709	11,310	3·11	10,263
Western Australia	77	281	5,810	3·09	4,645
Tasmania	215	751	10,373	5·97	7,580
Commonwealth	2,454	8,349	150,105	3·95	118,472
New Zealand	309	810	15,344	1·97	13,207
Australasia ...	2,763	9,159	165,499	3·61	131,679

In New South Wales there has been a large increase in private schools during the past ten years. Since 1891 the number of schools has increased from 704 to 889, and the enrolment from 45,018 to 60,282. Of the private schools in the State, 341 are Roman Catholic, as compared with 61 connected with the other Churches, while 487 are undenominational; but of the scholars enrolled, more than three-fifths—41,486—are in attendance at Roman Catholic schools, while 3,966 attend Church of England schools; 1,284, schools belonging to other denominations; and 13,546, the undenominational schools. Since 1891 the pupils of the Roman Catholic schools have increased by 35 per cent., which is about 1 per cent. higher than the general rate of increase. Many of these private schools are institutions of a high class. Only one—the Sydney Grammar School—is assisted by the State, which provides a statutory endowment of £1,500 per annum. In 1901 the staff of this school consisted of 25 teachers; the total enrolment was 683; the average enrolment, 565; and the average daily attendance, 537. The receipts for the year totalled £11,246, of which £9,611 represented fees; while the expenditure was £10,630.

From returns furnished by the principals of private schools in Victoria, it appears that the total number of institutions has increased from 872 in 1894 to 884 at the end of 1900, while the gross enrolment increased from 44,038 to 51,834 during the same period. In this State the principals of a number of the private colleges have granted scholarships at their institutions to State school pupils since the Government retrenched in this respect. These colleges are not subsidised by the State.

Of the 159 private schools in Queensland, the principal are the ten grammar schools, which are situated at Brisbane, Ipswich, Maryborough, Rockhampton, Townsville, and Toowoomba. In each of the first four towns there are two schools—one for girls and one for boys. In 1901 the teaching staff of the grammar schools consisted of 55 permanent and 20 visiting teachers; the aggregate number of pupils on the rolls was 929; and the average daily attendance, 788. As previously mentioned, each of the ten schools receives an annual grant of £1,000 from the State. During 1901 the total receipts amounted to £29,279, and the expenditure, including salaries, to £28,821.

There is no special information available with respect to the private schools in South Australia. In Western Australia the principal private institution is the Perth High School for Boys, which, in 1901, received Government aid to the extent of £1,083. The school is under the supervision of a Board of Governors. In 1901 the teaching staff numbered 5; the total number of pupils enrolled was 96, of whom 26 were boarders; and the average daily attendance was 93.

Included with the 215 private schools in Tasmania are 19 grammar schools and colleges, 6 of which are undenominational in character, 7 are connected with the Church of England, 3 with the Roman Catholic Church, 1 with the Wesleyan Church, 1 with the Presbyterian Church, and 1 with the Society of Friends. There were 119 permanent teachers at these institutions in 1900, and accommodation was provided for 2,819 students. The average attendance during the year was 2,191, of whom 467 were of the age of 15 years and upwards. As in New South Wales, the majority of the pupils at private institutions in New Zealand are enrolled at the Roman Catholic Schools. At the beginning of 1901 the number of schools belonging to this denomination was 132, at which 10,687 scholars were enrolled, with an average daily attendance of 9,228.

DIFFUSION OF EDUCATION.

It will be seen that the Governments of the various States have done much for the instruction of the children, and throughout Australia and New Zealand attendance at school of children of certain ages is compulsory. Unfortunately, in spite of the law and in spite of the educational facilities afforded by the states, large numbers of children are growing up in total ignorance, and a large number with very little

instruction. It must not be supposed that the officials of the public departments controlling instruction are to blame for this lamentable state of affairs; on the contrary, they have made, and continue to make, protests against the continuance of the evil, but the rescuing of children from the neglect of parents, and the effects of their own depraved inclinations, does not seem to appeal very strongly to the legislatures of these States.

As regards New South Wales the census returns for 1901 showed that there were 17,464 children of school age, that is 6 and under 14 years, who were not receiving instruction either at school or at home. If allowance be made for those who possessed certificates showing that they had been educated up to the requirements of the Education Act, and who numbered approximately 5 percent. of the number quoted, there still remain about 16,600 children presumably growing up in blank ignorance. In addition to these a large proportion of the scholars enrolled at State schools fail to attend the requisite 70 days in each half-year. With respect to private schools the State has no means of ascertaining whether the teachers are competent to impart instruction, while nothing can be said regarding regularity of attendance at these institutions as the principals are not compelled to produce returns. Legislation to cope with the truancy evil is in contemplation by the State. At present the parents of children attending public schools are liable to prosecution if their children do not attend the number of days prescribed by the Act. Private schools are not interfered with, while there is no adequate provision made for tracing and dealing with children who are not enrolled at any school.

In Victoria, the school ages are from 6 to 12 years, both inclusive, and a careful estimate shows that the number of children of school age in 1900 was 201,000. The average number of children of school ages who completed the statutory attendance was 117,251, and 2,400 others did not attend the requisite number of days, but held certificates of exemption, while 1,000 scholars who entered or left during the currency of a quarter were considered to have complied with the requirements of the Act. In addition, there were 21,640 children who were exempt from regular attendance under Section 13 of Act 1086. The total under instruction was, therefore, 142,291. Assuming that the attendance at private schools was in the same ratio as that for State schools the number regularly instructed in these institutions was 27,950, There were in addition about 8,000 children regularly instructed at home, so that the total number of school age who were receiving regular instruction was about 178,000. Of the remaining 23,000 some were receiving tuition for a small portion of the year, but the great majority were apparently growing up in ignorance.

With regard to the other States, no definite information is available but doubtless it would be found that there is great room for improvement with respect to the attendance at school of children of the compulsory ages.

UNIVERSITY EDUCATION.

The advance of education is hardly more clearly indicated by the institution and success of Colleges and Universities than is the progress of wealth or the attainment of leisure. In Australia the earliest attempts to provide for what may be termed the luxuries of education were made in New South Wales in 1852, and in Victoria in 1855, when the Universities of Sydney and Melbourne respectively were established. No other province of Australasia was at that time sufficiently advanced in wealth and population to follow the example thus set; but New Zealand in 1870, South Australia in 1874, and Tasmania in 1890, each founded a University. The Universities are in part supported by grants from the public funds, and in part by private endowments and the fees paid by students.

The income received by the Sydney, Melbourne, Adelaide, and Tasmanian Universities in 1901 was as follow :—

University.	Government Endowment.	Lecture Fees.	Other Sources.	Total.
	£	£	£	£
Sydney.....	9,800	11,619	14,347	35,766
Melbourne	15,750	9,000	4,750	29,500
Adelaide	6,556	7,238	5,230	19,024
Tasmania.....	4,000	748	969	5,717

In addition to the above annual endowment, the Adelaide University has received a perpetual endowment of 50,000 acres of land from the Government of South Australia. The University of New Zealand has a statutory grant of £3,000 a year from Government, and an additional income of about £2,500 from degree and examination fees. Of the affiliated colleges, Auckland University College is in receipt of a statutory grant of £4,000 a year from Government. The University of Otago derives a sum of about £5,500 annually from rents of reserves.

The number of students attending lectures in 1901 is shown below. In New Zealand the students keep their terms principally at the University of Otago, the Canterbury College, the Victoria College, and the Auckland University College.

University.	Students attending Lectures.		
	Matriculated.	Not Matriculated.	Total.
Sydney	574	83	657
Melbourne	496	102	598
Adelaide	257	234	491
New Zealand	581	202	783
Tasmania.....	49	4	53
Total	1,957	625	2,582

Attached to the University of Sydney there are three denominational colleges for male students, and a fourth, undenominational in character, for female students. In Melbourne there are three affiliated denominational colleges, one of which contains a hall for the accommodation of female students. In Adelaide and Hobart there are no affiliated colleges attached to the University; and in New Zealand the University itself is an examining and not a teaching body, the students keeping their terms at three undenominational colleges at Dunedin, Christchurch, and Auckland, besides several smaller institutions which have supplied a few graduates.

The Australasian Universities are empowered to grant the same degrees as the British Universities, with the exception of degrees in Divinity. In all the Universities women have now been admitted to the corporate privileges extended to male students; and at the Sydney, Melbourne, and Adelaide Universities this includes qualifying for degrees in medicine.

The number of degrees conferred by the five Universities, including those bestowed on graduates admitted *ad eundem gradum*, is as follows:—

Sydney.....	1,977
Melbourne	3,320
Adelaide	473
New Zealand	895
Tasmania.....	138

and there are about 1,600 students qualifying for degrees at the present time.

TECHNICAL EDUCATION.

Technical instruction is given in nearly all the capital cities of Australasia, as well as in many other parts of the country, and there is every probability that instruction in such matters will before long be still further extended. The State expenditure on this important branch of education in five of the Commonwealth provinces and in New Zealand will be found below; information for South Australia is not available:—

	£
New South Wales	27,674
Victoria.....	26,225
Queensland	11,419
Western Australia	1,432
Tasmania	1,338
New Zealand	7,132

In New South Wales, during the year 1878, a sum of £2,000 was granted by Parliament towards the organisation of a Technical College, and for five years the work of the institution was carried on in connection with the Sydney School of Arts. In 1883, however, a Board was appointed by the Government to take over its management, and the Technical College thenceforth became a State institution. Towards the end of 1889 the Board was dissolved, and the institution came under the direct control of the Minister of Public Instruction. The College, which, with the Technological Museum, is housed in a fine building at Ultimo, Sydney, is open to both male and female students. Branch technical schools have been established in the suburbs of Sydney and in many of the country districts, and technical instruction is also given in some of the public schools. In 1901 there were 325 technical classes in operation, of which 140 were held in Sydney and suburbs, 158 in the country districts, and 27 in connection with the public schools. The enrolment at these classes was 12,548, namely, 7,646 in Sydney and suburbs, 3,424 in the country districts, and 1,478 at the public schools. The number of individual students under instruction during the year was 9,267, and the average weekly attendance 7,721. In 1896 a Technical College was opened at Newcastle, and a new College at Bathurst in June, 1898. During the year the expenditure by the Government on technical education amounted to £33,630, exclusive of expenditure on the Technical Museum and branches. Fees to the amount of £5,742 were received from the students.

Technical education in Victoria has extended rapidly, but while the Government of New South Wales has wholly borne the cost of this branch of instruction, that of Victoria has received great assistance from private munificence, the Hon. F. Ormond, M.L.C., having given £15,500 to assist in the establishment of a Working Men's College. In 1901 there were 18 Schools of Mines and Technical Schools receiving aid from the State. The total State expenditure during the year was £26,225.

Technical education has well advanced in South Australia. The School of Design in Adelaide during 1900 had 504 students on the roll, and there were branch schools at Port Adelaide and Gawler with an enrolment of 28 and 37 students respectively. The School of Mines and Industries, founded in 1889, received Government aid in 1901 to the extent of £3,250, while the receipts from fees and sale of materials to students amounted to £2,532. Manual instruction is imparted in the public schools, and special instruction in agriculture is also given at various country centres. At the Adelaide Agricultural School 101 pupils were enrolled during the year, and there was an average attendance of 56.8.

In Queensland technical education has received some attention, although there is no direct State control outside of North Brisbane. There are 15 colleges attached to Schools of Art at various centres, and these are subsidised at the rate of £ for £ of fees from students. In 1901 the total payments of the State to these institutions amounted to

£11,419. The total receipts of the Colleges during the year reached a sum of £23,582; and the expenditure was £22,520, of which salaries of teachers absorbed £13,771. The number of individual students receiving instruction was 5,465, namely, 2,612 males and 2,853 females. Statutory provision was made for providing technical instruction in mining by the passing of the School for Mines Act of 1894," but up to the present its provisions have not been availed of.

In Tasmania the foundations of new Technical Schools were laid in 1889 in Hobart, and there is a branch school in Launceston. The schools are under the direction of local Boards of Advice, the members of which act directly under the Minister in charge of education. The average attendance of students in 1901, including those in the two Schools of Mines, was 689. The total receipts for the year came to £3,235. In Western Australia a Technical School was opened in Perth on the 16th May, 1900. The total number of students enrolled in 1901 was 113, of whom 99 were males, and 14 females. The receipts during the year were £221, chiefly from fees, and the expenditure amounted to £1,432.

In New Zealand there is a School of Mines in connection with the University of Otago, and two other Schools of Mines in mining districts; a School of Engineering and Technical Science, in connection with the Canterbury College; and an Agricultural College at Canterbury. Under the Manual and Technical Elementary Instruction Act of 1895, State aid is granted to classes established for the purpose of imparting instruction in such branches of science and art as are encouraged by the Science and Art Department, South Kensington, and the City and Guilds of London Institute. Workshops have been established in connection with some of the public schools, and part of the school day may be given to elementary manual instruction. For the financial year ended March, 1901, the expenditure on technical instruction was £7,132, of which £2,806 represented capitation allowances, £3,596 was absorbed in special grants, and £730 represented a £ for £ subsidy on local contributions. At the three mining schools, the number of students is about 230. There are 41 students at the Canterbury Agricultural College, and 89 at the School of Engineering and Technical Science in connection with the Canterbury College.

GENERAL EDUCATION.

Striking evidence of the rapid progress made by these States in regard to education is afforded by a comparison of the educational status of the people as disclosed by the five census enumerations of 1861, 1871, 1881, 1891, and 1901. In those years the numbers who could read and write, read only, and who were unable to read were as follow,

children under five being considered unable to read, no matter how returned at the census :—

Degree of Education.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
1861.									
Read and write...	188,543	327,800	17,181	72,207	8,446	48,281	662,458	67,998	730,456
Read only	46,024	56,945	3,714	18,629	1,559	13,137	140,008	8,922	148,930
Cannot read	116,293	155,577	9,164	35,994	5,585	28,559	351,172	22,101	373,273
1871.									
Read and write...	296,741	478,572	74,940	115,246	18,703	55,939	1,040,141	177,419	1,217,560
Read only	56,391	70,959	12,080	21,123	2,614	13,945	177,152	19,240	196,392
Cannot read	150,849	181,957	33,084	49,257	4,036	29,444	443,627	59,734	508,361
1881.									
Read and write...	507,067	651,567	136,718	200,057	19,697	74,967	1,500,073	346,228	1,936,301
Read only	49,372	49,535	13,631	15,267	2,429	9,605	139,839	27,323	167,162
Cannot read	195,029	161,244	63,176	64,541	7,582	31,133	522,705	116,352	639,087
1891.									
Read and write...	835,570	908,767	276,381	236,514	34,254	103,138	2,394,624	484,198	2,878,822
Read only	43,536	32,817	14,618	9,571	2,061	6,287	108,890	24,902	133,792
Cannot read	244,848	198,821	102,719	74,346	13,467	37,242	671,443	117,558	789,001
1901.									
Read and write...	1,071,939	996,885	374,153	282,834	149,268	133,132	3,008,211	632,936	3,641,147
Read only	29,725	24,021	11,352	7,252	2,965	3,804	79,119	14,580	93,699
Cannot read	253,182	180,161	111,091	72,521	31,891	35,539	684,385	122,346	806,731

The figures in the preceding table refer to the total population, and the number of illiterates is therefore swollen by the inclusion of children under school-going age. If the population over 5 years of age be considered in comparison with the total population, the results for the whole of Australasia will be as follow :—

Degree of Education.	Whole Population.				
	1861.	1871.	1881.	1891.	1901.
Read and write	730,456	1,217,560	1,936,301	2,878,822	3,641,147
Read only	148,930	196,392	167,162	133,792	93,699
Cannot read	373,273	508,361	639,087	789,001	806,731
Total	1,252,659	1,922,313	2,742,550	3,801,615	4,541,577
Degree of Education.	Population over 5 years of age.				
	1861.	1871.	1881.	1891.	1901.
Read and write	730,339	1,130,145	1,936,111	2,878,813	3,490,130
Read only	143,908	190,545	161,295	128,445	90,011
Cannot read	168,929	285,286	243,583	262,515	426,500
Total	1,043,176	1,605,976	2,340,989	3,269,773	4,006,731

The following table affords a comparison of the number of each class in every 10,000 of the population for the same periods :--

Degree of Education.	Whole Population.					Population over 5 years of age.				
	1861.	1871.	1881.	1891.	1901.	1861.	1871.	1881.	1891.	1901.
Read and write	5,331	6,334	7,060	7,573	8,017	7,001	7,035	8,270	8,504	8,710
Read only	1,189	1,022	610	352	206	1,380	1,186	630	393	225
Cannot read	2,980	2,644	2,330	2,075	1,777	1,619	1,776	1,041	803	1,065
Total	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

It will be seen, therefore, that while in 1861 there were only 7,001 persons who could read and write out of every 10,000 people over 5 years of age, the number in 1901 had increased to 8,710, while those who were totally illiterate had in the same period decreased from 1,619 to 1,065. The figures show that while there has been an increase in degree of education since 1891 for the whole population, the rate for persons over 5 years of age has slightly declined.

Looking at the matter still more closely with reference to age, it will be seen that the improvement in education is most marked in the case of the rising generation. The following table shows the degree of education of all children between the ages of 5 and 15 years in 1861, 1871, 1881, 1891, and 1901, numerically and per 10,000:--

Degree of Education.	Total between 5 and 15 years.					Per 10,000 children.				
	1861.	1871.	1881.	1891.	1901.	1861.	1871.	1881.	1891.	1901.
Read and write	114,353	288,154	482,719	674,012	832,708	4,637	5,911	7,058	7,565	8,137
Read only	68,038	102,316	86,574	69,640	54,275	2,750	2,099	1,266	782	499
Cannot read . . .	64,237	96,986	114,654	147,280	147,336	2,004	1,900	1,676	1,653	1,364
Total	246,628	487,456	683,947	890,932	1,034,319	10,000	10,000	10,000	10,000	10,000

The proportion of those able to read and write has, therefore, grown from 4,637 to 8,137 in every 10,000 children during the forty years which the table covers, while the number of those able to read only in 1901 was less than one-sixth of what it was in 1861, and the wholly illiterate had decreased by nearly one-half during the period.

The Marriage Register affords further proof of the advance of education, and it has the further advantage of giving annual data, while the census figures are only available for decennial periods,

The numbers of those who signed the Marriage Register by marks were as appended. Where a blank is shown the information is not available.

State.	1861.			1871.			1881.			1891.			1901.		
	Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.		Marriages.	Marks.	
		M.	F.		M.	F.		M.	F.		M.	F.		M.	F.
New South Wales.	3,222	596	989	3,053	573	768	6,284	347	525	8,457	273	248	10,538	142	141
Victoria	4,434	..	..	4,613	342	650	5,896	171	245	8,780	110	133	8,406	47	42
Queensland	320	..	..	970	..	..	1,703	84	169	2,905	88	109	3,341	72	99
South Australia ..	1,158	..	..	1,250	..	..	2,308	100	159	2,315	40	49	2,309	31	12
Western Australia.	149	..	..	159	..	..	197	..	..	413	..	..	1,821	18	18
Tasmania	717	..	..	598	..	..	856	..	..	988	..	..	1,338	65	45
Commonwealth	10,000	..	..	11,623	..	..	17,244	..	..	23,858	..	..	27,753	375	357
New Zealand	878	..	..	1,864	..	..	3,279	105	190	3,805	53	64	6,095	28	38
Australasia	10,878	..	..	13,487	..	..	20,523	..	..	27,663	..	..	33,848	403	395

The percentages for those States for which the necessary information is available are worked out in the following table:—

Year.	Males.	Females.	Total.
1861	18·50	30·69	24·60
1871	10·58	16·40	13·49
1881	4·14	6·61	5·38
1891	2·12	2·27	2·20
1901	1·19	1·17	1·18

The percentage in 1901 was, therefore, less than one-twentieth that in 1861, and there is every reason to expect that in the course of another few years it will be still further diminished.

PUBLIC LIBRARIES.

In all the States public libraries have been established. The Public Libraries in Melbourne and Sydney are splendid institutions, the former comparing favourably with many of the libraries in European capitals. The following table shows the number of libraries which furnished returns, and the number of books belonging to them, for the latest year for which information is available:—

	No. of Libraries.	No. of Books.
New South Wales	340	520,000
Victoria	342	752,191
Queensland	140	166,589
South Australia	156	303,265
Western Australia	53	82,164
Tasmania	43	86,226
New Zealand	304	409,604
Australasia	1,378	2,320,039

AGRICULTURE.

TAKEN as a whole, Australasia may be said to be in the first phase of agricultural settlement; indeed, several States have not yet emerged from the pastoral stage. Nevertheless the value of agricultural produce, estimated at farm prices, is considerable, and amounts to over 50 per cent. of the value of the pastoral and dairy produce. The return from agriculture in each State for the season 1901-2 was approximately as shown below :—

State.	Total value of Crops.	Average Value of Produce per acre.	Proportion of Total Value.
	£	£ s. d.	per cent.
New South Wales	6,687,000	2 18 9	21·33
Victoria	8,625,000	2 18 2	27·51
Queensland	2,457,000	5 1 8	7·84
South Australia	3,712,000	1 13 2	11·84
Western Australia.....	861,000	3 19 5	2·75
Tasmania.....	1,493,000	6 8 5	4·76
Commonwealth	23,835,000	2 16 8	76·03
New Zealand	7,515,000	4 17 3	23·97
Australasia	31,350,000	3 2 11	100·00

From this estimate it would seem that the value of crops per acre cultivated is much larger in Queensland and Tasmania than in the other States, a fact which is due to the proportionately large area under sugarcane in the former State, while in Tasmania the area devoted to fruit and hops, and the larger returns of cereals, account for the high average per acre which that province shows; in Western Australia, where the greater part of the produce consumed is imported, prices are higher than in the eastern States, and the small area devoted to the plough returns on an average a better price per acre than in the States where agriculture has received greater attention. In point of gross value, Victoria occupies the first position among the members of the group, the produce of that province having a value considerably in excess of one-fourth of that of all Australasia. The high position occupied by Victoria is in great

measure due to the large return from gardens and orchards, the value of production from this source alone being upwards of £1,470,000, or more than double the return in New Zealand, and over three times higher than that of New South Wales. New Zealand also produces nearly one-fourth of the total, and New South Wales over one-fifth. The value of the principal crops, and the percentage of each to the total production, are given in the following statement :—

Name of Crop.	Value.	Proportion to Total.
	£	per cent.
Wheat	7,472,000	23·8
Maize	1,364,000	4·4
Barley	414,000	1·3
Oats	3,383,000	10·8
Hay	7,837,000	25·0
Grass seed	176,000	0·6
Potatoes	2,534,000	8·1
Grapes	1,071,000	3·4
Hops	54,000	0·2
Tobacco.....	10,000	.....
Sugar-cane	585,000	1·9
Orchards and Gardens	2,554,000	8·1
Green forage.....	1,121,000	3·6
Minor crops (other grain, root, &c.)...	2,775,000	8·8
Total.....	31,350,000	100·0

The principal crop is hay, which returned 25 per cent. of the total value, wheat coming next with 23·8 per cent. Minor crops returned large sum of £2,775,000—8·8 per cent.—to which, New Zealand alone contributed £2,219,000, the high value of the production in that province being due to the fact that there is an area of considerably over half a million acres devoted to the cultivation of turnips and other root crops, which are grown mostly as food for sheep.

The average value of agricultural produce per head of population in each of the Australasian provinces during the season 1901-2 is represented by the figures given below. It will be seen that South Australia shows the highest value, followed in order by New Zealand, Tasmania, Victoria, and New South Wales. Queensland occupies the lowest position with a value of less than half that of South Australia. Comparisons of this kind are however somewhat misleading, as the main

consideration is the extent of employment afforded by the industry and the return to the persons engaged therein.

State.	Average value per head.		
	£	s.	d.
New South Wales	4	17	6
Victoria	7	3	5
Queensland	4	13	6
South Australia	10	4	6
Western Australia	4	11	10
Tasmania	8	12	0
Commonwealth	6	5	4
New Zealand	9	12	11
Australasia	6	16	10

Below will be found the value of the agricultural production of the Commonwealth and New Zealand in the years 1871, 1881, and 1891. Comparing these figures with those for 1901 given above, it will be seen that while the total production of Australasia is now over £11,000,000 more than in 1881, the average value per head has declined nearly 6 per cent., and that, as compared with 1891, the value per head shows an increase of £1 2s. 4d. As subsequent tables will show, a decrease in prices, and not want of productiveness, was responsible for the decline in value since 1881. The fall in prices, especially the prices of wheat, was very rapid down to 1895; for the next three years there was a very material increase, in 1899 they fell again to the 1895 level, but in 1901 there was a more or less general increase.

State.	1871.	1881.	1891.
	£	£	£
New South Wales	2,220,000	3,830,000	3,584,500
Victoria	3,300,000	5,894,000	7,009,100
Queensland	650,000	1,283,000	1,414,000
South Australia	1,789,000	3,283,000	3,045,000
Western Australia	258,000	248,000	380,900
Tasmania	724,000	981,000	1,046,500
Commonwealth	8,941,000	15,519,000	16,480,000
New Zealand	1,955,000	4,650,000	5,518,000
Australasia } Total	10,896,000	20,169,000	21,998,000
Australasia } Per head ...	£ s. d. 5 12 8	£ s. d. 7 5 3	£ s. d. 5 14 6

Compared with the principal countries of the world, Australasia does not take a high position in regard to the gross value of the produce of its tillage, but in value per inhabitant it compares fairly well; indeed,

some of the provinces, such as South Australia, New Zealand, and Tasmania, show averages which surpass those of the leading agricultural countries. This may be partly seen from the following table, which gives approximately for 1891-95 the value of agricultural production in the principal countries of the world, with the average amount per head of population :—

Countries.	Value in millions.	Per head.	Countries.	Value in millions.	Per head.
United Kingdom	£ 126	£ 3·2	Holland	£ 18	£ 4·0
France	284	7·3	Belgium	29	4·6
Germany	262	5·1	Switzerland	9	3·0
Russia	370	3·5	United States	487	7·7
Austria	210	5·7	Canada	33	6·9
Italy	141	4·6	Cape Colony	2	1·3
Spain	94	5·5	Argentina	24	6·0
Portugal	18	4·0	Uruguay	2	2·7
Sweden	20	4·9			
Norway	3	1·7			
Denmark	19	8·6	Australasia (1901) ...	31	6·2

AREA UNDER CULTIVATION.

The following figures, giving the total extent of land in cultivation in each of the Commonwealth States and New Zealand at different periods since the year 1861, will serve to illustrate the progress which agriculture has made. In this table, and in the others which follow, the years 1861, 1871, 1881, 1891, and 1901 embrace the period from the 1st April in each of those years to the 31st March in the following year :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	265,389	390,099	578,243	846,383	2,276,628
Victoria	410,406	851,354	1,435,446	2,116,654	2,965,681
Queensland	4,440	59,969	117,664	242,629	483,460
South Australia.....	400,717	837,730	2,156,407	1,927,689	2,236,552
Western Australia	24,705	51,724	53,353	64,209	216,824
Tasmania	163,385	155,046	148,494	168,121	232,550
Commonwealth	1,269,042	2,345,922	4,489,607	5,365,685	8,411,695
New Zealand	68,506	337,282	1,070,906	1,424,777	1,545,683
Australasia.....	1,337,548	2,683,204	5,560,513	6,790,462	9,957,378

Taking Australasia as a whole, it will be seen that the area under crop is now over seven times as large as it was in 1861. If, however, the land artificially grassed be included, the total will come to 22,592,000

acres, or nearly seventeen times the area in cultivation in 1861. A comparison of the acreage under crop on the basis of population, and may perhaps best serve to give an idea of the progress of agriculture, and this is shown in the table given below. South Australia still holds, as it has done for many years, the first position, followed at a long interval by Victoria and New Zealand.

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	0·7	0·8	0·8	0·7	1·7
Victoria	0·8	1·1	1·7	1·8	2·6
Queensland.....	0·1	0·5	0·5	0·6	1·0
South Australia.....	3·2	4·5	7·5	5·9	6·2
Western Australia	1·6	2·0	1·8	1·2	1·2
Tasmania	1·8	1·5	1·2	1·1	1·3
Commonwealth	1·1	1·4	2·0	1·6	2·2
New Zealand	0·7	1·3	2·1	2·2	2·1
Australasia.....	1·1	1·4	2·0	1·7	2·2

For the whole of Australasia the increase of agriculture as compared with population is shown in the following table:—

Increase of—	1861-71.	1871-81.	1881-91.	1891-1901
	per cent.	per cent.	per cent.	per cent.
Acreage under crop.....	100·6	107·2	22·1	47·6
Population	55·6	43·2	38·1	21·3

Although during the period of forty-one years the population of Australasia was nearly quadrupled, the area of land devoted to agriculture increased almost eightfold, and the rate of agricultural progress was more than twice that of the population. The chief progress was made during the twenty years from 1861 to 1881, and the ten years from 1891 to 1901. During the intervening period from 1881 to 1891 the population increased nearly twice as rapidly as the agricultural industry.

The progress in the seventies is what naturally might be expected, as the gold fever had altogether subsided about the end of the first period, and a large portion of the population was seeking employment of a more settled nature than was afforded by the gold-fields. It was not to be anticipated that the same rate of progress could be maintained, and the comparative decline in the eighties may be accounted for by the fact that most of the best land had been taken up. The earnest attempts of the State to assist the agriculturist in obtaining land on easy terms,

The position in which each of the principal agricultural products stood in relation to the total area under crop in Australasia, at various periods since the year 1861, may be ascertained from the following table. The figures should, however, be taken in conjunction with those giving the actual areas cultivated, for a decline in the proportion of land under any particular crop does not necessarily mean a falling-off in the area devoted to that product; on the contrary, in few instances has there been any actual retrogression. It is satisfactory to observe that there is a greater proportionate increase in the cultivation of the more valuable crops, and that, despite checks from causes due to unfavourable seasons, the area devoted to vines, sugar-cane, and "other crops" formed 15·3 per cent. of the whole in 1901, as compared with 8·6 per cent. in 1861:—

Product.	1861.	1871.	1881.	1891.	1901.
	per cent.	per cent.	per cent.	per cent.	per cent.
Wheat	53·6	51·4	60·7	55·0	52·7
Oats	10·6	13·5	7·9	8·4	8·7
Maize	4·6	5·3	3·0	4·3	3·3
Barley	2·2	2·3	1·9	1·4	1·0
Potatoes	4·2	3·0	1·8	2·0	1·4
Hay	16·2	11·9	15·1	16·0	17·6
Vines.....	0·5	0·7	0·3	0·7	0·6
Sugar-cane .....	.....	0·5	0·7	1·1	1·3
Other crops	8·1	11·4	8·6	11·1	13·4
Total	100·0	100·0	100·0	100·0	100·0

WHEAT.

With the exception of Queensland and Western Australia, all the States now produce sufficient wheat for their own requirements, and in good seasons there is a large and steadily increasing balance available for export, which finds a ready market in Great Britain, where Australian wheat is well and favourably known. For the season 1901-2, although a larger area was sown than at any previous period, protracted drought, coupled with unseasonable rainfall, had the effect of greatly curtailing

the production. Taking Australasia as a whole, there was a net export of breadstuffs, during 1901, equivalent to 24,770,592 bushels of grain, valued at £3,096,000.

The subjoined table shows the progress of wheat-growing during the period of the last forty-one years :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales	123,468	154,030	221,888	356,666	1,392,070
Victoria	196,922	334,609	926,729	1,332,683	1,754,417
Queensland	392	3,024	10,958	19,306	87,232
South Australia	310,636	692,508	1,758,781	1,552,423	1,743,452
Western Australia	13,584	25,697	21,951	26,866	93,707
Tasmania	58,823	63,332	51,757	47,584	44,084
Commonwealth.....	703,825	1,273,200	3,002,064	3,335,528	5,114,962
New Zealand	29,531	108,720	365,715	402,273	163,462
Australasia	733,356	1,381,920	3,367,779	3,737,801	5,278,424

It will be seen that, during the twenty years extending from 1861 to 1881, all the States, with the exception of Tasmania, made considerable additions to the area under wheat, the increase for the whole of Australasia being 2,634,423 acres, or an advance of 359 per cent. From 1881 to 1901 the extension of this form of cultivation has not been so general, most of the increase in area having taken place during the last few seasons, in consequence of the rise in the prices of wheat which was taken advantage of by the agriculturists of all the States, excepting South Australia and Tasmania, where there were decreases in acreage, although this was partly due to the unfavourable seasons. In New Zealand, the adverse weather conditions were responsible for a falling off in the area cut for grain amounting to over 200,000 acres. In Australasia, as a whole, the increase in area since 1881 amounts to 1,910,645 acres—but while New South Wales shows an extension of cultivation during the period amounting to 1,170,182 acres, and Victoria an increase of 827,688 acres, the total increase was considerably reduced by the falling off mentioned above. At present more than one-half of the land in cultivation is devoted to wheat-growing, and in an ordinary season the produce of 750,000 acres is available for export to Europe.

The production of wheat during the period covered by the preceding table was as follows :—

State.	1861.	1871.	1881.	1891.	1901.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	1,606,034	2,229,642	3,405,966	3,963,668	14,808,705
Victoria	3,607,727	4,500,795	8,714,377	13,629,370	12,127,382
Queensland	5,880	36,288	39,612	392,309	1,692,222
South Australia	3,410,756	3,967,079	8,087,032	6,436,488	8,012,762
Western Australia	160,155	345,368	153,657	288,810	933,101
Tasmania	1,380,913	847,962	977,365	930,841	963,667
Commonwealth.....	10,171,465	11,927,134	21,378,009	25,641,486	38,537,834
New Zealand.....	772,531	2,448,203	8,297,890	10,257,738	4,046,589
Australasia	10,943,996	14,375,337	29,675,899	35,899,224	42,584,423

The severe drought which prevailed over the greater part of Australasia caused the wheat crop of 1901 to fall far below expectations, and it is estimated that the harvest was affected to the extent of over seventeen million bushels. In New Zealand the dry weather was succeeded by heavy rains, which lasted in some districts right through the harvest, and rendered the grain unfit for milling.

The greatest increase in production is shown by New South Wales, which in 1901 produced nearly eleven million bushels more than in 1891, and from the following statement, which gives the proportion of the total crop produced by each State in 1881, 1891, and 1901, the progress made by New South Wales will be evident, for whereas in 1881 and 1891 it only produced 11 per cent. of the total crop, in 1901 it produced nearly 35 per cent. Victoria and New Zealand show the largest declines, the proportions falling from 38 per cent. and 28·6 per cent. in 1891 to 28·5 per cent. and 9·5 per cent. respectively in 1901 :—

State.	1881.	1891.	1901.
	per cent.	per cent.	per cent.
New South Wales	11·5	11·0	34·8
Victoria	23·4	38·0	28·5
Queensland	0·1	1·1	3·9
South Australia	27·2	17·9	18·8
Western Australia	0·5	0·8	2·2
Tasmania.....	3·3	2·6	2·3
New Zealand	28·0	28·6	9·5
Australasia.....	100·0	100·0	100·0

As producers of wheat, these States are of little account when viewed in comparison with the great wheat-producing countries of the world, Australasian grown wheat forming only 2·2 per cent. of the world's wheat crop. According to the estimate published by the United States Department of Agriculture, the production of wheat in Europe, America, Asia, and Africa in 1900 was 2,477,688,000 bushels, which, with the 54,879,000 bushels yielded by Australasia, gives the world's production as 2,532,567,000 bushels. The figures for each country are appended, the production being represented in Imperial bushels:—

Country.	Bushels.	Country.	Bushels.
Europe—		Africa—	
Russia	312,000,000	Algeria	18,000,000
France	296,000,000	Egypt	12,000,000
Hungary	144,800,000	Tunis	8,000,000
Germany	156,000,000	Cape Colony	4,000,000
Italy	116,000,000		
Spain	102,000,000	Total	42,000,000
United Kingdom	54,400,000		
Austria	40,800,000	America—	
Roumania	54,000,000	United States	544,000,000
Bulgaria	40,000,000	Argentine Republic..	72,000,000
Turkey	32,000,000	Canada	48,000,000
Belgium	12,000,000	Mexico	16,000,000
Servia	12,000,000	Chili	8,000,000
Portugal	4,000,000	Uruguay	16,000,000
Sweden and Norway..	4,000,000		
Holland	4,000,000	Total	704,000,000
Switzerland	4,000,000		
Denmark	4,000,000	Australasia—	
Greece	6,000,000	Victoria	17,847,000
Total	1,398,000,000	New South Wales ...	16,174,000
		New Zealand	6,527,000
Asia—		South Australia	11,253,000
India	184,000,000	Tasmania	1,110,000
Russia in Asia	48,000,000	Western Australia ...	774,000
Turkey	56,000,000	Queensland	1,194,000
Japan	19,388,000		
Persia	24,000,000	Total	54,879,000
Cyprus	2,300,000		
Total	333,688,000	Grand Total	2,532,567,000

The yield of wheat per acre during the season 1901-2 ranged from 4·6 bushels in South Australia to 24·8 bushels in New Zealand, and, with the exception of Victoria, Western Australia, and New Zealand, was

above the average for the last ten years. The average yield per acre for each State for 1901 and during the ten years 1892-1901 are shown below :—

State.	Average Yield per acre.	
	1901.	1892-1901.
	bushels.	bushels.
New South Wales	10·6	10·1
Victoria	6·9	7·7
Queensland	19·4	15·2
South Australia	4·6	4·4
Western Australia	9·9	10·5
Tasmania	21·9	19·4
Commonwealth	7·5	7·3
New Zealand	24·8	25·7
Australasia	8·1	8·5

A yield of 8·5 bushels per acre is a very small one when compared with the following results obtained in some of the principal wheat-growing countries of the world. The averages shown are mostly based on the yields during the six years 1894-99 :—

Country.	Average Yield per acre.	Country.	Average Yield per acre.
	bushels.		bushels.
United Kingdom	31·2	United States	13·0
Germany.....	26·1	India	12·1
France.....	18·9	Russia	9·3
Hungary.....	16·8	Argentine Republic ...	9·3

A bare statement of averages, however, is somewhat misleading. In South Australia, for example, it is found that owing to favourable conditions of culture a yield of 7 bushels is financially as satisfactory a crop as one of 15 bushels in New South Wales or of 20 bushels in New Zealand. In these States the yield could be greatly increased if cultivation of a more scientific character were adopted. Progress in this direction is being made yearly, however; but not to the extent which should prevail, although the tendency in former years simply to put the seed in the ground and await results has been outgrown.

The total value of the wheat crop for 1901-2 and the value of the return per acre in each State and in New Zealand are shown below :—

State.	Value of Production.	Value per Acre.
	£	£
New South Wales	2,525,900	1 16 3
Victoria	2,071,800	1 3 7
Queensland	333,400	3 17 7
South Australia	1,502,400	0 17 3
Western Australia.....	211,100	2 5 0
Tasmania	180,700	4 2 0
Commonwealth	6,830,300	1 6 8
New Zealand	741,900	4 10 9
Australasia	7,572,200	1 8 8

The very high value returned in New Zealand is due to the heavy yield of grain, the area under cultivation being small and specially selected; the values in Tasmania and Queensland also appear high for similar reasons, while in Western Australia the value of production was increased by the high prices obtained for wheat during portion of the year.

A detailed table of the value of the yield per acre during each of the last twelve years is shown below for the three principal wheat-growing states—New South Wales, Victoria, and South Australia. The values are estimated on the basis of the market rates ruling in February and March of each year. It will be seen that a considerable decline took place between 1891 and 1895, due for the most part to the fall in prices rather than to any decrease of production. The effect of the rise in prices is seen in the more satisfactory results in New South Wales during the seasons ending March, 1896, 1897, and 1898; for Victoria and South Australia the drought is largely responsible for the low values in those years :—

Year ending March.	Average Yield per acre.			Value of Average Yield per acre.		
	New South Wales.	Victoria.	South Australia.	New South Wales.	Victoria.	South Australia.
	bushels.	bushels.	bushels.	£ s. d.	£ s. d.	£ s. d.
1891	10·9	11·1	5·6	2 0 10	1 19 9	0 19 7
1892	11·1	10·3	4·3	2 2 6	2 2 3	0 17 11
1893	15·1	11·0	6·1	2 5 2	1 14 0	0 19 3
1894	11·0	10·4	7·9	1 10 1	1 0 1	0 18 4
1895	10·9	8·3	4·9	1 4 6	0 13 6	0 8 0
1896	8·7	4·0	4·2	1 17 0	0 17 9	0 19 10
1897	10·2	4·5	1·7	2 3 5	1 3 8	0 8 7
1898	10·6	6·4	2·6	2 4 2	1 6 2	0 11 3
1899	7·0	9·1	4·9	0 19 0	0 19 9	0 13 7
1900	9·5	7·0	4·6	1 5 0	0 18 9	0 12 4
1901	10·6	8·9	5·9	1 6 9	1 1 0	0 16 2
1902	10·6	6·9	4·6	1 16 3	1 3 7	0 17 3

The rates just given, as well as elsewhere in this chapter, represent farm prices, and not values at the place of consumption.

The average consumption of wheat per head of population in each of the six States and in New Zealand for the last decade was as stated below. The large proportion of adult male population in Western Australia accounts for the high figures for that province :—

	Bushels.
New South Wales	5·9
Victoria	5·2
Queensland	5·6
South Australia	6·3
Western Australia	8·6
Tasmania	7·2
New Zealand	7·7

For the whole of Australasia, the average consumption was 6·2 bushels per head, which is larger than the quantity consumed in any other part of the world for which records are available, with the exception of France and Canada.

The following table shows the net imports or exports of wheat and flour of each of the States during the year 1901, 1 ton of flour being taken as equal to 50 bushels of grain. The exporting States are New South Wales, Victoria, South Australia, New Zealand, and Tasmania. Since 1896, New South Wales has almost been able to supply the wheat required for the food of its inhabitants, and in 1901 exported over 7,700,000 bushels. During the last few years Tasmania also produced enough wheat for home consumption, and had a small surplus, available for export :—

State.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales .....	.....	7,702,072
Victoria .....	.....	10,183,350
Queensland	1,820,525	.....
South Australia .....	.....	9,565,910
Western Australia	884,709	.....
Tasmania .....	.....	24,494
Commonwealth .....	.....	24,770,592
New Zealand .....	.....	2,363,130
Australasia .....	.....	27,133,722

The records for the six States which form the Commonwealth show that since 1879 there were only four years during which they were forced to import wheat from places outside their boundaries. These years were 1886, 1889, 1896, and 1897. In the first-named year the wheat crop was a partial failure in Victoria and South Australia, and almost a complete failure in New South Wales and Queensland. In 1889 there was a general failure in New South Wales and Victoria. In 1896 the crop failed in Victoria, and in the following year, that State for the first time in twenty-two years was compelled to import wheat, the net import, however, being only 61,160 bushels. The following statement gives the figures for the Commonwealth for the twenty years since 1882 :—

Year.	Wheat Crop.	Net Export of Breadstuffs.	Year.	Wheat Crop.	Net Export of Breadstuffs.
	bushels.	bushels.		bushels.	bushels.
1882	21,378,009	5,751,130	1892	25,675,265	4,126,538
1883	21,492,505	4,742,290	1893	32,759,693	8,829,941
1884	35,714,456	17,130,843	1894	36,929,947	11,916,782
1885	30,559,060	11,583,644	1895	30,855,812	6,774,377
1886	20,165,988	(—) 603,532	1896	19,557,726	(—) 4,347,168
1887	28,899,220	4,265,924	1897	20,880,479	(—) 3,641,306
1888	35,930,697	10,643,673	1898	28,241,409	1,341,596
1889	19,757,509	(—) 2,107,136	1899	41,417,853	11,581,198
1890	34,039,289	8,836,170	1900	48,353,402	13,965,610
1891	27,118,259	10,646,298	1901	38,537,834	24,770,592

(—) denotes excess of imports.

In ordinary seasons Australasia ranks about sixth amongst the exporting countries; still, its contribution to the world's markets does not form more than one-thirtieth of the demand, and it cannot, therefore, be said to form a factor of any consequence in the trade.

The United Kingdom is the largest importer of wheat, and the British demand largely influences the price throughout the world. The average London prices per quarter of 8 bushels during the last decennial period were as follow :—

Year.	Price per quarter.	Year.	Price per quarter.
	s. d.		s. d.
1892	30 3	1897	30 2
1893	26 4	1898	34 0
1894	22 10	1899	25 8
1895	23 1	1900	26 11
1896	26 2	1901	26 8

OATS.

The cultivation of oats, which come next to wheat in importance as a grain crop, is increasing in Australasia, as the following figures show:—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	7,224	13,795	16,348	12,958	32,245
Victoria	91,061	175,944	146,995	190,157	329,150
Queensland	69	131	88	715	1,535
South Australia	1,638	3,586	3,023	12,637	34,660
Western Australia	507	1,474	827	1,301	9,641
Tasmania	29,022	29,631	27,535	28,360	54,089
Commonwealth.....	129,521	224,561	194,816	246,128	461,320
New Zealand.....	15,872	139,185	243,387	323,508	405,924
Australasia.....	145,393	363,746	438,203	569,636	867,244

During 1900 there was a considerable increase in cultivation of oats, owing to the demand for this cereal created by the South African war. The colony of New Zealand furnishes considerably more than one-half of the production. In New South Wales the cultivation has been comparatively neglected; in Victoria and Tasmania, however, it is next to wheat in importance; whilst in Queensland, South Australia, and Western Australia the climate is ill-adapted to the cultivation of oats, and the yield is small and counts for very little in the total production of the grain. The total yield in each state for the period covered by the preceding table was as follows:—

State.	1861.	1871.	1881.	1891.	1901.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales ...	152,426	280,887	356,566	276,259	687,179
Victoria	2,136,430	3,299,889	3,612,111	4,412,730	6,724,900
Queensland .....	.....	.....	1,121	16,669	42,208
South Australia ...	33,160	38,894	32,219	80,876	469,254
Western Australia...	8,162	28,330	8,270	18,539	158,638
Tasmania	751,475	593,477	783,129	873,173	1,702,659
Commonwealth ...	3,081,653	4,241,477	4,793,416	5,678,246	9,784,838
New Zealand	512,665	3,726,810	6,924,848	11,009,020	15,045,233
Australasia	3,594,318	7,968,287	11,718,264	16,687,266	24,830,071

The average yield per acre in each State in 1901, and during the ten years 1892-1901 are shown below :—

State.	Average yield per acre.	
	1901.	1892-1901.
	bushels.	bushels.
New South Wales	17·7	19·7
Victoria	20·4	20·1
Queensland	27·5	19·0
South Australia	13·5	9·8
Western Australia	16·5	16·6
Tasmania	31·5	29·0
Commonwealth	21·2	20·5
New Zealand	37·1	34·7
Australasia	28·6	27·6

In all the provinces which grow oats to any extent the yield last year was above the decennial average. New Zealand had the very high average of 37 bushels per acre, which compares very favourably with the averages which prevailed during 1894-99 in the following principal oat-growing countries of the world :—

Country.	Average yield per acre.	Country.	Average yield per acre.
	bushels.		bushels.
United Kingdom ...	40·0	United States	23·7
Germany	35·6	France	26·0
Canada	31·1	Austria	22·7
Hungary	27·4	Russia, in Europe.	15·5

The total value of the oats crop and the return per acre, in each of the Commonwealth States and New Zealand, for the season 1901-2, will be found below :—

State	Value.	Value per acre.
	£	£ s. d.
New South Wales	91,600	2 16 10
Victoria	896,700	2 14 6
Queensland	6,000	3 18 2
South Australia	62,600	1 16 1
Western Australia	30,400	3 3 1
Tasmania	227,000	4 3 9
Commonwealth	1,314,300	2 16 11
New Zealand	2,068,700	5 1 11
Australasia	3,383,000	3 18 0

The high values per acre shown by New Zealand and Tasmania were caused by an increase in the local quotations, consequent on the demands from the drought-stricken States. Large quantities of oats and oaten hay were also exported during 1901 to South Africa by the two provinces mentioned.

The net import or export of oats by each of the states is given in the following table. New Zealand was the only province which exported this cereal to any considerable extent in 1901, although Tasmania and Victoria also exported fairly large quantities. Owing to the war in South Africa, a large demand for oats as horse-feed was created, and for the year ended 31st March, 1902, no less than 6,930,791 bushels of oats, valued at £616,000, were exported to that country by New Zealand alone. New Zealand also exported 386,303 bushels to the United Kingdom :—

State.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	951,577	.....
Victoria .....	.....	2,578,568
Queensland	163,023	.....
South Australia .....	.....	45,502
Western Australia	331,353	.....
Tasmania .....	.....	589,792
Commonwealth .....	.....	1,767,909
New Zealand .....	.....	10,514,606
Australasia .....	.....	12,282,515

According to a carefully-compiled estimate of the average production of oats throughout the world, issued by the Agricultural Department of the United States, the commercial supply of this grain in 1900 is represented by the following condensed results :—

	Bushels.
Europe	2,100,061,000
North America	922,738,000
Asia	40,905,000
Africa	6,500,000
Australasia	25,293,000
Total	3,095,497,000

MAIZE.

Maize is, next to sugar-cane, the principal crop grown in Queensland, and is one of the most important products of New South Wales. In the other States the climate is not suited to its growth, and the cultivation of the cereal extends to only about 23,000 acres. The following

figures show that fair progress has been made since 1861 in the area devoted to this crop :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales	57,959	119,956	117,478	174,577	167,733
Victoria	1,714	1,709	1,783	8,230	10,020
Queensland	1,914	20,329	46,480	101,593	116,983
Other States.....	91	113	36	23	530
Commonwealth	61,678	142,107	165,777	284,428	295,266
New Zealand	770	.....	3,177	5,447	12,503
Australasia ...	62,448	142,107	168,954	289,875	307,769

The production in the same years was as follows :—

State.	1861.	1871.	1881.	1891.	1901.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales	1,727,434	4,015,973	4,330,956	5,721,706	3,844,993
Victoria	20,788	30,833	81,007	461,447	615,472
Queensland	42,100	508,000	1,313,655	3,077,915	2,569,118
Other States	367	2,000	648	483	5,611
Commonwealth	1,790,689	4,556,806	5,726,266	9,261,551	7,035,194
New Zealand	31,570	.....	127,257	238,746	571,834
Australasia ...	1,822,259	4,556,806	5,853,523	9,500,297	7,607,028

It will be seen from the tables given above that although there has been an increase in acreage amounting to nearly 18,000 acres since 1891, the production declined by about 1,894,000 bushels, the falling off being accounted for by the unfavourable season.

The following table shows the average yield of each State and of Australasia for 1901, and for the ten years ended 1901 :—

State.	Average yield per acre.	
	1901.	1892-1901.
	bushels.	bushels.
New South Wales	22·9	29·1
Victoria	61·4	60·7
Queensland	22·0	22·7
Western Australia	10·6	10·6
Commonwealth	23·8	27·6
New Zealand	45·7	41·6
Australasia	24·7	28·2

The averages for Victoria and New Zealand are of little value, as the area under maize in those provinces is small and very favourably situated; while Western Australia, during the whole ten years, had but 530 acres under cultivation, producing 5,611 bushels.

The total value of the crop for the season 1901-2, and the average return per acre, will be found below :—

State.	Total value of crop.	Average value per acre.
	£ . .	£ s. d.
New South Wales	846,800	5 0 11
Victoria	76,900	7 13 6
Queensland	353,300	3 0 4
Other colonies.....	1,300	2 9 1
Commonwealth	1,278,300	4 6 7
New Zealand	85,800	6 17 3
Australasia	1,364,100	4 8 8

The high average value per acre of maize produced in Victoria and New Zealand is due to the fact that the area under this crop is specially selected, and, consequently, yields a larger average return than in the other States.

The net import or export of maize by each State during 1901 was as follows :—

State.	Net Imports.	Net Exports.
	bushels.	bushels.
New South Wales	210,569	.....
Victoria .....	.....	115,475
Queensland	114,628	.....
South Australia	5,475	.....
Western Australia.....	10,984	.....
Tasmania	63	.....
Commonwealth	226,244	.....
New Zealand .....	.....	124,447
Australasia	101,797	.....

It is rather curious that the only States which import maize to any extent are New South Wales and Queensland, where it is principally grown. In Australasia corn does not enter into consumption as an article of food, as it does in other countries, and particularly in America, which produces and consumes more than 80 per cent. of the whole maize crop of the world, as the following figures for 1900—compiled on the authority of the Department of Agriculture in the United States—will show :—

	bushels.
North America.....	2,210,500,000
South America.....	90,000,000
Europe.....	391,358,000
Africa.....	33,207,000
Australasia.....	10,025,000
Total.....	2,735,090,000

BARLEY.

Of the cereal productions of Australasia, barley is grown on the smallest acreage. The area under this crop at different periods was as follows :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales.....	2,924	3,461	6,427	4,459	6,023
Victoria.....	3,419	16,772	48,652	45,021	32,423
Queensland.....	13	971	256	739	11,775
South Australia.....	10,637	17,225	11,953	11,461	15,517
Western Australia.....	2,412	5,083	3,679	3,738	2,719
Tasmania.....	7,279	4,275	4,597	2,650	6,104
Commonwealth.....	26,684	47,787	75,564	68,068	74,561
New Zealand.....	3,457	13,305	29,808	24,268	26,514
Australasia.....	30,141	61,092	105,372	92,336	101,075

For the same years the production was as stated below :—

State.	1861.	1871.	1881.	1891.	1901.
	bushels.	bushels.	bushels.	bushels.	bushels.
New South Wales.....	41,054	55,284	135,218	93,446	106,361
Victoria	68,118	335,506	927,566	830,741	693,851
Queensland.....	158	11,836	3,207	21,302	277,037
South Australia.....	168,137	164,161	137,165	107,183	243,362
Western Australia	2,412	5,083	36,790	48,594	35,841
Tasmania	169,381	76,812	102,475	71,686	167,485
Commonwealth.....	449,260	648,682	1,342,421	1,172,952	1,523,937
New Zealand	96,658	287,646	664,093	688,683	855,993
Australasia.....	545,918	936,328	2,006,514	1,861,635	2,379,930

The average yield of barley per acre in each State for 1901, and for the ten years ended 1901, is given in the following table :—

State.	Average Yield per Acre.	
	1901.	1892-1901.
	bushels.	bushels.
New South Wales	17·7	16·4
Victoria	21·4	17·5
Queensland	23·5	19·1
South Australia	15·7	12·6
Western Australia	13·2	13·2
Tasmania	27·4	20·3
Commonwealth	20·4	16·9
New Zealand	32·3	30·0
Australasia	23·5	20·6

As in the case of the other three cereals which have just been dealt with, New Zealand had a far larger yield of barley per acre than any of the Commonwealth States, and compares favourably with the following countries, which averaged during 1894-99—United Kingdom, 32·7 bushels per acre; Germany, 30·3; United States, 21·8; and France, 20·3 bushels per acre. Barley is not cultivated in these States to the

extent it deserves, and to the total production of 919,224,000 bushels by the world in 1900 Australasia contributed only a little over 2½ million bushels. In fruitful seasons Australasia produces sufficient barley, exclusive of that required for malt, for home requirements, and a small surplus for export; but if the combined trade in barley and malt be considered, all the provinces, with the exception of Victoria, Tasmania, and New Zealand, are dependent upon external sources. The trade in barley and malt for the Commonwealth and New Zealand in 1901 was as follows:—

State.	Barley.		Malt.	
	Net Imports.	Net Exports.	Net Imports.	Net Exports.
	bushels.	bushels.	bushels.	bushels.
New South Wales	74,743	.....	497,229	.....
Victoria .....	.....	44,116	.....	174,760
Queensland	4,234	.....	111,065	.....
South Australia .....	.....	1,035	1,469	.....
Western Australia	38,846	.....	88,105	.....
Tasmania .....	.....	5,296	.....	6,774
Commonwealth	67,376	.....	516,334	.....
New Zealand .....	.....	119,709	.....	135,011
Australasia .....	.....	52,333	381,323	.....

The total value of the barley crop and the average return of this cereal per acre during the season 1901-2 will be found below:—

State.	Total value of barley crop.	Average value per acre.
	£	£ s. d.
New South Wales	13,900	2 6 2
Victoria	147,800	4 11 2
Queensland	58,200	4 18 10
South Australia	48,700	3 2 9
Western Australia	5,000	1 16 9
Tasmania	23,000	3 15 4
Commonwealth	296,600	3 19 7
New Zealand	117,700	4 8 9
Australasia	414,300	4 2 0

POTATOES.

The cultivation of the potato is not confined to any particular State. Victoria, New Zealand, and New South Wales have the largest areas under this crop, but New Zealand shows the largest production. The largest area under this crop was grown in 1899, when no less than 176,381 acres were cultivated. Of this area New South Wales, Victoria, and New Zealand supplied 127,421 acres as against 96,409 acres in 1900. The decrease is accounted for chiefly by the two States last mentioned, where this crop was abandoned to a certain extent in favour of oats for which a large demand was created by the South African war. The following table shows the acreage under potatoes in each State :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales	10,040	14,770	15,943	22,560	26,158
Victoria	27,174	39,064	39,129	57,334	40,058
Queensland	512	3,121	5,086	9,173	13,338
South Australia	2,612	3,156	6,136	6,892	6,248
Western Australia	277	494	278	532	1,829
Tasmania	9,349	8,154	9,670	16,393	25,444
Commonwealth...	49,964	68,759	76,242	112,884	113,075
New Zealand.....	7,292	11,933	22,540	27,266	31,259
Australasia	57,256	80,692	98,782	140,150	144,334

As in the case of the area so in production the highest was in 1899 when it amounted to 629,275 tons. Of this New South Wales, Victoria, and New Zealand contributed 476,842 tons, as against 371,435 tons in 1901. The production for each State was as follows :—

State.	1861.	1871.	1881.	1891.	1901.
	tons.	tons.	tons.	tons.	tons.
New South Wales	30,942	44,758	44,323	62,283	39,146
Victoria	59,364	125,841	134,290	109,786	125,474
Queensland	1,080	6,585	11,984	25,018	39,530
South Australia	7,726	10,989	18,154	27,824	15,059
Western Australia	817	1,457	556	1,596	5,665
Tasmania	47,428	22,608	33,565	63,100	114,704
Commonwealth...	147,357	212,238	242,872	289,607	339,578
New Zealand.....	37,554	42,130	121,890	162,046	206,815
Australasia	184,911	254,368	364,762	451,653	546,393

The average production of potatoes per acre is next given, for 1901, and for the ten years ended 1901. New Zealand, it will be seen, shows a considerably larger return than any of the other provinces :—

State.	Average Yield per Acre.	
	1901.	1892-1901.
	tons.	tons.
New South Wales	1·5	2·4
Victoria	3·2	3·3
Queensland	3·0	2·9
South Australia	2·4	2·3
Western Australia	3·1	3·1
Tasmania	4·5	3·3
Commonwealth	2·1	2·9
New Zealand	6·6	6·1
Australasia	3·1	3·6

Only three of the States are in a position to export potatoes in any quantity—Tasmania, Victoria, and New Zealand. The surplus in Victoria, though at one time considerable, has now very much decreased. The following were the imports or exports of potatoes by each State and New Zealand in 1901 :—

State.	Net Imports.	Net Exports.
	tons.	tons.
New South Wales	42,628	.....
Victoria .....	.....	8,961
Queensland	14,486	.....
South Australia	5,198	.....
Western Australia	10,541	.....
Tasmania .....	.....	49,861
Commonwealth	14,031	.....
New Zealand .....	.....	21,984
Australasia .....	.....	7,953

The total value of the potato crop and the average return per acre for 1901-2 will be found below :—

State.	Value of crop.	Average value per acre.
	£	£ s. d.
New South Wales	226,700	8 13 5
Victoria	480,700	12 0 0
Queensland	158,100	11 17 1
South Australia	56,500	8 17 8
Western Australia	51,000	22 8 4
Tasmania	430,100	16 18 1
Commonwealth	1,403,100	12 8 2
New Zealand	723,800	23 3 1
Australasia	2,126,900	14 14 9

These values are remarkably high, the average return in a normal year for the whole of Australasia being not more than £8 an acre. The ruling prices in 1901 were, however, far in excess of those realised for some considerable time, and this is especially the case as regards Western Australia.

HAY.

Considerable quantities of wheat, oats, barley, and lucerne are grown for the purpose of being converted into hay, but the area cut varies, of course, according to the season. The area cut for hay has largely increased since 1881, as will be seen from the table appended :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales	45,175	51,805	146,610	163,863	442,163
Victoria	74,681	103,206	212,150	369,498	659,239
Queensland	280	3,828	16,926	30,655	63,055
South Australia	62,874	97,812	333,467	304,171	369,796
Western Australia	6,676	*14,342	24,445	28,534	92,964
Tasmania	31,803	31,578	34,790	45,445	61,495
Commonwealth ...	221,489	302,571	768,388	942,166	1,688,712
New Zealand	+27,160	30,717	68,423	46,652	62,984
Australasia	248,649	333,288	836,811	988,818	1,751,696

* In 1869. † In 1867.

In New Zealand, for all the years except the last, the areas shown only include the extent of sown grasses cut for hay. It is not possible

to quote for the earlier years the area under wheat, oats, &c., cut for this purpose. Similarly, the production shown below for those years only includes the quantity of grass cut :—

State.	1861.	1871.	1881.	1891.	1901.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	57,363	77,460	198,532	209,417	472,621
Victoria	92,497	144,637	238,793	505,246	884,369
Queensland	459	6,278	19,640	58,842	122,039
South Australia.....	78,886	98,266	240,827	193,317	346,467
Western Australia	6,609	14,288	24,445	28,534	91,517
Tasmania	59,851	30,891	44,957	66,996	109,383
Commonwealth...	295,665	371,820	767,194	1,062,352	2,026,396
New Zealand.....	36,666	35,674	89,081	67,361	94,476
Australasia.....	332,331	407,494	856,275	1,129,713	2,120,872

The average yield of hay per acre will be found in the next table, the periods covered being the year 1901 and the ten years which closed with 1901 :—

State.	Average yield per acre.	
	1901.	1892-1901.
	tons.	tons.
New South Wales	1.1	1.0
Victoria	1.3	1.2
Queensland	1.9	1.9
South Australia	0.9	0.8
Western Australia	1.0	1.0
Tasmania	1.8	1.1
Commonwealth	1.2	1.1
New Zealand	1.9	1.9
Australasia	1.3	1.1

The greater portion of the hay is produced from wheat, although in New South Wales, Victoria, Queensland, and New Zealand there are large areas under oaten and lucerne hay, which are in great demand

and readily sell at remunerative prices ; in fact, so profitable is the return from oaten hay, that in New South Wales and Queensland the cultivation of oats for threshing is practically neglected for the sake of hay. For the most part, hay is grown in each province in quantities sufficient for its own requirements, New South Wales, Queensland, and Western Australia ordinarily being the only States which import to any extent.

The net import or export of hay and chaff by each State and New Zealand during the year 1901 was as follows :—

State.	Net Imports.	Net Exports.
	tons.	tons.
New South Wales	14,665	.....
Victoria .....	.....	96,786
Queensland	11,073	.....
South Australia .....	.....	23,900
Western Australia	1,250	.....
Tasmania .....	.....	5,892
Commonwealth .....	.....	99,590
New Zealand .....	.....	836
Australasia .....	.....	100,426

The value of the return from hay in 1901-2 was higher than that of any other crop ; the value in each State and the return per acre will be found below :—

State.	Total Value of Hay Crop.	Average Value per Acre.
	£	£ s. d.
New South Wales	1,887,000	4 5 4
Victoria	3,095,000	4 13 9
Queensland	427,000	6 15 5
South Australia	1,468,000	3 19 5
Western Australia	412,000	4 8 7
Tasmania	323,000	5 6 8
Commonwealth	7,617,000	4 10 2
New Zealand	220,000	3 6 8
Australasia ..	7,837,000	4 9 6

The above averages are higher than those realised for some years past, the increase being accounted for by the enhanced prices realised for all descriptions of fodder owing to the unfavourable season experienced over a great part of Australasia.

GREEN FORAGE AND SOWN GRASSES.

The cultivation of maize, sorghum, barley, oats, and other cereals for green food in addition to lucerne and grass is confined chiefly to the districts where dairy farming is carried on. The agricultural returns of some of the States do not admit of a distribution being made between these forms of cultivation prior to 1887. The following table shows the area under such green food in 1887, 1891, and 1901, and it will be seen that there have been large developments in most of the States, especially in New South Wales.

The return from the cultivation of green forage in all the States during the season 1901-1902 is estimated at £1,003,000, or nearly £3 an acre.

State.	Green Food.			Sown Grasses.		
	1887.	1891.	1901.	1887.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.	acres.
New South Wales..	20,403	32,138	110,215	192,678	333,238	467,839
Victoria	6,036	9,202	32,795	154,612	174,982	162,954
Queensland	9,582	10,727	39,793	13,619	20,921	34,679
South Australia ...	10,079	6,416	13,695	23,217	17,519	23,510
Western Australia .....	.....	238	1,024	.....	.....	11,132
Tasmania	1,246	1,101	4,082	184,653	208,596	314,422
Commonwealth	47,346	59,822	201,604	568,779	755,256	1,014,536
New Zealand	98,029	118,484	199,508	5,869,247	7,357,229	11,620,178
Australasia ...	145,375	178,306	401,112	6,438,026	8,112,485	12,634,714

In Victoria, Tasmania, and New Zealand various areas of sown grasses are cut for seed, chiefly rye grass and cocksfoot, the total quantity of grass seed produced in 1901 being 6,514 tons, valued at £215,000. The production in Victoria was 537 tons; in Tasmania, 800 tons; and in New Zealand, 5,177 tons. The acreage on which this grass seed was produced is included in the total given above for sown grasses, and amounted to 1,877 acres in Victoria, 8,043 acres in Tasmania, and 44,120 acres in New Zealand.

THE VINE.

The history of the vine in Australia dates from the year 1828, when cuttings from the celebrated vineyards of France, Spain, and the Rhine Valley were planted in the Hunter River District of New South Wales, forming the nursery for the principal vineyards of that State. Years afterwards the vine was planted in the Murray River District and other parts of New South Wales, and was afterwards introduced into Victoria and South Australia, and is now cultivated in all the

provinces of the Australian continent. In South Australia a large number of Germans are employed in the industry of wine-making.

The climate and soil of Australia are peculiarly adapted to the successful cultivation of the vine, and with an increasing local demand, and the opening up of a market in England, where Australian wines have obtained due appreciation, the future expansion of wine-growing appears fairly assured. The depreciation which some of the foreign wines have suffered, both in quantity and quality, owing to the devastation of the vineyards by phylloxera, is an additional reason why the vine-growers of this continent should look forward to largely-increased operations for their industry.

The progress of vine cultivation since the year 1861 is illustrated by the table subjoined. The areas given include the vines producing table-fruit, as well as those cultivated for wine-making, also the young vines not yet in bearing :—

State.	1861.	1871.	1881.	1891.	1901.
	acres.	acres.	acres.	acres.	acres.
New South Wales	1,130	4,152	4,027	8,281	8,606
Victoria	1,464	5,523	4,923	24,483	28,592
Queensland	40	568	1,212	1,988	1,990
South Australia.....	3,918	5,455	4,202	12,314	20,860
Western Australia	457	692	527	1,004	3,724
Australia	7,009	16,390	14,891	48,070	63,772

At present the area devoted to vines is much larger in Victoria and South Australia than in the other States ; in the former State 4,109 and in the latter 8,546 acres have been added to the vineyard area since 1891. This is not great progress compared with Algeria, for example, which has already 375,136 acres under vines, although systematic planting dates only from 1849 ; nevertheless it is a hopeful sign in Australia, where patient waiting for the harvest to be gathered years hence is not a characteristic of the agriculturist. The progress of New South Wales has been very slight, the area under vines in 1901 being only 325 acres more than in 1891. The introduction of phylloxera into the county of Cumberland has greatly retarded this industry as most of the table grapes are grown there, and until some efficient means of easily guarding against the disease have been found but little progress can be expected in this State. Vine-growing has never been carried on to any extent in Tasmania or New Zealand, although there are numerous places in the latter colony suited for growing vines for the manufacture of both wine and raisins. The area under vines in New Zealand in 1901 was returned at 543 acres.

The following tables show the progress made in wine-growing during the last forty-one years :—

State.	1861.	1871.	1881.	1891.	1901.
	gallons.	gallons.	gallons.	gallons.	gallons.
New South Wales.....	85,328	413,321	513,688	913,107	868,479
Victoria	47,568	713,589	539,191	1,554,130	1,981,475
Queensland.....	.....	.....	72,121	168,526	148,835
South Australia.....	312,021	852,315	313,060	861,835	2,077,923
Western Australia .....	.....	.....	99,600	166,664	119,500
Australia	444,917	1,979,225	1,537,660	3,604,262	5,196,212

The production of table-grapes during the same period is shown below :—

State.	1861.	1871.	1881.	1891.	1901.
	tons.	tons.	tons.	tons.	tons.
New South Wales.....	224	508	1,103	3,694	3,475
Victoria	849	1,545	740	2,791	5,110
Queensland.....	.....	.....	255	1,169	1,814
South Australia.....	1,161	1,692	1,498	4,590	12,608
Western Australia .....	.....	.....	.....	.....	400
Australia.....	2,234	3,745	3,596	12,244	23,407

Among other produce of the vineyards may be mentioned 9,351 gallons of brandy in New South Wales, while Victoria and South Australia produced respectively 30,078 cwt. and 10,753 cwt. of raisins and currants. Victoria produces much more brandy than any of the other States, but it is not wholly made from grapes and the figures cannot be ascertained.

It is impossible to tabulate the average wine-yield of all the States, as in many instances the acreage under cultivation for wine-making purposes cannot be separated from young unproductive vineyards or areas cultivated for table varieties of the grape only. Making due allowance for this fact, it would appear that the average production for the season 1901-1902, which was a very unfavourable one, was about 177 gallons in New South Wales, 88 gallons in Queensland, 72 gallons in Western Australia, and 77 gallons in Victoria. Taking an average year, the production for Australia may be set down at 190 gallons.

Compared with the wine production of other countries, that of Australia is certainly trifling. In 1898, the latest year for which information is available, the world's production was estimated at 2,716,000,000 gallons, to which Australia only contributed 4,000,000 gallons; while in 1901 the production of Australia was returned at 5,000,000 gallons.

The following table illustrates the progress made in the export of Australian wine to countries outside of Australasia since 1881. It will be noticed that in 1901, the trade with foreign countries had grown to seventeen times the value in 1881, while the number of gallons exported had also increased very largely. The 1901 figures are, exclusive of Queensland, 39 gallons, valued at £19; and Western Australia, 173 gallons, valued at £116:—

State.	1881.		1891.		1901.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	gallons.	£	gallons.	£	gallons.	£
New South Wales..	13,271	3,520	12,368	2,904	8,242	1,923
Victoria	5,588	2,341	142,294	26,152	340,353	43,327
South Australia	1,751	580	227,681	39,054	485,671	67,136
Australia ...	20,610	6,441	382,343	68,110	834,266	112,386

Including the inter-state as well as the foreign trade, the exports of each State during the same years are shown below. The figures for 1901 are exclusive of Queensland, 39 gallons, valued at £19; Western Australia, 185 gallons, valued at £122; and Tasmania, 24 gallons, valued at £27.

State.	1881.		1891.		1901.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	gallons.	£	gallons.	£	gallons.	£
New South Wales..	22,377	7,233	54,143	11,644	39,651	12,256
Victoria	12,544	5,388	160,982	32,516	364,413	50,950
South Australia.....	54,001	12,637	285,107	58,282	593,357	91,548
Australia ...	88,922	25,258	500,232	102,442	997,421	154,754

The total value of the grape crop and the average return per acre in the Australian States, for the year 1901, will be found below :—

State.	Total value of crop.	Average value per acre—	
		Of Total Area under Vines.	Of Productive Vines.
	£	£ s. d.	£ s. d.
New South Wales	136,500	15 17 3	17 9 4
Victoria	461,800	15 16 0	18 0 0
Queensland	39,800	14 13 6	17 5 4
South Australia	337,700	16 17 9	18 11 4
Western Australia.....	55,900	15 0 0	.....
Commonwealth	1,031,700	16 3 4	18 3 7
New Zealand	8,100	15 0 0	.....
Australasia	1,039,800	16 3 4	18 3 7

The Government of Victoria made provision for assisting the wine industry in that State by establishing wineries. Under safeguarding regulations it undertook to advance up to £3,000 to each company on its formation, and a sum of £8,600 was advanced to companies at Rutherglen, Stawell, Mooropna, and Yarrawonga.

SUGAR-CANE.

The growth of the cane and the manufacture of sugar are important industries in Queensland and New South Wales; but whilst in the former State the industry if not increasing is maintaining its position, in the latter the area under crop has declined by nearly one-third since 1896. The area under cane in each State in the various years shown was as follows :—

Year.	Queensland.	New South Wales.
	acres.	acres.
1864	94	22
1871	9,581	4,394
1881	28,026	12,167
1891	50,948	22,262
1896	83,093	32,927
1901	112,031	20,809

The conditions of cultivation in the two States are not precisely the same. In New South Wales, taking one year with another the area under cane is usually twice as great as the area from which cane is cut, but in Queensland the productive area is very much larger. This will be seen from the following statement:—

Year ended 31st March.	Total Area.		Area from which Cane was cut.		Yield of Cane per acre.	
	Queensland.	New South Wales.	Queensland.	New South Wales.	Queensland.	New South Wales.
	acres.	acres.	acres.	acres.	tons.	tons.
1898	98,641	25,865	65,432	12,936	13·4	20·8
1899	111,012	24,759	82,391	14,578	18·7	19·8
1900	110,657	22,517	79,435	9,435	14·8	18·1
1901	108,535	22,114	72,651	10,472	11·7	19·0
1902	112,031	20,809	78,160	8,790	15·1	21·4

For the five years the average for Queensland was 14·7 tons per acre, as against 19·8 tons in New South Wales. This does not by any means prove the superiority of the land in New South Wales for cane-growing, for if the whole area under cane be taken into account very different results are arrived at. The following figures cover five years:—

Yield of cane from total area under crop—

Queensland	10·3 tons per acre.
New South Wales	9·6 „ „

In New South Wales cane is cut every second year, but in the Northern State a crop is obtained from the greater part of the cane area yearly, and this is the explanation of the difference in the yields and the large area in New South Wales apparently unproductive.

The quantity of sugar obtained from the cane-fields has varied during the last ten years between 77,752 and 192,844 tons per annum, the average being 118,518 tons, of which 94,497 tons were produced by Queensland, and 24,021 tons by New South Wales. The yield of sugar per ton of cane varies, of course, with the density of the juice. In an ordinary season it may be set down at 9·75 per cent.

The greater part of the field-work on the plantations in Queensland is performed by coloured labour, chiefly South Sea Islanders. In New South Wales the work was formerly done entirely by white labour, but latterly there has been a considerable proportion of coloured persons, chiefly Hindoos, employed on the cane-fields. In Queensland during last season the number of coloured labourers was about 8,850, and as the area cut was 78,160 acres, the employment of coloured labour was in the proportion of one man to every 8·8 acres. In New South Wales the coloured labourers numbered about 1,010, and the area cut being 8,790

acres, the proportion was one man to every 8·7 acres. From this statement it would appear that there is little difference between the States in regard to the employment of coloured labour compared with the area cropped. There is, however, a further difference between the States. In Queensland the law restricts the employment of Kanakas to the field work of a cane plantation; in New South Wales no similar restriction exists, and coloured labour is employed in several occupations reserved for white labour in Queensland. This, of course, refers to the conditions obtaining anterior to recent federal legislation.

The cost of growing cane may be set down at from 2s. 11d. to 3s. 5d. per ton of cane, according as black or white labour is employed, the lower figures representing the cost of black labour.

In New South Wales the cost of harvesting the cane is somewhat as follows, the average being for areas on which white labour is employed:—

	s.	d.
Cutting	3	3
Carting to riverside	1	0
Transfer to Mills	0	9
Sundry Expenses	0	3
	<hr/>	
	5	3
Average price paid for standing cane	11	3
	<hr/>	
Total, per ton	16	6

In Queensland the plantations are more favourably situated in regard to the mills, and the cost delivered to the mill is about 12s. 2d. per ton. This represents 4s. 4d. per ton of cane, and at the rate of 9 tons of cane per ton of sugar the comparison is 39s. per ton in favour of Queensland. From Dr. Maxwell's report to the Federal Premier it would appear that the wages of coloured labourers working in the fields, after making all necessary allowances, is 2s. 4½d. per day.

In 1901 the Federal Parliament passed an Act which greatly affects the sugar industry, especially in Queensland. Under the provisions of this measure, which is entitled the Pacific Island Labourers Bill, a limited number of Pacific Islanders are allowed to enter Australia up to the 31st day of March, 1904, but on and after that date their immigration is prohibited. All agreements for their employment terminate on the 31st December, 1906, and after that date any Pacific Islander found in Australia will be deported.

The duty on imported cane sugar is £6 per ton, while the excise duty on locally-grown sugar is £1 per ton on sugar produced by white labour, and £3 per ton on sugar in the manufacture of which black labour has been employed. The employment of white against black labour is thus protected to the extent of £2 per ton of sugar, or equal to about 4s. 5d. per ton of cane.

The following table shows the apparent consumption of sugar in each State during 1901. Queensland was the only province which was able to meet its own requirements, and spare a quantity of sugar for export.

The net export from that State amounted to 70,598 tons, valued at £788,600 almost the whole of which was consigned to the other Commonwealth States.

State.	Locally Produced.	Net Import.	Total Locally Produced or Imported.
	tons.	tons.	tons.
New South Wales	19,569	41,101	60,670
Victoria .....	.....	59,608	59,608
Queensland	120,858	*70,598	50,260
South Australia .....	.....	20,725	20,725
Western Australia .....	.....	9,087	9,087
Tasmania .....	.....	8,536	8,536
Commonwealth	140,427	68,459	208,886
New Zealand .....	.....	44,560	44,560
Australasia	140,427	113,019	253,446

* Net Export.

The quantity shown above does not necessarily represent the consumption of sugar during the year, as the surplus available from previous years and the amount carried over at the end of the year have to be considered. Taking the last ten years' average of 103·5 lb. per head the annual consumption of the Commonwealth would appear to be 174,800 tons, which is 34,086 less than shown in the table.

The country of origin of 98,448 tons of the sugar which were imported into Australia from abroad during 1901 can be ascertained, and was as shown below. The unspecified balance consisted partly of small quantities imported from other countries, but mostly of re-exports, the original port of shipment of which could not be traced from one State to another. The quantity shown as imported from Europe was probably beet sugar :—

Country of Origin.	Quantity Imported.
	tons.
Mauritius	8,453
Fiji	694
Java	72,643
Hongkong	1,791
Europe	4,876
Egypt	3,936
Peru	6,055
Unknown	18,322
Total	116,770

The re-export of foreign and Queensland sugar from Australia amounts to 48,311 tons.

The total value of the sugar crop and the average return per acre, in the sugar-growing States of Australia, will be found below for the year 1901 :—

State.	Value of Cane grown.	Average Value per Acre.
	£	£ s. d.
New South Wales	83,400	4 0 2
Queensland	501,600	4 9 6

SUGAR-BEET.

The question of cultivating beet-root for the production of sugar has attracted attention in these States, principally in Victoria, where experiments were made in this direction over thirty years ago. The results obtained were not considered satisfactory enough to induce growers to cultivate this particular crop, and it was not until the year 1896 that a systematic attempt was made to establish the industry.

On the 6th March, 1896, the Victorian Parliament passed an Act empowering the Government to assist in the establishment of the sugar-beet industry by granting loans to duly registered public companies which might be formed for the purpose of erecting mills and equipping them with the necessary machinery and plant for the extraction of sugar from the roots. The company applying for aid must satisfy the Treasurer of the State of certain conditions, and if he were satisfied that these conditions were likely to be fulfilled, and that the company had a paid-up capital of not less than £20,000, he was authorised to advance to the company a sum not exceeding twice the amount raised by its shareholders.

As a result of these concessions a company was formed in Victoria, This company erected a factory at Maffra, at a total cost of £17,200, and the first campaign ended in June, 1898. The cultivation was further persevered with until May, 1900, when the factory was closed down. The failure of the industry was ascribed to various causes, the principal one being that the supply of beet was not sufficient, since 9,000 tons was the greatest quantity treated in a campaign by the factory, which was capable of treating 40,000 tons. Want of expert knowledge by the farmers in growing beet-root was another cause of failure ; the first crop only produced 9 tons to the acre, and the others were even worse. Dry seasons were also blamed, so that, on the whole, the cultivation of beet in Victoria was not a success. The percentage of sugar produced during the three seasons was as follows :—

1897-98.....	14·0 per cent.
1898-99.....	11·8 „
1899-1900.....	14·6 „

while the sugar produced had a standard of purity of 80 per cent., 76 per cent., and 85 per cent. respectively.

The Government expenditure on plant and machinery at Maffra amounted to £60,000, and altogether upwards of £100,000 of public money has been laid out in connection with the venture. Although the industry so far has been a failure, the Minister of Agriculture in Victoria has determined to make another effort to resuscitate it on a sounder basis.

In New South Wales, although, as already stated, portions of the soil, particularly in the New England district, have been demonstrated to be admirably adapted to the cultivation of beet of excellent saccharine properties, no systematic effort has yet been made towards the establishment of the sugar-beet industry on a commercial basis.

TOBACCO.

The cultivation of the tobacco-plant has received attention in the three eastern states. The following table shows the area and production of tobacco at various periods :—

Year.	New South Wales.		Victoria.		Queensland.		Australia.	
	Area.	Production.	Area.	Production.	Area.	Production.	Area.	Production.
1861	acres.	cwt.	acres.	cwt.	acres.	cwt.	acres.	cwt.
1861	224	2,647	220	2,552.	..	..	444	5,190
1871	507	4,475	299	2,307	44	.....	910	6,782
1881	1,025	18,311	1,461	12,876	68	521	3,154	31,708
1888	4,833	55,478	1,685	13,355	123	1,418	6,641	70,251
1891	880	9,314	545	2,579	790	7,704	2,221	19,597
1892	848	8,344	477	658	318	3,808	1,643	12,810
1893	854	10,358	1,057	8,952	475	4,577	2,386	24,887
1894	710	8,132	1,412	7,155	915	9,571	3,043	24,858
1895	1,231	10,548	2,029	15,223.	1,061	7,511	4,321	33,282
1896	2,744	27,468	1,264	7,890	994	8,029	5,002	43,987
1897	2,181	19,718	522	3,419	755	5,703	3,458	28,840
1898	1,405	12,706	78	190	617	3,276	2,100	16,172
1899	546	6,641	155	1,365	745	6,551	1,446	14,557
1900	199	1,905	109	311	665	4,032	973	6,248
1901	182	1,971	103	345	768	5,848	1,053	8,164

Owing to over-production and the want of a foreign market, the area devoted to tobacco-culture greatly declined from 1888 to 1892, after which it showed signs of development until 1896, but since then consistently declined until 1901, when the acreage showed a slight increase over that of the previous season. The Australasian tobacco-leaf has not yet been prepared in such a way as to find acceptance abroad, and until such is accomplished it will be useless to expect the cultivation of the plant to become a settled industry. The soil and climate of Australia appear to be suitable for the growth of the plant, but sufficient care and skill have not been expended upon the preparation of the leaf. The quantity of 70,251 cwt. of leaf produced in 1888 was so greatly in excess of local requirements that very low prices only could be obtained, and a large

portion of the crop was left upon the growers' hands. The result was that many farmers abandoned the cultivation of tobacco, so that the area under this crop during 1889 was only 3,239 acres in New South Wales, and 955 acres in Victoria, producing respectively 27,724 cwt. and 4,123 cwt. of leaf—less than half the crop of the previous year. In 1891 the area showed a further decline in the case of New South Wales and Victoria. In the mother State this decline continued until 1894; but in Victoria and Queensland the smallest area devoted to the crop was during the season 1892. The year 1895 saw a great increase in the cultivation of tobacco in all three States, and in New South Wales in 1896 there was again a large extension of the area under the plant, although in Victoria and Queensland the advance made in 1895 was not maintained. Since that year the area under cultivation and the production have both steadily declined in each State until, in 1900, the total production was only 6,248 cwt., the lowest since 1861. The production in 1901 was very small, being only about 8,000 cwt. In 1898 the crop in Victoria was almost a complete failure.

The average production per acre of tobacco in 1901, and during the ten years ended 1901, were as shown below:—

State.	Average Production per Acre.	
	1901.	1892-1901.
	cwt.	cwt.
New South Wales	10·8	9·9
Victoria	3·3	6·2
Queensland	7·6	8·1
Australasia	7·7	8·4

The Agricultural Department of Queensland is endeavouring to assist the tobacco-growers by the importation of American seed of first quality, suited to the Queensland climate, and, following the example set by Victoria and New South Wales, the services of an American expert have been secured. New Zealand, also, has commenced the cultivation of tobacco, but so far it is only in the nature of an experiment; and a small area has been planted in the Northern Territory of South Australia. In 1897 the Victorian Government decided to grant a bonus of 3d. per lb. on all tobacco-leaf of approved quality grown in the State, and cured and shipped under the supervision of the tobacco expert. The bonus was only payable to the actual grower of the leaf, and 3 tons were assigned as the maximum quantity for which payment was to be made to any one grower or association. In Western Australia preparations are being made for cultivating tobacco on a large scale, and a company has been formed which proposes to acquire suitable land for raising the crop. Samples of the product grown in the State

have been submitted to experts and pronounced equal to the finest Havana, and a large firm in England has undertaken to purchase any quantity of similar leaf at from 1s. 9d. to 3s. per lb.

The following table shows the imports of tobacco, cigars, and cigarettes for home consumption during 1901; but the amounts for this year are above the normal consumption owing to excessive imports in anticipation of the Federal Tariff.

State.	Quantity. lb.
New South Wales	4,403,930
Victoria	3,668,700
Queensland	933,500
South Australia	793,315
Western Australia	872,000
Tasmania	379,930
<hr/>	
Commonwealth	11,051,375
New Zealand	1,972,300
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Australasia	13,023,675

The proportion of waste in the manufacture of tobacco is about one-third, so that the quantity of leaf represented above may be set down as 19,535,500 lb. Applying the decennial average of 8·4 cwt. per acre, it would appear that the produce of 20,764 acres is required annually to supply the demand for tobacco in Australasia. The total value of the tobacco crop for 1901 in Australia was only £10,300, returning an average value of £9 15s. 7d. per acre.

GARDENS AND ORCHARDS.

The cultivation of fruit in Australasia does not attract anything like the attention it deserves, although the soil and climate of large areas in all the provinces are well adapted to fruit-growing. Still, some progress has been made, especially in recent years. In 1901 the proportion of the total cultivation allotted to fruit was 2·1 per cent., and in 1891 2·1 per cent., while in 1881 the proportion was 1·5 per cent. The area per 1,000 persons, in 1901, was 44·6 acres; in 1891, 36 acres; and in 1881, 29·4 acres. Grapes, oranges, apples, pears, and peaches are the principal fruits grown; but with an unlimited area suitable for fruit-cultivation, and with climatic conditions so varied, ranging from comparative cold in New Zealand and on the high lands of New South Wales and Victoria to tropical heat in Queensland, a large variety of fruits could be cultivated. The industry, however, languishes partly on

account of the lack of skill and care on the part of the grower ; good fruits commanding high prices, while those placed within the reach of the multitude are generally of lower quality ; and partly owing to the lack of means of rapid transit to market at reasonable rates. The inferior quality of much of the fruit produced was due to the ravages of fruit pests. The pests were almost wholly imported from Europe and America on fruit and cuttings, and as the orchards of Australia were threatened, and the fruit industry likely to be seriously interfered with, Acts have been passed in all the states prohibiting the importation of diseased fruit. The result of this legislation has been wholly beneficial, and if supplemented by legislation aimed at eradicating diseases existing in the orchards themselves, the future of the fruit industry would be assured. The area under orchards and gardens in 1881, 1891, and 1901 was as follows :—

State.	1881.		1891.		1901.	
	Acres.	Percentage to total area under Crops.	Acres.	Percentage to total area under Crops.	Acres.	Percentage to total area under Crops.
New South Wales	24,565	4·3	40,116	4·7	55,941	2·4
Victoria	20,630	1·4	37,435	1·8	58,807	2·0
Queensland	3,262	2·8	9,758	4·0	14,771	3·0
South Australia	9,864	0·4	14,422	0·7	25,320	1·1
Western Australia .. . . .	.....	...	.....	...	6,177	2·8
Tasmania	6,717	4·5	10,696	6·4	13,231	5·7
Commonwealth.....	65,038	1·5	112,427	2·1	174,247	2·1
New Zealand	16,360	1·5	29,235	2·0	30,191	1·9
Australasia	81,393	1·5	141,662	2·1	204,438	2·1

With the extension of artificial irrigation and the increased facilities for export afforded by the adoption of cool chambers for the preservation of fruit during long voyages, the orchardists of Australasia are now enabled to compete with foreign States in the fruit supply for the English market, which averages about £8,000,000 in value annually. The Tasmanian fruit trade with England has passed the experimental stage, and every season large steamers visit Hobart to receive fruit for the home market.

The following table shows the import and export trade of each State in green fruit and pulp for 1901, from which it will be seen that Tasmania is, as yet, the only State whose export largely exceeds its

import, although in both Queensland and South Australia the exports of domestic produce are now well above the imports :—

State.	Imports.	Exports of Domestic Produce.
	£	£
New South Wales	303,956	79,965
Victoria	88,633	71,283
Queensland	94,181	101,975
South Australia	21,712	62,692
Western Australia	25,315	682
Tasmania	23,006	228,468
Commonwealth	556,803	545,065
New Zealand	135,353	262
Australasia	692,156	545,327

The total value of the produce of gardens and orchards and the average return per acre in 1901 were as given below :—

State.	Total Value of Crop.	Average Value per Acre.
	£	£ s. d.
New South Wales	474,500	8 9 8
Victoria	1,470,200	25 0 0
Queensland	215,300	14 11 6
South Australia	443,100	17 10 0
Western Australia	108,100	17 10 0
Tasmania	330,800	15 0 0
Commonwealth	3,042,000	17 9 2
New Zealand	557,600	18 9 5
Australasia	3,599,600	17 12 2

The average returns per acre have but little value for purposes of comparison, as much depends on the proportion of the areas under certain kinds of fruit and under vegetable gardens, which tends to increase or decrease, as the case may be, the general average of a State. It will be seen that Victoria shows the largest return from this class of cultivation, the total value of the produce being £1,470,000, equal to an average of £25 an acre. In this State there are great facilities for disposing of the crop, while the bonuses offered by the Government have caused increased attention to be devoted to the fruit industry. Under the planting bonus of £3 an acre offered for trees planted after the 8th May, 1890, over 8,000 acres have been cropped during the period of eleven years

up till 1901. A sum of £25,00 was set apart for payment of these allowances, and of this about £21,000 have been expended. The export trade has also greatly benefited by a system of bonuses. Prior to 1896 the amount was 2s. per case, but since that date, up to 1901, it was at the rate of 1s. per case. Last season over 12,000 cwt. of apples and pears were exported, several of the shipments realising very high prices in the English market. In New South Wales the smallness of the average is explained by the fact that in a great number of instances, owing to a lack of facilities for disposing of the fruit crops, the produce of the orchards did not reach the markets, and in some cases was not even gathered. In Tasmania stone fruits are principally grown, and the gross returns from these are much smaller than the returns obtained from the cultivation of sub-tropical fruits such as the orange and citron, which tend to increase the average returns in some of the other provinces. In South Australia the large area cultivated as market gardens, which return a greater value per acre than orchards, accounts for the high value of production shown.

MINOR CROPS.

Besides the crops already specifically noticed, there are small areas on which are grown a variety of products, chiefly rye, bere, onions, beans, peas, turnips, rape, mangold wurzel, and hops; but they are not sufficiently important to warrant special mention, except turnips and rape in New Zealand, where no less an area than 422,359 acres was planted with these crops. The area under minor crops in each province in 1901 was as follows:—

State.	Acres.
New South Wales	13,780
Victoria	20,077
Queensland	20,189
South Australia	2,066
Western Australia	5,533
Tasmania	41,334
Commonwealth	102,979
New Zealand	568,675
Australasia	671,654

In 1901 there were 547 acres under coffee in Queensland, which produced on an average 238 lb. per acre. There were also 399 acres under arrowroot, with an average production of 10·2 tons per acre, and 205 acres under rice, which returned a yield of 5,222 bushels, or an average of 25·5 bushels to the acre. Small quantities of cotton, also, are grown in Queensland; and it has been found that heavy crops of cotton can be raised at the Pera Artesian Settlement in New South Wales. In 1897 the South Australian Government granted a lease of Bathurst Island, comprising an area of 500,000 acres, to a syndicate, which proposes to plant india-rubber trees on a large scale.

DISSEMINATION OF AGRICULTURAL KNOWLEDGE.

Although considerable progress has of late years been made in some directions, yet it must be admitted generally that agriculture in Australasia has only now passed the tentative stage. The typical Australian agriculturist, relying largely on a bountiful Nature, does not exercise upon his crops anything approaching the same patience, care, and labour that are bestowed by the European cultivator, nor as a rule does he avail himself of the benefits of scientific farming and improved implements to the extent that prevails in America and Europe. It may be expected that improvements will take place in this respect, and that the efforts made by the Governments of the various States for the promotion of scientific farming will bear good fruit. In most of the provinces, agricultural colleges and model farms have been established, and travelling lecturers are sent to agricultural centres. At present New South Wales possesses the Hawkesbury Agricultural College and experimental farm, and the experimental farms at Wagga, Wollongbar, Bathurst, Coolabah, the Pera Bore, and Moree. Victoria has the two agricultural colleges of Dookie and Longerenong, with experimental farms attached to them, and another farm at Framlingham, together with a viticultural college at Rutherglen. South Australia has an agricultural college and experimental farm at Roseworthy. The Queensland Government established an agricultural college and farm at Gatton in 1896. By a change in the distribution of the money voted for State scholarships, four bursaries have been allotted, entitling the holders to free board and instruction for a period of three years as resident students of the college. State farms have also been established at Westbrook, Hermitage, Biggenden, and Gindie. New Zealand possesses an agricultural college and an experimental farm at Lincoln, in Canterbury.

In New South Wales experimental cultivation by means of irrigation with artesian and catchment water has been successfully conducted at some of the tanks and bores owned by the State, notably at the Pera Bore. The total expenditure by the Government on artesian boring up to the 31st December, 1901, was £263,829. In South Australia a central agricultural bureau in Adelaide, with about one hundred branch bureaus in the country, assists the farmers by disseminating valuable information, publishing papers, introducing new economic plants, and improving the breed of dairy cattle. A State school has been established in Adelaide for the purpose of affording instruction to "secondary agricultural pupils." The fees paid by the scholars, who must be over 15 years of age and have passed the compulsory examination, are at the same rate as those paid in the ordinary State schools. In Tasmania, the Council of Agriculture gives valuable advice to farmers concerning improved methods of agriculture, extermination of insect pests, etc.; while Western Australia possesses seventeen agricultural halls subsidised by the Government, where the latest literature of interest to farmers may be examined, and where lectures are delivered on agricultural subjects.

STATE ADVANCES TO FARMERS.

The oldest system by which advances of money are made to farmers is probably that which was established, as early as 1770, by the German "Landschaften Bank"; and the principle, assuming different forms according to the circumstances of the countries into which it was introduced, was gradually extended to the other great countries of Europe, with the exception of the United Kingdom, where an unwieldy system of land transfer, and the growing accumulation of large estates, form obstacles in the way of its successful application. Since 1849, mainly by the efforts of Raiffeisen, the German Land Credit Banks have taken the form of purely co-operative institutions, and in this respect they have been followed by Sweden, the Baltic provinces of Russia, and Poland, as well as, to some extent, by Austria-Hungary; but in most of the European countries the institutions may be classed as partly State and partly co-operative. In France alone is the system exclusively administered by the State; and it is the French *Credit Foncier* which has been adopted in Australasia wherever the idea of rendering financial aid to agriculturists has been carried into effect, namely, in the States of New South Wales, Victoria, South Australia, Western Australia, Queensland, and New Zealand; while in Tasmania the system has received consideration.

It was not till very recently that New South Wales adopted the principle of advances to settlers. Act No. 1, of 1899, was passed to assist settlers who were in necessitous circumstances, or who were financially embarrassed owing to the droughts. Under this Act a Board was appointed to consider applications for relief, and determine whether such relief should be granted. No advance to any settler was to exceed £200, to be repaid in ten years at 4 per cent. per annum. An Amending Act (No. 1 of 1902) was passed, giving to the Board power to advance up to £500, and providing that the advances with interest thereon should be repaid within thirty-one years. Up to 3rd October, 1900, 4,393 applications had been received for advances, the amount applied for being £377,000. Of these applications, 4,251 have been dealt with by the Board, and 1,564 have been refused. The number of applications approved is 2,687, representing advances to the amount of £193,037. Repayments of principal amount to £9,773, in addition to which £2,948 has been received in interest. The Government has in contemplation the introduction of a scheme somewhat on the lines followed in Victoria, in which the system will be carried on in connection with the Savings Bank.

In Victoria, a section of the Savings Banks Act of 1890 empowered the Commissioners to entertain applications for loans, and to lend sums of money on security by way of mortgage of any lands and hereditaments held in fee-simple free of all prior charges, quit-rents excepted, at such rate of interest as might, from time to time, be fixed by them. The conditions were not very liberal, but they endured for a number of

years. Five per cent. was the rate of interest charged, and 2 per cent. was payable annually in redemption of the principal. Opportunity was taken in the Act for the amalgamation of the Savings Banks, assented to on the 24th December, 1896, to definitely grant advances to farmers under the land-credit system. Under the new Act the Commissioners of Savings Banks are empowered to assist farmers, graziers, market-gardeners, or persons employed in agricultural, horticultural, viticultural, or pastoral pursuits, by making advances, either by instalments or otherwise, upon the security of any agricultural, horticultural, viticultural, or pastoral land held by them, either in fee simple, or under a lease from the Crown in which the rent reserved is taken in part payment of the purchase money of the land demised by such lease. The Commissioners have the option of making such advances either in cash or in mortgage bonds; and it is provided that all advances, together with interest at the rate of $4\frac{1}{2}$ per cent. per annum, are to be repaid in sixty-three half-yearly instalments, or such smaller number as may be agreed upon by the Commissioners and the borrower. From the commencement of the Act to the 30th June, 1901, advances to the amount of £1,163,105 had been made. The total number of loans in existence on that date was £2,323, representing the sum of £1,022,836, averaging £440 each. The actual advances made during the financial year 1900-01 amounted to £189,670, of which £172,016 was advanced to pay liabilities, £3,533 to pay Crown rents, and £14,121 to improve resources of land, and to carry on. To enable them to make the necessary advances the Commissioners had sold Treasury bonds and debentures to the nominal value of £1,183,600, of which £155,050 have been redeemed, leaving a balance of £1,028,550.

In Queensland the Agricultural Bank Act, assented to on the 31st December, 1901, empowered the Government to establish a bank for the purpose of promoting the occupation, cultivation, and improvement of the agricultural lands of the State. The amount to be raised must not exceed £250,000, and may be advanced to farmers and settlers in sums not greater than £800. Applications for advances not exceeding £200 are to be given priority over those of a greater amount, and no advance must exceed 13s. in the £ of the fair estimated value of the improvements to be made. Interest at the rate of 5 per cent. per annum is to be paid on advances for a period of five years, and thereafter the advances must be repaid within twenty years by half-yearly instalments of £4 0s. 3d. for every £100 advanced.

The South Australian Parliament, on the 20th December of that year, passed the State Advance Act of 1895, providing for the establishment of a State Bank for the purpose of making advances to farmers and producers, to local authorities, and in aid of industries, on proper security, consisting either of lands held in fee-simple or under Crown lease; the funds for this purpose to be raised by the issue of mortgage bonds guaranteed by the State. The rate of interest was to be a matter

of arrangement between the bank and the borrower, the maximum being 5 per cent. per annum. To the 31st March, 1901, the South Australian State Bank, thus established, had advanced £620,705, and received repayments to the amount of £113,296. On that date there were arrears of interest to the amount of £339 outstanding; and £6,057 interest had accrued and become due on the 1st April. In order to enable these advances to be made, mortgage bonds had been sold to the amount of £618,900, of which £114,700 had been repurchased, leaving the amount current at £504,200. The advances made during the financial year 1900-01 amounted to £90,824.

In Western Australia the Agricultural Bank Act of 1894 authorised the establishment of a bank for the purpose of assisting persons in the occupation, cultivation, and improvement of agricultural lands. Under the provisions of the Act the manager of the bank is empowered to make advances to farmers and other cultivators of the soil on the security of their holdings in fee-simple, or under special occupation lease, or under conditional purchase from the Crown, or under the Homestead Farms Act of 1893. The advances are granted either for the purpose of making improvements on unimproved holdings, or of making additional improvements on holdings already improved, and, under the original Act, could not exceed in amount one-half of the fair estimated value of the improvements proposed to be made. The maximum rate of interest chargeable was fixed at 6 per cent. per annum payable half-yearly, and it was provided that the largest sum to be advanced to any one person shall be £400. Repayment is made in half-yearly instalments of one-fiftieth of the principal sum, to commence on the 1st January or the 1st July next following the expiration of five years from the date of the advance, until the whole amount is repaid with interest. Arrangements can, however, be made for the repayment of advances at shorter intervals, and in larger instalments. For the purposes of the Act, improvements were defined as clearing, cultivating, and ringbarking; but by an Amending Act passed in 1896 the term was extended so as to include fencing, drainage works, wells of fresh water, reservoirs, buildings, or any other works enhancing the value of the holding. The same Act raised the largest sum which can be advanced to £800, reduced the maximum rate of interest to 5 per cent., made provision for the acceptance of pastoral leases as security, and allowed advances to be made up to three-fourths of the estimated value of the proposed improvements. The capital allotted to the Agricultural Bank is £200,000; and to the 31st December, 1901, loans to the amount of £145,650 from 1,458 applicants had been approved. During the financial year 1899-1900, advances to the amount of £15,330 were approved.

In New Zealand the Government Advances to Settlers Act of 1894 provided for the establishment of an Advances to Settlers Office, empowered to lend money on first mortgages of land occupied for farming, dairying, or market-gardening purposes, urban and suburban

lands used for residential or manufacturing purposes being expressly excluded from the scope of the Act. At that time one class of loans only was contemplated, viz., loans on mortgage security, which were repayable by seventy-three half-yearly instalments, subject, however, to redemption at any time; but by an Amending Act passed in 1896 authority was given for the granting of fixed loans for any term not exceeding ten years. These loans can only be granted on freehold lands, and are repayable without sinking fund at the end of the period for which they are made. The amount advanced on fixed loan is not to exceed one-half the estimated value of the security; while under the instalment system the Board of Control has power to grant loans up to 60 per cent. of the realisable value of freehold securities, and up to 50 per cent. of the lessee's interest in leasehold securities. In both cases interest is fixed at the rate of 5 per cent. per annum, and the amount advanced cannot be less than £25 nor more than £3,000—the maximum under the 1894 Act having been £2,500. Instalment loans are repayable in 36½ years, in half-yearly payments, at the rate of 5 per cent. for interest and 1 per cent. in redemption of the principal sum. The first meeting of the General Board for the purpose of considering applications for loans was held on 23rd February, 1895; and up to 31st March, 1902, the Board had authorised 11,312 advances, amounting to £3,736,620. The total amount applied for in the 11,312 applications granted in full, or in part, was £4,253,000. 1,450 applicants declined the partial grants offered to them, amounting to £662,935; so that the net advances authorised at 31st March, 1902, numbered 9,862, and amounted to £3,073,685. The security for the advances authorised was valued at £6,737,611. The number of applications received up to 31st March, 1902, was 14,746, and the amount applied for, £5,204,300.

WATER CONSERVATION.

The necessity of providing water for stock in the dry portions of the interior of the Australian continent induced the Governments of the States to devote certain funds to the purpose of sinking for water, and bringing to the surface such supplies as might be obtained from the underground sources which geologists stated to exist in the tertiary drifts and the cretaceous beds which extend under an immense portion of the area of Central Australia, from the western districts of New South Wales to a yet unknown limit into Western Australia.

In New South Wales the question of the existence of underground water had long been a subject of earnest discussion, but doubts were set at rest in 1879 by the discovery on the Kallara Run, at a depth of 140 feet, of an artesian supply of water, which, when tapped, rose 26 feet above the surface. The Government then undertook the work of searching for water, and since the year 1884 the sinking of artesian

wells has proceeded in a scientific and systematic manner, under the direction of specially-trained officers. Private enterprise, which had shown the way, has also followed up its first successes.

Up to 1901 the Government of New South Wales had undertaken the sinking of 103 wells; of these, 88 have been completed, and 15 are in progress. Of the completed wells, 58 are flowing, 19 are sub-artesian, yielding pumping supplies, and 11 have been failures; these wells represent 143,391 feet of boring, while with the uncompleted wells the total depth bored has been 170,507 feet. From the completed wells about 33,000,000 gallons of water flow every day to the surface. The deepest bore completed is that at the Dolgelly, on the road from Moree to Boggabilla, where boring has been carried to a depth of 4,086 feet; this well yields a supply of approximately 745,200 gallons per diem. The largest flow obtained in the State is from the Kenmare Bore, on the road from Bourke to Hungerford; the depth of this well is 1,539 feet, and the estimated flow about 2,050,000 gallons per diem. Another important bore is that at Pera, 8 miles from Bourke, on the Wanaaring road, where at a depth of 1,154 feet a flow of 350,000 gallons per diem is obtained. At this bore the most extensive system of irrigation by artesian water as yet undertaken in the State is being carried out. An area of 57 acres has been set apart for experimental cultivation by the Government, and certain fruits and other products indigenous to the temperate and torrid zones are being grown with success. Equally good results have been obtained at Native Dog, Barrington, Enngonia, and Belalie bores, on the road from Bourke to Barrington. Lucerne, maize, wheat, tobacco, millet, planter's friend, sugar-cane, date palms, pineapples, bananas, and many other fruits and vegetables of tropical and sub-tropical character have been found to thrive there exceedingly well.

On the road from Wanaaring to Milparinka, once a waterless track, successful boring operations have been carried on. Seven bores have been completed. Four of these give a pumping supply, and three are flowing, yielding an aggregate supply of 3,150,000 gallons daily. Boring operations have been extended farther to the north-west, and two bores have been sunk at Paldrumata and Oarnoo, on the Tibooburra to Yalpunga road. These two bores are sub-artesian, and yield pumping supplies at depths of 780 and 1,357 feet respectively. Another bore is in progress at Warri Warri. A remarkable flow has also been obtained at the Moree bore, amounting to 1,108,000 gallons daily. This bore has been carried to a depth of 2,792 feet, through formations of the same age as the Ipswich coal measures (*Trias Jura*), thus demonstrating the fact that water can be obtained in other than the lower cretaceous formation. An experimental farm has been established at this site, where sub-tropical fruits and plants are grown.

Much has been done in the way of artesian boring by private enterprise. As far as can be ascertained, 128 private bores have been undertaken in New South Wales, of which 16 were failures, 2 were abandoned, and 1 is in progress. Amongst the most important are two wells on

Lissington Holding, one with a flow of 4,000,000 gallons and the other with 3,000,000 gallons per day; one at Cuttabulla (Lila Springs), with a daily flow of 4,000,000 gallons; one at Toulby with 3,500,000 gallons per day; and one at Goondabluie with 3,000,000 gallons per day. From the private wells approximately 45,000,000 gallons are discharged daily.

A better idea of the value of artesian wells to the community will be obtained when it is known that the aggregate daily flow of underground water in New South Wales is now approximately 78,000,000 gallons, and that, in addition, large supplies can be pumped from sub-artesian wells. The average depth of the 88 wells completed by the Government is 1,628 feet 4 inches, with a range from 165 to 4,086 feet, while the temperature of the water varies from 80 to 139 degrees Fahrenheit. The total cost of the wells (including actual boring, casing, carriage, and incidental expenses) was £252,759, or an average of £2,872 5s. 3d. per bore, or £1 15s. 3d. per foot.

In Queensland up to the 31st December, 1901, there were 907 completed bores, of which 65 were Government, 30 Local Government, and 812 private bores.

Of the Government bores, 24 were artesian, 14 sub-artesian, and 27 were abandoned as failures. The daily flow of water from the successful bores amounted to 10,365,600 gallons. The Local Government bores included 10 artesian and 18 sub-artesian, while 2 were abandoned. From the successful bores a daily flow of 6,007,100 gallons is obtained. Of the private bores, 499 were artesian, 174 were sub-artesian, and 107 were failures. It is estimated that the daily flow of water from private bores amounts to no less than 344,701,800 gallons. The large proportion of abandoned Government bores is due to the fact that many of them were sunk for experimental purposes in order to ascertain the prospects of obtaining artesian water. Others were put down by the old methods of boring, by which depths over 1,000 feet could not be penetrated in the swelling clays of Queensland. The total expenditure by the Government up to the 31st December, 1901, amounted to £345,943 on water conservation, and £138,060 on artesian bores. The deepest Government bore is at Winton, and reaches 4,010 feet, while the most copious supply, namely, 3,000,000 gallons per day, is obtained at the Charleville bore. The deepest private bore, and also the deepest bore in the State, is the Whitewood on the Bimerah run, and reaches 5,045 feet. The largest supplies are obtained from the Coongoola bore, which yields 6,000,000 gallons daily; Cunnamulla East, 4,500,000; Burrumbilla and Cunnamulla West, 4,000,000; Boatman, 3,500,000; and Savannah Downs yielding 3,400,000 gallons daily. The total depth bored in search of artesian water up to 30th June, 1901, was 1,066,605 feet, the average depth per bore being 1,176 feet. At Helidon water of so low a temperature as 60 degrees Fahrenheit was flowing; while at Dagworth, the water had a temperature of 196 degrees. Large areas are served by the water from the bores for irrigation purposes, the total at the end of 1901, according

to the returns received being 6,526 acres, of which 4,490 acres were principally under sugar-cane; and in addition several stations, which made no returns, also used the water for purposes of irrigation. Some of the bore waters contain soda in various forms, and these it is impossible to use, except for a limited period, and in small quantities.

At the end of 1897, the latest date for which any information is available, the Water Conservation Department of South Australia had completed eighty-seven bores, of which, however, only thirty-three were successful. These are spread over widely-distant parts of the territory, successful bores existing at Nullarbor Plains, on the boundary of Western Australia; at Oodnadatta, the present terminus of the Northern Railway system; and at Tintinara, in the south-eastern extremity of the State. The bore at Tintinara has proved that the marine tertiary area is water-bearing. For purposes of water conservation, the State may be divided into four large areas, namely, the West Coast division, where 12 bores were attempted and 3 were successful; the Far North and North-west division, where 13 out of 32 bores were successful; the Central division, where 15 out of 39 bores were a success; and the South-east division, where 2 out of 4 bores were successful. Of the bores on the west coast, Robert's Well No. 1, on Nullarbor Plains, reaches a depth of 777 feet, and gives a daily supply of 68,000 gallons; the total supply from the three flowing wells being 133,000 gallons. Much greater depths have been reached in the far north; a well at Kopperamanna being the deepest in the State, viz., 3,000 feet. This well gives a daily supply of 800,000 gallons. A well at Strangways, and another at Coward, give daily supplies of 1,200,000 gallons each—the maximum obtained in South Australia. The flowing bores in this division gave a daily yield of 3,928,200 gallons. The wells in the central area are much less important, the largest supply, viz., 108,000 gallons daily, being obtained from one in the vicinity of Gawler. The deepest well in this division is situated at Percyton, and reaches 930 feet. The total daily supply in the central area amounts to 354,400 gallons. The two successful wells in the south-east have a daily outflow of 134,000 gallons. The total daily supply for the whole State reaches, therefore, 4,449,600 gallons. According to a report by the engineer-in-chief, it would appear that the South Australian Government had expended £19,202 on machinery and £148,689 in boring operations, or a total of £167,891, at the end of the year 1897.

The Government of Western Australia, following the example set by those of the eastern States has sunk 22 bores in various parts of the State, and 10 bores have been sunk by private owners. Of the Government bores, 12 have been successful, and yield a daily supply of 5,129,504 gallons, 9 were failures, and 1 is in progress. All the private bores yield supplies of water with the exception of one which is in progress—the daily flow being 1,543,000 gallons. The deepest bore is at South Perth, and reached a depth of 1,860 feet; while the largest supply is obtained from the municipal bore at Guildford, and amounts

to 1,120,000 gallons daily. Up to the 31st December, 1901, the Government had expended £39,283 on artesian boring, while £8,500 had been spent by private owners.

In Victoria the attempts to obtain water by means of artesian boring have not been successful. Up to the 31st December, 1901, 46 bores had been sunk, 16 of which were driven to bed rock, but none yielded artesian supplies. The expenditure on these bores amounted to £68,864, and the cost of water conservation, excluding Government expenditure on Melbourne Water Supply, was £8,570,603.

It is unfortunate that later information than that quoted in regard to South Australia cannot be given; but there seems to be a singular apathy on the part of the Departments concerned in all the States in publishing reports on this most important service. The statistics are presented for South Australia for the date referred to, although a large amount of work has been carried out during the last year or two in the direction of boring for artesian water.

PASTORAL RESOURCES AND DAIRY INDUSTRY.

NOTWITHSTANDING the fact that the soil, climate, and indigenous herbage of Australasia are admirably adapted to the sustenance of animal life, no attempt was made to test the capabilities of the land as a feeding-ground for flocks and herds on a large scale until the example of Captain Macarthur had demonstrated beyond doubt that Nature favoured the production in Australasia of a quality of wool which was unsurpassed by that grown in any part of the world. Then the settlers began to understand and utilise the natural resources of the country; and as the indomitable spirit of exploration gradually opened up the apparently boundless plains of the interior, pastoralists extended their domain, and sheep and cattle in increasing numbers spread over the face of eastern Australia. Now the expansion of the pastoral industry is gradually converting the central and western portions of the continent into holdings devoted to the production of the greatest element of the wealth of Australasia.

The beginnings of pastoral enterprise in Australia were very humble. The live stock of the community which accompanied Captain Phillip comprised only 1 bull, 4 cows, 1 calf, 1 stallion, 3 mares, 3 foals, 29 sheep, 12 pigs, and a few goats; and although the whole of the present flocks and herds of Australasia have not sprung from these animals alone, yet the figures show the small scale on which the business of stock-raising was first attempted. No systematic record of the arrival of stock seems to have been kept in the early days of settlement; but it would appear that during the period between Governor Phillip's landing and the year 1800 there were some slight importations, chiefly of sheep from India. In 1800 the stock in Australasia comprised 6,124 sheep, 1,044 cattle, 203 horses, and 4,017 swine; while at the end of the year 1901, there were no less than 92,358,824 sheep, 9,827,433 cattle, 1,905,172 horses, and 1,171,381 swine.

The following figures give the number of stock in Australasia at various dates up to 1851:—

Year.	Sheep.	Cattle.	Horses.	Swine.
1792.....	105	23	11	43
1800.....	6,124	1,044	203	4,017
1810.....	33,818	11,276	1,114	8,992
1821.....	290,158	102,939	4,564	33,906
1842.....	6,312,004	1,014,833	70,615	66,086
1851.....	17,326,021	1,921,963	166,421	121,035

The increase in the number of each kind of live stock since the year 1861 is illustrated in the following table :—

Year.	Sheep.	Cattle.	Horses.	Swine.
1861.....	23,741,706	4,039,839	459,970	362,417
1871.....	49,773,584	4,713,820	782,558	737,477
1881.....	78,063,426	8,709,628	1,249,765	903,271
1891.....	124,547,937	11,861,330	1,785,835	1,154,553
1901.....	92,358,824	9,827,433	1,905,172	1,171,381

The average number of sheep, cattle, horses, and swine per head of the population of Australasia at the same periods was as follows :—

Year.	Sheep.	Cattle.	Horses.	Swine.
1861.....	18·8	3·2	0·4	0·3
1871.....	25·3	2·4	0·4	0·4
1881.....	27·7	3·1	0·4	0·3
1891.....	31·8	3·0	0·5	0·3
1901.....	20·2	2·1	0·4	0·3

It will be seen that in 1861 there were 18·8 sheep for every person in Australasia, and that this number had increased to 31·8 in 1891. In 1901, however, in consequence of the continued dry seasons, and the demands made upon the flocks for the export trade, the average number had fallen to 20·2 per inhabitant. During the forty-one years the average number of cattle depastured diminished from 3·2 to 2·1 per head. The breeding of horses and swine has about kept pace with the population.

SHEEP.

The suitability for pastoral pursuits of the land discovered in the early days was undoubtedly the means of inducing the infant colony of New South Wales to take its first step on the path of commercial progress, and, looking backward, it is not a little surprising to find how steadily some of the settlers, in the face of the almost insurmountable difficulty of transport which existed a century ago, availed themselves of the opportunities at their disposal. The importation of valuable specimens of sheep from England or the Cape of Good Hope prior to the introduction of steam was at all times attended with great risk, and it frequently happened that many of these costly animals died during the tedious voyage. These enterprises were, however, on the whole successful, and thus the flocks and herds of the colonists surely, if at first slowly, increased and multiplied.

By the year 1795, Captain Macarthur, one of the first promoters of sheep-breeding in New South Wales, had accumulated a flock of 1,000 sheep, which were held in great estimation, and gradually increased in value

until, as recorded by an entry in his journal ten years later, the market price of a fat wether had risen to £5. Not satisfied with the natural increase of his flocks, Macarthur sought to improve the quality of his fleeces, by which means he could see opening before him the promise of great wealth and the prospect of establishing important commercial relations with Great Britain. With these ends in view, he procured from the Cape of Good Hope, at great cost and trouble, a number of superior rams and ewes. A happy circumstance favoured his enterprise; for he had the good fortune to secure three rams and five ewes of very fine Spanish breed, which had been presented by the King of Spain to the Dutch Government. These animals, out of a total of twenty-nine purchased at the Cape, arrived in Sydney in 1797, and were disposed of to various breeders. With the exception of Macarthur, however, those who had secured sheep of the superior breed made no attempt to follow up this advantage, being probably amply satisfied with the larger gains from the sale of an increased number of animals. Macarthur, on the other hand, thought little of present profits, and still less of breeding entirely for human consumption. He attentively watched the results of crossing his imported rams with the old stock, and by systematically selecting the finer ewes which were the offspring for further mingling with the sires, he gradually improved the strain, and in a few years obtained fleeces of very fine texture which met with the ready appreciation of English manufacturers. It has been asserted that Macarthur was not the first to introduce merino sheep into Australia; but whether this be so or not, there is no doubt that to him is due the credit of having been the first to prove that the production of fine wool could be made a profitable industry in New South Wales.

Prior to the present century the production of the finest wool had been confined chiefly to Spain, and woollen manufactures were necessarily carried on in England upon a somewhat limited scale, which was not likely to improve in face of certain restrictions which the operatives endeavoured to place upon their employers. These men, in support of their contention that the woollen trade could not be expanded on account of the limited supply of raw material, argued that fine wool was obtainable only in Spain; and it was at this favourable period that Macarthur arrived in England with specimens of the wool obtained from his finest sheep, conclusively proving the capabilities of Australia as a wool-producing country. In this way he opened up with English manufacturers a small trade which, as Australasian wool rose in public estimation, gradually increased until it reached its present enormous dimensions. During his visit to England, Macarthur purchased an additional stock of ten rams and ewes of the noted Spanish breed, nearly equal in quality to those which in 1797 he had procured from the Cape of Good Hope. That these animals were the finest obtainable in Europe may be gathered from the fact they also had formed portion of a present from the King of Spain to George III. After his return to New South Wales, Macarthur patiently continued for many years the process of selection, with such

success that in 1858, when his flock was finally dispersed, it was estimated that his superior ewes numbered fully 1,000. Victoria secured a considerable portion of his flock, and the process of breeding proceeded simultaneously in that and other adjacent states.

Although the increase in the numbers of the finer sheep was satisfactory, yet the importation of superior stock was not discontinued, and the stock of the states was augmented in 1823 and 1825 by the further introduction of Spanish sheep. Sheep-breeding was about this period commenced in the Mudgee district of New South Wales; the climate of that region had a more favourable effect upon the quality of the fleeces than that of any other part of the state, and it was thence that the finest merinos were for a long time procured. As was to be expected, the climate has in some respects changed the character of the Spanish fleece. The wool has become softer and more elastic, and while it has diminished in density it has increased in length, so that the weight of the fleece has only slightly altered. Thus, on the whole, the quality of the wool has improved under the beneficial influence of the climate, and if no further enhancement of its intrinsic value can be reasonably hoped for, there is at least every reason to believe that Australasian wool will maintain its present high standard of excellence.

The following table shows the number of sheep in each State at intervals of ten years since 1861.

State.	Number of Sheep.				
	1861.	1871.	1881.	1891.	1901.
New South Wales...	5,615,054	16,278,697	36,591,946	61,831,416	41,857,099
Victoria	6,239,258	10,002,381	10,267,265	12,928,148	10,841,790
Queensland	4,093,381	7,403,334	8,292,883	20,289,633	10,030,971
South Australia	3,038,356	4,412,055	6,810,856	7,745,541	5,060,540
Western Australia..	279,576	670,999	1,267,912	1,962,212	2,542,844
Tasmania	1,714,498	1,305,489	1,847,479	1,662,801	1,792,481
Commonwealth ...	20,980,123	40,072,955	65,078,341	106,419,751	72,125,725
New Zealand.....	2,761,583	9,700,629	12,985,085	18,128,186	20,233,099
Australasia.....	23,741,706	49,773,584	78,063,426	124,547,937	92,358,824

In all the states the number of sheep depastured has largely increased during the period shown above with the exception of Tasmania. In that State, however, more attention is directed towards the breeding of stud sheep than to raising immense flocks, and the stud farms of the island have gained considerable distinction, and are annually drawn upon to improve the breed of sheep in the other States.

In South Australia the area adapted to sheep is limited, and no great expansion in sheep-farming can be looked for. As regards Victoria, the important strides made in agriculture and kindred pursuits afford

sufficient explanation of the diminished attention paid to sheep farming. The statement given below shows, for 1901, the proportion of sheep in each State to the total flocks of Australasia. New South Wales, with 45·32 per cent. of the total flock, comes first, and New Zealand, with 21·91 per cent., second, while Victoria, with 11·74 per cent., and Queensland, with 10·86 per cent., are next in order. The other three States together possess only a little over 10 per cent. of the whole.

State.	1901.
	per cent.
New South Wales	45·32
Victoria	11·74
Queensland	10·86
South Australia	5·48
Western Australia	2·75
Tasmania	1·94
New Zealand	21·91
Australasia	100·00

In order to show the increase or decrease in sheep during the last fifteen years, the following table has been prepared, giving the numbers in the various States at the end of each year since 1885. It will be seen that returns were not collected in some years in Victoria, South Australia, and New Zealand, and that the figures for those States are therefore incomplete :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1885	37,820,906	10,681,837	8,994,322	*	1,702,719	1,648,627	16,564,595
1886	39,169,304	10,700,403	9,690,445	*	1,809,071	1,609,046	*
1887	46,965,152	10,623,985	12,926,158	*	1,909,940	1,547,242	*
1888	46,503,469	10,818,575	13,444,005	*	2,112,392	1,430,065	15,468,890
1889	50,106,768	10,882,231	14,470,095	6,432,401	2,366,631	1,551,429	15,503,263
1890	55,986,431	12,692,843	18,007,234	7,050,544	2,524,913	1,619,256	18,125,186
1891	61,831,416	12,928,148	20,289,633	7,745,541	1,962,212	1,664,218	18,570,752
1892	58,080,114	12,965,306	21,708,310	7,209,500	1,635,500	1,623,338	19,380,369
1893	56,980,688	13,088,725	18,697,015	7,325,003	2,200,642	1,535,047	20,230,829
1894	56,977,270	13,180,943	19,587,691	*	2,132,311	1,727,200	19,826,604
1895	47,617,687	*	19,856,959	*	2,295,832	1,523,846	19,138,493
1896	48,318,790	*	19,593,696	6,402,593	2,248,976	1,650,567	19,687,954
1897	43,952,897	*	17,797,883	5,092,078	2,210,742	1,578,611	19,673,725
1898	41,241,004	*	17,552,008	5,076,696	2,251,548	1,493,638	19,348,506
1899	36,213,514	*	15,226,479	5,721,493	2,282,306	1,672,068	19,347,346
1900	46,020,506	*	10,339,185	5,283,247	2,431,861	1,683,956	19,355,195
1901	41,857,099	10,841,790	10,030,971	5,060,540	2,542,844	1,792,481	20,233,099

* Returns not collected.

The number of sheep depastured in the Commonwealth increased with great regularity each year until 1891, when it reached 106,400,000; since that year there has been an almost continuous succession of unfavourable seasons in New South Wales and Queensland, the two States chiefly interested in pastoral pursuits, with the result that the number

of sheep depastured in these States has decreased by over 30,000,000 during the last ten years. In Queensland the number fell from 15,226,000 in 1899, to 10,339,000 in 1900, a decrease of 4,887,000 in one year, and at the present time (1902) the number is still lower. In New South Wales the returns of the Stock Department place the number of sheep depastured in October, 1902, at 33,715,819, which is lower than in any year since 1884. The other States did not suffer to the same extent from adverse seasons, although the number of sheep in both Victoria and South Australia has decreased considerably since 1891. In Western Australia and Tasmania there were increases in the numbers, and in New Zealand, although the figures have been practically stationary for some years past, they show an advance on the number in 1891.

The total number of sheep (including lambs) slaughtered in the various States from which the information is available during the five years ended 1900 is shown below. In South Australia and New Zealand no slaughtering returns are made, while the figures for Tasmania refer to the numbers killed in Hobart and Launceston only.

Year.	New South Wales.	Victoria.	Queensland.	Western Australia.	Tasmania (Hobart and Launceston).
1896	6,196,749	2,559,088	1,726,125	420,952	102,266
1897	5,790,103	2,434,519	1,902,735	505,091	107,223
1898	5,665,763	2,352,694	1,262,313	433,867	104,303
1899	4,795,259	2,557,858	1,497,546	.....	93,913
1900	4,359,513	2,371,415	860,648	445,046	91,829

The value of the sheep depastured in Australasia, on the basis of the average prices ruling in 1901, was £44,992,000, thus distributed among the various States:—

	£
New South Wales	16,743,000
Victoria	5,421,000
Queensland	4,200,000
South Australia	2,119,000
Western Australia.....	1,271,000
Tasmania	1,075,000
Commonwealth	30,829,000
New Zealand	14,163,000
Australasia	£44,992,000

CATTLE.

Except in Queensland, cattle-breeding in the Australasian States is secondary to that of sheep. Indeed, in New South Wales in 1901 the number of the herds was even less than in 1861, the decrease amounting to 224,469. The lowest point was reached by that State in 1885, when

the herds only numbered 1,317,315, the result partly of continuous bad seasons, but principally of the more profitable character of sheep-farming, which had induced graziers on many runs to substitute sheep for cattle. From that period up till 1894, when the herds numbered 2,465,411, there was a gradual improvement, which seemed to indicate a disposition on the part of pastoralists in some parts of the State to devote more attention to cattle-breeding. The serious droughts which have been experienced, however, have militated against the expansion of the cattle industry, and the numbers again fell away until the year 1899, but increased slightly during the last two years. The progress of Victoria in the breeding of cattle was steady until 1894, but since that year the numbers have decreased. In Queensland the number reached 7,012,997 in 1894, but owing to the combined effects of drought and tick fever, the herds have since diminished greatly, and in 1901 there were but 3,772,707. New Zealand, after having neglected the cattle industry for a long time, has during recent years largely increased its herds, the increase being the result of the special attention bestowed upon the dairy industry.

The following table shows the number of cattle in each State at ten-year intervals since 1861 :—

State.	Number of Cattle.				
	1861.	1871.	1881.	1891.	1901.
New South Wales	2,271,923	2,014,888	2,597,348	2,046,347	2,047,454
Victoria	628,092	799,509	1,286,677	1,812,104	1,602,384
Queensland	560,196	1,164,235	3,618,513	6,192,759	3,772,707
South Australia	265,434	143,463	314,918	676,933	479,863
Western Australia	33,795	49,593	63,009	133,690	394,580
Tasmania	87,114	101,540	130,526	167,666	168,661
Commonwealth ...	3,846,554	4,277,228	8,010,991	11,029,499	8,465,649
New Zealand	193,285	436,592	698,637	831,831	1,361,784
Australasia	4,039,839	4,713,820	8,709,628	11,861,330	9,827,433

The statement below shows the proportion of cattle in each State to the total herds in Australasia, at the end of 1901 :—

State.	per cent.
New South Wales.....	20.83
Victoria.....	16.31
Queensland.....	38.39
South Australia.....	4.88
Western Australia	4.01
Tasmania.....	1.72
New Zealand	13.86
Australasia.....	100.0

In spite of the vast losses in recent years, Queensland has still the largest number of cattle, but the extent of its losses will be realised when it is remembered that out of a total of 11,049,065 in 1899, nearly 46 per cent. were in Queensland, while in 1901, out of a total of 9,827,433 only 38 per cent. were in that State.

A clearer idea of the changes which late years have brought about in the cattle industry is afforded by the next table, showing the number in the various States at the close of each year since 1885. As will be seen, returns were not collected in three of the States—Victoria, South Australia, and New Zealand—for several of the years under review:—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1885	1,317,915	1,290,790	4,162,653	*	70,403	138,642	853,358
1886	1,367,844	1,303,265	4,071,563	*	88,254	148,665	*
1887	1,575,487	1,333,873	4,473,716	*	93,544	147,092	*
1888	1,622,907	1,370,660	4,654,932	*	95,822	142,019	853,358
1889	1,741,592	1,391,209	4,872,416	531,296	119,571	150,004	895,461
1890	2,091,229	1,782,881	5,558,264	574,032	130,970	162,440	831,831
1891	2,128,838	1,812,104	6,192,750	676,933	133,690	167,788	*
1892	2,221,459	1,824,704	6,591,416	631,522	162,886	170,085	851,801
1893	2,269,852	1,817,291	6,693,200	675,234	173,747	169,141	885,305
1894	2,465,411	1,833,900	7,012,997	*	187,214	177,088	964,034
1895	2,150,057	*	6,822,401	*	200,091	162,801	1,047,901
1896	2,226,163	*	6,507,377	638,591	199,793	157,736	1,138,572
1897	2,035,096	*	6,089,013	540,149	244,971	157,486	1,209,165
1898	2,020,516	*	5,571,292	613,894	269,947	149,754	1,203,024
1899	1,967,081	*	5,053,336	523,524	297,081	160,204	1,210,439
1900	1,983,116	*	4,078,191	472,428	333,665	165,516	1,256,080
1901	2,047,454	1,602,384	3,772,707	479,863	394,580	168,661	1,361,784

* Returns not collected.

The number of cattle (including calves) slaughtered during each of the five years ended 1900 is shown in the following table for all the States except South Australia and New Zealand, which do not furnish returns. The Tasmanian figures represent the numbers killed in Hobart and Launceston only:—

Year.	New South Wales.	Victoria.	Queensland.	Western Australia.	Tasmania. (Hobart and Launceston).
1896	351,246	245,477	474,946	30,664	9,393
1897	365,898	240,958	498,583	41,665	10,615
1898	364,042	244,319	572,735	33,203	10,029
1899	383,948	249,177	640,898	38,577	10,276
1900	399,992	248,797	503,223	40,950	9,114

The value of the cattle in Australasia, on the basis of the average prices ruling in 1901, was £49,934,000, thus divided amongst the various States :—

	£
New South Wales	10,421,000
Victoria	10,262,000
Queensland.....	11,726,000
South Australia.....	3,031,000
Western Australia	2,762,000
Tasmania	1,137,000
	<hr/>
Commonwealth.....	39,339,000
New Zealand.....	10,595,000
	<hr/>
Australasia	£49,934,000

HORSES.

Australasia is eminently fitted for the breeding of most descriptions of horses, and attention has long been directed to this industry. At an early period the stock of colonial-bred horses was enriched by the importation of some excellent thoroughbred Arabians from India, and to this cause the high name which was acquired by the horses of Australia was largely due. The abundance of good pasture everywhere obtainable also contributed to this result. The native kangaroo-grass, especially when in seed, is full of saccharine matter, and young stock thrive excellently upon it. This plenitude of natural provender permitted a large increase in the stock of the settlers, which would have been of great advantage had it not been that the general cheapness of the animals led to a neglect of the canons of breeding. In consequence of the discovery of gold, horses became very high priced. Under ordinary conditions this circumstance would have been favourable to breeding, and such was actually the case in Victoria. In New South Wales, however, it was far otherwise. The best of its stock, including a large proportion of the most valuable breeding mares, was taken by Victoria, with the result that for twenty years after the gold rush the horses of the mother State greatly deteriorated. One class of stock only escaped—the thoroughbred racer, which was probably improved both by the importation of fresh stock from England, and by the judicious selection of mares.

The States are specially adapted to the breeding of saddle and light-harness horses, and it is doubtful whether these particular breeds of Australasian horses are anywhere surpassed. The bush horse is hardy and swift, and capable of making very long and rapid journeys when fed only on the ordinary herbage of the country ; and in times of drought, when the grass and water have become scanty, these animals often

perform astonishing feats of endurance. Generally speaking, the breed is improving, owing to the introduction of superior stud horses and the breeding from good mares. Where there has been a deterioration in the stock, it has been due to breeding from weedy mares for racing purposes and to the effects of drought.

The following table shows the number of horses in each State at ten-year intervals since 1861. In 1901, New South Wales possessed the largest number of horses, closely followed by Queensland :—

State.	Number of Horses.				
	1861.	1871.	1881.	1891.	1901.
New South Wales.....	233,220	304,100	398,577	459,755	486,716
Victoria	84,057	181,643	278,195	440,696	392,237
Queensland	28,983	91,910	194,217	399,364	462,119
South Australia	52,597	78,125	159,678	202,906	178,199
Western Australia ..	10,720	22,698	31,755	40,812	73,830
Tasmania	22,118	23,054	25,607	31,262	32,399
Commonwealth...	431,695	701,530	1,088,029	1,574,795	1,625,500
New Zealand	28,275	81,028	161,736	211,040	279,672
Australasia.....	459,970	782,558	1,249,765	1,785,835	1,905,172

There is at present a considerable demand in India for Australian horses, especially for those of a superior class, and although the speculation of shipping horses to that country is attended with some risk, owing to the dangers of the voyage, there is reason to believe that in the near future the trade will assume considerable dimensions, as Australia is the natural market from which supplies may be derived. The number and value of the horses exported to India during 1901 from each State was as follows :—

State.	Number.	Value.
New South Wales	1,004	£ 17,196
Victoria	2,355	35,648
Queensland	2,207	25,879
New Zealand	106	1,590
Australasia	5,672	80,313

The war in South Africa created a demand for Australian horses as army remounts during the last few years, and during 1901 no less than

24,995 horses, valued at £320,152, were exported from Australasia to South African ports, the number from each State being as follows :—

State.	Number.	Value.
		£
New South Wales	6,300	81,204
Victoria	6,857	129,642
Queensland	11,069	96,841
South Australia	15	355
Western Australia.....	472	7,080
Tasmania	280	5,000
Commonwealth	24,993	320,122
New Zealand	2	30
Australasia	24,995	320,152

The following table shows the proportion of horses in each State to the total number in Australasia, at the end of 1901 :—

State.	Per cent.
New South Wales	25.55
Victoria.....	20.59
Queensland	24.26
South Australia	9.35
Western Australia	3.87
Tasmania	1.70
New Zealand	14.68
Australasia	100.00

The value of horses in 1901, in the various States, is estimated as follows :—

	£
New South Wales	3,901,000
Victoria	4,707,000
Queensland	2,311,000
South Australia	1,247,000
Western Australia	923,000
Tasmania	356,000
Commonwealth	13,445,000
New Zealand	3,636,000
Australasia	£17,081,000

STOCK-CARRYING CAPACITY OF AUSTRALASIA.

None of the States is stocked to its full capacity ; indeed, in the large territory of Western Australia and in the Northern Territory of South Australia the process has only begun. A clear idea of the comparative extent to which each State is stocked cannot be given unless the different kinds of animals are reduced to a common value. Assuming, therefore, that one head of large stock is equivalent to ten

sheep, and expressing cattle and horses in terms of sheep, it will be found that the number of acres to a sheep in each State is as follows:—

State.	No. of acres per sheep.
New South Wales	3·0
Victoria	1·8
Queensland	8·2
South Australia	49·7
Western Australia	86·4
Tasmania	4·4
New Zealand	1·8
Australasia	9·4

The most closely-stocked of the Commonwealth States is Victoria, with 1·8 acres per sheep, but this is by no means the limit to the carrying-capacity of that State; on the contrary, there is still a considerable tract to be brought under the sway of the pastoralist. New Zealand is stocked to the same extent, but neither that colony nor New South Wales, which averages 3 acres per sheep, can be said to have reached its full carrying-capacity. If the present average of New South Wales be taken as the possible limit to which Australasia may be stocked, there is room in these States for nearly 450 million sheep or 45 million cattle more than are now depastured. That Australasia could carry 1 sheep to 3 acres, however, is an improbable supposition; in almost every State the best land is under occupation, and the demands of the farmer must diminish the area at present at the disposal of the grazier. This will more especially prove true of Victoria, New Zealand, and Tasmania. On the other hand, by resisting the temptation to overstock inferior-country, and by increasing the natural carrying-capacity by water conservation and irrigation and by the artificial cultivation of grasses, the States in which agriculture has made most progress will be able to carry stock in even larger numbers than they have hitherto attempted. Taking all circumstances into consideration, it may be fairly estimated that under the present system the States are capable of maintaining, in ordinary seasons, stock equivalent to 390,000,000 sheep—that is, about 180,000,000 sheep, or their equivalent in cattle, more than are now depastured.

The number of stock in Australasia, expressed in terms of sheep, the number of acres per sheep, and the number of sheep per head of population, at various dates since 1861, were as given below:—

Year.	Sheep.	Cattle, in terms of Sheep.	Horses, in terms of Sheep.	Total.	Acres per Sheep.	Sheep per head of Population.
1861	23,741,706	40,398,390	4,599,700	68,739,796	28·7	54·3
1871	49,773,584	47,138,200	7,825,580	104,737,364	18·8	53·2
1881	78,063,426	87,096,280	12,497,650	177,657,356	11·1	62·9
1891	124,547,937	118,613,300	17,858,350	261,019,587	7·5	67·4
1901	92,358,824	98,274,330	19,051,720	209,684,874	9·4	45·8

VALUE OF PASTORAL PROPERTY AND PRODUCTION.

The total value of pastoral property in Australasia—that is, of improvements, plant, and stock—was estimated in 1899 at £241,554,000. In this amount the value of stock alone (excluding swine) comes to about £115,417,000. No account is taken of the value of land devoted to pastoral purposes, for though much purchased land is used for depasturing stock, the larger area comprises lands leased from the State, so that a statement which omitted to take into account the value of the State lands would be misleading. The annual return from pastoral pursuits in 1901 was £34,112,000, the share of each state in the total production being as follows:—

New South Wales	£12,552,000
Victoria	5,347,000
Queensland	5,618,000
South Australia.....	2,086,000
Western Australia	924,000
Tasmania	623,000
Commonwealth.....	27,150,000
New Zealand	6,962,000
Australasia	£34,112,000

The products of dairy cattle and swine are not included in the foregoing statement, the figures being given in another place. It should be understood that the values quoted are those at the place of production. The value of the return from each class of stock may be approximately reckoned as follows:—

Sheep.....	£24,017,000
Cattle	7,153,000
Horses	2,942,000
Total	£34,112,000

WOOL.

As might be supposed, the greater part of the value of production from sheep is due to wool. Thus, out of the £24,017,000 shown above, £18,454,700 is the value of wool, viz. :—£18,189,000 for wool exported, and £265,700 for wool used locally. The value of the wool exported, according to the Customs returns, was £18,608,000—that is to say, £419,000 more than the figures shown above. The excess represents the charges for freight, handling, &c., between the sheep-walks and the port of shipment.

The price of wool, which in 1899 was much higher than for many years previously, declined almost as suddenly as it had advanced, and as the production for 1901 did not show much increase, except in New Zealand, the total value compares unfavourably with preceding years, and fell short of that of 1899 by £6,165,000.

Nearly all the wool produced in Australasia is exported, the home consumption being small, amounting in 1901 to only 1·76 lb. greasy, per head of population; while in Europe and America the quantity of wool available for consumption by the industry amounts to about 5 lb. per head. During the last two quinquennial periods the consumption of wool in Europe and America has averaged as follows:—

1891-94	5·12 lb. per head of population
1895-99	5·19 lb. " "

The quantity, in the grease, of wool produced by each State at decennial periods since 1861 was as follows:—

State.	1861.	1871.	1881.	1891.	1901.
	lb.	lb.	lb.	lb.	lb.
New South Wales...	19,254,800	74,401,300	161,022,900	321,416,000	301,942,000
Victoria	27,168,900	63,641,100	67,794,300	69,205,600	74,879,300
Queensland	12,356,100	36,553,200	34,275,300	83,118,100	70,141,800
South Australia.....	13,756,500	28,242,100	46,013,900	50,151,500	39,951,700
Western Australia..	820,500	1,888,000	4,654,600	9,501,700	14,049,000
Tasmania	5,129,100	6,687,800	10,525,100	10,102,900	8,939,000
Commonwealth	78,485,900	211,413,500	324,236,100	543,495,800	509,902,800
New Zealand	9,601,700	46,192,300	69,055,600	117,733,500	164,011,500
Australasia.....	88,087,600	257,605,800	393,341,700	661,229,300	673,914,300

The great fall in production is seen from the above table, which shows that the only States where an increase has taken place since 1891 are Victoria, Western Australia, and New Zealand, all the others showing a large decline. The increase in New Zealand has taken place in spite of the heavy demands upon the resources of the colony for the supply of sheep to meet the requirements of the London market in frozen mutton.

The weight of wool per sheep has been increasing regularly in each of the States, as will be seen from the following table, which shows the weight of clip per sheep at each decennial interval since 1861. It is manifest that the Victorian figures are unreliable, because there is no reason to suppose that there was a decline in the weight of the fleece in 1891; on the contrary, it is known to have been steadily improving. The Western Australian and Tasmanian results also show irregularities, and are omitted from the table. The values for New South Wales and Queensland best represent the increase in the weight of the fleece on the mainland, and the New Zealand figures are also believed to be correct. In South Australia the weight of wool per sheep has been consistently higher than in the other States, but the results

are derived from the official statistics, and it would appear that the number of sheep in that State has been under-estimated.

State.	1861.	1871.	1881.	1891.	1901.
	lb.	lb.	lb.	lb.	lb.
New South Wales.....	3·28	4·57	4·47	5·74	7·2
Victoria	4·52	6·17	6·87	5·68	6·9
Queensland.....	3·40	4·73	4·50	4·73	7·1
South Australia.....	4·69	6·41	6·93	6·85	7·9
New Zealand.....	3·48	4·76	5·32	6·42	8·1

The values of the excess of exports over imports in each State for the same periods were as follows. A careful examination of the figures proves rather conclusively that less care than might have been expected has been taken in stating the values, except in New South Wales and New Zealand, but they are taken from the official records, and are given for what they are worth :—

State.	Excess of Exports over Imports.				
	1861.	1871.	1881.	1891.	1901.
	£	£	£	£	£
New South Wales ...	1,537,536	4,705,820	7,173,166	10,650,525	8,619,067
Victoria	2,001,681	4,483,461	2,562,769	3,792,938	2,510,219
Queensland	613,074	1,158,833	1,331,869	3,453,548	2,130,778
South Australia	572,720	1,113,825	1,573,313	1,540,079	1,021,283
Western Australia ...	54,297	122,637	256,690	329,365	378,135
Tasmania	326,413	298,160	498,400	418,460	279,022
Commonwealth ...	5,105,721	11,882,736	13,396,207	20,184,915	14,938,504
New Zealand	523,728	1,606,144	2,914,046	4,129,686	3,669,642
Australasia	5,629,449	13,488,880	16,310,253	24,314,601	18,608,146

Western Australia was the only State to show an increase in the value during the year over that obtained in 1891.

According to returns prepared in London, the number of bales of Australasian wool imported into Europe and America during the year 1901 was 1,745,000, which were valued at £10 10s. per bale, giving a total of £18,322,500. The average price per bale of the wool sold in Australia during the season 1901-2 was £9 6s. 4d. In comparing these prices, it must be remembered that not only have freight and charges to be added to the Australian value, but some allowance must be made for the difference in the quality and condition of the wool dealt with in the Australian markets and in London. Large quantities of the inferior portions of the clip intended for sale in the London market are scoured prior to shipment, and the London price is therefore raised to an average considerably higher than the Sydney or Melbourne price with freight and charges added. As a set off against this, however, it must be stated that the London figures include New Zealand wool, which is not

so valuable as that grown in the Commonwealth States. In 1900, 1,456,000 bales were imported into Europe and America. These were valued at £13 10s. per bale, making the total value £19,656,000, so that, notwithstanding the increased import during 1901, the total value received was nearly £1,333,500 less than in 1900.

The price per lb. obtained for wool in grease in London at the end of each year from 1890 was as follows :—

Year.	New South Wales. (Average Merino).	Victoria. (Good Average Merino.)	New Zealand. (Average Cross-bred.)
	d.	d.	d.
1890	8½	10	10
1891	7½	9	9½
1892	7	8½	9½
1893	7	8½	9½
1894	6	7½	8½
1895	7½	9½	9½
1896	7	9	8½
1897	7½	9	8½
1898	7½	9½	7
1899	13	15½	10½
1900	7	9	7½
1901	7½	10	5½

Taking the last sixteen years, the highest prices were realised for New South Wales and Victorian wools during 1899, namely, 13d. per lb. and 15½d. per lb. respectively. The maximum price for New Zealand wool, 11½d. per lb., was obtained in 1889. The lowest prices—6d. for New South Wales, and 7½d. for Victoria,—were experienced in 1895, while owing to the heavy fall in the value of cross-breds, New Zealand wool realised as little as 4¾d. per lb. during 1901. The average prices realised during the whole period were 9d. per lb. for New South Wales average merino, 11d. for good average Victorian merino, and 7½d. for average New Zealand cross-bred. From these figures it will be seen that Victorian wool averages about 2d. per lb. higher than New South Wales wool. The figures must be taken with some qualification. Much of the New South Wales wool, the product of the Riverina districts, is exported *via* Melbourne and sold as Port Phillip wool, and brings a price considerably in excess of the average given in the table for the State of which it is the produce. The quantity of wool sold at the local sales in the Australasian States is increasing. Particulars of these sales will be found in the chapter on “Commerce.”

THE FROZEN-MEAT TRADE.

In view of the large increase in the live stock of Australasia, the question of the disposal of the surplus cast has become a matter of serious consequence. In New South Wales especially, and in the

Riverina district in particular, it was found necessary to have recourse to the old method of boiling down, which a fortunate rise in the price of tallow made it possible to carry on with a margin of profit; but with such prices as have ruled for tallow during the past few years it cannot be said that boiling-down offers any inducement to the pastoralist, although in 1901 the production of tallow in the State reached the large quantity of 124,100 cwt.

In New Zealand a much better solution of the question of disposal of the surplus cast was found, and a trade in frozen mutton with the United Kingdom has been established on a thoroughly payable basis—an example which some of the other States are endeavouring to follow, although considerably handicapped by the want of cross-bred sheep and the prejudice of the English consumer against merino mutton.

The first successful attempt at shipping frozen mutton to England was made by New Zealand in 1882, and since then the trade has attained great proportions, to the immediate benefit of the colonial producer as well as the English consumer. The trade initiated by the New Zealand Land Company has been extended by the formation of numerous joint stock companies, which now own twenty-one meat-freezing works in the two islands, having an aggregate capacity for freezing about 4,000,000 sheep per year. The sheep are generally killed in the country, and transported by rail to the freezing works. Several fleets of steamers are engaged in the trade, and the freight rates charged enable the companies to realise satisfactory profits. The growth of the frozen and preserved meat industries of New Zealand since 1881 is shown in the following table. The shipments are almost exclusively made to the United Kingdom:—

Year.	Frozen or Chilled Meat.						Preserved Meat.	
	Beef.	Mutton.	Lamb.	Mutton and Lamb.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	carcases.	carcases.	cwt.	cwt.	£	lb.	£
1881	....	.....	.....	.....	.....	.....	1,074,640	22,391
1882	....	.....	.....	.....	15,244	19,339	2,913,904	54,397
1883	937	.....	.....	80,995	87,932	113,261	3,868,480	72,778
1884	1,644	.....	.....	252,422	254,066	345,081	3,103,744	59,224
1885	9,170	.....	.....	286,961	296,131	373,326	4,047,904	81,401
1886	9,391	.....	.....	336,405	345,796	426,556	2,592,464	47,426
1887	6,630	656,823	110,810	421,405	428,035	454,942	4,706,016	79,246
1888	44,613	885,843	94,681	507,306	551,910	629,110	4,912,544	86,123
1889	68,298	990,486	118,794	588,524	656,822	783,374	5,325,152	106,772
1890	98,234	1,330,176	279,741	798,625	896,859	1,084,992	6,702,752	136,182
1891	103,007	1,447,583	338,344	889,012	992,019	1,185,122	5,447,904	111,133
1892	55,020	1,316,758	290,996	806,304	861,324	1,021,838	3,939,712	69,420
1893	11,059	1,355,247	475,365	888,455	899,514	1,078,427	2,656,416	46,601
1894	912	1,633,213	459,948	1,001,342	1,002,254	1,162,770	3,368,736	57,325
1895	12,000	1,632,590	735,254	1,073,640	1,090,730	1,214,778	4,124,400	66,137
1896	25,905	1,505,969	792,037	1,065,292	1,091,197	1,239,969	5,006,848	75,661
1897	50,044	1,653,170	1,038,316	1,291,532	1,341,626	1,512,286	5,046,216	78,235
1898	95,213	1,719,232	1,168,883	1,338,175	1,433,393	1,596,543	6,245,792	97,197
1899	172,345	2,102,533	1,272,525	1,557,439	1,729,784	1,965,564	5,832,272	90,919
1900	312,201	1,585,233	1,351,145	1,354,730	1,667,021	1,952,610	4,973,024	94,524
1901	221,211	1,806,671	1,513,017	1,499,124	1,720,335	2,116,360	3,948,896	87,683

Amongst the States of the Commonwealth the export of meat has reached the largest dimensions in Queensland, although of course it consists chiefly of beef, the trade in mutton being proportionately very small. So far as they can be given, the figures showing the growth of the Queensland frozen-meat trade, as well as the exports of preserved meat, will be found below :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	cwt.	cwt.	£	lb.	£
1881	.....	.....	.....	.....	2,276,409	39,956
1882	.....	.....	.....	.....	5,689,189	119,343
1883	.....	.....	1,951	2,151	6,729,721	151,001
1884	.....	.....	8,082	11,240	2,298,696	57,101
1885	.....	.....	3,926	5,003	8,306,432	171,432
1886	.....	.....	9,239	12,103	130,658	1,586
1887	.....	.....	.....	.....	5,272,170	99,653
1888	.....	.....	.....	.....	3,964,419	77,887
1889	8,745	15,542	24,287	62,240	853,621	16,743
1890	30,253	23,799	54,052	75,908	2,769,881	44,040
1891	52,609	53,698	106,307	161,345	3,333,317	59,032
1892	123,196	51,595	174,791	276,113	6,035,035	96,828
1893	204,349	21,898	226,247	377,039	8,001,788	143,146
1894	301,837	32,187	334,024	498,652	15,544,826	250,646
1895	461,733	28,221	489,954	580,489	25,941,400	393,492
1896	434,683	31,874	466,557	501,498	21,583,658	330,728
1897	529,162	31,162	560,324	659,260	15,699,098	241,189
1898	511,629	10,935	522,564	672,970	13,188,836	217,684
1899	651,029	32,529	683,558	833,733	25,148,815	383,899
1900	689,423	16,239	705,662	976,878	25,250,226	427,062
1901	675,221	19,208	694,429	1,016,038	13,310,615	221,709

Next to New Zealand, the largest exporter of frozen mutton is New South Wales. During the last few years greater efforts have been made in this State to expand the trade, and the exports show a considerable increase, although a temporary check was experienced in 1897 in consequence of the unfavourable season. But New South Wales has laboured under the disadvantage of possessing no cross-bred sheep for export, and the food qualities of the merino are scarcely appreciated in the English market, where New Zealand mutton is favourably known,

and brings on an average 1½d. per lb. more than Australian. A great expanse of New South Wales, however, is suited to the breeding of large-carcass sheep, and the pastoralists have become alive to the importance of securing a share of the meat trade of the United Kingdom. Attention is being directed to the introduction of British rams, and a large increase in the cross-bred flocks has already taken place. The following table shows the growth of the frozen-meat trade of New South Wales; the exports of preserved meat consist almost wholly of tinned mutton :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	quarters.	carcases.	cwt.	£	lb.	£
1881	.....	.....	9,980	8,554	.....	176,721
1882	.....	.....	13,782	22,910	.....	*143,601
1883	.....	.....	34,911	43,100	.....	*221,912
1884	.....	.....	13,309	12,321	.....	*161,477
1885	.....	.....	6,271	6,064	.....	*166,561
1886	.....	.....	4,852	4,671	.....	*77,756
1887	.....	.....	21,831	19,310	9,761,154	150,714
1888	.....	.....	52,262	44,537	4,528,269	69,481
1889	.....	.....	37,868	33,426	2,877,303	52,321
1890	.....	.....	72,304	71,534	4,655,523	74,329
1891	.....	.....	105,013	101,828	6,581,713	87,632
1892	.....	.....	223,074	169,425	8,620,747	105,922
1893	4,773	364,958	220,584	141,640	13,092,942	164,592
1894	9,538	533,995	339,404	193,760	16,382,597	206,054
1895	88,719	1,021,006	607,818	380,107	22,384,285	302,828
1896	16,286	1,372,373	642,188	343,397	16,351,936	218,292
1897	28,529	1,065,990	503,925	275,118	10,903,611	147,165
1898	39,593	1,095,568	539,495	330,325	13,930,801	227,288
1899	32,855	956,222	459,553	331,904	11,453,332	185,804
1900	86,948	951,891	540,426	541,395	11,966,326	221,604
1901	72,662	963,614	510,148	578,923	12,398,011	260,455

* Including Extract of Meat.

The total capacity of the boiling-down works in New South Wales is stated at 633,900 head of cattle or 16,965,000 sheep; of chilling works, 488,500 head of cattle or 5,422,800 sheep; of freezing works, 76,500 head of cattle or 3,150,000 sheep; and of meat-preserving works, 183,000 head of cattle or 5,445,000 sheep.

The only other State in which the meat-export trade has reached dimensions of any importance is Victoria, although its exports fall far below those of the States already dealt with. A statement of the Victorian trade from 1881 to 1901 will be found below :—

Year.	Frozen or Chilled Meat.				Preserved Meat.	
	Beef.	Mutton.	Total Weight.	Total Value.	Weight.	Value.
	cwt.	cwt.	cwt.	£	lb	£
1881	.....	.....	.....	.....	4,026,072	102,306
1882	.....	.....	18,522	18,969	1,274,066	30,705
1883	.....	.....	9,944	12,220	3,225,657	76,015
1884	.....	.....	41,373	53,196	2,667,866	63,707
1885	.....	.....	39,107	61,617	1,486,849	38,244
1886	.....	.....	39,384	70,319	616,652	17,868
1887	.....	.....	15,245	27,270	629,054	14,291
1888	.....	.....	.....	.....	714,856	16,115
1889	.....	.....	.....	.....	805,580	16,156
1890	.....	.....	.....	.....	893,114	20,197
1891	.....	.....	.....	.....	1,052,887	19,230
1892	.....	.....	.....	.....	1,982,151	51,624
1893	.....	.....	1,307	1,838	777,953	14,349
1894	53	27,182	27,235	25,370	2,267,791	40,082
1895	268	24,563	24,831	31,673	2,917,730	43,408
1896	127	23,634	23,761	25,827	4,335,511	71,576
1897	62	21,416	21,478	20,248	5,498,315	84,914
1898	233	7,556	7,789	9,101	2,852,191	38,516
1899	1,458	74,960	76,418	86,087	4,760,047	50,174
1900	2,814	79,507	82,321	112,040	4,776,979	67,265
1901	3,931	85,053	88,984	131,529	3,856,381	63,284

There are at present depastured in Australasia 92,358,824 sheep and 9,827,433 cattle, of which 20,233,099 sheep and 1,361,784 cattle are in New Zealand. In that colony the industry of sheep and cattle raising has now reached such a stage that practically the whole of the stock

available for market is used up every year either locally or for export, and as a consequence the numbers of both kinds of stock are stationary, and have been so for some years past. In the States of the Commonwealth a different state of things prevails. In New South Wales there is usually a large surplus of sheep beyond the State's requirements; while the cast of cattle is below the local demand, and is supplemented by the importation of stock from Queensland, the net import from that State for the past three years being 281,066 head. The other four States have each a deficiency of cattle and sheep.

It is estimated that in an average year the "cast" of cattle is 10·25 per cent.—that is to say, that percentage of all the cattle depastured would be of marketable age, could they be made fit for slaughtering. Assuming this is as the basis of calculation it is estimated that in the Commonwealth there are annually 250,000 head of cattle in excess of those required for food and independent of those preserved or frozen.

The year 1901 was a disastrous one to sheep and cattle breeders in the Commonwealth, and especially to those of Queensland and New South Wales; and as the present year has been one of equal severity, there is little doubt that the stock in all the States excepting Tasmania will be still further reduced, and consequently there will be very little meat available for export. This is unfortunate in view of the export trade which has been so patiently built up; but as it is now an established fact that Australian meat is greatly appreciated in England, and can be exported largely at remunerative prices there are strong elements of hope for future progress when better seasons are experienced.

During the years 1894 and 1895 several attempts, more or less successful, were made to place live cattle and sheep in the English market. A great difficulty in the way of establishing such a trade was the wildness of the cattle, the mortality in some of the shipments being sufficiently high to provoke strong criticism in England as to the cruelty to which the cattle were subjected by being shipped on such a long voyage. It is to be feared, however, that these expressions of opinion were prompted, not altogether by the alleged sufferings of the cattle, but to a large extent by the interests of the English producer and the American exporter. At the same time, it is clear that a permanent and profitable trade cannot be established until the cattle have been handled sufficiently to bring them into a tractable condition, for the present system of depasturing followed in Australia renders the stock too wild to endure a long stay on shipboard. Probably, however, the great strides made by the Argentine Republic in supplying the English market will make it difficult for Australian shippers to realise a satisfactory margin of profit, the near proximity of that country to Great Britain giving it an immense advantage over these States in the matter of freights. In view of the vast population of the United States, any increase in the export of live cattle from that country cannot be anticipated.

DAIRY-FARMING.

Dairy-farming has of late years made fair progress in Australasia, especially in New South Wales, Victoria, New Zealand, and, more recently, in Queensland. The introduction of the factory system at convenient centres and the use of the cream-separator have done much to cause the extension of the industry. The number of dairy cows at the end of 1901, and the estimated quantity of milk produced in each State during that year, were as follow :—

State.	Dairy Cows.	Quantity of Milk produced (estimated).
	No.	gallons.
New South Wales	417,835	142,457,000
Victoria	521,612	217,158,000
Queensland	136,000	40,800,000
South Australia	75,889	26,570,000
Western Australia	29,500	8,555,000
Tasmania	40,933	17,289,000
Commonwealth ...	1,221,769	452,829,000
New Zealand	381,492	154,551,000
Australasia	1,603,261	607,380,000

* Estimated.

The estimated value of the milk and its products, butter and cheese, and of the return obtained from swine, together with the total value of dairy produce for each State in 1900, will be found below :—

State.	Value of Milk, Butter, and Cheese.	Value of Return from Swine.	Total Value of Dairy and Swine Produce.
	£	£	£
New South Wales	2,083,000	266,000	2,349,000
Victoria	2,845,000	436,000	3,281,000
Queensland	608,000	152,000	760,000
South Australia	491,000	151,000	642,000
Western Australia.....	172,000	77,000	249,000
Tasmania	297,000	88,000	385,000
Commonwealth	6,496,000	1,170,000	7,666,000
New Zealand	2,280,000	313,000	2,593,000
Australasia	8,776,000	1,483,000	10,259,000

The production of butter and cheese in each State during 1901 is estimated to have been as follows :—

State.	Butter.	Cheese.
	lb.	lb.
New South Wales	38,930,878	3,838,835
Victoria	46,857,572	3,974,669
Queensland	9,741,882	2,436,912
South Australia	4,954,523	1,053,160
Western Australia	431,670	.....
Tasmania	723,771	268,539
Commonwealth	101,640,296	11,572,115
New Zealand	29,758,310	15,644,944
Australasia	131,398,606	27,217,059

The States having a surplus of butter and cheese available for exportation during 1901 are shown in the following table :—

State.	Butter.	Cheese.
	lb.	lb.
New South Wales	8,643,071	.....
Victoria	28,457,652	113,628
Queensland	2,044,073	237,498
New Zealand	22,576,288	11,679,024
Total	61,721,084	12,030,150

New South Wales was formerly both an importer and an exporter of butter, for only during the spring and early summer months was the production larger than the local requirements, while during the remainder of the year butter had to be imported to meet the local demand. Now this State has become an exporter of butter to the United Kingdom on a fair scale ; but a large quantity of New Zealand butter is still sent to the New South Wales markets on account of the more satisfactory price realised there. There is also an importation from South Australia and Victoria for the supply of the districts adjacent to those States. Queensland has only lately become an exporter of butter, 1897 being the first year when the export exceeded the import. The net export in that year was 179,490 lb., which in 1901 had increased to 2,044,073 lb.

The States which, on the other hand, were obliged to import butter and cheese during 1901 are shown below :—

State.	Butter.	Cheese.
	lb.	lb.
New South Wales .....	.....	1,771,247
South Australia	251,060	60,001
Western Australia	5,033,269	462,392
Tasmania	720,633	48,597
Total	6,004,962	2,342,237

From the foregoing figures it will be seen that those States which produce a surplus of butter and cheese have, after providing for the deficiency of the other States, a balance available for exportation to outside countries, this balance in 1901 amounting to 55,716,122 lb. of butter and 9,687,913 lb. of cheese. An export trade in butter and cheese has long been maintained by New Zealand, while in recent years Victorian, New South Wales, and South Australian butters and, more recently still, Queensland butters have been sent to the London market, and their very favourable reception has given a fresh stimulus to the dairying industry in those States. The rapidity with which this trade is growing may be gauged from the following table, which shows the quantity of butter exported to the United Kingdom during the thirteen years ended 1901 :—

Year.	Exporting State.				
	New South Wales.	Victoria.	Queensland.	South Australia.	New Zealand.
	lb.	lb.	lb.	lb.	lb.
1889	284,251	505,478	.....	.....	2,363,088
1890	589,160	1,286,583	.....	10,850	2,976,848
1891	391,180	3,778,775	.....	23,864	3,246,768
1892	1,532,782	6,446,900	.....	.....	4,648,980
1893	2,846,989	13,141,423	1,064	357,087	5,864,656
1894	4,333,927	22,139,521	.....	1,233,539	6,590,640
1895	1,852,360	21,127,025	31,420	1,017,629	6,181,728
1896	1,741,272	16,452,649	.....	242,872	6,730,304
1897	5,431,109	15,450,857	407,199	16,240	8,943,088
1898	5,309,811	13,548,293	628,296	389,836	9,051,168
1899	7,006,701	26,045,210	741,308	894,992	13,608,224
1900	8,477,617	26,185,679	872,244	707,448	18,577,552
1901	5,985,784	17,180,468	208,740	162,456	19,141,136

From latest advices it would appear that the price obtained for Australian butter in London was higher than the rates ruling in the local market; and as there can hardly be a limit placed to the capacity of Australasia to produce butter and cheese, it is probable that these high prices will have the effect of greatly stimulating the dairy industry

throughout all these States. In connection with this subject, it may be mentioned that the value of the butter, cheese, and eggs imported into the United Kingdom during 1901 was £19,297,396, £6,227,135, and £5,495,167 respectively. The supply is chiefly drawn from the Continent of Europe and from America, and of the total amounts mentioned, the only imports from Australasia were butter to the value of £2,046,981, and cheese to the value of £193,868.

It may not be out of place to remark that in one or two of the States the export of butter has helped to maintain prices in the local markets, and tended to restrict home consumption. If a season of great prosperity visits Australia there will be a very large increase in the local demand, with a consequent limitation in the supply available for export, so that it may be concluded that under any circumstances the prospects of the industry are encouraging.

SWINE.

The breeding of swine is usually carried on in conjunction with dairy-farming, and the following table shows the number of swine in each State at ten-year intervals since 1861 :—

State.	Number of Swine.				
	1861.	1871.	1881.	1891.	1901.
New South Wales ...	146,091	213,193	213,916	253,189	265,730
Victoria	43,480	177,447	239,926	286,780	350,370
Queensland	7,465	32,707	56,438	122,672	121,641
South Australia	69,286	95,542	120,718	83,797	89,875
Western Australia.....	11,984	14,265	22,530	25,930	61,025
Tasmania.....	40,841	52,863	49,660	73,520	58,716
Commonwealth ..	319,147	586,017	703,188	845,888	947,357
New Zealand.....	43,270	151,460	200,083	308,812	224,024
Australasia.....	362,417	737,477	903,271	1,154,700	1,171,381

The production of swine should be a large factor in dairy-farming, but the increase in the number of pigs has not been so large as might have been expected. In Queensland, Tasmania, and New Zealand the number of swine is actually less now than in 1891, while South Australia shows very slight increase. Victoria possesses the largest stock, with 29·9 per cent. of the total number in Australasia; then come New South Wales and Zealand with 22·7 per cent. and 19·1 per cent. respectively; Queensland has 10·4 per cent. of the total; South Australia, 7·7 per cent.; Western Australia, 5·2 per cent.; and Tasmania, 5·0 per cent.

The products of the swine—bacon, ham, lard, and salt pork—are now exported by all the States with the exception of New South Wales, Western Australia, and Tasmania, as is shown by the following table, which relates to the year 1901 :—

State.	Bacon and Ham.	Salt and Frozen Pork.	Lard.	Net Value exported.
	£	£	£	£
New South Wales.....	*40,062	*246	*2,280	*42,588
Victoria	90,172	5,020	4,531	99,723
Queensland	31,051	3,864	2,637	37,552
South Australia	7,204	.....	.....	7,204
Western Australia.....	*104,776	*2,548	*1,115	*108,439
Tasmania	*1,960	.....	*904	*2,864
Commonwealth.....	*18,371	6,090	2,869	*9,412
New Zealand	17,710	8,297	1,343	27,350
Australasia	*661	14,387	4,212	17,938

* Excess of imports.

POULTRY AND MINOR INDUSTRIES.

An estimate is given below of the value of the production of poultry and eggs, together with that arising from bee-farming, in each State during the year 1901 :—

State.	Poultry and Eggs.	Honey and Beeswax.
	£	£
New South Wales	671,000	26,000
Victoria	603,000	11,000
Queensland	283,000	9,000
South Australia	203,000	5,000
Western Australia.....	169,000	2,000
Tasmania	88,000	4,000
Commonwealth	2,017,000	57,000
New Zealand	399,000	16,000
Australasia	2,416,000	73,000

The most remarkable feature is the trade in eggs between South Australia as supplier and New South Wales, Victoria, and Western Australia as buyers. The returns for 1901 show that during that year South Australia exported eggs to the value of £72,171 to these States, viz., £4,156 to Victoria, £14,035 to New South Wales, and £53,980 to Western Australia. The bulk of the trade with New South Wales is transacted with the Barrier district, which is commercially a dependency of South Australia.

PASTORAL AND DAIRY PRODUCTION.

The total value of pastoral and dairy production including poultry and bee farming during the year 1901, in each State and in the whole of Australasia, together with the value per inhabitant, were as shown in the following table :—

State.	Total Value of Pastoral and Dairy Production.	Value per Inhabitant.
	£	£ s. d.
New South Wales	15,598,000	11 7 4
Victoria	9,242,000	7 13 7
Queensland	6,670,000	13 4 6
South Australia	2,936,000	8 1 9
Western Australia	1,344,000	7 3 4
Tasmania	1,100,000	6 6 9
Commonwealth	36,890,000	9 14 0
New Zealand	9,970,000	12 15 11
Australasia	46,860,000	10 4 6

The following table gives similar information for the years 1871, 1881, and 1891, and shows that in point of total value the production for 1901 did not equal that of 1891. The only States which show increases since 1891 are Western Australia and New Zealand :—

State.	1871.	1881.	1891.	
	£	£	£	
New South Wales	8,709,000	13,151,000	17,460,000	
Victoria	7,260,000	7,499,000	9,321,000	
Queensland	1,959,000	4,186,000	7,561,400	
South Australia	1,800,000	3,178,000	3,148,525	
Western Australia	274,000	431,000	647,350	
Tasmania	734,000	1,093,000	1,117,550	
Commonwealth	20,736,000	29,538,000	39,255,825	
New Zealand	3,210,000	7,096,000	9,153,225	
Australasia {	Total.....	23,946,000	36,634,000	48,409,050
	Per head.	£ s. d. 12 7 7	£ s. d. 13 3 11	£ s. d. 12 12 0

Comparing the two preceding tables, it will be seen that although the total production has been nearly doubled since 1871 the value per head has decreased considerably. In 1901 the value of pastoral and dairy

production was £1,549,000 less than in 1891; but to a great extent this was due to diminished production caused by a succession of dry seasons—the cast of both sheep and cattle being much reduced as compared with 1891. On the other hand, the production of butter was larger, and also the export of meat, as will be seen below :—

Produce.	1891.	1901.
Wool, as in grease	Lb. 661,229,000	673,914,000
Cast of sheep	No. 17,000,000	10,345,000
Cast of cattle	No. 1,216,000	1,014,000
Butter produced	Lb. 70,628,000	131,398,606
Meat export.....	Cwt. 1,454,000	3,322,939

The movement in prices will be seen from the following tabulation, which is based chiefly on an analysis of the New South Wales trade. The prices of 1901 are represented by 1,000 :—

Year.	Price Levels of—				
	Wool.	Butter.	Cattle.	Tallow.	Hides.
1891	969	977	641	856	707
1892	951	984	631	874	604
1893	852	911	520	968	535
1894	788	754	399	899	494
1895	877	655	393	832	642
1896	938	921	654	749	539
1897	904	913	513	706	709
1898	961	970	676	801	754
1899	1,357	1,006	629	958	855
1900	1,102	967	779	1,040	904
1901	1,000	1,000	1,000	1,000	1,000

The price of wool which advanced suddenly in 1899, declined again during the last two years, while tallow also declined in price during 1901. The other products quoted above show increases in value; but in considering the high prices of cattle it must be remembered that they have been brought about by the large decrease in the numbers of stock, and the increased prices do not by any means compensate for the losses occasioned by the drought.

THE MANUFACTURING INDUSTRY.

The progress of the manufacturing industry in Australasia has been very irregular, even in the most advanced states; and although the tabular statement given below shows an increase of 87,772 hands in the Commonwealth and 26,623 in New Zealand since 1885, about one-tenth of the former number has been added by a change in the tabulation of the statistics in Victoria and New South Wales. The population of the continent was not sufficient to maintain industries on an extensive scale, and even this field was still further limited by intercolonial tariffs. Now that these barriers have been swept away, and the Australian field secured to a certain extent against outside competition, more rapid progress may reasonably be expected in regard to the manufacturing industry.

The greater portion of the manufactories of Australasia may be classified as domestic industries—that is to say, industries naturally arising from the circumstances of the population, or connected with the treatment of perishable products; but there are nevertheless a fair number of firmly established industries of a more complex character. A statement of the number of establishments, and of the hands employed, in Australasia is given below for the years 1885, 1890, 1895, and 1901. The figures for the year last-mentioned were obtained from census returns in the cases of New South Wales, and New Zealand, while for Victoria, Queensland, and Western Australia they represent the usual annual returns. As the returns of South Australia and Tasmania for the year 1901 are not yet available, the information for those states refers to the year 1900 :—

Year.	Establishments.		Hands employed.	
	Commonwealth.	New Zealand.	Commonwealth.	New Zealand.
	No.	No.	No.	No.
1885	8,632	1,946	105,265	22,095
1890	8,903	2,254	133,147	25,633
1895	8,247	2,459	133,631	27,389
1901	10,559	3,668	193,037	48,718

MANUFACTORIES OF VICTORIA.

Victoria was the state which first displayed activity in the manufacturing industries. In 1885 there were employed in factories, properly so called, 49,297 hands, and in 1889 there were 57,432 hands; but the number fell away to 41,729 in 1893. Since that year there has been an increase to the extent of 24,800 hands. Of the 66,529 workers employed in 1901, 3,827 may be said to have found occupation in connection with domestic industries for the treatment of perishable produce for immediate use; 25,567 in other industries dependent upon the natural resources of the country, and 37,135 in industries the production from which comes into competition with imported goods:—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1885	2,813	41,542	7,755	49,297
1886	2,770	39,453	6,320	45,773
1887	2,854	42,019	7,065	49,084
1888	2,975	47,335	7,153	54,488
1889	3,137	49,105	8,327	57,432
1890	3,104	47,596	8,773	56,369
1891	3,123	43,627	10,786	54,413
1892	2,934	35,726	9,689	45,415
1893	2,659	32,209	9,520	41,729
1894	2,614	32,638	10,681	43,319
1895	2,724	35,406	12,240	47,646
1896	2,809	37,728	12,669	50,397
1897	2,759	38,620	14,030	52,650
1898	2,869	40,631	14,147	54,778
1899	3,027	44,041	16,029	60,070
1900	3,097	45,794	18,413	64,207
1901	3,249	47,059	19,470	66,529

Comparing the number of women employed in the factories of the various States, it will be found that the proportion is largest in Victoria; thus, out of 54,413 hands in 1891, there were 10,786, or 19.82 per cent., females; while in 1901, of 66,529 hands, 19,470, or 29.27 per cent., were females.

The number of factories and industrial establishments of various sizes, with the number of hands employed in each class, during 1901, was as follows :—

Number of Hands employed by each Establishment.	Number of Establishments.	Total number of Hands.
Under 4 hands	492	1,606
4 hands	337	1,348
5 to 10 hands	1,166	8,191
11 to 20 ,,	589	8,661
21 to 50 ,,	403	12,521
51 to 100 ,,	156	10,901
101 hands and upwards	106	23,301
Total.....	3,249	66,529

Interesting statistics were obtained in 1891, and again in 1901, of the value of materials used, and of the output by the manufactories of Victoria. The following are the official figures for the two periods :—

1890-1.

	£
Value of output	22,227,909
Value of materials used or operated on ...	11,902,089
	<hr/>
Value added in process of treatment or of manufacture	£10,325,820
	<hr/>

1900.

	£
Value of output	16,948,951
Value of materials used or operated on ...	10,104,131
	<hr/>
Value added in process of treatment or of manufacture	£6,844,820

This shows that there has been an apparent decline in the value of production of not less than £3,481,000. There are, however, omissions to be allowed for. Taking these into consideration, there is still a difference in favour of 1891 to the extent of about £3,000,000. In the ten years the number of persons employed showed an increase of 7,838—

MANUFACTORIES OF NEW SOUTH WALES.

The manufacturing industries of New South Wales do not cover so wide a field as those of Victoria, but they afford employment for almost as many persons. For the year 1901 the two states compare as follows :—

State.	Establishments.	Hands employed.		Total.
		Males.	Females.	
Victoria	3,249	47,059	19,470	66,529
New South Wales ...	3,368	54,461	11,674	66,135

In Victoria, therefore, there were employed 7,796 females more than in New South Wales, and 7,402 fewer males. In order to trace the progress of the manufacturing industry in New South Wales during the last eleven years, it is necessary to adjust the figures for the five years 1891-95, since in 1896 a change was made in the scope of the returns by the inclusion of dressmakers and milliners who were not previously counted as factory hands. Certain other small changes were made, the object of which was to secure uniformity with Victoria. Making the necessary adjustments, the figures since 1891 are as follows :—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1891	3,056	43,203	7,676	50,879
1892	2,657	42,909	5,007	47,916
1893	2,428	37,832	4,225	42,057
1894	3,070	41,070	5,432	46,502
1895	2,723	41,546	6,484	48,030
1896	2,928	42,908	6,932	49,840
1897	2,826	44,333	7,106	51,439
1898	2,839	44,673	7,845	52,518
1899	2,912	47,063	8,583	55,646
1900	3,077	50,516	10,263	60,779
1901	3,368	54,461	11,674	66,135

Up to the year 1891 there had been a fairly regular increase in the employment afforded by the factories of the state; in the following year, owing to causes already discussed in another part of this volume, there was a decrease in the number of persons employed, and, from 50,879 in 1891, the number had fallen to 42,057 in 1893—the year of the bank failures. In the following years there was a rapid recovery,

so that the employment in 1897 was greater than in 1891, and the year 1901 showed an improvement of 15,256 during the eleven years since 1891, and an increase of 24,078 over the figures of 1893. The value of the output of the factories of the state is obtained with considerable elaboration every ten years, but approximate figures are also obtained every year. The following is a comparison of the returns for 1891 and 1901 under some of the principal headings; the figures for 1891 have been slightly altered from those previously published, so as to place them on the same basis as the returns for 1901:—

	1891.	1901.
	No.	No.
No. of Establishments	3,056	3,373
Horse-power used	28,061	40,823
Persons employed—Males	42,728	54,461
Females	5,230	11,674
Total	47,958	66,135
	£	£
Value of materials treated	8,172,383	13,815,100
Value of fuel used	431,543	496,615
Amount of wages paid	4,272,704	4,943,079
Total value of output	16,807,132	24,393,471
Value added to materials during process of manufacture	8,203,206	10,081,756

These figures present some very interesting features. The increase in the value of material used was equal to 69·05 per cent., in the value of fuel 15·08 per cent., of wages 15·69 per cent., and in the value added to materials in the process of manufacture or treatment 22·90 per cent. The increase in the added value, compared with the increase in the wages paid, indicates the great change that has taken place in the methods of production—the more extensive use of machinery and the employment of machinery of a better class.

Of the 66,135 workers employed in 1901, 31,109 found employment in connection with industries the products from which come into competition with imported goods, 3,979 were engaged in domestic industries for the treatment of perishable produce required for immediate use, and 31,047 in other industries called into existence by the natural resources of the state

The number of factories and industrial establishments of various sizes, with the number of hands employed in each class during 1901, was as follows:—

Number of Hands employed by each Establishment.	Number of Establishments.	Total number of Hands.
Under 4 hands	519	1,282
4 hands.....	361	1,444
5 to 10 hands	1,197	8,369
11 to 20 „	628	9,155
21 to 50 „	421	13,176
51 to 100 „	137	9,529
101 hands and upwards	105	23,180
Total.....	3,368	66,135

MANUFACTORIES OF QUEENSLAND.

In Queensland systematic statistics relating to manufactories have been taken only since 1892. Until the year 1900, no details were available with reference to the employment of males and females, and the numbers for previous years have therefore been estimated. The figures for the last ten years are as follow:—

Year.	Establishments.	Persons employed.		
		Males.	Females.	Total.
1892	1,329	11,529	1,840	13,369
1893	1,391	12,434	2,000	14,434
1894	1,323	13,124	2,100	15,224
1895	1,397	16,128	2,600	18,728
1896	1,332	17,013	2,720	19,733
1897	1,682	19,100	3,060	22,160
1898	1,864	20,830	3,340	24,170
1899	2,172	23,440	3,760	27,200
1900	2,019	23,138	3,766	26,904
1901	2,062	23,431	3,692	27,123

The value of materials used in Queensland industries is £4,718,998, the wages paid £2,283,400, and the value of production £8,704,195; the value added to materials in the process of manufacture is therefore £3,985,197. When the smallness of the population of Queensland and the extent of the importation of manufactured goods are considered, the value of the output of the factories must appear very large, the

annual wages bill being nearly half, and the value added in the processes of manufacture more than half, that set down for Victoria. Queensland has the advantage of the important sugar-refining and meat-preserving industries, the combined output of which amounts to slightly over £3,400,000, or nearly 40 per cent. of the total production of all the manufacturing industries of the State. The figures relating to these two industries are worthy of attention, and are dealt with at some length in another place.

MANUFACTORIES OF SOUTH AUSTRALIA.

In South Australia returns were obtained from manufactories in 1892, but in the following three years no information was obtained; since 1895, however, the returns have been collected annually. The following are the available figures:—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1892	815	9,642	1,847	11,489
1896	767	10,974	1,811	12,785
1897	768	10,930	2,027	12,957
1898	766	12,296	2,085	14,381
1899	841	12,941	2,214	15,155
1900	1,036	14,800	2,859	17,659

MANUFACTORIES OF WESTERN AUSTRALIA.

In Western Australia, the manufacturing industry has advanced very rapidly in importance, and the number of hands employed now exceeds eleven thousand. The following are the figures for the last five years:—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1897	413	8,683	408	9,091
1898	485	8,521	613	9,134
1899	476	8,641	766	9,407
1900	507	9,440	880	10,320
1901	537	10,238	1,062	11,300

MANUFACTORIES OF TASMANIA.

Tasmania has several long-established industries, but the employment afforded has been very limited. The opening up of the mines in the west coast of the island, however, has had a stimulating effect upon the local

industries, as may be seen from the figures given below. Commencing with 1886, when the returns relating to manufactories were first collected, the number of establishments and of hands employed therein were as follows :—

Year.	Establishments.	Males.	Females.	Total Hands employed.
1886	271	2,030	77	2,107
1887	249	1,968	74	2,042
1888	250	2,015	50	2,065
1889	232	2,144	35	2,179
1890	237	2,147	57	2,204
1891	215	2,019	33	2,052
1892	205	1,641	52	1,693
1893	204	1,407	20	1,427
1894	201	1,546	34	1,580
1895	211	1,713	41	1,754
1896	215	2,110	34	2,144
1897	290	3,272	206	3,478
1898	288	3,438	191	3,629
1899	280	3,629	355	3,984
1900	304	3,964	327	4,291

MANUFACTORIES OF NEW ZEALAND.

In New Zealand information regarding the manufacturing industry is obtained only at the quinquennial census. The following statement shows the progress made since 1886 :—

Year.	Establishments.	Hands employed.		
		Males.	Females.	Total.
1886	1,946	19,601	2,494	22,095
1891	2,254	22,664	2,969	25,633
1896	2,440	22,945	4,391	27,336
1901	3,668	38,094	10,624	48,718

The foregoing figures show very marked progress during the last five years, and an analysis of the returns shows that this progress has been general amongst all classes of industries. Adjusting the figures for the purpose of comparison with those of New South Wales, Victoria, and Queensland, the following results are obtained :—

	1900.	£
Value of materials operated on, including fuel.....		9,409,787
Wages paid		3,511,590
Total output.....		16,339,450
Value added to materials during process of manufacture		6,929,663

VALUE ADDED BY PROCESSES OF MANUFACTURE OR TREATMENT.

The figures relating to the value of production afford material for some interesting comparisons. Taking the four States for which there is complete information, the value of materials used—with which is included fuel—and the output were as follows:—

State.	Value of Materials used.	Value of Output.	Value added in the Processes of Treatment or Manufacture.
	£	£	£
New South Wales.....	14,311,715	24,393,471	10,081,756
Victoria.....	11,040,291	18,512,680	7,472,389
Queensland.....	4,718,998	8,704,195	3,985,197
New Zealand.....	9,409,787	16,339,450	6,929,663

Taken by themselves, neither the value of materials used nor the value of output has any statistical importance—but their difference, represented in the last column as the value added in the processes of treatment or manufacture, is the sum which is shared between labour and capital. In the following statement the term wages represents the amount paid to employees, including managers, clerks, carters, and the like, as well as those who are more directly engaged in the processes of manufacture. The difference between the value added in the processes of treatment, and the amount of wages paid, represents the return on capital, including interest on money invested, rent, insurance, depreciation, &c., and the proprietor's gains from carrying on his business. Dividing the so-called added value into these two parts, the following is the result:—

State.	Added value.	Wages.	Profits, interest, rent, insurance, &c.	Proportion of Wages to total added value.
	£	£	£	per cent.
New South Wales.....	10,081,756	4,943,079	5,138,677	49·0
Victoria.....	7,472,389	4,589,412	2,882,977	61·4
Queensland.....	3,985,197	2,283,400	1,701,797	57·3
New Zealand.....	6,929,663	3,511,590	3,418,073	50·7

It will be seen that the largest proportion of the value added to materials during the process of treatment falls to the Victorian wage-earners, and the least to those of New South Wales. The question is,

however, one that admits of much discussion as to the true meaning of the figures, and further light will be thrown on the subject by a consideration of the details afforded by the Statistical Registers of the various states.

CLASSES OF INDUSTRY.

The information in regard to industrial establishments is not given by the various statistical departments in precisely the same form, and any summary of the various industries must be looked upon as more or less approximate. The appended classification follows the lines adopted in most of the states :—

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Treating raw material, the product of pastoral pursuits	6,257	17	2,093	6	8,350	23
Connected with food and drink, or the preparation thereof ..	20,432	3,704	6,641	653	36,073	4,357
Clothing and textile fabrics	15,582	20,049	5,654	8,523	21,236	37,572
Building materials	23,534	77	8,098	9	31,632	86
Metal works, machinery, &c	37,188	60	6,402	13	43,590	82
Shipbuilding, repairing, &c.	2,268	99	393	81	2,661	180
Furniture, bedding, &c.	4,426	420	1,332	73	5,303	493
Books, paper, printing, &c.	13,558	2,024	2,960	662	16,518	3,536
Vehicles, saddlery, and harness ..	7,855	117	2,197	40	10,052	157
Light, fuel, and heat	2,838	71	657	150	3,495	221
Miscellaneous	11,015	2,537	1,617	414	12,632	2,951
Total	153,953	39,084	38,094	10,024	192,047	49,708

Distributing the total just set down for the Commonwealth amongst the various states the results shown in the following table are obtained. The information in regard to Tasmania is incomplete and it has been necessary to estimate the figures regarding two classes of industries, viz., those relating to furniture, &c., and vehicles, saddlery and harness. No information is available regarding ship-building, &c.; but as this industry has not attained any importance in Tasmania no attempt has been made to ascertain the actual employment afforded therein. The Tasmanian returns appear to be confined to certain leading employments,

and if the minor industries had been included it is probable that the gross number of hands employed would have shown a total of 6,000.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Treating raw material, the product of pastoral pursuits	2,848	1,023	755	534	66	148
Connected with food and drink, or the preparation thereof	10,342	10,441	8,020	2,359	1,066	908
Clothing and textile fabrics	14,128	20,707	4,383	3,413	1,459	541
Building materials	7,239	5,925	3,461	1,640	4,146	1,200
Metal works, machinery, &c.	13,888	9,656	4,737	6,150	2,423	358
Shipbuilding, repairing, &c.	1,680	170	386	87	44	....
Furniture, bedding, &c.	2,140	1,658	597	71	230	150
Books, paper, printing, &c.	5,573	5,905	2,191	1,328	896	589
Vehicles, saddlery, and harness ..	2,541	2,686	1,272	700	473	300
Light, fuel, and heat	1,291	977	316	132	153	40
Miscellaneous	4,465	6,481	1,005	1,205	339	57
Total	66,135	66,529	27,123	17,659	11,300	4,291

INDUSTRIES TREATING RAW MATERIALS THE PRODUCT OF PASTORAL PURSUITS.

A consideration of the details relating to the various classes of industry discloses some very interesting features. The hands employed in the industries treating raw material, the product of pastoral pursuits, arranged according to the principal groups, were as follow :—

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Boiling-down & Tallow Refineries	270	....	84	....	354	....
Bone Mills, Manures, &c.	241	1	47	....	288	1
Glue, Oil, and Grease	251	1	5	....	256	1
Tanneries and Fellmongeries	5,405	15	1,957	6	7,452	21
Wool-scouring						
Total	6,257	17	2,093	6	8,350	23

It is difficult to say if the figures for all the states are compiled upon the same basis. In New South Wales and Victoria wool-scouring works on sheep stations are not included, as the hands are employed in such works only during the shearing season, and frequently for not more than a few weeks. In Queensland there are no establishments classed as tallow-refineries, tallow being incidentally extracted in the process of meat-preserving, and the persons engaged therein are included in the latter industry.

The number of hands employed in treating raw material, the product of the pastoral industries, varies greatly from year to year, and, owing to the decrease in the number of live stock depastured, is much less than in former years. The following is a distribution of the total persons employed in the various states of the Commonwealth :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Boiling-down & Tallow Refineries	110	92	23	45	....	....
Bone Mills, Manures, &c.	55	130	37	....	20	....
Glue, Oil, and Grease.....	165	43	7	20	....	17
Tanneries and Felhuongeries	1,059	} 1,658	688 {	341	46	131
Wool-scouring	1,450			128	....	....
Total	2,848	1,923	755	534	66	143

Tanning, fellmongering, and wool-scouring afford the largest amount of employment amongst industries of this class, and the details show the goods treated or manufactured in tanneries during the latest year available.

State.	Number Tanned.			
	Hides.	Skins.		
		Calf.	Sheep.	Other.
New South Wales	433,299	41,565	3,282,600	32,040
Victoria	405,206	169,316	585,886	91,050
Queensland.....	189,000	.....	154,178	.....
Western Australia	12,852	.....	11,450	.....
Tasmania	*148,344	.....	.....	.....
New Zealand	178,075	.. ..	272,775	.....

* Includes skins.

The foregoing information is somewhat imperfect, but will serve to convey some idea of the development of the industry in each state.

The quantity of wool washed in ordinary wool-scouring establishments cannot be stated with exactitude, but the following figures will give some idea of the extent of the industry. The figures represent the weight of clean wool exported from each state or locally consumed, in accordance with the latest annual returns.

	lb.
New South Wales	37,773,481
Victoria	6,866,383
Queensland	18,252,000
South Australia	2,736,000
Western Australia	436,460
New Zealand	25,793,239

INDUSTRIES CONNECTED WITH FOOD AND DRINK.

The industries connected with food and drink afford employment for a large number of hands, the distribution into detailed groups being as shown in the following table. The figures for the most part afford their own explanation. Included under the head of cornflour, oatmeal, and arrowroot are, in the case of Victoria, a small number of hands making macaroni, and some starch makers; these last are few in number, and it was not found possible to exclude them from the persons employed in making farinaceous foods, otherwise they could have been classed elsewhere. Owing to an arrangement between the statistical offices of New South Wales and Victoria, factories dealing with milk products have been included in the list of manufactories, although they cannot rightly be considered as such.

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Aerated Waters	3,254	161	437	15	3,691	176
Biscuits	1,402	680	454	213	1,946	893
Breweries and Maltsters	3,016	9	822	5	4,438	14
Condiments, Coffee, Spices	625	331	63	15	688	346
Confectionery	1,470	747	158	147	1,628	894
Cornflour, Oatmeal, Arrowroot	677	216	19	10	696	226
Distilling	274	7	.....	.....	274	7
Flour Mills	2,525	15	513	2	3,038	17
Ice Making	981	5	5	.....	986	5
Jam, Fruit-canning, Pickles, Vinegar	2,469	1,309	178	145	2,647	1,454
Meat-preserving, Refrigerating	3,706	136	2,554	62	6,260	198
Milk Products (Butter, Cheese, Condensed Milk)	3,516	73	1,182	39	4,698	112
Olive Oil	14	10	.....	.....	14	10
Sugar Mills	3,782	.....	.....	.....	3,782	.....
Sugar Refineries	869	5	256	.....	1,125	5
Salt	162	.....	.....	.....	162	.....
Total	29,432	3,704	6,641	653	36,073	4,357

Distributing the persons shown above as employed in the Commonwealth amongst the various states, the most noticeable point is the strong position of Queensland, due entirely to the development of the sugar and meat-preserving industries.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Aerated Waters	1,228	1,061	633	181	312	....
Biscuits	845	1,073	254	....	....	....
Breweries and Maltsters	1,036	1,270	465	356	401	97
Condiments, Coffee, Spices	568	243	79	13	53	....
Confectionery	805	768	349	218	77	....
Cornflour, Oatmeal, Arrowroot ..	225	352	261	55	....	....
Distilling	10	137	26	108	....	....
Flour Mills	889	704	201	515	105	126
Ice Making	703	87	75	47	74	....
Jam, Fruit-canning, Pickles, Vinegar	740	1,957	217	289	....	575
Meat-preserving, Refrigerating ..	1,127	847	1,670	180	....	18
Milk Products (Butter, Cheese, Condensed Milk)	1,012	1,546	703	192	44	92
Olive Oil .....	....	....	....	24	....	....
Sugar Mills	695	....	3,087	....	....	....
Sugar Refineries	450	324	....	100	....	....
Salt .....	....	72	....	90	....	....
Total	10,342	10,441	8,020	2,359	1,066	908

There are many important industries in this class the details of which would prove interesting, but only for a limited number is the necessary information available. The most important of these is perhaps the meat-preserving and refrigerating industry, and the following table will give some idea of its development in the various States.

The figures show the latest annual output, those for New South Wales are exclusive of 1,264,743 lb. of tongues preserved during the year.

State.	Sheep and lambs, frozen.	Beef, frozen and chilled.	Rabbits frozen.	Meat Preserved.		
				Beef.	Mutton.	Rabbits.
	carcases.	lb.	No.	lb.	lb.	lb.
New South Wales	963,614	8,138,144	°	5,703,701	7,678,960	.....
Victoria	417,721	1,119,115	3,980,460	370,048	270,704	2,945,936
Queensland	64,121	90,053,829	.....	29,905,920	2,827,247	.....
New Zealand.....	3,348,123	34,285,328	6,040,047	7,867,440		.....

* Value £6,233.

The sugar industry has attained considerable dimensions in New South Wales and Queensland. Some details of the industry are given below, but more extended information is given on this subject in the chapter dealing with "Agriculture."

State.	Sugar cane crushed.	Sugar manufactured.	Molasses manufactured.
New South Wales.....	tons. 201,373	tons. 19,518	gallons. 1,300,909
Queensland.....	1,180,091	120,858	3,679,952

Detailed information regarding flour-mills is available for each state excepting South Australia, and the following items have been selected as being of most value in showing the progress made.

State.	Wheat ground.	Other grain ground.	Flour made.
	bushels.	bushels.	tons.
New South Wales.....	9,368,654	35,247	191,504
Victoria.....	8,387,323	81,658	169,739
Queensland.....	1,244,305	53,257	26,093
Western Australia.....	494,193	.....	10,297
Tasmania.....	1,093,871	126,227	22,000
New Zealand.....	4,004,789	762,340	83,017

Breweries afford a large amount of employment, and those of Victoria have attained the most importance and have the largest annual output, as the following figures show.

State.	Beer and Porter made.	Materials used—		
		Sugar.	Malt.	Hops.
	gallons.	cwt.	bushels.	lb.
New South Wales.....	13,253,600	78,540	532,930	665,345
Victoria.....	16,557,236	113,600	608,148	649,812
Queensland.....	5,325,314	.....	.....	.....
Western Australia.....	4,015,490	24,092	152,852	252,310
Tasmania.....	1,622,807	.....	.....	.....
New Zealand.....	7,379,581	21,647	455,035	562,245

CLOTHING AND TEXTILE FABRICS.

Industries connected with the manufacture of clothing and textile fabrics afford more employment than any other class. The females employed largely outnumber the males, and the excess would be still greater if persons working in their own homes, or in dwelling-houses not classed as factories, had been included. The following table shows the number of males and females employed in this class of industry :—

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Boots and Shoes	8,726	3,436	1,906	790	10,632	4,226
Clothing other than Dressmaking and Millinery	4,647	14,388	1,199	3,772	5,846	18,160
Dressmaking and Millinery	154	8,064	23	2,365	177	11,529
Flax Mills .....	.....	.....	1,698	.....	1,698	.....
Furriers	33	49	.....	.....	33	49
Hats and Caps	642	890	37	80	679	970
Woolen Mills	1,158	600	769	924	1,927	1,524
Water-proof Clothing and Oil Skins	189	685	22	92	211	777
Others	33	337	.....	.....	33	337
Total	15,582	29,049	5,654	8,523	21,236	37,572

Victoria shows the greatest development in these industries, and employs more hands than any other state in almost every branch of them. The only exceptions are waterproof clothing, where New South Wales employs more hands, and textiles, in which it is surpassed by New Zealand. The colony last named has 1,693 hands employed in woollen mills compared with 1,075 in Victoria and 234 in New South Wales. New Zealand has also 1,698 hands in flax mills; in no other state has the flax industry been established. The following table shows the distribution of employment in the various states of the Commonwealth :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Boots and Shoes	3,979	4,871	1,401	1,195	352	364
Clothing other than Dressmaking and Millinery	5,993	8,454	1,782	} 2,041 {	765	.....
Dressmaking and Millinery	2,587	4,938	951		342	.....
Furriers	33	49	.....	.....	.....	.....
Hats and Caps	330	1,048	97	57	.....	.....
Woolen Mills	234	1,075	152	120	.....	177
Water-proof Clothing and Oil Skins	602	272	.....	.....	.....	.....
Others	370	.....	.....	.....	.....	.....
Total	14,128	20,707	4,383	3,413	1,459	541

There are important boot and shoe factories in each of the states, and the output is attaining considerable proportions, as will be seen from the following figures :—

State.	Articles manufactured.			Value of Output.
	Boots and Shoes.	Slippers.	Uppers.	
	pairs.	pairs.	pairs.	£
New South Wales	2,821,724	512,584	72,662	692,253
Victoria	3,125,799	92,174	18,639	.....
Queensland	510,670	.....	27,746	265,001
Western Australia	264,768	.....	10,700	.....
Tasmania	*216,960	.....	.....	73,627
New Zealand.....	1,161,873	104,583	166,027	529,254

* Includes uppers.

The manufacture of textile fabrics is one of the most important industries of New Zealand, and the woollen mills in that colony employ more hands than those in the Commonwealth. The following information shows the output from woollen mills in the various states :—

State.	Wool used.	Articles manufactured.				Value of Output.
		Tweed and Cloth.	Flannel.	Blankets.	Shawls and Rugs.	
	lb.	yds.	yds.	pairs.	No.	
New South Wales ...	685,240	525,020	3,428	5,000	900	57,039
Victoria	3,408,526	818,975	2,229,617	49,302	4,600	.....
Tasmania	727,000	.....	.....	.....	.....	31,800
New Zealand.....	3,257,319	1,445,867	1,191,234	49,523	26,806	359,352

BUILDING MATERIALS.

The grouping of industries under the heading preparation and manufacture of building materials is attended with some difficulty, especially when an attempt is made to give detailed information. The following table shows the employment afforded by these industries in the Commonwealth and New Zealand :—

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Asphalt	53	.....	.....	.....	53	.....
Bricks, pottery, earthenware	4,893	43	538	.....	5,731	43
Joinery	2,888	8	5	.....	2,893	8
Lime, plaster, and cement	666	1	184	.....	850	1
Paints and varnishes	93	3	31	.....	129	3
Saw-mills	13,946	17	6,805	7	20,751	24
Stone-dressing, polishing, model-ling and monumental works..	763	5	81	.....	849	5
Wood-turning and carving	222	.....	154	2	376	2
Total	23,534	77	8,008	9	31,632	86

There appears to be only one establishment in Australasia preparing crude asphalt for industrial purposes, this establishment is at Sydney. There are many so-called asphalt works, that is, works preparing coal tar, sand, and screenings for pavement purposes, but these have been excluded from the returns. The hands employed making earthenware and pottery can be given for only two of the states New South Wales, 150, and South Australia, 76. For the other states these industries are included with brickmaking, and have been so grouped in the accompanying table. The figures relating to saw-mills and joinery appear slightly misleading; but this is due to the fact that the returns for the different states are not compiled on the same basis. In Queensland, Western Australia, and Tasmania the joiners are included with workers in saw-mills, and in New South Wales a number of them are also included with the saw-mill employees. Under the heading of stone-dressing, polishing, modelling and monumental works, the chief employment in all the states is the preparation of tombstones—an industry which might well be omitted from a tabulation of manufactures and works.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Asphalt	53	.....	.....	.....	.....	.....
Bricks, pottery, earthenware	1,973	1,582	369	395	370	247
Joinery	519	1,928	.....	449	.....	.....
Lime, plaster, and cement	276	265	45	81	.....	.....
Paints and varnishes	18	43	.....	10	30	.....
Saw-mills	4,088	1,621	2,046	629	3,726	953
Stone-dressing, polishing, modelling and monumental works..	229	381	82	61	20	.....
Wood-turning and carving	83	105	19	15	.....	.....
Total	7,239	5,925	3,461	1,640	4,146	1,200

There is no uniformity in the details published by the various states regarding saw-mills; but the latest information available as to the quantity of timber roughly sawn is given below.

Timber sawn in saw-mills.
feet.

New South Wales	168,440,000
Victoria	46,495,885
Queensland	140,443,099
Western Australia	122,511,605
New Zealand	261,583,518

The manufacture of pottery is generally associated with brick-making, and in the following table the products of brickyards and potteries are shown together.

State.	Number of bricks and fire-bricks made.	Value of—	
		Pipes and tiles made.	Pottery, &c., made.
		£	£
New South Wales.....	159,254,000	45,743	36,312
Victoria	84,898,000	55,751	19,870
Queensland.....	15,752,146	13,491	
Western Australia	30,160,162	.....	.....
Tasmania	11,375,598	.....	3,275
New Zealand	41,290,316	27,335	7,475

METALS, MACHINERY, &c.

Works connected with the treatment of metals, manufacture of machinery, agricultural implements, and railway rolling stock form a large and growing class of industry. The grouping given below is not by any means satisfactory. Persons engaged in the various processes connected with the extraction of gold from gold-bearing stone are in a sense just as much entitled to be classified in the following tables as those concerned in the reduction of silver, lead, or copper ores. The determination of what constitutes an establishment classifiable as a work or factory is by no means clear. As regards works for the extraction of metals from their ores, the determining factor seems to be the degree of intricacy involved in the process of reduction; and whereas a quartz battery would not be called a factory or work, an establishment using a cyanide plant might be so classified. The distinction is not very logical, but as it has long obtained in these states it is retained here. For the number of persons employed in connection with the extraction of gold, the reader should turn to the chapter on "Mining."

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Agricultural Implements	1,451	8	584	2	2,035	10
Brass and copper smelting	828	2	.....	.....	828	2
Galvanized iron, sheet iron, tin-smithing.....	1,723	4	597	1	2,320	5
Ironworking, engineering, foundries, &c.	17,992	22	3,304	10	21,386	32
Lead works	74	1	.....	.....	74	1
Railway carriages, rolling stock manufacture, and repairs....	7,651	22	1,026	.....	9,277	22
Smelting.....	6,313	.....	.....	.....	6,313	.....
Wireworking.....	417	2	.....	.....	417	2
Others.....	739	8	201	.....	940	8
Total	37,188	69	6,402	13	43,590	8

In considering this and the subsequent tables, several difficulties in making comparisons will be met with. In Queensland, for example, all metal works, except smelting, are grouped in the one line, which is also the case in several of the other states. In Queensland and Tasmania no hands are shown as being employed in the manufacture and repairs of rolling stock; this, of course, is incorrect, for though little manufacturing may be carried on, all the states make their own repairs. In Victoria 1,629 hands are shown as employed in railway carriage and rolling stock manufacture and repairs as compared with 3,889 in New South Wales. The employment afforded in railway workshops is chiefly in the nature of repairs, but locomotives, passenger carriages, and goods waggons are built in each state. In New South Wales the wages paid in railway workshops amounted in 1900 to £390,284, and in Victoria to £253,218; the repairs in the former state are therefore on a much more extensive scale than in the latter. The number of hands set down as employed in the manufacture of agricultural implements in New South Wales is only 92, few establishments devoting themselves entirely to this business, the manufacture of implements being usually associated with ironworking generally. New South Wales and South Australia possess smelting works on a large scale, affording employment to 3,008 hands in the first-named state, and to 2,443 in the latter. The chief smelting works of New South Wales are situated at Cockle Creek, near Newcastle, and at Dapto, in close proximity to the coal-fields. The chief ores treated are copper, tin, silver, and lead, partly the production of the state itself, and partly of Tasmania, South Australia, Western Australia, Queensland, and New Caledonia. The smelting works of South Australia are situated at Port Pirie, and deal with silver and lead ore from Broken Hill. The number of hands employed in each state is shown in the following table:—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Agricultural Implements	92	1,057	.....	264	46	.....
Brass and copper smelting	332	469	.....	29	.....	.....
Galvanized iron, sheet iron, tin-smithing	710	752	.....	265	.....	.....
Ironworking, engineering, foundries, &c.	5,319	5,132	3,934	1,339	1,432	358
Lead works	23	52	.....	.....	.....	.....
Railway carriages, rolling stock manufacture, and repairs	3,889	1,629	.....	1,205	950	.....
Smelting	3,008	59	803	2,443	.....	.....
Wireworking	268	151	.....	.....	.....	.....
Others	247	355	.....	145	.....	.....
Total	13,888	9,656	4,737	6,190	2,428	358.

SHIP-BUILDING, REPAIRING, &C.

The industries depending upon shipping have not attained large dimensions in any of the states, and as regards ship-building itself, the use of iron instead of wood for the frames and hulls of vessels has

injuriously affected a promising industry, as the woods of Australia are eminently fitted for ship-building purposes. The following is a statement of the persons employed :—

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Docks and ships	1,384	.....	32	.....	1,416	.....
Sails, tents, and tarpaulins	136	99	150	81	286	180
Ship and boat building and repairs	748	.....	211	.....	950	.....
Total	2,268	99	303	81	2,661	180

In industries connected with ship-building and repairing, New South Wales has a far larger number of hands employed than has any other state. The chief part of the business is in connection with the docking and repairing of ships, although there are several establishments engaged exclusively in ship and boat building.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania
Docks and ships	1,280	104	.....	.....	.....	.....
Sails, tents, and tarpaulins	184	51	.....	.....	.....	.....
Ship and boat building and repairs	216	15	386	87	44	.....
Total	1,680	170	386	87	44	.....

FURNITURE, BEDDING, &c.

As Australia and New Zealand produce various kinds of wood admirably adapted to the requirements of the furniture trades, it can hardly be said that the industry has attained a development equal to its opportunities. As showing the possibilities of the industry, it may be mentioned that the value of furniture imported into the Commonwealth during 1900 was £266,700, and of bedding, flock, and upholstery, £65,800; while the value of furniture, bedding, flock, and upholstery imported into New Zealand was £45,450. The employment afforded by the industry was :—

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Bedding, flock, upholstery	769	238	64	1	833	239
Billiard-tables	31	.....	7	.....	38	.....
Furniture	3,416	86	1,248	67	4,659	153
Picture-frames	144	94	19	3	163	97
Window-blinds	66	2	49	2	115	4
Total	4,426	420	1,882	73	5,808	493

The manufacture of furniture, bedding, &c., in the Commonwealth affords employment to 4,846 persons, of whom 2,140 are in New South Wales and 1,658 in Victoria. No information is published as to the number employed in Tasmania, but, from inquiries made, it is estimated that 150 persons find employment in this industry. The distribution in the various states is as follows :--

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Bedding, flock, upholstery	481	361	138	27	.....	.....
Billiard-tables	31	.....	.....	.....	.....	.....
Furniture	1,501	1,162	459	.....	230	150
Picture-frames	100	94	.....	44	.....	.....
Window-blinds	27	41	.....	.....	.....	.....
Total	2,140	1,658	597	71	230	150

BOOKS, PAPER, PRINTING, &c.

The different industries connected with printing, bookbinding, paper-making, &c., afford work to 20,104 persons. The great bulk of these are employed in the various processes of printing, actual manufacturers being comparatively few in number. Australia and New Zealand produce many excellent paper-making materials; nevertheless, only 288 persons are employed in paper-making, and a large proportion of the output of the mills consists of ordinary brown or wrapping papers.

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Electrotyping and stereotyping ..	69	10	.....	.....	69	10
Paper bags, boxes, &c.	331	478	24	57	355	535
Paper	157	37	79	19	236	56
Photo-engraving	43	15	.....	.....	43	15
Printing and bookbinding	12,942	2,381	2,852	586	15,794	2,967
Printing materials	16	3	5	.....	21	3
Total	13,558	2,924	2,960	662	16,518	3,586

There are several difficulties in the way of making comparisons regarding these industries. Under the heading of electrotyping and stereotyping and photo-engraving no persons are set down in any state but New South Wales. As this cannot be the case, it must be presumed that persons employed in these pursuits in the other states are included with printing, bookbinding, &c. Under the head of printing are included the composing and mechanical staff of the newspaper offices—persons whom it takes a very wide definition to bring in under

the term "manufacturers." The following table shows the employment afforded in the various states :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Electrotyping and stereotyping ..	79	.....	.....	.....	.....	.....
Paper bags, boxes, &c.	235	241	77	188	18	.....
Paper .....	.....	194	.....	.....	.....	.....
Photo-engraving	58	.....	.....	.....	.....	.....
Printing and bookbinding	5,151	5,455	2,114	1,136	873	589
Printing materials .....	.....	15	.....	4	.....	.....
Total	5,573	5,905	2,191	1,328	896	580

VEHICLES, SADDLERY, AND HARNESS.

In connection with the manufacture and repair of vehicles, saddlery, harness, &c., there are 10,209 hands employed. The great bulk of the work done in connection with coaches and waggons is repairing; but there are establishments in all the states where vehicles of all classes are manufactured.

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Bicycles	332	50	378	17	710	67
Coaches and waggons	5,354	9	1,185	.....	6,539	9
Perambulators	45	6	.....	.....	45	6
Saddlery and harness, whips, &c.	2,058	52	634	23	2,722	75
Spokes	36	.....	.....	.....	36	.....
Total	7,855	117	2,197	40	10,052	157

It will be seen that the employment afforded by these industries is proportionately largest in the states where communication over long distances is still effected by means of coaches and waggons. No hands are set down in the statistics of Tasmania as employed in these industries. It is probable there must be at least 300 so employed, and this figure appears in the following table :—

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Bicycles	52	194	.....	106	30	.....
Coaches and waggons	1,777	1,974	636	406	320	250
Perambulators	24	27	.....	.....	.....	.....
Saddlery and harness, whips, &c.	652	491	636	188	123	50
Spokes	36	.....	.....	.....	.....	.....
Total	2,541	2,086	1,272	700	473	300

INDUSTRIES CONNECTED WITH THE PRODUCTION OF LIGHT,
FUEL, AND HEAT.

Industries connected with the production of fuel, heat, and light do not afford employment to many hands. The following table shows 3,716 hands, of whom 2,331 are employed in gas-works, 797 in electric-lighting works, 319 in coke-making, and 269 in manufacturing matches. Gas-supply gives employment to far more persons than the table shows—possibly to twice as many—but the additional hands are not employed in gas making, but in laying down pipes and other work connected with gas supply.

Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Coke	319	.....	.....	.....	319	.....
Electric light	740	5	52	.....	792	5
Gas	1,759	.....	568	4	2,327	4
Matches	20	66	37	146	57	212
Total	2,838	71	657	150	3,495	221

Only in New South Wales is the number of hands employed in each industry specified. The coke-workers in Victoria are included with hands employed in gas-works, and coke workers and hands employed in electric-lighting are grouped together in Queensland. The number of hands employed in manufacturing candles is not included in the following table. The soap and candle industries are usually worked together, so that it is not possible to separate the hands employed, which are accordingly classified under the heading of soap and candle workers, in the last group of the series.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Coke	319	.....	.....	.....	.....	.....
Electric light.....	322	266	58	.....	99	.....
Gas	650	625	258	132	54	40
Matches .....	.....	86	.....	.....	.....	.....
Total	1,291	977	316	132	153	40

In view of the magnitude attained by gas-works in the various states, the following particulars as to the quantity of coal used and gas made during 1901, may prove interesting:—

State.	Coal used.	Cubic feet of gas produced.
	tons.	
New South Wales	182,301	2,138,630,688
Victoria	153,455	1,567,649,380
Queensland	36,527	305,012,860
Western Australia.....	.....	56,774,370
Tasmania.....	.....	96,637,500
New Zealand .....	.....	786,531,150

MISCELLANEOUS INDUSTRIES.

Under the heading of miscellaneous are grouped a very large number of manufactures, many of them small, but some of them of considerable importance; amongst the latter may be mentioned—tobacco manufactures, employing 3,017 hands; chaff-cutting and corn-crushing, 1,845 hands; chemical, drug, and patent medicine factories, 1,147 hands; glass-works, 1,108 hands; rope-works, 902 hands; and soap and candle works, 1,763 hands. Further particulars regarding these and the other industries included in the list will be found in the Statistical Registers of the various states.

Class of Industry.	Commonwealth.		New Zealand.		Australasia.	
	Males.	Females.	Males.	Females.	Males.	Females.
Baskets and wickerware, mats and matting	214	34	116	10	330	53
Boxes and packing cases	157	.....	.....	.....	157	.....
Brooms and brushes	412	93	86	42	498	135
Catgut and sausage-skins	31	.....	98	.....	129	.....
Chaff-cutting and corn-crushing	1,558	21	265	1	1,823	22
Chemicals, drugs, and patent medicines.....	832	186	96	33	928	219
Cooperage	506	2	137	1	643	3
Cutlery	62	2	2	.....	64	2
Dye works	63	68	23	23	91	91
Electro-plating	51	.....	11	.....	62	.....
Fancy leather	181	32	.....	.....	181	32
Glass (including bottles)	897	5	9	.....	876	5
Glass (ornamental)	218	2	7	.....	225	2
Jewellery (manufacturing)	717	24	.....	.....	717	24
Lamps	27	27	.....	.....	27	27
Pianos and organs	240	12	11	.....	251	12
Portmanteaux	85	12	19	3	104	15
Rope, fishing-lines, and twine.....	533	177	192	.....	725	177
Rubber goods	35	.....	3	.....	38	.....
Soap and candles.....	1,464	67	224	8	1,688	75
Surgical and other scientific instruments.....	80	20	.....	.....	80	20
Tobacco, cigars, and cigarettes	1,632	1,347	12	26	1,644	1,373
Umbrellas	62	189	.....	.....	82	189
Other industries	968	217	301	258	1,269	475
Tota	11,015	2,537	1,617	414	12,632	2,951

The incorporation of so many diverse trades in one class is not satisfactory, but the use of a general grouping of this kind could only have been avoided by minute sub-divisions of less utility than the table here presented. It will be observed that for many industries no employment is shown for Tasmania. It is hardly to be supposed that such is the case, but the statistics of the island do not furnish any details, probably owing to the fact that the returns were not collected.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Baskets and wickerware, mats and matting	94	76	11	67	.....	.....
Boxes and packing cases	157	.....	.....	.....	.....	.....
Brooms and brushes	164	233	108	.....	.....	.....
Catgut and sausage-skins .....	.....	31	.....	.....	.....	.....
Chaff-cutting and corn-crushing ..	326	970	.....	283	.....	.....
Chemicals, drugs, and patent medicines	404	481	.....	110	23	.....
Cooperage	261	109	82	56	.....	.....
Cutlery	15	49	.....	.....	.....	.....
Dye works	41	76	.....	14	.....	.....
Electro-plating	51	.....	.....	.....	.....	.....
Fancy leather	117	96	.....	.....	.....	.....
Glass (including bottles)	350	467	.....	55	.....	.....
Glass (ornamental)	126	94	.....	.....	.....	.....
Jewellery (manufacturing)	114	512	.....	75	40	.....
Lamps	54	.....	.....	.....	.....	.....
Pianos and organs	226	26	.....	.....	.....	.....
Portmanteaux .....	.....	54	43	.....	.....	.....
Rope, fishing-lines, and twine	189	454	39	28	.....	.....
Rubber goods	35	.....	.....	.....	.....	.....
Soap and candles	533	504	154	216	67	57
Surgical and other scientific instruments	69	31	.....	.....	.....	.....
Tobacco, cigars, and cigarettes ..	1,030	1,374	240	242	93	.....
Umbrellas	41	230	.....	.....	.....	.....
Other industries	68	614	323	59	116	.....
Total	4,465	6,481	1,005	1,205	339	57

The greatest employment in this class is afforded by tobacco factories, and particulars regarding the quantity of tobacco, cigars, and cigarettes made will be found in the chapter on "Food Supply and Cost of Living." Another important industry is soap and candle-making; the following table shows the quantity of soap and candles manufactured in each state during 1901 :—

State.	Soap manufactured.	Candles manufactured.
	cwts.	lbs.
New South Wales	233,700	3,897,468
Victoria	132,031	5,299,056
Queensland	63,409	.....
Western Australia.....	20,315	1,584,292
Tasmania	19,400	887,040
New Zealand	92,321	2,989,280

The relative development of the industries of the states may be measured by the information shown in the following table, in which the industries are arranged in three classes, viz.:—First, those connected with the treatment of perishable products for domestic consumption; second, those dependent upon the natural resources of the country; and, third, those the production of which comes into competition with imported goods :—

State.	Employed in domestic industries for the treatment of perishable products for immediate use.		Employed in industries dependent upon the natural resources of the country.		Employed in industries the production from which comes into competition with imported goods.	
	Males.	Females.	Males.	Females.	Males.	Females.
New South Wales..	3,912	67	26,237	4,810	24,312	6,797
Victoria	3,771	56	17,970	7,597	25,318	11,817
Queensland	1,786	90	11,065	1,677	10,580	1,925
South Australia ...	755	21	8,158	261	5,887	2,577
Western Australia.	817	14	6,080	772	3,341	276
Tasmania	189	.....	2,429	72	1,346	255
Commonwealth..	11,230	248	71,939	15,189	70,784	23,647
New Zealand	2,446	59	20,155	4,496	15,493	6,069
Australasia	13,676	307	92,094	19,685	86,277	29,716

PLANT EMPLOYED IN MANUFACTORIES.

The character of the industry chiefly determines the horse-power required and the value of the plant. Thus, in the clothing industries, the average number of persons per 100 horse-power is 892; in industries.

connected with the preparation of food and drink, the average is only 61. The value of the plant, compared with the horse-power, also varies greatly as between the different industries. In industries associated with building materials, the value of plant is only about £71 per horse-power; in furniture trades, £90; while in gas-making it is about £1,610. The following is a statement of the amount of horse-power and value of plant employed in the various groups of industries, according to the classification used in the foregoing pages:—

Class of Industry.	Commonwealth.		New Zealand.	
	Horse-power.	Value of plant.	Horse-power.	Value of plant.
	No.	£	No.	£
Treating raw material, the product of pastoral pursuits	5,100	563,696	1,737	97,458
Connected with food and drink, or the preparation thereof	50,670	7,123,600	14,728	1,030,812
Clothing and textile fabrics	3,642	693,338	3,137	300,153
Building materials	23,939	1,934,562	10,123	483,652
Metal works, machinery, &c.	18,526	3,068,670	2,778	316,527
Shipbuilding, repairing, &c.	1,352	317,069	484	209,878
Furniture, bedding, &c.	807	76,579	464	28,249
Books, paper, printing, &c.	4,080	1,581,197	1,762	351,958
Vehicles, saddlery, and harness	608	144,156	226	38,868
Light, fuel, and heat	13,740	1,977,378	2,419	871,653
Miscellaneous	6,642	1,073,039	2,031	203,313
Total	129,106	18,553,284	39,939	3,962,521

Similar information for each state of the Commonwealth is given below:

HORSE POWER.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
	No.	No.	No.	No.	No.	No.
Treating raw material, the product of pastoral pursuits	2,177	1,306	913	410	137	157
Connected with food and drink, or the preparation thereof	13,486	10,788	20,265	4,294	1,274	563
Clothing and textile fabrics	680	2,366	194	249	33	120
Building materials	7,443	4,753	4,793	1,132	4,148	1,665
Metalworks, machinery, &c.	8,107	4,321	1,983	3,030	882	203
Shipbuilding, repairing, &c.	922	209	129	92	.....	.....
Furniture, bedding, &c.	258	396	88	25	15	25
Books, paper, printing, &c.	1,243	1,746	527	279	241	44
Vehicles, saddlery, and harness	150	221	60	101	56	20
Light, fuel, and heat	4,570	5,386	1,699	36	1,949	100
Miscellaneous	1,787	3,056	394	1,145	148	111
Total	40,823	34,548	31,050	10,794	8,883	3,008

VALUE OF PLANT.

Class of Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
	£	£	£	£	£	£
Treating raw material, the product of pastoral pursuits	265,133	155,770	86,103	47,730	4,250	4,710
Connected with food and drink, or the preparation thereof.....	1,884,342	1,349,230	3,017,229	602,316	136,033	84,450
Clothing and textile fabrics.....	150,380	371,250	68,447	57,110	13,251	33,000
Building materials	469,235	319,400	350,816	100,641	561,270	133,200
Metal works, machinery, &c.	1,227,701	804,490	392,887	464,078	149,064	30,450
Shipbuilding, repairing, &c.....	197,321	53,970	43,826	20,802	1,150	.....
Furniture, bedding, &c.....	20,336	33,880	11,562	1,987	1,364	2,500
Books, paper, printing, &c.....	510 856	605,260	212,413	117,348	113,320	22,000
Vehicles, saddlery, and harness ..	32,908	45,920	20,968	23,779	15,591	5,000
Light, fuel, and heat	712,356	648,220	477,071	4,669	133,062	2,000
Miscellaneous	299,827	454,790	79,822	192,840	25,780	19,980
Total	5,770,295	4,847,130	4,761,134	1,633,300	1,204,135	337,290

The average value of plant per horse-power of machinery employed ranges from £99 in the case of New Zealand to £153 for Queensland, the average for Australasia being £133. A mere statement of values, however, has no special meaning since the difference in the figures is compatible with two opposite conditions—either the same plant is put to greatest use in the case of New Zealand, or it is of superior character in the case of Queensland.

VALUE OF PRODUCTION OF MANUFACTORIES.

The gross value of articles produced in manufacturing establishments during 1900, and the value added to materials in the process of treatment can be readily obtained. For New South Wales, Victoria, and New Zealand the information collected at the census is available, and in the other states, where no direct information has been published, there is ample material for the preparation of satisfactory estimates. The production from butter, cheese, and bacon factories and creameries has been excluded from consideration, as it has already been included under the pastoral and dairying industries. The total value of the output from the factories in each state, the value of materials treated and fuel used, the amount of wages paid, and the value added to

materials, fuel, and wages in the process of treatment during 1900, were as follows:—

State.	Value of Materials Treated.	Value of Fuel Used.	Amount of Wages Paid.	Profits of Business, Rent, Insurance, &c.	Total Value of Output.
	£	£	£	£	£
New South Wales.....	13,815,000	497,000	4,943,000	5,139,000	24,394,000
Victoria	10,752,000	289,000	4,689,000	2,883,000	18,513,000
Queensland.....	4,588,000	131,000	2,283,000	1,702,000	8,704,000
South Australia	3,997,000	152,000	1,390,000	1,592,000	7,131,000
Western Australia	1,983,000	83,000	1,176,000	846,000	4,088,000
Tasmania	753,000	25,000	325,000	323,000	1,426,000
Commonwealth	35,888,000	1,177,000	14,706,000	12,485,000	64,256,000
New Zealand	9,167,000	243,000	3,512,000	3,418,000	16,340,000
Australasia.....	45,055,000	1,420,000	18,218,000	15,903,000	80,596,000

A striking feature of the information given in this table is the large amount expended on fuel in New South Wales and South Australia, caused by the great consumption of fuel in the smelting works of those states.

The value added in the process of manufacture has been divided so as to show the amount shared amongst the workers and the value which accrued to the proprietors, out of which rent, insurance, depreciation, &c., had to be paid, the balance representing profits on the business. The proportion received by the proprietors varied considerably in the several states, and this will best be seen by considering the percentage added to the value of materials and fuel, and the wages paid.

State.	Percentage added to Cost of Materials, Fuel, and Wages.
New South Wales	26·7
Victoria	18·4
Queensland	24·3
South Australia	28·7
Western Australia.....	26·1
Tasmania.....	29·3
New Zealand	26·5

It would appear from the above that in Victoria the amount which accrued to the proprietors represented only 18·4 per cent. on the cost of materials, fuel, and labour as against 29·3 per cent. in Tasmania. As the latter state is not of great importance in regard to its manufacturing, it is hardly necessary to challenge its position; but the Victorian figures demand consideration in spite of the fact that a

liberal allowance has been made for values not included in the census returns. They differ widely from those of New Zealand and New South Wales. It is hardly to be imagined that the manufacturers in Victoria are satisfied with smaller earnings on their investments than those of other states, and the figures relating to that State are therefore presented with considerable diffidence.

The total value of the output from the manufactories of Australasia during 1900 was £80,596,000, of which £46,475,000 represents the value of materials and fuel used, and the balance, £34,121,000, the value added in the process of treatment. This sum is the real value of production from the manufacturing industries, and the following table shows the distribution of the amount in the various industries :—

Class of Industry.	Value of Production.	
	Commonwealth.	New Zealand.
Treating raw material, the product of pastoral pursuits	£ 958,700	£ 495,496
Connected with food and drink, or the preparation thereof	6,914,517	2,117,049
Clothing and textile fabrics	3,172,767	1,099,115
Building materials	3,161,137	861,730
Metal works, machinery, &c.	5,752,637	817,444
Shipbuilding, repairing, &c.	235,738	51,356
Furniture, bedding, &c.	538,369	160,287
Books, paper, printing, &c.	2,657,900	556,112
Vehicles, saddlery, and harness ..	1,156,044	233,372
Light, fuel, and heat	1,763,671	214,734
Miscellaneous		322,883
Total	27,191,342	6,929,603

The value of production from establishments connected with the preparation of food and drink was the largest, and amounted to £9,031,566. The following table shows the distribution of the total value of £27,191,342 amongst the various states of the Commonwealth :—

Class of Industry.	Value of Production.					
	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.
Treating raw material, the product of pastoral pursuits	£ 435,794	£ 252,601	£ 86,221	£ 118,000	£ 26,000	£ 40,000
Connected with food and drink, or the preparation thereof	2,835,076	1,575,285	1,863,156	668,000	306,000	167,000
Clothing and textile fabrics	1,042,413	1,332,318	320,036	301,000	130,000	47,000
Building materials	952,137	805,174	445,826	200,000	533,000	170,000
Metal works, machinery, &c.	2,479,458	1,101,408	524,771	1,102,000	487,000	58,000
Shipbuilding, repairing, &c.	167,300	28,888	24,550	12,000	3,000	.....
Furniture, bedding, &c.	220,434	200,339	63,596	9,000	29,000	16,000
Books, paper, printing, &c.	950,771	883,938	321,191	218,000	192,000	92,000
Vehicles, saddlery, and harness ..	266,016	321,192	109,745	89,000	64,000	29,000
Light, fuel, and heat	577,363	289,442	101,139	30,000	143,000	16,000
Miscellaneous	654,994	681,714	124,963	235,000	54,000	13,000
Total	10,081,756	7,472,359	3,985,197	2,982,000	2,022,000	643,000

The value of production from manufactories was largest in New South Wales, where it amounted to £10,081,756, being more than £2,600,000 in excess of the figures shown for Victoria, which, however, are open to grave question. In New Zealand the value was £6,929,663, and in Queensland, £3,985,197; but as a mere statement of the total affords but little idea of the relative production in the various states, the following table has been prepared showing the value of production from the manufacturing industries per head of the population in each state:—

State.	Value of Production from Manufactories.	Value per head of Population.
	£	£ s. d.
New South Wales	10,081,756	7 8 11
Victoria	7,472,389	6 5 3
Queensland	3,985,197	8 2 7
South Australia	2,982,000	8 5 6
Western Australia.....	2,022,000	11 10 3
Tasmania	648,000	3 15 1
Commonwealth	27,191,342	7 5 2
New Zealand	6,929,663	9 1 6
Australasia	34,121,005	7 11 4

The above table shows that, in proportion to population, Western Australia holds the premier position; but this is due to the higher prices obtained for the products rather than from any great development of the manufacturing industries. New Zealand stands second, and this position is ample evidence of the great expansion which has occurred in the manufacturing industries of that colony during the last few years. Attention has already been directed to the position of Victoria, and it is difficult to believe that the average production per head of population in that state can be £2 16s. 3d. less than in New Zealand, as the published figures seem to indicate.

SOCIAL CONDITION.

THE high rates of wages which have generally prevailed in Australasia and the cheapness of food have permitted the enjoyment of a great degree of comfort, if not of luxury, by a class which elsewhere knows little of the one and nothing of the other; and even in times of trade depression and reduced wages it may safely be said that the position of the wage-earner in Australia is equal to that occupied by his compeers in any other part of the world. Although a high standard of living is not conducive to thrift, saving has gone on with marked rapidity, notwithstanding the industrial disturbances resulting from the great strikes and the bank crisis of 1893. Some idea of the rate and extent of this accumulation of wealth may be obtained from the tables showing the growth of deposits with banks. The banking returns, however, afford in themselves but an incomplete view of the picture; it should also be regarded from the standpoint of the expenditure of the people. Both of these subjects are dealt with in their proper places in this volume, and these evidences of the social condition of the people need not, therefore, be further considered here.

NEWSPAPERS AND LETTERS.

Few things show more plainly the social superiority of a civilized people than a heavy correspondence and a large distribution of newspapers. In these respects all the provinces of Australasia have for many years been remarkable. In proportion to population it is doubtful whether any country in the world can boast of a larger number or a better class of newspapers than they publish. Great advances were made in this respect between 1871 and 1891, but the rate of progress, both in number and in excellence of production, has been even more rapid since the year last named. There are no means of correctly estimating the number of newspapers actually printed and distributed in the States, because the Post-office carries but a small proportion of the circulation. For purposes of comparison with other countries, however, it may be stated that during the year 1901 no less than 121,000,000 newspapers passed through the Post-offices of the various States, giving the large proportion of 26 per head of population. In the same year the number of letters and post-cards carried was

273,582,000, being nearly 60 for every person in Australasia. An examination of the statistics of other countries shows that these States stand third among the countries of the world in the transmission of correspondence, being only exceeded by the United Kingdom and the United States of America per head of population. The following table shows the increase which has taken place in the quantity of postal matter carried, together with the proportion of letters and newspapers carried per head of population at the last six census periods :—

Year.	Letters and Post Cards.	Newspapers.	Letters per head.	Newspapers per head.
1851.....	2,165,000	2,150,000	4·7	4·7
1861.....	14,061,000	10,941,400	11·3	8·8
1871.....	30,435,300	17,252,700	15·7	8·9
1881.....	80,791,700	43,802,000	29·1	15·8
1891.....	183,694,900	95,879,760	47·9	25·0
1901.....	273,582,000	121,000,000	59·7	26·4

There are 983 newspapers published in Australasia ; 306 in New South Wales, of which 92 are published in Sydney and suburbs ; 323 in Victoria, of which 130 are published in Melbourne ; 115 in Queensland ; 46 in South Australia ; 22 in Western Australia ; 16 in Tasmania ; and 155 in New Zealand.

PARKS, MUSEUMS, AND ART GALLERIES.

All the Australasian capitals are liberally supplied with parks and recreation-grounds. In Sydney and suburbs there are parks, squares, and public gardens comprising an area of 3,131 acres, including 530 acres which form the Centennial Park. Then there is the picturesque National Park, of 36,320 acres, situated about 16 miles from the centre of the metropolis ; and, in addition to this, an area of 35,300 acres, in the valley of the Hawkesbury, and distant about 12 miles from the railway terminus on the northern shore of Sydney Harbour, has been reserved for public recreation under the name of Ku-ring-gai Chase. Thus Sydney has two extensive and picturesque domains for the enjoyment of the people at almost equal distances north and south from the city, and both accessible by railway. Melbourne has about 5,400 acres of recreation-grounds, of which about 1,750 acres are within the city-boundaries, 2,850 acres in the suburban municipalities, and 800 acres outside those municipalities. Adelaide is surrounded by a broad belt of park lands, and also contains a number of squares within the city boundaries, covering altogether an area of 2,300 acres. Brisbane, Hobart, Perth, and the chief cities of New Zealand are also well

provided for in this respect, and in all the provincial towns large areas have been dedicated as public parks. There are fine Botanic Gardens in Sydney, Melbourne, Brisbane, Adelaide, Perth, and Hobart, which are included in the areas above referred to. Each of these gardens has a special attraction of its own. They are all well kept, and reflect great credit upon the communities to which they belong.

The various capitals of the States, and also some of the prominent inland towns, are provided with museums for the purposes of instruction as well as recreation; and in Sydney, Melbourne, Brisbane, Adelaide, Perth, and Hobart there are art galleries containing excellent collections of paintings and statuary. All these institutions are open to the public free of charge.

PUBLIC CHARITIES.

One of the most satisfactory features of the social condition of the Australian communities is the wide distribution of wealth, and the consequently small proportion of people who are brought within the reach of want. In the United Kingdom, the richest country of Europe, only nine out of every hundred of the population possess property of the value of £100, while in Australasia the number is not less than fifteen, and the violent contrast between the rich and the poor which blots the civilization of the old world is not observable in these young States. It is, unfortunately, only too plain that a certain amount of poverty does exist; but there is a complete absence of an hereditary pauper class, and no one is born into the hopeless conditions which characterize the lives of so many millions in Europe, and from which there is absolutely no possibility of escape. No poor-rate is levied in Australasia, the assistance granted by the State to able-bodied men who find themselves out of employment in times of depression, taking the form of payment, in money or in rations, for work done by them.

The chief efforts of the authorities, as regards charity, are directed towards the rescue of the young from criminal companionship and temptation to crime, the support of the aged and infirm, the care of the imbecile or insane, and the subsidising of private institutions for the cure of the sick and injured and the amelioration of want. Even where the State grants aid for philanthropic purposes, the management of the institutions supervising the expenditure is in private hands, and in addition to State-aided institutions there are numerous charities wholly maintained by private subscriptions, whose efforts for the relief of those whom penury, sickness, or misfortune has afflicted are beyond all praise.

The rescue of the young from crime is attempted in two ways—first, by means of Orphanages and Industrial Schools, where children who have been abandoned by their natural guardians, or who are likely, from the poverty or incapacity of their parents, to be so neglected as to render them liable to lapse into crime, are taken care of, educated,

and afterwards apprenticed to some useful calling; and second, by sequestering in Reformatories children who have already committed crime, or whose parents or guardians find themselves unable to control them; but the accommodation in the latter class is very limited, and might well be extended.

Although more than a century has elapsed since settlement commenced in Australasia, its resources are by no means developed, and very many men are at work far away from the home comforts of everyday life, and from home attendance in case of sickness or injury. Owing to the peculiar nature of the occupations in which a great part of the adult male population is employed, accidents are very common, the annual death-rate being about 8 per 10,000 living, and the majority of the cases treated, especially in the districts outside the metropolitan area are injuries arising out of accidents to men following hazardous pursuits. Hospitals are therefore absolutely essential under the conditions of life in the rural districts of the States, and they are accordingly found in every important country town. Below will be found the number of hospitals in each State, with the number of indoor patients treated during the year mentioned, and the total expenditure for the same year. Unfortunately, the South Australian and Western Australian returns are defective, as will be seen by the note appended to the table:—

State.	Year.	Hospitals.	Indoor patients treated.	Expenditure.
		No.	No.	£
New South Wales ...	1900	116	30,592	163,633
Victoria	1900-01	50	25,100	161,795
Queensland.....	1901	68	19,194	120,781
South Australia	1901	8	3,371*	20,104*
Western Australia...	1899-1900	24	5,275†	15,010†
Tasmania	1900	12	3,254	22,142
Commonwealth	.....	278	86,786	503,465
New Zealand	1900	43	12,202	117,535
Australasia ...	.....	321	98,988	621,000

* Adelaide Hospital only.

† Perth and Fremantle Hospitals.

All the States possess institutions for the care of the insane, which are under Government control. The treatment meted out to the inmates is that dictated by the greatest humanity, and the hospitals are fitted with all the conveniences and appliances which modern science points out as most calculated to mitigate or remove the affliction from which these unfortunate people suffer. The following table shows the number of insane patients under treatment, the total expenditure on hospitals for the insane during the year, and the average expenditure per inmate

under treatment. The question of insanity is treated farther on in this chapter :—

State.	Insane Patients under treatment.	Total Expenditure.	Average Expenditure per Inmate under treatment.
	No.	£	£ s. d.
New South Wales	5,236	115,791	22 2 3
Victoria	5,156	125,318	24 6 1
Queensland	2,010	43,665	21 14 6
South Australia	1,192	27,669	23 4 3
Western Australia.....	410	6,537	15 18 10
Tasmania	469	14,105	30 1 6
Commonwealth	14,473	333,085	23 0 3
New Zealand	3,155	57,154	18 2 4
Australasia	17,628	390,239	22 2 9

The amounts expended on Destitute Asylums and Benevolent Societies cannot be separated from other items of expenditure in some of the States. As far as they can be ascertained they are given in the following table, together with the number of adult inmates of the various asylums for the year 1900 :—

State.	Inmates.	Expenditure.
	No.	£
New South Wales.....	5,070	131,830
Victoria	4,503	82,006
Queensland	2,447	53,224
South Australia.....	656	5,870
Western Australia	957	8,044
Tasmania	918	6,653
Commonwealth	14,551	287,627
New Zealand	1,151	37,693
Australasia	15,702	325,320

In addition to the above, a liberal amount of out-door relief is given in all the Australasian provinces, and destitute children are taken care of, either by being supported in the Government institutions or by being boarded out to persons deemed able to take care of them properly. As far as can be judged from the imperfect returns, adding together the amount received from the Government and the amount of private subscriptions, the expenditure in the whole of the Australasian States in connection with all forms of relief and in aid of hospitals and other charitable institutions is certainly not less than £1,350,000 per annum. This sum, though not excessive in proportion to the population, may yet appear large in view of the general wealth of the States, which should preclude the necessity of so many seeking assistance; and there is the risk that the charitable institutions may encourage the growth of the pauper element, for while free quarters and free food are so accessible those who are disinclined to work are tempted to live at the public expense. It should be stated, however, that of the total number of persons who seek hospital relief, less than one-half are natives of the States, the remainder being mostly natives of the United Kingdom, with a few who were born in a European country or in China. This, however, cannot be taken as evidence of the superiority of the Australian born. The inmates of the institutions referred to are in almost all cases aged persons, and probably not more than half the number of aged persons are Australian born.

CRIME.

In all the states proceedings against a person accused of an offence may be initiated either by the arrest of the culprit or by summoning him to appear before a magistrate. Serious offences, of course, are rarely dealt with by process of summons; but, on the other hand, it is not uncommon for a person to be apprehended on a very trivial charge, and this circumstance should not be forgotten in dealing with arrests by the police, which are unusually numerous in some of the States. Unfortunately, it is not easy to say how far the police of one State are disposed to treat offenders with such consideration as to proceed against them by summons, and how far those of another State are content to adopt similar action; for in most of the provinces the records do not draw a distinction between the two classes of cases; and in the table given on page 699, showing the number of persons charged before magistrates in each State during the year 1900, offenders who were summoned to appear are included with those arrested, except in the case of Victoria, whose criminal statistics seem to deal only with arrests. It is likewise difficult to make a true comparison between the various States in the matter of the prevalence of crime, for there are a number of circumstances which must considerably affect the criminal returns

and modify their meaning. The first of these, of course, is the question of the strength of the police force and its ability to cope with lawlessness, which must be decided chiefly by the proportion of undetected crime which takes place in the States. The policy adopted by the chief of police in regard to trivial breaches of the public peace and other minor offences against good order must also be taken into consideration; and then there are considerable differences between the criminal codes of the States, and in the number of local enactments, breaches of which form a large proportion of the minor offences taken before the Courts. Also, when the returns of the lower Courts are laid aside and the convictions in superior Courts taken up, the comparison is affected by the jurisdiction of the magistrates who committed the prisoners. In New South Wales, for example, the jurisdiction of the lower Courts is limited to imprisonment for six months, except in regard to cases brought under one or two Acts of Parliament, such as the Chinese Restriction Act, prosecutions under which are very few; while in Victoria a large number of persons are every year sentenced in Magistrates' Courts to imprisonment for terms ranging from six months to three years. It is apparent, therefore, that in any comparison drawn between the number of convictions in the superior Courts of New South Wales and of Victoria, the former State must appear to great disadvantage.

An investigation into the differences between the law of New South Wales and of Victoria in respect to the jurisdiction of magistrates discloses some important results. Under the Victorian Crimes Act of 1890, 54 Victoria No. 1,079, it is provided by section 67 that Justices may try persons under sixteen years of age for the offence of simple larceny or for any offence punishable as simple larceny no matter what the value of the property in question may be, and persons over sixteen years of age where the property said to have been stolen is not of greater value than £2; and it is further provided by the same section that if upon the hearing of such a charge the Justices shall be of opinion that there are circumstances in the case which render it inexpedient to inflict any punishment, they shall have power to dismiss the charge without proceeding to a conviction. This provision, it is needless to say, is likely to reduce materially the number of convictions for larceny in Victoria. In New South Wales, on the other hand, the law does not give Justices any such power. In every case where the offence is proved they must convict the accused person, although in the case of offenders under the age of sixteen years they may discharge the convicted person on his making restitution, or in other cases deal with him under the First Offenders' Act and suspend the sentence; but in all such cases the conviction is placed on record and is accounted for in the criminal statistics of the state. Section 69 of the same Victorian Act gives Justices power to deal with any case of simple larceny, or of larceny as a clerk or servant, or of stealing from the person, when the accused pleads guilty, the punishment being imprisonment for any term not

exceeding twelve months; while in New South Wales the law does not give Justices the power to deal with such cases when the property alleged to have been stolen exceeds the value of £20. This section must therefore tend materially to reduce the number of cases committed for trial in Victoria for the offences mentioned, although in all such cases the Justices may commit the accused person if they think fit to do so. Furthermore, it is provided by section 370 of the Crimes Act of 1890 that suspected persons who have been convicted of capital or transportable felony elsewhere and are found in Victoria may be arrested and sentenced to imprisonment for three years in the case of a male, and for one year in the case of a female. Such a protective provision is in force in some of the other provinces as well as in Victoria, and its absence in New South Wales has made that state the chosen refuge of many of the criminals of the other states; for there they may lay their plots in peace and enjoy immunity from arrest until the police discover some proof of their complicity in fresh crime or can charge them with being in possession of property which may reasonably be regarded as having been stolen. It is not, however, only in respect to serious offences that the law of Victoria differs from that of New South Wales, for under the Victorian Police Offences Act of 1890 drunkenness in itself is no crime, and must be allied with disorderly conduct before the person may be punished. These statements all go to show in what important respects the criminal statistics of the states must differ from each other, and how great care must be taken in making comparisons.

The number of persons arrested during the year 1900, together with the proportion per 10,000 of the population for four of the Commonwealth states, is given below. The returns from the other states do not show apprehensions separately.

State.	No. of Arrests.	Per 10,000 of Population.
New South Wales	27,682	204
Victoria	27,568	231
Queensland	17,886	365
Tasmania	1,820	105

Taking into consideration only the more serious crimes, such as offences against the person and against property, including forgery, the rates for New South Wales, Victoria, and Tasmania, were respectively 47, 30, and 32 per 10,000 of the population.

During the year 1900, so far as can be gathered, 159,992 persons were charged before magistrates in Australasia, 123,990 being summarily convicted and 32,493 discharged, while 3,509 were committed. The returns of each of the Commonwealth States and New Zealand will be found below. It should be explained that in the case of New Zealand

and Western Australia each charge is counted as a separate person—a proceeding which, of course, tells against those provinces; while in Victoria the returns only deal with arrested persons, no record being published of the summons cases dealt with in that state :—

State.	Persons charged.	Summarily dealt with.		Committed.
		Discharged.	Convicted.	
New South Wales.....	56,590	8,430	47,017	1,143
Victoria	27,568	8,609	18,384	575
Queensland.....	24,364	3,697	20,112	555
South Australia.....	6,536	1,010	5,384	142
Western Australia ...	14,863	4,668	9,925	270
Tasmania	5,381	1,124	4,179	78
Commonwealth ...	135,302	27,538	105,001	2,763
New Zealand	24,690	4,955	18,989	746
Australasia.....	159,992	32,493	123,990	3,509

Taking the whole of Australasia, rather more than thirty-five persons out of every thousand were charged before magistrates during the year 1900—a figure which compares favourably with the rates for previous years. Only three states—Western Australia, Queensland, and New South Wales—exceed the average amount of disorder and crime as disclosed by the police court returns. The very large proportion of adult males to the population of the first-named state, and its present industrial conditions, place it, of course, in quite an exceptional position; while in Queensland and New South Wales there are greater floating populations, from the ranks of which a large percentage of offenders is drawn, than in the other states which have better records. The province with the least disorder and crime is South Australia, where the persons answering to charges in the lower Courts only form 18·14 per thousand of the population. Next come Victoria with 23·10 per thousand; Tasmania, with 31·18; and New Zealand, with 32·33; while, as before stated, Western Australia, Queensland, and New South Wales have the highest proportions, namely, 84·65, 49·69, and 41·78 per thousand respectively. In the case of Western Australia, the returns leave little doubt that there has been a large influx of criminals from the eastern states, because the rate is 70 per cent. higher than that of Queensland, the next state. The rate is, however, unduly increased by including the charges brought against the aborigines, and also from the fact that, as stated before, each offence is counted as a separate person; but in the absence of any exact statistical information, there is no option but to use the figures presented. In New South Wales and Victoria,

about every ninety persons charged are accused of 100 offences, and assuming the same ratio to hold in Western Australia, it is estimated that if these two mentioned factors were excluded, the rate in Western Australia would be about 74 per 1,000. The New Zealand rate is also affected by the last-mentioned circumstance. The following table shows the proportion of persons charged before magistrates in each state during the year; also the percentages of the persons discharged, convicted, and committed of the whole number charged:—

State.	Persons charged per 1,000 of population.	Percentages of total persons charged.			
		Discharged.	Convicted.	Summarily dealt with.	Committed.
New South Wales	41·78	14·90	83·08	97·98	2·02
Victoria	23·10	31·22	66·69	97·91	2·09
Queensland	49·69	15·17	82·53	97·70	2·30
South Australia.....	18·14	15·45	82·38	97·83	2·17
Western Australia	84·65	31·40	66·78	98·18	1·82
Tasmania	31·18	20·89	77·66	98·55	1·45
Commonwealth	36·11	20·35	77·61	97·96	2·04
New Zealand	32·33	20·07	76·91	96·98	3·02
Australasia.....	35·47	20·31	77·50	97·81	2·19

It will be seen from the above table that out of every hundred persons charged before magistrates in Australasia in 1901, 97·81 were summarily dealt with, 20·31 being discharged and 77·50 convicted, while only 2·19 were committed to higher courts. The state with the highest percentage of cases summarily disposed of and the smallest proportion of committals was Tasmania; while Victoria, although the magistrates there have a much wider jurisdiction, showed a slightly smaller proportion of cases summarily dealt with than New South Wales. This was without doubt due to the fact that, as already pointed out, summons cases, which usually cover minor offences, are not included in the criminal statistics of the first-mentioned state. As a matter of fact, the Victorian returns should show a very high percentage of cases summarily disposed of; for an inspection of the statistics discloses the fact that, owing to this wider jurisdiction, the magistracy of the state, in 1900, sentenced 9 persons to two years' imprisonment, 161 to periods between one year and two years, and 280 to terms of six months and under one year. Many of these persons, had they been tried in New South Wales, would have been convicted in higher courts. Another important point to be noted is that Victoria and Western Australia have by far the largest proportion of discharges, and if the theory be dismissed as untenable that the police in those states are more prone to charge

persons on insufficient grounds than in the other states, it must be concluded that the magistrates of Victoria and Western Australia deal more leniently with accused persons than is the case elsewhere; indeed, so far as Victoria is concerned, it has already been shown that the Crimes Act of 1890 provides for the discharge without conviction of persons found guilty of certain offences. The lowest proportion of discharges is to be found in Queensland and New South Wales, which also have the highest percentage of summary convictions; and the figures testify to the stringency with which the criminal laws are administered in those states.

Of the 159,992 persons brought before magistrates during the year 1900, only 26,960 were charged with offences which can fairly be classed as criminal, the overwhelming majority being accused of drunkenness and other offences against good order, and of breaches of Acts of Parliament, which have a tendency to multiply to a great extent. For present purposes the accused persons may be divided as in the table given below, offences against the person and against property being regarded as serious crime. Of course, amongst the other offenders are to be found a few charged with grave misdemeanours, but against these may be put trifling assaults, which are included with crimes against the person:—

State.	All Offenders.	Serious Offenders.			Minor Offenders.
		Against the Person.	Against Property.	Total.	
New South Wales	56,590	4,115	5,770	9,885	46,705
Victoria	27,568	1,139	2,378	3,517	24,051
Queensland	24,364	1,937	2,552	4,489	19,875
South Australia	6,536	417	598	1,015	5,521
Western Australia	14,863	1,037	1,767	2,804	12,059
Tasmania	5,331	368	676	1,044	4,337
Commonwealth.....	135,302	9,013	13,741	22,754	112,548
New Zealand	24,690	1,526	2,680	4,206	20,484
Australasia.....	159,992	10,539	16,421	26,960	133,032

This examination into the nature of the offences explains in some measure the comparatively unfavourable position of New South Wales as shown by the previous tables; for of the 56,590 accused persons in that state, the minor offenders numbered 46,705, or 82·5 per cent. No doubt the large number of trivial cases in New South Wales is accounted for by the greater strictness of police administration. Victoria shows 87·2 per cent. of minor offenders, but in consequence of a difference in the tabulation of the returns its position is not nearly so

favourable as it appears to be on the surface. In New South Wales, and, it is to be presumed, in most of the other states, a person accused of two or more offences is entered as charged with the most serious in the eyes of the law; while in Victoria he is entered as charged with the first offence committed, any others, however serious, arising out of his capture, being left out of consideration. For example, if a person is arrested for drunkenness, and he assaults his captors while on the way to the station, he is entered in the returns of New South Wales, as they are here presented, as charged with an offence against the person, and thereby helps to swell the amount of serious crime; but in Victoria he is entered as charged with drunkenness and disorderly conduct, and the charge of assault, on which he may be convicted and sentenced to a term of imprisonment, is not disclosed. This fact must therefore be taken into account in comparing the proportions of the various classes of offenders per thousand of population, which are appended:—

State.	Per thousand of population.				
	All Offenders.	Serious Offenders.			Minor Offenders.
		Against the Person.	Against Property.	Total.	
New South Wales	41·78	3·04	4·26	7·30	34·48
Victoria	23·10	0·95	2·00	2·95	20·15
Queensland	49·69	3·95	5·20	9·15	40·54
South Australia	18·14	1·16	1·66	2·82	15·32
Western Australia	84·65	5·91	10·06	15·97	68·68
Tasmania	31·18	2·13	3·92	6·05	25·13
Commonwealth	36·11	2·40	3·67	6·07	30·04
New Zealand	32·33	2·00	3·51	5·51	26·82
Australasia	35·47	2·34	3·64	5·98	29·49

It will be seen that, relatively to population, the state with the largest number of serious offenders was Western Australia, which had a proportion of 15·97 per thousand. Queensland followed with a proportion of 9·15, while New South Wales and Tasmania occupied third and fourth positions with 7·30 and 6·05 per thousand respectively. The rate of New Zealand was 5·51 per thousand, while that of Victoria is set down at 2·95, and South Australia closes the list with 2·82. It would be interesting to compare the crime of the principal states on the basis of the number of males of such ages as contribute to the ranks of offenders; but the records unfortunately do not give sufficient data to enable such a comparison to be made. In explanation of the position of Western Australia, it is well known to the police of Victoria and New South Wales—and, indeed, the fact is proved by the records

of the prisoners received into Fremantle gaol—that a large number of criminals have left those states for the west during the last few years.

About one-third of the minor offenders of Australasia are charged with drunkenness. From the table given below it will be seen that in all the states 59,605 cases of drunkenness were heard during the year 1900, convictions being recorded in 51,920 cases, or 87·11 per cent. of the total number. The state with the highest number of cases relatively to population was Queensland, the rate of which was 18·87 per thousand persons, followed by Western Australia with 17·48, New South Wales with 15·51, and Victoria with 13·30, while Tasmania was last with a rate of only 4·82 per thousand. The figures for Victoria, however, only refer to apprehensions, information respecting persons summoned to answer a charge of drunkenness not being available, while, as already pointed out, drunkenness in itself is not a crime in that state, but must be aggravated by disorderly conduct. In the case of Western Australia, it must be remembered that the proportion of adult male population is very high. From the figures showing the number of convictions, it will be seen that the magistrates of that state and of Victoria take a somewhat lenient view of this offence, and only record convictions in about 57 and 62 per cent. of the cases respectively, while in the other states the percentage ranges from 89·7 to 99·9 :—

State.	Charges of Drunkenness.	Convictions.		Per 1,000 persons.	
		Total.	Percentage of Charges.	Charges.	Convictions.
New South Wales	21,003	20,901	99·51	15·51	15·43
Victoria	15,878	9,856	62·07	13·30	8·26
Queensland	9,254	9,241	99·86	18·87	18·85
South Australia	2,249	2,134	97·11	6·24	6·06
Western Australia	3,070	1,740	56·68	17·48	9·91
Tasmania	832	746	89·66	4·82	4·32
Commonwealth.....	52,286	44,668	85·43	13·96	11·92
New Zealand	7,319	7,252	99·08	9·59	9·50
Australasia	59,605	51,920	87·11	13·22	11·51

A return showing only the number of cases of drunkenness is not, however, a safe index of the abuse of alcoholic liquors, for a great deal depends on the state of the law and the manner in which it is administered, and it is evident that the maintenance of the law intended to preserve public decency will always be less strict in sparsely-settled country districts than in larger centres of population where the police are comparatively more numerous, if not in proportion to the population, at least in proportion to the area they have under their supervision; and further, will vary according to the diverse nature of the duties performed by the

police. The quantity of intoxicants consumed per head is another index of the habits of communities living under like conditions; but comparisons so based should not be pushed to extremes, for, as has often been pointed out, the larger part of the alcohol which enters into consumption is that consumed by the population who are not drunkards. The average quantity of intoxicants used in each state during the three years ended 1900, is given below, wines and beer being reduced to their equivalent of proof spirit. The consumption of the various kinds of intoxicants will be found in the chapter on "Food Supply and Cost of Living":—

State.	Proof Gallons of Alcohol per head of population.
New South Wales	2·33
Victoria	2·83
Queensland.....	2·69
South Australia.....	2·12
Western Australia	4·98
Tasmania	1·61
New Zealand.....	1·86
Australasia.....	2·48

The strength of the police force in each of the states and New Zealand at the end of 1900 is given below. These figures show the importance which must be attached to police administration when studying the question of drunkenness.

State.	Police.			Inhabitants to each Police Officer.	Area to each Constable in Country Districts.
	Metropolitan.	Country.	Total.		
	No.	No.	No.	No.	Sq. miles.
New South Wales	888	1,254	2,142	632	248
Victoria	735	730	1,465	815	120
Queensland.....	202	664	866	566	1,007
South Australia.....	173	219	392	911	4,126*
Western Australia	150	346	496	354	2,821
Tasmania	58	192	250	690	137
Commonwealth.....	2,206	3,405	5,611	668	873
New Zealand.....	61	526	587	1,301	199
Australasia.....	2,267	3,931	6,918	728	783

* Including Northern Territory.

A comparison of the cost of the police forces of the various states will be found below. The greater number of mounted troopers in those states where very large and thinly-populated districts have to be

controlled, tends to make the average cost somewhat higher than in the other provinces :—

State.	Total Cost of Police Force.	Average Cost per Constable.	Average Cost per Inhabitant.
	£	£ s. d.	s. d.
New South Wales.....	384,442	179 9 7	5 8
Victoria	272,496	186 0 1	4 7
Queensland.....	182,446	210 13 6	7 5
South Australia...	73,925	188 11 8	4 1
Western Australia	113,859	229 11 1	13 0
Tasmania.....	37,452	149 16 2	4 4
Commonwealth ...	1,064,620	189 14 9	5 8
New Zealand	116,420	198 6 8	3 1
Australasia	1,181,040	190 11 0	5 3

The record of cases heard before a Court of Magistrates cannot be regarded as altogether a trustworthy indication of the social progress of Australasia, because, as has been pointed out, it includes many kinds of offences which cannot fairly be classed as criminal, and the number of these has a tendency to increase with the increase of local enactments. The committals for trial, taken in conjunction with the convictions for crime in the Superior Courts may be regarded as much more conclusive on the question of the progress of society or the reverse. In some respects even this evidence is misleading, for, as already shown, in the less populous provinces there are no Courts intermediary between the Magistrates' and the Supreme Courts, so that many offences which in New South Wales, for example, are tried by a jury, are in some of the other provinces dealt with by magistrates; and even in Victoria, where there are Courts of General Sessions, magistrates have a much wider jurisdiction than in New South Wales. But for the purpose of showing the decrease of serious crime in Australasia as a whole, the proportion of committals and of convictions in Superior Courts may fairly be taken; and this information is given below. It will be seen that during the forty years, from 1861 to 1900, the rate of committals per thousand of population has dropped from 2·2 to 0·8, and of convictions from 1·3 to 0·5 :—

Year.	Per 1,000 of Population.	
	Committals.	Convictions in Superior Courts.
1861	2·2	1·3
1871	1·4	0·8
1881	1·2	0·7
1891	1·1	0·6
1900	0·8	0·5

In noting these facts and comparing the results with those obtained in Great Britain during the same period, it must not be forgotten that some of the provinces of Australasia have been compelled gradually to reform a portion of their original population, and that in the case of states such as Victoria and Queensland, not originally peopled in any degree by convicts, the attractions of the gold-fields have drawn within their borders a population by no means free from criminal instincts and antecedents. Viewed in this light, the steady progress made cannot but be regarded as exceedingly satisfactory, and the expectation may not unreasonably be entertained that the same improvement will be continued until the ratio of crime to population will compare favourably with that of any part of the world.

Below will be found the number of convictions in the Superior Courts of each state, at decennial periods from 1861 to 1891, as well as for the year 1900 :—

State.	1861.	1871.	1881.	1891.	1900.
New South Wales	437	628	1,066	964	755
Victoria	846	511	332	729	374
Queensland.....	24	91	92	232	278
South Australia	62	91	213	90	82
Western Australia	35	65	61	44	156
Tasmania	127	74	51	63	25
Commonwealth.....	1,531	1,460	1,815	2,122	1,670
New Zealand.....	100	162	270	276	369
Australasia.....	1,631	1,622	2,085	2,398	2,039

The following table gives a classification of the offences for which the accused persons were convicted during 1900 ; also the rate of convictions and of committals per 1,000 of population. It will be seen that the rate of convictions in the Superior Courts of Victoria is 0·31 per thousand ; but if the persons who received sentences of over six months' imprisonment at the hands of magistrates were taken into account, the proportion would be as high as that of most of the other states. Tasmania and South Australia have smaller proportion of convictions

in Superior Courts than Victoria; but in those two provinces, as already pointed out, no intermediate Courts exist:—

State.	Convictions in Superior Courts.					Committals per 1,000 of Population.
	Classification of Offences.			All Convictions.	Per 1,000 of Population.	
	Against the Person.	Against Property.	Other.			
New South Wales	217	467	71	755	0·56	0·84
Victoria	112	248	14	374	0·31	0·48
Queensland	76	191	11	278	0·57	1·32
South Australia	13	65	4	82	0·23	0·39
Western Australia.....	37	88	31	156	0·89	1·54
Tasmania.....	6	13	6	25	0·15	0·45
Commonwealth.....	461	1,072	137	1,670	0·45	0·74
New Zealand	79	271	19	369	0·48	0·98
Australasia	540	1,343	156	2,039	0·45	0·78

There is no doubt that New South Wales would appear to much greater advantage in a comparison of crime statistics if there existed in that state any law preventing the entrance of criminals, such as is rigidly enforced in most of the other provinces. That there is ground for this assertion is shown by the fact that whereas in New South Wales offenders born in the state only formed 40 per cent. of the total apprehensions in 1900, in Victoria 47 per cent. of arrested persons were of local birth; while at the census of 1901 the element of the population of local birth was fairly equal, being 72·1 per cent. for New South Wales and 72·9 for Victoria.

The punishment of death is very seldom resorted to except in cases of murder, though formerly such was not the case. Thus the number of executions steadily declined from 151 during the decade 1841-50 to 66 during the ten years 1881-90. In South Australia the extreme penalty has been most sparingly inflicted, there having been only 11 executions in the thirty years which closed with 1900. The following table shows the number of executions in each province during each decade of the 50 years ended 1890, also those which took place in 1891-95 and 1896-1900. Queensland was incorporated with New South Wales until the end of 1859, though Victoria became a separate

colony in 1851. It will be noticed that the returns are defective so far as Western Australia is concerned :—

State.	1841-50.	1851-60.	1861-70.	1871-80.	1881-90.	1891-95.	1896-1900.	
New South Wales	} 68	} 38	34	27	23	15	7	
Queensland			14	18	15	16	1	
Victoria			47	41	19	13	12	4
South Australia ...			7	12	6	2	2	1
Western Australia .....	.....	.....	.....	.....	.....	6	10
Tasmania	83	32	15	3	5	1	...	
New Zealand .....	.....	.....	.....	12	8	1	5
Total	151	124	116	85	66	53	28	

The returns relating to the prisons of the states are in some cases very incomplete. The prisoners in confinement at any specified time may be divided into those who have been tried and sentenced, those who are awaiting their trial, and debtors. The returns of five of the states allow of this distinction being made. The number and classification of prisoners in confinement on the 31st December, 1900, were as follow :—

State.	Tried and Sentenced.	Awaiting Trial.	Debtors.	Total.
New South Wales.....	1,791	106	2	1,899
Victoria	1,088	80	.....	1,168
Queensland	521	42	.....	563
South Australia	210*	10	.....	220
Western Australia ...	492	16	.....	508
New Zealand.....	527	41	.....	568
Total	4,629	295	2	4,926

* Including debtors.

The returns of Tasmania do not enable the distinction made in the above table to be drawn, but there were 108 prisoners in Tasmanian gaols at the end of 1900; so that the total number of persons in confinement in the gaols of Australasia, at the close of 1900, may be stated as 5,034, equal to 1.12 in every thousand of the population.

SUICIDES.

The total number of persons who committed suicide in Australasia during 1900 was 491—402 males and 89 females—corresponding to a rate of 1.09 per 10,000 living. The table below shows the number of deaths and the rates in each state, in five-year periods since 1870.

It is believed that the actual number of suicides is even larger than is shown in the tables, especially during recent years; for there is a growing disposition on the part of coroners' juries to attribute to accident what is really the result of an impulse of self-destruction.

Total number of deaths.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900
New South Wales.....	212	297	368	578	713	874
Victoria	446	505	463	638	630	565
Queensland	72	141	179	292	349	400
South Australia	79	93	146	134	156	192
Western Australia	3*	7	23	22	73	157
Tasmania	28	37	27	43	63	63
New Zealand.....	89*	195	261	267	339	340
Australasia .....	.....	1,275	1,467	1,974	2,323	2,591

Death rate per 10,000 living.

New South Wales	·78	·90	·87	1·12	1·19	1·33
Victoria	1·17	1·23	1·02	1·21	1·08	0·95
Queensland	1·00	1·38	1·33	1·62	1·69	1·71
South Australia	·81	·77	·99	·87	·92	1·07
Western Australia	·29*	·50	1·46	1·05	2·25	1·99
Tasmania	·54	·68	·44	·63	·85	0·79
New Zealand.....	·72*	·91	·99	·89	1·03	0·92
Australasia .....	.....	1·02	·98	1·12	1·16	1·18

* Four years—1872-75.

The experience of Australasia agrees with that of other countries, namely, that the tendency to self-destruction is increasing. From the table above it is seen that the rate has been slowly but steadily advancing since 1870. Tasmania has always had the lowest rate, while in New Zealand the rate is now about equal to that in England, where it is 0·92 per 10,000 living. Up to 1893, the three first named states in the table exhibited the highest rates, Queensland coming first; but since that year Western Australia has shown the largest proportional number of victims by suicide, due, no doubt, to the relatively large number of males in the state, since males are three or four times as prone to take their own lives as females.

The means of committing suicide most favoured in all the states, are poisoning, drowning, shooting, which is more common now than formerly, and hanging amongst males, and poisoning and drowning amongst females.

ILLEGITIMACY.

Illegitimate births are rather numerous in these states, the total number in the whole of Australasia during 1900 being 7,194, equal to 5·91 per cent. of the total births. The following table shows the number of illegitimate births which have occurred in each state and New Zealand in quinquennial periods since 1870, and the proportion per cent. of total births :—

TOTAL NUMBER of Illegitimate Births.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	4,369	5,401	6,949	9,394	11,875	12,622
Victoria	4,222	5,646	6,491	8,425	9,858	8,625
Queensland	846	1,447	1,990	3,117	3,516	4,213
South Australia .....	...	...	1,222	1,331	1,577	1,767
Western Australia .....	...	...	...	...	402‡	1,133
Tasmania .....	...	...	762†	911	1,136	1,322
New Zealand.....	523*	2,027	2,831	3,011	3,443	4,196
Australasia .....	...	...	20,245	26,189	31,807	33,878

PROPORTION per cent. of Total Births.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	4·09	4·22	4·36	4·90	6·01	6·88
Victoria	3·10	4·27	4·63	4·89	5·45	5·57
Queensland	2·89	3·85	4·06	4·44	4·83	5·92
South Australia .....	...	...	2·16	2·50	2·98	3·76
Western Australia .....	...	...	...	...	4·75‡	5·06
Tasmania .....	...	...	4·35†	3·84	4·58	5·65
New Zealand.....	1·36*	2·30	2·93	3·20	3·77	4·43
Australasia .....	...	...	3·90	4·35	5·06	5·67

* Three years—1873-75. † Four years—1882-85. ‡ Four years—1892-95.

It is seen that New South Wales has always been in the unenviable position of exhibiting the highest proportion of illegitimate births, although up to 1890 it was closely followed by Victoria. Since 1890, however, the rate in New South Wales has increased very rapidly, as also in Queensland, which now stands second. In all the states illegitimacy is on the increase; and whereas less than twenty years ago each province had a lower rate than prevailed in England, they all, with the exception of South Australia, have now a higher rate.

The increase, however, is more apparent than real, since the general decline in the birth-rate affects the proportion of illegitimates. For instance, the birth-rate in 1881-85 was 35·21 per thousand of population, compared with 27·31 per thousand in 1896-1900. If the rate had not declined, the births in the last five years would have been 770,545, and the illegitimate rate 4·40 per cent.

The following table shows the proportion of illegitimate births in the United Kingdom, and in the chief countries of Europe, based on the experience of the latest five years available, the figures referring, in most cases, to the period 1895-9. In a majority of the European countries illegitimacy appears to be on the increase.

Country.	Illegitimate Births per cent.	Country.	Illegitimate Births per cent.
England and Wales...	4·15	Hungary	9·01
Scotland	6·97	France	8·26
Ireland	2·65	Belgium	8·51
Germany	9·21	Netherlands.....	2·71
Prussia	7·84	Sweden	10·80
Bavaria	14·00	Norway	7·35
Saxony	12·90	Italy	6·34
Austria	14·55		

DIVORCE.

The question of divorce is one of much interest to Australasia, as some of the states, especially New South Wales and Victoria, now offer great facilities for the dissolution of the marriage bond. The general opinion was that such facilities were calculated to increase divorce to an extent that would prove hurtful to public morals; and so far as the experience of New South Wales was concerned, for the first few years after the passing of the Act multiplying the grounds on which divorce could be granted, the fear did not seem to be altogether groundless; for in 1893 the number of decrees *nisi* granted rose to 305, from 102 in 1892, and in 1900 was still as high as 216. When, however, it is remembered that advantage would be taken of the change in law to dissolve marriages the bonds of which would have been broken long before under other circumstances, it is evident that there was little ground for the fear that this somewhat alarming increase would continue, and it was, therefore, not surprising to find a decline in 1900. In Victoria, where a very similar law came into operation in 1890, the number of divorces increased considerably, immediately after the passing of the Act, although not to the alarming extent experienced in New South Wales.

In New South Wales, under the Matrimonial Causes Act of 1873, the chief grounds on which divorce was granted were adultery after marriage on the part of the wife, and adultery with cruelty on the part of the husband. Under the Act of 1892 and the Amending Act passed in 1893 petitions for divorce can be granted for the following causes, in addition to those already mentioned:—*Husband v.*

Wife.—Desertion for not less than three years; habitual drunkenness and neglect of domestic duties for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned under sentence for three years or upwards; attempt to murder or inflict grievous bodily harm, or repeated assault on the husband within a year preceding the date of the filing of the petition. *Wife v. Husband*.—Adultery, provided that at the time of the institution of the suit the husband is domiciled in the state; desertion for not less than three years; habitual drunkenness with cruelty or neglect to support for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned for three years or upwards, or having within five years undergone various sentences amounting in all to not less than three years; attempt to murder or assault with intent to inflict grievous bodily harm, or repeated assault within one year previously. Relief can only be sought on these grounds should the petitioner have been domiciled in the state for three years or upwards at the time of instituting the suit, and not have resorted to the state for the purpose of having the marriage dissolved. In Queensland, South Australia, Western Australia, Tasmania, and New Zealand, divorces are granted principally for adultery on the part of the wife, and adultery coupled with desertion for over two years on the part of the husband.

In the subjoined table will be found the actual number of divorces and judicial separations granted during each of the years 1894–1900. It will be seen that, taking the states as a whole, with the exception of that for 1898, the rate for 1900 is the lowest shown in the table:—

State.	1894.		1895.		1896.		1897.		1898.		1899.		1900.	
	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.
New South Wales	313	14	301	11	234	8	246	13	247	17	232	17	219	14
Victoria	81	2	85	..	106	2	117	..	87	..	105	2	93	..
Queensland	6	..	4	..	3	2	10	1	7	..	10	1	12	1
South Australia	5	1	5	..	6	1	3	..	7	1	11	..	7	1
Western Australia	1	..	2	..	1	..	4	..	3	..	3	..	16	..
Tasmania	5	..	4	1	3	..	5	..	4	..	4	..	4	..
New Zealand	20	4	18	5	36	2	33	1	32	2	46	16	85	3
Australasia	431	21	419	17	389	15	418	15	387	20	411	36	436	19
Totals	452		436		404		433		407		447		455	
Divorces and separations per 10,000 marriages ..	132·3		160·9		144·2		150·6		137·7		142·3		138·0	

The following table shows the number of decrees of dissolution of marriage and judicial separation granted in each state, in quinquennial periods since 1871, so far as it is possible to procure the information.

Divorce was legalised in New South Wales in 1873, and the figures of that state for 1871-75 only cover the two years 1874 and 1875.

State.	1871-75.		1876-80.		1881-85.		1886-90.		1891-95.		1896-1900.	
	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.	Divorces.	Judicial Separation.
New South Wales	21	...	87	...	116	6	212	12	1087	55	1178	69
Victoria	33	6	41	2	74	8	124	9	441	10	508	4
Queensland	4	1	14	...	5	2	26	3	26	3	42	5
South Australia	22	3	35	2	31	10	23	2	30	2	34	3
Western Australia .....	...	...	1	1	5	...	8	...	9	...	27	...
Tasmania	9	...	9	...	9	...	15	2	21	2	20	...
New Zealand	*...	*...	*...	*...	*...	*...	110	5	101	14	232	24
Australasia	89	10	187	5	240	26	518	33	1715	86	2041	105

* Information not available.

Taking the figures given in the foregoing table, and comparing them with the number of marriages celebrated during the same periods, the rates of divorce for the individual states, per 10,000 marriages, will be found below. It will be seen that the rate for New South Wales is higher than that of any country of the world except the United States and Switzerland:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-1900.
New South Wales	†23·5	33·6	32·5	54·8	272·3	271·6
Victoria	16·0	16·9	24·4	31·1	119·6	130·5
Queensland	8·0	18·7	6·0	19·0	21·4	30·4
South Australia	33·5	34·6	33·1	24·3	29·9	33·8
Western Australia .....	...	20·5	44·8	53·5	38·6	34·2
Tasmania	27·4	22·0	18·0	35·4	50·8	35·7
New Zealand	*...	*...	*...	63·5	56·9	96·9

* Information not available. † 1874 and 1875 only.

From the appended statement, which sets forth the latest divorce rates of the countries for which accurate statistics are obtainable, such rates being calculated on an experience of ten years wherever possible, it will be seen that there is a larger proportion of marriages dissolved in Australasia than in any other part of the British Empire, but that the rate for these provinces as a whole is largely exceeded by a number of foreign countries. Of countries where divorce laws are in force, no reliable

statistics are available for Denmark, Hungary, Russia, and Spain. In Italy and Portugal divorce is not recognised by law :—

Country.	Divorces per 10,000 Marriages.	Country.	Divorces per 10,000 Marriages.
Canadian Dominion ...	4	Cape Colony	98
United Kingdom	11	Netherlands	103
Norway	16	Germany	165
Austria Proper	43	France	180
Greece	50	Roumania	204
Belgium	81	Switzerland	432
Sweden	87	United States	612

In the United States of America no general system of registration of births, deaths, and marriages is in force. For the purpose of comparison, the marriage-rate of that country has been assumed to be 6·50 per 1,000 of mean population, and on that basis the 20,660 divorces granted annually during ten years would give an average of not less than 612 per 10,000 marriages.

In the Dominion of Canada divorce was, under the Union Act, assigned to the Federal Parliament; but those provinces which had established divorce courts before the accomplishment of federation were permitted to retain the jurisdiction which they already exercised. In the remaining provinces no divorce courts have been established since the constitution of the Dominion, and divorce can only be obtained by legislation, the matter being dealt with in each case as an ordinary private Act of Parliament, with this difference, however, that the Senate requires the production of such evidence in support of the application for relief as would be deemed sufficient in a court of law.

INSANITY.

The number of insane persons in Australasia, under official cognizance in the various Government hospitals for the treatment of the insane, at the end of 1900 was 14,846, equal to 3·29 per 1,000 of the population, or corresponding to one insane person in every 304. This rate is above that prevailing in England, where one person in every 313 is officially known to be insane.

An inspection of the table given below of the insane persons, both male and female, in each state and New Zealand on 31st December, 1900, and the rate per 1,000 inhabitants of each sex, will disclose the fact that the rate of insanity varies greatly in the different provinces, and that the rate for males is everywhere higher than that for females.

State.	Number of Insane.			Per 1,000 of Population.		
	Males.	Females.	Total Persons.	Males.	Females.	Total Persons.
New South Wales	2,655	1,741	4,396	3·72	2·72	3·25
Victoria	2,286	2,113	4,399	3·74	3·62	3·69
Queensland	1,098	621	1,719	4·00	2·87	3·51
South Australia	577	401	978	3·14	2·27	2·71
Western Australia	197	80	277	1·72	1·31	1·58
Tasmania	215	190	405	2·38	2·30	2·35
Commonwealth.....	7,028	5,146	12,174	3·54	2·92	3·25
New Zealand.....	1,581	1,691	2,672	3·93	3·02	3·50
Australasia.....	8,609	6,237	14,846	3·60	2·94	3·29

Victoria has the highest general rate, with 3·69 per 1,000, Queensland coming next with 3·51, closely followed by New Zealand with 3·50. Next comes New South Wales with 3·25; South Australia with 2·71; Tasmania with 2·35; while Western Australia shows the lowest proportion with 1·58 per 1,000. Queensland shows the highest rate for males with 4·00 per thousand, and Victoria with 3·62 per thousand has the largest proportion of females.

There is one remarkable difference between the Australasian states and Great Britain, namely, that in England the greater proportion of insanity is found amongst women, whereas in Australasia it is found amongst men.

In England the rate per 1,000 males in 1900 was 3·16, and per 1,000 females 3·55. In Australasia the greatest disproportion was in Queensland, where the male and female rates were respectively 4·00 and 2·87 per 1,000. The smallest difference between the sexes is found in those states where the male population follow in greater proportion what may be termed the more settled pursuits. In Tasmania the excess of the male over the female rate was only 0·08 and in Victoria 0·12.

There seems to be little doubt that insanity is slowly but steadily increasing in the states, as it is in the United Kingdom and other countries. In England the rate has risen from 2·92 per 1,000 of population in 1884 to 3·36 in 1900, and in Scotland a similar rise has taken place from 2·75 per 1,000 in 1884 to 3·47 in 1900. In Ireland the rate has risen from 2·50 per 10,000 of the population in 1880 to 4·70 per 10,000 in 1900. The greater part of this increase is no doubt rightly attributed to an improvement in the administration of the Commissioners in Lunacy, by which a more accurate knowledge of the number of cases existent in the country has been gained; but the steady growth of the rate in recent years, when statistical information has been brought to a high pitch of perfection, plainly points to the fact that the advance of civilisation, with the increasing strain to

which the struggle for existence is subjecting body and mind, has one of its results in the growth of mental disease. In all the states of Australasia, with the sole exception of Tasmania, there is seen the same state of affairs as the insanity returns of Great Britain disclose, although the conditions of life press much more lightly on the individual here.

The experience of the various states is fairly represented in the following table, which shows the average number of insane in each state per 1,000 of population, arranged in three five-years periods:—

State.	1886-90.	1891-95.	1896-1900.
	Rate per 1,000 of Population.	Rate per 1,000 of Population.	Rate per 1,000 of Population.
New South Wales.....	2·76	2·82	3·09
Victoria	3·35	3·43	3·66
Queensland.....	2·54	3·06	3·35
South Australia.....	2·46	2·56	2·70
Western Australia	2·85	1·94	1·40
Tasmania.....	2·51	2·38	2·34
Commonwealth	2·90	3·00	3·16
New Zealand	2·78	3·05	3·35
Australasia	2·89	3·01	3·19

The only states where the rate is diminishing are Western Australia and Tasmania. In Western Australia the hospital accommodation is limited, and thereby many insane, especially males, doubtless escape notice.

It has been said that the trade depression experienced a few years ago throughout Australasia, was the cause of an increase in insanity; and at first sight it looks as if this were so, because since 1892 there has been a steady increase in the proportion of the population detained in asylums. But looking at the rates of admissions this view does not seem to be altogether borne out. Probably one effect of depressed times is to send to the asylums a number of harmless but demented persons who, under other circumstances, would be supported by their relatives. In England and Wales it is found that the increase in insanity has taken place amongst those who are termed the "pauper" class—that is, those whose relatives are not in a position to support them after they lose their reason. On the other hand, the admissions in prosperous times are kept up by insanity either directly or indirectly induced by the indulgence which commonly follows high wages and large gains.

The following table shows the average annual number of admissions and readmissions into the asylums in each state, and the rate per

1,000 of population, during each of the two quinquennial periods 1891-95 and 1896-1900 :—

State.	1891-95.		1896-1900.	
	Average Number of Admissions per annum.	Rate per 1,000 of Population.	Average Number of Admissions per annum.	Rate per 1,000 of Population.
New South Wales	676	0·56	764	0·58
Victoria	697	0·60	734	0·62
Queensland	264	0·64	304	0·65
South Australia	224	0·67	214	0·60
Western Australia	35	0·53	101	0·65
Tasmania	65	0·43	67	0·40
Commonwealth	1,961	0·59	2,184	0·60
New Zealand	508	0·77	546	0·74
Australasia	2,469	0·62	2,730	0·62

The table shows that on the whole the rate of admissions has remained constant throughout the decade, and that while there has been a decrease for the last five years in South Australia, Tasmania, and New Zealand, all the other states show increases, the rate in Western Australia rising from 0·53 per 1,000 in 1891-5 to 0·65 in 1896-1900.

The next table shows the total number of patients who were discharged from the asylums during the ten years 1891-1900, either on account of recovery, permanent or temporary, or on account of death, and the proportion borne by each to the total number who were under treatment during the period.

State.	Total under Treatment.	Discharged—recovered or relieved.		Died.	
		Number.	Per cent. of total under treatment.	Number.	Per cent. of total under treatment.
New South Wales.....	10,306	3,528	34·23	2,343	22·73
Victoria	10,924	3,076	28·16	3,248	29·73
Queensland.....	3,926	1,267	32·27	904	23·03
South Australia.....	3,021	1,203	39·82	751	24·86
Western Australia	804	329	40·92	162	20·15
Tasmania	1,013	292	28·82	285	28·13
Commonwealth	29,994	9,695	32·32	7,693	25·65
New Zealand	7,070	2,258	31·94	1,287	18·20
Australasia.....	37,064	11,953	32·25	8,980	24·23

It is seen that, of the total number under treatment, 32·25 per cent. were discharged either partially or wholly recovered, and that 24·23

per cent. died. Western Australia shows the highest proportion of recoveries, and Victoria the lowest, while New Zealand has the lowest death-rate, and Victoria the highest. Speaking generally, it is estimated that of the persons who are discharged from the asylums in Australasia, some 28 per cent. suffer a relapse and are readmitted; and it may be said that out of every 1,000 persons who are admitted for the first time, 420 will recover, and the sufferings of the remaining 580 will only be terminated by death.

Very little information is available as to the exciting or predisposing causes of insanity in the different states, New South Wales being the only one concerning which there is complete information. But that state may be taken as typical of the whole, as the customs and conditions of living do not vary greatly in any of them, and the statement below enables a comparison to be made with the principal assigned causes of insanity in England and Wales. The chief causes are stated in proportion to the average annual number of admissions.

Cause.	Males.		Females.	
	New South Wales.	England and Wales.	New South Wales.	England and Wales.
	per cent.	per cent.	per cent.	per cent.
Domestic trouble, Adverse circumstances, Mental anxiety	12·0	13·6	13·1	14·3
Intemperance in drink	16·1	18·9	4·5	7·8
Hereditary influence, ascertained; Congenital defect, ascertained	15·1	21·0	17·9	23·2
Pregnancy, Lactation, Parturition, and Puerperal state, Uterine and Ovarian disorders, Puberty, Change of life .....	.....	.....	17·1	12·1
Previous attacks	14·0	13·7	15·9	18·2
Accident, including Sunstroke	6·6	4·9	1·5	0·6
Old Age	6·3	5·5	4·9	6·3
Other Causes ascertained.....	29·9	22·4	25·1	17·5

Intemperance in drink is popularly supposed to be the most fruitful cause of insanity in Australasia, and although it does bear the highest proportion of known causes amongst males, it is not nearly so common a cause as in England. Amongst females, the chief causes of insanity in the states are hereditary influence and pregnancy, &c. Hereditary influence and congenital defect, in England and Wales, bear the largest proportion of known causes, both amongst males and females, and it is believed they are responsible in New South Wales for many more than the number shown in the table, and that of the unknown causes the great majority should be ascribed to hereditary influences. The small proportion of cases set down to these two causes is simply due to the difficulty of obtaining knowledge of the family history of a large number of the people in Australasia.

HABITATIONS.

The latest information available concerning the habitations of the people, is that obtained at the census of 1901, when inquiry was made on the householders' schedules respecting the dwellings of the population. The information sought was in respect to whether a building was occupied, unoccupied, or in course of construction; the material of which it was built, and the number of rooms which it contained. The tabulation was not made with the same degree of completeness in all the states; but so far as comparative figures can be given they are shown below:—

Class of Dwelling.	New South Wales.	Victoria	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Inhabited	252,502	241,410	98,737	69,856	48,506	34,165	158,898
Uninhabited	14,831	11,629	1,670	5,640	2,203	2,187	10,830
Being built	1,438	617	*	353	201	118	865
Total	268,771	253,656	100,407	75,854	50,970	36,470	170,593

* Information not available.

The materials of which the dwellings in each state were constructed are shown in the following table, so far as the particulars are available. In New South Wales, South Australia, Tasmania, and Western Australia, the information is shown for all dwellings; in the other states for inhabited dwellings only. Dwellings made of canvas are most numerous in Western Australia, Queensland, and New South Wales. The large numbers of men living in tents engaged in mining in Western Australia, and in mining and on railway extensions in the two last mentioned states, will sufficiently account for the totals shown in this class.

Material.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Stone	10,793	8,409	300	45,136	3,931	} 8,059	{ 7,194
Brick	92,879	63,627	2,248	13,479	8,371		
Concrete, Pisé	1,525	1,525	....	2,604	1,104	.....	....
Iron, metal	5,880	1,337	6,215	2,787	5,590	} 23,653	{ 143,618
Wood	140,482	157,112	77,419	9,471	12,296		
Lath and Plaster	4,952	....	....	....	....	} 1,304	{
Mud, bark .....	....	2,896	....	....	495		
Canvas (including tents)	8,874	3,423	9,609	1,564	13,628	860	5,116
Others and unspecified	3,886	3,021	2,946	753	495	2,585	1,448
Total	268,771	241,410	98,737	75,854	50,970	36,470	158,898

The number of rooms is given below for all houses, whether occupied or unoccupied, in the case of New South Wales, South Australia, Tasmania, and Western Australia; for the other states the figures refer to inhabited dwellings only :—

Dwellings, with—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
One room	7,915	6,841	3,606	2,902	14,485	2,962	13,263
Two rooms.....	16,275	11,470	5,782	5,776	7,308	3,529	10,462
Three and four rooms	79,366	80,076	25,108	31,180	17,273	13,028	45,499
Five and six rooms	93,641	84,914	31,924	24,061	7,319	8,193	52,585
Seven to ten rooms.....	43,844	43,242	16,158	} 11,086	2,886	4,158	} 36,542
Eleven to fifteen rooms.....	6,928	5,615	2,104		647		
Sixteen to twenty rooms.....	1,612	1,157	548		226	} 1,968	
More than twenty rooms.....	1,205	909	529	209			
Number of rooms unspecified	5,889	3,763	423	349	612	2,632	547
Tents, &c.	7,096	3,423	12,555	....	....	....	....
Total	268,771	241,410	98,737	75,854	50,970	36,470	158,898

In the case of those states where no information is given in the table respecting tents, &c., the returns are incorporated in the first two lines of the table. From the foregoing figures it will be seen that in Australasia there are over 5 persons to every occupied house.

SHIPPING.

THE earliest date for which there is reliable information in regard to the shipping of the States now constituting the Commonwealth of Australia, and also of the colony of New Zealand is the year 1822. Since that time the expansion of the trade has been marvellous, and although population has increased at a high rate, yet the growth of shipping has been even more rapid. In the table given below the increase in the number and tonnage of vessels may be traced. The shipping of New Zealand is treated separately, and all tonnage of this colony, of course, is shown, but it is necessary to point out that the figures for the Commonwealth of Australia include the interstate traffic, and are, therefore, of little value in a comparison between the shipping trade of Australia and that of other countries, as the vessels plying between the various States represent merely coasting trade when the Commonwealth is considered as a whole. This distinction is kept in view throughout this chapter, as well as in the succeeding one dealing with commerce:—

Year.	Commonwealth of Australia.		Year.	New Zealand.	
	Entered and Cleared.			Entered and Cleared.	
	Vessels.	Tonnage.		Vessels.	Tonnage.
1822	268	147,869	1822	.....	.....
1841	2,576	552,347	1841	.....	.....
1851	4,780	975,959	1851	560	112,149
1861	9,174	2,425,148	1861	1,142	403,336
1871	11,836	3,689,643	1871	1,438	540,261
1881	14,408	8,109,924	1881	1,527	833,621
1891	16,987	16,235,213	1891	1,481	1,244,322
1901	18,638	26,197,436	1901	1,379	2,139,180

In the year 1822 all the settlements on the mainland were comprised in the designation of New South Wales, and as late as 1859 Queensland formed part of that State. Thus an exact distribution of shipping amongst the States comprising the Commonwealth and New Zealand can be made only for the period subsequent to the year last named. Such a division of the total tonnage entered and cleared is made in the following table for the five census years commencing with 1861 :—

State.	Total Tonnage Entered and Cleared.				
	1861.	1871.	1881.	1891.	1901.
Commonwealth of Australia—					
New South Wales.....	745,696	1,500,479	2,786,500	5,694,236	8,521,234
Victoria.....	1,090,002	1,355,025	2,412,534	4,715,109	6,715,491
Queensland.....	44,645	93,236	882,491	997,118	1,085,820
South Australia.....	199,331	357,026	1,359,591	2,738,589	4,127,993
Western Australia.....	115,256	137,717	285,046	1,045,555	3,714,263
Tasmania.....	230,218	216,160	383,762	1,044,606	1,432,725
Total.....	2,425,148	3,689,643	8,109,924	16,235,213	26,197,436
Colony of New Zealand.....	403,336	540,261	833,621	1,244,322	2,189,180

The tonnage of 1891 exceeded that of any preceding year. This result was not altogether due to the actual requirements of the trade of that year, as, in consequence of the maritime strike, a large quantity of goods remained unshipped at the close of 1890, and helped to swell the returns for the succeeding twelve months. It was not until 1895 that the tonnage of 1891 was again reached; but since 1895 there has been a great expansion of shipping, and 1901 showed not only the largest total tonnage recorded but the greatest for each individual State.

Below will be found the proportion of the tonnage of each State to the total shipping of the Commonwealth of Australia in the five years quoted above :—

State.	Percentage of Total of Commonwealth.				
	1861.	1871.	1881.	1891.	1901.
Commonwealth of Australia—					
New South Wales.....	30·8	40·7	34·4	35·1	32·5
Victoria.....	44·9	36·7	29·7	29·0	25·6
Queensland.....	1·8	2·5	10·9	6·2	6·4
South Australia.....	8·2	10·5	16·8	16·9	15·8
Western Australia.....	4·8	3·7	3·5	6·4	14·2
Tasmania.....	9·5	5·9	4·7	6·4	5·5
Total.....	100·0	100·0	100·0	100·0	100·0

It cannot be claimed that these figures have much meaning, and they would not have been repeated in this work, except for the purpose of showing how easy it is to make fallacious comparisons from reasonably correct data. Queensland appears almost last amongst the States in point of tonnage, yet, unquestionably, that State ranks third as regards the importance of its trade. The explanation of the discrepancy between the real and apparent trade lies in the fact which will hereafter be reverted to, that the same vessels are again and again included as distinct tonnage in the returns of the southern States. A mail-steamer which calls at Fremantle, in Western Australia, continues its voyage to Sydney by way of Adelaide and Melbourne, sometimes calling at Hobart, and figures as a separate vessel at each port. This is not the case to so large an extent in regard to Queensland, so that the figures quoted are only of value as indicating the comparative progress of the trade of each separate State, and not the progress of one State as compared with another.

INTERSTATE SHIPPING.

The total shipping of the Commonwealth of Australia, dealt with in the preceding section, excluded the trade between the various States, but in the following table will be found the number and tonnage of vessels entered at the ports of each State from the other States. As a rule, the expansion of the trade of a State with its neighbours has kept pace with the growth of its commerce with outside countries. It should be remembered that the trade between New Zealand and Australia does not appear in tables showing interstate shipping.

State.	Entered from other States of the Commonwealth.					
	1881.		1891.		1901.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage
Commonwealth of Australia—						
New South Wales	1,461	828,230	2,111	1,687,300	2,303	2,094,297
Victoria	1,620	725,663	1,954	1,461,974	1,745	1,992,118
Queensland.....	659	267,413	376	267,753	430	545,469
South Australia.....	821	407,406	761	683,095	719	1,135,714
Western Australia ...	95	74,020	149	237,708	446	973,474
Tasmania	612	154,883	680	371,205	713	485,023
Total	5,268	2,457,615	6,031	4,709,035	6,356	7,226,096

The peculiar feature of the foregoing table is the large increase in the tonnage of Western Australia and South Australia, due in both

cases to the influx of population and expansion of trade resultant on the great gold discoveries in the former State.

Stat	Cleared for other States of the Commonwealth.					
	1881.		1891.		1901.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
Commonwealth of Australia—						
New South Wales	1,223	639,893	1,861	1,385,357	1,995	1,907,226
Victoria	1,773	833,919	2,166	1,761,027	1,794	2,072,747
Queensland	678	330,664	389	302,723	395	440,659
South Australia	856	460,112	865	854,236	826	1,377,399
Western Australia	101	71,477	158	269,256	456	977,846
Tasmania	585	147,614	679	352,406	694	433,735
Total.....	5,216	2,483,679	6,118	4,925,005	6,160	7,209,612

A comparison of the figures given above with those in the preceding table shows that in the case of Victoria and South Australia the tonnage cleared is largely in excess of that entered. This partly arises from the necessity of many vessels clearing at the southern ports in ballast and proceeding for outward cargo to New South Wales ports, principally Newcastle, where on their outward voyage such vessels are, of course, reckoned amongst the external shipping.

The combined tonnage of inter-state shipping entered and cleared during 1881, 1891, and 1901, with the percentage for each state to the total inter-state shipping of the Commonwealth, will be found below :—

State.	Entered from and Cleared for other States.					
	Total Tonnage.			Percentage of each State to Total.		
	1881.	1891.	1901.	1881.	1891.	1901.
Commonwealth of Australia—						
New South Wales	1,468,123	3,072,657	4,001,523	29·7	31·9	27·7
Victoria	1,559,582	3,223,001	4,064,865	31·6	33·5	28·2
Queensland	598,077	570,476	986,128	12·1	5·9	6·8
South Australia	867,518	1,537,331	2,513,113	17·6	15·9	17·4
Western Australia	145,497	506,964	1,951,320	2·9	5·3	13·5
Tasmania	302,497	723,611	918,758	6·1	7·5	6·4
Total.....	4,941,294	9,634,040	14,435,707	100·0	100·0	100·0

EXTERNAL SHIPPING.

It has been explained that in any comparison between the shipping of the Commonwealth of Australia and that of other countries the interstate trade would have to be excluded; but even then the tonnage would be too high, because of the inclusion of mail-steamers and other vessels on the same voyage in the returns of several of the states. However, it is scarcely possible to amend the returns so as to secure the rejection of the tonnage which is reckoned more than once; and in considering the following statement, showing the shipping trade of the Commonwealth with countries beyond Australia, this point should be borne in mind:—

Division.	1881.		1891.		1901.	
	Vessels	Tonnage.	Vessels	Tonnage.	Vessels	Tonnage.
United Kingdom—						
Entered	642	836,262	868	1,699,958	716	2,066,167
Cleared	350	523,889	588	1,217,582	784	2,144,587
Total	992	1,360,151	1,456	2,917,540	1,500	4,210,754
British Possessions—						
Entered	954	596,880	894	790,608	1,403	1,971,931
Cleared	999	589,258	942	903,972	1,349	2,081,623
Total	1,953	1,186,138	1,836	1,694,580	2,752	4,053,554
Foreign Countries—						
Entered	450	261,973	681	880,814	906	1,774,013
Cleared	529	360,368	865	1,108,239	964	1,723,408
Total	979	622,341	1,546	1,989,053	1,870	3,497,421
All External Trade—						
Entered	2,046	1,695,115	2,443	3,371,380	3,025	5,812,111
Cleared	1,878	1,473,515	2,395	3,229,793	3,097	5,949,618
Total	3,924	3,168,630	4,838	6,601,173	6,122	11,761,729

The external shipping of the Commonwealth of Australia during 1901 was fully 78 per cent. more than the tonnage entered and cleared in 1891, when trade was inflated by the shipment of goods left over from the previous year on account of the maritime strike. A distribution of the traffic amongst the leading divisions of the British Empire and

the principal foreign countries with which the states of the Commonwealth have commercial relations will be found below :—

Country.	Entered from and cleared for Countries beyond the Commonwealth.					
	1881.		1891.		1901.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
British Empire—						
United Kingdom	992	1,360,151	1,456	2,917,540	1,500	4,210,754
New Zealand	937	422,363	1,007	749,886	999	1,345,471
India and Ceylon	159	262,355	134	276,030	142	330,714
Hong Kong	326	300,075	227	324,820	241	380,174
Cape Colony	112	45,752	63	55,611	430	681,869
Fiji	92	34,963	107	105,033	60	58,799
Other British Possessions	327	120,630	298	183,200	880	1,256,527
Total, British	2,945	2,546,289	3,292	4,612,120	4,252	8,264,308
Foreign Countries—						
France and New Caledonia	205	107,364	255	410,577	242	483,512
Germany	29	17,025	208	393,001	274	909,798
Netherlands and Java...	78	45,467	50	74,110	95	198,097
Belgium	2	1,552	27	41,907	14	29,716
United States	241	265,685	418	519,252	385	758,281
China	76	51,993	34	33,135	11	23,797
Other Foreign Countries	348	133,255	554	517,071	849	1,094,220
Total, Foreign.....	979	622,341	1,546	1,989,053	1,870	3,497,421
All External Tonnage	3,924	3,168,630	4,838	6,601,173	6,122	11,761,729

As the following table shows, the largest share of the external tonnage of Australia falls to New South Wales, which takes more than one-third of the total; Victoria comes next with a little over one-fifth, followed by Western Australia with almost one-sixth. The figures in the chapter on Commerce, however, give a better idea of the relative importance of the states in external trade, as the tonnage of the mail-steamers entered

and cleared at Fremantle and Port Adelaide is out of all proportion to the goods landed and shipped there:—

State.	External Tonnage Entered and Cleared.						Percentage of each State to Total of Commonwealth.		
	1881.		1891.		1901.		1881.	1891.	1901.
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.			
Commonwealth of Australia—									
New South Wales	1,672	1,318,377	2,149	2,621,579	2,529	4,519,711	41·6	30·7	38·4
Victoria	855	852,952	971	1,492,108	1,226	2,650,626	26·9	22·6	22·5
Queensland	467	284,414	405	420,042	534	639,692	9·0	6·5	6·0
South Australia	572	492,073	803	1,201,258	721	1,614,790	15·5	18·2	13·7
Western Australia	172	139,549	291	538,591	883	1,762,943	4·4	8·1	15·0
Tasmania	186	81,265	219	329,995	229	513,967	2·6	4·9	4·4
Total	3,924	3,168,630	4,838	6,601,173	6,122	11,761,729	100 0	100·0	100·0

A comparison between the shipping of the principal countries of the world and the external tonnage of the Commonwealth of Australia is appended:—

Country.	Tonnage Entered and Cleared.		Country.	Tonnage Entered and Cleared.	
	Total.	Average per head.		Total.	Average per head.
United Kingdom.....	98,523,693	2·4	Spain	23,477,569	1·6
Russia in Europe.....	17,366,619	0·2	Italy	39,510,262	1·2
Norway	6,149,700	2·7	United States	47,151,255	0·6
Sweden.....	17,123,126	3·3	Argentine Republic	13,364,884	3·0
Denmark	11,753,567	4·8	Canada	14,175,121	2·6
Germany	29,207,857	0·5	Cape Colony	9,504,992	6·2
Netherlands.....	18,890,460	3·6	New Zealand.....	2,139,180	2·8
Belgium	16,977,646	2·5	Commonwealth of Australia	11,761,729	3·1
France	38,286,445	1·0			

On the basis of population, therefore, the shipping of the states of the Commonwealth exceeds that of the United Kingdom and the great countries of the United States of America, France, Germany, Italy, Russia, and Spain.

TONNAGE IN BALLAST.

A peculiar feature of the shipping trade is the small though varying proportion of tonnage in ballast arriving from and departing for places beyond Australia. Thus in the year 1881 this description of tonnage amounted to 5·2 per cent., and in 1891 to 4·1 per cent., of the total external shipping; while in 1901, at 9·5 per cent., the proportion was comparatively high. The increase during recent years is chiefly due to the larger number of vessels which come to New South Wales in quest of freights, the proportion of shipping in ballast for that state being nearly 13 per cent. of the total external tonnage. The total external tonnage entered and cleared in ballast during the years 1881, 1891, and 1901 was as follows:—

State.	External Tonnage Entered and Cleared in Ballast.			Percentage of Tonnage in Ballast to Total External Tonnage.		
	1881.	1891.	1901.	1881.	1891.	1901.
Commonwealth of Australia—						
New South Wales	60,079	100,167	579,904	1·9	3·8	12·8
Victoria	19,077	47,721	194,442	0·6	3·2	7·3
Queensland	21,742	36,700	24,869	0·7	8·6	3·6
South Australia	30,501	52,515	102,899	1·0	4·4	6·4
Western Australia	10,397	14,104	210,581	0·3	2·6	11·9
Tasmania	22,391	16,357	2,355	0·7	1·6	0·5
Total	164,187	267,564	1,115,050	5·2	4·1	9·5

The reason why so small a proportion of Australian shipping clears in ballast is principally to be found in the great and varied resources of the country; for when the staple produce—wool—is not available, cargoes of wheat, coal, silver, copper, live-stock, frozen meat, fruit, tallow, and other commodities may generally be obtained. Besides, owing to the great distance of the ports of the Commonwealth from the commercial centres of the old world, vessels are not usually sent out without at least some prospect of securing a return cargo. As a rule, it does not pay to send vessels to Australasia seeking freights, as is commonly done with regard to European and American ports. It is strong testimony, therefore, of the value of the trade of New South Wales to shipowners to find entered at the ports of that state direct from outside countries the comparatively large quantity of 505,259 tons of shipping in ballast, the following being the chief countries represented:—New Zealand, Japan, Java, Portuguese East Africa, Mauritius, Cape Colony, Natal, Phillipine Islands.

The tonnage in ballast which entered and cleared at New Zealand ports and the percentage of such to the total tonnage of the colony may be seen in the following table.

Year.	Tonnage in ballast.	Percentage to total tonnage.
1881	76,247	9.0
1891	103,754	8.3
1901	191,266	8.9

The proportion of tonnage in ballast to the total shipping of some of the principal countries of the world is subjoined :—

Country.	Percentage of Shipping in Ballast.	Country.	Percentage of Shipping in Ballast.
United Kingdom	18.9	France.....	18.4
Russia in Europe	32.8	Spain	28.5
Norway	21.4	Italy	15.1
Sweden	43.0	United States	17.9
Germany.....	20.1	New Zealand.....	8.9
Netherlands	26.7	Commonwealth of	
Belgium	24.9	Australia	9.5

NATIONALITY OF ALL VESSELS.

The shipping trade of the Commonwealth of Australia and of the Colony of New Zealand is almost entirely in British hands, as will be seen from the subjoined tables, which deal with the total tonnage, both inter-state and external. Although direct communication with continental Europe has been established within recent years, and several lines of magnificent steamers, subsidised by foreign Governments, have entered into the trade between Australia and foreign ports, yet the proportion of shipping belonging to Great Britain and her dependencies has only fallen from 93.2 to 85.3 per cent. during the period extending from 1881 to 1901 :—

Nationality.	Total Shipping Entered and Cleared the Commonwealth.						Percentage of each Nationality.		
	1881.		1891.		1901.		1881.	1891.	1901.
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.			
British.....	13,668	7,560,057	15,472	14,087,460	16,544	22,358,652	93.2	86.8	85.3
French	84	45,670	247	591,524	305	654,475	0.6	3.6	2.5
German	172	119,142	526	843,652	662	1,771,945	1.5	5.2	6.8
Scandinavian.....	102	55,311	319	292,071	403	350,040	0.7	1.8	1.3
American.....	250	231,828	307	296,096	401	520,705	2.8	1.8	2.0
Other nationalities.	132	97,916	116	124,401	323	541,619	1.2	0.8	2.1
Total	14,408	8,109,924	16,987	16,235,213	18,638	26,197,436	100.0	100.0	100.0

The returns published by the various states are not in such a form as to admit of the separation of the purely local tonnage from the other shipping of the Empire, and vessels owned in the Commonwealth are classed in the above table as "British." The number and tonnage of the steam and sailing vessels registered in each of the states of the Commonwealth and New Zealand may be found on a succeeding page. Few of the large vessels employed in the inter-state trade have been built in Australia, and it is possible that the registrations do not represent the whole of the tonnage engaged in local waters.

The nationality of vessels trading with New Zealand may be seen in the following table :—

Nationality.	Entered and Cleared New Zealand.						Percentage of each Nationality.		
	1881.		1891.		1901.		1881.	1891.	1901.
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.			
British.....	1,424	718,563	1,359	1,120,435	1,234	1,831,590	86·2	90·0	85·6
French.....	7	1,719	4	1,862	1	1,562	0·2	0·2	0·1
German.....	20	7,327	16	12,370	2	1,684	0·9	1·0	0·1
Scandinavian.....	9	3,703	17	12,906	39	26,541	0·5	1·0	1·2
American.....	63	101,275	81	91,387	80	263,134	12·1	7·4	12·3
Other nationalities.	4	1,034	4	4,856	23	14,669	0·1	0·4	0·7
Total.....	1,527	833,621	1,481	1,244,322	1,379	2,139,180	100·0	100·0	100·0

STEAM AND SAILING VESSELS.

The tendency to substitute steamers for sailing vessels, which is general throughout the world, is very marked in the Australian trade. Unfortunately the records of Queensland and of South Australia do not admit of the separation of the two classes of vessels, and this was the case also with regard to the colony of New Zealand until late years. It is not possible, therefore, to show the total increase of steam tonnage, but appended will be found the figures of the external trade of the various states so far as they can be given :—

State.	Steam Tonnage entered and cleared.			Percentage of Steam to Total Tonnage.		
	1881.	1891.	1901.	1881.	1891.	1901.
Commonwealth of Australia—						
New South Wales.....	589,825	1,582,308	3,258,228	44·7	60·3	72·1
Victoria.....	717,098	1,044,467	2,194,863	84·1	70·0	82·8
Western Australia.....	101,088	483,460	1,460,619	72·4	89·8	82·9
Tasmania.....	37,131	287,188	488,370	45·7	89·5	95·0
Colony of New Zealand.....	*	822,086	1,860,622	*	66·1	87·0

* Not obtainable.

The substitution of steam for sailing vessels in the shipping trade of some of the principal countries of the world may be gathered from the following table. The percentage for the Commonwealth of Australia is calculated on the basis of the external shipping of the states exclusive of that of Queensland and South Australia :—

Country.	Percentage of Steam to Total Tonnage.	
	1881.	1900.
United Kingdom.....	67·7	91·7
Russia in Europe.....	74·3	95·7
Norway.....	31·1	66·0
Sweden.....	46·8	83·3
Denmark.....	61·9	86·3
Germany.....	70·8	90·6
Netherlands.....	74·4	96·8
Belgium.....	81·3	96·3
France.....	69·5	94·6
Italy.....	72·8	96·5
United States.....	55·5	86·1
Argentine Republic.....	70·4	90·7
New Zealand.....	.....	87·0
Commonwealth of Australia.....	68·6	78·4

A comprehensive view of the changes which have taken place since the year 1881 in the class of vessel engaged in the inter-state and the external shipping trade of the Commonwealth is afforded by the following figures :—

Year.	Vessels.	Tonnage.	Crews.	Average Tonnage per vessel.	Average Tonnage per hand.
INTER-STATE SHIPPING.					
1881	10,484	4,941,294	251,189	471	20
1891	12,149	9,634,040	386,798	793	25
1901	12,516	14,435,707	475,457	1,153	30
EXTERNAL SHIPPING.					
1881	3,924	3,168,630	120,193	808	26
1891	4,838	6,601,173	244,171	1,364	27
1901	6,122	11,761,729	350,176	1,921	34
ALL COMMONWEALTH SHIPPING.					
1881	14,408	8,109,924	371,332	563	22
1891	16,987	16,235,213	630,969	956	26
1901	18,638	26,197,436	825,723	1,406	32

As the table shows, the total number of vessels engaged in the shipping trade of the Commonwealth of Australia during 1901 was 1,651 more than the figure for 1891, and the returns of tonnage show an increase of nearly ten millions. The average tonnage of shipping is 1,406, as compared with 956 in 1891, and 563 in 1881. The explanation of this increase of course lies in the fact that a superior type of vessel is now engaged in the shipping trade, and the enterprise of the great European and American trading companies will doubtless have the effect of raising still higher the average for succeeding years. It is somewhat remarkable to find that the vessels engaged in the inter-state trade have more than kept pace in increase of tonnage with those trading between the Commonwealth and other countries. Of course, the increase in the average tonnage of inter-state vessels is represented as greater than it actually has been, because the mail-steamers on their way to Sydney are cleared at Fremantle, Adelaide, and Melbourne for the states further east; but when allowance has been made on this score, the improvement in the class of vessel trading in local waters will be found most noteworthy. It is well known, however, that the steamers running on the Australian coast favourably compare with those engaged in the coasting trade of the United Kingdom.

The trade of the Commonwealth with New Zealand appears as external shipping in all returns given in this chapter, and has, therefore, not been distinguished separately, but in the following table will be found figures showing the total shipping of that Colony with all countries :—

Year.	Vessels.	Tonnage.	Crews.	Average Tonnage per Vessel.	Average Tonnage per hand.
1881	1,527	833,621	30,409	546	27
1891	1,481	1,244,322	43,969	840	28
1901	1,379	2,139,180	59,752	1,551	36

The above figures show that, although the number of vessels has decreased by 102 since 1891, the total tonnage has increased by about 895,000 tons, while the average per vessel is nearly double that of 1891.

RELATIVE IMPORTANCE OF PORTS.

The relative importance of the various ports of the Commonwealth of Australia and New Zealand may be ascertained by an inspection of the table given hereunder. Melbourne takes first place in the amount of tonnage; but the figures are inflated by the counting of the great ocean steamers as twice entering and twice clearing at Port Phillip.

This remark applies equally to Port Adelaide and Albany, and in the last year to Fremantle. If allowance be made on this score, it will be found that Sydney has a larger quantity of shipping than any other Australasian port, and that it is followed by Melbourne, Newcastle, and Port Adelaide. The figures for the years 1881 and 1891 given for Queensland ports, other than Brisbane, include coastal trade, and the quantity of tonnage shown for these years is, therefore, somewhat in excess of the truth. As this table is only intended to show the relative importance of ports, the inter-state shipping of the Commonwealth has not been excluded, but no account has been taken of the purely coastal trade within each state:—

Port.	Total Tonnage entered and cleared.		
	1881.	1891.	1901.

Commonwealth of Australia.

<i>New South Wales—</i>			
Sydney	1,610,692	3,469,862	5,413,677
Newcastle	1,127,238	1,844,842	2,609,861
Wollongong	14,642	101,888	300,699
<i>Victoria—</i>			
Melbourne	2,144,949	4,362,138	6,366,103
Geelong	93,347	190,932	259,573
<i>Queensland—</i>			
Brisbane	406,032	855,993	1,207,295
Townsville	205,886	544,470	95,101
Rockhampton	207,706	471,837	36,653
Cooktown	217,144	469,577	31,670
Cairns	56,447	326,898	4,084
Mackay	104,174	330,119	4,473
<i>South Australia—</i>			
Port Adelaide	1,078,920	1,990,938	3,296,108
Port Pirie	33,325	321,781	376,856
Port Darwin	90,100	170,642	163,705
<i>Western Australia—</i>			
Fremantle	42,618	63,068	1,864,195
Albany	219,902	931,502	1,667,707
<i>Tasmania—</i>			
Hobart	204,007	646,683	870,733
Launceston	138,657	293,537	199,444
Devonport .....	.....	8,121	124,964

New Zealand.

Wellington	119,243	293,451	591,154
Auckland	238,886	345,183	736,005
Bluff Harbour	91,592	196,540	303,496
Lyttelton	167,151	161,387	208,476
Dunedin	114,637	97,409	112,718

A better idea of the relative importance of the principal ports of the states is obtainable from the trade figures, which are given below for the year 1901 :—

Port.	Total Trade.	Average per ton of Shipping.	Port.	Total Trade.	Average per ton of Shipping.
New South Wales—	£	£	Western Australia—	£	£
Sydney.....	41,393,250	7·6	Fremantle	12,169,806	6·5
Newcastle	3,359,844	1·3	Albany.....	576,790	0·3
Victoria—			Tasmania—		
Melbourne	30,649,087	4·8	Hobart.....	1,566,232	1·8
Queensland—			Launceston	1,458,876	7·3
Brisbane	6,305,906	5·2	New Zealand—		
South Australia—			Wellington	4,990,670	8·4
Port Adelaide.....	9,212,509	2·8	Auckland.....	4,946,358	6·7

The comparative importance of the ports of the Commonwealth of Australia and New Zealand may be seen by viewing them in connection with the shipping and trade of the chief ports of the United Kingdom, the 1901 figures for which are appended. It will be seen that in aggregate tonnage Melbourne is exceeded only by London, Liverpool, Cardiff, and Newcastle. Sydney comes next on the list, exceeding all other British ports. In value of trade Sydney is exceeded only by London, Liverpool, and Hull. If the Commonwealth of Australia be regarded as one country, however, the comparison is somewhat misleading, as the inter-state trade is included in the returns:—

Port.	Total Shipping.	Total Trade.	Port.	Total Shipping.	Total Trade.
England—	tons.	£	Scotland—	tons.	£
London.....	17,275,645	262,164,200	Glasgow	3,825,890	30,906,501
Liverpool.....	12,636,225	237,390,518	Leith	1,945,754	16,795,209
Cardiff	12,737,057	15,616,806	Kirkcaldy ..	1,900,876	1,579,153
Newcastle and N.&S. Shields	8,671,810	20,505,656	Grangemouth.	1,537,485	5,311,311
Hull	4,425,356	52,800,743	Ireland—		
Southampton	3,062,721	28,057,904	Belfast	674,023	8,069,258
Sunderland ..	2,147,155	2,710,464	Dublin	365,881	2,721,207
Grimsby	1,775,647	18,026,984	Australia—		
Dover	1,905,919	13,815,576	Sydney.....	5,413,677	41,393,250
Newport	2,343,721	3,548,930	Melbourne ...	6,366,103	30,649,087
Harwich	1,395,137	22,704,705	Brisbane	1,207,295	6,305,906
Bristol	1,274,092	13,748,110	Adelaide	3,296,108	9,212,509
Newhaven.....	703,632	12,788,725	Fremantle ...	1,864,195	12,169,806
			Hobart	870,733	1,566,232
			New Zealand—		
			Wellington ...	591,154	4,990,670
			Auckland.....	736,005	4,946,358

The yearly movement of tonnage at Melbourne and Sydney far exceeds that of the ports of any other British possession, Hong Kong and Singapore excepted. Two other exceptions might be mentioned—Gibraltar and Malta; but as these are chiefly ports of call, and the trade is very limited compared with the tonnage, they can scarcely be placed in the same category.

REGISTRATION OF VESSELS.

The number and tonnage of steam and sailing vessels on the registers of each of the six states of the Commonwealth and the colony of New Zealand at the end of 1901 are given below:—

State.	Steam.		Sailing.		Total.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
Commonwealth of Australia—						
New South Wales	499	78,919	523	61,525	1,022	140,444
Victoria	150	68,028	222	35,894	372	103,922
Queensland	102	13,127	155	10,007	257	23,134
South Australia	109	29,661	218	18,943	327	48,604
Western Australia	30	5,708	161	6,405	191	12,113
Tasmania	53	8,098	154	8,952	207	17,050
Total	943	203,541	1,433	141,726	2,376	345,267
Colony of New Zealand—	217	59,218	303	43,108	520	102,326

DEFENCE.

THE colonists of Australasia have always manifested an objection to the maintenance of a large standing army, and shown a disposition to rely mainly upon the patriotism and valour of the citizens for their own defence; but each state possesses a more or less complete system of fortifications, armed with expensive ordnance which requires a more regular and constant attendance than could well be bestowed by those who devote only a portion of their time to military affairs; hence it has been found advisable to institute in each state small permanent military forces, consisting for the most part of artillery and submarine miners, whose chief duty it is to man the fortifications and keep the valuable armaments therein in a state of efficiency, so as to be ready for any emergency. At the same time, it is expected that they will prove the nucleus for an effective defence force if ever hostilities should unfortunately occur. Under the terms of the Commonwealth Constitution Act, the control of the naval and military defence forces of the states was assumed by the Federal Government in March, 1901.

The greater portion of the Australian forces consists of volunteers enrolled under a system of partial payment, which affords a defence force without the disadvantages and expense of a standing army. The men receive payment according to the number of parades and night drills they attend, as compensation for wages lost while absent from their employment for the purpose of receiving military instruction. The remuneration varies in the different states, the New South Wales scale being about £7 8s. per annum for the ordinary land forces, and £8 10s. for the naval forces. There has been a marked tendency in most of the provinces to discourage the services of those who are purely volunteers, as the system was found to work unsatisfactorily, especially in the country districts. In New Zealand alone is the volunteer system the mainstay of defence.

The following table shows the strength of the military forces maintained by each state as at 30th June, 1902. The total number of men of military ages (from 20 to 40 years) in Australasia was ascertained at

the Census of 1901 to be 775,000, and compared with this figure the forces of the states appear extremely small.

State.	Paid.	Militia or Partially Paid.	Volunteers.	Total Forces.
New South Wales.....	757	5,525	3,456	9,738
Victoria	396	3,404	3,135	6,935
Queensland	322	4,180	903	5,405
South Australia.....	52	3,047	.....	3,099
Western Australia	56	2,137	.....	2,193
Tasmania	53	362	2,593	3,008
Commonwealth	1,636	18,655	10,087	30,378
New Zealand	393	.....	19,288	19,681
Australasia	2,029	18,655	29,375	50,059

The relative strength of the various arms in the Commonwealth States may be summarised as follows :—

Staff, and all arms not enumerated	1,175
Artillery	4,163
Engineers	402
Submarine Miners.....	338
Machine Gun Corps	54
Cavalry	1,401
Mounted Rifles and Mounted Infantry	4,372
Infantry	18,473

making a total strength, as shown above, of 30,378 men.

In addition to the above there are small bodies of reserves in New South Wales and Victoria, and rifle clubs are enrolled in all the states except Tasmania. These men are all trained to the use of the rifle, and have a slight knowledge of drill, and would be available in time of war to complete the establishment of the regular forces. Under the provisions of the Defence Acts in Queensland and South Australia the police received a certain amount of military training, and in case of emergency could be called upon to perform military service. The

following table shows the strength of reservists, members of rifle clubs, and school cadets in the various states, on the 30th June, 1902:—

State.	Reservists.	Members of Rifle Clubs.	Cadets.
New South Wales.....	2,260	4,612	64
Victoria	158	22,112	5,613
Queensland .....	.....	4,110	1,033
South Australia .....	.....	3,340	.....
Western Australia .....	.....	1,500	200
Tasmania.....	.....	.....	199
Commonwealth	2,418	35,674	7,109
New Zealand	140	1,801	1,956
Australasia	2,558	37,475	9,065

In addition to the military forces enumerated, all the states, with the exception of Tasmania and Western Australia, have small corps of Naval Volunteer Artillery, or partially-paid forces of a similar character, capable of being employed either as light artillery land forces or on board the local war vessels. The strength of the marine forces of the states, on the 30th June, 1902, was as follows:—

State.	Paid.	Partially Paid.	Total.
New South Wales	6	657	663
Victoria	158	152	310
Queensland	56	729	785
South Australia.....	21	154	175
Commonwealth	241	1,692	1,933

For many years the question was discussed of organising reserve forces in the states for the Imperial navy, and early in 1899 the Admiralty forwarded a despatch to the various states outlining a scheme to give effect to the proposal. In July, 1899, a conference of naval officers, representing New South Wales, Victoria, Queensland, and South Australia, was held at Melbourne, when it was decided that it would be impossible to raise a reserve force in Australasia on the conditions prescribed by the Admiralty, and it was deemed expedient to defer further consideration of the question till the establishment of a central authority under Federation.

On their present footing the combined forces of the Commonwealth states are over 32,000 strong, as will be seen above, and of these over 20,000 could be mobilised in a very short time in any one of the states of Queensland, New South Wales, Victoria, or South Australia. Most

of the states have also cadet companies, consisting of youths attending school, who are taught the use of arms so as to fit them, on reaching manhood, for taking a patriotic share in the defence of their country.

The outbreak of hostilities with the Boers in October, 1899, served to demonstrate the strength of the loyalty of these states to the mother country. From all parts of Australasia members of the various defence forces, as well as civilians, volunteered for service with the Imperial troops in South Africa. The total number of men despatched in the various contingents was 22,928. The table below shows the number of men and horses sent from each state:—

State.	Officers.	Non-commissioned Officers and Men.	Horses.
New South Wales	327	6,000	5,877
Victoria	183	3,393	3,878
Queensland	143	2,756	3,085
South Australia	78	1,450	1,524
Western Australia	63	1,160	1,044
Tasmania	35	827	725
Commonwealth	829	15,586	16,133
New Zealand	342	6,171	6,662
Australasia	1,171	21,757	22,795

In addition to the above, several special service officers were, at the request of the colonial Governments, attached to the British troops for the purpose of gaining experience, and 14 nurses were despatched from New South Wales.

The states again offered to assist Great Britain on the outbreak of hostilities in China. The Imperial Authorities accepted the offer, and contingents of naval volunteers were despatched from New South Wales and Victoria numbering 260 and 200 men respectively, while South Australia equipped and sent the gunboat Protector.

NAVAL DEFENCE.

The boundaries of the Australian Naval Station have been defined as follow:—From 95° E. long. by the parallel of 10° S. lat. to 130° E. long.; thence north to 2° N. lat., and along that parallel to 136° E. long.; thence north to 12° N. lat., and along that parallel to 160° W. long.; thence south to the Equator, and east to 149° 30' W. long.; bounded on the south by the Antarctic Circle; and including the numerous groups of islands situated within the limits specified.

The defence of the Australasian coast is entrusted to the British ships on the Australian Station and the Australasian Auxiliary Squadron. Sydney, the head-quarters of the fleet, ranks as a first-class naval

station, and extensive repairing yards and store-houses have been provided for the accommodation of the ships of war. The vessels of the Imperial fleet are detailed below. The Penguin and Dart are engaged in surveying service.

Name.	Class.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament.	Speed.	Coal endurance.	
							Guns.		Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots' speed.
Royal Arthur (flagship)	Twin-screw cruiser, 1st class, protected.	7,700	10,000	24 10	360 0 60	8	One 9·2-in. B.L., 12 6-in. B.L.Q.F., 12 6-Pr., 5 3-Pr., 7 Nordenfeldt.	19·75	1,250	10,000
Phœbe ..	Twin-screw cruiser, 3rd class.	2,575	7,500	15 6	265 0 41	0	Eight 4·7 Q.F., 8 3-in. Pr. Q.F., 4 M., 1 L.	19·2	300	4,800
Archer ..	Twin-screw cruiser, 3rd class.	1,770	3,500	15 7	225 0 36	0	Six 6-in. 5-ton B.L.V.C.P. 8 3-Pr., 2 Nordenfeldt.	16·5	325	7,000
Pylades ..	Screw cruiser 3rd class.	1,420	1,510	16 11	200 0 38	0	Eleven 5-in. 38-cwt. B.L. R., 8 M., 1 L.	12·6	425	6,600
Sparrow	Screw gun-boat, 1st class.	805	1,200	13 3	165 0 30	0	Six 4-in. 26-cwt. B.L.R., 2 Q.F. Hotchkiss, 2 M.	13·7	105	..
Torch ..	Screw sloop..	960	1,100	14 6	180 0 32	6	Six 4-in. Q.F., 2 3-Pr. Q.F. Hotchkiss, 2 0·45-in. Maxim.	13·25	180	2,000
Penguin.	Screw sloop..	1,130	700	14 0	180 0 38	0	Two 64-pr. M., 1 L., 2 M.	10·0	200	..
Dart	Screw yacht..	470	250	12 11	133 0 25	2	L., 2 M.....	7·5	64	..

Q.F., Quick-firing guns; M., Machine guns; L., Light guns under 15 cwt.; B.L.R., Breech-loading rifled guns; V.C.P., Vavasseur Centre Pivot.

The Royal Arthur has no armour, but carries a protective deck of steel, varying in thickness from 1 to 5 inches. Her 6-inch guns are also enclosed in casemates of steel 6 inches thick.

Six cadetships and two engineer studentships in the Imperial Navy are given annually to Australian boys, who must not be less than 14½ nor more than 15½ years of age to qualify for the former, and not less than 14½ nor more than 16½ years of age for the latter appointments. The cadets undergo a course of instruction for about two years on board the "Britannia" training ship, and at the expiration of their apprenticeship are appointed to the various warships. In addition the Board of Admiralty may admit one candidate annually to the Medical Branch of the Royal Navy, who has been proposed by the University of Sydney, and passed an examination as to physical and professional fitness before a Board of Naval Medical Officers on the Australian Station.

An undertaking has been entered into by the Commonwealth and New Zealand for the payment of a *pro rata* subsidy towards the maintenance of an auxiliary fleet. The total subvention to be paid amounts to £126,000 per annum, made up of £91,000 for maintenance, and £35,000 as interest

charge on the cost of construction, at the rate of 5 per cent. per annum, the contribution of each State being determined on the basis of population. The distribution of the subsidy is as follows:—

New South Wales	£ 37,973
Victoria	32,749
Queensland	13,585
South Australia	10,439
Western Australia	4,816
Tasmania	5,134
New Zealand	21,304

Australasia..... £126,000

The fleet consists of five fast cruisers and two torpedo gunboats of the Archer (improved type) and Rattlesnake classes of the British Navy. Three cruisers and one gunboat are continuously kept in commission, and the remainder are held in reserve in Australasian ports, ready for commission whenever circumstances may require their use. At the present time the vessels in reserve are the Katoomba, Mildura, Tauranga, and Karrakatta, the Katoomba being used as guard-ship. The agreement is for a period of ten years, and is then or at the end of any subsequent year terminable, provided two years' notice has been given. The vessels have been built by the British Government; and the Australasian Governments have no voice whatever in their management, nor any control over their movements. On the termination of the agreement the vessels will remain the property of the Imperial Government. The strength of the British fleet in Australian waters before the agreement was entered into is maintained independently of the presence of the Australasian vessels. The squadron is commanded by the Admiral on the Australian Station, whose headquarters are in Sydney, where a residence is provided for him by the State of New South Wales. The squadron, which arrived in Port Jackson on the 5th September, 1891, consists of the following vessels:—

Name.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament.		Speed.	Coal endurance.		
						Guns.	Torpedo tubes.		Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots speed.	
	tons.		ft. in.	ft. in.	ft. in.			knots.	tons.	knots.	
*Katoomba ..	2,575	7,500	17 6	265 0	41 0	Eight 4·7 Q. F. guns, eight 3-pr. Q. F. guns, one 7-pr. M. L. R. gun (boat and field), four 4·45-in. 5-barrel Nordenfeldt.	4	19·2	300	6,000	
Mingarooma ..	2,575	7,500	17 6	265 0	41 0			4	19·2	300	6,000
Mildura	2,575	7,500	16 6	265 0	41 0			4	19·2	300	6,000
Wallaroo	2,575	7,500	17 3	265 0	41 0			4	19·2	300	6,000
Tauranga	2,575	7,500	17 6	265 0	41 0			4	16·5	300	6,000
Boomerang ..	735	3,500	10 8	230 0	27 0	Two 4·7 in. Q. F. guns, four 3-pr. Q. F. guns.	3	19·0	160	2,500	
Karrakatta ..	735	3,500	10 9	230 0	27 0			3	19·0	160	2,500

* Guard ship of reserve. Q. F.—Quick-firing guns. M. L. R.—Muzzle-loading rifled guns.

The Boomerang and Karrakatta are classed as torpedo gun-boats; all the other vessels are third-class screw cruisers. The hull of each vessel is of steel. The deck armour over machinery space is 2-in. and 1-in., and the conning-towers are protected by 3-inch armour, except in the case of the torpedo gun-boats, the towers of which have 1-in. armour. Each of the cruisers carries four, and each of the torpedo gun-boats three torpedo tubes. In the event of any of the squadron being lost, the vessel is to be replaced by the British Government.

Under the terms of the proposed new agreement with the Admiralty, the Federal Government will be asked to provide for an annual subsidy of £200,000 per annum, instead of £106,000, or £2,000,000 for the period of ten years. In consideration of this concession the Admiralty will add about 8,000 tons to the displacement of the fleet and engage to keep it up-to-date, while the Australian Naval Station will be raised in status by the appointment of a Vice-Admiral, instead of a Rear-Admiral, to the Command.

The only war vessels which the State of New South Wales possesses are two small torpedo boats, the Acheron and the Avernus, which were manned by the Naval Artillery Volunteers; but the vessels are now out of Commission.

Victoria has the following vessels available for harbour defence:—

Name.	Class.	Displacement.	Armament.
Cerberus	Armoured turret ship (twin screw).	tons. 3,480	Four 10-in. 18-ton M.L.R., six 6-pdr. Q.F., four 1-in. Nordenfeldts, 4 barrels.
Countess of Hoptoun.	First-class steel torpedo boat.	120	Three 14-in. Mark IX R.G.F. torpedoes, and two 2-barrel Nordenfeldt 1-in. M. guns.
Childers	do do ..	63	Two 14-in. Fiume torpedoes, and two 1-pdr. Hotchkiss Q.F. guns.
Nepean	Second-class steel torpedo boat.	12	Two 14-in. Mark IV Fiume torpedoes.
Lonsdale	do do ..	12	do do do
Gordon	Wooden torpedo boat ..	12	Two 14-in. Mark IV Fiume torpedoes, three 2-barrel 1-in. Nordenfeldt guns.

In addition to the vessels mentioned, Victoria formerly had in commission two steel gunboats, the Victoria and the Albert, the wooden frigate Nelson, and the armed steamer Gannet. In consequence of the promulgation of an opinion by the Colonial Defence Committee that where there are complete fixed defences floating defences do not add to the strength of a place, but in most cases even tend to weaken it, by interfering with and limiting the arcs of fire of the battery guns, it was decided to dispose of the vessels named, and to give up the use of the Melbourne Harbour Trust's hopper barges, the Batman and the Fawknar. In 1896 the Government of Western Australia purchased the gunboat Victoria, with the intention of employing it in surveying service; and the frigate Nelson was sold in 1898 to be broken up.

Queensland has two gunboats, one of which, the Paluma, was formerly employed on survey service on the coast of Queensland at the joint expense of the Queensland and British authorities. Afterwards, the Paluma was lent to the Imperial Government; and, since handed back to Queensland in April, 1895, has been placed in reserve. The other gunboat, the Gayundah, was paid off and placed in reserve on the 30th September, 1892, and recommissioned on the 1st December, 1898. Particulars of the vessels available for the defence of Queensland ports are given below:—

Name.	Class.	Displacement.	Armament.
Gayundah.....	Steel gunboat (twin screw)	Tons. 360	One 8-in. B.L., one 6-in. B.L. Armstrong, two 3-pdr. 1½-in. Nordenfeldt, one 1-in. four-barrelled Nordenfeldt, one Maxim.
Paluma	do ..	360	One 6-in. B.L.; two 5-in. B.L.; two 1½-in. Q.F. Nordenfeldts; one 1-in. four-barrelled Nordenfeldt; one 0·45-in. five-barrelled Nordenfeldt.
Midge.....	Steam pinnace .....	....	Three machine guns.
Mosquito	Second-class steel torpedo boat.	....	One machine gun.

South Australia maintains one twin-screw steel cruiser, the Protector, of 920 tons. The armament of the Protector consists of one 8-in. 12-ton B.L., five 6-in. 4-ton B.L., and four 3-pdr. Q.F. The state also possesses two 6-in. 5-ton B.L. guns, intended for use in an auxiliary gun-vessel, and five Gatling machine guns for boat or land service. Tasmania owns one torpedo boat with dropping gear for Whitehead torpedoes. New Zealand possesses three Thorneycroft torpedo boats and two steam launches fitted for torpedo work.

COST OF DEFENCE.

The following table shows the expenditure by the Commonwealth Government on naval and military defence for the year ended 30th June, 1902:—

State.	Amount.	Per head.
	£	s. d.
New South Wales	309,137	4 6
Victoria	317,102	5 3
Queensland	186,062	7 3
South Australia	58,694	3 3
Western Australia	35,303	3 7
Tasmania	29,118	3 4
Commonwealth	£935,416	5 6

In all the states, with the exception of Western Australia, a certain amount of money has been spent out of loans for purposes of defence. Victoria, however, from 1872 to 1899 did not expend loan moneys on this service. The amounts thus spent during 1900-01 were as follow :—

	£
New South Wales.....	65,218
Victoria	4,080
Queensland	49,462
South Australia.....	16,255
Tasmania	1,827
Commonwealth	136,842
New Zealand	41,610
Australasia	£178,452

The total loan expenditure by each state for defence purposes to the end of the financial year 1900-1 was as follows :—

State.	Amount.	Per head.
	£	s. d.
New South Wales	*1,419,106	20 8
Victoria	137,435	2 4
Queensland	328,093	13 0
South Australia	260,328	14 4
Tasmania	126,378	14 7
Commonwealth	2,271,340	11 11
New Zealand	1,050,461	26 11
Australasia	£3,321,801	14 6

* Inclusive of £312,485 for naval station, Port Jackson.

There were probably small additional amounts spent from loans by each state during the financial year 1901-2, but the details are not at present available.

This does not represent the whole cost of the fortifications, as large sums have from time to time been expended from the general revenues of the states in the construction of works of defence; the amount of such payments, however, it is now impossible to determine.

In 1890 a military commission was appointed by the Imperial and the different Australian Governments to take evidence and report on the question of fortifying King George's Sound, Hobart, Thursday Island, and Port Darwin, at the joint expense of the states. The commission visited the points mentioned during 1891, and as a result of the evidence taken fortifications were erected at King George's Sound and Thursday Island; and it is probable that similar works will be begun at Hobart and Port Darwin in the near future. On 11th March, 1892, the four states New South Wales, Victoria, Queensland, and South Australia entered into a contract with Western Australia, to contribute to the cost of the defence of Albany. The agreement provided for one-fourth of the total expense to be defrayed by Western Australia, and three-fourths by the other states, the proportion to be paid by each to be calculated on the basis of its population. Western Australia was to provide the garrison and exercise general superintendence. A similar agreement was made on the 1st January, 1893, between the same five states for the defence of Thursday Island. In this instance each state contributed towards the total expense of maintaining the garrison in proportion to its population. The general management of all defence works is now in the hands of the Federal Government.

PRIVATE PROPERTY AND INCOMES.

THE first century of Australasian history closed on the 26th January, 1888, and though it is impossible to trace step by step the progress made during that period, as the data for the purpose are for the most part wanting, sufficient material is, however, available from which a comparative statement of the wealth of the States at different periods may be deduced. In the following figures the private property of the people has alone been considered, the value of the unsold lands of the State, as well as the value of public works, having been omitted. The table shows the value of private property for the whole of Australasia, and the increase thereof at intervals of twenty-five years from the date when this territory was first colonised :—

Year.	Value of Private Property.
	£
1788	Country first colonised.
1813	1,000,000
1838	26,000,000
1863	181,000,000
1888	1,015,000,000
1901	1,083,838,000

Though Australasia has but the population of a province of some of the great European powers, in the wealth and earnings of its people it stands before most of the secondary States, and as regards wealth and income per head of population it compares very favourably with any country.

The plan adopted in valuing the elements of private wealth is given in detail in previous issues of this work, and has not been greatly varied on this occasion. Land, houses, and other improvements thereon, represent more than two-thirds of the private wealth. There are now

ample data for assessing the value of these, for besides the municipal returns which are available for each State, there are complete land tax returns for New South Wales, New Zealand, and South Australia. From the data thus to hand, there has been no difficulty in arriving at the value of land separately from its improvements. For all Australasia, the value of land in private hands was in 1901, £411,747,000, out of a total wealth of £1,083,838,000; this represents a proportion of 38 per cent., varying in each State, as follows:—

State.	Value of Land.	Proportion of Value of all Property.
	£	per cent.
New South Wales	142,617,000	39·74
Victoria	112,396,000	40·30
Queensland	35,887,000	31·80
South Australia	34,080,000	41·73
Western Australia.....	8,813,000	21·78
Tasmania	16,488,000	45·86
Commonwealth	350,281,000	38·54
New Zealand	61,466,000	35·11
Australasia	411,747,000	37·99

The value of land and improvements together amounts to £738,910,000, or 68·18 per cent. of the total value of property. The following is a statement of the values for each State:—

State.	Value of Land and Improvements.	Proportion of Value of all Property.
	£	per cent.
New South Wales	263,052,000	73·29
Victoria	204,294,000	73·25
Queensland	63,796,000	56·53
South Australia	56,060,000	68·65
Western Australia.....	14,360,000	35·49
Tasmania	26,243,000	72·99
Commonwealth	627,805,000	69·08
New Zealand	111,105,000	63·46
Australasia	738,910,000	68·18

The improvements on the lands of the Commonwealth and New Zealand are valued at £327,163,000, which sum represents 79·46 per cent. of the value of land, ranging between 84·45 per cent. in New South Wales and 59·16 per cent. in Tasmania.

It has been found since the last issue of this volume that the value of State lands and of certain public works had been included in the valuation of property for New Zealand. This, of course, was an error, as the values are exclusive of State lands and the improvements made thereon. This explanation will account for the reduced figures for New Zealand that are now published.

Classification.	Commonwealth States.	New Zealand.	Total.
	£	£	£
Land	350,281,000	61,466,000	411,747,000
Houses and permanent improvements ..	277,524,000	49,639,000	327,163,000
Live stock	85,048,000	27,184,000	112,232,000
Furniture and household goods and effects	29,746,000	5,254,000	35,000,000
Personal effects	12,066,000	2,318,000	14,384,000
Machinery and implements of trade, excluding mining machinery	29,852,000	6,121,000	35,973,000
Shipping	5,874,000	1,777,000	7,651,000
Mining properties and plant	32,299,000	2,950,000	35,249,000
Merchandise and produce on hand	59,711,000	14,021,000	73,732,000
Coin and bullion	26,361,000	4,346,000	30,707,000
Total	908,762,000	175,076,000	1,083,838,000

The foregoing gives an average of £240 per inhabitant for Australasia, and £243 for the Commonwealth, which figures show a considerable reduction on those of 1890, when the average was not less than £309 per inhabitant. The results fall somewhat short of the truth, inasmuch as they do not take into account property rights, the value of which is not represented by land, buildings, machinery, &c. The case of gas companies may be cited as an example. The total value of the shares of and interests in these companies throughout Australasia is approximately £6,900,000, but in the statement of values of properties given above, the actual property of gas companies appears as value of land, machinery, plant, &c., £4,350,000, no note being taken of value of goodwill and other items which form an appreciable proportion of the value of these works. The actual selling value of the gas undertakings of Australasia is therefore £2,550,000 in excess of the value of their tangible assets, and there are many other cases where a like anomaly exists. For New South Wales it is found that the sum of £18,000,000 might be added to the valuation on this score, and probably a like amount for Victoria, but the data even for these States are imperfect, and it has not been considered desirable to take into consideration an item about which there is any uncertainty.

The distribution of the property amongst the various States is as follows :—

State.	Value of Property.	
	Total.	Per Inhabitant.
	£	£
New South Wales	358,934,000	265
Victoria	278,887,000	234
Queensland	112,860,000	230
South Australia	81,664,000	227
Western Australia	40,462,000	230
Tasmania	35,955,000	208
Commonwealth	908,762,000	243
New Zealand	175,076,000	229
Australasia	1,083,838,000	240

These figures must be taken with some qualification. The foregoing table shows the State wherein the property lies, but gives no indication as to the place of residence of the owners. As is well known, residents in Great Britain have very large interests in Australia and New Zealand, and persons residing in one State have large holdings in other States, thus residents of Victoria and South Australia have large investments in New South Wales, Queensland, and Western Australia, while residents of New South Wales are largely interested in Queensland properties, and if it were possible to locate the actual ownership of property throughout Australasia it would probably be found that the actual distribution is very different from the apparent distribution as shown above.

The figures available to illustrate the amount of property possessed by persons not living within the State in which their property is situated are by no means complete; indeed details of any kind are obtainable only for New South Wales, Victoria, and New Zealand.

An analysis of the information gathered by the Stamps Office in Sydney for the purpose of assessing the values of the estates of deceased persons shows that the ownership of the £27,949,895 on which stamp duty was paid during the last six years was as follows :—

	Total. £	Proportion per cent.
New South Wales	22,236,303	79·5
Great Britain.....	2,819,797	10·1
Victoria	1,810,800	6·5
Other States of Australia and New Zealand	940,560	3·4
Elsewhere	142,435	0·5
	£27,949,895	100·0

It may, therefore, be assumed that 20 per cent. of the property in New South Wales is owned by persons who live outside its boundaries, and 10·6 per cent. outside Australia.

In regard to Victoria, there is no direct evidence of ownership available, but the place of residence of the persons who pay income tax affords indirect evidence of great value. In the year 1900 it is estimated that the income of persons paying taxation in respect of incomes derived from property in Victoria was £4,192,281, and of this amount £812,406 was enjoyed by persons who resided out of Victoria. From this it would appear that something like 19 per cent. of property in Victoria is owned by absentees.

So far as New Zealand is concerned, there is both direct and indirect evidence. In the year 1888 the value of property assessed for property tax was £135,881,176, and of this sum £24,313,706, or 18 per cent., was returned as belonging to persons not residing in the colony. Since then the proportion of property held by absentees has probably declined to about 15 per cent., as there has of late years been no great import of capital into the colony, while during some years there have been considerable withdrawals.

The figures for New South Wales, Victoria, and New Zealand taken together show that 18½ per cent. of the property in those States belongs to absentees. The proportion for Queensland and Western Australia is probably greater than in the other States; for South Australia and Tasmania it is probably less. Adopting a reasonable estimate for these States, it may be said that, apart from Government stock held in London, the value of property in Australia belonging to non-residents of the States in which such property is situated, is not less than £164,000,000, and in New Zealand £18,500,000. In the case of Australia, a considerable portion of this property is held by persons residing in other States than those where the property is situated, and, if allowance be made on this account, it will be found that the value of property belonging to other than Australian residents is approximately £128,000,000. The question of the indebtedness of the Australasian States is referred to at length in another part of this chapter, and for further information the reader is referred to page 753.

DISTRIBUTION OF PROPERTY.

It is a somewhat prevalent practice amongst statisticians to make the valuations for probate purposes the basis of their estimates of the wealth of a country, but no reliance whatever can be placed upon the returns of values of estates assumed for probate purposes, for such returns at best only profess to give the apparent amount of property left by deceased persons, without any allowance for debts. There is, however, some show of reason for using the valuation of estates for stamp duty purposes. These valuations are far below the values for probate purposes; during the ten years ended with 1900 the probate returns in New South Wales give a total of £53,867,000, while the sworn valuation of the very same estates for stamp duty was £41,686,000, and there can hardly be any doubt that all the other States would show similar discrepancies. Much greater reliance could be placed upon estimates depending upon the

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amount of stamp duty paid, if the ages of the persons dying were taken into consideration; but information on this point is not procurable, except at excessive trouble, and the idea of using the valuations for stamp duty for estimating the amount of wealth in the country cannot, therefore, be resorted to.

The probate returns, however, are not without considerable statistical value, as will presently appear, and the returns for the five years ended with 1900 are, therefore, given below :—

State.	Number of Estates.	Total Value of Estates.	Average Value of Estate left by each Deceased Person leaving Property.
		£	£
New South Wales	11,886	28,339,908	2,384
Victoria	17,818	30,981,576	1,739
Queensland	2,955	8,297,308	2,807
South Australia	4,168	8,153,202	1,956
* Western Australia	1,077	1,777,212	1,650
Tasmania	1,120	1,786,791	1,595
Commonwealth	39,024	79,335,997	2,033
New Zealand	5,942	10,409,909	1,752
Australasia	44,966	89,745,906	1,996

* Four years only.

By comparing the number of persons who leave property at death with the number of persons dying some idea is obtained of the proportion of the whole population possessing estates sufficiently valuable to become the objects of specific bequest. This has been done for each year since 1880, and the following table shows the number of persons per hundred dying who were possessed of property, while the figures may also be taken as the proportion of the whole population owning property to the value of at least £100 :—

State.	Proportion of Estates per 100 deaths of total population.			
	1880-84.	1885-89.	1890-94.	1895-1900.
	per cent.	per cent.	per cent.	per cent.
New South Wales.....	11·0	11·6	13·2	15·15
Victoria	12·7	13·1	17·3	21·63
Queensland	6·6	8·8	10·2	10·17
South Australia	12·3	15·3	17·4	19·95
Western Australia ...	10·8	10·7	12·0	11·56
Tasmania	9·6	11·5	11·9	10·72
Commonwealth ...	11·1	12·0	14·1	17·23
New Zealand.....	.....	.....	9·4	15·97
Australasia.....	.....	.....	14·0	16·75

These figures show a distribution of property not to be paralleled in any other part of the world; and in a country where so much is said about the poor growing poorer and the rich richer, it is pleasing to find that in the whole population one in six is the possessor of property, and that the ratio of distribution has been increasing with fair regularity in every province of the group. Victoria has the widest diffusion of wealth of the individual States; South Australia comes next to Victoria; then come New Zealand, New South Wales, Western Australia, and Queensland; and lastly Tasmania. Too much stress may be laid on the apparently wider distribution of wealth in one State than in another, for it is obvious that a province with a stationary or decreasing population will naturally come out of a comparison of this kind more favourably than another with a rapidly-increasing population.

In the United Kingdom, during the five years 1890-94, the last period for which complete returns can be obtained, the number of estates on which legacy duty was paid was 257,351. Making the liberal allowance of one-fourth for successions, of which the number is not given in the *Statistical Abstract*, the total estates would be 321,700, as compared with 3,595,447 deaths, or a little over 8·9 per cent., as against 14·0 per cent. in Australasia during the same period. To show the wide distribution of property in these States, the following statement is even more useful than the figures just given. The comparison is made as for every hundred deaths of adult males, and for the same number of deaths of adult males and females. This latter method is undoubtedly the proper basis of comparison, as large numbers of females are possessors of a substantial amount of property:—

State.	Proportion of Estates per 100 deaths of adult males.				Proportion of Estates per 100 deaths of adult males and females.			
	1880-84.	1885-89.	1890-94.	1895-1900.	1880-84.	1885-89.	1890-94.	1895-1900.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
New South Wales	34·6	37·5	41·2	43·4	22·3	23·8	25·8	26·8
Victoria	38·8	39·7	49·8	58·8	23·4	24·2	30·2	34·3
Queensland	18·3	23·1	28·6	26·2	13·8	16·9	20·2	18·2
South Australia	50·0	53·5	59·4	62·7	29·1	30·9	32·3	34·2
Western Australia	29·5	29·3	31·2	27·0	19·8	19·6	21·1	20·4
Tasmania	26·0	31·6	33·2	29·5	15·8	19·4	20·1	17·2
Commonwealth ...	34·6	37·0	42·1	46·6	22·0	23·4	26·1	28·5
New Zealand .....	...	...	27·3	42·1	.....	.....	16·7	25·5
Australasia .....	...	...	41·6	46·0	.....	.....	25·8	28·1

Taking the returns of estates subject to stamp duties as the basis of comparison, and making allowance for those escaping duty, such as the

circumstances seem to warrant, the following table gives to each State the number of persons with property to the value of at least £100 :—

State.	Number of Estates exceeding £100 in value.
New South Wales	188,700
Victoria	225,900
Queensland	47,000
South Australia	61,900
Western Australia	23,100
Tasmania	15,000
Commonwealth	561,600
New Zealand	110,000
Australasia	671,600

The figures for some of the States may appear to be extraordinarily large, but they find strong support in the banking returns, especially those of the Savings Banks, given elsewhere in this chapter. There is a general assumption in dealing with this branch of statistics that few women possess property, and in dealing with property and incomes the position of women is often lost sight of. Full information regarding women's property is obtainable for New South Wales, and the following comparisons are interesting; the figures refer to the six years 1896 to 1901, but they differ somewhat in regard to the percentages from those in the preceding pages, which include all properties over £100 in value :—

	Males.	Females.
Number of persons dying who had property in excess of £200	10,166	3,610
Number residing in the State of New South Wales	9,483	3,443
Number residing elsewhere	683	167
Value of property devised	£24,531,377	£3,418,518
Average value of estates	£2,413	£947
Proportion of total adult population with estates over £200 in value	35 per cent.	20 per cent.

IMPORTATION OF CAPITAL.

Australasia ranks among the debtor nations. At the close of 1901 its people owed to persons outside its boundaries, or, more correctly speaking, there was invested in it by non-residents, and owing by its various Governments, a sum approximating to £387,772,000, or £84 per inhabitant. Of this large sum, £146,420,000 represents the private investments, and £241,352,000 the outstanding liabilities of the States and local governing bodies. More important in some respects than the corpus of the debt are the annual payments made in respect thereof. These can be stated with some exactitude. The yearly interest paid on account of State debts to other than Australasian creditors amounts to £7,991,000, and on account of local government debts

£642,000, while the income from private investments may be stated at £7,228,000, and the absentee incomes and return on shares held in London, £400,000. These various sums make up a total of £16,261,000, which is the tribute paid yearly by Australasia to London.

It has been stated above that the gross amount of investments by non-residents is £387,772,000. This sum may be divided into what was received prior to 1871, and what was received subsequent to that date, for 1871 may be conveniently taken as the opening year of latter-day Australasian finance. At the opening of 1871 these States stood indebted to Great Britain thus :—

	Commonwealth States.	New Zealand.	Total.
	£	£	£
On account of State and Municipalities	26,520,000	7,842,000	34,362,000
Private investments.....	33,090,000	5,504,000	38,594,000
Total	59,610,000	13,346,000	72,956,000

From 1871 to 1901 the increase of indebtedness was :—

	Commonwealth States.	New Zealand.	Total.
	£	£	£
On account of State and Municipalities	165,821,000	41,169,000	206,990,000
Private investments	94,861,000	12,965,000	107,826,000
Total.....	260,682,000	54,134,000	314,816,000

The figures just given are irrespective of the money brought by persons taking up their abode in Australasia; the amount of such money is very considerable, as will presently appear.

The interests of the various States are so intertwined that there is not a little difficulty in accurately determining the amount of capital imported on private account, in which each stands indebted to Great Britain. In former editions of this work such a distribution was made, but the changes that have taken place since 1893, in which year the bank crisis occurred, have been so many and so extensive, that a separation of the respective interests of the various States is well nigh impossible.

In considering the question of the annual payment made by Australasia to Great Britain—which is its sole creditor—it is important to have distinctly in view the fact that part of this income is payable irrespective of production, and part only arises when there has been antecedent production. In the first of these categories is the charge on State and municipal borrowings to the amount already stated

(£8,633,000), and from two-fifths to a half of the income from private investments, or, in round figures, £2,890,000—the two taken together making a sum of £11,523,000, or £2 10s. 4d. per inhabitant, which must be exported entirely irrespective of the condition of productive industry. It may here be remarked that there is another source of drainage from these States to be considered in estimating the tributary stream flowing from Australasia to England—that is, the income of absentee colonists, which for 1901 probably reached £400,000, a figure very greatly below that of previous years. The total payments to outside creditors or investors during 1901 may be summarised as follow :—

	£
Payments on account of State or municipal borrowings, and on account of private investments on which interest must be paid irrespective of the condition of production	11,523,000
Return dependent on antecedent production	4,338,000
Absentee incomes	400,000
	£16,261,000
Total.....	£16,261,000

Of the sum just given, £13,039,000 is paid by the States of the Commonwealth, and £3,222,000 by New Zealand.

From these figures it will be gathered that for these States to pay their way there ought to be an excess of exports over imports equal to the interest on loans outstanding and the earnings of investments—that is to say, if no capital were introduced and none withdrawn. But equilibrium in this respect is not to be looked for. Even now there is a stream of capital coming here in excess of what is withdrawn; and in the worst years several thousand persons arrive in Australasia with the intention of settling, a large proportion of whom bring with them some little capital with which to begin their career in their new home. In the foregoing pages the expression “capital introduced” must be taken in a qualified sense. Under the condition of equilibrium between the introduction and withdrawal of capital, as already demonstrated, Australasia would show an excess of exports representing the interest on State and other public loans and the tribute due to private investors. This export for 1901 was about £16,261,000, and it is therefore plain that Australasia might increase its indebtedness to the extent of over fifteen millions in any one year and at the same time show an equality between its imports and exports. With this explanation in mind it will not be difficult to understand how, in spite of the fact that during the last thirty-one years the indebtedness of Australasia was increased by £314,816,000, the money or money's worth actually received, as represented by the excess of imports, was less than that sent away by £4,910,000. Such is the operation of interest as affecting a debtor country. In further explanation of this view of the matter the following figures are given; they refer to the

borrowings of the Governments and local bodies during the thirty-one years 1871-1901 :—

State.	Borrowings of State and Local Government Bodies.	Interest on State and Local Government Loans.	Net Amount of Money introduced.
	£	£	£
New South Wales	54,322,000	41,473,000	12,849,000
Victoria	43,563,000	43,125,000	438,000
Queensland	29,435,000	23,885,000	5,550,000
South Australia	22,107,000	18,393,000	3,714,000
Western Australia	9,112,000	2,668,000	6,444,000
Tasmania	7,282,000	5,737,000	1,545,000
Commonwealth	165,821,000	135,281,000	30,540,000
New Zealand	41,169,000	46,498,000	(—) 5,329,000
Australasia	206,990,000	181,779,000	25,211,000

It will be seen that out of loans aggregating £206,990,000 a sum of only £25,211,000 reached Australasia, the balance of £181,779,000 being retained in London to meet interest charges, as a set-off against a similar sum which otherwise it would have been necessary to remit from Australasia. The figures in regard to private borrowings are still more striking :—

Private borrowings in excess of withdrawals	£ 107,826,000
Capital introduced by persons taking up their abode in Australasia	26,000,000
Total inflow of capital	£133,826,000
Earnings of investments of non-residents and incomes of absentees in excess of income derived by residents in Australasia from investments abroad	164,400,000
Excess of outflow over inflow	£30,574,000

It will be seen that, leaving out of consideration the capital introduced by immigrants, the return to investors, together with absentee incomes, has exceeded by over fifty-six millions the amount invested in Australasia, although of the principal sum, £107,826,000, still remains due. It may be difficult to conceive how such a result has been possible, but the difficulty will be lessened when it is remembered that at the beginning of the period embraced in the tables the Australasian States were already paying an annual tribute to private investors of £3,517,000, and, therefore, on account of debts incurred and investments made prior to 1871 something like 103 millions might have been paid away during the last thirty-one years without any reduction in the principal owing.

The movement of capital towards Australasia up to the end of 1870 presented no features of unusual importance, for the total sum received, though large, representing as it did rather more than £38 per inhabitant, was not larger than might reasonably have been expected to be introduced into a country so rapidly adding to its population and so fertile in resources. During this period the investments on private account and by the various Governments were almost equal in amount, but in

the twenty-five years that followed, the borrowing operations of the Governments far outstripped private investments. The following table shows the borrowings of the State and on private account up to the end of 1870, and in five-year periods subsequent to that date:—

Period.	Money raised by Government or Local Bodies.	Private Investments, excluding Immigrants' Capital.	Total.
	£	£	£
Prior to 1871	34,362,000	38,594,000	72,956,000
1871-75	20,999,000	*2,392,000	18,607,000
1876-80	32,804,000	11,407,000	44,211,000
1881-85	46,944,000	37,186,000	84,130,000
1886-90	53,374,000	49,077,000	102,451,000
1891-95	28,653,000	*1,322,000	27,331,000
1896-1901	24,216,000	13,870,000	38,086,000
Total	241,352,000	146,420,000	387,772,000

* Excess of withdrawals over investments.

In the foregoing table the importation of capital by immigrants has been neglected; if this be taken into consideration, the figures given in the next table show the full amount for the period subsequent to 1870:—

Period.	Total Capital Introduced.
	£
1871-75	23,010,000
1876-80	48,959,000
1881-85	90,504,000
1886-90	107,088,060
1891-95	30,705,000
1896-1901	38,717,000
Total	£338,983,000

The total indebtedness of Australasia to British investors has been set down in the foregoing pages as £387,772,000, and the annual return therefrom, excluding absentee incomes, £15,861,000. The capital sum represents a weight of £83 18s. 6d. per inhabitant, and the annual return £3 8s. 8d. The apparent interest earned is, therefore, slightly above 4 per cent., a rate which must be considered very favourable, seeing that £241,352,000, or three-fifths of the total, comprise Government and Municipal securities. The indebtedness of the States of the Commonwealth to British creditors amounts to £320,292,000, or £83 11s. 4d. per inhabitant, of which £192,341,000 is due by the central and local governing bodies, and £127,951,000 represents private investments. The indebtedness of New Zealand is £67,480,000, or £85 13s. 5d. per inhabitant, of which £49,011,000 is owing by the central and local governing bodies, and £18,469,000 represents private investments.

From the table given above showing the total amount of money including that brought to the country by immigrants introduced during each quinquennial period since 1870, it will be seen that the

net introduction of capital during the first period was £23,010,000, and of this New Zealand received £10,707,000, or nearly one-half, principally the proceeds of Governmental borrowings, the withdrawals of private capital being nearly as large as the amount introduced. Queensland and New South Wales had, during the period, an accession of capital to the extent of £4,329,000 and £4,321,000 respectively; in the one case the sum obtained by the State was £2,389,000, and by the public, £1,940,000, while in the other case the sum introduced by the State was £2,861,000, and by private persons something less than £1,500,000. The net sum introduced into Victoria was £2,982,000, the State having imported £3,352,000, while the export of private capital was some £370,000. Tasmania received in all £1,210,000, of which £220,000 was introduced by the State, and nearly one million by private persons, which must be reckoned a very considerable sum in view of the smallness of the population of the island. Nearly the whole sum introduced into Western Australia (£400,000) was by the Government. South Australia, even so far back as 1871-75, was in a very different position to the other States in regard to private investments. During the five years the State introduced £1,722,000, but £2,661,000 was withdrawn by lenders or sent out of the State for investment. Speaking generally, the period 1871 to 1875 was marked by large public borrowing, with a very moderate influx of private capital. During this interval the importation by the various Governments amounted to £2 per inhabitant yearly, the private investments being not more than 4s. per inhabitant.

The period from 1876 to 1880 showed a net importation of capital to the amount of £48,959,000, or more than twice the sum received during the preceding five years. Of the sum named, New Zealand received £15,396,000, or slightly less than one-third, although its population was only one-eighth of the whole of Australasia. The larger portion of the money brought to New Zealand was in the shape of Government loans, which amounted to £10,884,000, the net sum received on account of private investment being £4,512,000. New South Wales stood next as regards the amount of capital received, but the borrowing by the State and local bodies only amounted to £5,458,000, or half the sum raised by New Zealand, while the private investments amounted to about £8,168,000, of which nearly two millions were received with immigrants taking up their permanent abode in the State. The total capital imported into New South Wales during the five years was £13,626,000. Queensland received £8,028,000 during the period—an enormous sum, considering that the population was not more than 150,000. The money imported by the Government was £4,980,000, and that invested by private persons, £3,048,000. The Victorian Government imported £5,229,000, while the sum sent to the State by private investors, over and above the amount withdrawn, was £1,949,000. The South Australian Government borrowed largely during the five years, the sum raised being £5,217,000, but, as in the previous period, the sum

withdrawn by investors or sent to other States for investment exceeded the capital introduced by £1,644,000. Both Tasmania and Western Australia received less capital from abroad from 1876 to 1880 than in the previous five years, the amounts being £954,000 and £204,000 respectively. The Government borrowings were £671,000 in the one case and £365,000 in the other; but in Tasmania there was an investment of £283,000 by private persons, and a withdrawal of £161,000 in the case of Western Australia. Taking Australasia as a whole, the public borrowings during 1876-80 were large, amounting to £32,804,000, or a yearly sum of about £2 12s. per inhabitant. The import of private money continued on a more extended scale, the sum received in excess of withdrawals being £16,155,000, but nearly five millions of this sum were brought in by immigrants.

The facility with which New Zealand had been able to raise money on loan during the five years 1876-80 was an object lesson not lost on the Australian States, for during the five years from 1881 to 1885 the sum of £46,944,000 was raised by the various Governments and local bodies; while private investors, banks, and financial institutions poured in money at an almost equal rate, the net sum received on private account being, in round figures, £43,560,000. These sums represent yearly amounts of £3 2s. 4d. and £2 18s. 1d., or together over £6 per inhabitant—a rate of increase in indebtedness quite unparalleled in any country except in the next succeeding five years of Australasian history. Of the large sum of £90,504,000 received by these States, the share of New South Wales was £30,473,000. In the light of this statement it is easy to understand how, during this same period, though one of drought and restricted production, the industrial life of the State was marked by increasing wages, shorter hours, and full employment. The importation by the State amounted to £16,066,000, and by private investors to £14,407,000, but of the sum last quoted £2,719,000 represented the money brought by immigrants and entailed no burthen on the State for future interest to be exported. This period was, so far as New South Wales is concerned, the one marked by the most lavish borrowing by the State, though it yields to the subsequent quinquennium in regard to the importation of private capital. Queensland was next to New South Wales in receipt of most money during the period under review, the Government of that State having obtained £7,094,000, while private investments amounted to £12,505,000—enormous sums for a population of a quarter of a million. Included in the private investments, however, is the sum of £1,927,000 introduced by immigrants taking up their abode permanently in the State. The imports of capital into New Zealand during the quinquennium were still very heavy, amounting to £7,442,000 by the Government, and £10,475,000 on private account, or £17,917,000 in all. Of the private importation, £587,000 accompanied the owners who settled in the colony. The capital received by Victoria, which in the two preceding periods amounted to very moderate sums, now rose to £13,002,000,

viz., £8,519,000 on account of the Government, and £4,483,000 by private investors. The South Australian Government in 1881-85 was still a large borrower, £5,895,000 being raised and expended during that time, while, contrary to the experiences of previous periods, there was an importation on private account of £1,000,000. Tasmania, also, considerably increased its borrowings, the State raising £1,465,000 in the five years, while £425,000 was sent for investment or was received with the owners. The borrowing of the Western Australian Government for 1881-85 amounted to £463,000, but not more than £265,000 was received for private investment, or in all £728,000.

The next period, 1886-90, was marked by very extraordinary features. The average population of Australasia was 3,540,000, yet during the short space of five years the various States governing these people raised and expended £53,374,000, while an additional sum of £53,714,000 was received for investment on private account, or was introduced into the country by persons who made it their abode. But even more astonishment will be evinced on considering the detailed figures for each State. Of the large total received by the various States, considerably more than one-half—£54,690,000—was obtained by Victoria, and, as the population during the five years under review was 1,070,000, the inflow of capital amounted to over £51 per inhabitant. The State and local bodies borrowed and disbursed £16,987,000, which was the largest expenditure from the proceeds of loans that any State contrived to crowd into the short space of five years. The private capital introduced was £35,792,000, and the sum brought by persons taking up their abode in the country was £1,911,000. These figures afford a sufficient clue to the astounding impetus which trade received during these years, and the corresponding rise in land values. New South Wales, though not the recipient of so much money as its southern neighbour, nevertheless contrived to obtain £28,145,000—a far larger sum than could be conveniently absorbed in five years, especially as in the like preceding period £30,000,000 was absorbed. The capital introduced represented £11,571,000 of Government borrowings, £15,187,000 of private investments, and £1,387,000 brought by persons making New South Wales their home. The Queensland Government was also a large borrower, its loan expenditure during the five years, 1886-90, being not less than £9,581,000. The private capital introduced, however, fell off largely. The sum received, allowing for withdrawals to the amount of £3,360,000, was £1,574,000. The flow of private money to New Zealand practically ceased during the period now under consideration, amounting only to £632,000, as compared with £10,475,000 in the preceding five years; but Government borrowings still continued, and a sum of £6,560,000 was raised and expended. South Australia occupied an exceptional position, for though the Government introduced some £5,693,000, there was a large withdrawal of private capital, or, as it may be, an export of capital for investment in other States, so that the net import on public and private account amounted to £1,345,000. Tasmania, with its

population of 150,000, was well in the struggle for British investments, the State importation being £2,557,000, and the investment by private persons, £570,000; of this last sum £85,000 was introduced by persons taking up their abode in the State. It was about this period, too, that Western Australia began to attract attention as a field for investment, for over and above the sum of £425,000 introduced by the Government, about £1,009,000 was invested by private persons, perhaps one-fifth of the amount being accompanied by the investors themselves.

The recitation of borrowing just given brings the financial history of the Australias down to the close of 1890. Two years more of credit and investment remain to be traced, after which came the collapse of credit, and the events of May, 1893, still fresh in the public memory. That two years elapsed after the close of 1890 before Australasian public credit in London finally collapsed is true only of Victoria, and in a modified sense of New South Wales, Western Australia, and Tasmania. These States continued to be the recipients of British money, but private investments were—excepting in the case of Victoria—on a minor scale. Victoria received fresh capital to the extent of £8,834,000, of which amount only £464,000 was brought in by immigrants. New South Wales received from private investments over £3,000,000, but the withdrawals were also extensive, so that the net amount of capital invested was only £1,711,000. Western Australia received £952,000, of which £408,000 was accompanied by the owners. Tasmania received £792,000, and of this about £271,000 was introduced by permanent residents. Withdrawals of private capital were already in progress before the close of 1890, and were continued from South Australia, but to a less extent than in the preceding period. New Zealand ceased to receive any private money, while Queensland, for the first time in its history, showed a net withdrawal of capital, the amount of which during the two years was £2,011,000, but as the State had introduced £1,917,000, there was an actual withdrawal of £3,928,000. During the two years 1891 and 1892 the total capital imported into Australasia was £25,083,000, and of this £18,786,000 was introduced by the various Governments and local bodies.

During the three years which followed there was a withdrawal of private capital from Australasia to the extent of £7,619,000, so that in spite of the importation during the years 1891 and 1892, the quinquennium showed a net withdrawal of £1,322,000. There was during the period a movement of £20,088,000 apparently introduced, and £21,410,000 withdrawn; but this movement was mainly between the States themselves, and not between Australasia and Great Britain. Looking at the figures in detail, it would seem that there was an importation in excess of withdrawals of £14,686,000 into Victoria, and £2,382,000 into Western Australia. So far as Victoria is concerned, this introduction of money was not by way of investment; it was merely the recall by the large financial institutions of their capital from other

States. This withdrawal affected New South Wales and Queensland most largely; £10,162,000 was withdrawn from the latter province during the five years, and it is a great tribute to its resources and stability that this withdrawal should have been effected with so little disturbance to its financial position. New South Wales lost £4,481,000, part of which represents deposits gathered in London and withdrawn during the panic, and part transference of capital by branch institutions to the head office in Melbourne. From New Zealand £2,143,000 was withdrawn, and from South Australia £1,698,000. The withdrawal in nearly all cases was a silent one; and it is only when a financial institution absolutely failed and the courts were invoked to consent to the removal of assets that the community at large realised the process that had been going on.

Taking the whole period of five years, there was a total of £30,705,000 introduced. Of this sum, £28,653,000 represents the borrowings of the various Governments and local bodies, the share of each being as follows:—

New South Wales.....	£11,655,000
Victoria	5,430,000
Queensland	2,996,000
South Australia	638,000
Western Australia	2,291,000
Tasmania.....	1,835,000
Commonwealth	24,845,000
New Zealand	3,808,000
Australasia	£28,653,000

Even in this period immigration did not entirely cease, and it is estimated that an amount of £3,374,000 was introduced by persons who took up their permanent abode in the country.

The withdrawal of capital from Australia practically ceased in 1895. During the two following years, there was a considerable sum introduced chiefly to Western Australia, where the gold-fields claimed much attention from British mining speculators. In 1896 and 1897 about four millions of private capital were brought to New South Wales, a large part of which was money withdrawn during the period following the banking crisis. In 1899 and the two following years, about five and a half millions were sent to the same State, where business prospects appeared very bright. During the six years ending in 1901 there was an excess of imports over exports into Victoria of about £500,000; but as the payments on behalf of the Government in London exceeded the borrowings by £7,100,000, there would appear to have been an introduction of private capital to the extent of £7,600,000 in excess of payments made to British and other creditors on private account. The last could scarcely have been less than £9,350,000, so that the sum of £16,950,000 would stand as the amount of capital introduced into the State during the six years. The probabilities are entirely against the supposition that so large an amount of capital was brought to Victoria during those years, but there is evidence that from six to seven millions

of private capital found its way to Melbourne during the period. The balance, amounting to some £1,700,000 per annum, represents the earnings of Victorian capital invested outside the State boundaries, and the return for the business services which Melbourne renders to the Commonwealth.

The most interesting feature of the movement of capital during the six years, besides the one just mentioned, is the position assumed by Western Australia since 1897. For many years preceding 1897 the State had been the recipient of much capital, the return therefrom being by no means large. In 1899, for the first time during seventeen years, the exports of the State exceeded the imports. This excess has since continued and is indicative of the return made by Western Australia to the investors in its payable gold-mines. It is calculated that during the last five years this return has averaged within a few thousands of two millions sterling.

The total import of private capital into the Commonwealth during the last six years appears to have been nine and three-quarter millions, while the proceeds of State loans raised in London during the same period amounted to £24,896,000. During the two years 1896-7, Western Australia was the only borrower, its loans amounting to £1,846,000. This State has continued its public works policy, its borrowings in London averaging £1,200,000 a year. The proceeds of the loans have been applied mainly to railway extensions and water supply. New South Wales obtained from London £6,711,000; Queensland, £4,387,000; Victoria, £2,992,000; South Australia, £2,819,000; and Tasmania, £840,000 during the same period.

The New Zealand Government, during the six years 1896-1901, obtained £4,092,000, and the private investments made in the Colony amounted to £5,806,000, the bulk of both the State and private borrowings being made in the year 1899.

Taking Australasia as a whole, the State and municipal borrowings during the six years 1896-1901 amounted to £28,988,000, while £15,559,000 was introduced on private account, not including about £2,000,000 brought to the country by immigrants. The total introduction of capital, therefore, amounted to £44,547,000.

In speaking of the British capital invested in Australasia no mention has been made of the amount lost by the owners in unprofitable speculations, of which there have been not a few. From the nature of the case the sum total of these losses cannot be stated with any degree of accuracy; but there is no reason to suppose that the proportion is greater than would have occurred in like investments if made in the British Isles.

INCOME.

The incomes received by the people of Australasia can be determined with considerable accuracy, as the information available for such an estimate is fairly extensive. For New South Wales, Victoria, South

Australia, and New Zealand there are income-tax figures, in Queensland and Tasmania particulars of collections under dividend and income-tax acts, and for several of the States very full returns relating to land-values. Besides these direct sources of information there are official estimates of incomes for New South Wales and New Zealand. Excluding the revenues of the various State Governments, the yearly income derived from Australasia amounts to £221,336,000, and of this sum local residents draw £204,692,000, and British investors and absentees £16,644,000, and of this last-mentioned sum £9,016,000 represents income derived from Government or municipal stocks, and £7,628,000 the amount from private sources. Of the total income (£221,336,000) the States of the Commonwealth claim £182,868,000, and New Zealand £38,468,000, the incomes of non-residents in each case being £13,378,000 and £3,266,000.

Leaving out of consideration the income drawn by debenture-holders in England, it would appear that the income derived from private sources for each of the principal States was in 1901 :—

State.	Total.	Per Inhabitant.
	£	£
New South Wales	64,936,000	47·3
Victoria	51,422,000	42·7
Queensland	23,868,000	47·3
South Australia	16,374,000	45·1
Western Australia.....	12,021,000	64·1
Tasmania	7,285,000	42·0
Commonwealth	175,906,000	46·2
New Zealand	36,414,000	46·7
Australasia	212,320,000	46·3

Dividing the incomes into two categories, viz., those below and those above £200 a year, very interesting results are obtained; the figures do not include the sum of £9,016,000 paid to non-resident debenture-holders and holders of local government stock :—

State.	Number of persons with incomes of £200 and over.	Total Incomes £200 and over.	Total Incomes under £200.
	No.	£	£
New South Wales.....	29,700	19,306,000	45,630,000
Victoria	28,498	13,530,000	37,892,000
Queensland	9,050	5,393,000	18,475,000
South Australia.....	9,630	4,934,000	11,440,000
Western Australia.....	3,835	1,611,000	10,410,000
Tasmania	4,140	1,657,000	5,628,000
Commonwealth	85,753	46,431,000	129,475,000
New Zealand	12,606	7,566,000	28,848,000
Australasia	98,359	53,997,000	158,323,000

The amount of income derived from private sources (that is to say, all incomes except payments made by the various governments and local bodies to their debenture-holders), is thus £212,320,000, and of this amount £7,628,000, or slightly over 3½ per cent., is drawn by non-residents, in addition to the sum of £9,016,000 paid to debenture-holders.

The incomes of the various States depend in a very large measure upon the number of adult male workers in those States, and the variations in the rates per inhabitant disclosed by the foregoing table, are largely due to the different proportions which these workers form of the general population. Amongst the Australian States Victoria and Western Australia stand at the extremes, the former with 307 adult males per thousand of the population, and the latter with 477 per thousand, and it is, therefore, easy to understand how, in such circumstances, the revenue per head of population in Western Australia so greatly exceeds that of Victoria.

In the last edition of this work attention was directed to the smallness of the aggregate incomes in Victoria subject to taxation—that is, incomes in excess of £200. In the year then reviewed the total of such incomes was £10,080,000, and the opinion was hazarded that the amount was greatly understated. Confirmation of this opinion was given by the increase, in the year immediately following, of the amount of taxable incomes, and in the present calculation the Victorian incomes have been set down at £13,530,000, which is an increase of over 34 per cent. When it is remembered that the assessed incomes of New South Wales, excluding altogether those derived from the use or occupancy of land—that is to say, incomes aggregating £7,166,000—amount to £12,140,000, or only about one million below the total of all Victorian incomes, it is difficult to avoid the conclusion that even at this increased amount these incomes are largely understated. It is impossible, however, to reject the Victorian income tax returns and set up unofficial figures in their place, so that these figures have been used in all the estimates given in this chapter.

The incomes drawn from investments by persons non-resident amount to £7,228,000, and about £400,000 is spent by Australians resident in Europe. Of the first mentioned amount, £2,832,000 is drawn from New South Wales, or nearly 4½ per cent. of the total incomes of the State apart from payments to debenture-holders; £1,802,000 is drawn from Victoria, or 3½ per cent.; £1,366,000 from Queensland, or nearly 6 per cent.; and £1,132,000, equal to a little over 3 per cent., from New Zealand.

The figures just given of the incomes of the people, read with those in regard to property and production, admit of several very interesting comparisons as to the relation of one to the other. The following figures show the percentage which the incomes drawn in each state bear to the

value of private wealth, the incomes being distinguished into total incomes and those over £200 a year.

State.	Percentage which Total Incomes bear to value of private property.	Percentage which Incomes over £200 bear to private property.
New South Wales	17·9	5·3
Victoria.....	18·3	4·8
Queensland	21·5	4·9
South Australia	20·1	6·0
Western Australia.....	30·8	5·8
Tasmania.....	20·4	4·6
New Zealand.....	20·4	4·2

The incomes of the country usually exceed the value of the production; the more various and developed the industries the greater will be the income which results from production.

The following is a statement of the incomes obtained in each state and the value of production in that state, as set out on page 806. It will be seen that in each case the incomes exceed the production; in Western Australia, however, the excess is very little above 2 per cent., whereas in the case of Victoria the excess is nearly 78 per cent. The low percentage of income given off by production in the case of Western Australia is explained by the fact that of the total production of £12,544,000, the value of gold won exceeds £7,000,000, and the income given off, so to speak, by this production is far less than the value of the production itself, for the winning of gold not only is a costly process, but when the precious metal is obtained, the cost of carriage and handling and other expenses form but a trifling percentage of its value.

State ¹	Percentage which Total Incomes bear to value of production.	Percentage which Incomes over £200 bear to production.
New South Wales	166·7	49·6
Victoria.....	177·8	46·8
Queensland	141·0	31·8
South Australia	158·8	47·8
Western Australia.....	102·2	19·2
Tasmania.....	144·7	32·9
New Zealand.....	128·0	26·6

OLD AGE PENSIONS.

The question of granting pensions to aged persons has been of late years much discussed throughout Australia and New Zealand, and at the present time the old age pension system is in operation in New South Wales, Victoria, and New Zealand. The last named province was the .

first to legislate in regard to the matter, and pensions were payable from 1st April, 1898.

Every person in New Zealand, of the full age of sixty-five years, or upwards, is entitled to a pension, provided he has resided continuously in the colony for twenty-five years, certain concessions in regard to residence being made in favour of seamen and others. To be entitled to a pension, a person must not possess an income in excess of £52 a year, nor property exceeding £270 in value. There are also other qualifications, principally affecting good citizenship. The full pension is £18 a year, payable in monthly instalments. For each £1 of income above £34 a year, and for each £15 of property above £50, £1 per annum is deducted from the amount of the pension. In March, 1902, there were 32,000 persons in New Zealand whose ages exceeded sixty-five years, and of these 12,776 had already been granted pensions, 10,900 in the full amount, and 1,876 in sums ranging from £1 to £17. The average pension paid was £17 and the sum payable in respect of all pensions, excluding management, is £217,192. The proportion of the population who claim old age pensions varies according to the locality. This variation is due partly to the differences in the proportion of the persons above the pension age, and partly to the fact that in districts where mining is the chief industry, few persons are able to earn their living after they reach sixty-five years. The proportion of pensioners to the population over sixty-five years of age is about 40 per cent., and the proportion of pensioners to those qualified, both by age and residence, is about 50 per cent.; but there can be hardly any doubt that both the number of pensioners and the proportion to total population will increase considerably during the next few years.

The old age pension scheme sanctioned by the Parliament of New South Wales specifies a pension of £26 a year, diminished by £1 for every £1 of income above £26 a year, and by £1 for every £15 of property that the pensioner possesses. Where a husband and wife are each entitled to a pension, the amount is fixed at £19 10s. a year each, unless they are living apart under a decree of the Court or a deed of separation, when the full sum of £26 will be allowed. Persons under 65 years of age but over 60 years are entitled to pensions if they are incapacitated by sickness or injury from earning their livelihood, but debility due merely to age is not considered as an incapacitating sickness.

The pension system came into force on the 1st August, 1901, and at the close of the first pension year there were 22,252 pensions current, representing an annual payment of £531,823 or £23 18s. per pension. There were on 1st August, 1902, 2,656 persons of ages between 60 and 65 years in receipt of pensions, and 19,596 persons of 65 years and upwards. The total population, 65 years and over, was 47,426, so that the proportion receiving pensions was 41·3 per cent. Full pensions of £26 were paid to 15,610 persons, and 3,893 of £19 10s. to married persons, while 2,749 persons received less than full pensions in amounts varying from £1 to £25.

The pension system of Victoria differs very materially from that in operation in New South Wales and New Zealand. The average weekly income of a claimant in Victoria during the six months immediately preceding the grant of a pension must not have amounted to 8s. per week (in New South Wales the sum allowed is £1 per week); he must also have made reasonable efforts to provide for himself, and this is not necessary either in New South Wales or New Zealand, where the pension is granted in consideration of old age, and a citizen may enjoy his pension on attaining the age of 65, whether he is able to work or not; indeed, the law allows him to supplement his income to the extent of 10s. per week, in the case of New South Wales, and 13s. in that of New Zealand; the total income enjoyed by the pensioner may, therefore, in these two States, amount to 20s. per week. In Victoria, the amount of pension is determined by the Commissioners appointed to adjudicate on the matter, and 8s. is the maximum allowed; but the Commissioners have to determine what sum less than 8s. may be reasonable and sufficient to meet the wants of the claimant. Moreover, when a claimant, although he has attained the statutory age of 65 years, appears to be physically capable of earning or partly earning his living, a pension may be refused or fixed at a lower sum than 8s. As noted before, the total income of a pensioner in New South Wales may reach 20s., that is 10s. over and above a full pension; but in Victoria, the limit of a pensioner's income from all sources is 8s., although, under certain conditions, he may be allowed to earn a sum which, with his pension, will amount to 10s. in all. The statutory maximum of pension is diminished by 6d. per week for every £10 of savings accumulated by the claimant, or by the value of the board and lodging which he may receive; the value of such board and lodging, however, may be taken at any sum not exceeding 5s. per week. Proceedings to obtain an old age pension are usually in open court, but the Commissioners dealing with the claim may dispense with the personal attendance of the claimant where the latter is physically unfit, or where the claim is one that obviously should be granted. Relatives—if the father, mother, brother, sister, or child of the claimant—are required to assist in the maintenance of the pensioner, where their means are sufficient to allow them to do so, and they may be brought before the Commissioners' Court to prove their inability to contribute to the maintenance of the pensioner to whom they are said to be related.

It will be seen that, whereas in New South Wales and New Zealand the old age pension is a gift by the State to citizens who have contributed by taxation, and who, as the preamble to the New South Wales Act declares, have during the prime of life helped to bear the public burthens of the State by the payment of taxes, and by opening up its resources by their labour and skill, in Victoria the pension partakes more of the nature of a charitable dole. It is easy to understand, therefore, how it is that in New South Wales there are 22,252 persons who are in receipt of pensions, and in New Zealand 12,776, while in Victoria

the number is only 13,410, although the persons of 65 years and upwards in Victoria number 66,452 compared with 47,426 in New South Wales and 31,965 in New Zealand.

The number of persons of 65 years and upwards in Australasia was, at the beginning of 1902, 184,630, of whom 152,665 resided in the Commonwealth and 31,965 in New Zealand. These figures are deduced from the census returns and are probably in excess of the truth, as a large number of persons, in anticipation of the establishment of a general system of old age pensions, described themselves as over 65 years of age, though in reality they had not reached that age. However, accepting the figures as they stand, the following are the numbers in the various States of the Commonwealth :—

New South Wales	47,426
Victoria	66,452
Queensland	13,237
South Australia	15,029
Western Australia	3,513
Tasmania	7,008

152,665

Proposals have been made from time to time for the Commonwealth Government to institute a system of old age pensions applicable to persons resident in any of the States, an objection to the present State system being that residence of twenty years in the case of Victoria and of twenty-five years in the case of New South Wales is a condition precedent to the granting of a pension. There are a large number of persons who have been twenty-five years in Australia but whose time has been spent in two or more States and who, therefore, would not under any State system likely to be put into operation be entitled to a State pension. These persons would be eligible under a federal system to receive pensions in virtue of their residence in Australia.

The proportion of the 152,665 persons of 65 years and upwards now in the Commonwealth, who were born or have resided for twenty-five years in Australia, is probably about 84 per cent., and the proportion qualified to receive a pension about 43 per cent., so that if a federal pension scheme had been in operation on 1st January, 1902, there would have been 65,650 pensioners over 65 years of age. The cost of this scheme, according to the New South Wales rates, would be £1,575,600 per annum, and according to the New Zealand rates, £1,132,500. The New South Wales system, as before stated, provides for pensions to persons between the ages of 60 and 65 years, incapacitated, by reason of physical infirmity from earning their livelihood. If provision were to be made by the Commonwealth for such persons according to the New South Wales scale, the cost of the pension system would be about £1,800,000.

ACCUMULATION.

BANKING.

THE laws relating to banks and banking at present in force are susceptible of great improvement, and in 1893 the failure of many monetary institutions which posed as banks directed attention to the urgent necessity for entirely revising the conditions under which deposits might be taken from the general public, but so far no new legislation has been enacted. All institutions transacting the business of banking are required by law to furnish, in a specified form, quarterly statements of their assets and liabilities, and from these statements and the periodic balance-sheets the tables in this chapter have been compiled. The returns furnished by the banks, though in compliance with the laws of the States, are by no means satisfactory, being quite unsuited to the modern methods of transacting banking business, and they cannot be accepted without question as indicating the stability or instability of the institutions by which they are issued. As a rule, nothing can be elicited beyond what is shown in the half-yearly or yearly balance-sheets. No uniformity is observed as regards the dates of closing the accounts, and the modes of presentation are equally diverse. Important items which should be specifically stated are included with others of minor import, and, in some cases, current accounts are blended with other accounts instead of being separately shown. The value of the information vouchsafed to the public is illustrated by the fact that it was impossible to obtain from the publications of several institutions suspending payment in 1893 the amount of their liabilities either to the public or the State, and these particulars were never disclosed.

CAPITAL RESOURCES OF BANKS.

According to the latest information published, the paid-up capital of the twenty-two banks operating in Australasia is £20,366,153, of which £5,315,744, inclusive of £2,000,000 guaranteed to the Bank of New Zealand by the Government of that colony, has a preferential claim on the profits of the companies. Below will be found a statement of the ordinary and preferential capital of each bank at the date shown, with the amount of the reserve fund of the institution. In the case of several companies which were reconstructed, there are reserves which

are held in suspense pending realisation of assets, and of these no account has been taken in the table :—

Bank.	Date of Balance-sheet.	Capital paid up.			Reserve Fund.
		Ordinary.	Preferential.	Total.	
		£	£	£	£
Australian Joint Stock Bank (Ld.)	30 June, 1902	1,168,042	....	1,168,042	*236,887
Bank of Adelaide	31 Mar., 1902	400,000	....	400,000	185,000
Bank of Australasia	14 Oct., 1901	1,600,000	....	1,600,000	995,000
Bank of New South Wales	31 Mar., 1902	2,000,000	....	2,000,000	1,270,000
Bank of New Zealand	31 Mar., 1902	427,320	2,000,000	2,427,320	23,474
Bank of North Queensland (Ld.)	30 June, 1902	100,000	....	100,000	12,500
Bank of Victoria (Ld.)	30 June, 1902	1,061,250	416,760	1,478,010	130,000
City Bank of Sydney	30 June, 1902	400,000	....	400,000	100,244
Colonial Bank of Australasia (Ld.)	31 Mar., 1902	133,642	304,044	437,686	30,000
Commercial Bank of Australia (Ld.)	30 June, 1902	1,132,762	2,117,230	3,249,992	....
Commercial Banking Co. of Sydney (Ld.) ..	30 June, 1902	1,000,000	....	1,000,000	1,010,000
Commercial Bank of Tasmania (Ld.)	28 Feb., 1902	141,492	....	141,492	100,000
English, Scottish, and Australian Bank (Ld.)	30 June, 1901	539,438	....	539,438	†110,466
London Bank of Australia (Ld.)	31 Dec., 1901	743,985	171,930	915,915	....
National Bank of Australasia (Ld.)	31 Mar., 1902	1,192,440	305,780	1,498,220	60,000
National Bank of New Zealand (Ld.)	31 Mar., 1902	250,000	....	250,000	110,000
National Bank of Tasmania (Ld.)	31 May, 1902	152,040	....	152,040	22,500
Queensland National Bank (Ld.)	30 June, 1902	413,036	....	413,036	24,000
Royal Bank of Australia (Ld.)	31 Mar., 1902	150,000	....	150,000	15,000
Royal Bank of Queensland (Ld.)	30 June, 1902	444,962	....	444,962	54,000
Union Bank of Australia (Ld.)	31 Aug., 1901	1,500,000	....	1,500,000	1,000,000
Western Australian Bank	31 Mar., 1902	100,000	....	100,000	225,000

* Includes £184,837, proceeds derived from discharge of B Deposits.

† Includes Capital Reserve Account.

The preceding table shows the position of the capital account at date of balancing; but a number of the banks had made calls on their shareholders which will increase their paid-up capital. The amount of these

calls and the total working capital that will be available when they are met are appended :—

Bank.	Capital paid and being called up.		
	Paid up.	Being called.	Total Working Capital.
	£	£	£
Australian Joint Stock Bank (Limited)	1,168,042	6,473	1,174,515
Bank of Adelaide	400,000	.....	400,000
Bank of Australasia	1,600,000	.....	1,600,000
Bank of New South Wales	2,000,000	.....	2,000,000
Bank of New Zealand	2,427,320	72,030	2,500,000
Bank of North Queensland (Limited)	100,000	.....	100,000
Bank of Victoria (Limited)	1,478,010	.....	1,478,010
City Bank of Sydney	400,000	.....	400,000
Colonial Bank of Australasia (Limited)	437,686	1,594	439,280
Commercial Bank of Australia (Limited)	3,249,992	1,484	3,251,476
Commercial Banking Company of Sydney (Limited) ..	1,000,000	.....	1,000,000
Commercial Bank of Tasmania (Limited)	141,492	.....	141,492
English, Scottish, and Australian Bank (Limited)	539,438	.....	539,438
London Bank of Australia (Limited)	*915,915	750	916,665
National Bank of Australasia (Limited)	1,498,220	.....	1,498,220
National Bank of New Zealand (Limited)	250,000	.....	250,000
National Bank of Tasmania (Limited).....	152,040	.....	152,040
Queensland National Bank (Limited)	413,036	2,212	415,248
Royal Bank of Australia (Limited)	150,000	.....	150,000
Royal Bank of Queensland (Limited)	444,962	.....	444,962
Union Bank of Australia (Limited)	1,500,000	.....	1,500,000
Western Australian Bank	100,000	.....	100,000

* Includes £8,190 prepaid on account of Reserve Liability.

The paid-up capital of the banking companies now operating in Australasia has increased from £14,724,587 before the crisis to £20,366,153, or by £5,641,566. In 1893, however, there were in existence two banks, with a combined capital of £900,000, which are now defunct; and it should also be mentioned that capital to the amount of £6,242,685 has been written off during the last nine years, including £500,000, the value of shares of the Bank of New Zealand issued to the Crown, and re-purchased.

LIABILITIES AND ASSETS OF BANKS.

The liabilities of the banks enumerated, at the dates which have been previously given, totalled £141,760,522, against which amount assets aggregating £168,918,615 were shown. The following table gives the liabilities of each institution to the public, notes in circulation

and deposits being distinguished from other liabilities. In some cases small items which should be classed with "other liabilities" are included with deposits, as they cannot be distinguished in the balance-sheets; and in the case of the Commercial Bank of Australia (Limited), the accounts of the assets trust have been excluded:—

Bank.	Notes in Circulation.	Deposits.	Other Liabilities to Public.	Total Liabilities to Public.
	£	£	£	£
Australian Joint Stock Bank (Limited)	110,142	6,063,114	201,585	6,374,841
Bank of Adelaide	134,903	1,838,643	227,596	2,191,142
Bank of Australasia	482,868	13,878,371	2,374,977	16,736,216
Bank of New South Wales	976,820	21,464,248	3,292,447	25,733,515
Bank of New Zealand	759,464	10,016,639	699,615	11,475,718
Bank of North Queensland (Limited) .....	.....	230,311	90,519	320,830
Bank of Victoria (Limited)	117,921	4,561,005	730,854	5,469,780
City Bank of Sydney	68,045	1,125,836	694	1,194,575
Colonial Bank of Australasia (Limited)	120,896	2,485,384	196,355	2,802,635
Commercial Bank of Australia (Limited)	142,332	3,387,912	385,425	3,915,669
Commercial Banking Company of Sydney (Ltd.)	477,301	11,964,545	546,613	12,988,519
Commercial Bank of Tasmania (Limited)	54,843	1,517,616	.....	1,572,459
English, Scottish, and Australian Bank (Ltd.) ..	24,472	5,013,459	427,329	5,465,260
London Bank of Australia (Limited)	181,166	4,240,163	651,276	5,072,605
National Bank of Australasia (Limited)	325,914	6,318,773	1,425,131	8,069,818
National Bank of New Zealand (Limited)	252,339	2,732,951	333,527	3,318,817
National Bank of Tasmania (Limited)	65,209	460,950	20,578	546,737
Queensland National Bank (Limited) .....	.....	7,062,408	403,243	7,465,746
Royal Bank of Australia (Limited)	9,393	600,644	185,880	795,917
Royal Bank of Queensland (Limited) .....	.....	879,322	42,997	922,319
Union Bank of Australia (Limited)	466,254	14,678,803	2,222,660	17,367,717
Western Australian Bank	140,578	1,809,260	63,849	2,013,687

The assets of each bank are shown below:—

Bank.	Coin and Bullion.	Advances.	Other Assets.	Total Assets.
	£	£	£	£
Australian Joint Stock Bank (Limited)	466,789	6,360,790	974,894	7,802,473
Bank of Adelaide	383,659	1,574,477	866,429	2,824,565
Bank of Australasia	2,977,526	13,930,456	2,517,471	19,425,453
Bank of New South Wales	5,220,098	20,328,787	3,575,680	29,130,565
Bank of New Zealand	1,488,063	6,137,134	6,473,816	14,099,013
Bank of North Queensland (Limited)	49,515	298,422	94,013	441,950
Bank of Victoria (Limited)	961,109	4,853,736	1,251,572	7,066,417
City Bank of Sydney	288,438	1,235,413	188,821	1,712,672
Colonial Bank of Australasia (Limited)	409,927	2,403,569	475,529	3,289,025
Commercial Bank of Australia (Limited)	1,057,411	4,324,424	1,844,879	7,226,714
Commercial Banking Company of Sydney (Ltd.) ..	2,531,576	9,140,293	3,402,042	15,073,911
Commercial Bank of Tasmania (Limited)	216,738	1,192,980	417,991	1,827,709
English, Scottish, and Australian Bank (Ltd.) ..	735,931	4,740,003	687,048	6,162,982
London Bank of Australia (Limited)	804,535	4,065,454	1,152,689	6,022,678
National Bank of Australasia (Limited)	1,245,613	5,696,308	2,733,703	9,675,624
National Bank of New Zealand (Limited)	547,516	2,901,929	292,590	3,742,044
National Bank of Tasmania (Limited)	157,037	543,506	31,873	732,416
Queensland National Bank (Limited)	826,190	5,485,169	1,603,423	7,914,782
Royal Bank of Australia (Limited)	165,591	576,486	232,710	974,787
Royal Bank of Queensland (Limited)	245,101	1,025,549	160,735	1,431,385
Union Bank of Australia (Limited)	3,283,713	14,122,575	2,570,928	19,977,216
Western Australian Bank	1,102,436	990,714	271,084	2,364,234

RESULTS OF WORKING OF BANKS.

The results of working of each bank for the latest period for which information is available are given below. With the exception of the Bank of Adelaide, the Bank of New Zealand, the English, Scottish, and Australian Bank, the London Bank of Australia, and the National Bank of New Zealand, for which the figures refer to twelve months' operations, the amounts given cover a period of six months. The dates of the balance-sheets are as shown on page 771 :—

Bank.	Class of Shares.	Amount brought forward.	Net Profits less Rebate on Bills current.	Dividend paid.		Amount transferred to Reserve Accounts, Reduction of Premises Account, &c.	Amount carried forward.
				Rate per cent. per annum.	Amount.		
Australian Joint Stock Bank (Ltd.)..	Ordinary ..	£ 20,660	£ 2,043	..	..	..	£ 22,703
Bank of Adelaide	" ..	18,498	45,925	8	32,000	15,000	17,423
Bank of Australasia	" ..	14,160	140,077	10	80,000	60,000	14,237
Bank of New South Wales	" ..	11,543	115,507	10	100,000	15,000	12,050
Bank of New Zealand	{ Preferential } ..	{ 50,000	{ \$172,501	{ ..	{ ..	{ 50,000	{ 101,135
	{ Ordinary ..	{ ..	{ ..	{ 5	{ 21,366	{ ..	{ ..
Bank of North Queensland (Limited)	Ordinary ..	584	2,037	2½	1,313	1,250	58
Bank of Victoria (Limited)	{ Preferential } ..	{ 15,304	{ 33,323	{ ..	{ 10,419	{ 10,000	{ 9,636
	{ Ordinary ..	{ ..	{ ..	{ 3½	{ 18,572	{ ..	{ ..
City Bank of Sydney	Ordinary ..	9,837	8,016	4	8,000	..	9,853
Colonial Bank of Australasia (Ltd.)..	{ Preferential } ..	{ 1,531	{ 17,173	{ 5	{ 7,601	{ 5,000	{ 2,762
	{ Ordinary ..	{ ..	{ ..	{ 5	{ 3,341	{ ..	{ ..
Commercial Bank of Australia (Ltd.)	{ Preferential } ..	{ 27,619	{ 67,852	{ 3	{ 31,758	{ 34,418	{ 20,205
	{ Ordinary ..	{ ..	{ ..	{ ..	{ ..	{ ..	{ ..
Commercial Banking Co. of Sydney (Limited)	Ordinary ..	24,138	51,254	10	50,000	..	25,392
Commercial Bank of Tasmania (Ltd.)	" ..	5,118	8,640	8	5,943	5,000	2,815
English, Scottish, and Australian Bank (Limited)	" ..	7,018	40,800	3½	18,880	†21,311	7,627
London Bank of Australia (Limited)	{ Preferential } ..	{ 10,805	{ 23,353	{ 5½	{ *23,640	{ ..	{ 10,518
	{ Ordinary ..	{ ..	{ ..	{ ..	{ ..	{ ..	{ ..
National Bank of Australasia (Ltd.)..	{ Preferential } ..	{ 13,192	{ 34,394	{ 5	{ 7,644	{ 5,000	{ 14,074
	{ Ordinary ..	{ ..	{ ..	{ 3½	{ 20,868	{ ..	{ ..
National Bank of New Zealand (Ltd.)	Ordinary ..	8,294	64,933	†10	†25,600	40,000	8,227
National Bank of Tasmania (Limited)	" ..	6,667	4,472	5	3,991	..	7,148
Queensland National Bank (Limited)	" ..	..	25,605	..	3,000	22,605	..
Royal Bank of Australia (Limited) ..	" ..	6,810	7,060	5	3,756	7,500	2,620
Royal Bank of Queensland (Limited)	" ..	1,080	9,024	3	6,700	2,000	1,404
Union Bank of Australia (Limited) ..	" ..	23,818	95,681	8	60,000	35,000	29,490
Western Australian Bank	" ..	8,131	17,416	17½	8,750	..	16,797

* For 2½ years. † Including bonus of 2 per cent. per annum. ‡ Includes further payment of 1½ per cent. on Deferred Inscribed Stock (£12,894); purchase of Deferred Inscribed Stock (£7,417); and Officers' Guarantee and Provident Fund (£1,000). § See explanation in text following table.

The total net profit for the Bank of New Zealand was £289,502, and the interest on guaranteed stock amounted to £80,000, leaving £209,502 for distribution. Of this sum £37,001 was allocated to the various

estate and property accounts ; £50,000 was paid to the Assets Realisation Board and £21,366 for dividend on ordinary shares at 5 per cent. : leaving a balance of £101,135 which must be paid to the Assets Realisation Board, while the £50,000 brought forward from the previous year was also paid to the same Board. The dividend paid by the Queensland National Bank represents a repayment to the Government of that State in terms of the scheme of arrangement, and the amount transferred to reserve fund, &c., includes £6,000 paid to private depositors' repayment fund. The net profit shown for the London Bank of Australia, and the English, Scottish, and Australian Bank (Limited), is exclusive of the interest on Transferable Fixed Deposits, Debenture Stocks, &c. ; while the earnings of the Commercial Bank of Australia (Limited), include the amount transferred to the Special Assets Trust Reserve Account. The dividend tax payable by the two Tasmanian banks, the Royal Bank of Queensland, and the Bank of North Queensland has been included in the amount of dividend shown in the table.

BANKING BUSINESS OF EACH STATE.

Of the twenty-two banks operating in Australasia at the beginning of 1902, thirteen had offices in New South Wales, eleven in Victoria, eleven in Queensland, seven in South Australia, six in Western Australia, four in Tasmania, and five in New Zealand. There were only two banks doing business in all the seven states ; one transacted business in six states ; one in five states ; two in four ; two in three ; four in two ; and ten banks did not extend their business beyond the limits of one state or colony. The majority of the institutions, however, had offices in London.

The liabilities and assets of the twenty-two banks of issue operating in the different states and New Zealand during the June quarter of 1902 are shown in the following tables. The total liabilities of the banks are given as £116,412,626, and the assets as £135,709,401, showing a surplus of assets of £19,296,775. If the returns gave all the facts in relation to the operations of the banks, this surplus should represent the capital or funds provided out of their own resources ; but as the capital and reserve funds amount to £26,420,497, it is evident that there is a balance of £7,123,722 to be otherwise accounted for. This sum represents part of the deposits obtained in Australasia and used in the London business of the banks ; the British deposits with Australasian banks having decreased to about twelve millions. The following figures will convey some notion of the business transacted within each state. It should be noted that under the heading of deposits bearing interest has been included perpetual inscribed stock of the English, Scottish, and Australian Bank (Limited), to the amount of

£2,071,885, namely, £692,434 in New South Wales, £932,828 in Victoria, £313,256 in South Australia, and £133,367 in Queensland :—

State.	Notes in circulation not bearing Interest.	Bills in circulation not bearing Interest.	Deposits.		Balances due to other Banks, &c.	Total Liabilities.
			Not bearing Interest.	Bearing Interest.		
	£	£	£	£	£	£
New South Wales.....	1,450,640	211,695	13,561,909	20,820,620	143,316	36,188,180
Victoria	915,426	120,295	12,012,338	18,827,106	142,398	32,017,563
Queensland .....	.....	115,575	5,088,119	8,707,618	63,538	13,974,850
South Australia	382,387	10,059	2,418,090	3,794,867	51,736	6,657,139
Western Australia.....	391,886	41,420	3,158,675	1,583,904	58,268	5,234,153
Tasmania	164,796	19,461	1,495,377	1,967,609	....	3,647,243
Commonwealth	3,305,135	518,505	37,734,508	55,701,724	459,256	97,719,128
New Zealand.....	1,403,426	54,695	7,763,718	9,427,782	43,867	18,693,498
Australasia.....	4,708,571	573,200	45,498,226	65,129,506	503,123	116,412,626

The preceding table shows that about 95 per cent. of the Australasian liabilities of the banks consisted of deposits, viz., £110,627,732 out of £116,412,626. The returns of the banks in each state, with the exception of Tasmania, distinguish between deposits at call and deposits bearing interest. In Tasmania, although not obliged by law to do so, a similar distinction has been made by three banks out of four, and assuming that in the case of the other bank the proportion of deposits at call to the total deposits is the same, the total deposits at call are as stated in the table, viz., £45,498,226, or 41 per cent. of all deposits.

The assets for the same period are shown below. Certain assets of small amount, consisting chiefly of Government and other securities, have been included under all debts due to the banks, and in the case of one state, technical over-statements of the assets of some of the banks have been rectified. The value of landed property in Victoria is exclusive of the interest of the Commercial Bank of Australia (Limited), in the Special Assets Trust Company (Limited). Also, under the

heading of "Notes and bills of other banks," &c., are included Queensland Treasury Notes to the amount of £678,731 :—

State.	Coin.	Bullion.	Landed Property.	Notes and Bills discounted, and all other Debts due to the Banks.	Notes and Bills of other Banks, and Balances due from other Banks.	Total Assets.
	£	£	£	£	£	£
New South Wales.....	6,915,265	136,079	1,784,498	34,195,271	580,864	43,611,977
Victoria.....	6,301,624	409,264	2,023,558	30,446,032	451,290	39,636,768
Queensland.....	1,978,891	281,401	733,750	12,975,645	906,100	16,875,787
South Australia.....	1,691,499	23,597	457,131	4,434,031	97,430	6,603,688
Western Australia.....	2,376,344	479,962	214,251	3,276,409	111,869	6,459,335
Tasmania.....	*580,790	.....	119,090	2,397,290	349,014	3,446,184
Commonwealth.....	19,744,913	1,330,303	5,337,278	87,724,678	2,496,567	116,633,739
New Zealand.....	2,986,222	174,489	422,590	15,394,377	97,984	19,075,662
Australasia.....	22,731,135	1,504,792	5,760,868	103,119,055	2,504,551	135,769,461

* Includes Bullion.

METALLIC RESERVES OF BANKS.

The following table shows the metallic reserves held by the banks as against their total Australasian liabilities, and also against their liabilities at call, viz., deposits at call and note circulation. The table, however, cannot be taken as complete, as some banks receiving deposits in England and elsewhere do not include such liabilities in their returns :—

State.	Coin and Bullion.	Total Liabilities.	Liabilities at Call.	Proportion of Coin and Bullion—	
				To Total Liabilities.	To Liabilities at Call.
	£	£	£	per cent.	per cent.
New South Wales.....	7,051,344	36,188,180	15,012,549	19·48	46·97
Victoria.....	6,710,888	32,017,563	12,927,764	20·65	51·91
Queensland.....	2,260,292	13,974,850	5,088,119	16·17	44·42
South Australia.....	1,615,096	6,657,139	2,800,477	24·26	57·67
Western Australia.....	2,856,806	5,234,153	3,550,561	54·58	80·46
Tasmania.....	580,790	3,647,243	1,660,173	15·92	34·98
Commonwealth.....	21,075,216	97,719,128	41,039,643	21·57	51·35
New Zealand.....	3,160,711	18,693,498	9,167,154	16·91	34·48
Australasia.....	24,235,927	116,412,626	50,206,797	20·82	48·27

It will be seen that Tasmania apparently holds the weakest position in the proportion of cash reserves to total liabilities, and New Zealand in proportion to liabilities at call. This, however, means very little, seeing that in some of the states many banks profess to hold gold largely in excess of their wishes or requirements.

EXPENSES OF BANKING.

The balance-sheets of banks, as presented to the shareholders, do not usually contain details likely to satisfy the inquirer curious to discover the amount of gross profits as compared with the net amount divisible amongst shareholders. Allowing the same proportion of expenses for the banks not disclosing this information as for those concerning which particulars are available, the following results are obtained for the last working year dealt with in the preceding pages :—

Total trading assets.....	£161,977,000
Capital and reserves	26,420,500
Gross earnings, less reserve for bad and doubtful debts	6,457,300
Gross expenditure, including interest.....	4,800,800
Net earnings.....	1,656,500

Compared with the total assets, the net earnings represent 0·98 per cent. ; and compared with the banks' own resources, *i.e.*, capital and reserved profits, 6·27 per cent. The gross expenditure above set down may be divided into expenses of management, £2,111,800, and interest, £2,689,000 ; these together amount to 74·35 per cent. of the gross earnings, the management expenses being 32·71 per cent., and the interest 41·64 per cent. It would appear, therefore, that for every £1 of net earnings, the sum of £1 5s. 6d. is spent in management expenses, and £1 12s. 6d. in interest. The cost of working banking institutions in Australia is undoubtedly very large ; but this class of business is everywhere expensive, and an analysis of the balance-sheets of some thirty British banks shows that the expenses of management amount to about 15s. 7d. for every £1 of net earnings.

Compared with their resources, the net earnings of Australasian banks are far less than those of English banks, as will appear from the following statement, which gives the rate per cent. per annum of earnings compared with total resources, including, of course, deposits and issue, as well as shareholders' capital and reserves :—

	£	s.	d.
Bank of England	1	10	9
English Provincial Banks.....	1	6	10
Irish Banks	1	9	7
London Banks.....	1	4	11
Scotch Banks	1	4	0
Banks trading in Australasia	1	1	7

The net earning power of Australian banks has much improved during recent years, and is now larger than at any time since the crisis. The year 1892 showed net earnings equal to £1 0s. 4d. per cent. of the banks resources; this is, however, a reduction on the earnings of previous years. From this there was a steady falling off, until in 1897 the net earnings were only 8s. 5d. per cent., which was perhaps as poor a showing as could be found in the history of Australian banking. After 1897 there was a gradual recovery, and the year closing with June, 1902, showed an improvement even on 1892. The net earnings per cent. during the past twelve years, were :—

	£ s. d.		£ s. d.
1891.....	.....	1897.....	0 8 5
1892.....	1 0 4	1898.....	0 10 10
1893.....	0 17 7	1899.....	0 13 10
1894.....	0 12 10	1900.....	0 16 1
1895.....	0 9 0	1901.....	1 0 1
1896.....	0 8 8	1902.....	1 1 7

The expense of banking in Australasia is largely due to the number of branches open throughout the country; thus in Australasia there are 1,560 banks and branches, or one to every 2,900 persons, while in England the proportion is one bank to 8,500 persons (exclusive of private banks), in Scotland one to every 4,100, and in Ireland one to every 7,600.

INVESTMENT COMPANIES.

In addition to the Banks of Issue, there are numerous Savings Banks, and Land, Building, Investment, Trading, and Commercial Companies receiving money on deposit and transacting much of the business usually undertaken only by banks of issue. The land, building, and other trading companies were presumed to be in a flourishing condition even as late as the year 1890. Their dividends to shareholders were very large, and the rates allowed on deposits were considerably in excess of those current in the banks of issue. As might be expected, the high interest offered was too tempting a bait to be resisted by a section of the investing public, and large sums were placed in these institutions with the utmost confidence that they would be available when required. This confidence, unfortunately, proved to be, in many instances, unmerited. The shrinkage of land values, and the depreciation of real estate generally, put an end to all unsound institutions working on speculative lines, as well as to some other companies that were conducted on reasonable principles. The difficulties into which the deposit companies fell may for the most part be attributed to their practice of borrowing money for short periods, and locking it up for long terms.

Besides this, however, many so-called building societies indulged in speculative land purchases, and having retailed the land at enhanced prices, with payments over extended periods, proceeded to divide the presumed profits among the shareholders; with a result that might easily have been foreseen, for in many cases the purchasers, after paying a few instalments towards the price, left the allotments on the hands of the companies, whose anticipated profits were therefore purely visionary, and whose dividends were really never earned, but, in many instances, were merely taken from the deposits. Complete returns of these societies are not available, but the amounts held on deposit in some of the states will be found on page 785.

SAVINGS BANKS.

The Savings Banks are on a very different footing, being to a greater or less extent under State control and otherwise safeguarded, so that they enjoy public confidence. The institutions classed as Savings Banks may be divided into two kinds—those worked in conjunction with the Post Office, and, consequently, directly administered by the State; and those under trustees or commissioners, who are generally nominated by the Government. The declared objects of these banks are to encourage thrift in the working classes, and to provide a safe investment for the funds of charitable institutions, friendly societies, and such like. The institutions, however, have become so popular that all classes of the community are represented amongst their depositors, and the banking crisis of 1893 had the effect of largely increasing their business.

In New South Wales there are both State and trustee institutions for the receipt of savings, the Post Office Savings Bank having been established in 1871, and the Savings Bank of New South Wales as far back as 1832. In both institutions sums of one shilling and any multiple of that amount may be deposited; but, with the exception of the funds of charitable institutions and friendly societies, deposits exceeding £200 do not bear interest on such excess. From October, 1894, to July, 1896, the Post Office Savings Bank allowed interest at the rate of 3 per cent., with an additional 1 per cent. on accounts open for the full calendar year, but this latter privilege has now been withdrawn. During 1901-2 the Savings Bank of New South Wales allowed 3 per cent. interest on accounts closed during the year, and 3½ per cent. for those remaining open at the end of the year. A measure providing for the amalgamation of the two institutions has been presented to Parliament on several occasions, but up to the present the Bill has not been passed.

In Victoria both Commissioners' and Post Office Savings Banks, established in 1842 and 1865 respectively, were in operation until the

30th September, 1897, when they were amalgamated under the Savings Bank Amendment Act of 1896, the Commissioners assuming the control of the new institution. Amounts of one shilling and any multiple thereof are received. The Act referred to further provided for advances to farmers and others, and this portion of the Act was brought into operation without delay. Interest is allowed at the rate of $2\frac{1}{2}$ per cent. on sums not exceeding £100, and 2 per cent. from £100 to £250, the latter being the maximum amount carrying interest.

In Queensland, a Government Savings Bank, not administered in connection with the Post Office, is in operation, the system dating from 1865. The interest allowed during 1895 was $3\frac{1}{2}$ per cent. on all deposits below £200; but from July, 1896, the rate was reduced to 3 per cent., which is the rate now being paid. In December, 1895, authority was obtained for the issue of Savings Bank Stock at 3 per cent. to enable depositors of upwards of £200 to obtain interest on such excess, as it was found that large sums were entrusted to the Government which could not earn interest under the old constitution of the Bank.

In South Australia there is, properly speaking, no Government Savings Bank; but an institution administered by trustees was established in 1848. The rate of interest paid by the trustees has been the subject of many changes. Starting at 3 per cent., it fell as low as 1 per cent. in 1853; rose to 6 per cent. in 1858; and declined to 4 per cent. in 1873. Between the year last mentioned and 1892, interest fluctuated between $5\frac{1}{2}$ and $4\frac{1}{2}$ per cent.; and in 1893 it was reduced to 4 per cent., at which it remained during the years 1894 and 1895, while in 1896 and 1897 it was still further reduced to $3\frac{1}{2}$ per cent. and 3 per cent. respectively—the latter rate being allowed in 1901–2—the maximum amount bearing interest being £250.

In Western Australia, Post Office banks have been in operation since 1864. One shilling and upwards may be received, provided not more than £150 is deposited in any one year, while the maximum amount of deposits must not exceed £600. Interest is allowed at the rate of 3 per cent. provided the amount at credit is not less than £1, and not more than £300.

In Tasmania, Post Office and trustee banks are working side by side. Sums of one shilling and upwards may be deposited, the interest allowed being 3 per cent. both in the Post Office banks and in the trustee institutions. Interest is not allowed on amounts over £150.

In New Zealand, Post Office and trustee institutions are also established. The former commenced operations in February, 1867; but some of the other class of banks are of much older standing, the Auckland Savings Bank, for instance, having been established as far back as 1847. Deposits of one shilling and upwards are received. Interest was formerly allowed in both classes of institutions at the rate of $4\frac{1}{2}$ per cent. up to £200, and 4 per cent. from £200 to £500; but in July, 1893, the rates allowed in the Government Savings Bank were

reduced to 4 per cent. and $3\frac{1}{2}$ per cent. respectively, the maximum amount bearing interest remaining at £500. These rates remained in force until the 1st January, 1896, when the interest was reduced to $3\frac{1}{2}$ per cent. and 3 per cent. respectively; while from the 1st November, 1897, a further reduction was made, the rates ruling from that date being 3 per cent. up to £200, and $2\frac{1}{2}$ per cent. from £200 to £500, no interest being allowed on sums in excess of £500. The trustee Savings Banks in 1895 allowed 4 per cent., but reduced this rate to $3\frac{1}{2}$ per cent. from the beginning of 1896. In 1897 the interest was increased to 4 per cent. on amounts under £100; but in 1900 it was again reduced to $3\frac{1}{2}$ per cent., which is the rate now allowed. A feature of the New Zealand Post Office Savings Bank is that deposits of one shilling may be made by means of postage stamps affixed to cards specially issued for the purpose. This plan was adopted to encourage thrift among children. It was recognised to be a difficult matter for a child to save its pence until they accumulated to a shilling; but under the present system, whenever a child receives a penny it may purchase a postage stamp and affix it to the card in its possession.

The returns of the Savings Banks show an enormous development since the year 1861. At that period the number of depositors in Australasia (excluding Tasmania, for which there are no returns) was 20,062, with the sum of £1,367,396 to their credit, or an average of £47 to each depositor. In 1871 the number of depositors had risen to 115,074, with deposits amounting to £3,675,772; but the average amount credited to each depositor was only £31 18s. 10d. In the year 1881 there were 311,124 depositors, with a total of £9,442,979, averaging £30 7s. for each account. In 1891 the number of depositors had increased to 741,627, and the amount of deposits to £18,943,541, the average being £25 10s. 1d. In 1901-2 the number of depositors had risen to 1,252,219, with deposits amounting to £40,126,061, giving an average sum of £32 0s. 11d. to each account. It will thus be seen that there has been a decline in the amount per depositor from the period first mentioned; but this is no sign of retrogression, for the large increase in the number of depositors, which must be taken into consideration, evidences the fact that the less affluent classes of the community are more largely represented in the books of the banks than was formerly the case. In point of fact, the proportion of depositors to the entire population has increased all along. Thus, in 1861 the number of persons who had accounts in the Savings Banks represented only 2.31 per cent. of the entire population of Australasia; but in 1871 the percentage had risen to 5.98; in 1881, to 11.33; and in 1891, to 19.47; while in 1901-2 the proportion was 27.02 per cent. Dealing with the individual states, the Queensland depositors have the largest amount at their credit, averaging £48 12s. 7d. per head; Western Australian depositors come next with £40 16s. 3d.; New South Wales depositors occupy the third position with £38 11s. 2d.; while those of Tasmania have the smallest sum, their average being only £22 1s. 9d. The subjoined table shows the progress

of accumulation in the Savings Banks of each of the states and of New Zealand since 1871 :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia	Western Australia	Tasmania.	Commonwealth.	New Zealand.	Australasia.
NUMBER OF DEPOSITORS.									
1871	24,370	45,819	6,760	14,270	1,062	8,500	100,790	14,275	115,074
1881	72,384	101,829	20,168	37,742	3,219	14,728	250,070	61,054	311,124
1891	153,426	300,781	46,259	78,795	3,564	26,916	614,741	126,886	741,627
1901-2	306,311	410,126	84,685	116,436	45,110	44,527	1,007,195	245,024	1,252,219
AMOUNT OF DEPOSITS.									
	£	£	£	£	£	£	£	£	£
1871	945,915	1,117,761	407,134	517,000	15,583	217,413	3,220,806	454,966	3,675,772
1881	2,098,703	2,569,438	944,251	1,288,450	23,344	369,278	7,893,464	1,549,515	9,442,979
1891	5,342,135	5,715,687	1,660,753	2,217,419	46,181	554,417	15,536,592	3,406,949	18,943,541
1901-2	11,808,710	10,131,604	4,118,337	3,974,709	1,841,022	983,576	32,857,958	7,263,103	40,126,061
AVERAGE AMOUNT PER DEPCISOR.									
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1871	38 10 0	24 7 11	60 2 11	36 4 7	14 13 6	25 11 7	31 19 0	31 17 5	31 18 10
1881	37 5 8	25 4 7	40 16 5	34 2 9	7 5 0	25 1 6	31 11 4	25 7 7	30 7 0
1891	33 14 5	19 0 1	35 18 0	25 2 10	12 19 2	20 12 0	25 5 6	26 17 0	25 10 1
1901-2	38 11 2	24 14 8	48 12 7	34 2 8	40 16 3	22 1 9	32 12 5	29 13 3	32 0 11

The following table shows the average amount per head of population, and the average number of depositors per 100 of population, in each of the states for the year 1901-2 :—

State.	Average amount per head of Population.	Depositors per 100 of Population.
New South Wales	£ s. d. 8 11 2	22
Victoria	8 7 11	34
Queensland	8 0 0	16
South Australia	10 19 0	32
Western Australia	8 16 9	22
Tasmania	5 12 11	25
Commonwealth.....	8 10 10	26
New Zealand	9 4 7	31
Australasia	8 13 2	27

It will be observed that Victoria had the largest number of depositors per 100 of population ; while the largest amount per head of population was reached in South Australia.

The following table shows the number of depositors in the savings banks of the principal countries of the world, the total amount standing

at their credit, and the average amount per depositor. The figures are compiled from the latest available returns:—

Country.	Depositors.	Amount of Deposits in Savings Bank.	Average Amount per Depositor.
	No.	£	£ s. d.
United Kingdom	10,065,006	187,005,562	18 11 7
Sweden	1,758,612	26,409,506	15 0 4
Norway	671,241	17,016,395	25 7 0
Holland	1,250,016	13,463,667	10 15 5
Austria-Hungary	5,037,601	166,469,385	33 0 11
Belgium	1,642,778	24,120,546	14 13 8
Italy	6,032,300	95,663,412	15 17 2
France.....	10,562,677	175,126,815	16 11 7
Denmark	1,150,233	36,781,352	31 19 7
Russia	3,540,587	70,035,412	19 15 8
United States.....	6,358,723	533,667,847	83 18 6
^a Canada	205,937	11,517,304	55 18 6
Australasia	1,252,219	40,126,061	32 0 11

* Exclusive of £3,929,949 in special Savings Banks—number of depositors not available.

The figures for the United States are given on the authority of the official *Statistical Abstract*, and are, to all appearances, correct.

TOTAL DEPOSITS IN BANKS.

If to the amounts deposited in the savings banks of the states be added the deposits in banks of issue, it will be seen that the total sum on deposit in banking institutions is equal to over £32 for each inhabitant of Australasia. The largest amount on deposit as compared with population is found in Queensland, with £34 16s. 1d., or £2 5s. 6d. above the average of all the states. The particulars for each state will be found below:—

State.	Deposits in Banks of Issue (Averages for the second quarter of 1902.)	Deposits in Savings Banks.	Total Deposits.	Amount of Deposits per head of Population.
	£	£	£	£ s. d.
New South Wales	34,382,529	11,808,710	46,191,239	33 9 7
Victoria	30,839,444	10,131,604	40,971,048	33 19 0
Queensland	13,795,737	4,118,337	17,914,074	34 16 1
South Australia.....	6,212,957	3,974,709	10,187,666	28 1 5
Western Australia	4,742,579	1,841,022	6,583,601	31 12 1
Tasmania	3,462,986	983,576	4,446,562	27 1 6
Commonwealth	93,436,232	32,857,958	126,294,190	32 16 8
New Zealand.....	17,191,500	7,268,103	24,459,603	31 1 1
Australasia.....	110,627,732	40,126,061	150,753,793	32 10 7

As already mentioned, large sums are also deposited with various building and investment societies, but the returns with reference to these are incomplete. The latest available figures show that the amounts so invested were:—In New South Wales, £1,217,860; in Victoria, £1,353,912; in Tasmania, £147,322; and in New Zealand, £218,562.

In the following table are given the deposits in banks, including savings banks, and, where available, building societies, &c., at four decennial periods, as well as for the year 1901–1902:—

State.	1861.	1871.	1881.	1891.	1901–1902.
	£	£	£	£	£
New South Wales	5,645,108	7,989,801	23,006,720	42,988,550	47,409,090
Victoria	7,575,406	12,476,677	23,721,348	50,183,551	42,324,960
Queensland	334,503	1,647,830	5,633,097	12,154,657	17,914,074
South Australia	875,320	2,038,719	6,231,004	9,992,338	10,187,666
Western Australia	*2,487	*15,583	*23,344	1,365,906	6,553,601
Tasmania	†729,085	875,512	2,969,390	4,220,292	4,593,884
Commonwealth { Total	15,161,909	25,044,122	61,564,903	120,905,294	129,013,284
{ Per head	£13	£15	£27	£38	£33
New Zealand	905,675	3,789,639	10,618,893	17,497,436	24,078,165
Australasia { Total	16,067,584	28,833,761	72,203,796	138,402,730	153,691,449
{ Per head	£13	£15	£26	£36	£33

*Savings Banks only. † Banks of Issue only.

From this table it will be seen that the increase of deposits in all classes of banks between 1861 and 1881 was exactly 100 per cent., allowing for the growth of population; while between 1871 and 1891 the deposits per head of population increased by 140 per cent. When compared with the figures for Great Britain, the amount of deposits per head of population in Australasia far exceeds that in the older country. In 1861, indeed, the sum per head in Great Britain was higher than in Australasia, amounting to £15 as against £13 in the colonies, and in 1874 the British average stood at £25 per head; but ten years later, in 1884, it had sunk to £23, and in 1890 to £16; while in 1901 the rate per head had increased to over £24. In the colonies there was no falling-off at any period until 1893—the total deposits per head in 1888 far exceeding the highest level ever reached in Great Britain. In 1893, however, there was a decline of about ten millions in the sum total of Australasian deposits; that is to say, the commercial depression which prevailed more or less throughout Australasia during that year caused the amount just mentioned to be withdrawn from the savings of the people and to be employed in meeting current expenses and in the maintenance of credit. During 1894 and 1895 there was a further falling-off in Victoria and Tasmania; but the other states showed larger deposits in 1895 than in 1893—the Queensland, Western Australia, and New Zealand deposits being even larger than in 1891. In 1901–2 the savings in all the states were greater than in 1895, the net increase in the six and a half years being nearly twenty-three and a half millions, while, compared with 1891, there was an increase of over fifteen millions. It will thus be seen that the states have entirely recovered from the effects of the financial crisis of 1893.

In some of the states the *Credit Foncier* system has been established in connection with the Savings Banks, and particulars relating to the operations of the system will be found in the chapter dealing with Agriculture.

CURRENCY.

There is no universal currency in Australia except the British sovereign, the silver and bronze current being more properly tokens than coins. The bank notes issued by the banks of issue are not legal tender in any State, and do not circulate beyond the State in which they are issued. In Queensland there is a legal paper currency in the shape of Treasury notes, which have superseded the ordinary bank notes. The total note currency of the Commonwealth comprises £3,305,135 bank notes issued in the various States in the proportions shown on page 776, and £687,731 Treasury notes of Queensland, in all £3,992,866, equal to £1 0s. 10d. per inhabitant. The coin in circulation is a doubtful quantity; if the ratio found for New South Wales, viz., gold, £1 8s. 7d., silver, 5s. 7d., and bronze, 6d., obtains throughout the Commonwealth—the total coin circulation of Australia is gold, £5,477,800, silver, £1,070,000, and bronze, £95,800. These sums, with the note circulation, bring the total currency to £10,636,466, or £2 15s. 6d. per inhabitant. The coin and bullion held in reserve by the banks amount to £21,075,216, so that the total currency of the Commonwealth, both active and reserved, amounts to £31,711,682. Gold coins are legal tender to any amount, silver for an amount not exceeding forty shillings, and bronze for one shilling. The standard weight and fineness of each coin are given below. The least current weight of a sovereign is 122·5 Imperial grains, and of a half-sovereign, 61·125 grains:—

Denomination of Coin.		Standard Weight.	Standard Fineness.
		Imperial grains.	
		Troy.	
Gold	{ Sovereign	123·27447	{ Eleven-twelfths fine gold, one-twelfth alloy, or deci- mal fineness ·91666
	{ Half-sovereign	61·63723	
Silver	{ Crown	436·36363	{ Thirty-seven-fortieths fine silver, three-fortieths alloy, or decimal fineness ·925.
	{ Double Florin	349·09090	
	{ Half-crown	218·18181	
	{ Florin	174·54545	
	{ Shilling	87·27272	
	{ Sixpence	43·63636	
	{ Threepence	21·81818	
		Avoirdupois.	
Bronze ...	{ Penny	145·83333	{ Mixed metal:—Copper, 95 parts; tin, 4 parts; and zinc, 1 part.
	{ Halfpenny	87·50000	
	{ Farthing	43·75000	

The only coins struck at the Sydney, Melbourne, and Perth Mints are of gold, though silver and bronze of English coinage are also issued at Sydney and Melbourne. The amounts of silver and bronze issued during

1901 were, at the Sydney Mint, silver, £83,400, and bronze, £5,500; and at the Melbourne Mint, £68,600 and £3,000 respectively. No silver or bronze coin had been issued at the Perth Mint up to the end of 1901. The Sydney Branch of the Royal Mint was opened on the 14th May, 1855, the Melbourne Branch on the 12th June, 1872, and a third branch was established at Perth on the 20th June, 1899. The amount of gold received for coinage up to the end of 1901, at the Sydney Mint, was 27,011,585 oz., valued at £100,039,920; the amount received at the Melbourne Mint to the same date was 24,620,279 oz., valued at £97,271,850; while at the Perth Branch the amount received was 1,556,646 oz., the value being £5,559,347.

The following table shows the quantity of gold received into the three Mints to the end of 1901, the metal received from outside sources being distinguished from that locally produced:—

Where produced.	Gold received for Coinage.		
	Sydney Mint.	Melbourne Mint.	Perth Mint.
	oz.	oz.	oz.
New South Wales	9,598,573	108,455	.....
Victoria	1,443,150	17,845,057	19
Queensland	12,431,611	11,914	.....
South Australia	84,201	590,292	.....
Western Australia.....	12,079	2,620,658	1,556,453
Tasmania	84,893	942,916	.....
New Zealand	3,047,188	2,286,686	.....
Other Countries	48,897	203,372	163
Old Coin, etc.....	260,993	10,929	11
Total.....	27,011,585	24,620,279	1,556,646

The total value of gold raised in Australasia to the end of 1901 was £459,494,071, of which amount 44 per cent. passed through the Sydney, Melbourne, and Perth Mints.

The following table shows the amount of gold coin and bullion issued by each Mint to the end of 1901:—

Mint.	Sovereigns.	Half-sovereigns.	Bullion.	Total Value of Coin and Bullion issued.
	£	£	£	£
Sydney	93,688,500	2,867,500	3,283,478	99,839,478
Melbourne	89,990,183	547,362	6,728,020	97,265,565
Perth	5,466,414	59,688	21,257	5,547,359
Total	189,145,097	3,474,550	10,032,755	202,652,402

The quantity of gold received into the Sydney Mint in 1901 was 864,635 oz., valued at £3,045,266, of which only 200,626 oz., or about 26 per cent., was the produce of New South Wales. Queensland.

contributed 543,921 oz., or about 57 per cent. of the whole, while of the remainder, 91,925 oz. came from New Zealand, and 17,436 oz. from Tasmania. The amount of gold received into the Melbourne Mint for the same year was 1,048,239 oz., of which 808,512 oz., or 57 per cent., was the produce of Victoria, while 67,023 oz. came from Western Australia, notwithstanding the fact that the Perth Mint was opened on the 30th June, 1899; and 89,245 oz. were the produce of New Zealand. With the exception of 193 oz. the whole of the gold coined at the Perth Mint was the produce of Western Australia.

The gold coins issued from the Sydney Mint in 1901 consisted solely of 3,012,000 sovereigns, while the Melbourne Mint issued 3,987,701 sovereigns, and the Perth Mint, 2,889,333 sovereigns during the year.

The value of the gold coinage issued from Sydney, Melbourne, Perth, and London Mints during the year 1901 was as follows:—

	£
Sydney	3,012,000
Melbourne.....	3,987,701
Perth.....	2,889,333
London	2,599,000

Besides gold coin, the Sydney Mint during 1901 issued gold bullion to the value of £18,845; the Melbourne Mint to the value of £87,534; and the Perth Mint to the value of £21,225.

The annual report of the Deputy-Master of the Royal Mint for 1901 shows the value of silver coin issued to and withdrawn from, and the value of bronze coin issued to each of the Australian States during the thirty years 1872-1901, to have been as follows:—

State.	Silver Coin.			* Bronze Coin issued.
	Issued.	Withdrawn.	Net Issue.	
	£	£	£	£
New South Wales.....	994,700	194,921	799,779	48,350
Victoria	1,010,150	296,307	713,843	42,535
Queensland.....	260,945	4,750	256,195	3,365
South Australia.....	290,800	2,176	288,624	14,065
Western Australia	95,750	3,927	91,823	3,815
Tasmania.....	50,400	23,443	26,957	1,320
Commonwealth	2,702,745	525,524	2,177,221	113,450
New Zealand	287,035	.....	287,035	17,285
Australasia	2,989,780	525,524	2,464,256	130,735

* From 1874.

These figures show a net annual average circulation of silver of £82,142 and of bronze of £4,670, but no allowance is made in the figures for coin brought to the States or taken away by passengers.

Complete information regarding worn coin is not available for the Melbourne Mint; the following figures, therefore, refer to Sydney only. From 1873, when the Mint first received worn silver coin, until 1901, the amount of silver withdrawn from circulation was of the nominal value of £203,917. The actual weight after melting was 653,202 oz., and the corresponding weight of new coinage would be 741,512 oz. The loss while the coins were in circulation was therefore 88,310 oz., the average loss being 11·9 per cent. From 1876 to 1901 gold coin of the nominal value of £826,542 was received at the Sydney Mint for recoinage, and was found to have an actual value of £823,779. The loss amounted, therefore, to £2,763, or 0·33 per cent.

As has already been pointed out, standard silver consists of ·925 pure metal and ·075 alloy. A pound troy of standard silver is coined into sixty-six shillings; that is to say, 11·1 ounces of fine metal produce coin to the value of £3 6s. The average price of silver during 1901 was 2s. 3 $\frac{1}{2}$ d. per ounce, which for 11·1 ounces gives the sum of £1 5s. 1 $\frac{1}{4}$ d.; so that, after making due allowance for Mint expenses and loss entailed by abrasion of the coinage, it is evident that the British Government derives a fairly large profit from the silver coin issued to Australasia. This explains why the Governments of New South Wales and Victoria have approached the Imperial authorities for permission to coin silver to the value required for circulation in the States. With the present limited population of Australasia, however, it is doubtful whether the profits would do more than pay for the outlay necessary in connection with the minting.

LIFE ASSURANCE.

All the States save New South Wales have special laws regulating the business of life assurance. Except that of Queensland, the Life Assurance Acts require yearly statements to be made showing the total business of companies in operation, and also certain particulars regarding the transactions within their own State, and the Western Australian Act also enforces particulars of the business in each of the other States. In New South Wales no special law has been passed, and companies doing this class of business are either registered under the Companies or Friendly Societies Act, or incorporated by special Act. In the other States the Acts regulating the business of life assurance deal chiefly with deposits to be made by companies commencing business, and with returns of business transacted. In no province are the full returns officially published; nevertheless, interesting and valuable reports are prepared and circulated by several of the companies, and all information reasonably to be desired is given in their pages. Other companies pursue a different course, and disclose very few particulars of their business. However, from such sources as are available, the information contained in the following pages has been compiled.

Of the eighteen companies doing ordinary and industrial business in the States, six have their head-offices in New South Wales, six in Victoria, one in South Australia, one in New Zealand, one in the United Kingdom, and three in the United States. The English company—the Liverpool and London and Globe Insurance Company—commenced business in 1853 by the assumption of the liabilities of the Australasian Colonial and General Life Assurance and Annuity Company, but no information as to the Australasian business for 1901 can be given, as the Company does not publish annual statements of the Australasian business. The only particulars concerning its local business which are available are the number of policies in force on the 31st March, 1896 (1,028), the total sum assured exclusive of bonuses (£566,647), and the amount of the annual premiums (£15,627). Some of the other British companies have agencies in the States, principally for the collection of renewal premiums on policies effected in the United Kingdom, but as particulars of the business in the States are not available, these companies have also been excluded. The Mutual Assurance Society of Victoria was amalgamated with the National Mutual Life Association at the beginning of 1897, and consequently the figures in the tables show the transactions of the new company.

The results of the latest published actuarial investigations of the various societies are appended :—

Institution.	Year of Foundation.	Basis of Valuation.	Date of last Valuation.	Net or Present Liability.	Total Assets.
Australian Mutual Provident Society	1840	3½ (a)	31 Dec., 1901	£ 17,250,540	£ 18,297,032
Mutual Life Association of Australasia	1860	4 (q)	31 ,, 1899	1,234,090	1,372,331
City Mutual Life Assurance Society (Ltd.) ..	1879	4 (t)	31 ,, 1900	199,898	211,408
*Citizens' Life Assurance Company (Ltd.) ..	1886	3½ (a)	31 ,, 1901	463,211	498,015
Standard Life Association (Ltd.)	1899	§	§	§	§
Australian Metropolitan Life Assurance Company (Ltd.)	1895	4 (q)	31 Aug., 1900	*	†22,976
Australian Alliance Assurance Company	1862	3½ (t)	31 Dec., 1900	253,108	†503,939
National Mutual Life Association of Australasia (Ltd.)	1860	3½ (t)	30 Sept., 1901	3,063,319	3,399,231
Australian Widows' Fund Life Assurance Society (Ltd.)	1871	3½ (q)	31 Oct., 1901	1,418,509	1,527,566
Colonial Mutual Life Assurance Society (Ltd.)	1874	3½, 4 (q)	31 Dec., 1899	2,071,579	2,391,882
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	1876	3½ (q)	30 Sept., 1900	*	†260,751
Victoria Life and General Insurance Company	1858	3 (d)	30 June, 1900	123,951	364,018
Adelaide Life Assurance and Guarantee Company	1866	4 (q)	30 June, 1892	18,322	22,124
New Zealand Government Life Insurance Department	1870	3½ (t)	31 Dec., 1899	2,871,081	3,071,581
Equitable Life Assurance Society of the United States	1859	3, 3½, 4 (a)	31 ,, 1901	54,168,891	63,966,608
New York Life Insurance Company	1845	3, 4 (a)	31 ,, 1901	43,912,326	59,823,742
Mutual Life Insurance Company of New York	1843	3, 4 (a)	31 ,, 1901	59,001,120	72,451,534

(a) Annual. (t) Triennial. (q) Quinquennial. (d) Decennial.

* Not published for whole business.

† Includes Fire, Marine, and Guarantee branches.

‡ Includes assets of Industrial branch.

§ The first investigation will be made in June, 1904.

The net or present liability represents the present value of the sums assured in respect of whole life and endowment assurance, reversionary bonuses, endowments, and annuities in force at date of valuation, less the present value of the future pure premiums thereon.

Of these seventeen companies, ten are mutual, and the remainder are what is termed in insurance parlance "mixed"—that is, proprietary companies dividing profits with the policy-holders. Four of the institutions also transact industrial business, while one company also undertakes fire, marine, and guarantee risks, and another does guarantee as well as life business. Most of the offices have representatives in all the States. Three institutions have extended their operations to London, and two also to South Africa. The New Zealand Government institution does not transact any business outside that colony.

The following table gives the policies in force and the sums assured in each society at the close of 1901. The item "Sums assured" means the sums payable, exclusive of reversionary bonuses, at death, or on attaining a certain age, or at death before that age:—

Institution.	Policies in force, exclusive of Annuities.	Assurances.			Annual Premium Income.
		Sums Assured, exclusive of Bonuses.	Bonus Additions.	Total.	
	No.	£	£	£	£
Australian Mutual Provident Society.....	168,566	49,366,565	0,638,798	59,005,363	1,612,243.
Mutual Life Association of Australasia	21,155	5,501,585	402,090	5,903,675	188,087
City Mutual Life Assurance Society (Ltd.) ..	10,833	1,385,716	44,900	1,430,616	62,797
¶Citizens' Life Assurance Company (Ltd.) ..	30,432	4,173,655	152,640	4,326,295	163,485.
¶Standard Life Association (Ltd.)	** 1,575	**156,317	.....	**156,317	**7,417
¶Australian Metropolitan Life Assurance Company (Ltd.).....	951	75,458	1,135	76,593	3,461
Australian Alliance Assurance Company ...	1,143	399,271	35,637	434,908	12,532
National Mutual Life Association of Australasia (Ltd.)	50,082	11,336,347	723,160	12,064,507	371,943
Australian Widows' Fund Life Assurance Society (Ltd.).....	23,622	5,025,229	168,406	5,193,635	185,506
Colonial Mutual Life Assurance Society (Ltd.)	33,906	10,420,684	325,430	10,746,114	325,877
¶Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	9,483	1,407,379	13,047	1,420,426	49,775.
*Victoria Life and General Insurance Co.	381	182,432	36,286	218,718	5,457
†Adelaide Life Assurance and Guarantee Company.....	86	30,900	.....	30,900	773.
New Zealand Government Life Insurance Department	41,066	9,742,102	835,161	10,627,263	295,332
‡Equitable Life Assurance Society of the United States.....	11,542	4,729,161	§	4,729,161	¶
‡Mutual Life Insurance Company of New York	3,778	1,860,500	¶	1,860,500	71,279
‡New York Life Insurance Company	5,755	2,330,404	¶	2,330,404	101,750
Total.....	414,296	108,123,705	12,431,690	120,555,395	3,445,714

* Year ended June, 1897. † Year ended December, 1900. ‡ Australasian business only.

§ Included in preceding column. ¶ Ordinary branch only. ¶¶ Not available. ** June, 1902.

The following table shows the assurances in force at the close of each of the last three years :—

Institution.	Amount Assured, excluding Bonuses and Annuities.		
	1899.	1900.	1901.
	£	£	£
Australian Mutual Provident Society	45,528,090	47,706,765	49,366,565
Mutual Life Association of Australasia	4,944,577	5,179,578	5,501,585
City Mutual Life Assurance Society (Ltd.)	1,099,751	1,274,166	1,385,716
†Citizens' Life Assurance Company (Ltd.)	3,231,590	3,652,684	4,173,655
*Standard Life Association (Ltd.)	*	88,997	\$156,317
†Australian Metropolitan Life Assurance Company (Ltd.)	*	15,571	75,468
Australian Alliance Assurance Company	464,942	431,892	399,271
National Mutual Life Association of Australasia (Ltd.)	10,632,539	10,948,504	11,336,347
Australian Widows' Fund Life Assurance Society (Ltd.)	4,561,863	4,742,674	5,025,229
Colonial Mutual Life Assurance Society (Ltd.)	10,593,726	10,418,388	10,420,684
†Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	1,170,896	1,362,635	1,407,379
Victoria Life and General Insurance Company	*	*	*
Adelaide Life Assurance and Guarantee Company	*	30,900	*
New Zealand Government Life Insurance Department	9,558,166	9,697,036	9,742,102
†Equitable Life Assurance Society of the United States	4,098,452	4,234,265	4,729,161
†Mutual Life Insurance Company of New York	1,623,951	1,747,814	1,860,600
†New York Life Insurance Company	2,008,582	2,212,033	2,330,404

* Information not available. † Australasian business only, but inclusive of bonus additions, except for the Mutual Life of New York in 1900 and 1901, and the New York Life Company in 1901, for which the information relating to bonuses is not available. ‡ Ordinary branch only. § June, 1902.

The receipts of the societies are chiefly represented by the collections from premiums on policies and the interest arising from investments of the accumulated funds; while payments on account of claims, surrenders, cash bonuses, and expenses of management chiefly comprise the disbursements. The receipts and disbursements during 1901 of each society having its head office in Australasia were as follow :—

Institution.	Receipts.	Expenditure.	Excess Receipts (Addition to Funds).
	£	£	£
Australian Mutual Provident Society	2,456,389	1,621,720	834,669
Mutual Life Association of Australasia	203,334	172,253	96,081
City Mutual Life Assurance Society (Ltd.)	62,186	37,843	24,333
*Citizens' Life Assurance Company (Ltd.)	168,520	60,366	107,654
†Standard Life Association (Ltd.)	31,481	27,919	3,562
†Australian Metropolitan Life Assurance Company (Ltd.)	19,706	8,050	11,656
Australian Alliance Assurance Company	24,756	35,151	†10,395
National Mutual Life Association of Australasia (Ltd.)	506,417	394,161	172,256
Australian Widows' Fund Life Assurance Society (Ltd.)	249,773	168,833	80,940
Colonial Mutual Life Assurance Society (Ltd.)	412,816	308,936	103,880
*Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	61,872	44,634	17,238
Victoria Life and General Insurance Company	13,068	20,598	†7,530
Adelaide Life Assurance and Guarantee Company	673	2,543	†1,870
New Zealand Government Life Insurance Department	460,753	315,294	145,459
Total	£ 4,796,744	3,218,806	1,577,933

* Ordinary branch only.

† Decrease.

‡ Includes Industrial Branch.

The aggregate receipts and disbursements of the twelve Australasian institutions during 1901 were as follow :—

Receipts.		Expenditure.	
	£		£
Premiums—		Claims	1,875,297
New	344,503	Surrenders	508,738
Renewals.....	2,919,927	Annuities	60,052
Consideration for Annuities.....	123,037	Cash Bonuses and Dividends	90,290
Interest	1,375,825	Expenses	645,578
Other Receipts (Rents, etc.)	32,762	Amount written off to Depreciation, Reserves, etc.....	38,851
Total.....	£ 4,796,744	Total.....	£ 3,218,806

It will be seen that the combined amount of interest earned and rents received was insufficient to meet the demands under the head of claims. The difference to be made good from other sources, however, was small. A similar condition of affairs has obtained since 1894; but for many years prior to that date the amount earned more than met the expenditure on account of claims. The change just indicated may be attributed to two causes, first, the large number of discontinuances which have followed in the train of the depression, so that when the new business has been set against that which has lapsed, the net result is either only a slight increase or even a shrinkage in the volume of assurances in force, and, secondly, the lower rate of interest lately realised on investments, which in 1901 only amounted to 4·48 per cent., as against 5·54 per cent. in 1893.

ASSETS AND LIABILITIES OF ASSURANCE COMPANIES.

The societies publish annually a statement of assets and liabilities, with the object of showing the distribution of the accumulated funds and the amount placed to commercial reserve. The return is, however, in no way connected with the valuation balance-sheet prepared at the date of the actuarial investigation. The assets and liabilities for each

institution, for the financial year of 1901, were as shown in the subjoined table:—

Institution.	Assets.			Liabilities.		
	Loans on Mortgages and Policies.	Government and Municipal Securities, Freehold Property, Cash on Deposit, etc., etc.	Total	Assurance Endowment and Annuity Funds.	Paid-up Capital, Reserve Funds, etc., etc.	Total.
	£	£	£	£	£	£
Australian Mutual Provident Society	12,571,376	5,725,056	18,297,032	17,864,514	432,518	18,297,032
Mutual Life Association of Australasia	936,048	600,087	1,545,135	1,533,693	11,442	1,545,136
City Mutual Life Assurance Society (Ltd.)	151,752	83,780	235,532	234,002	1,530	235,532
*Citizens' Life Assurance Company (Ltd.)	221,877	276,138	498,015	491,601	6,414	498,015
§Standard Life Association (Ltd.) ..	190	19,040	19,230	6,348	12,882	19,230
§Australian Metropolitan Life Assurance Company (Ltd.)	3,103	31,345	34,448	25,039	9,409	34,448
†Australian Alliance Assurance Company	249,397	247,488	496,885	249,778	247,107	496,885
National Mutual Life Association of Australasia (Ltd.)	2,333,245	1,065,986	3,399,231	3,265,126	134,105	3,399,231
Australian Widows' Fund Life Assurance Society (Ltd.)	1,106,532	421,034	1,527,566	1,509,234	18,332	1,527,566
Colonial Mutual Life Assurance Society (Ltd.)	1,335,857	1,264,502	2,600,359	2,499,113	101,246	2,600,359
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	139,072	147,635	286,707	253,865	32,842	286,707
Victoria Life and General Insurance Company	181,086	165,148	346,234	227,000	119,234	346,234
¶Adelaide Life Assurance and Guarantee Company	13,488	38,958	52,446	35,841	16,605	52,446
New Zealand Government Life Insurance Department	2,216,608	1,146,458	3,363,126	3,255,416	77,710	3,363,126
Total	£ 21,450,601	11,242,255	32,701,946	31,480,570	1,221,376	32,701,946

* Ordinary branch only. † Inclusive of Fire, Marine, and Guarantee Branches, which cannot be separated. ‡ Includes the Investment Fluctuation Fund. § Inclusive of the Industrial Branch. ¶ Inclusive of Guarantee Branch.

Loans on mortgages and policies represent about two-thirds of the total assets, and in former years the investment of funds was almost exclusively confined to these securities; but lately the operations in Government stocks, municipal loans, and other securities and shares have greatly increased. The remaining items require no special comment, except loans on personal security, combined with life assurance. Investments of this character are unusual in Australasia, and are decreasing each year, the amount invested aggregating only £51,509. In some of the States the companies are obliged by law to deposit

certain sums with the Treasury as a guarantee of good faith, and the amount so lodged is included either under the head of Government securities or of deposits.

EXPENSES OF MANAGEMENT OF ASSURANCE COMPANIES.

The ratio of expenses of management to premium income and gross receipts must necessarily vary according to the age of the society and the proportion of new business transacted. The figures are given for what they are worth. That a more exact comparison cannot be made is the fault of certain companies which fail to make a complete disclosure of their affairs, and do not distribute their expenses of management so that the cost of new business may be distinguished from that of old business; the reports of other companies are unequalled in any part of the world:—

Institution.	Expenses of Management.		
	Amount.	Proportion to—	
		Premium Income.	Gross Receipts.
	£	per cent.	per cent.
Australian Mutual Provident Society	200,684	13·24	8·54
Mutual Life Association of Australasia	54,799	29·69	20·42
City Mutual Life Assurance Society (Ltd.)	15,997	31·57	25·72
*Citizens' Life Assurance Company (Ltd.)	24,584	16·45	14·59
‡Standard Life Association (Ltd.)	25,806	32·62	31·97
‡Australian Metropolitan Life Assurance Company (Ltd.)	5,665	59·58	28·75
Australian Alliance Assurance Company	3,914	28·69	15·81
National Mutual Life Association of Australasia (Ltd.)	90,110	23·22	15·01
Australian Widows' Fund Life Assurance Society (Ltd.)	55,518	31·18	22·23
Colonial Mutual Life Assurance Society (Ltd.)	78,977	25·18	19·13
*Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	19,910	48·79	32·18
Victoria Life and General Insurance Company	1,419	37·22	10·86
Adelaide Life Assurance and Guarantee Company	†.....	†.....	†.....
New Zealand Government Life Insurance Department	59,194	18·60	12·85

* Ordinary Branch only. † Included in expenses of Guarantee Branch.
‡ Includes Industrial Branch.

ASSURANCE IN VARIOUS COUNTRIES.

The average amount assured per policy for each State, and for the United Kingdom, Canada, and the United States, is given in the following table. The figures in certain instances are probably somewhat overstated, as all the companies do not show complete returns of the business in each state; but the results may be taken as a fair estimate for each province. The Australasian business of the American institutions excluded from the previous returns, has been included for the

purpose of establishing the Australian averages, but the industrial business has been excluded :—

Country.	Average Sum assured per Policy.	Average Premium per £100 of Assurance.
	£	£ s. d.
Australasia	261	3 3 9
New South Wales	303	2 19 11
Victoria	246	3 1 9
Queensland	289	2 18 10
South Australia	238	2 16 10
Western Australia	305	3 3 2
Tasmania	266	3 1 9
New Zealand.....	252	2 17 8
United Kingdom	348	.....
United States.....	465	.....
Canada	333	.....

The average amount of assurance per head of population was, in Australasia, £24 ; in Canada, £17 ; in the United Kingdom, £15 ; and in the United States £19 ; while the average number of policies per thousand of population was, in Australasia, 90 ; in Canada, 50 ; in the United Kingdom, 43 ; and in the United States, 40.

The average policy is scarcely a fair measure of thrift. In these States mutual assurance is the rule, and members of the various societies have acquired large bonus additions. The average existing policy, including reversionary bonus, of the Australasian companies, on the 31st December, 1901, was £291, as compared with the £261 shown in the comparative table.

It would seem that the practice of assuring life is much more prevalent in Australasia than in any of the other countries instanced ; and although the average sum assured by each policy is less, the number of policies is so much greater, as compared with the population, that the amount assured per inhabitant is considerably higher.

INDUSTRIAL ASSURANCE.

In addition to the ordinary life transactions mentioned in the foregoing tables, a large industrial business has grown up during the past few years. The policies in this class are usually for small amounts, and the premiums are, in most cases, payable weekly or monthly. The assurances may be effected on the lives of infants and adults, and the introduction of this class of business has proved of great benefit to the industrial population.

As already mentioned there are four of the Australasian companies previously dealt with which combine industrial with ordinary business,

while a fifth limits its operations to industrial and medical benefit transactions. The balance-sheets of these companies, however, do not show sufficient information to admit of making a satisfactory comparison of the business transacted, as, in some cases, the two branches are not treated separately. At the close of 1901, the business in force of the three companies showing transactions in the industrial branch, was as follows:—

Company.	Date.	No. of Policies.	Sum Assured.	Annual Premiums
Citizens' Life Assurance Company, Ltd.	31 Dec., 1901	194,013	£ 4,199,253	£ 178,009
Australasian Temperance and General Mutual Life Assurance Society, Ltd.	30 Sept., 1900 ^b	37,124	705,996	35,532
Australian Metropolitan Life Assurance Company, Ltd.	31 Aug., 1901	5,252	106,055	7,266
Total (3 Companies) ...	.....	236,389	5,011,304	220,807

* Latest Available.

It will thus be seen that the average amount per policy for these companies was about £21 4s., while the average premium per policy amounted to 18s. 8d. per annum, or about 4½d. per week.

The receipts and disbursements of the companies publishing the information are given below, the dates to which the figures relate being also shown:—

Company.	Date.	Receipts.			Disbursements.			
		Premiums.	Other.	Total.	Claims, Surrenders, and Cash Dividends.	Expenses of Management, Commission on New Business, &c.	Other.	Total.
Citizens' Life Assurance Co., Ltd.	31 Dec., 1901	£. 172,916	£. 11,196	£. 184,112	£. 45,649	£. 97,370	£. 428	£. 143,447
Australasian Temperance and General Mutual Life Assurance Society, Ltd.	30 Sept., 1901	39,203	994	40,197	7,724	26,937	..	34,661
Provident and Industrial Insurance Co. of N.Z.	30 June, 1901	10,371	367	10,738	3,332	5,841	564	9,737
Total (3 Companies) ..	.....	222,490	12,557	235,047	56,705	130,148	992	187,845

The figures quoted show that about 95 per cent. of the total receipts consist of premiums, the other sources of revenue being interest, rent, fines, &c. With regard to the disbursements it will be noticed that a large amount was paid for expenses of management, commission, &c., the proportions under this head being :—

	Percentage of Total Income.	Percentage of Premium Income.
Citizens' Life Assurance Co., Ltd.....	52·9	56·3
Australasian Temperance and General Mutual Life Assurance Society, Ltd.....	67·0	68·7
Provident and Industrial Insurance Co. of N.Z.	54·4	56·3

The expenses of all societies transacting this class of business are invariably high, as a large staff of collectors and agents have to be employed, who are required to call at the homes of the assured for payments, but it may be said generally that the above ratios compare not unfavourably with those of old-established societies in the United Kingdom and the United States of America.

A distinctive feature of the liabilities of four of the companies (the Australasian Temperance and General is purely mutual) is the amount of share capital employed, and the profits generally provide for the payment of dividends to shareholders, the policy-holders, as a rule, not being entitled to participate. A complete table of assets and liabilities cannot be given, but the paid-up capital at the latest available date was as follows :—

	£.
Citizens' Life Assurance Company, Ltd.....	20,000
Standard Life Association, Ltd	12,500
Australian Metropolitan Life Assurance Co., Ltd.	9,182
Provident and Industrial Insurance Co. of N.Z.	4,775

FRIENDLY SOCIETIES.

The services which friendly societies directly render to the State in enabling the labouring classes to combine for the making of due provision to meet unforeseen demands in the case of sickness or death, are clearly recognised by the Governments of the various states, and all such societies which are registered according to law are granted certain privileges in consideration of the important part which they play in the social welfare of the community, in relieving the public purse of claims which would otherwise have to be preferred against it, and in maintaining the independence of their members and obviating the necessity of those members accepting aid which would have a tendency to pauperise them. The Acts regulating the operations of friendly societies in the states are all based on English legislation; and, generally speaking, the following privileges, which are granted to members of such societies

in the state of New South Wales, may be taken as typical of those enjoyed in Australasia :—

1. A registered Society can legally hold land and other kinds of property in the names of trustees, such property passing from one trustee to another by the mere fact of appointment; and can carry on all legal proceedings in the trustees' names.
2. The Society has a remedy on summary conviction whenever any person—
 - (a) Obtains possession of its property by false representation or imposition;
 - (b) Having possession of any of its property, withholds or misapplies it;
 - (c) Wilfully applies any part of such property to purposes other than those expressed or directed by the rules and authorised by the Act.
3. If an officer of the Society dies or becomes bankrupt or insolvent, or if an execution is issued against him whilst he has money or property of the Society in his possession by virtue of his office, the trustees of the Society are entitled to claim such money or property in preference to any other creditors.
4. The documents of the Society are free from stamp duty.
5. The Society can admit members under twenty-one and take from them binding receipts, which would otherwise be of no effect.
6. If it invests money on mortgage, such mortgages can be discharged by a mere endorsed receipt without reconveyance.
7. Its officers are legally bound to render account and give up all money or property in their possession on demand or notice, and may be compelled to do so.
8. Disputes can be legally settled according to the Society's own rules.
9. Members of registered Friendly Societies have the privilege of legally insuring money, on the deaths of their wives and children, for their funeral expenses, without having an insurable interest in their lives.
10. Members of registered Societies may dispose at death of sums payable by the Society by written nomination without a will; and this nomination may be made by youths of sixteen who cannot make a will till they are twenty-one.

11. Where there is no will and no nomination, the trustees may distribute sums without letters of administration being taken out (a person doing so in any other case would make himself liable for the debts of the deceased).

The Acts contain provisions inserted with the object of securing the solvency of the societies. In most of the states these provisions have been operative; but in others the position of some of the orders is not so satisfactory as it should be.

In the following table will be found the number of societies, the number of lodges or branches of these societies, the aggregate number of members, the total amount of their funds, and the average amount per member in each of the states. The figures are for the latest available periods, the dates being set forth below :

State.	Date.	Societies.	Lodges or Branches.	Members.	Total Funds.	Average Amount of Funds per member.
		No.	No.	No.	£	£ s. d.
New South Wales	31 Dec., 1900	45	809	79,021	710,003	8 10 8
Victoria	31 Dec., 1900	29	1,111	97,937	1,267,068	12 18 9
Queensland	31 Dec., 1900	17	357	30,726	245,937	8 0 1
South Australia	31 Dec., 1895	15	487	42,703	475,654	11 2 9
Western Australia	31 Dec., 1900	*15	108	76,890	46,300	6 14 5
Tasmania	31 Dec., 1900	16	136	13,548	108,984	8 0 11
Commonwealth .....	.....	137	3,008	270,825	2,853,952	10 10 9
New Zealand	31 Dec., 1900	12	443	40,267	766,480	19 0 10
Australasia		149	3,451	311,082	3,620,432	11 12 9

* Exclusive of 5 specially authorised societies.

† Exclusive of honorary members.

It will be seen from the foregoing table that, taking the average amount of funds per member as the basis of comparison, New Zealand occupies first position with the sum of £19 0s. 10d.; Victoria comes next with £12 18s. 9d.; South Australia takes third place with £11 2s. 9d. per member; New South Wales comes next with £8 19s. 8d.; and then follow Tasmania and Queensland in the order named, with £8 0s. 11d. and £8 0s. 1d. respectively; Western Australia having the smallest amount, viz., £6 14s. 5d., to the credit of each individual member.

MONEY ORDERS.

The business transacted in the various Postal Departments under the system of money orders has grown to very large dimensions. This increase is due mainly to the greater facilities now afforded for the transmission of money by this method, though it is also to some extent attributable to the more general appreciation of the system by the

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working classes. The following is a statement of the business transacted during 1900:—

State.	Orders issued.		Orders paid.	
	Number.	Amount.	Number.	Amount.
		£		£
New South Wales.....	441,925	1,507,967	435,768	1,541,535
Victoria	223,566	675,982	287,219	961,270
Queensland	153,988	530,822	96,987	381,891
South Australia	93,928	256,542	82,546	287,760
Western Australia	183,667	702,873	86,298	336,557
Tasmania	155,911	326,514	272,955	371,319
Commonwealth	1,252,985	4,000,700	1,261,773	3,880,332
New Zealand.....	369,834	1,214,853	265,178	1,047,179
Australasia.....	1,622,819	5,215,553	1,526,951	4,927,511

The average amount of each money order issued was £3 4s. 4d., and the business done by New South Wales greatly exceeded that of any other state. The average value of money orders issued in the United Kingdom during 1900 was £2 19s. 8d.

POSTAL NOTES.

Besides the money orders mentioned above, a system of postal notes is in force in all the states. The notes are issued for fixed amounts, varying from 1s. to 20s. The number and value of notes issued and paid during 1900 in each of the states were as follows:—

State.	Notes issued.		Notes paid.	
	Number.	Amount.	Number.	Amount.
		£		£
New South Wales.....	1,348,696	488,484	1,342,648	487,449
Victoria	1,259,416	493,177	1,290,590	502,490
Queensland	301,749	116,317	279,643	106,270
South Australia .....	.....	.....	284,340	94,500
Western Australia	59,180	16,788	.....	.....
Tasmania	62,447	19,088	57,667	18,076
Commonwealth...	*3,031,488	*1,133,854	†3,254,888	†1,208,785
New Zealand.....	490,505	151,178	486,553	153,587
Australasia.....	3,521,993	*1,285,032	†3,741,441	†1,362,372

* Exclusive of South Australia.

† Exclusive of Western Australia.

These figures show that, for the transmission of small amounts, postal notes are rapidly superseding money orders. While in 1900 the number of money orders issued was less than half that of postal notes, the value of the latter was only slightly over one-fourth of the value of money orders, the average value of postal notes being 7s. 3d. as compared with £3 4s. 4d. for money orders.

BANKRUPTCIES.

The bankruptcy laws of the different states are even more dissimilar than the laws on most other questions of importance; they have also been fluctuating, and the subject of many experiments and amendments. This renders any work of comparison difficult and unsatisfactory. Returns are available for all the states for the year 1900, and are given below. In connection with the table it may be pointed out that the figures are exclusive of 74 liquidations in Queensland, with liabilities stated at £104,412, and assets at £79,501; and also of 141 private arrangements under the Insolvency Act in South Australia, for which the assets and liabilities are not stated. The Victorian figures include 149 Deeds of Arrangement under the Act of 1897, the liabilities of which were £168,700, and the assets £159,771:—

State.	Number of Sequestrations.	As shown in Bankrupts' Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
New South Wales...	602	743,887	328,053	415,834
Victoria	495	353,898	249,233	104,665
Queensland.....	363	86,135	25,638	60,497
South Australia.....	27	13,776	8,319	5,457
Western Australia..	57	23,298	20,266	3,032
Tasmania	54	25,471	6,141	19,330
Commonwealth	1,598	1,246,465	637,650	608,815
New Zealand	304	244,280	151,644	92,636
Australasia.....	1,902	1,490,745	789,294	701,451

Little, if any, reliance can be placed upon the statements made by bankrupts as to the position of their affairs, the assets being invariably exaggerated. Taking the figures given above for what they are worth, it would appear that the average amount of liabilities per bankrupt was £784, and of assets, £415, showing a deficiency of £369. In the following table the average figures for the last ten years for which returns are available are given, except for Western Australia, for which

complete returns are only available for eight years; the assets, however, have been omitted, since the statements, so far as some of the states are concerned, are palpably worthless. The Victorian figures include the "Deeds of Arrangement" for the years 1898 to 1900, while the South Australian returns are exclusive of private arrangements, which averaged 191 per annum :—

State.	Number of Sequestrations.	Liabilities, as shown in Bankrupts' Schedules.
		£
New South Wales	1,086	1,045,674
Victoria	829	2,820,792
Queensland	341	131,874
South Australia	64	84,949
Western Australia	70	125,216
Tasmania	120	55,975
Commonwealth	2,510	4,264,480
New Zealand	464	407,077
Australasia	2,974	4,671,557

EMPLOYMENT AND PRODUCTION.

TO obtain a fair approximation of the number of persons engaged in the various walks of life in Australasia was impossible before the census of 1891 was taken, for although at the Census enumerations of 1881 and previous years the occupations of the people were made a feature of the inquiry, the classification, which followed closely that originally devised by the late Dr. Farr, was unsatisfactory, as it completely failed to distinguish between producers and distributors. To avoid a repetition of this defect the Census Conference, held at Hobart in March, 1890, abandoned the English system and adopted a scheme of classification more in accordance with sound principles. This classification was reviewed at the conference of Statisticians held in Sydney in February, 1900, and was adopted, with very slight modification, for use at the decennial Census of 1901. Under this classification the population is divided into two great sections—bread-winners and dependents; and the bread-winners are arranged in their natural classes of producers and distributors, with their various orders and sub-orders. The census results of several of the states were, unfortunately, not available at the time this volume was printed, and it is, therefore, not possible to give particulars of each class of employment for the year 1901, while a statement based on the results of the previous census would probably be misleading, in consequence of the great changes that have taken place during the past ten years. At the time of the census there were in Australia and New Zealand 1,469,661 male persons between the ages of 15 and 65 years, the period of life usually termed the supporting ages. These were distributed amongst the various states as follows:—

New South Wales	434,325
Victoria.....	358,136
Queensland	173,046
South Australia	111,876
Western Australia	83,510
Tasmania	53,164
	<hr/>
Commonwealth	1,214,057
New Zealand	255,604
	<hr/>
Australasia	1,469,661

The number of bread-winners in a country is usually in excess of the number of males at the so-called supporting ages, due to the employment of boys under 15 years and the continued activity of men over 65 years of age, and Australia is not an exception to the rule. The following table gives for each state the number of bread-winners—male and female—at the close of the first quarter of 1901; for some states the figures are approximations only :—

State.	Number of Bread-winners.		
	Male.	Female.	Total.
New South Wales	453,000	114,000	567,000
Victoria	373,000	126,000	499,000
Queensland	175,000	41,000	216,000
South Australia	120,000	30,000	150,000
Western Australia.....	90,000	12,000	102,000
Tasmania	58,000	16,000	74,000
Commonwealth	1,269,000	339,000	1,608,000
New Zealand	248,000	60,000	308,000
Australasia	1,517,000	399,000	1,916,000

The surprising feature in these figures is the large number of females shown to be employed. Of the 399,000 stated above, about two-fifths are in domestic service, or engaged in connection with board or lodging houses, one-fourth in some form of manufacturing, principally in factories, while dairying and farm work employ about 10 per cent., and professional pursuits a like number.

The number of dependents in each State is set out in the following statement, which must be taken as approximate only, since the actual

figures, as ascertained at the census in March, 1901, have not in all cases been published :—

State.	Number of Dependents.		
	Males.	Females.	Total.
New South Wales	260,000	527,800	787,800
Victoria	230,700	471,400	702,100
Queensland	101,200	179,400	280,600
South Australia ..	64,400	148,200	212,600
Western Australia.....	22,900	59,200	82,100
Tasmania.....	31,600	66,900	98,500
Commonwealth	710,800	1,452,900	2,163,700
New Zealand	158,000	306,700	464,700
Australasia	868,800	1,759,600	2,628,400

VALUE OF PRODUCTION FROM ALL INDUSTRIES.

Under the various chapters devoted to the discussion of agriculture, dairying, grazing, mining, &c., particulars regarding the value of the production of the great primary industries have been given at some length; combining the results there shown with the value of manufactures, the total value of production during the year 1901 was £141,156,000, of which amount the total of each state and the value per inhabitant were as follow :—

State.	Value of Production.	Value per Inhabitant.
	£	£ . s. d.
New South Wales	38,954,000	28 7 9
Victoria	28,926,000	24 0 11
Queensland	16,933,000	33 11 5
South Australia	10,314,000	28 8 2
Western Australia	12,544,000	66 17 11
Tasmania	5,033,000	28 19 10
Commonwealth	112,704,000	29 12 7
New Zealand	28,452,000	36 10 4
Australasia	141,156,000	30 16 0

The distribution of the production of the states under the various branches of primary and other productive industries was as follows :—

State.	Agriculture.	Pastoral Industries.	Dairying, Poultry, and Bee Farming	Mining Industries.	Forestry and Fisheries.	Manu- factories.
	£	£	£	£	£	£
New South Wales....	6,657,000	12,552,000	3,046,000	5,854,000	733,000	10,032,000
Victoria	8,625,000	5,347,000	3,395,000	3,312,000	275,000	7,472,000
Queensland	2,457,000	5,618,000	1,052,000	3,115,000	706,000	3,935,000
South Australia	3,712,000	2,086,000	850,000	614,000	70,000	2,932,000
Western Australia	861,000	924,000	420,000	7,446,000	871,000	2,022,000
Tasmania	1,493,000	623,000	477,000	1,675,000	117,000	648,000
Commonwealth..	23,835,000	27,150,000	9,740,000	22,016,000	2,772,000	27,191,000
New Zealand	7,515,000	6,962,000	3,008,000	*2,956,000	1,081,000	6,930,000
Australasia.....	31,350,000	34,112,000	12,748,000	24,972,000	3,853,000	34,121,000

* Kauri gum production included hereunder.

The timber industry has not been specially dealt with in this volume. The interests involved, however, are somewhat large, especially in New Zealand and in the states of Western Australia, Queensland, and New South Wales. The total annual value of the timber industry of the Commonwealth is £2,100,000, and of New Zealand £971,000. This represents the value of the rough timber as it leaves the forest saw-mills, the value added by further treatment in the saw-mills and joinery yards is included in the manufacturing industries. Amongst the states of the Commonwealth, Western Australia stands first as regards timber production. In the year 1901 the value was £751,000, for New South Wales the return was £563,000 during the same period, and for Queensland £536,000. The other states show much smaller amounts, viz., Victoria, £125,000; Tasmania, £95,000; and South Australia about £30,000.

The fisheries of Australia comprise the ordinary coast and river fisheries, and the pearl-fishing industry of Queensland and Western and Northern Australia; while there is a small export of whale oil from Tasmania. The pearlshell fisheries of Queensland show an export of £107,000 per annum, and of *bêche-de-mer* the value exported is, in round figures, £10,000. From Western Australia the export of pearl-shell is about £87,000, and of pearls £20,000. Reckoning the home fisheries of all the states and New Zealand, as well as the pearl fisheries, the total production of the industry may be set down at £782,000.

Compared with the older countries of the world, the amounts stated in the table just given are by no means insignificant, and in production per head Australasia exceeds any other country for which records are available. Although the data on which an exact statement can be founded are incomplete, there is sufficient information to warrant the assertion that from primary industries alone Australasia produces more per inhabitant than is produced from the combined industries of any other country, and

a consideration of this fact will, perhaps, explain the ease with which these states bear their apparently great indebtedness, and the general prosperity they enjoyed until the disturbances incident to the banking crisis unsettled general business. The following figures, giving the value of production from primary industries in the principal countries of the world, are, with the exception of those for the Australasian states, taken from Mulhall's *Dictionary of Statistics* :—

Country.	Total Production in Primary Industries.	Per head of Population.		
		£	s.	d.
United Kingdom	317,000,000	7	18	6
France	451,000,000	11	11	6
Germany	465,000,000	8	13	4
Russia	594,000,000	4	19	8
Austria.....	347,000,000	8	7	11
Italy	212,000,000	6	17	1
Spain.....	143,000,000	8	4	3
Portugal	28,000,000	5	10	2
Sweden.....	50,000,000	10	1	11
Norway	15,000,000	7	6	2
Denmark	36,000,000	10	4	0
Holland	37,000,000	7	17	5
Belgium	55,000,000	8	16	6
Switzerland.....	21,000,000	7	2	1
United States	1,037,000,000	14	14	0
Canada	83,000,000	16	5	6
Australasia (1901)	118,035,000	25	15	1
New South Wales	28,872,000	21	0	10
Victoria	21,454,000	17	16	8
Queensland	12,948,000	25	13	5
South Australia	7,332,000	20	3	11
Western Australia	10,522,000	56	2	3
Tasmania	4,385,000	25	5	2
New Zealand	21,522,000	27	12	5

Judged by the aggregate production, New South Wales stands above the other states, a position which it owes to the largeness of its interests in pastoral pursuits. The value of the return from this industry was £12,552,000, a sum almost equal to the total production from this industry in all the other Commonwealth States. In value of primary production per inhabitant, Western Australia stands easily first with the very high production of £56 2s. 3d. per head. New Zealand comes next, followed by Queensland. The high position occupied by Western Australia is due to its great production of gold, and to its large timber industries.

A comparison of the production of the states from primary industries per head of population, however, is liable to give an undue importance to those which have large territories and scanty population; for it is

but a natural expectation that where the population of a country is dense a large proportion of the inhabitants will be engaged in other than primary industries. If the value of primary production, therefore, be compared with the extent of territory enjoyed by each state, it will be found that the positions of several of the provinces are reversed. Thus, Victoria occupies first position with an average primary production of £244 2s. 4d. per square mile, while Western Australia has the second lowest return with £10 15s. 8d. The following, as well as the preceding table, bears testimony to the great natural resources of New Zealand, which has an average production per head of £27 12s. 5d., and per square mile of £206 0s. 2d. :—

State.	Production of Primary Industries per square mile.		
	£	s.	d.
New South Wales	92	18	6
Victoria	244	2	4
Queensland.....	19	7	5
South Australia.....	8	2	3
Western Australia	10	15	8
Tasmania	167	5	5
Commonwealth.....	28	15	3
New Zealand.....	206	0	2
Australasia.....	34	15	8

If the value of production in all the industries be related to the area of territory possessed by each state, which is a favourite comparison with some statisticians, the following results are obtained. There is, however, no necessary connection between the production of the manufacturing industries of a country and the area of its territory, the development of manufactures depending upon entirely different considerations :—

State.	Total production per square mile.		
	£	s.	d.
New South Wales	125	7	6
Victoria	329	2	9
Queensland	25	8	3
South Australia	11	8	3
Western Australia	12	17	1
Tasmania	191	19	9
Commonwealth	37	18	2
New Zealand ..	272	6	11
Australasia	45	17	5

A comparison of the value of production in 1901 with that of previous years brings out the fact that in spite of many adverse conditions these states are holding their own. In 1901 the value per head was £30 16s., which was greater than in 1891 or than in 1871, and only a few shillings below the average of 1881. This is an excellent result considering the continuous fall in prices from 1871 to 1894. If the prices of 1870-4, shown on page 376, had been maintained, the following would have been the value of production in the years indicated; for purposes of comparison the actual results are also quoted:—

Year.	Average value of Production per Inhabitant.	Average value of Production if 1871 prices had been obtained in each year.
	£ s. d.	£ s. d.
1871	29 3 8	29 3 8
1881	31 9 10	37 15 9
1891	30 13 5	44 13 10
1901	30 16 0	44 14 4

During the interval of ten years between 1891 and 1901 the sheep depastured in Australasia declined in number from 125 millions to 92 millions, while there was also a large decrease in other classes of stock, and the satisfactory results shown in this and the succeeding table were achieved in spite of the shrinkage in the return from the leading industry. The total value of production for each of the years named was as follows:—

State.	1871.	1881.	1891.	1901.
	£	£	£	£
New South Wales...	15,379,000	25,180,000	36,739,760	38,954,000
Victoria	19,260,000	22,750,000	30,319,610	28,926,000
Queensland	3,995,000	10,200,000	14,273,660	16,933,000
South Australia...	5,228,000	8,457,000	9,025,675	10,314,000
Western Australia..	707,000	943,000	1,806,340	12,544,000
Tasmania	2,131,000	3,586,000	3,920,940	5,033,000
Commonwealth	46,700,000	71,116,000	96,085,985	112,704,000
New Zealand	9,739,000	16,490,000	21,518,915	28,452,000
Australasia.....	56,439,000	87,606,000	117,604,900	141,156,000

The results per inhabitant for the same years were as follow :—

State.	1871.	1881.	1891.	1901.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales...	30 5 3	32 18 3	32 3 5	28 7 9
Victoria	26 2 8	26 3 0	26 9 3	24 0 11
Queensland	33 3 10	45 0 7	35 19 11	33 11 5
South Australia.....	28 7 7	29 19 11	28 1 1	28 8 2
Western Australia..	28 0 9	31 19 0	36 5 8	66 17 11
Tasmania	21 0 10	30 16 0	26 8 9	28 19 10
Commonwealth	27 17 2	31 1 3	29 19 9	29 12 7
New Zealand	37 15 10	33 9 8	34 3 1	36 10 4
Australasia.....	29 3 8	31 9 10	30 13 5	30 16 0

These figures show that since 1871 the value of production per head of population has increased in every state of the Commonwealth with the exception of Victoria, and as it is extremely probable that the returns from the manufacturing industry in that state are undervalued it may be said that the increase has been general throughout the Commonwealth, although proportionately larger in some states than in others. Taking the last period of ten years only, South Australia, Western Australia, Tasmania, and New Zealand show increases, but the average for Australasia also increased slightly, and this must be regarded as satisfactory when it is considered that the year could not be regarded as a favourable one for the pastoral and agricultural industries.

COMMONWEALTH FINANCE.

THE financial obligations of the Commonwealth began with the appointment of the Executive and the proclamation of the Constitution on the 1st January, 1901, at which date also the administration of the Customs passed over to the control of the Commonwealth. Besides the Customs and Excise, the Commonwealth has authority to take over from the States the administration of the following services, viz., posts, telegraphs, and telephones; naval and military defence; lighthouses, lightships, beacons and buoys; astronomical and meteorological observations; quarantine; census and statistics; bankruptcy and insolvency; copyrights; naturalisation and aliens; divorce and matrimonial causes; and immigration and emigration.

In accordance with this power, the Postal Service was transferred to the Commonwealth on the 1st March, 1901, and on the same date the Defence Administration was taken over. None of the other departments have yet been transferred.

The expenditure of the Commonwealth is divisible into new expenditure, that is to say, on services called into being after the proclamation of the Federal Union, and other expenditure, or expenditure on services previously existing. The new expenditure is charged to the States proportionately to their population, and the cost of transferred services over and above the revenue derived therefrom being ascertained, the total of the two amounts is deducted from the net revenue from Customs and Excise, and the balance handed back to the States.

Under the provisions of Section 87 of the Constitution Act, the Treasurer of the Commonwealth is entitled to retain one-fourth of the net proceeds of Customs and Excise services for the purposes of defraying the expenses of the Commonwealth, the remaining three-fourths, and as much more as the Treasurer does not require, being handed back to the States. It is, therefore, very essential in considering the question of Federal and State Finance to remember that, so far as concerns three-parts of the net revenue derived from customs and excise, such revenue, though appearing in the receipts of the Commonwealth, is not within the disposal of Parliament, but must be returned to the States. A large amount, in a normal year estimated at over seven and three-quarter millions, appears first as a federal receipt and a federal expenditure, and again as received by the States. Therefore in calculating the total sums raised by the Australian Governments, the amount returned to the States by the Federal Treasurer should be deducted from the total

receipts. It is necessary, however, that the whole transactions of the Federal Treasurer should be shown both as to revenue and expenditure; for, unless this is done, a proper understanding of Federal and State accounts cannot be obtained.

The financial year of the Commonwealth ends on the 30th June. Since the 1st January, 1901, there have been two periods, the first being the six months, January to June, 1901, and the second, the twelve months from 1st July, 1901, to 30th June, 1902. The first of these periods was quite abnormal, the transferred departments were not administered by the Commonwealth for the whole period, and there were some exceptional expenses by reason of the federal elections, and the cost of establishing the Commonwealth itself; on the other hand the federal departments were not organised, and cost less than in an ordinary year.

OPERATIONS FOR HALF-YEAR ENDED 30TH JUNE, 1901.

For the half-year ended 30th June, 1901, the following were the income and expenditure of the Treasurer:—

Income.		Expenditure.	
	£		£
Customs and Excise	4,150,589	New services of Commonwealth	131,255
Posts and Telegraphs	740,665	Customs and Excise collection	121,443
Other	4,502	Posts and Telegraphs	809,840
		Military and Naval	233,515
		Balance carried to following year	5,974
		Returned to States	3,593,729
	<hr/>		<hr/>
	£4,895,756		£4,895,756

During this period the State tariffs existing at the establishment of the Commonwealth remained in force, the uniform Customs tariff with the abolition of interstate duties not coming into operation until some time later. The collections in each State were:—

State.	Half-year ended 30th June, 1901.			
	Customs and Excise.	Posts and Telegraphs.	Other.	Total.
	£	£	£	£
New South Wales	1,019,008	276,936	1,019	1,296,963
Victoria	1,356,099	177,931	2,780	1,536,810
Queensland	710,830	95,586	301	806,717
South Australia	351,953	90,703	395	443,051
Western Australia	491,371	67,735	1	559,107
Tasmania	221,328	31,774	6	253,108
Total	4,150,589	740,665	4,502	4,895,756

The expenditure on account of new Services distributed on a capita- tion basis, and the other expenditure chargeable to the States were as follows :—

State.	Half-year ended 30 June, 1901.					
	New Expenditure.	Customs and Excise Collections.	Posts and Telegraphs.	Naval and Military.	Balance carried forward to following year.	Total.
	£	£	£	£	£	£
New South Wales	47,606	29,005	262,036	70,743	Cr. 4,300	413,690
Victoria	41,056	32,645	209,177	77,148	Dr. 956	359,070
Queensland	17,031	27,944	129,388	49,666	Dr. 594	223,435
South Australia ...	13,088	11,656	71,030	15,605	Dr. 567	110,812
Western Australia	6,038	15,338	84,191	8,610	Cr. 4,070	118,247
Tasmania	6,436	4,855	54,018	11,743	Dr. 279	76,773
Total.....	131,255	121,443	809,840	233,515	5,974	1,302,027

The difference between these figures and the amounts set out in the preceding table represents the payments which the States were entitled to receive under the provisions of Section 87 of the Constitution Act, and the sums handed back to each were as shown below.

	£
New South Wales	883,273
Victoria	1,177,740
Queensland	583,282
South Australia	332,239
Western Australia	440,860
Tasmania	176,335
Total.....	£3,593,729

The financial operations of the Commonwealth for its first half-year call for no special comment,—the payments made and the sources of income were in continuation of those of the States; no new sources of revenue were entered on by the Commonwealth, while the amount of new expenditure was comparatively small.

OPERATIONS FOR YEAR ENDED 30TH JUNE, 1902.

An entirely new set of conditions came into operation on the 9th October, 1902, when the schedule of uniform Customs duties was promulgated. Under the new conditions the interstate duties ceased, except,

as will be hereafter explained, in the case of Western Australia. The Federal Customs and Excise duties were in force for thirty-eight weeks and the state duties for fourteen weeks, while the Post Office and Defence Services were administered by the Commonwealth for the whole year. The following is a statement of the transactions of the Federal Treasurer for the year.

Income.		Expenditure.	
	£		£
Balance brought forward from 30th June, 1901 ...	5,974	New Services of Commonwealth	313,931
Customs and Excise	8,692,750	Customs and Excise collection	259,584
Posts and Telegraphs	2,364,873	Posts and Telegraphs	2,417,861
Customs collected on behalf of Western Australia ...	201,569	Military and Naval	935,416
Other revenue	29,711	Other expenditure	17
Balance carried forward to 1902-3	350	Returned to States	7,368,418
Total.....	£11,295,227	Total	£11,295,227

The amount of revenue collected within each state was as shown in the following table. The Customs and Excise collections of Western Australia include £1,134,044 revenue from the Commonwealth tariff, and £201,569 from interstate duties.

State.	Collections during year ended 30th June, 1902.					
	Customs and Excise.	Posts and Telegraphs.	Other Revenue.	Balance brought forward from previous year.	Balance carried forward to following year.	Total.
	£	£	£	£	£	£
New South Wales...	2,812,722	870,244	8,474	Cr. 4,300	Dr. 3,240	3,698,980
Victoria	2,376,483	588,278	7,519	Dr. 956	Cr. 1,428	2,969,896
Queensland	1,297,664	312,882	1,048	Dr. 594	Cr. 7	1,610,993
South Australia.....	698,696	276,191	2,094	Dr. 567	Cr. 1,904	974,510
Western Australia...	1,335,613	225,748	211	Cr. 4,070	Cr. 1,319	1,564,323
Tasmania.....	373,141	91,530	10,365	Dr. 279	Dr. 1,768	476,525
Total.....	8,894,319	2,364,873	29,711	Cr. 5,974	Dr. 350	11,295,227

The distribution of the expenditure between the states was as shown in the following table, the new expenditure as it is called

being distributed amongst the states according to population, the other expenditure according to the states on behalf of which it was incurred.

State.	Expenditure during year ended 30th June, 1902.					
	New Expenditure.	Customs and Excise Collection.	Posts and Telegraphs.	Naval and Military.	Other Expenditure.	Total.
	£	£	£	£	£	£
New South Wales...	112,949	63,445	827,544	309,137	.....	1,313,075
Victoria	99,227	63,279	569,314	317,102	.....	1,048,922
Queensland	41,496	64,040	414,619	186,062	2	706,219
South Australia.....	29,952	26,779	242,936	58,694	.....	358,361
Western Australia...	16,001	31,828	256,115	35,303	.....	339,247
Tasmania.....	14,306	10,213	107,333	29,118	15	160,985
Total.....	313,931	259,584	2,417,861	935,416	17	3,926,809

The difference between the collections and disbursements by the Commonwealth on behalf of the states was returned to the latter, and the following sums represent the amount in each case :—

	£
New South Wales	2,385,905
Victoria	1,920,974
Queensland	904,775
South Australia	616,148
Western Australia.....	1,225,076
Tasmania	315,540
Total.....	7,368,418

PROBABLE REVENUE AND EXPENDITURE, 1902-3.

The settlement of the tariff and the passage of the Postal Act enable the Federal Treasurer to forecast the probable revenue and expenditure for the year ending 30th June, 1903, with a reasonable assurance that the forecast will be realised. The following table indicates the revenue estimated to be received during the year :—

State.	Customs and Excise.	Posts and Telegraphs.	Other Revenue.	Total.
	£	£	£	£
New South Wales.....	3,150,000	887,500	3,140	4,040,640
Victoria	2,300,000	620,900	4,595	2,925,495
Queensland	1,200,000	323,500	280	1,523,780
South Australia.....	680,000	268,200	1,689	949,889
Western Australia	1,385,000	243,900	128	1,629,028
Tasmania	340,000	100,400	872	441,272
Total	9,055,000	2,444,400	10,704	11,510,104

The expenditure that will probably be incurred during the same period is as follows :—

State.	New Expenditure.	Customs and Excise Collection.	Posts and Telegraphs.	Naval and Military.	Total.
	£	£	£	£	£
New South Wales	111,450	72,919	888,645	301,483	1,374,497
Victoria	96,723	62,998	608,404	280,264	1,048,389
Queensland	40,998	64,942	428,159	131,388	665,487
South Australia	29,136	27,012	260,624	61,901	378,673
Western Australia	16,718	34,657	277,983	40,228	369,586
Tasmania.....	13,931	10,662	114,944	31,798	171,335
Total	308,956	273,190	2,578,759	847,062	4,007,967

The probable return to the states, after adding or deducting the balance brought forward from 1901-2, will, therefore, probably be—

	£
New South Wales.....	2,662,903
Victoria	1,878,534
Queensland	858,300
South Australia	573,120
Western Australia	1,260,761
Tasmania	268,169
Total	£7,501,787

The proportions of estimated revenue and expenditure borne by each state, are shown in the following table :—

State.	Estimated Revenue, 1902-3.		Estimated Expenditure, 1902-3.	
	Amount.	Proportion to Total.	Amount.	Proportion to Total.
	£	per cent.	£	per cent.
New South Wales.....	4,040,640	35·10	1,374,497	34·29
Victoria	2,925,495	25·42	1,048,389	26·17
Queensland.....	1,523,780	13·24	665,487	16·60
South Australia.....	949,889	8·25	378,673	9·45
Western Australia	1,629,028	14·16	369,586	9·22
Tasmania	441,272	3·83	171,335	4·27
Total	11,510,104	100·00	4,007,967	100·00

The proportions of population in each state to the total Commonwealth population, are—New South Wales, 35·83 per cent. ; Victoria, 31·34 ; Queensland, 13·44 ; South Australia, 9·46 ; Western Australia, 5·42 ; and Tasmania, 4·51. It will be seen that, of the states, Western Australia alone has a revenue in excess of the proportion indicated by its population.

CUSTOMS AND EXCISE.

The collections under customs and excise during the year ended 30th June, 1901, were under divided control. From the 1st July, 1900, to the 31st December of that year, the collections were made by the State Governments, and for the latter half of the financial year, the administration was carried out by the Commonwealth Government. During the whole period the tariffs existing in the various states at the time of their union remained in force, and afford no indication of the revenue likely to be received under a uniform tariff. Nor do the collections for the year ended 30th June, 1902, settle satisfactorily this important question. In the first place three months of the twelve were under state tariffs and inter-state duties, and secondly, in some of the states it is believed that there were large importations in anticipation of the Federal Tariff affecting goods then free or subject to low duties. During the passage of the tariff through Parliament, material alterations were made in the rates proposed, and on that account also the revenue received gives no exact indication of the possibilities of the tariff as a revenue-producing instrument.

The following table shows the amounts of Customs and Excise collections for the years ended 30th June, 1901 and 1902, with the proportion thereof collected in each state, and the average per inhabitant:—

State.	For Year ended 30th June, 1901.				For Year ended 30th June, 1902.	
	Collected by State Government.	Collected by Commonwealth Government.	Total Collections.	Average per Inhabitant.	Amount Collected.	Average per Inhabitant.
New South Wales	£ 939,336	£ 1,019,008	£ 1,958,344	£ s. d. 1 8 8	£ 2,512,722	£ s. d. 2 0 9
Victoria	1,202,999	1,356,099	2,559,098	2 2 9	2,376,483	1 19 4
Queensland	787,695	710,830	1,498,525	3 0 2	1,297,664	2 10 10
South Australia	338,233	351,953	690,186	1 18 3	698,696	1 18 4
Western Australia	500,345	491,371	992,216	5 10 2	1,134,044	5 16 5
Tasmania	253,783	221,328	475,111	2 14 11	373,141	2 2 10
Total	4,022,891	4,150,589	8,173,480	2 3 4	8,692,750	2 5 4

Besides the amount set down in the foregoing table as collected in Western Australia during the year ended 30th June, 1902, a sum of £201,569 was received by the Customs Department on interstate goods taxable under the special Western Australian tariff. Under the provisions of the 95th section of the Commonwealth of Australia Constitution Act, Western Australia is empowered for the first five years after the imposition of a uniform tariff to impose duties on goods passing

into that state and not originally imported from beyond the limits of the Commonwealth. The duty so imposed on any goods, however, is not to exceed, during the first of such years, that chargeable under the law of Western Australia in force at the imposition of uniform duties, and shall not exceed during the second, third, fourth, and fifth of such years respectively, four-fifths, three-fifths, two-fifths, and one-fifth of such latter duty. This special tariff therefore ceases on the 9th October, 1906. If these collections had been included, the total revenue for the Commonwealth would have been £8,894,319, and for Western Australia £1,335,613, equal in the former case to £6 17s. 1d. per inhabitant, and in the latter to £2 6s. 5d.

The passing of the uniform tariff has enabled the Federal Treasurer to estimate the revenue that may be expected from duties of customs and excise during the financial year ending 30th June, 1903. Excluding the receipts from the special Western Australian tariff, calculated to yield £225,000, the estimated collections will be as follows:—

State.	Estimated Net Revenue from Customs and Excise for year ending 30th June, 1903.
	£
New South Wales	3,150,000
Victoria	2,300,000
Queensland	1,200,000
South Australia	680,000
Western Australia	1,160,000
Tasmania	340,000
Total	8,830,000

Grouping the receipts according to the divisions of the tariff, the estimated return under each head will be—

Estimated Revenue, 1902-3.

Customs—	£	Customs—	£
Stimulants	2,074,500	Paper and stationery...	105,000
Narcotics	962,500	Vehicles	49,500
Sugar	468,500	Musical instruments ...	56,000
Agricultural products and groceries	881,500	Miscellaneous receipts, including licenses ...	115,500
Apparel and textiles ...	1,301,500	Total customs	7,603,500
Metals and machinery	713,500	Excise	1,375,500
Oils, paints, and var- nishes	127,000	Total collections...	8,979,000
Earthenware, &c.	160,000	Drawbacks and re- funds	149,000
Drugs and chemicals ...	54,000	Net revenue.....	8,830,000
Wood, wicker, and cane	203,500		
Jewellery and fancy goods.....	161,000		
Leather and rubber ...	170,000		

The foregoing estimated revenue is equal to £2 5s. 4d. per inhabitant, the rates for each state being :—

	£	s.	d.
New South Wales.....	2	5	2
Victoria	1	17	8
Queensland	2	5	11
South Australia	1	16	11
Western Australia	5	10	0
Tasmania	1	18	9
Commonwealth	2	5	4

If the yield from its special tariff had been included the rate for Western Australia would be £6 11s. 5d., and for the Commonwealth, £2 6s. 6d. Western Australia stands far above any of the other states in regard to revenue per inhabitant, and in total revenue it exceeds Tasmania and South Australia, and equals Queensland. This position it owes to the large consuming power of its population, a population consisting very largely of adult males receiving higher wages than those paid in any other state.

The proportion in which the various states have contributed, and may be expected to contribute to the Commonwealth tariff, is a question of much interest, as under the book-keeping provisions of the Constitution the return made to each state depends upon its contribution to the revenue. The following is a statement of the proportions of customs and excise collected in each state for the nine months of the financial year 1902, during which the uniform tariff was in operation, and the proportions estimated by the Treasurer during the year ended June 1903 ; in order to throw further light on the question the proportion of population in each state to the total population of the Commonwealth is also given.

State.	Proportion of—		
	Population.	Customs and Excise Revenue raised, 9 months ended 30th June, 1902.	Customs and Excise Revenue estimated for year ending 30th June, 1903.
	Per cent.	Per cent.	Per cent.
New South Wales	35·83	35·31	35·67
Victoria	31·34	25·05	26·05
Queensland	13·44	14·62	13·59
South Australia	9·46	7·67	7·70
Western Australia.....	5·42	13·18	13·14
Tasmania.....	4·51	4·17	3·85

The chief element in determining the amount of revenue to be raised by the Commonwealth was the necessities of the various states, and so long as those necessities exist a sum approximating to what is now obtained will need to be raised, but it can hardly be supposed that Australia will long continue to raise as large a revenue as £2 5s. 4d. per inhabitant from a customs tariff containing so large a free list, embracing as it does imports amounting to £10,257,000 out of a total import of general merchandise of £38,503,000.

Although indirectly connected with the question of the Commonwealth tariff, the returns obtained in past years from customs and excise by the states under their local tariffs are worth recording.

It will be found from a consideration of the subsequent tables that the rate per inhabitant has varied greatly, not only in a comparison of the different states but for the same state in different years. This variation arises from diverse causes. First, the influence of good or bad times on the producing power of the people is directly felt in the customs collections, although the rise or fall of the rate per inhabitant is not always a safe indication of such influence. Certain states, notably Queensland and Western Australia, grow insufficient agricultural produce for their own requirements, and in times past a good season—since it enabled those states to depend to a greater extent on their own resources—meant a decrease in the revenue from the importation of agricultural produce. Similar effects have also been felt in regard to revenue derived from live stock and other forms of produce. It also must be remembered that for many years the states have been systematic borrowers from the London market, while they have been the recipients of much money sent for investment by private persons. As loans of all descriptions reach the borrowing country in the form of goods, and a considerable proportion of the importations is the subject of taxation, years of lavish borrowing are naturally years of large revenue collections, and coincident with the cessation of a flow of foreign capital there is a decrease in customs revenue. Furthermore, there have been extensive alterations in the tariffs affecting the revenue during the years which the following table covers. In New South Wales, in 1891 and 1895, and in Western Australia, in 1893 and 1896, radical tariff changes were made, and in other years minor alterations took place in nearly all the other states.

To these changes is chiefly attributable any sharp rise or fall in the rate of revenue per inhabitant. Speaking generally the customs revenue per inhabitant has tended to decline, especially when the tariffs are high, unless adjusted from time to time to meet the decline, for, apart from the specific causes mentioned above, other effective, if less obtrusive, influences are at work. Year by year the industries of the states are being developed, and the local producer is acquiring a firm hold on the domestic markets. Except in drought years little revenue will be received from duties on agricultural produce, as such produce will not be imported from abroad, and many descriptions of manufactured

goods have likewise ceased to be introduced, the locally-made article being produced in sufficient quantities to meet the demand. There can be no reasonable doubt that this tendency will be still more marked in the future; and it is, therefore, not surprising that Australasian Treasurers have of late years found it necessary to look to other sources than the customs for the revenue necessary to carry on the business of the country, and under the Commonwealth, with complete interstate freetrade and growing manufactures, this necessity will be greatly accentuated.

The amount of import and excise duties collected in the various states during each of the last twelve years is set forth in the following table—drawbacks and refunds being deducted from the gross collections of those states for which such information can be obtained:—

State.	1891.	1892.	1893.	1894.	1895.	1896.
	£	£	£	£	£	£
New South Wales	2,417,673	2,865,112	2,328,274	2,265,058	2,240,506	1,637,078
Victoria	2,509,551	2,318,218	1,887,474	2,045,853	2,021,564	2,050,380
Queensland	1,241,447	1,155,695	1,099,450	1,146,350	1,295,383	1,390,247
South Australia	647,203	611,723	546,006	539,868	551,103	613,169
Western Australia	233,777	271,376	254,095	409,886	614,457	988,829
Tasmania	393,457	336,084	303,682	299,661	322,755	347,925
Commonwealth	7,443,168	7,558,158	6,418,981	6,706,676	7,045,858	6,067,658

State.	1897.	1898.	1899.	1900.	1901 (Half-year).	1901-2.
	£	£	£	£	£	£
New South Wales	1,520,116	1,551,827	1,650,333	1,778,993	1,019,007	2,812,722
Victoria	2,025,886	2,217,541	2,224,811	2,320,555	1,356,100	2,376,483
Queensland	1,244,556	1,418,841	1,563,744	1,565,838	710,823	1,207,664
South Australia	612,382	618,430	641,181	639,005	352,934	698,696
Western Australia	1,062,026	906,831	859,915	976,411	491,371	1,335,613
Tasmania	370,312	426,799	447,036	489,921	221,327	373,141
Commonwealth	6,835,278	7,140,269	7,392,020	7,770,723	4,151,028	8,894,310

The revenue from import and excise duties per head of population probably offers more food for reflection than the figures in the table just given. New South Wales raised the smallest revenue compared with population of any of the states until 1891, a circumstance due to the comparatively low rate of the tariff; in 1892 its collections were about the average for Australasia; but at the beginning of 1896 a new tariff came into force which was designed to make the ports of the state free to all imports except narcotics and stimulants, and, although this intention was not fully carried out, yet the revenue per head of population was, until the introduction of the Commonwealth tariff, very considerably less than in any of the other states. The variations in the rates

from year to year are interesting as illustrating the force of the remarks made a few pages back in introducing the subject of customs duties.

State.	1891.	1892.	1893.	1894.	1895.	1896.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales.....	2 2 4	2 8 8	1 18 8	1 16 11	1 15 10	1 5 9
Victoria	2 3 10	1 19 10	1 12 2	1 14 8	1 14 2	1 14 8
Queensland	3 2 7	2 17 2	2 13 2	2 14 2	2 19 7	2 19 8
South Australia	2 0 3	1 17 2	1 12 3	1 11 3	1 11 7	1 14 11
Western Australia	4 13 6	4 17 0	4 2 2	5 11 5	6 14 1	8 5 4
Tasmania	2 13 1	2 4 7	2 0 5	1 19 7	2 2 0	2 4 3
Commonwealth	2 6 5	2 6 1	1 18 5	1 19 5	2 0 8	1 19 6

State.	1897.	1898.	1899.	1900.	1901 (Half-year).	1901-2.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	1 3 7	1 3 8	1 4 9	1 6 3	0 14 11	2 0 9
Victoria	1 14 4	1 17 6	1 17 6	1 18 11	1 2 8	1 19 4
Queensland	2 14 8	3 0 11	3 5 10	3 3 10	1 8 6	2 10 10
South Australia	1 11 10	1 15 0	1 15 11	1 15 6	0 19 6	1 18 4
Western Australia	7 1 8	5 9 11	5 1 5	5 11 2	2 14 7	6 17 1
Tasmania	2 5 10	2 11 5	2 12 6	2 16 9	1 5 7	2 2 10
Commonwealth	1 13 1	1 19 2	2 0 0	2 1 6	1 2 0	2 6 5

POSTS AND TELEGRAPHS.

The administration of the Post and Telegraph services was undertaken by the Commonwealth on the 1st March, 1901; the departments consequently were under state direction for a period of eight months in the year ended 30th June, 1901. In discussing the question of the revenue derived from these services, it must be borne in mind that the taking over of the administration by the Commonwealth made no immediate change in the management, which was conducted as if the six states were separate systems. On coming into operation of the Commonwealth Postal Act on 1st November, 1902, a uniform system was introduced, but the finances of the postal service before that date remained unaffected. In the following table is set out the revenue derived during each of the last two financial years, distinguishing for

the earlier year, the amounts received by the state and by the Commonwealth Governments during the period of their control :—

State.	For year ended 30th June, 1901.			For year ended 30th June 1902.
	Collected by State Government.	Collected by Commonwealth Government.	Total Collections.	Amount Collected.
	£	£	£	£
New South Wales.....	557,006	276,936	833,942	870,244
Victoria	410,435	177,931	588,366	588,278
Queensland	213,584	95,586	309,170	312,882
South Australia.....	183,310	90,703	274,013	276,191
Western Australia	142,391	67,735	210,126	225,748
Tasmania.....	72,551	31,774	104,325	91,530
Total	1,579,277	740,665	2,319,942	2,364,873

The expenditure during the same periods is shown in the subjoined table :—

Stat	For year ended 30th June, 1901.			For year ended 30th June, 1902.
	Expenditure by State Government.	Expenditure by Commonwealth Government.	Total Expenditure.	Total Expenditure.
	£	£	£	£
New South Wales.....	527,254	262,036	789,290	827,544
Victoria	305,787	209,177	514,964	569,314
Queensland	246,798	129,388	376,186	414,619
South Australia.....	152,288	71,030	223,318	242,936
Western Australia	171,322	84,191	255,513	256,115
Tasmania	52,812	54,018	106,830	107,333
Total	1,456,261	809,840	2,266,101	2,417,861

The operations of the past year show an apparent deficiency of £52,988 in the working of the Post and Telegraph Department. There are, however, certain allowances to be made. The expenditure was charged with various sums amounting to £124,893, which should have been charged against the preceding year ; on the other hand, obligations to the extent of £37,056, chargeable to 1901-2, were thrown forward to next year. Making these allowances, the post and telegraphic services would appear to show a profit of £34,849. The financial position of the postal service, however, cannot be correctly stated unless the interest on the capital cost of the land, buildings, plant and appliances existing at the time of transfer to the Commonwealth,

be taken into account. This cost has been variously estimated at from £7,312,000 to £7,514,000, and if an interest payment of £3 6s. per annum be charged to the postal service, the transactions would show a net loss of £232,000. The revenue and expenditure of the Post and Telegraph Department for the year ending 30th June, 1903, is estimated by the Treasurer to be, approximately, as follows:—

State.	Revenue.	Expenditure.
	£	£
New South Wales	887,500	890,617
Victoria	620,900	610,116
Queensland	323,500	428,884
South Australia	268,200	261,140
Western Australia	243,900	278,278
Tasmania	100,400	115,191
Total	2,444,400	2,584,226

These figures indicate a probable loss of £139,826 on the operations of the year, but included in the proposed expenditure is an amount of £140,110, for the construction of works and buildings. From all the states, with the exception of South Australia, an increased revenue is expected. From South Australia a decrease in the revenue to the extent of £7,991 is looked for; this is due to the fact that alterations, by way of reduction in the terminal and other charges in connection with the Eastern Extension Cable Company's business, will not be compensated for by new business.

The determination to charge to revenue the expenditure upon works and buildings will leave the administration of this service with a deficiency of £139,826, without taking into consideration the interest chargeable on transferred properties.

EFFECT OF FEDERATION ON STATE FINANCE.

The question of the effect which the operations of the Commonwealth may have upon the finances of the states is of great moment, and one which will not lessen in importance with the passage of time. That the finances of the states are in a disturbed state is evident from the fact that increased taxation and drastic retrenchment are being carried out, or in contemplation, in several of the states, and some show large deficits on the year's transactions. The existence of financial disturbance immediately following on the loss by the states of the control of their customs revenue is relied upon as proving the allegation so confidently made that this disturbance is due to the action of the Commonwealth Parliament and the Federal Administration. The assumption, more easily made than proved, is one that admits of being tested by the evidence of actual facts.

In dealing with the matter it will be necessary to consider the finances of the states since federation, and for the few years preceding that event. The following is a statement of the net revenue and expenditure of each state upon the services not transferred to the Commonwealth. The period covered is the five years, 1897-1902:—

State.	1897-8.		1898-9.		1899-1900.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	£	£	£	£	£	£
New South Wales	7,052,354	8,308,239	7,208,586	8,569,898	7,436,878	9,057,447
Victoria	4,250,196	6,261,685	4,585,787	6,315,082	4,595,216	6,567,260
Queensland	2,183,676	3,296,141	2,834,940	3,543,201	2,675,751	4,011,211
South Australia	1,768,205	2,479,569	1,844,949	2,506,035	1,935,725	2,659,777
Western Australia	1,516,111	2,906,952	1,414,120	2,255,399	1,733,571	2,316,117
Tasmania*	400,332	702,779	399,332	735,790	408,631	770,613

State.	1900-1.		1901-2.	
	Revenue.	Expenditure.	Revenue.	Expenditure.
	£	£	£	£
New South Wales	8,232,587	9,990,682	8,621,451	11,020,105
Victoria	4,932,031	7,219,771	5,085,359	7,407,781
Queensland	2,511,729	4,270,922	2,630,287	3,967,001
South Australia	2,082,153	2,801,736	1,853,850	2,823,578
Western Australia	1,875,692	2,806,002	2,129,047	3,151,427
Tasmania*	472,299	812,071	429,787	861,678

* Year ended 31st December previous.

The foregoing figures admit of a calculation of the amount of revenue to be obtained from other sources to enable the states to balance their finances, had they not administered the posts and telegraphs, or provided for their own defence during any of these years. The excess of expenditure over revenue for each year was:—

State.	1897-8.	1898-9.	1899-1900.	1900-1.	1901-2.
	£	£	£	£	£
New South Wales	1,255,885	1,361,312	1,620,569	1,758,095	2,398,654
Victoria	2,011,489	1,729,295	1,972,044	2,287,740	2,322,422
Queensland	1,112,465	1,158,261	1,335,460	1,759,193	1,336,714
South Australia	711,364	660,086	724,052	769,583	969,728
Western Australia	1,390,841	841,279	582,546	930,310	1,022,380
Tasmania*	302,447	335,958	361,982	339,772	431,891

* Year ended 31st December previous.

It will thus be seen that, except in the case of Western Australia, every state has increased its expenditure in the non-transferred

departments. Comparing the years 1899 and 1902 the increase for each state has been as follows:—

	£
New South Wales	1,037,342
Victoria	593,127
Queensland	178,453
South Australia	309,642
Western Australia	181,101
Tasmania	95,933

Western Australia is in a peculiar position, and causes were in operation in the state which make its case quite different from that of the other states.

It is obvious that no action of the Commonwealth could affect in any important degree the services remaining in the hands of the states, and that any increase or decrease in their obligations would arise, if not from causes within the control of the states, at all events from causes beyond the control of the Commonwealth. It must, therefore, be conceded that any confusion apparent in the state finances would have existed even if federation had not taken place. It remains to be seen how far the return made to the states by the Commonwealth differs from what the states provided for themselves before federation became an accomplished fact. The following is a statement of the excess of revenue over expenditure of transferred departments. This excess represents the amount available to meet the deficiency of revenue from the departments not transferred:—

State.	Excess of Revenue over Expenditure, Transferred Services.				
	1897-8.	1898-9.	1899-1900.	1900-1.	1901-2.
	£	£	£	£	£
New South Wales	1,261,358	1,371,988	1,508,119	1,692,661	2,483,981
Victoria	1,970,102	2,111,533	2,139,763	2,366,312	2,021,474
Queensland	1,133,189	1,308,177	1,383,249	1,247,275	946,102
South Australia	594,132	613,679	640,762	661,915	647,847
Western Australia	888,676	780,732	842,267	848,873	1,238,145
Tasmania*	362,440	414,013	434,498	471,021	398,966

* Year ended 31st December previous.

The whole of the sum shown as excess on transferred services in 1902 was not returned to the states, as the expenses of the Commonwealth had first to be deducted. After making due allowance for new revenue, the charges to the states under this head ranged between £11,354 for Tasmania for the year ended 31st December, 1901, and £112,949 for New South Wales for the year ended 30th June, 1902, as shown on page 816.

Taking the year 1898-9 as the last of the series for which the states were wholly responsible so far as revenue was concerned, and comparing

the excess of revenue therein with that for 1901-2 some interesting results are obtained.

	Excess of 1901-2 over 1898-9. £	Deficiency of 1901-2 on 1898-9. £
New South Wales	1,111,993	.....
Victoria .....	.....	90,059
Queensland .....	.....	362,075
South Australia	34,168	.....
Western Australia.....	457,413	.....
Tasmania ^a .....	.....	15,047

* Year ended 31st December 1901.

To three of the states, therefore, the first complete year of the Commonwealth gave a larger revenue than the last year under state control, while in the case of Victoria, Queensland, and Tasmania the reverse was true. It will be seen from the table on page 826 what efforts had been made to cope with the restriction of income which the re-arrangement of finances under federation would inevitably entail in the majority of the states. Placing, side by side, the sums representing the movements in revenue and expenditure and the sums charged to each state as its share of the new expenditure under federation, the position of affairs in the Commonwealth will be readily understood.

Taking the states individually it would appear that for New South Wales in 1901-2, as compared with three years previously (1898-9), there were—

Increased state expenditure	£ 1,037,342
New expenditure of Commonwealth charged to state.....	112,949
	<hr/>
	1,150,291
Increased revenue from transferred services.....	1,111,993
	<hr/>
Difference	38,298

The above statement shows that in New South Wales the whole of the new Commonwealth revenue was absorbed and a sum of £38,298 in addition.

In Victoria the conditions were :—

Increased state expenditure	£ 593,127
New expenditure of Commonwealth charged to state.....	99,227
	<hr/>
	692,354
Decreased revenue from transferred services	90,059
	<hr/>
Total	782,413

The state finances, therefore, were in a worse position to the extent of £782,413 in 1901-2 compared with three years previously, and the increase in the state expenditure was responsible for by far the larger part of this sum (£593,127). It may be pointed out that a reduction on customs revenue was almost inevitable with the abolition of

interstate duties, which, during the last year they were levied, gave Victoria £358,659.

The position of Queensland was as follows :—

	£
Increased state expenditure	178,453
New expenditure of Commonwealth charged to state.....	41,496
	<hr/>
	219,949
Decreased revenue from transferred services.....	362,075
	<hr/>
Difference	582,024

The state's financial position is, therefore, worse than in 1898-9 by £582,024, and of this sum only £178,453 can be attributed to the direct action of the state.

In South Australia the development since 1898-9 has been as follows :—

	£
Increased state expenditure	309,642
New expenditure of Commonwealth charged to state.. ...	29,952
	<hr/>
	339,594
Additional revenue from transferred services	34,168
	<hr/>
Difference	305,426

The state's position is, therefore, worse to the extent of £305,426. The cost of federal services is a charge every state looked forward to paying, and as South Australia has a larger revenue from transferred services than before the uniform tariff was adopted, the financial position of the state has not been affected by the establishment of the Commonwealth.

The position of Western Australia differs in one essential respect from that of the other states—duties are still leviable on interstate produce, and will continue leviable until the 8th October, 1906. Comparing 1898-9 with 1901-2, the following shows the altered conditions.

	£
Increase in state expenditure	181,101
New expenditure of Commonwealth charged to state ...	16,001
	<hr/>
	197,102
Increase of Revenue over Expenditure for transferred services	457,413
	<hr/>
Difference.....	260,311

Compared with three years ago the finances of 1901-2 showed an excess of £260,311 available revenue, which was about £59,000 in excess of the yield of the interstate duties. It is plain, therefore, that the state finances of Western Australia have not been disturbed by the operation of the uniform tariff.

The financial position of Tasmania has been for several years one of some difficulty. The following figures show the changes that have taken place during the last three years :—

	£
Increase of state expenditure	95,933
New expenditure of the Commonwealth charged to state	11,354
	<hr/>
	107,287
Decrease in Revenue from Transferred Services.....	15,047
	<hr/>
Total	122,334

The state Treasury was, therefore, in a less favourable position on the 31st December, 1901, by £122,334, than three years previously, but only £15,047 of this sum was due to the operation of the federal tariff.

Where the position of the states is now less favourable than in 1898-9, it may be attributed, first, to increase of expenditure upon the services remaining with the state, and secondly, to the loss of interstate duties. The value of the latter, at the date of the establishment of the Commonwealth, was :—

	£
New South Wales.....	141,061
Victoria	358,659
Queensland	144,009
South Australia	89,679
Western Australia.....	256,060
Tasmania.....	76,829

Western Australia, for the present, retains its interstate duties, while New South Wales and South Australia receive back more from the new duties than they received from the old duties, including those on interstate goods. In the case of Victoria, the return by the Commonwealth is only £90,059 less than in 1889, and Tasmania only £15,047 less, representing in each instance the approximate cost of the new services of federation, a charge which all the states might have looked forward to bearing without disturbance to their finances.

As will be seen from the chapter dealing with State Finance, the Treasurers of the states are seeking, by means of retrenchment and increased taxation, to balance their accounts.

It is well, perhaps, that this resolution has been taken, for a little consideration will show that it is idle, so far as concerns some of the states, to expect a return from the Commonwealth equal to satisfying their needs on the basis of expenditure indulged in by them during 1902. The following would need to be the amount of customs and excise duties to be levied by the Commonwealth to enable each state to receive back sufficient to balance its finances as on the 30th June, 1902. In order to show the measure of responsibility to be attached to the states, a column has been added showing the customs and excise revenue that

would have sufficed had their requirements been not greater than in 1899:—

State.	Customs and Excise revenue required, so that the return to each State would be sufficient to balance its expenditure.	
	On the basis of 1899.	On the basis of 1902.
	£	£
New South Wales	5,031,000	7,940,000
Victoria	8,311,000	10,588,000
Queensland	11,418,000	12,731,000
South Australia	9,537,000	13,559,000
Western Australia	7,457,000	8,835,000
Tasmania	10,203,000	12,695,000

It will thus be seen that whereas a tariff from which £7,940,000 is obtainable would, at the present time (1902), satisfy the requirements of the New South Wales Treasurer, it would take one yielding £13,559,000 to satisfy South Australia, the other states occupying positions at various intervals between the extremes. If, however, there had been no expansion of expenditure between 1899 and 1902, the required tariff might have ranged between £5,031,000 for New South Wales and £11,418,000 for Queensland.

It will have been observed from a previous table in this chapter, and in the part of this volume dealing with "State Finance," that the requirements of the State Treasurers vary greatly from year to year; it would be hopeless, therefore, for the Commonwealth Treasurer to endeavour to adjust his revenue to the needs of any state; still more hopeless would it be for him to attempt to mould his revenue to suit the variations in the requirements of six states. Hence the obvious policy of fixing a reasonable sum to be raised through the Customs House, and allowing the states to adjust their incomes and expenditures to the revenue thus provided.

RELIGION.

THE progress of all matters relating to denominational Religion since the early years of Australasian settlement has been steady and remarkable. For the first fifteen years after the foundation of the colony of New South Wales, only a single denomination was recognised by Government or possessed either minister or organisation—the Established Church of England. In those days the whole of Australasia was ecclesiastically within the diocese of the Bishop of Calcutta, of which it formed an Archdeaconry; this continued until 1836, when the bishopric of Australia was constituted, and the Rev. William Grant Broughton, D.D. (formerly Archdeacon), was consecrated the first Bishop. In 1841 the bishopric of New Zealand was established, and in 1842 that of Tasmania. Considerable changes took place in 1847, when the dioceses of Melbourne, Adelaide (including South Australia and Western Australia), and Newcastle (including the northern portion of what is now New South Wales, and the whole of Queensland) were established, and the Bishop of Australia was styled Bishop of Sydney and Metropolitan of Australia and Tasmania. In 1857 the diocese of Perth was formed out of that of Adelaide, and in 1859 the diocese of Brisbane out of that of Newcastle; in 1863 the bishopric of Goulburn was separated from Sydney; in 1867 the bishopric of Grafton and Armidale was formed out of part of the diocese of Newcastle; in 1869 Bathurst was separated from Sydney; in 1875 Victoria was divided into the two dioceses of Melbourne and Ballarat; in 1878 the bishopric of Northern Queensland was established, with Townsville as seat of its Bishop; in 1884 the diocese of Riverina was formed out of parts of the dioceses of Bathurst and Goulburn; in 1892 parts of the bishoprics of Brisbane and Northern Queensland were formed into the new diocese of Rockhampton; in 1898 the bishopric of British New Guinea was established, and in 1900 the new diocese of Carpentaria was formed in Northern Queensland. While the six dioceses of New South Wales were

united under a provincial constitution, with the Bishop of Sydney as Metropolitan, no such union existed in Victoria or Queensland, and the decision of the Lambeth Conference of 1897, granting the title of Archbishop to Colonial Metropolitans applied, therefore, only to Sydney, whose Bishop thereby became Archbishop of Sydney.

Each state preserves its autonomy in church matters, but the Archbishop of Sydney is nominal head or Primate within the boundaries of Australia and Tasmania. In 1872 the ties between the churches in the various states under the jurisdiction of the Primacy were strengthened by the adoption of one common constitution. A general synod of representatives of each of these states meets in Sydney every five years to discuss Church affairs in general. New Zealand is excluded from this amalgamation, and possesses a Primacy of its own. As already stated, a Bishop of New Zealand was appointed in 1841. After various changes the constitution of the Church in New Zealand was finally settled in 1874, when the whole colony was divided into the six dioceses of Auckland, Waiapu (Napier), Wellington, Nelson, Christchurch, and Dunedin. After the departure of Bishop Selwyn, who has been the only Bishop of New Zealand, the Primacy was transferred to the see of Christchurch, where it remained until 1895. In that year the Bishop of Auckland was elected Primate of New Zealand. The missionary Bishop of Melanesia, whose head-quarters are at Norfolk Island, is under the jurisdiction of the New Zealand primacy. At present, therefore, there are twenty-three bishops in the states, including the Bishop of Melanesia, but excluding assistant bishops. The Synodical system of Church Government, by means of a legislative body, consisting of the clergy and representatives of the laity, prevails throughout Australasia, both in the individual states and as a group.

The Church of England has a larger number of adherents than any other church as well in each state as in the Commonwealth; its position is strongest in Tasmania and New South Wales, where its doctrines are professed by nearly half of the population; in Western Australia also it is a very powerful body, numbering 42 per cent. of the people of the state. The Church is proportionately weakest in South Australia with adherents numbering 30.26 per cent. of the total population. The adherents of the Church of England in Australia numbered 644,490 in 1871, 867,791 in 1881, 1,234,121 in 1891, and 1,497,620 in 1901, an increase of 853,130 in thirty years; in New Zealand the increase has been from 107,241 in 1871 to 314,024 in 1901, or 206,783 in thirty years.

In 1803 a grudging recognition was extended to Roman Catholics, one of whose chaplains was for some time placed on the Government establishment; but it was not until 1820 that any regular provision was made for the due representation of the clergy of this body. Until 1834 the Roman Catholics of Australia and Tasmania were under the jurisdiction of the Bishop of Mauritius (the Rev. Dr. Ullathorne being

Vicar-General from 1830 to 1834), but in that year Sydney was constituted a see, and the Rev. John Bede Polding, D.D., was consecrated Bishop, with jurisdiction over the whole of the Continent and Tasmania. In 1842 Hobart was established as a separate diocese, and Sydney became an archiepiscopal see. The diocese of Adelaide dates from 1843, that of Perth from 1845, and those of Melbourne, Maitland, Bathurst, and Wellington from 1848. During this year a diocese was established in the Northern Territory of South Australia, which since 1888 has been designated the diocese of Port Victoria and Palmerston. The bishopric of Brisbane was founded in 1859, and that of Goulburn in 1864. In 1867 the Abbey-nullius of New Norcia (Western Australia) was established. The dioceses of Armidale and Auckland date from 1869, and those of Ballarat and Sandhurst from 1874. In 1876 Melbourne became an archdiocese, and Cooktown was formed into a Vicariate-Apostolic. Other changes took place in Queensland in 1882, when the diocese of Rockhampton was founded, and in 1884, when the Vicariate-Apostolic of British New Guinea (with residence at Thursday Island) was established. In 1885 the Archbishop of Sydney was created a cardinal, and placed at the head of the Roman Catholic Church throughout Australasia. Following upon this appointment great alterations took place in the arrangement of dioceses in 1887, when the new dioceses of Lismore, Wilcannia, Sale, Port Augusta, and Christchurch, and the Vicariates-Apostolic of Kimberley and Queensland (the latter with jurisdiction over all the aborigines of the state) were established, and Adelaide, Brisbane, and Wellington became archdioceses. In 1888 Hobart was also made an archiepiscopal see; and a new see was established in 1898 at Geraldton, in Western Australia. At the present time there are six archbishops, sixteen bishops, three vicars apostolic, and one abbot-nullius, or in all twenty-six heads of the Church with episcopal jurisdiction, irrespective of the Vicariate-Apostolic of British New Guinea and of several auxiliary and coadjutor-bishops.

The Roman Catholic Church occupies the second place in importance among the Churches of Australasia, and in each state, except South Australia, where the Methodist church is numerically stronger, and in New Zealand where its adherents are less numerous than the Presbyterians. In 1871, the Roman Catholics returned at the census of the Commonwealth states numbered 408,279, in 1881, 539,558, in 1891, 713,846, and in 1901, 855,800; this shows an increase of 447,521, in thirty years. In New Zealand the increase was from 35,608 to 109,822 in the same period, that is to say, of 74,214. Compared with the total population the Roman Catholic adherents were 23.1 per cent. in 1871 compared with 21.6 per cent. in 1901, thus showing a slight decrease.

Amongst the earliest free colonists who settled in the Hawkesbury district of New South Wales was a small party of Presbyterians, and one

of the first places of worship erected in the state was put up in 1810 at Portland Head by their voluntary exertions. Services were conducted there for years before any ordained minister of the denomination reached New South Wales; indeed, it was not until 1823 that the Rev. Dr. Lang and the Rev. Archibald Macarthur, the first Presbyterian ministers in Australasia, arrived in Sydney and Hobart respectively. The Presbyterian Churches of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania, are united in a Federal Assembly which meets every year in rotation in the capital cities of the states mentioned. On the 24th July, 1901, representatives of the churches within the various states met at Sydney, when the union of the Presbyterian churches of the states of Australia was accomplished, and the first General Assembly met in pursuance of the scheme of union agreed upon by the Federal Assembly. The United Church is known as "The Presbyterian Church of Australia." New Zealand is not included in this federation, and the Presbyterian Church in that colony is divided into the Presbyterian Church of New Zealand and the Presbyterian Church of Otago and Southland. Besides the churches mentioned, there are several small bodies of Presbyterians unconnected with the larger churches, such as the Presbyterian Church of Eastern Australia in New South Wales, and the Free Church in Victoria. The church in each state, however, acts independently as regards local ecclesiastical administration, and preserves its autonomy in respect of funds and property.

The Presbyterian Church is strongest in New Zealand where its adherents number 176,503, equal to 23·42 per cent. of the population; in Victoria the Presbyterians form 16·16 per cent., and in Queensland 11·7 per cent. of the total population; in none of the other states does the proportion reach 10 per cent. Since 1871 the Presbyterian population of the Commonwealth has increased from 199,195 to 426,073, or by 226,878. In New Zealand the increase has amounted to 112,879.

The first Wesleyan minister came to New South Wales in 1815, but it was not until 1821 that a Wesleyan place of worship was erected in Sydney, and it was even later before the denomination was allowed to share in the Government provision for religion. The first Wesleyan Church in Hobart was established in 1820. From 1815 to 1855 the Wesleyan Church in the colonies was regarded as a mission of the British Wesleyan Church, and from 1855 to 1873 it was affiliated to the British Wesleyan Conference; but in the latter year it was constituted into a separate and independent Conference as the Australasian Wesleyan Methodist Church. At the conference of 1890, held in Sydney, the church districts in Queensland were formed into a separate body, and in 1898, the union of the Methodist churches took place in accordance with resolutions approved by the Wesleyan Conference and Primitive Methodist District Assembly. The union of the Methodist churches of

South Australia took place in January, 1900. Western Australia formed a district of the South Australian Conference until March, 1899, when it was constituted a separate conference, its first meeting being held at Perth in March, 1900. At present the Church is divided into six Conferences, viz., New South Wales, Victoria and Tasmania, Queensland, South Australia, Western Australia, and New Zealand. These Conferences meet annually, while a General Conference is held at triennial periods within the boundaries of each annual Conference in the order decided upon. On the 1st January, 1902, the Wesleyan Methodist, Primitive Methodist, and United Methodist Free Churches, entered into organic union, under the name of "The Methodist Church of Australasia." The members of the various Methodist churches in Australia now number 504,154, an increase of 323,571 on the total for 1871, which was returned at 180,583. During the twenty years from 1871 to 1901, the number of adherents in New Zealand increased from 22,004 to 83,789. The denomination at present is proportionately strongest in South Australia, where it forms 25·5 per cent. of the total population, and in Victoria where the proportion amounts to 15·2 per cent.

A Congregational minister arrived in Sydney as early as 1798; and in Hobart the Congregational Church was established in 1830. At present there exists a separate Congregational Union in each of the Australasian provinces. Federal meetings have been held, and a Congregational Union of Australasia has been established. The first meeting of this body was held at Wellington, New Zealand, in 1892. It is intended to hold similar gatherings from time to time in the capital cities of the various states. In 1901 the Congregationalists in Australia numbered 73,563 as against 41,595 in 1871. The membership of this body has, however, remained almost stationary since 1891, when the adherents in Australia numbered 72,738. In New Zealand there were 3,941 Congregationalists in 1871, 6,685 in 1891, and 6,844 at the census of 1901.

The Baptist Church in Australasia dates from a much later period, the establishment of the first four Baptist Churches being as follows:— Sydney, 1834; Launceston, 1839; Adelaide, 1840; and Melbourne, 1841. Churches were established in Auckland in 1852, in Brisbane in 1855, and in Perth in 1895. The adherents of this church in 1871 numbered 33,632, and in 1901 92,771, the increase in Australia for the thirty years being 59,139. In New Zealand the numbers for 1871 and 1901 were 4,732 and 16,899 respectively. The denomination is proportionately strongest in South Australia where it forms 6·2 per cent. of the total population.

The Jewish community in the Commonwealth had a membership in 1901 of 15,229 as compared with 13,805 in 1891, 8,815 in 1881, and 7,059 in 1871. In New Zealand this body numbered 1,262 in 1871, 1,536 in 1881, 1,463 in 1891, and 1,612 in 1901.

Leaving out of consideration some churches with but a small number of adherents, the Salvation Army may be said to be the youngest of the denominations in Australasia. It commenced operations in South Australia towards the close of the year 1880, and in 1882 officers were despatched from Adelaide to Victoria, New South Wales, and Tasmania, for the purpose of organising corps in those states. New Zealand was invaded in 1883, Queensland in 1886, and Western Australia in 1891. The head-quarters of the Army are in Melbourne, and its head in Australasia ranks as a Commissioner. He is directly responsible to General Booth, and controls the officers commanding in each of the states, who bear the rank of colonel or brigadier. Each state is divided into districts, which are placed in the charge of superior officers; and each of these districts is subdivided into local corps under subaltern officers, assisted by secretaries, etc. These subaltern officers are responsible to the officers commanding their division, and the latter to the colonel or brigadier in charge of the Army of the whole state. In 1891 there were 33,428 members of the Salvation Army in Australia, and at the census of 1901 the total was returned at 30,997, so that there has been a falling off in membership to the extent of over 2,400. For New Zealand the numbers in 1891 and 1901 were respectively 9,383 and 7,999, showing a decrease of 1,300 adherents.

In the eyes of the state all religions are equal in Australasia, and state aid to the denominations has now been abolished in all the provinces of the group. South Australia, in 1851, was the first state to withdraw such aid, after it had been in force only three years; and Queensland, in 1860, shortly after the assembling of the first Parliament, abolished the system inherited from the mother colony, and limited future payments to the clergy then actually in receipt of state aid. New South Wales passed a similar Act in 1862, and the expenditure on this account, which in that year was over £32,000, had fallen in 1901 to £4,281. The total amount paid by the state up to the 30th June, 1901, amounted to £565,171. The other states of the group subsequently abolished state aid, Victoria withdrawing its denominational grants as late as 1875. In Western Australia the system lasted until 1895, when it was abolished from that year; and, in lieu of the annual grants, two sums of £17,715 each were distributed amongst the religious bodies affected, namely, the Anglicans, Roman Catholics, Wesleyans, and Presbyterians, on the 1st October, 1895, and 1st July, 1896.

The only denominations which ever received State aid were the Church of England, Roman Catholics, Presbyterians, and Wesleyans; other denominations to which it was tendered refusing to accept it. The greater portion of the inhabitants belonged to these four persuasions, and the enormous increase of population during the last forty-five years has not in any considerable degree altered this condition of things, though in some states different bodies of Christians have represented a larger proportion of the people than in others.

The following table shows the proportions held by the principal denominations to the total population of each state at the enumerations of 1871, 1881, 1891, and 1901:—

State.	Church of England.	Roman Catholics.	Presbyterians.	Wesleyan and other Methodists.	Congregationalists.	Baptists.	Jew, Hebrew.	All Others.	
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	
1871	New South Wales	45·5	29·3	9·7	7·9	1·8	0·8	0·5	4·5
	Victoria	34·4	23·3	15·5	12·3	2·5	2·2	0·5	9·3
	Queensland	36·5	26·5	12·8	6·0	2·2	2·4	0·2	13·4
	South Australia	27·1	15·2	6·4	18·9	3·5	5·0	0·3	23·6
	Western Australia	59·0	28·7	2·1	5·6	3·6	0·2	0·2	0·6
	Tasmania	53·5	22·3	9·1	7·2	4·0	0·9	0·2	2·8
	New Zealand	41·8	13·9	24·8	8·6	1·5	1·9	0·5	7·0
	Australasia	39·1	23·1	13·6	10·5	2·4	2·0	0·4	8·9
1881	New South Wales	45·6	27·6	9·6	8·6	1·9	1·0	0·4	5·3
	Victoria	34·7	23·6	15·4	12·6	2·3	2·4	0·5	8·5
	Queensland	34·6	25·5	10·6	6·7	2·2	2·6	0·2	17·6
	South Australia	27·1	15·2	6·4	18·9	3·5	5·0	0·3	23·6
	Western Australia	54·7	28·3	3·4	7·0	4·3	...	...	2·3
	Tasmania	51·7	19·9	7·9	9·5	3·5	1·6	...	5·9
	New Zealand	41·5	14·1	23·1	9·4	1·4	2·3	0·3	7·9
	Australasia	39·1	22·2	13·4	10·9	2·2	2·2	0·4	9·6
1891	New South Wales	44·8	25·5	9·7	9·8	2·1	1·2	0·5	6·4
	Victoria	35·2	21·8	14·7	13·0	1·9	2·5	0·6	10·3
	Queensland	36·2	23·6	11·6	7·8	2·2	2·6	0·2	15·8
	South Australia	27·9	14·7	5·7	19·0	3·7	5·5	0·3	23·2
	Western Australia	49·7	25·3	4·0	9·2	3·2	0·6	0·3	7·7
	Tasmania	49·9	17·6	6·6	11·7	3·1	2·2	...	8·9
	New Zealand	40·0	13·9	22·6	9·9	1·1	2·4	0·2	9·9
	Australasia	39·1	21·1	13·0	11·4	2·1	2·3	0·4	10·6
1901	New South Wales	46·6	26·0	9·9	10·3	1·9	1·2	0·5	3·6
	Victoria	35·8	22·3	16·2	15·2	1·5	2·8	0·5	5·7
	Queensland	37·5	24·6	11·7	9·5	1·7	2·6	0·2	12·2
	South Australia	30·2	14·8	5·2	25·5	3·8	6·2	0·2	14·1
	Western Australia	42·0	23·4	8·2	13·6	2·5	1·7	0·7	7·9
	Tasmania	49·6	17·9	6·8	14·8	3·3	2·8	...	4·8
	New Zealand	41·7	14·6	23·4	11·1	0·9	2·2	0·2	5·9
	Australasia	40·5	21·6	13·5	13·2	1·8	2·4	0·4	6·6

From the foregoing table it will be seen that while there were fluctuations in individual States, the relative strength of the principal denominations in the whole of Australasia showed but little alteration during the thirty years from 1871 to 1901. The Church of England at the census of 1871 embraced 39·1 per cent. of the population, and at that of 1901 40·5 per cent., while the Roman Catholic Church receded from 23·1 per cent. in 1871 to 22·2 per cent. in 1881, and to 21·1 per

cent. in 1891, while there was a slight increase to 21·6 per cent. in 1901. The Presbyterian Church receded from 13·6 per cent. in 1871 to 13·4 per cent. in 1881 and 13·0 in 1891, rising again in 1901 to 13·5 per cent. The various Methodist bodies, which have been classed together, increased from 10·5 per cent. in 1871 to 10·9 per cent. in 1881, 11·4 per cent. in 1891, and 13·2 per cent. in 1901. Congregationalists remained almost stationary during the first three enumerations, but in 1901 the proportion receded to 1·8 per cent of the total. The percentage of Baptists at the enumeration of 1871 was 2 per cent., rising gradually to 2·4 per cent, at the census of 1901. At each of the four census periods the proportion of Jews remained the same, namely, 0·4 per cent. The column headed "All others" shows a decrease from 8·9 per cent. to 6·6 per cent. during the period. This column contains all the minor denominations, of which none are at all numerous except Lutherans in Queensland and South Australia; those whose denomination could hardly be classed as a religion; and all those who, from conscientious scruples, took advantage of the clauses of the Census Acts by which the filling in of the column "Religious Denomination" was left optional.

THE DENOMINATIONS IN 1901.

The numbers of adherents of the various denominations in each State of the Australian Commonwealth at the census of 1901 were as follows:—

Denominations.	New South Wales.	Victoria.	Queensland.	South Australia.	West'n Australia.	Tasmania.	Australian Commonwealth.
Church of England.....	623,131	423,955	184,078	106,987	75,654	83,815	1,497,620
Roman Catholic	347,286	263,710	120,405	52,193	41,832	30,314	855,800
Presbyterian	132,617	191,427	57,442	18,357	14,707	11,523	426,073
Wesleyan and other Methodists	137,638	180,278	46,574	90,125	24,540	24,099	504,154
Congregational	24,834	17,143	3,300	13,338	4,404	5,544	73,563
Baptist	16,618	33,831	12,717	21,764	3,125	4,716	92,771
Lutheran	7,387	13,934	25,470	26,140	1,703	387	75,021
Salvation Army	9,585	8,726	5,512	4,030	1,690	1,454	30,957
Christians, Disciples of Christ, &c.	3,453	11,425	2,055	6,103	1,133	1,070	25,239
Christian Brethren, Plymouth Brethren.	2,133	1,580	1,576	343	146	645	6,423
New Church, Swedenborgian, &c.	271	146	206	167	44	1	835
Catholic Apostolic Church, Irvingite.	442	456	942	33	36	38	1,947
Society of Friends, Quaker	234	254	164	70	21	179	931
Welsh Church, Calvinist, Calvinistic Methodist.	91	1,259*	147	19	41	2	1,559
Australian Church	418	966	.....	6	13	.....	1,403
Christadelphian	1,197	634	673	229	52	.....	2,835
Protestant (not otherwise described).	3,335	9,019	989	3,073	1,847	2,621	20,834
Hebrew	6,447	5,897	733	786	1,259	107	15,229
Mahometans, etc.	7,011	5,482	1,872	3,678	2,063	330	20,456
Others	30,718	30,898	26,741	15,154	9,754	4,680	117,945
Total	1,354,846	1,201,070	496,596	362,604	184,124	172,475	3,771,715

* Including Welsh Presbyterians.

while the numbers in New Zealand and in the whole of Australasia were as shown below :—

Denomination.	New Zealand.	Australasia.
Church of England.. .. .	314,024	1,811,644
Roman Catholic	109,822	965,622
Presbyterian	176,503	602,576
Wesleyan and other Methodists	83,789	587,943
Congregational	6,844	80,407
Baptist	16,899	109,670
Lutheran	4,833	79,854
Salvation Army	7,999	38,996
Christians, Disciples of Christ, &c.	6,107	31,346
Christian Brethren, Plymouth Brethren	7,484	13,907
New Church, Swedenborgian, &c.	159	994
Catholic Apostolic Church, Irvingite, &c.	326	2,273
Society of Friends, Quakers	313	1,244
Welsh Church, Calvinist, Calvinistic Methodist	14	1,573
Australian Church .. . . .	.....	1,403
Christadelphian	989	3,824
Protestant (not otherwise described)	1,241	22,125
Hebrew	1,612	16,841
Mahometans, etc.	2,475	22,961
Others	31,286	149,231
Total	772,719	4,544,434

RAILWAYS.

TO the proper development of a country like Australasia, ill-supplied with navigable rivers, railway construction is absolutely essential. This has been recognised from an early period, and for the last forty years the Governments of the principal states have been fully alive to the importance of carrying on the work. For a long time, however, they were hampered in their efforts by the difficulty of borrowing money in London at a reasonable rate of interest; but since the year 1871 considerable progress has been made in the work of construction; indeed, by far the greater portion of the public debt of Australasia has been contracted for railway purposes. As the area of the six states and New Zealand almost equals that of Europe or the United States of America, while the population numbers a little over four and a half millions, it is almost needless to say that many of the lines run through districts very sparsely peopled. This is particularly the case in the States of Queensland, South Australia, and Western Australia, where there are vast tracts of territory in which little in the nature of permanent settlement has yet been accomplished, and in none of the states can it be said that the railway lines traverse thickly-settled areas. Indeed, if a fault may be found with the State policy pursued in the past, it is that in some cases expensive lines have been laid down in empty country the requirements of which could have been effectually met for many years to come by light and cheap lines, and that in consequence the railway administrators find themselves heavily burdened with a number of unprofitable lines. A few of these have been closed, but the vast majority are worked at a loss. Notwithstanding these drawbacks, however, the railways of the Commonwealth of Australia collectively yield a net return equal to 2.88 per cent., and those of Australasia 2.95 per cent. on the cost of construction.

HISTORY OF RAILWAY CONSTRUCTION.

An agitation for the introduction of the railway into the colony of New South Wales was afoot as early as 1846, and in August of that year it was decided at a public meeting held in Sydney to survey a line to connect the capital with Goulburn. But no decided step was taken towards construction until September, 1848, when the Sydney Railroad and Tramway Company was formed for the purpose of laying down a line between Sydney and Parramatta and Liverpool, to be afterwards extended to Bathurst and to Goulburn. The first sod was turned by the Hon. Mrs. Keith Stewart, daughter of Sir Charles Fitzroy, the

Governor of the colony, on the 3rd July, 1850. Although started during a period of trade depression, when there was an abundant supply of labour, the scheme was only well under weigh when the discovery of gold caused a stampede from the city, and the company was left without workmen to carry on the undertaking. Undeterred, however, by the difficulties into which the changing conditions of the country had plunged the Sydney Railroad and Tramway Company, private enterprise in 1853 essayed the further task of constructing a line between Newcastle and Maitland; but this project proved no more successful than the other, and in the following year the Government was forced to step in and carry out the schemes for which the two companies had been promoted. From that time the work of construction was vigorously pressed forward, and on the 26th September, 1855, the line from Sydney to Parramatta, 14 miles in length, was opened to traffic; and on the 11th April, 1857, Newcastle was connected with East Maitland. The extension to Goulburn of the Sydney line was completed on the 27th May, 1869.

While the Sydney Railroad and Tramway Company was endeavouring to surmount the obstacles that had arisen in its path, the work of railway construction was begun in the neighbouring State of Victoria, no fewer than three private companies being promoted in 1853 for that purpose. Material assistance in the shape of land grants and guarantee of interest was afforded by the Government; and on the 13th September, 1854, the first completed railway in Australasia, a line extending from Flinders-street, Melbourne, to Port Melbourne, was opened to traffic. It had been begun nearly three years after the line to connect Sydney with Parramatta, but was only $2\frac{1}{2}$ miles long. No further mileage was brought into operation until May 13, 1857, when the Melbourne and Hobson's Bay Railway Company, which had constructed the first line, effected communication with St. Kilda; and on the 17th June of the same year a line from Williamstown to Geelong, 39 miles in length, which had been built by another company, was declared open. Meanwhile the Government of the State had not remained inactive. In addition to assisting private enterprise with liberal concessions, it had taken over in 1855 an unfinished line started by the third of the companies referred to, and was carrying on the work of construction on its own account. By the year 1863 it had acquired all the lines in the State with the exception of those owned by the Melbourne and Hobson's Bay Company, which were not purchased until the year 1878.

Although a line from Goolwa to Port Elliot, 6 miles in length, over which the locomotive now passes, was opened on the 18th May, 1854, it was at that time merely a horse tramway; and the first railway in South Australia was a line connecting the city with Port Adelaide, $7\frac{1}{2}$ miles long, which was thrown open to traffic on the 21st April, 1856. The following year saw a railway constructed as far north as Gawler; while on the 1st October, 1889, a line from Palmerston to Pine Creek, in the Northern Territory, which had been built by the South Australian Government, was opened, the length being $145\frac{1}{2}$ miles.

The northern State of Queensland had enjoyed the privilege of self-government for several years when, early in 1864, a line to connect Ipswich with Grandchester was commenced, and on the 31st July of the same year it was opened.

Although the Tasmanian Parliament granted a sum of £5,000 in 1863 for the survey of a line to connect Hobart with Launceston, the first railway in the island was one between Launceston and Deloraine, 45 miles in length, which was opened on the 10th February, 1871, having been commenced three years before. It was built by a private company, to whose capital, however, the Government had subscribed eight-ninths of the total amount of £450,000, on condition that the interest should be a first charge on the net receipts, and on the 3rd August, 1872, the line passed entirely into the ownership of the State. Communication between Hobart and Launceston was effected in 1876 by the completion of a line, connecting the southern city with Evandale Junction, which was constructed by an English company. The last of the States comprised in the Commonwealth to introduce the railway was Western Australia, where a line from the port of Geraldton to Northampton was begun during 1874 and opened in 1878. The commencement of railway construction in New Zealand was due to an agitation on the part of the settlers of Canterbury, who were desirous of facilitating communication between the city of Christchurch and the port of Lyttleton. The first portion of the line, as far as Ferrymead Junction, was brought into use on the 1st December, 1863.

The progress of railway construction, except, perhaps, in the State of Victoria, was anything but rapid during the earlier years. This was in a great measure owing to the sparseness of the population and the natural fear that the return would not justify the expenditure which would have to be incurred in making lengthy extensions of the lines. It was also due, as previously pointed out, to the low estimation in which Australasian securities were held in London, and the consequent high rate of interest at which money for railway construction had to be borrowed. Since the year 1871, however, all the States and New Zealand have made satisfactory progress. In the following table will be found the length of line opened during each year, and the total mileage at the close of the working year :—

Year.	Miles opened.					
	Total.			During each year.		
	Common-wealth.	New Zealand.	Australasia.	Common-wealth.	New Zealand.	Australasia.
1854	2½	.....	2½	2½	.....	2½
1855	16½	.....	16½	14	.....	14
1856	32½	.....	32½	16	.....	16
1857	117	.....	117	84½	.....	84½
1858	132	.....	132	15	.....	15
1859	171	.....	171	39	.....	39
1860	215	.....	215	44	.....	44

Year.	Miles opened.					
	Total.			During each year.		
	Common-wealth.	New Zealand.	Australasia.	Common-wealth.	New Zealand.	Australasia.
1861	243	.....	243	28	.....	28
1862	373	.....	373	130	.....	130
1863	395	5	400	22	5	27
1864	469	5	474	74	.....	74
1865	490	5	495	21	.....	21
1866	519	5	524	29	.....	29
1867	711	7	718	192	2	194
1868	782	7	789	71	.....	71
1869	911	7	918	129	.....	129
1870	994	46	1,040	83	39	122
1871	1,030	105	1,135	36	59	95
1872	1,168	105	1,273	138	.....	138
1873	1,353	145	1,498	185	40	225
1874	1,491	209	1,700	138	64	202
1875	1,602	542	2,144	111	333	444
1876	1,961	718	2,679	359	176	535
1877	2,493	954	3,447	532	236	768
1878	2,906	1,070	3,976	413	116	529
1879	3,222	1,171	4,393	316	101	417
1880	3,675	1,258	4,933	453	87	540
1881	4,192	1,334	5,526	517	76	593
1882	4,704	1,465	6,169	512	131	643
1883	5,107	1,480	6,587	403	15	418
1884	5,855	1,570	7,425	748	90	838
1885	6,227	1,654	7,881	372	84	456
1886	6,859	1,810	8,669	632	156	788
1887	7,657	1,841	9,498	798	31	829
1888	8,365	1,865	10,230	708	24	732
1889	9,162	1,912	11,074	797	47	844
1890	9,757	1,956	11,713	595	44	639
1891	10,163	2,011	12,174	406	55	461
1892	10,394	2,011	12,405	231	.....	231
1893	10,688	2,108	12,796	294	97	391
1894	10,974	2,168	13,142	286	60	346
1895	11,600	2,190	13,790	626	22	648
1896	11,641	2,190	13,831	41	.....	41
1897	11,970	2,185	14,155	329	(-) 5	324
1898	12,170	2,222	14,392	200	37	237
1899	12,702	2,257	14,959	532	35	567
1900	12,995	2,271	15,266	293	14	307
1901	13,497	2,300	15,797	502	29	531
1902	13,821	2,323	16,144	324	23	347

It will be seen from the foregoing table that the lines opened in the Commonwealth and Australasia averaged 30 miles in length during each year from 1854 to 1861; from 1862 to 1871 the annual average was 82 miles in the Commonwealth and 89 in Australasia; from 1872 to 1881, 312 miles in the Commonwealth and 439 in Australasia; from 1882 to 1891, 597 miles in the Commonwealth and 665 in Australasia; and from 1892 to 1902, 332 miles in the Commonwealth and 361 in Australasia. It is now the established policy of each state to keep the railways under State control, and only in exceptional circumstances is that policy departed from. Excluding coal, timber, and other lines which are not open to general traffic, there are within the Commonwealth only $640\frac{1}{4}$ miles of private lines, equal to but 4.75 per cent. of the total mileage open; and in Australasia only $728\frac{1}{4}$ miles, or 4.61 per cent. of the total mileage open. In Victoria the railways are entirely in the hands of the Government; while in Western Australia there are 277 miles of private lines, or 16.92 per cent. of the total mileage of the state; in New South Wales, $81\frac{1}{2}$ miles; in Tasmania, $160\frac{1}{2}$ miles, and in South Australia, 20 miles. A departure from the ordinary policy of the State has also been made in Queensland, where the construction of the railway from Mareeba to Chillagoe, a distance of 102 miles, has been carried out by private persons. The private lines of New Zealand have a total length of 88 miles. Except in the case of Western Australia, none of these private railways are trunk lines, the most important of them being primarily intended to facilitate the development of important mines, and not for general traffic.

The divergence of the policy of Western Australia from that pursued by the other states was caused by the inability of the Government to construct lines when railway extension was urgently required in the interests of settlement. Private enterprise was therefore encouraged by liberal grants of land to undertake the work of construction; but the changing conditions of the state have modified its policy, and on the 1st January, 1897, the Government acquired the Great Southern Railway, 243 miles in length, one of the two trunk lines in private hands. This railway, which was owned by the West Australian Land Company, Limited, was built on the land-grant system, the State concession being 12,000 acres for every mile of line laid down, of which the original concessionaire retained 2,000 acres. The total price paid by the Government for the railway, with all the interests of the company and of the original concessionaire, was £1,100,000, of which £800,000 is set down as the capital sum on which the railway authorities are expected to provide interest, exclusive of the amount invested in rolling stock. The other trunk line is the Midland Railway, 277 miles in length, owned by the Midland Railway Company of Western Australia, Limited. In this case the land granted by the state was also 12,000 acres per mile of line. In 1891 the Government granted some slight assistance to the company, and in the following year guaranteed £500,000 of 4 per cent. debentures, the security being a first charge

upon the railway and its equipment, and 2,400,000 acres selected land. At three months' notice, the state may foreclose should the company be indebted to it to the amount of £20,000.

The following statement shows the gauge and length of the private railways of Australasia, excluding coal, timber, and other lines which are not open to general traffic :—

Line.	Gauge.	Length.
New South Wales—	ft. in.	miles.
Deniliquin-Moama	5 3	45
Cockburn-Broken Hill	3 6	35½
Warwick Farm	4 8½	¾
Queensland—		
Mareeba to Chillagoe.....	3 6	102
South Australia—		
Glenelg Railway Co.'s lines :		
Holdfast Bay	5 3	7
Victoria Square	5 3	7
Sidings, loops, &c.	5 3	6
Western Australia—		
Midland : Midland Junction-Walkaway Junction	3 6	277
Tasmania—		
Emu Bay-Waratah-Guildford Junction- Zeehan	3 6	98
Lyell-Strahan	3 6	22
Gormanston to Kelly's Basin	3 6	33
Dundas-Zeehan	3 6	7
New Zealand—		
Wellington-Manawatu	3 6	84
Kaitangata-Stirling	3 6	4

A proviso has been inserted in the charters of the companies owning the private lines in New South Wales, whereby after a certain date the Government can, if disposed, acquire the lines at a valuation. Similar conditions are found in most of the charters granted by the other states permitting the construction of private lines.

In the construction of railways during the last working year the state of New South Wales displayed most activity. Of the 347 miles thrown open to traffic in Australasia during the twelve months ended 30th June, 1902, 177 were opened in New South Wales, comprising The Rock to Lockhart, Clyde to Carlingford, Byrock to Brewarrina, Gravesend to Reedy Creek, Cobar to the Peak, Reedy Creek to Inverell, and Goulburn to Crookwell.

The following table shows the extension of the railway in each state since 1861 :—

State.	1861	1866	1871	1876	1881	1886	1891-2	1901-2
New South Wales	73	143	358	554	1,040	1,941	2,266	3,107
Victoria	114	270	276	718	1,247	1,754	2,903	3,302
Queensland	*	50	218	298	800	1,433	2,320	2,903
South Australia	56	56	133	308	845	1,226	1,823	1,901
Western Australia	*	*	*	38	92	202	657	1,990
Tasmania	*	*	45	45	168	303	425	618
Commonwealth	243	519	1,030	1,961	4,192	6,859	10,394	13,821
New Zealand	*	5	105	718	1,334	1,810	2,011	2,323
Australasia	243	524	1,135	2,679	5,526	8,669	12,405	16,144

* Railways not in existence.

In 1883 a junction was effected between the New South Wales and Victorian lines at the river Murray ; three years later direct communication was established between Victoria and South Australia ; and in 1888 the last mile of line connecting Sydney with the northern state of Queensland was completed, thus placing the four capitals, Brisbane, Sydney, Melbourne, and Adelaide, in direct communication with each other. A few years ago proposals were made to the Government of Western Australia to construct a railway upon the land-grant system, connecting the eastern districts of the state with South Australia. It was proposed to extend the lines to Eucla, close to the South Australian border, and when that state had extended its railways to the same point, Perth would be connected with all the capitals of the Australian states. In June, 1897, the South Australian Railways Commissioner, in a report to the Commissioner of Public Works, estimated the cost of construction and equipment of a line to the Western Australian border, a distance of 553 miles, at £1,903,000. When the railways of the two states shall have been connected, as they will possibly be at no far distant date, the European mails will, in all likelihood, be landed at Fremantle, and sent overland to all parts of the continent.

The following table shows the length of Government railways in course of construction and authorised on the 30th June, 1902 :—

New South Wales	Miles. 426
Victoria	232
Queensland	244
Western Australia	159
Tasmania	4
Commonwealth	1,065
New Zealand	212
Australasia	1,277

Notwithstanding the energetic expansion of the railway systems throughout Australasia since 1871, there is still room for considerable extension. In the state of South Australia construction is entirely confined to the south-eastern corner and to the extension of the Northern Line, which has its present terminus at Oodnadatta, 686 miles from Adelaide. It is proposed eventually to extend this line as far north as Pine Creek, the southern terminus of the Port Darwin line. In the course of the year 1896 offers were made on behalf of various syndicates for the construction of the Transcontinental railway, with the acquisition of the section from Palmerston to Pine Creek; but the Government was not prepared to recommend to Parliament the acceptance of any offer based on the land grant or guarantee system. When this railway is completed, direct overland communication will be established between the northern and southern portions of the continent. The length of the gap between the terminus at Oodnadatta and that at Pine Creek is 1,140 miles on the telegraph route.

In New South Wales the railway extensions will be chiefly confined to perfecting the various systems already constructed. At the present time several lines of what is termed the "pioneer" class are in course of construction in level pastoral country. These are of a light and cheap kind, on which the produce of the settlers may be conveyed to the trunk lines at a reasonable speed and at a cheaper rate than carriage by road. In Queensland, with its vast expanse of partly-settled territory and extensive seaboard, the railways are being constructed in separate systems. The lines commence from each of the principal ports and run inland, but there is no doubt that not many years will elapse before these systems will become branches of a main trunk-line which, in all likelihood, will be the Brisbane-Charleville line extended as far as Normanton at the Gulf of Carpentaria. In this state a system has been introduced by which railways are constructed under a guarantee given by the local authority on behalf of the ratepayers of the district. Details of this system are given on a subsequent page. In Victoria, Tasmania, and New Zealand the railways are well developed compared with size of territory, and any future extensions will hardly be on so large a scale as in the other states. In Western Australia great activity now prevails in extending the lines to the gold-fields, and also to the south-western portion of the state.

CONTROL OF STATE RAILWAYS.

The states of Victoria, South Australia, New South Wales, and Queensland have found it expedient to place the management and maintenance of railways under the control of commissioners. Victoria, in 1883, was the first state to adopt this system; four years later South Australia made the change, while New South Wales and Queensland followed in 1888. Each of these states appointed three officials

as commissioners, and conferred upon them large executive powers, amounting to almost independent control, the object aimed at being to obtain economical management of the lines free from political interference. Subsequently Queensland, Victoria, and South Australia reduced the number of commissioners to one; but in New South Wales, where the administration has been most successful, no changes in the system have been made. The control of the New Zealand railways was also handed over to a body of three commissioners in 1887; but at the beginning of 1895 the Government resumed charge of the lines, a general manager being appointed, responsible to a Minister for Railways.

In New South Wales and Victoria an additional safeguard in railway construction prevails. All proposals for new lines are submitted to committees selected from Members of the Houses of Parliament. These committees take evidence regarding the suitability of the route proposed, the probable cost of construction, the financial prospects of the line, and the grades to be adopted; and thereupon advise Parliament to adopt or reject the schemes proposed. This supervision of railway development may be said to have been attended with success, although lines that are not likely to be commercially successful have been recommended by the committee and sanctioned by Parliament.

DIVERSITY OF GAUGE.

Unfortunately for interstate communication, railway construction in Australia has proceeded without uniformity of gauge, and the accomplishment of this work, which it is everywhere admitted must be secured, becomes more formidable to contemplate as the years roll on. In 1846 Mr. Gladstone advised that the 4-ft. 8½-in. gauge should be adopted for any lines constructed in New South Wales; and two years later this gauge was adopted as the standard by the Royal Commission appointed for the purpose of determining a uniform gauge for England and Scotland. In 1850, however, the Sydney Railroad and Tramway Company decided to adopt the 5-ft. 3-in. gauge, and in 1852 an Act was passed which provided that all railways in the state should be laid down to that gauge. But in 1853 the company mentioned, having changed their engineer, altered their views on the gauge question, and applied to have the 4-ft. 8½-in. gauge substituted for the 5-ft. 3-in., succeeding in repealing the Act and in passing another which made the narrower gauge imperative. This step was taken without the concurrence of the other states, and feeling ran very high in Victoria in consequence, as two of the railway companies in that state had already given large orders for rolling-stock on the 5-ft. 3-in. gauge. Until the lines of the two states met on the boundary no discomfort was, of course, experienced; but since then the break of gauge, with the consequent change of trains, has been a source of irritation and inconvenience. The South Australian Government adopted at the outset the 5-ft. 3-in. gauge of Victoria;

but finding that the construction of lines of this class involved a heavier expense than they were prepared to face, the more recent lines were built on a gauge of 3 ft. 6 in. In that state there are 507 miles laid to the 5-ft. 3-in. gauge, and 1,229 $\frac{1}{4}$ to that of 3-ft. 6-in., which is also the gauge of the 145 $\frac{1}{2}$ miles of railway in the Northern Territory. The line joining Adelaide with the Victorian border, as well as several of the other trunk-lines, has been constructed on the wide gauge, so that the line from Melbourne to Adelaide is uniform. The private line which prolongs the South Australian system into New South Wales as far as Broken Hill is on the 3-ft. 6-in. gauge. All the Queensland lines are built on the gauge of 3 ft. 6 in., so that transshipment is necessary on the boundary between that state and New South Wales. Tasmania, Western Australia, and New Zealand have adopted the 3-ft. 6-in. gauge. The first line laid down in Tasmania was on the 5-ft. 3-in. gauge, but it was soon altered to 3 ft. 6 in. On the west coast of that island an experiment is being made in the construction of a 2-ft. gauge line, at one-fourth the cost of a line laid down to the Tasmanian standard gauge. The advisability of constructing lines of this class is also being considered in Victoria. The total length of line in Australasia laid down to a gauge of 5 ft. 3 in. is 3,809 $\frac{1}{2}$ miles; there are 3,025 $\frac{3}{4}$ miles on the 4-ft. 8 $\frac{1}{2}$ -in. gauge, and 8,228 $\frac{1}{2}$ miles on the 3-ft. 6-in. gauge.

As far back as May, 1889, Mr. Eddy urged the Government of New South Wales to take action with the object of securing a uniform gauge for the states, and frequently since that date the Railway Commissioners have directed attention to the urgency of dealing with this important question before the states incur greater expenditure in railway construction. They have suggested that the settlement of the difficult question of the adoption of a standard gauge should be approached from the standpoint of which of the two gauges, 4 ft. 8 $\frac{1}{2}$ in. and 5 ft. 3 in., can be adopted at the least cost and with the smallest amount of inconvenience to the country; and that the whole of the railways of New South Wales and Victoria, with that part of the South Australian lines laid to the 5-ft. 3-in. gauge, as well as the line to Cockburn, and all the lines in Queensland south of Brisbane leading to New South Wales, shall be altered to the standard, the cost of altering the railways and the rolling stock necessary to work them to be a national charge.

COMPARISON OF RAILWAY FACILITIES.

The population and area of territory per mile of line open vary considerably in the different states and New Zealand. In comparison with population, Western Australia, Queensland, and South Australia—the most extensive states—have the greatest mileage; but in proportion to the area of territory, Victoria, Tasmania, and New Zealand take the lead. The annexed table shows the relation of the railway mileage

to population and to the area of each state and New Zealand for the year 1901-2 :—

State.	Per Mile of Line Open.	
	Population.	Area.
	No.	sq. miles.
New South Wales	449	100
Victoria	366	26
Queensland	177	230
South Australia*	190	475
Western Australia	105	490
Tasmania	284	43
Commonwealth	279	215
New Zealand	339	45
Australasia	288	190

* Including Northern Territory.

In the following table are given the average population and area of territory per mile of line open in the principal countries of the world. Of course a comparison can only be made fairly between Australasia and other young countries in process of development :—

Countries.	Length of Railway.	Per Mile of Line Open.	
		Population.	Area.
	miles.	No.	sq. miles
United Kingdom	22,078	1,877	5·5
France	26,730	1,444	7·6
Germany	31,492	1,789	6·6
Austria-Hungary	22,327	2,031	10·8
Belgium	2,833	2,363	4·0
Netherlands	1,730	2,993	7·3
Switzerland.....	2,362	1,403	6·7
Sweden	6,649	772	26·0
Norway	1,231	1,819	101·1
Russia (exclusive of Finland)	31,711	2,987	56·3
Spain	8,068	2,240	24·5
Italy	9,810	3,308	11·3
India (inclusive of Native States)	24,633	9,381	31·0
Canada	17,657	317	175·1
Cape Colony	2,914	806	95·1
Argentine Republic	10,595	452	11·7
Brazil	8,718	1,644	369·1
Chili	2,880	1,086	97·2
United States of America	194,321	392	18·0
Commonwealth of Australia	13,821	279	215
Australasia	16,144	288	190

COST OF CONSTRUCTION.

At the close of the year 1901-1902, the cost of construction and equipment of the State railways completed and open to traffic in the Commonwealth was, in round figures, £126,943,000, or 58·8 per cent. of the public debts of the states comprised in the Federation, after deducting sinking funds. The construction and equipment of the railways of Australasia cost £145,114,000, or 54 per cent. of the public debt of Australasia, after deducting sinking funds. To what extent the states have contributed to this expenditure will be apparent from the subjoined table, showing the total cost and the average per mile :—

State.	Year.	Length of line open.	Gauge.	Total cost of Construction and Equipment.	Average cost per mile.
		miles.	ft. in.	£	£
New South Wales	1902	3,025 $\frac{3}{4}$	4 8 $\frac{1}{2}$	40,565,073	13,407
Victoria	"	3,302 $\frac{1}{2}$	5 3	40,613,784	12,298
Queensland	"	2,801	3 6	20,119,143	7,182
South Australia	"	1,736 $\frac{1}{4}$	{ 5 3 } { 3 6 }	13,275,037	7,645
Northern Territory.....	"	145 $\frac{1}{2}$	3 6	1,160,757	7,977
Western Australia	"	1,360	3 6	7,410,426	5,449
Tasmania	1901	457 $\frac{1}{2}$	3 6	3,799,098	8,304
Commonwealth .....	.....	12,828 $\frac{1}{2}$	.....	126,943,318	9,895
New Zealand	1902	2,235	3 6	18,170,722	8,130
Australasia .....	.....	15,063 $\frac{1}{2}$	.....	145,114,040	9,633

It will be seen that the lines which have been constructed most cheaply are those of Western Australia, where the average cost per mile has only been £5,449, as compared with an average of £9,895 for the Commonwealth and £9,633 for the whole of Australasia. In that state there have been few engineering difficulties to contend with, and the lines laid down have been of a light kind. In New South Wales, the average cost, given as £13,407, has been somewhat reduced lately, in consequence of the construction of light "Pioneer" lines, built at an expenditure of £2,019 per mile. The Minister for Public Works

has constructed 10, and is constructing 7 new lines by day labour, as the Railway Construction Department has had a somewhat unfortunate experience in regard to claims for extras to contracts, and expensive litigation in resisting such claims. In Victoria the average cost has been reduced from £13,153 to £12,298 since 1891. At that date it was decided to apply the "butty-gang" system to the construction of railways in the state, and to build all new country lines as cheaply as possible, and this principle has been strictly adhered to. Fairly substantial permanent-way has been laid down, with reduced ballast; unless absolutely necessary, fencing and gatehouses have been dispensed with; and only a skeleton equipment for stations and water supplies has been provided. As settlement progresses and traffic is developed, it is intended to raise these lines to the requisite standard of efficiency.

It would hardly be fair to institute a comparison between the cost of construction per mile in Australasia and in the densely-populated countries of Europe, for while in Europe the resumption of valuable ground is perhaps the heaviest expense in connection with the building of railways, in the states and New Zealand this item of expenditure is not of leading importance. The cost per mile in certain sparsely-settled countries is as follows :—

Canada	£11,713
Cape Colony	10,524
United States	12,616
Argentina.....	10,213
Mexico	9,417
Chili	10,103
Brazil	14,355

while for the Commonwealth of Australia it is £9,895, and for New Zealand £8,130.

REVENUE AND WORKING EXPENSES.

The avowed object of State railway construction in Australasia has been to promote settlement, apart from considerations of the profitable working of the lines; but at the same time the principle has been kept in view that in the main the railways should be self-supporting, and some of the states have, with more or less success, handed them over to Commissioners to be worked according to commercial principles, free from political interference. With the exception of South Australia, so far as the Palmerston-Pine Creek line in the Northern Territory is

concerned, in all the states the revenue derived from the railway traffic exceeds the working expenses. During 1898-9 the states of New South Wales and Western Australia derived a profit from the working of the lines; and for the year ended 30th June, 1900, the states of South Australia proper and Western Australia were similarly favoured. During 1900-1, the lines of New South Wales and Western Australia, and for the year ended 30th June, 1902, those of Western Australia, not only paid working expenses and interest but left a slight margin of profit. Even in New South Wales, where the Commissioners have achieved most commendable results during the term of their administration, and claim to have at last made the lines self-supporting, there is still a deficiency for the year ended 30th June, 1902, when it is borne in mind that the average price received for the loans of the state is but £96·41 per £100 of stock, and the interest payable is calculated accordingly. The net sum available to meet interest charges during the last two working years will be found in the following table, showing the earnings and working expenses:—

State.	Working year, 1900-1901.			Working year, 1901-1902.		
	Gross Earnings.	Working Expenses.	Net Earnings.	Gross Earnings.	Working Expenses.	Net Earnings.
	£	£	£	£	£	£
New South Wales.....	3,573,779	2,043,201	1,530,578	3,068,686	2,267,369	1,401,317
Victoria	3,337,797	2,075,239	1,262,558	3,367,843	2,166,118	1,201,725
Queensland	1,316,936	1,057,981	258,955	1,382,170	992,751	389,428
South Australia	1,236,616	729,039	507,577	1,085,175	689,517	395,658
Northern Territory ...	13,345	25,280	(—) 11,435	12,522	34,049	(—) 22,127
Western Australia ...	1,353,704	1,044,920	308,784	1,521,429	1,256,370	265,059
Tasmania*	202,959	160,487	42,472	205,791	173,400	32,391
Commonwealth ..	11,035,636	7,136,147	3,899,489	11,243,625	7,580,174	3,663,451
New Zealand†	1,727,236	1,127,848	599,388	1,874,586	1,252,237	622,349
Australasia	12,762,872	8,263,995	4,498,877	13,118,211	8,832,411	4,285,800

* Years ended 31st December, 1900 and 1901.

† Years ended 31st March, 1901 and 1902.

(—) Denotes deficiency in amount available to meet working expenses.

The proportion of gross earnings absorbed by working expenses during each of the last five years will be found below :—

State.	Percentage of Gross Earnings absorbed by Working Expenses.				
	1897-8.	1898-9.	1899-1900.	1900-01.	1901-02.
New South Wales	53·34	53·75	55·93	57·17	61·80
Victoria	63·24	62·55	62·89	62·17	64·31
Queensland	56·43	57·14	64·78	80·34	71·82
South Australia	61·31	58·33	56·37	58·95	63·54
Northern Territory	143·50	117·73	164·47	182·59	276·70
Western Australia ..	77·11	70·91	68·40	77·19	82·58
Tasmania*	77·04	79·23	79·10	79·07	84·26
Commonwealth	60·70	59·71	61·46	64·66	67·41
New Zealand†	62·30	63·26	64·80	65·30	66·80
Australasia	60·91	60·18	61·94	64·75	67·33

* Years ended 31st December, 1897-1901.

† Years ended 31st March, 1898-1902.

It will be seen from this table that the percentage of working expenses for the states comprised in the Commonwealth has increased from 60·70 to 67·41 in the course of the five years; the increase for Australasia as a whole being from 60·91 to 67·33. In each state of the Commonwealth and New Zealand, the working expenses have increased during the quinquennial period. In New South Wales, the increase was 8·46 per cent.; in Victoria, 1·07 per cent.; in Queensland, 15·39 per cent.; in South Australia proper, 2·23 per cent.; in the Northern Territory, 133·20 per cent.; in Western Australia, 5·47 per cent.; in Tasmania, 7·22 per cent.; and in New Zealand, 4·50 per cent. At the present time the proportion of gross earnings absorbed by working expenses is smallest in New South Wales, and, setting aside the Northern Territory railway, highest in Tasmania.

The following statement gives an analysis of the working expenses of the railways of the various states, for the year 1902 for all the states except Western Australia and Tasmania, where the figures refer to the year 1901, distinguishing the expenditure on maintenance, locomotive

power, repairs and renewals, traffic expenses, and general charges. The distribution under the various heads is that made by the railway authorities, and, so far as can be seen, like charges have been grouped together in every case; for New South Wales and Victoria, there is an item "Pensions and Gratuities," which is absent from the returns of the other states. Where gratuities are given in those states the sum is included under general charges. The item of "Compensation" can be given for all the states with the exception of Queensland, Tasmania, and New Zealand; this item being also included, for those states, under the heading of "General Charges." The important distinction of repairs to carriages and waggons, and of maintenance of locomotive power is unfortunately not observed by Western Australia and Tasmania, the manner in which such repairs are carried out, it is said, does not admit of an exact distribution of the various charges. It is not proposed to enter into a comparison of the various branches of expenditure since the differences disclosed by the table arise not from exigencies of working, but from the needs of the Treasurers of the states, and the freedom of control, or otherwise, allowed to the managers. In a subsequent part of this chapter dealing with the railway systems of the states individually, an analysis is given of the working expenses for ten years.

Expenditure on—	New South Wales.	Victoria.	Queensland.	South Australia (Proper).	North-ern Territory.	Western Aus-tralia.	Tas-mania.	New Zealand.
Maintenance—								
Total.....£	521,983	501,938	348,185	166,691	29,001	221,451	59,897	436,847
Per train mile.....d.	10·75	10·68	14·75	9·53	229·90	12·88	16·1	20·09
Per mile open.....£	179·3	153·8	124·33	96·0	199·4	163·4	130·3	196·17
Locomotive Power—								
Total.....£	875,582	710,105	317,540	278,839	2,418	497,188	63,580	351,172
Per train mile.....d.	18·04	15·10	13·45	15·96	19·17	28·92	17·0	16·64
Per mile open.....£	300·6	217·5	113·39	160·6	16·6	366·9	138·4	157·69
Carriage and Waggon Re- pairs—								
Total.....£	184,232	145,350	67,314	64,733	792	Included under		99,522
Per train mile.....d.	3·79	3·09	2·85	3·70	6·28	Locomotive		4·71
Per mile open.....£	63·2	44·5	24·03	37·3	5·5	Power.		44·69
Traffic Expenses—								
Total.....£	588,938	640,442	223,321	162,626	2,108	296,045	41,138	333,211
Per train mile.....d.	12·13	13·62	9·46	9·30	16·71	17·92	11·0	15·79
Per mile open.....£	202·2	196·2	79·74	93·6	14·5	218·5	89·5	149·63
Compensation—								
Total.....£	20,234	31,145	....	1,394	2	6,926	....	....
Per train mile.....d.	0·42	0·66	....	0·08	0·01	0·40	....	....
Per mile open.....£	6·9	9·5	....	0·8	....	5·1	....	....
Pensions and Gratuities—								
Total.....£	6,296	93,744	....	....	....	....	....	....
Per train mile.....d.	0·13	1·99	....	....	....	....	....	....
Per mile open.....£	2·2	28·7	....	....	....	....	....	....
General Charges—								
Total.....£	70,104	43,385	36,391	15,234	323	23,310	3,785	31,485
Per train mile.....d.	1·45	0·92	1·54	0·87	2·60	1·36	2·3	1·49
Per mile open.....£	24·1	13·3	13·00	8·8	2·3	17·2	19·1	14·14
Total Expenses—								
Total.....£	2,267,369	2,166,118	992,751	659,517	34,649	1,044,920	173,400	1,252,237
Per train mile.....d.	46·71	46·06	42·05	30·44	274·67	60·78	46·4	50·32
Per mile open.....£	778·4	663·5	354·49	397·1	238·3	771·1	377·3	562·32

INTEREST RETURNED ON CAPITAL.

In establishing the financial results of the working of the lines, it is the practice of the railway authorities to compare the net returns with the nominal rate of interest payable on the railway loans outstanding, ignoring the fact that many loans were floated below par and that the nominal is not the actual rate of interest. A true comparison, of course, is afforded by taking the rate of interest payable on the actual sum obtained by the state for its outstanding loans. This information is not obtainable for New Zealand; but for the states of the Commonwealth it is to be understood that the figures in the second column of the following table represent the actual rate of interest payable, ascertained in the manner last described. On this basis, the only state whose lines paid their way during the year ended 30th June, 1902, was Western Australia, where the activity in gold-mining has resulted in a net profit of 0·07 per cent. after defraying the interest charge on the capital expenditure on the railway lines of the state. In New South Wales, where the Commissioners have announced a profit after paying interest on the invested capital, there is still a deficiency of 0·23 per cent., but it may be expected that this will be extinguished at an early date:—

State.	Interest returned on Capital.	Actual rate of Interest payable on outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
New South Wales	3·45	3·68	0·23
Victoria	2·96	3·72	0·76
Queensland	1·93	3·94	2·01
South Australia	2·98	3·81	0·83
Northern Territory ...	(—) 1·99	4·37	6·36
Western Australia.....	3·54	3·47	*0·07
Tasmania.....	0·85	3·76	2·91
Commonwealth ...	2·88	3·74	0·86
New Zealand	3·43	3·76	0·33
Australasia	2·95	3·75	0·80

* Average gain.

The rate of return on capital which is shown in the foregoing table represents the interest on the gross cost of the lines. In some cases the nominal amount of outstanding debentures is less than the actual expenditure on construction and equipment, owing to the fact that some loans have been redeemed; but as the redemption has been effected by means of fresh loans charged to general services, or by payments from

the general revenue, and not out of railway earnings, no allowance on this account can reasonably be claimed.

The table given below shows the rate of interest returned on the capital expenditure for each of the last five years, with the sum which such return falls short of the actual rate of interest payable on cost of construction. In the case of New Zealand, only the nominal loss is shown; the actual loss was somewhat higher :—

State.	1897-8.	1898-9.	1899-1900.	1900-01.	1901-2.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.

INTEREST RETURNED ON CAPITAL EXPENDITURE.

New South Wales	3·74	3·83	3·62	3·93	3·45
Victoria	2·49	2·75	2·83	3·14	2·96
Queensland	2·92	3·15	2·67	1·31	1·93
South Australia	2·98	3·42	3·91	3·86	2·98
Northern Territory	(-)0·53	(-)0·22	(-)0·82	(-)0·98	(-)1·99
Western Australia	4·62	4·55	5·81	4·35	3·54
Tasmania*	1·09	1·03	1·12	1·16	0·85
Commonwealth	3·11	3·31	3·25	3·14	2·88
New Zealand	3·24	3·29	3·42	3·48	3·43
Australasia	3·12	3·31	3·27	3·18	2·95

NET LOSS ON WORKING LINES.

New South Wales	0·04	+0·08	0·14	+0·19	0·23
Victoria	1·44	1·08	1·06	0·62	0·76
Queensland	1·12	0·85	1·35	2·67	2·01
South Australia	1·05	0·53	+0·02	0·01	0·83
Northern Territory	4·56	4·17	4·86	5·03	6·36
Western Australia	+1·03	+1·01	+2·29	+0·83	+0·07
Tasmania*	2·76	2·79	2·69	2·62	2·91
Commonwealth	0·79	0·53	0·59	0·65	0·86
New Zealand	0·65	0·52	0·37	0·30	0·33
Australasia	0·77	0·52	0·55	0·60	0·80

* Years 1897 to 1901.

† Net profit.

In 1881 the New South Wales railways yielded 5·31 per cent.—a higher rate of interest on the capital cost than was ever reached before or since. In the same year the Victorian lines yielded a return of 4·04

per cent., which is the highest on record in that state, with the exception of 4.18 in the year 1886. The decline in the net profits was largely due to the extension of the lines in sparsely-populated districts; but with the adoption of a more prudent policy in the matter of construction, rendered necessary by the severe financial pressure to which the states were subjected, and with more careful management, the returns, as will be evident from the foregoing table, are again showing improvement.

EARNINGS AND EXPENSES PER MILE.

The gross earnings, expenditure, and net earnings per average mile worked during the last two years were as follow :—

State.	Gross Earnings.		Expenditure.		Net Earnings.	
	1900-01.	1901-2.	1900-01.	1901-2.	1900-01.	1901-2.
	£	£	£	£	£	£
New South Wales..	1,286	1,259	735	778	551	481
Victoria	1,034	1,031	643	663	391	368
Queensland	470	493	378	354	92	139
South Australia ...	712	625	420	397	292	228
Northern Territory	95	86	174	238	(—) 79	(—)152
Western Australia.	999	1,122	771	927	228	195
Tasmania*	456	448	360	377	96	71
Commonwealth	883	887	571	598	312	289
New Zealand	794	842	519	562	275	280
Australasia...	870	880	563	592	307	288

* 1900 and 1901.

For the states comprised in the Commonwealth the gross earnings per average mile worked during 1901-2 were £4 more than in the the previous year, and the working expenses were increased by £27, leaving the net earnings at £289 in 1901-2, as compared with £312 in 1900-1. For the whole of Australasia the gross earnings per average mile worked during 1901-2 were £10 more than in the previous year, and the working expenses were increased by £29, leaving the net earnings at £288 in 1901-2 as against £307 in 1900-1. On the next page will be found a table giving the returns per train mile. The states with the

exception of Queensland, South Australia proper, and Western Australia, show an increase in the train mileage run during 1901-2:—

State.	Gross Earnings.		Expenditure.		Net Earnings.	
	1900-01.	1901-2.	1900-01.	1901-2.	1900-01.	1901-2.
	d.	d.	d.	d.	d.	d.
New South Wales.....	79·69	75·58	45·56	46·71	34·13	28·87
Victoria	72·39	71·63	45·01	46·06	27·38	25·57
Queensland	54·61	58·54	43·87	42·05	10·74	16·49
South Australia	67·56	62·06	39·83	39·44	27·73	22·62
Northern Territory.....	109·75	99·26	200·39	274·67	(-)90·64	(-)175·41
Western Australia.....	78·74	81·00	60·78	66·89	17·96	14·11
Tasmania*	59·70	55·14	47·20	46·46	12·50	8·68
Commonwealth.....	74·61	70·59	46·32	47·59	25·29	23·00
New Zealand.....	89·75	88·80	58·58	59·32	31·17	29·48
Australasia	73·60	72·72	47·66	48·96	25·94	23·76

* 1900 and 1901.

FINANCIAL RESULTS OF FOREIGN RAILWAYS.

The interest on capital cost, the proportion of working expenses to the gross revenue, and the return per train mile for the railways of some of the principal countries of the world are given below. The figures for the countries other than Australasia refer either to the year 1901 or to 1899:—

Country.	Capital Cost.			Working Expenses: Proportion to Gross Revenue.	Per Train Mile.		
	Total.	Per Mile Open.	Return Per Cent.		Gross Revenue.	Working Expenses.	Net Revenue.
	£	£	p. cent.	per cent.	d.	d.	d.
United Kingdom	1,195,564,478	54,151	3·27	63·33	64·1	40·6	23·5
France	648,760,000	27,697	4·27	51·31	67·1	34·5	32·6
Germany	606,700,000	20,257	6·06	60·69	76·7	45·6	31·1
Belgium	75,361,324	26,591	4·85	59·60	56·0	33·4	22·6
United States	2,298,741,000	12,616	4·08	65·24	75·0	49·0	26·0
Canada	214,278,339	11,713	2·16	69·06	67·4	46·6	10·8
Cape Colony	22,409,389	10,524	4·35	74·63	89·0	66·4	22·6
Commonwealth of Australia	126,943,318	9,895	2·88	67·41	70·6	47·6	23·0
Australasia	145,114,040	9,633	2·95	67·33	72·7	49·0	23·7

The figures given above for Cape Colony are for State lines only.

COACHING AND GOODS TRAFFIC.

The following table shows the number of passengers carried on the lines of the various states during the years 1881, 1891-2, and 1901-2. The number of journeys on the Victorian lines during the year ended 30th June, 1902, approximates to those of 1888-9, 1889-90, and 1890-91, and though, in common with the rest of the states, a great reduction occurred in 1893-94, the traffic, since the latter year, has manifested an upward movement. All the states have experienced the effects of the diminished spending power of the people, following on the financial crisis, but in every case a recovery has taken place. The number of passenger journeys in Tasmania in 1901 shows a small increase compared with the 1891 returns:—

State.	Passengers carried.		
	1881.	1891-2.	1901-2.
New South Wales	6,907,312	19,918,916	30,885,214
Victoria	18,964,214	55,148,122	57,465,077
Queensland*	247,284	2,370,219	4,636,174
South Australia	3,032,714	5,744,487	9,497,222
Northern Territory .....	.....	4,541	3,755
Western Australia.....	67,144	456,631	8,158,299
Tasmania.....	102,495	704,531	777,445
Commonwealth	29,321,163	84,347,447	111,423,186
New Zealand	2,911,477	3,555,764	7,356,136
Australasia	32,232,640	87,903,211	118,779,322

* Exclusive of journeys of season ticket-holders.

The amount of goods tonnage is shown in the subjoined table. In the period from 1881 to 1891 there was an increase of about 102 per cent., varying from 44 per cent. in New Zealand to 747 per cent. in Tasmania. During the decennial period 1891-2-1901-2, the increase in tonnage has varied from 4 per cent. in South Australia to 1,401 per

cent. in Western Australia, with an average increase of nearly 63 per cent. for the Commonwealth, and 64 per cent. for the whole of Australasia.

State.	1881.	1891-2.	1901-2.
	tons.	tons.	tons.
New South Wales	2,033,850	4,296,713	6,467,552
Victoria	1,366,603	2,720,886	3,433,627
Queensland	161,008	768,527	1,725,520
South Australia	646,625	1,337,859	1,392,257
Northern Territory .....	.....	2,633	2,436
Western Australia.....	27,816	135,890	2,040,092
Tasmania.....	21,043	178,224	314,628
Commonwealth	4,256,945	9,440,732	15,376,112
New Zealand	1,437,714	2,066,791	3,529,177
Australasia	5,694,659	11,507,523	18,905,289

The percentage of receipts from coaching traffic to the total receipts is somewhat less in the states of the Commonwealth and New Zealand than in the United Kingdom, where for the year 1901 the coaching receipts formed 46·82 per cent. of the total obtained from goods and passenger traffic. The figures for each state are given below :—

State.	Coaching Traffic.	Goods Traffic.
	per cent.	per cent.
New South Wales	38·26	61·74
Victoria	48·94	51·06
Queensland	37·13	62·87
South Australia	35·19	64·81
Northern Territory	27·49	72·51
Western Australia	30·73	69·27
Tasmania	47·22	52·78
Commonwealth	40·26	59·74
New Zealand	38·68	61·32
Australasia	40·04	59·96

AVERAGE WEIGHT OF TRAIN LOAD.

The useful comparisons that may be made between the railway systems of the various states are very limited, and greater uniformity in the presentation of the railway reports is extremely desirable in view of the provisions in the Commonwealth Act for the possible

control of the railway systems by the central government. An example of want of uniformity in an important particular is the absence of information which would enable the average train load to be ascertained. This information can only be given for two states—South Australia and New South Wales—and for the latter state, complete returns are available for three years only. The figures for South Australia show a considerable variation in the average weight during the last seven years; but, for the years 1899, 1900, and 1901, the average is uniformly high when compared with that for each of the preceding three years. In 1902 a considerable fall occurred, consequent on a falling off in tonnage carried without a commensurate reduction in mileage. The figures quoted do not include the business of the Northern Territory:—

Year.	Goods mileage.	Ton mileage.	Average weight of train.
			tons.
1896	2,089,911	134,846,696	64·52
1897	2,265,277	159,454,588	70·34
1898	2,273,537	157,143,651	69·11
1899	2,426,477	191,041,569	78·73
1900	2,569,958	197,079,956	76·68
1901	2,686,789	202,649,157	75·42
1902	2,468,326	170,523,167	69·08

The average tonnage for goods trains is, therefore, 72 tons, which is 4 tons higher than in New South Wales, the only other system with which a comparison can be made. The New South Wales figures, with the exception of those for the years 1900, 1901, and 1902, are unsatisfactory, inasmuch as the goods mileage relates to the year ended 30th June, while the ton mileage is for the year ending 31st December following. No figures can be quoted for 1899:—

Year.	Goods mileage.	Ton mileage.	Average weight of train.
			tons.
1896	4,001,164	255,621,932	63·9
1897	4,244,385	273,400,624	64·4
1898	4,260,368	314,996,969	73·9
1900	4,610,343	320,364,852	69·5
1901	5,836,587	404,740,360	69·4
1902	6,586,032	436,814,308	66·3

The average for the period was 68 tons. The figures for New South Wales and for South Australia compare very favourably with the

returns of the British railways, but are very far behind those of some of the great American lines, as the following figures show :—

BRITISH RAILWAYS, 1900.

Company.	Goods mileage.	Ton mileage.	Average weight of train.
			tons.
Lond. North-Western	22,668,940	1,311,000,000	57
Midland	27,270,791	1,377,000,000	50
Great Western	23,096,578	1,056,000,000	46
North-Eastern	17,565,768	1,055,000,000	60
Great Northern	12,027,759	534,000,000	44½
Lancashire and Yorkshire	6,681,695	450,000,000	67
Great Eastern	8,564,851	322,000,000	37½
Great Central	8,328,551	360,000,000	43
Total	126,204,933	6,465,000,000	51

The New York Central shows to great advantage compared with the British lines ; the average weight of train for the years quoted was :—

	tons.		tons.
1894	249	1897	270
1895	252	1898	299
1896	268	1899	322

ROLLING STOCK.

The following table gives the different classes of rolling stock in the possession of the several Australasian Governments at the end of the year 1901-2, and, considerable as are the numbers of each class, they could with advantage be largely increased in most of the states :—

State.	Engines.	Coaching Stock.	Goods Stock.
New South Wales	518	1,073	11,183
Victoria	536	1,482	9,716
Queensland	362	419	6,943
South Australia	345	431	6,122
Northern Territory	6	7	134
Western Australia	274	260	5,285
Tasmania	71	190	1,170
Commonwealth ...	2,112	3,862	40,553
New Zealand	362	701	12,444
Australasia	2,474	4,563	52,997

RAILWAY ACCIDENTS.

The persons meeting with accidents on railway lines may be grouped under three heads—passengers, servants of the railways, and trespassers ; and the accidents themselves might be classified into those arising from

causes beyond the control of the person injured, and those due to misconduct or want of caution. The following table shows the number of persons killed and injured on the Government railways during 1901-1902 in those states for which returns are available:—

State.	Passengers.		Railway Employés.		Trespassers, &c.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales	2	40	14	750	18	32	34	822
Victoria	4	355	10	398	26	85	40	838
South Australia .....	...	2	4	31	8	3	12	36.
Northern Territory .....	...	.....	...	.....	1	.....	1	.....
New Zealand	6	17	8	447	11	175	25	639.

The railways of Australasia have been as free from accidents of a serious character as the lines of most other countries. In order to obtain a common basis of comparison it is usual to find the proportion which the number of persons killed or injured bears to the total passengers carried. There is, however, no necessary connection between the two, for it is obvious that accidents may occur on lines chiefly devoted to goods traffic, and a more reasonable basis would be the accidents to passengers only compared with the number of passengers carried. The data from which such a comparison could be made are wanting for some countries. As far as the figures can be given they are shown in the following table, which exhibits the number of passengers killed and injured per million carried. The figures are calculated over a period of ten years and brought down to the latest available dates:—

Country.	Number of Passengers.		Average per million passengers carried.	
	Killed.	Injured.	Killed.	Injured.
Germany.....	582	2,341	0·1	0·4
Austria-Hungary.....	191	1,896	0·1	1·3
Belgium	139	1,518	0·1	1·5
Sweden	24	41	0·1	0·2
France.....	744	3,545	0·2	1·1
Norway	8	10	0·1	0·1
Holland	21	93	0·1	0·4
Switzerland	177	669	0·4	1·5
Russia.....	541	2,090	0·9	3·6
United Kingdom.....	142	5,606	0·01	0·6
Spain	155	924	0·6	3·3
Canada	109	767	0·7	4·8
New South Wales.....	62	471	0·26	2·0
Victoria	27	1,447	0·06	3·1
South Australia.....	11	20	0·17	0·31
New Zealand.....	46	191	0·94	3·90

NEW SOUTH WALES.

The progress of railway construction during the twenty years which followed the opening of the first line was very slow, for in 1875 the length of line in operation had only reached 435 miles. From 1876 to 1889, greater activity prevailed, no less than 1,748 miles being constructed during this period, but this rate of increase was not continued, inasmuch as only 14 miles were opened during the next three years. Subsequently there was renewed activity, and the length of line opened to 30th June, 1902, was 3,025 $\frac{3}{4}$ miles, the amount expended thereon for construction and equipment being £40,565,073, or at the rate of £13,407 per mile.

The railways of the State are divided into three branches, each representing a system of its own. The southern system, which is the most important, serving as it does the richest and most thickly-populated districts, and placing Sydney, Melbourne, and Adelaide in direct communication, has several offshoots. From Culcairn, a line connects with Corowa on the Murray River; from The Rock a line extends to Lockhart; from Junee a branch extends as far as the town of Hay in one direction, and Finley in another, and places the important district of Riverina in direct communication with Sydney. From Cootamundra a line branches off in a southerly direction to Gundagai, and another in a north-westerly direction to Temora; while from Murrumburrah a line has been constructed to Blayney, on the western line, thus connecting the southern and western systems of the state. From Koorawatha a branch has been laid down to connect Grenfell with the railway system. Nearer the metropolis, the important town of Goulburn is connected with Cooma, bringing the rich pastoral district of Monaro into direct communication with Sydney. From Goulburn, a branch line has also been opened to Crookwell. Another line that forms part of the southern system has been constructed to Nowra, connecting the metropolis with the coastal district of Illawarra, which is rich alike in coal and in the produce of agriculture. The western system of railways extends from Sydney over the Blue Mountains, and has its terminus at Bourke, a distance of 503 miles from the metropolis. Leaving the mountains, the western line, after throwing out a branch from Wallerawang to Mudgee, enters the Bathurst Plains, and connects with the metropolis the rich agricultural lands of the Bathurst, Orange, and Wellington districts. Beyond Dubbo it enters the pastoral country. At Blayney, as before stated, the western line is connected with the southern system by a branch line to Murrumburrah; at Orange a branch connects that town with Forbes on the Lachlan River, and from Parkes, one of the stations on this branch line, an extension to Condobolin on the Lachlan River has been constructed. Further west, on the main line at Nevertire, a short

line extends to the town of Warren, and at Nyngan a branch line connects the important mining district of Cobar with Sydney. From Byrock a line branches off to Brewarrina. The western system also includes a short line from Blacktown to Richmond on the Hawkesbury River; and a branch line is in course of construction from Dubbo to Coonamble. The northern system originally commenced at Newcastle, but a connecting line has been constructed, making Sydney the head of the whole of the railway systems of the state. This connecting line permits of direct communication between Adelaide, Melbourne, Sydney, and Brisbane, a distance from end to end of 1,808 miles, or altogether between the terminus of Oodnadatta, in South Australia, and Cunnamulla, in Queensland, there is one continuous line of railway, 3,100 miles in length. The northern system comprises a branch from Werris Creek, *via* Narrabri and Moree, to Inverell, thus placing the Namoi and Gwydir districts in direct communication with the ports of Newcastle and Sydney. A portion of the North Coast railway has also been constructed from Murwillumbah, on the Tweed River, to Lismore on the Richmond River. A short line branches off the main northern line at Hornsby, and connects with the north shore of Port Jackson at Milson's Point.

Up to October, 1888, the control of the railways was vested in the Minister for Works, the direct management being undertaken by an officer under the title of Commissioner. It was, however, recognised that political influence entered unduly into the management of this large public asset, and, as a consequence, the "Government Railways Act of 1888" was passed, with the object of removing the control and management of the railways from the political arena, and vesting them in three railway Commissioners, who were required to prepare for presentation to Parliament an annual report of their proceedings, and an account of all moneys received and expended during the preceding year. While the avowed object of state railway construction has been to promote settlement, apart from consideration of the profitable working of the lines, still the principle has been kept in view that in the main the railways should be self-supporting. It will be seen, from the subsequent pages, that the present management, despite the fact that they are hampered by a large number of unprofitable lines, have succeeded in placing the railways of the state in a satisfactory financial position.

Revenue and Working Expenses.

The net sum available to meet interest charges during the last decennial period is set forth in the following table, and the returns show that the Commissioners have achieved most important results during their term of administration, and may reasonably claim to have at last made the lines almost self-supporting, as during the year ended 30th June, 1902, there was only a matter of £91,000 between the net-

earnings and the interest charge, despite the exceptional conditions that had to be contended with:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	Per cent.
1893	2,927,056	1,738,516	1,188,540	59·39
1894	2,813,541	1,591,842	1,221,699	56·58
1895	2,878,204	1,567,589	1,310,615	54·46
1896	2,820,417	1,551,888	1,268,529	55·02
1897	3,014,742	1,601,218	1,413,524	53·11
1898	3,026,748	1,614,605	1,412,143	53·34
1899	3,145,273	1,690,442	1,454,831	53·75
1900	3,163,572	1,769,520	1,394,052	55·93
1901	3,573,779	2,043,261	1,530,578	57·17
1902	3,668,686	2,267,369	1,401,317	61·80

In the foregoing table will be found ample evidence of the economical working of the State railways under their present management, inasmuch as the net earnings for the financial year ended 30th June, 1902, were 38·20 per cent. of the total earnings, as against 33·31 per cent. when the Commissioners took office. The net earnings, exhibited in the last year of the table, show a considerable improvement on those for the first year. The financial depression of 1893, which brought about a great change in the character of the coaching traffic, and the continued unfavourable character of the seasons, adversely affected the earnings of several years; the fall in earnings, however, was met by a reduction in working expenses, so that the financial result of the railway management was not greatly affected. The year 1900 compares somewhat unfavourably with the three years immediately preceding. This is due to the fact that, notwithstanding a much larger tonnage carried, the merchandise and live stock traffic showed a decrease in freight earned, clearly indicating that the traffic from these sources had been carried at less profitable rates than hitherto. The traffic in wool and hay also showed a large falling off, but there was no further diminution in the net earnings for the year 1901, the total, £1,530,578, being the largest for the period shown in the table. The revenue exceeded that of the previous year by £410,207, towards which all classes of traffic contributed. The increased traffic, the greater cost of coal and materials, and the more liberal advances granted to the wages staff, were responsible for the rise of £273,681 in the working expenses. For the year ended 30th June, 1902, however, a considerable falling off in the net earnings occurred. The rise from 57·17 to 61·80 in the percentage of working expenses to gross earnings was due to the increased volume of traffic carried at exceptionally low rates, largely contributed to by the concessions made in the carriage of starving stock and fodder.

The increased cost of fuel, the additional repairs to the rolling stock and permanent way, the necessity for hauling water for locomotive and other purposes, and the increments granted to the staff, also contributed to the reduction in net earnings. No appreciable reduction in the percentage of expenditure to earnings is practicable, inasmuch as the Commissioners have provided for concessions in connection with the carriage of starving stock and fodder, and they will have to face a considerable shortage in the carriage of agricultural and pastoral produce, as well as other lines of general traffic for the present year. It may also be mentioned that considerable expense is being incurred in connection with the haulage of water to far-distant points. The proportion of working expenses to earnings is less in New South Wales than in any other part of Australia, as the following figures, which are the average of the five years 1898-1902, will show:—

	Per cent.
New South Wales	56·61
Victoria.....	63·04
Queensland	66·16
South Australia	61·04
Western Australia	75·68
Tasmania	79·88
New Zealand	64·66

An analysis is given hereunder of the working expenses of the New South Wales railways for the ten years, 1893-1902; in this statement the total expenses as well as the expenses per train mile and per mile of line in operation, are given. It will be seen that there has been a general reduction in the expenditure per train mile, and this reduction is visible in all the details included in the total, with the exception of the expenditure upon locomotive power, which has slightly increased during the ten years. In regard to the working expenses generally, it may be said that the condition of affairs revealed by the table is satisfactory. When the Commissioners took over the management of the railways in 1888, large renewals of rolling stock were needed, while additional expenditure had to be incurred on permanent way and buildings. The result of this will be seen in the high outlay per train mile and per mile open in the earlier years of the decade. By the year 1896, the lines were in thorough working order, and have been so maintained since that date. The rolling stock has been very greatly improved; the tractive power of the engines has been increased, and types of locomotives adapted to the special and general needs of the traffic introduced.

Year ended 30th June.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	Compensation.	Pensions and Gratuities.	General Charges.	Total.
1893	£ 474,142	£ 557,574	£ 129,188	£ 503,137	£ 3,590	£	£ 70,885	£ 1,738,516
1894	418,989	507,649	127,221	458,011	5,186	10,744	64,042	1,591,842
1895	399,679	494,657	130,776	441,798	33,232	8,446	59,001	1,567,589
1896	350,964	533,255	150,073	437,591	15,248	3,878	60,879	1,551,888
1897	358,057	574,255	152,885	444,857	2,894	5,203	63,067	1,601,218
1898	353,969	597,455	139,161	455,545	3,296	4,504	60,675	1,614,605
1899	370,197	635,145	141,942	471,532	5,451	2,652	63,523	1,690,442
1900	406,044	648,767	159,630	478,818	4,164	4,250	67,847	1,769,520
1901	484,750	761,625	174,478	537,227	11,111	4,764	69,246	2,043,201
1902	521,983	875,582	184,232	588,938	20,234	6,296	70,104	2,267,369

PER TRAIN MILE.

	d.	d.	d.	d.	d.	d.	d.	d.
1893	15·16	17·83	4·13	16·09	·11	· . . .	2·27	55·59
1894	14·03	16·99	4·26	15·33	·18	·36	2·14	53·29
1895	12·63	15·63	4·13	13·96	1·05	·27	1·87	49·54
1896	10·91	16·58	4·67	13·60	·47	·12	1·89	48·24
1897	10·57	16·95	4·51	13·13	·09	·15	1·86	47·26
1898	10·13	17·19	4·00	13·11	·10	·13	1·75	46·46
1899	10·09	17·32	3·87	12·85	·14	·07	1·73	46·07
1900	10·96	17·51	4·31	12·92	·11	·11	1·83	47·75
1901	10·81	16·98	3·89	11·98	·25	·10	1·55	45·56
1902	10·75	18·04	3·79	12·13	·42	·13	1·45	46·71

PER MILE OPEN.

	£	£	£	£	£	£	£	£
1893	204·7	240·8	55·8	217·2	1·5	· . . .	30·6	750·6
1894	172·6	209·1	52·4	188·7	2·1	4·4	26·4	655·7
1895	158·9	198·6	52·0	175·6	13·2	3·4	23·4	623·1
1896	138·6	210·6	59·3	172·9	6·0	1·5	24·1	613·9
1897	139·0	223·0	59·4	172·7	1·1	2·0	24·5	621·7
1898	133·1	224·7	52·3	171·3	1·3	1·7	22·8	607·2
1899	136·9	234·9	52·5	174·4	2·0	1·0	23·5	625·2
1900	147·9	230·4	58·1	174·5	1·5	1·7	24·7	644·8
1901	174·5	274·2	62·8	193·2	4·1	1·7	25·0	735·5
1902	179·2	300·6	63·2	202·2	6·9	2·2	24·1	778·4

Interest returned on Capital.

In establishing the financial results of the working of the lines it is the practice of railway authorities to compare the net returns with the nominal rate of interest payable on the railway loans or on the public debt of the state. An accurate comparison can only be made by taking the average rate of interest payable on the actual sum obtained by the state for its outstanding loans. On this basis, the lines of the state have met the interest on construction and equipment during five years only, viz., 1881, 1882, 1883, 1899, and 1901. In 1901 the lines yielded a net sum of £74,000 after paying working expenses, interest, and all charges, but the year 1902 showed a loss of £91,000:

The following table shows the average loss for each year during the period 1893-1902 :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1893	3·48	3·88	0·40
1894	3·46	3·89	0·43
1895	3·58	3·94	0·36
1896	3·44	3·86	0·42
1897	3·78	3·81	0·03
1898	3·74	3·78	0·04
1899	3·83	3·75	*0·08
1900	3·62	3·76	0·14
1901	3·93	3·74	*0·19
1902	3·45	3·68	0·23

* Average gain.

The fluctuation of the profits is partly owing to the extension of the lines in sparsely-populated districts ; but as a result of more economical working the returns are showing improvement. In this connection it is worth noting that there are sixteen branch lines on which over twelve millions sterling have been expended which do not pay their way, the loss on these lines being about £250,000 per annum.

Earnings and Expenses per Mile.

Two important facts which demonstrate the financial position of the railways and the character of the management are the earnings per train mile and per average mile open. Although the returns now being realised cannot be compared with those of 1875, when the net earnings per train mile fell little short of 52d., and per mile open of £775, the earnings, with the exception of those for the year 1902, are in every way encouraging. The falling off in 1902 was largely due to the increased volume of traffic carried at exceptionally low rates, the average revenue derived from all descriptions of merchandise and live stock traffic, exclusive of terminal charges, having decreased from 1·13d. to 1·07d. per ton per mile. Under the control of the Commissioners the net return per train mile has increased from 27·4d. to 28·9d., or 5·5 per cent. ; while per mile of line open for traffic the advance has been from £374 to £481, or 28·6 per cent. The gross earnings, expenditure,

and net earnings per train mile for the past ten years are shown in the following table:—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1893	93·60	55·59	38·01
1894	94·18	53·29	40·89
1895	90·96	49·54	41·42
1896	87·68	48·24	39·44
1897	88·99	47·26	41·73
1898	87·10	46·46	40·64
1899	85·72	46·07	39·65
1900	85·36	47·75	37·61
1901	79·69	45·56	34·13
1902	75·58	46·71	28·87

The gross earnings, expenditure, and net earnings per average mile per for the past ten years, were as follow:—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1893	1,264	750	514
1894	1,159	656	503
1895	1,144	623	521
1896	1,114	613	501
1897	1,171	622	549
1898	1,138	607	531
1899	1,163	625	538
1900	1,153	645	508
1901	1,286	735	551
1902	1,259	778	481

In many cases the railways of the state pass through heavy and mountainous country, involving steep gradients. For the more expeditious and economical working of the traffic, important deviations have been and are being carried out to secure better grades and to ease the curves. While much has been done in this direction, much more remains to be done, as many of the lines have been constructed with an unusual proportion of steep gradients, of which the worst are on the trunk lines, and are so situated that the whole of the traffic must pass over them. In the southern system, the line at Cooma reaches an altitude of 2,659 feet above the sea level; in the western, at the Clarence station, Blue Mountains, a height of 3,658 feet is attained; while on the northern line the highest point, 4,471 feet, is reached at

Ben Lomond. In no other state of the Commonwealth or New Zealand do the lines attain such an altitude. In Queensland the maximum height is 3,008 feet; in Victoria, 2,452 feet; in South Australia, 2,024 feet; in Western Australia, 1,522 feet; and in New Zealand, 1,252 feet. Where heavy gradients prevail, the working expenditure must necessarily be heavier than in the states where the surface configuration is more level.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the state during the year 1881, and for the last ten years, together with the receipts from the traffic, and the average receipts per journey:—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	
1881	6,907,312	488,675	16·97
1893	19,932,703	1,115,042	13·43
1894	19,265,732	1,047,029	13·04
1895	19,725,418	1,022,901	12·45
1896	21,005,048	1,043,922	11·93
1897	22,672,924	1,098,696	11·63
1898	23,233,206	1,126,257	11·63
1899	24,726,067	1,158,198	11·22
1900	26,486,873	1,227,355	11·12
1901	29,261,324	1,370,530	11·23
1902	30,885,214	1,403,744	10·91

It will be seen that the years 1896 to 1902 show far larger numbers of passenger journeys than preceding years, but less satisfactory results in the way of average receipts per journey. This does not so much arise from curtailment of long-distance travelling as from the change of a large body of travellers from first to second class—a result due to diminished means, and doubtless to some extent to the more comfortable carriages now provided for second-class passengers. A return to prosperous times should show an increase in first-class travellers, but it frequently happens that the removal of the original impelling cause is not followed by a return to previous habits, so that the railways may not altogether recover the revenue lost by the change on the part of the travelling public.

The amount of goods tonnage for the year 1881, and from 1893 to 1902 is shown in the following table:—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	tons.	£
1881	2,033,850	955,551
1893	3,773,843	1,812,014
1894	3,493,919	1,766,512
1895	4,075,093	1,855,303
1896	3,953,575	1,776,495
1897	4,567,041	1,916,046
1898	4,630,564	1,900,491
1899	5,248,320	1,987,075
1900	5,531,511	1,936,217
1901	6,398,227	2,203,249
1902	6,467,552	2,264,942

The subdivision of the tonnage of goods and live stock for the year ended 30th June, 1902, into a general classification is set forth in the subjoined statement. Particulars of the tonnage are given under nine broad classes, while the table also shows the average distance goods of each class were carried, and the average earnings per ton per mile. The last figure, however, does not include the terminal charges, which would probably increase the revenue per ton per mile by about 0·20d., from 1·07d. to 1·27d. The "miscellaneous" traffic comprises timber, bark, agricultural and vegetable seeds, in 5-ton lots; firewood, in 5 ton lots; bricks, drain pipes, and various other goods. "A" and "B" classes consist of lime, fruit, vegetables, hides, tobacco leaf, lead and silver ore, caustic soda and potash, cement, copper ingots, fat and tallow, mining machinery, ore tailings, leather, agricultural implements in 5 ton lots; and various other goods.

Description of Traffic.	Tons carried.	Average number of miles each ton of traffic is carried.	Earnings per ton per mile.
		miles.	d.
Coal, coke, and shale	3,520,027	21·93	0·51
Firewood	215,655	27·03	0·76
Grain, flour, &c.	387,720	233·89	0·44
Hay, straw, and chaff	245,574	201·83	0·36
Miscellaneous	613,125	62·02	0·72
Wool	105,252	261·53	1·98
Live stock	238,668	228·43	1·66
"A" and "B" classes.....	572,497	96·67	1·16
All other goods	265,459	143·66	3·39
	6,163,977	70·87	1·07
Terminal charges .....	.....	.....	0·20
Total	6,163,977	70·87	1·27

The charge for carrying goods one mile along the lines of the state in 1872 was 3·6d. per ton, while after an interval of thirty years, it has fallen to 1·27d. The decrease, however, is to some extent more apparent than real, inasmuch as it represents a more extensive development of the mineral traffic than of the carriage of general merchandise; but, when due allowance has been made on this score, it will be found that the benefit to the general producer and consumer has been very substantial, and it may safely be taken as indicating generally the lessened cost of carriage to persons forwarding goods by rail.

VICTORIA.

Railway operations in Victoria began with the opening of the line from Flinders-street, Melbourne, to Port Melbourne. In the early years the lines constructed were chiefly in the vicinity of the metropolis, and up to the year 1865, that is in ten years, only 274 miles were laid down; during the next decennial period a further length of 312 miles was constructed. As in the case of other states, more energy was manifested during the decade ended 1885, when no less than 1,092 miles were constructed; during the next ten years the rate of progress was maintained, and a further length of 1,444 miles was opened. The length of line open for traffic on 30th June, 1902, was 3,302½ miles, upon which the sum of £40,613,784 has been expended for construction and equipment, or an average of £12,298 per mile.

The railways of the state are grouped under seven systems—the Northern, North-Eastern, Eastern, South-Eastern, North-Western, South-Western, and Suburban lines. The Northern system extends from Melbourne to Echuca; the North-Eastern stretches from Kensington to Wodonga, and is the main line connecting Melbourne with Sydney; the Eastern connects Prince's Bridge, Melbourne, with Bairnsdale; the South-Eastern runs from Lyndhurst to Port Albert; the North-Western, joining Laverton with Serviceton, is the main line connecting Melbourne with Adelaide; the South-Western runs from Breakwater to Port Fairy; and the suburban system makes provision for the requirements of the population within a distance of about twenty miles from the metropolis. Included in the seven systems are no less than ninety main, branch, and connecting lines. With the exception of the eastern and extreme north-western portions of the state, where settlement is sparse, the railway facilities provided are in advance of those of any other state, in so far as the length of the line open for traffic is concerned.

Victoria, in 1883, was the first state of the group to adopt the system of placing the management and maintenance of the railways under the control of three Commissioners. From the 1st February, 1884, to the end of 1891 the construction as well as the working of the lines was vested in this body; but on the 1st January, 1892, the duty of construction was transferred to the Board of Land and Works under

the provisions of the "Railways Act, 1891." During 1896 the number of commissioners was reduced to one.

Revenue and Working Expenses.

The net earnings, that is the sum available to meet interest charges during the last decennial period, are shown in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1893	2,925,948	1,857,291	1,068,657	63·48
1894	2,726,159	1,651,186	1,074,973	60·57
1895	2,581,591	1,547,698	1,033,893	59·95
1896	2,401,392	1,551,433	849,959	64·61
1897	2,615,935	1,568,365	1,047,570	59·95
1898	2,608,896	1,649,793	959,103	63·24
1899	2,873,729	1,797,725	1,076,004	62·55
1900	3,025,162	1,902,540	1,122,622	62·89
1901	3,337,797	2,075,239	1,262,558	62·17
1902	3,367,843	2,166,118	1,201,725	64·31

It will be observed that the gross earnings for the closing year of the decade are larger than those of the opening year, and the net earnings for 1902 show a decided improvement over those of the year 1893, while the proportion of working expenses to gross earnings was also slightly larger during the former year. The intervening years show similar fluctuations to those of the other states comprised within the Commonwealth, due to a variety of causes, among the principal of which are—the financial crisis, the drought that has uniformly affected the whole of Australasia for some years past, and the fact that Victoria adopted the construction of a number of branch "cockspur" lines, which had to be worked at absolute loss. In many instances the lines did not even pay working expenses, apart from interest. Continued losses resulted in the closing to traffic of some of these lines during 1896 and subsequent years, and the Report for the year ended 30th June, 1902, shows that the average loss per annum on non-paying lines is £294,697. Notwithstanding the fall in 1902, the net revenue shows a gradual tendency to improvement during the last seven years, the fall in 1898 in comparison with the previous year being due to the fact that in 1897 the receipts were swollen by the exceptional traffic occasioned by the Jubilee celebrations. In 1898 additional expenditure, arising from increases of pay to the lower-grade employees, and from improvements and renewals of permanent-way works and rolling stock caused a large inflation in working expenses. The proportion of working expenses to gross earnings shows a decided improvement with the exception of 1902; and notwithstanding extensive renewals of way, repairs and renewals of stock, the payment of increments to employees, the heavy

compensation for settlement of claims for personal injury, and the extra price paid for coal under new contracts, this figure now stands only slightly higher than it did at the commencement of the decennial period.

The necessity for reducing expenditure has received serious consideration, and, as a consequence, it has been determined to bring about a considerable reduction in train mileage, a curtailment in the amount of leave allowed to the staff, payment for overtime at ordinary rates, reduction of travelling expenses, diminution of expenditure on general stores, and placing the whole of the daily paid employees on short time. It is estimated that an approximate saving of £180,000 will thereby result.

Great care seems to have been taken to keep down the working expenses during the first four years of the decade shown in the following analysis of the working expenditure of Victorian railways, and a reduction of over £200,000 per annum was made in spite of an addition of 200 miles to the length of line in operation. After 1896 concessions in the way of salary or wages were made to the staff, amounting to £35,000 in 1897, and £66,312 in the following year. In 1899 and 1900 additional concessions were made, involving an annual expenditure of £41,000.

The following analysis, which is on the same basis as that already given for New South Wales, gives the details of the expenditure during the ten years. It will be observed that there is an expenditure of £93,744 per annum on pensions and gratuities. The charges for this service for New South Wales amount to £6,296, and in none of the other railway systems is there any like expenditure.

Year ended 30th June.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	Compensation.	Pensions and Gratuities.	General Charges.	Total.
	£	£	£	£	£	£	£	£
1893	327,959	607,702	127,551	683,717	6,433	67,629	51,270	1,857,291
1894	320,981	528,309	104,050	562,226	4,316	93,620	37,684	1,651,136
1895	331,198	478,439	89,129	514,131	6,806	84,509	43,486	1,547,038
1896	365,848	450,489	97,353	486,433	7,321	94,695	49,294	1,551,433
1897	381,293	451,548	101,946	497,030	4,639	83,958	47,901	1,568,365
1898	408,837	459,992	111,113	526,958	7,892	83,720	51,251	1,649,793
1899	489,792	502,763	130,659	546,754	3,611	81,284	51,362	1,797,725
1900	498,459	537,340	142,639	564,908	6,862	95,239	57,093	1,902,540
1901	518,483	646,192	147,153	609,090	7,945	90,443	56,013	2,075,239
1902	501,938	710,105	145,359	640,442	31,145	93,744	43,385	2,166,118

PER TRAIN MILE.

	d.	d.	d.	d.	d.	d.	d.	d.
1893	7.30	13.54	2.84	14.89	.14	1.51	1.14	41.36
1894	7.59	12.50	2.46	13.30	.10	2.21	.89	39.95
1895	8.31	12.00	2.24	12.90	.17	2.11	1.09	38.82
1896	9.77	12.03	2.60	12.99	.19	2.53	1.32	41.43
1897	9.92	11.74	2.65	12.93	.12	2.18	1.25	40.79
1898	10.62	11.95	2.89	13.69	.20	2.17	1.33	42.35
1899	11.88	12.42	3.23	13.51	.09	2.01	1.33	44.42
1900	11.81	12.76	3.39	13.41	.16	2.26	1.35	45.17
1901	11.25	14.02	3.19	13.21	.17	1.96	1.21	45.01
1902	10.63	15.10	3.09	13.62	.60	1.99	.92	46.06

Year ended 30th June.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	Compensation.	Pensions and Gratuities.	General Charges.	Total.
PER MILE OPEN.								
	£	£	£	£	£	£	£	£
1893	111·8	207·5	43·4	227·9	2·2	23·1	17·4	633·3
1894	107·7	177·2	34·9	188·6	1·5	31·1	12·6	553·6
1895	107·4	155·1	28·9	160·8	2·2	27·5	14·1	502·0
1896	117·2	144·3	31·2	155·9	2·4	30·3	15·3	497·1
1897	122·0	144·4	32·6	159·0	1·5	26·9	15·3	501·7
1898	130·9	147·2	35·6	168·7	2·5	20·8	16·4	528·1
1899	154·0	161·0	41·9	175·1	1·2	20·0	16·6	575·8
1900	156·5	163·7	44·8	177·3	2·1	20·9	17·0	597·2
1901	160·6	200·2	45·6	188·6	2·2	28·0	17·4	642·6
1902	153·3	217·5	44·5	190·2	9·5	28·7	13·3	663·6

Interest returned on Capital.

Continuing the basis adopted in the case of New South Wales of taking into consideration the absolute interest paid on the loans of the state and comparing this with the net earnings, the following table furnishes a review for the past ten years, and shows the average loss for each year of the period :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1893	2·87	4·01	1·14
1894	2·88	4·04	1·16
1895	2·73	3·96	1·23
1896	2·24	3·98	1·74
1897	2·74	3·96	1·22
1898	2·49	3·93	1·44
1899	2·75	3·83	1·08
1900	2·83	3·89	1·06
1901	3·14	3·76	0·62
1902	2·96	3·72	0·76

The earnings of the Victorian lines are largely reduced by the necessity of working fifty-two of the lines upon which there is an annual loss of £294,697. The fluctuations in net profits are due to the opening of new lines in sparsely-settled districts and the effect of the drought upon the traffic. A gradual improvement is, however, manifest in the returns of the past seven years, and the concluding year shows a slight increase over the opening one of the period.

Earnings and Expenses per Mile.

While the present returns bear no comparison with those of 1872, when the net earnings per train mile were 73·29d. and per mile open £1,342, they show a decided improvement per train mile on the figures for 1893, and the net earnings per mile open are a trifle higher than those shown for that year. The gross earnings, expenditure, and net earnings per train mile for the past ten years are set forth in the following table:—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1893	65·17	41·36	23·81
1894	64·49	39·05	25·44
1895	64·76	38·82	25·94
1896	64·11	41·43	22·68
1897	68·03	40·79	27·24
1898	67·77	42·85	24·92
1899	71·00	44·42	26·58
1900	71·83	45·17	26·66
1901	72·39	45·01	27·38
1902	71·63	46·06	25·57

The gross earnings, expenditure, and net earnings per average mile open for the past ten years were as follow:—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1893	998	633	365
1894	914	553	361
1895	837	502	335
1896	769	497	272
1897	837	501	336
1898	835	528	307
1899	920	576	344
1900	949	597	352
1901	1,034	642	392
1902	1,031	663	368

The tables indicate that while the gross earnings are gradually improving, the strictest economy will be necessary in the matter of expenditure, for the improvement in the revenue has so far been almost wholly neutralized by an increase in the working expenses.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the state during the year 1881, and for each of the last ten years, with the receipts from coaching traffic and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	d.
1881	18,964,214	770,617	9·75
1893	46,520,784	1,508,867	7·78
1894	40,880,378	1,359,675	7·98
1895	40,210,733	1,259,609	7·51
1896	40,993,798	1,264,219	7·40
1897	42,263,638	1,328,687	7·55
1898	43,090,749	1,325,062	7·38
1899	45,805,043	1,372,000	7·19
1900	49,332,899	1,469,910	7·15
1901	54,704,062	1,625,903	7·13
1902	57,465,077	1,648,381	6·89

The number of passengers carried on the railways of Victoria reached its maximum in 1890, when no less than 58,951,796 persons made use of the lines. The reaction following on the banking crises of 1893 considerably affected the traffic, and in 1895 the number of passengers was reduced to 40,210,733; a gradual improvement has since, however, been manifest in the returns. Victoria occupies the leading position among the states as regards the number of passengers carried, the latest figures being as follow :—New South Wales, 30,885,214; Victoria, 57,465,077; Queensland, 4,636,174; South Australia, including the Northern Territory, 9,500,977; Western Australia, 8,158,299; Tasmania, 777,445; and New Zealand, 7,356,136. The superiority of the Victorian figures results from the large number of passengers carried on the suburban railways, the Melbourne system effectively serving the population within a distance of twenty miles from the centre, and carrying upwards of 90 per cent. of the total passengers. The magnitude of the suburban traffic is evidenced by the fact that the average receipts per journey during the last year are shown to be 6·89d., as against 10·91d. in New South Wales; 26·59d. in Queensland; 9·41d. in South Australia, including Northern Territory; 12·65d. in Western Australia; 24·18d. in Tasmania; and 18·78d. in New Zealand.

The amount of goods and live stock tonnage in 1881, and for each of the ten years from 1893 to 1902, with the earnings therefrom, is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	Tons.	£
1881	1,366,603	894,592
1893	2,558,378	1,417,081
1894	2,455,811	1,366,484
1895	2,435,857	1,321,982
1896	2,163,722	1,137,173
1897	2,383,445	1,287,248
1898	2,408,665	1,283,834
1899	2,779,748	1,501,729
1900	2,998,303	1,555,252
1901	3,381,860	1,711,894
1902	3,433,627	1,719,462

The table indicates a gradual increase in the tonnage carried and earnings therefrom during the last seven years. The figures for 1902 must be considered highly satisfactory, especially when it is remembered that the harvest conditions generally were not so good as in the preceding year. Particulars of the subdivision of the tonnage of goods and live stock into a general classification are not available, and no information is furnished that will admit of a comparison being made in order to determine how far the cost of carriage per mile has been reduced during the period under review.

QUEENSLAND.

The progress of railway construction in Queensland for the first ten years after the opening of the Ipswich to Grandchester line was somewhat slow, only 268 miles having been constructed. In the decade ending in 1885, more energy was displayed, inasmuch as a further length of 1,167½ miles was constructed, and during the quinquennial periods ending in 1890 and 1895, further lengths of 712 and 250 miles were constructed. The length of line open on 30th June, 1902, was 2,801 miles, and the amount expended thereon for construction and equipment was £20,119,143, or at the rate of £7,182 per mile.

The railways of the state may be grouped into three divisions, comprising eight systems. The southern division extends from Brisbane to Wallangarra in a southerly direction, to Cunnamulla in a westerly direction, and to Gladstone northerly along the coast, and has fifteen branch lines connected with it. The central division extends from Archer Park to Longreach, and has five branch lines connected with it. The northern division comprises the line from Mackay to Eton and Mirani; the line from Bowen to Wangaratta; the line from Townsville

to Winton, with a branch to Ravenswood; the line from Cairns to Mareeba; the line from Cooktown to Laura; and the line from Norman-ton to Croydon.

For many years the construction, maintenance, and control of the railways were carried out by a branch of the Public Works Office, and subsequently by a separate Ministerial Department with a Secretary responsible to Parliament and administering the details of the office in a manner similar to any other Crown Minister. The "Railways Act of 1888," however, while leaving the Minister in charge of the Department, vested the construction, management, and control of all Government railways in three Commissioners, of whom one was to be Chief Commissioner. The number was subsequently reduced to two, and later a single commissioner was appointed holding the authority formerly vested in the three. In undertaking railway construction the State is guided by other considerations than those which would direct the action of private investors, and is content, for a time at least, to recoup the expenditure in an indirect form. The disastrous result of the continued drought has operated against successful management during recent years, and in consequence of the fact that the rate of interest returned on capital expenditure during the past two years does not compare favourably with the previous years, a policy of stringent economy is to be pursued in the management of the railways, and the rates and fares have been increased with the object of reducing the deficit.

Revenue and Working Expenses.

The net sum available to meet interest charges during the last decennial period is shown in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1893	1,022,677	638,889	383,788	62·47
1894	955,747	598,403	357,344	62·61
1895	1,025,512	581,973	443,539	56·75
1896	1,085,494	644,362	441,132	59·36
1897	1,179,273	684,146	495,127	58·01
1898	1,215,811	686,066	529,745	56·43
1899	1,373,475	784,811	588,664	57·14
1900	1,464,399	948,691	515,708	64·78
1901	1,316,936	1,057,981	258,955	80·34
1902	1,382,179	992,751	389,428	71·82

With the exception of the last two years the foregoing table shows a gradual tendency for earnings to increase, but there have been considerable fluctuations in the proportion of working expenses to gross earnings. The net earnings for the year ended 30th June, 1900, were 35·22 per cent. of the total earnings, as against 36·33 per cent. when the railways were placed under their present control. It will be observed that the result secured for that year is considerably lower than those of the preceding two years, and is due to the fact that the railways were compelled to carry very large numbers of starving stock and large quantities of fodder at unremunerative rates. There were also heavy disbursements to replace and increase the stock of locomotives, and in carrying out works which, though improving the equipment of the railways and ensuring safe running, have not been of a reproductive character, while during the year substantial increases in pay were conceded to all classes of railway employees. There was consequently a large increase in expenditure which was not accompanied by a corresponding improvement in the earnings. For the year ended 30th June, 1901, the revenue from passenger traffic showed a substantial increase; the decrease in earnings shown in the preceding table was entirely due to the loss of live stock by drought and consequent stoppage of station improvements, and to the necessity of carrying starving stock and fodder at merely nominal rates. The net earnings for the year were thus reduced to 19·66 per cent. of the total earnings. A slight improvement in the net earnings was manifested in the year ended 30th June, 1902, the percentage gained being 28·18 of the total earnings. Despite a shrinkage in the traffic the receipts show a slight improvement consequent on the increase of rates and fares. Working expenses have been curtailed by a reduction in the train mileage, and by the exercise of stringent economy in administration, and with the return of favourable seasons it is hoped that more satisfactory results will be secured.

An analysis of the working expenses of the Queensland railways for the ten years, 1893–1902, is given below. Taking the first year with the last it will be seen that there has been a substantial increase in the total cost, as well as in the rate per train mile and per mile of line open. In 1899 the expenditure per train mile had been reduced to 32·35d., as compared with 40·82d. in 1893 and 42·05d. in 1902. There can be no doubt that the expenditure for 1899 had been reduced below the point of safety and some services had been starved, and this necessitated in the following years an abnormal expenditure in regard to improvements of the locomotive, carriage and waggon stock, and for bringing the equipment generally up to a better standard to ensure the safe working of the lines. In 1901 there was a considerable amount of money expended on relaying and other heavy works, similar expenditure, or, at least, expenditure on so large a scale, will not, of course, be needed for some little time.

Year ended 30th June.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	General Charges.	Total.
	£	£	£	£	£	£
1893	273,403	149,892	31,783	157,806	26,005	638,889
1894	251,946	139,231	31,201	150,045	25,980	598,403
1895	233,772	141,568	33,702	144,483	28,448	581,973
1896	248,468	172,373	34,936	161,656	26,929	644,362
1897	271,602	184,817	37,714	164,097	25,916	684,146
1898	261,706	186,226	38,719	172,503	26,912	686,066
1899	289,005	225,033	45,462	196,680	28,631	784,811
1900	335,777	302,752	56,256	221,640	32,266	948,691
1901	401,013	322,879	68,088	229,902	36,099	1,057,981
1902	348,185	317,540	67,314	223,321	36,391	992,751

PER TRAIN MILE.

	d.	d.	d.	d.	d.	d.
1893	17·47	9·58	2·03	10·08	1·66	40·82
1894	16·89	9·33	2·10	10·06	1·74	40·12
1895	14·32	8·67	2·07	8·85	1·74	35·65
1896	12·57	8·72	1·77	8·18	1·36	32·60
1897	13·20	8·98	1·83	7·97	1·26	33·24
1898	12·54	8·92	1·86	8·27	1·29	32·88
1899	11·91	9·28	1·87	8·11	1·18	32·35
1900	12·54	11·31	2·10	8·28	1·20	35·43
1901	16·63	13·39	2·82	9·53	1·50	43·87
1902	14·75	13·45	2·85	9·46	1·54	42·05

PER MILE OPEN.

	£	£	£	£	£	£
1893	115·8	63·5	13·4	66·8	11·0	270·5
1894	106·0	58·6	13·1	63·1	10·9	251·7
1895	98·3	59·5	14·2	60·7	11·9	244·6
1896	104·3	72·3	14·7	67·8	11·3	270·4
1897	111·9	76·2	15·5	67·6	10·7	281·9
1898	101·2	72·0	15·0	66·7	10·4	265·3
1899	106·5	82·9	16·8	72·5	10·6	289·3
1900	120·1	108·3	20·1	79·3	11·5	339·3
1901	143·1	115·3	24·3	82·1	12·9	377·7
1902	124·3	113·4	24·0	79·8	13·0	354·5

Interest returned on Capital.

The financial results of the working of the lines are exhibited in the following table which covers a period of ten years :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1893	2.37	4.17	1.80
1894	2.18	4.17	1.99
1895	2.68	4.16	1.48
1896	2.63	4.09	1.46
1897	2.87	4.04	1.17
1898	2.92	4.04	1.12
1899	3.15	4.00	0.85
1900	2.67	4.02	1.35
1901	1.31	3.98	2.67
1902	1.93	3.94	2.01

A fair proportion of the railway construction of recent years has been in country of a purely pastoral character, and it is manifest that a sufficient traffic to prove remunerative cannot be looked for immediately from localities possessed of only a scattered and limited population ; but it is confidently expected that these lines will ultimately pay interest on cost of construction. Unfortunately, Queensland in common with the other provinces, suffers from the construction of lines of railway not warranted by existing or prospective traffic, and which will always be a handicap to successful management.

Earnings and Expenses per Mile.

While the results now secured cannot be compared with those of 1880, when the net earnings per train mile were a little over 43d., and per mile open £222, a satisfactory state of affairs is disclosed by a review of the figures shown for earnings in the subjoined tables. It will be seen that the net earnings per train mile, as well as the net return for each mile of line open, have, except in the last three years, been fairly well sustained. The fall in 1900, 1901, and 1902, as compared with

the previous three years, is due to the fact that the continuance of the drought and the consequent loss in sheep have operated against the revenue from the carriage of wool, while the increased traffic which was obtained consisted largely of the removal of starving stock from and the carriage of fodder to drought-stricken districts, a class of traffic which had to be undertaken at unremunerative rates. The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table:—

Year.	Gross Earnings per train mile.	Expenditure per train mlle.	Net Earnings per train mile.
	d.	d.	d.
1893	65·35	40·82	24·53
1894	64·18	40·12	24·06
1895	62·82	35·65	27·17
1896	54·91	32·60	22·31
1897	57·30	33·24	24·06
1898	58·27	32·88	25·39
1899	56·62	32·35	24·27
1900	54·69	35·43	19·26
1901	54·61	43·87	10·74
1902	58·54	42·05	16·49

The gross earnings, expenditure, and net earnings per average mile open for the past ten years were as follow:—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1893	428	270	158
1894	402	251	151
1895	431	244	187
1896	455	270	185
1897	486	281	205
1898	470	265	205
1899	506	289	217
1900	523	339	184
1901	470	377	93
1902	493	354	139

Coaching and Goods Traffic.

The number of passengers carried on the lines of the state during the year 1881, and for the last ten years, together with the receipts from the traffic, and the average receipts per journey, are set forth in the following table :—

Year.	Passengers carried.	Receipts from Coaching traffic.	Average Receipts per Journey.
	No.	£	d.
1881	247,284	113,490	110·14
1893	2,120,163	318,730	36·08
1894	2,024,450	307,430	36·44
1895	2,054,416	308,025	35·98
1896	2,274,219	324,790	34·27
1897	2,633,556	359,811	32·79
1898	2,742,108	391,270	34·24
1899	3,716,425	447,123	28·87
1900	4,395,841	505,536	27·60
1901	4,760,559	536,462	27·05
1902	4,636,174	513,257	26·59

It will be seen that the years 1899, 1900, 1901, and 1902 show a far larger number of passenger journeys than preceding years; this was largely due to an extraordinary expansion in the suburban traffic. The average receipts per journey showed a decline, which may be expected to continue as the suburban traffic expands, so that in a few years the receipts per person carried will approximate closely to the average for the rest of Australia, viz., one shilling per journey.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods.	Earnings.
		£
1881	161,008	235,100
1893	720,587	703,947
1894	785,475	648,317
1895	900,591	717,487
1896	1,026,889	760,704
1897	1,243,603	819,462
1898	1,323,782	824,541
1899	1,684,858	926,352
1900	1,688,635	958,863
1901	1,530,440	780,474
1902	1,725,520	868,922

In the foregoing statement the tonnage of live stock is not included, inasmuch as particulars in respect thereof are not available, but the earnings shown include the revenue derived from this class of traffic. The general traffic is divided into eight classes, particulars of which, for the year ended 30th June, 1902, together with the receipts for each class, are shown in the subjoined table. No information is available as to the average number of miles each ton of traffic is carried, or the earnings per ton per mile.

Description of Traffic.	Tons carried.	Receipts from traffic.
		£
General merchandise	264,445	339,345
Agricultural produce	401,393	126,582
Wool	23,549	76,896
Coal	415,834	56,509
Minerals other than coal	188,579	24,394
Timber	431,720	88,175
Live stock .....	.....	150,333
Non-paying .....	.....	6,688
Total.....	1,725,520	868,922

Guaranteed Railways.

Four railways, having a total length of 36 miles 55 chains, have been constructed to 30th June, 1902, under "The Railways Guarantee Act of 1895," by which the local authority, representing the ratepayers of a district, agrees to pay up to one-half of the deficiency in working expenses with interest at the rate of 4 per cent. on the capital cost during the first fourteen years after opening, the sum to be raised by means of a rate not exceeding 3d. in the £ of value of ratable lands. Should the operations of any year provide a surplus, half of this is retained by the Government and the other half paid to the Local Authority for distribution among the ratepayers in return for the payments made on account of the deficiency in previous years. When the line has been payable for three years, the Government may cancel the agreement. The results of the working of three out of the four railways do not afford much encouragement to apply the provisions of the Act to other lines which may be projected in the future. The working of the Pialba branch showed a loss, in the year 1898, of £2,451; in 1899, of £2,038;

in 1900, of £1,589; in 1901, of £1,595; and in 1902, of £1,361. In the first two years the receipts were not sufficient to cover working expenses; in the last three, however, there was a margin of £172 in 1900; £196 in 1901; and £459 in 1902. As this line has shown an improvement during each of the last three years, it may be reasonably anticipated that eventually the guarantors will be relieved of all responsibility. The Allora branch shows a loss of £617 in 1898; £308 in 1899; £630 in 1900; £959 in 1901; and £345 in 1902. The Enoggera branch exhibits a loss of £2,158 in 1899; £3,468 in 1900; £3,218 in 1901; and £2,889 in 1902. The Mount Morgan branch, which up to the 30th June, 1902, had involved a capital expenditure of £84,059, has given satisfactory results, though the margin of profit after the payment of working expenses and statutory interest has been considerably reduced during the past three years. The net profit for 1899 was £3,973; for 1900, £5,785; for 1901, £2,952; and for 1902, £1,510.

SOUTH AUSTRALIA.

While the beginning of railway construction in South Australia dates as far back as 1854, very little progress was made in the subsequent twenty years, and in 1874 the total length of line in operation was only 234 miles; in 1880 this had increased to 627 miles; in 1890 to 1,610 miles; and in 1895 to 1,722 miles. The length of line in operation on the 30th June, 1902, was 1,736 $\frac{1}{4}$ miles, and the amount expended thereon for construction and equipment, £13,275,037, or at the rate of £7,645 per mile.

The railways of South Australia proper are divided for the purposes of management into five systems. The Midland system, constructed on the 5ft. 3in. gauge, has a length of 236 $\frac{3}{4}$ miles, and extends from Adelaide to Terowie in a northerly direction, and to Morgan, on the Murray River, in a north-easterly direction. The Northern system has a total length of 1,008 $\frac{1}{4}$ miles, 1,003 of which are 3ft. 6in. gauge and 5 $\frac{1}{4}$ miles 5ft. 3in. gauge. This system includes that portion of the transcontinental line which extends to Oodnadatta, a distance of 550 miles from Adelaide; the line to Cockburn, which provides for the requirements of the Broken Hill district of New South Wales; and branches to Port Augusta, Port Pirie, Wallaroo, and Port Wakefield. The Southern system comprises a length of 265 $\frac{1}{4}$ miles on a gauge of 5ft. 3in., and includes the main line connecting Adelaide with Melbourne, and branches—Wolseley to Naracoorte and from Naracoorte to Kingston, Mount Gambier, and Beechport. The line from Port Broughton to Barunga has a length of 10 miles.

During 1887 the control of the railways was entrusted to three commissioners; in 1895, however, the number was reduced to one, who is responsible to Parliament.

Revenue and Working Expenses.

The net sum available to meet interest charges is set forth in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	£
1893	1,007,059	610,122	366,937	63·56
1894	999,707	569,592	430,115	56·98
1895	960,155	568,973	391,182	59·26
1896	986,500	583,022	403,478	59·10
1897	1,025,035	614,254	410,781	59·92
1898	984,228	603,474	380,754	61·31
1899	1,058,397	617,380	441,017	58·33
1900	1,166,987	657,841	509,146	56·37
1901	1,236,616	729,039	507,577	58·95
1902	1,085,175	689,517	395,658	63·54

The foregoing table shows that the gross earnings in 1901 were the largest during the decade, while the proportion of working expenses to gross earnings was lowest in 1900, the net earnings in the latter year being the highest for the period. The failure of the harvest and the succession of adverse seasons which South Australia laboured under during part of the decennial period are the causes of the falling off in the revenue for several years. No other railway system in Australia depends so much upon the carriage of agricultural produce for its traffic, and years of shrinkage in the railway revenue are coincident with years of harvest failure. The increase in working expenses during the years 1899 and 1900 was due to the renewal of rolling stock, the relaying of portion of the permanent way, and other outlay expended from the improved revenue. The further increase during 1901 is explained by the rise in the price of coal and materials; by the increased train mileage; and by the fact that opportunity was taken of a fairly good year's revenue to debit working expenses with an unusual outlay under the head of "replacements." The operations of the year ended 30th June, 1902, show a considerable reduction in the gross earnings, which is attributable to the shrinkage in the Barrier traffic caused by the fall in the price of lead reducing the output of the mines. Moreover, consequent on the decrease in mining profits, the department was compelled to carry ore and concentrates at much lower rates, so that there was a diminished receipt from every ton of a smaller volume of traffic, and an increase in the proportion of working expenses to gross earnings.

The results secured may be looked on as satisfactory, having regard to the fact that the management is burdened with some very unproductive lines, notably that from Hergott Springs to Oodnadatta, which barely pays working expenses, and entails an annual payment of about £44,000 in interest.

The working expenditure of the South Australian lines, an analysis of which is given below, does not show very much variation from year to year. The working expenses touched their lowest point in the year 1900 with 37·78d. per train mile; since then there has been a rise of about 2d. per train mile, which the railway managers attribute to the increased price of coal and materials, to larger expenditure on repairs and rolling stock, and to increases in the wages of the employees.

Year ended 30th June.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	Compensation.	General Charges.	Total.
	£	£	£	£	£	£	£
1893	159,390	256,370	46,492	158,785	260	18,825	640,122
1894	141,625	225,871	37,292	147,755	166	16,883	569,592
1895	138,983	214,271	51,956	147,173	73	16,517	563,973
1896	137,855	221,706	62,882	146,127	162	14,290	533,022
1897	159,798	244,235	50,546	144,935	713	14,027	614,254
1898	152,091	234,233	52,323	150,033	826	13,963	603,474
1899	160,514	236,604	58,754	146,962	645	13,901	617,330
1900	163,851	255,582	62,832	160,641	637	14,293	657,541
1901	185,292	293,913	68,654	164,589	1,562	15,029	729,039
1902	166,691	278,839	64,733	162,626	1,394	15,234	639,517

PER TRAIN MILE.

	d.	d.	d.	d.	d.	d.	d.
1893	10·42	16·77	3·04	10·83	0·02	1·23	41·86
1894	9·80	15·61	2·58	10·22	0·01	1·17	39·39
1895	9·83	15·15	3·67	10·41	0·01	1·17	40·24
1896	9·58	15·42	4·37	10·16	0·01	0·99	40·53
1897	10·44	15·94	3·30	9·47	0·05	0·92	40·12
1898	9·82	15·14	3·33	9·69	0·05	0·90	38·98
1899	9·88	14·55	3·62	9·05	0·04	0·85	38·00
1900	9·41	14·67	3·61	9·23	0·04	0·82	37·78
1901	10·12	16·06	3·75	8·99	0·09	0·82	39·33
1902	9·58	15·96	3·70	9·30	0·08	0·87	39·44

PER MILE OPEN.

	£	£	£	£	£	£	£
1893	95·9	154·2	28·0	95·5	0·2	11·3	385·1
1894	85·1	135·7	22·4	83·8	....	10·1	342·1
1895	80·7	124·4	30·2	85·5	....	9·6	330·4
1896	80·1	123·7	36·5	84·9	....	8·3	333·5
1897	92·8	141·8	29·3	84·1	0·4	8·1	356·5
1898	88·2	135·9	30·4	87·0	0·5	8·1	350·1
1899	93·1	137·3	34·1	85·3	0·4	8·0	358·2
1900	94·7	147·7	36·3	92·8	0·4	8·2	380·1
1901	106·7	169·3	39·5	94·8	0·9	8·7	419·9
1902	96·0	160·6	37·3	93·6	0·8	8·8	397·1

Interest returned on Capital.

The following table exhibits the financial results of the working of the lines during the last ten years :—

Year.	Interest returned on Capital.	Actual rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1893	3·07	4·28	1·21
1894	3·54	4·27	0·73
1895	3·12	4·22	1·10
1896	3·21	4·12	0·91
1897	3·26	4·05	0·79
1898	2·98	4·03	1·05
1899	3·42	3·95	0·53
1900	3·91	3·89	0·02 ^a
1901	3·86	3·87	0·01
1902	2·98	3·81	0·83

* Represents profit.

The interest returned on capital during 1900 was the highest secured since 1892, when the railways returned 4·78 per cent. on capital expenditure, and exceeded by a slight amount the interest rate on the debt of the province. South Australia possesses one advantage not shared by any other province, namely, a large and steady long-distance traffic from a neighbouring state. The Broken Hill traffic is a very important factor in the railway revenue, as the greater portion of the line connecting the mines with the seaports runs through South Australian territory. The extent of the Broken Hill traffic will be found mentioned on page 894.

Earnings and Expenses per Mile.

The net earnings now secured are very much below those of 1891 when the net earnings per train mile were 38·64d., and £370 per mile open; a gradual improvement is, however, noticeable up to 1900, the fall in 1901 and 1902 being due to the reasons already adverted to on the previous page. The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table :—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1893	65·85	41·86	23·99
1894	69·14	39·39	29·75
1895	67·90	40·24	27·66
1896	68·57	40·53	28·04
1897	66·95	40·12	26·83
1898	63·57	38·98	24·59
1899	65·14	38·00	27·14
1900	67·02	37·78	29·24
1901	67·56	39·83	27·73
1902	62·06	39·44	22·62

The gross earnings, expenditure, and net earnings per average mile open for the past ten years are set forth in the following table :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1893	606	385	221
1894	601	342	259
1895	558	330	228
1896	573	338	235
1897	595	356	239
1898	571	350	221
1899	614	358	256
1900	674	330	294
1901	712	419	293
1902	625	397	228

In comparison with 1891 and 1892 there was a substantial fall in the net earnings per train mile for 1893. An improvement was, however, manifest in the succeeding year, for while the gross revenue was smaller than that of 1893, the proportion of working expenses was considerably reduced. The results for the year 1900 may be viewed as satisfactory, taking into consideration the fact that the number of train miles run during that year was higher than in any previous year during the period. It will be seen that there was a substantial fall in the net earnings per train mile for the past year, due to the reasons already referred to. The present earnings per train mile are slightly above the average of the Commonwealth as a whole, although the return per mile of line does not compare so favourably.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the State during the year 1881, and for each of the last ten years, together with the receipts from the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1881	3,032,714	151,867	12·01
1893	5,434,047	299,128	13·21
1894	5,260,079	274,243	12·51
1895	5,224,854	263,448	12·09
1896	5,435,956	288,594	12·73
1897	5,789,297	297,026	12·31
1898	6,050,189	291,411	11·56
1899	6,171,081	297,207	11·56
1900	7,416,506	337,723	10·93
1901	8,858,470	359,172	9·74
1902	9,497,222	369,677	9·34

The table indicates an improvement each year in the number of passengers carried; the average receipts per journey have, however, gradually lessened—the year 1893 showing the highest rate.

The amount of goods tonnage for the same period is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	No.	£
1881	646,625	222,184
1893	970,865	660,371
1894	1,014,010	694,724
1895	1,000,408	666,600
1896	1,056,963	670,961
1897	1,146,293	700,629
1898	1,189,095	664,348
1899	1,403,727	731,156
1900	1,485,976	798,231
1901	1,623,444	843,019
1902	1,392,257	681,045

Fluctuation in the tonnage of goods carried is presented by the figures in the foregoing table, and the considerable decrease manifested in the past year, in comparison with 1901, is due to the continuous fall in the metal market not only reducing the output but leading to a general slackness of business on the Barrier; while, in addition, ore and concentrates were carried at lower rates. The volume of traffic secured by South Australia from the Barrier District of New South Wales amounted to 504,850 tons out of the total of 1,392,257 tons, and the receipts from all traffic passing through Cockburn to £337,011 out of a revenue of £1,085,175.

The following table shows a classification of the goods carried during 1902, and the amount received for carriage. It would have been interesting to have also shown the charge for haulage of each description of goods during the last ten years, but no information is available which will enable such particulars to be compiled. There has been a general reduction in freight charges, and the average charge per ton per mile for all goods has fallen from 1·05d. in 1897 to 0·96d. in 1902 :—

Description of Traffic.	Tons Carried.	Receipts from Traffic.
		£
Minerals	602,106	247,383
Grain	143,350	40,020
Wool	15,927	18,047
Goods other than above	597,828	310,976
Live stock	33,046	64,619

NORTHERN TERRITORY.

Railway construction in the Northern Territory has been confined to the line from Palmerston to Pine Creek, opened on the 1st October, 1889, and the returns for the past seven years show that the traffic does not even pay working expenses.

Revenue and Working Expenses.

The gross earnings, expenditure, and net earnings, with the proportion of working expenses to gross earnings of the line are set forth in the following table, which covers a period of ten years :—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1893	15,668	11,704	3,964	74·90
1894	16,193	11,403	4,790	70·42
1895	14,722	11,477	3,245	77·96
1896	15,105	15,289	(—) 184	101·22
1897	17,908	18,966	(—) 1,058	105·91
1898	14,124	20,268	(—) 6,144	143·50
1899	14,758	17,375	(—) 2,617	117·73
1900	14,799	24,340	(—) 9,541	164·47
1901	13,845	25,280	(—) 11,435	182·59
1902	12,522	34,649	(—) 22,127	276·70

(—) Denotes loss.

The experience of the past seven years offers no encouragement to any further extension of railways in the Northern Territory. The actual results of working have not been quite so unfavourable as would appear from the foregoing table, as each of the two years 1900 and 1901 was charged with the payment of an instalment of £10,000, and 1902 with the final instalment of £21,931, towards the reconstruction of the jetty destroyed in 1896, and on this account each of these years shows a much larger deficit than any of the previous years.

The expenditure on working for 1902 may be divided as follows :—

	£
Maintenance of Permanent Way Buildings, &c.....	29,001
Locomotive Power.....	2,418
Carriage and Waggon Repairs	792
Traffic Expenses.....	2,108
General Charges.....	330
Total.....	34,649

The total shows a great increase on previous years, although the mileage open for traffic, and the train miles run have not changed. The final payment in connection with the Palmerston jetty was made in 1902, and it is anticipated that no further expenditure will be required under this head for some time. The expenditure for 1903 will probably fall to about £15,000, or about 115d. per train mile, and slightly over £100 per mile of line open for traffic.

Interest returned on Capital.

The following table shows the average loss for each year during the last ten years, after the interest on cost of construction has been deducted from the net earnings :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1893	0·34	4·08	3·74
1894	0·42	4·08	3·66
1895	0·28	4·22	3·94
1896	(—) 0·02	4·12	4·14
1897	(—) 0·09	4·05	4·14
1898	(—) 0·53	4·03	4·56
1899	(—) 0·22	3·95	4·17
1900	(—) 0·82	4·04	4·86
1901	(—) 0·98	4·05	5·03
1902	(—) 1·99	4·37	6·36

(—) Denotes loss.

From the outset there was very little prospect that the traffic on this line would meet the interest on the cost of construction and equipment ; and although for the first five years there was a margin after paying working expenses, the results of the past seven years show that even working expenses have not been met. The deficiency is in part due to heavy expenditure necessitated by the ravages of the teredo in the sub-structure of the jetty at Palmerston, and the heavy outlay to repair damages caused by the cyclone which struck Port Darwin in the early part of 1897. Fluctuations in the volume of traffic are also partly responsible for the deficiency.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per train mile for a period of ten years are shown in the following table :—

Year.	Gross Earnings per Train Mile.	Expenditure per Train Mile.	Net Earnings per Train Mile.
	d.	d.	d.
1893	121·93	91·08	30·85
1894	125·14	88·12	37·02
1895	115·10	89·73	25·37
1896	114·28	115·67	(—) 1·39
1897	137·28	145·38	(—) 8·10
1898	112·97	162·12	(—) 49·15
1899	115·53	136·02	(—) 20·49
1900	114·53	188·37	(—) 73·84
1901	109·75	200·39	(—) 90·64
1902	99·26	274·65	(—) 175·39

(—) Denotes loss.

The gross earnings, expenditure, and net earnings per average mile open for the last decennial period were as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1893	108	80	28
1894	111	78	33
1895	101	79	22
1896	104	105	(—) 1
1897	123	130	(—) 7
1898	97	139	(—) 42
1899	102	119	(—) 17
1900	102	167	(—) 65
1901	95	174	(—) 79
1902	86	238	(—) 152

(—) Denotes loss.

The gross earnings show little variation from year to year, but the expenditure was increased through the series of accidents at the terminal port, to which reference has already been made.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the Palmerston to Pine Creek Line since its opening, together with the receipts from the traffic and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	d.
1890 (nine months)	4,567	4,330	227·54
1891	4,515	4,693	249·45
1892	4,541	4,159	219·80
1893	6,169	4,007	155·89
1894	4,076	3,820	224·91
1895	2,950	3,755	305·48
1896	2,901	3,772	312·04
1897	3,080	4,055	315·97
1898	3,126	3,556	273·01
1899	3,191	3,173	238·64
1900	3,374	3,556	260·48
1901	4,097	3,415	200·05
1902	3,755	3,032	193·80

The table shows an increase in the number of passengers carried during 1893 ; but the promise of the year was not sustained, and the

traffic fell away by more than one-half during 1895, 1896, and 1897 although the earnings did not decline in anything like the same proportion. Since the year last mentioned there has been a steady, though small, increase in the number of passengers; but without a corresponding addition to the revenue. The receipts per journey indicate that a large proportion of the traffic is of a long-distance character.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods and Live Stock.	Earnings.
	Tons.	£
1890 (nine months)	2,114	7,499
1891	2,426	9,035
1892	2,633	9,267
1893	2,328	9,470
1894	2,524	10,260
1895	2,053	8,643
1896	2,493	9,149
1897	3,150	11,222
1898	2,678	8,570
1899	3,187	10,091
1900	3,009	9,626
1901	2,981	8,852
1902	2,436	7,996

The average receipts per ton per mile during the year 1902 were 7·36d., as against 8·43d. in 1896.

WESTERN AUSTRALIA.

The first railway constructed in Western Australia was that from Geraldton to Northampton, a length of 34 miles 17 chains, opened for traffic on the 26th July, 1879. Between that date and the close of 1885, a further length of 91 miles 55 chains was constructed. To the end of 1890, only 200½ miles were constructed, and on the 30th June, 1895, there were 57½ miles open for traffic. Railway construction received a considerable impetus subsequent to 1895, and on the 30th June, 1902, there were 1,360 miles open for traffic, at a cost of £7,410,426 for construction and equipment, or at the rate of £5,449 per mile.

The State railways of Western Australia are comprised in five systems. The Eastern system has a length of 167 miles, and includes the line from Fremantle to Northam, with branches to Newcastle, Beverley, Greenhills, Perth Racecourse, and Owen's Anchorage, and the Mahogany Creek deviation; the Eastern Gold Fields system

extends eastward from Northam, and includes the Kanowna, Menzies, and Boulder branches, the total length being 411 miles; the South-western system comprises the line from East Perth to Bunbury, with branches to Colliefields, Bridgetown, Busselton, and Canning and Bunbury Racecourses, and has a length of 234 miles 22 chains; the Northern system includes the line from Geraldton to Cue, with branches to Walkaway, Mullewa, and Northampton, the total length being 305 miles 45 chains; and the Great Southern system, from Beverley to Albany, is 243 miles in length.

The control of the State railways is vested in the Commissioner for Railways, as member of the Government, but the active management is undertaken by an officer with the title of General Manager.

Revenue and Working Expenses.

The net sum available to meet interest charges during the last ten years is shown in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	per cent.
1892	94,201	90,654	3,547	96·23
1893 (half-year).....	54,668	47,069	7,599	86·10
1894	140,564	103,973	36,591	73·96
1895	296,000	182,046	113,954	61·50
1896	529,616	263,704	265,912	49·79
1897	915,483	577,655	337,828	63·00
1898	1,019,677	786,318	233,359	77·11
1899	1,004,620	712,329	292,291	70·91
1900	1,259,512	861,470	398,042	68·40
1901	1,353,704	1,044,920	308,784	77·19
1902	1,521,429	1,256,370	265,059	82·58

From the foregoing statement it will be seen that the gross earnings have increased from £94,201 in 1892 to £1,521,429 in 1902. The rush to the gold-fields of Western Australia has brought an enormous amount of traffic to the railways of that State, and the lines stand in

a position which it is impossible for those of any other province to attain, except under similar circumstances. The proportion of working expenses to gross earnings during the ten and a half years has been reduced from 96.23 per cent. to 82.58 per cent., the intervening years showing considerable irregularity. The rates for the carriage of merchandise are so low that the revenue derived from the traffic is hardly sufficient to pay for working it, and with a view to economy during 1899 the train service was considerably curtailed, and trains previously confined to passenger traffic were converted into mixed trains, conveying both passengers and goods, the result being a substantial reduction in working expenses proportionately to the gross earnings.

The relation of working expenses to gross earnings for 1901 showed a percentage of 77.19, as compared with 68.40 and 70.91 during the two preceding years. The increase of 8.79 per cent. for the year is attributed to many circumstances. There was a substantial addition to the tonnage of coal, timber, and goods hauled at low rates, but no profit was returned therefrom, the receipts only about equalling the working expenses in connection therewith. A heavy expenditure was incurred on locomotive repairs, and among other contributing causes were the rise in price of coal and stores, and increased rates of wages.

Western Australian lines show much greater variation from year to year than the lines of any other State. During the ten years 1892-1901, the lowest expenditure was in 1894 with 38.92d. per train mile, which rose to 60.78d. in 1901. The conditions, however, in the earlier years of the decade, when little more than 200 miles of line were open for traffic, and the train miles run amounted only to 234,000, were entirely different from those of 1901 with 1,355 miles open for traffic and an aggregate train mileage of 4,126,000. In 1899 there was a reduction in the total working expenses, brought about mainly by the curtailment of the mileage; this was accomplished by reducing the number of passenger trains and adopting a system of mixed trains. In the year 1900 there was a large increase in the number of locomotives, and in the repairs to carriages, waggons, &c. This increase, so far as can be seen, was attributable, partly to the natural development of the traffic, and chiefly to the inadequate workshop accommodation and to the fact that the water supply for railways was both inferior and expensive. The want of proper workshop accommodation was a serious drawback, and had the effect of causing an increase in the expenditure on repairs. The year 1901 showed a great advance in the cost of the railways, the expenditure per train mile rising from 49.04d. to 60.78d., every branch participating in the increase. It was in this year that the fifty-four hours per week system was introduced, involving the employment of an increased wages staff, and in addition thereto there was a general increase in the rates of wages. The conditions of working at Fremantle locomotive shops entailed a large outlay, and, in addition, there was an increased expenditure on locomotives due to the compulsory use of bad water, and the overwork of rolling stock owing to a shortage of

hauling power and waggons. There can be no question that in the year named the railways were worked at a very great disadvantage.

Year.	Maintenance of Way, Works, and Buildings.	Locomotive Power, Carriage and Waggon Repairs.	Traffic Expenses.	Compensation.	General Charges.	Total.
	£	£	£	£	£	£
1892, 31st Dec. ...	12,746	49,115	23,839	.....	4,954	90,654
1893, 30th June*	7,732	22,434	14,170	.....	2,733	47,069
1894	20,493	47,129	31,250	.....	5,101	103,973
1895	36,202	86,453	50,725	.....	8,666	182,046
1896	56,036	101,692	94,388	.....	11,588	263,704
1897	97,184	221,884	225,615	11,651	21,321	577,655
1898	176,741	315,066	266,167	9,803	18,541	786,318
1899	165,277	297,500	227,225	3,568	18,759	712,329
1900	183,096	406,565	252,750	4,455	14,604	861,470
1901	221,451	497,188	296,045	6,926	23,310	1,044,920

PER TRAIN MILE.

	d.	d.	d.	d.	d.	d.
1892, 31st Dec. ...	7.53	29.00	14.08	.....	2.93	53.54
1893, 30th June*	7.91	22.94	14.49	.....	2.79	48.13
1894	7.67	17.64	11.70	.....	1.91	38.92
1895	8.71	20.80	12.21	.....	2.08	43.80
1896	8.72	15.83	14.69	.....	1.81	41.05
1897	9.19	20.99	21.34	1.10	2.02	54.64
1898	11.74	20.92	17.68	0.65	1.23	52.22
1899	12.18	21.92	16.74	0.26	1.38	52.48
1900	10.42	23.15	14.39	0.25	0.83	49.04
1901	12.88	28.92	17.22	0.40	1.36	60.78

PER MILE OPEN.

	£	£	£	£	£	£
1892, 31st Dec. ...	62.8	241.9	117.4	.....	24.4	446.5
1893, 30th June*	38.1	110.5	69.8	.....	13.5	231.9
1894	63.8	146.8	97.4	.....	15.9	323.9
1895	65.8	157.2	92.2	.....	15.8	331.0
1896	96.6	175.3	162.7	.....	20.0	454.6
1897	117.1	267.3	271.8	14.0	25.7	695.9
1898	181.5	323.5	273.3	10.0	19.0	807.3
1899	130.1	234.3	178.9	2.8	14.8	560.9
1900	135.1	300.0	186.5	3.3	10.8	635.7
1901	163.4	366.9	218.5	5.1	17.2	771.1

* Half year only.

Interest returned on Capital.

The following is a statement of the average interest earned by the railways on the money invested in them, and affords a comparison with the interest paid on the public debt of the state :—

Year.	Interest returned on Capital.	Actual Rate of Interest payable on Outstanding Loans.	Average gain.
	per cent.	per cent.	per cent.
1892	0·37	4·09	*3·72
1893 (half-year)	0·79	4·09	*3·30
1894	3·12	4·09	*0·97
1895	5·45	4·57	0·88
1896	11·48	3·84	7·64
1897	9·05	3·61	5·44
1898	4·62	3·59	1·03
1899	4·55	3·54	1·01
1900	5·81	3·52	2·29
1901	4·35	3·52	0·83
1902	3·54	3·47	0·07

* Average loss.

The railways of Western Australia have not only met working expenses during the past eight years, but have left a margin after making provision for the payment of interest on capital expenditure. In the construction of these railways, few engineering difficulties were met with, and the lines, which are of a light character, were constructed at a cheaper rate than those of any other State. This fact, together with the enormous increase in coaching and goods traffic, due to the development of the gold-fields, has been instrumental in securing such a favourable return.

Earnings and Expenses per Mile.

The gross earnings, expenditure, and net earnings per train mile for the last ten and a half years are shown in the following table :—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1892	55·62	53·54	2·08
1893 (half-year)	55·87	48·13	7·74
1894	52·59	38·92	13·67
1895	71·22	43·80	27·42
1896	82·44	41·05	41·39
1897	86·59	54·64	31·95
1898	67·72	52·22	15·50
1899	74·01	52·48	21·53
1900	71·70	49·04	22·66
1901	78·74	60·78	17·96
1902	81·00	66·89	14·11

The gross earnings, expenditure, and net earnings per average mile open for the past ten and a half years were as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1892	464	446	18
1893 (half-year)	269	232	37
1894	438	324	114
1895	538	331	207
1896	913	454	459
1897	1,103	696	407
1898	1,047	807	240
1899	791	561	230
1900	930	636	294
1901	999	771	228
1902	1,122	927	195

While the gross earnings per train mile have increased from 55·62d. in 1892 to 81·00d. in 1902, the net earnings show a great improvement during the period, having risen from 2·10d. in the former year to 14·11d. in the latter. The causes that have led up to this have already been indicated. It will be observed that the expenses per train mile for 1902 are the highest for the period. From 1898 to 1900 inclusive a reduction was secured by the adoption of mixed trains. The volume of coaching and goods traffic carried during 1898 was larger than in previous years, but the net earnings per average mile open show a marked reduction. The increased traffic, of course, necessitated extra expenditure; and being accompanied by a reduction in rates, had the temporary effect of reducing the net earnings. It is estimated that the adoption of the new rates, as compared with the old, involved a loss during 1898 of at least £232,000 in the working of the Northam, Southern Cross, Coolgardie, and Kalgoorlie railways, but the wisdom of the railway policy of the country was justified by the results of the following two years. The abnormal rise in the expenditure for 1901 has already been explained.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the state during the year 1887, the earliest for which particulars are available, and for the last ten and a half years, together with the receipts for the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1887	173,656	19,032	26·29
1892	456,631	39,499	20·76
1893 (half-year)	286,520	20,921	17·52
1894	617,080	64,409	25·05
1895	1,022,248	122,051	28·65
1896	1,679,816	188,765	26·97
1897	3,607,486	410,750	27·33
1898	5,669,444	458,402	19·41
1899	5,872,200	364,687	14·90
1900	6,225,068	402,500	15·52
1901	6,823,453	407,319	14·33
1902	8,158,299	430,093	12·65

The statement shows a large increase in the number of passengers carried each year ; the gradual reduction in the average receipts per journey indicates the expansion of the suburban and local traffic.

The amount of goods tonnage for a similar period is shown in the following table :—

Year.	Tonnage of Goods.	Earnings.
		£
1887	52,151	20,380
1892	135,890	54,702
1893 (half-year)	86,004	33,747
1894	204,686	76,155
1895	255,839	173,949
1896	435,855	340,850
1897	858,748	494,733
1898	1,203,911	561,275
1899	1,132,246	639,933
1900	1,384,040	857,012
1901	1,719,720	946,385
1902	2,040,092	970,684

It will be seen that the increase in the goods traffic has been considerable since 1897, while the tonnage in 1902 was nearly two and a half times that of 1897. Owing to reduction in the charges for carriage, the earnings have not shown so considerable an expansion.

TASMANIA. .

The progress of railway construction in Tasmania has been somewhat slow, for owing to the fact that the island is small and possesses numerous harbours, the railways have had to face severe competition with sea-borne traffic. As stated earlier in the chapter, the line from Launceston to Deloraine, 45 miles in length, was opened on 10th February, 1871, and though an agitation long existed for the construction of a railway between the principal centres, Hobart and Launceston, it was not till the 1st November, 1876, that it was opened for traffic. No further extension was carried out until 1884, when an increase of 48 miles was made, and up to 1890 the total mileage opened was only 398, of which 48, opened in 1884, were constructed by a private company. The length of State railways opened to 31st December, 1901, was 457½ miles, at a cost of £3,799,098 for construction and equipment, or at the rate of £8,304 per mile.

The lines of State railway in operation in Tasmania are the Western, from Launceston to Burnie, with branch to Chudleigh; the Main line from Hobart to Launceston, with branches from Launceston to Scottsdale, Parattah to Oatlands, Conara Junction to St. Mary's, Bridgewater to Glenora, and Brighton Junction to Apsley; the Sorell line, from Bellerive to Sorell; and the West Coast line, from Strahan Wharf to Maestris.

The control of the railways is vested in the Department of Lands and Works, the active management being undertaken by an officer with the title of General Manager.

Revenue and Working Expenses.

The net sum available to meet interest charges in connection with the railways of the state for each of the years during the last decennial period was as follows:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	£
1892	176,926	161,586	15,340	91·32
1893	152,083	136,468	15,615	89·73
1894	144,488	122,850	21,638	85·02
1895	149,642	120,351	29,291	80·42
1896	162,932	122,171	40,761	74·98
1897	166,834	128,544	38,290	77·04
1898	178,180	141,179	37,001	79·23
1899	193,158	152,798	40,360	79·10
1900	202,959	160,487	42,472	79·07
1901	205,791	173,400	32,391	84·26

The cost of working the Tasmanian railways is comparatively high, and, as in New Zealand, the lines have to face severe competition with sea-borne traffic, while there are no large inland centres that could support railways. There is a marked decrease year by year in the Australian traffic *via* Launceston, which is attributed to the great improvement in the direct steamer service between Melbourne and Hobart.

The following analysis of the working expenses of Tasmanian railways for the ten years 1892-1901 does not call for special comment. There has, of late years, been a slight upward tendency in the cost of train mileage, partly due to the enhanced price of coal. In the years 1895, 1896, and 1897 it is evident that necessary expenditure on rolling stock was not carried out, thus throwing the burthen of repairs on to later years—this was especially the case in regard to locomotive repairs. In 1901 there were extensive renewals of locomotive boilers, but a portion of the expenditure in connection therewith might have been saved by earlier attention:—

Year ended 31st December.	Maintenance of Way, Works, and Buildings.	Locomotive Power, Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	General Charges.	Total.
	£	£	£	£	£
1892	61,642	55,277	37,110	7,557	161,586
1893	50,191	48,623	31,152	6,502	136,468
1894	44,762	42,483	29,507	6,098	122,850
1895	46,548	38,381	29,424	5,998	120,351
1896	46,813	35,326	30,909	6,123	122,171
1897	48,561	40,683	32,989	6,311	128,544
1898	54,927	45,180	33,765	7,307	141,179
1899	56,238	51,662	37,370	7,528	152,798
1900	58,862	53,865	39,300	8,460	160,487
1901	59,897	63,580	41,138	8,785	173,400

PER TRAIN MILE.

	d.	d.	d.	d.	d.
1892	16·2	14·6	9·8	2·0	42·6
1893	15·1	14·6	9·3	1·9	40·9
1894	14·2	13·5	9·3	1·9	38·9
1895	15·4	12·6	9·7	2·0	39·7
1896	15·2	12·4	10·0	2·0	39·6
1897	15·2	12·8	10·3	2·0	40·3
1898	17·3	14·2	10·7	2·3	44·5
1899	16·7	15·4	11·1	2·2	45·4
1900	17·3	15·8	11·6	2·5	47·2
1901	16·1	17·0	11·0	2·3	46·4

Year ended 31st December.	Maintenance of Way, Works, and Buildings.	Locomotive Power, Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	General Charges.	Total.
PER MILE OPEN.					
	£	£	£	£	£
1892	147·7	132·4	89·0	18·1	387·2
1893	117·5	113·8	72·9	15·2	319·4
1894	104·8	99·4	69·0	14·3	287·5
1895	109·0	89·8	68·8	14·0	281·6
1896	109·6	89·7	72·3	14·3	285·9
1897	112·4	94·1	76·3	14·5	297·3
1898	123·3	101·5	75·8	16·4	317·0
1899	126·3	116·0	83·9	16·9	343·1
1900	132·1	120·9	88·2	19·0	360·2
1901	130·3	138·4	89·5	19·1	377·3

Interest returned on Capital.

The following table shows the average loss on the working of the Tasmanian railways for each year during the last ten years :—

Year.	Interest returned on Capital.	Actual rate of Interest payable on Outstanding Loans.	Average Loss.
	per cent.	per cent.	per cent.
1892	0·43	4·09	3·66
1893	0·44	4·11	3·67
1894	0·61	3·96	3·35
1895	0·83	3·88	3·05
1896	1·16	3·87	2·71
1897	1·09	3·85	2·76
1898	1·03	3·82	2·79
1899	1·12	3·81	2·69
1900	1·16	3·78	2·62
1901	0·85	3·76	2·91

The foregoing table shows that there was a slight improvement in the condition of the railway revenue during the five years preceding 1901. During 1901 the interest returned on capital expenditure fell to nearly that of the year 1895. Among the causes leading to this was the reduction in passenger fares, in the case of single fares by 45 per cent., and return fares by 27½ per cent. These large reductions did not result in the fulfilment of anticipations, and on the 1st December, 1901, a revised scale was adopted, which is still 20 per cent. below that in force

in 1900. The competition of the Emu Bay Company and the low prices ruling for lead and silver have brought about a decrease in revenue on the Government West Coast line. Working expenses have absorbed 84·26 per cent. of total revenue, and the large increase over the previous five years is due to increased mileage, more extensive renewals of locomotive boilers paid for out of working expenses, and the increased price of coal. The competition already referred to, together with the heavy initial cost of the railways themselves, especially of the main line connecting Hobart with Launceston, for which the price paid by the Government on its resumption was at the rate of £9,069 per mile, as against an average of £8,304 per mile for the lines of the state generally, render it extremely difficult, even with the most careful management, to effect any considerable diminution in the average loss. Even in the case of the Western line from Launceston to Burnie, which passes through the finest agricultural land in the State, the return, after paying working expenses for the year ended 31st December, 1901, was only 1·17 per cent. on the cost of construction and equipment.

Earnings and Expenses per Mile.

The following tables indicate the gross earnings, expenditure, and net earnings per train mile and per mile of line open. It will be observed that the net earnings per train mile reached 13d. in 1896, a point beyond which it does not seem likely there will be much expansion. The considerable reduction in net earnings during 1901, in comparison with the previous five years, is due to the shrinkage of revenue consequent on the reduction of fares, and the contraction in revenue from goods traffic already referred to. This compares very unfavourably with the results for other parts of Australia.

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings. per train mile.
	d.	d.	d.
1892	46·73	42·68	4·05
1893	45·63	40·94	4·69
1894	45·83	38·96	6·87
1895	49·36	39·69	9·67
1896	52·85	39·63	13·22
1897	52·34	40·33	12·01
1898	56·17	44·50	11·67
1899	57·50	45·49	12·01
1900	59·70	47·20	12·50
1901	55·14	46·46	8·68

The earnings and expenditure per average mile open were as follows :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1892	424	387	37
1893	356	319	37
1894	338	287	51
1895	350	281	69
1896	381	286	95
1897	386	297	89
1898	400	317	83
1899	434	343	91
1900	456	360	96
1901	448	377	71

The peculiar position of Tasmania has already been referred to. The portions of the lines at first constructed were within the more densely populated districts, and the later extensions were projected into the more thinly-peopled areas, which were without sufficient production to afford a payable traffic. In comparison with the other States the proportion of expenses to gross earnings is extremely high, and while for the five years ended 1900 an improvement was shown, the increase in 1901 indicates that it is not possible under present conditions to reduce expenditure.

Coaching and Goods Traffic.

Particulars in respect of the number of passengers carried on the State lines of Tasmania during the year 1881, and for the last ten years, together with receipts from the traffic and the average receipts per journey, are set forth in the following table :—

Year.	Passengers carried.	Receipts from Coaching Traffic.	Average Receipts per Journey.
	No.	£	d.
1881	102,495	10,396	24·34
1892	704,531	87,506	29·80
1893	546,671	64,428	28·28
1894	514,461	58,070	27·09
1895	526,814	57,947	26·39
1896	542,825	59,771	26·43
1897	603,530	62,447	24·88
1898	617,643	68,317	26·54
1899	640,587	73,147	27·40
1900	683,015	76,184	26·77
1901	777,445	78,328	24·18

It will be seen that during the year 1892 there was a comparatively large number of passengers carried. This was due to the resumption of the main line connecting Hobart with Launceston, the returns for the years in question being swollen by the traffic over the increased length of line. The traffic, however, was not sustained, for in the subsequent year a large diminution in the number of persons making use of the lines was recorded. There has since been a revival, and there are good grounds for supposing that this improvement will be continued. The average receipts per journey do not vary to any considerable extent, the amount of suburban traffic properly so-called being very small. The fall in the average receipts per journey during 1901 is largely due to the considerable reduction in fares already alluded to.

The amount of goods tonnage for a similar period is shown in the following table:—

Year.	Tonnage of Goods and Live Stock.	Earnings.
		£
1881	21,043	8,332
1892	178,224	76,182
1893	164,982	73,490
1894	174,457	73,639
1895	204,480	78,797
1896	229,707	85,780
1897	229,620	86,941
1898	235,096	93,620
1899	312,446	107,661
1900	308,453	111,904
1901	314,628	108,698

No information is available showing the subdivision of the tonnage of goods and live stock for the year into a general classification. The average distance each ton of goods was carried was 40·93 miles, and the average receipts per ton per mile 1·73d.

NEW ZEALAND.

The continuance of the native war in New Zealand, militated against the rapid extension of the railways, and at the close of the war in 1870 there were only 46 miles in operation. In 1875 the length of line opened for traffic had increased to 542 miles; in 1885, to 1,613 miles; in 1890, to 1,842 miles; and in 1895 to 2,014 miles. The length of line opened to 31st March, 1902, was 2,235 miles, at a cost of £18,170,722 for construction and equipment, or at the rate of £8,130 per mile.

The railway system of the colony is divided into ten sections. The Kawakawa and Whangarei sections, in the extreme north of the North Island, are short lines to coal-fields, and the Kaihu section was built for the purpose of tapping large timber areas inland. The Auckland

section forms the northern portion of the North Island main trunk railway, which, when complete, will terminate at Wellington, on the shores of Cook's Strait. The Wellington-Napier-New Plymouth section comprises the group of lines which serve the southern portion of North Island. In the northern portion of Middle Island, the Westland, Westport, Nelson, and Picton sections form only the first link in the chain of through communication. On the East Coast of Middle Island, the actual working portion of the main trunk line is to be found. The present terminus is at Culverden, from whence extension will be made northward. This is known as the Hurunui-Bluff section, and includes the service to Christchurch, Dunedin, Invercargill, and the Bluff.

During the year ended March, 1901, the whole of the Midland railways were formally taken possession of by the Government, and incorporated with the Westland section of the Government railways. They had previously been worked by the Government as a trust. The total length of these lines was about 83 miles.

The management of the railways of New Zealand was placed in the hands of three Commissioners in 1887, but early in 1895 the Government resumed charge of the lines, the active control being vested in an officer with the title of General Manager, who is responsible to the Minister for Railways.

Revenue and Working Expenses.

The net sum available to meet interest charges during each year of the last decennial period is set forth in the following table:—

Year.	Gross Earnings.	Working Expenses.	Net Earnings.	Proportion of Working Expenses to Gross Earnings.
	£	£	£	£
1893	1,181,522	732,142	449,380	61·97
1894	1,172,793	735,360	437,433	62·70
1895	1,150,851	732,161	418,690	63·62
1896	1,183,041	751,368	431,673	63·51
1897	1,286,158	789,054	497,104	61·35
1898	1,376,008	857,191	518,817	62·30
1899	1,469,665	929,738	539,927	63·26
1900	1,623,891	1,052,358	571,533	64·80
1901	1,727,236	1,127,848	599,388	65·30
1902	1,874,586	1,252,237	622,349	66·80

The foregoing table shows that the serious fluctuations that at times characterise the returns of the states on the mainland of Australia are absent from those of New Zealand, the configuration of the islands and their higher latitude rendering them to a very great extent immune from the periodical droughts to which the Australian states are so subject. The proportion of working expenses to gross earnings does not vary to

any considerable extent, and the rise during the past four years is attributed to the payment of an increased rate of wages to employees, replacing old engines with new, heavy repairs due to the increased age of the stock, and the relaying of a portion of the permanent way with heavier rails. The traffic has, in many places, practically outgrown the carrying capacity of the lines, which were originally intended as the pioneers of settlement, and were not built to cope with a business such as still exists in many parts of the colony. The traffic over the railways has now assumed dimensions which render the employment of the heaviest type of locomotive a matter of the utmost importance in the interests of economy, and the running of trains at frequent intervals and high speeds a matter of necessity. There are, however, considerable portions of main line still laid with light rails, and until such time as these can be replaced with rails of a heavier type, and the bridges strengthened to carry the heavier class of engine, it is impossible to obtain the best results of working.

The analysis of the working expenses of the New Zealand railways for the ten years, 1893-1902, which is here presented, shows that there has been a regular increase since 1895, in which year the expenditure amounted to £732,161, equal to 54·54d. per train mile compared with 59·32d. per train mile in 1902.

The New Zealand railways were not originally constructed to carry the present traffic, and during the period under review there has been continued expenditure due to the necessity of increasing the weight of rails and strengthening the bridges and aqueducts. In the year 1902 the Minister for Railways speaks of the increasing age of the lines, the necessity for employing heavier rolling stock, and of the accelerated speed which render the efficient maintenance of the track an imperative necessity; if the Minister's ideas are fully carried out an increased expenditure may be looked for. The advance in the cost of working from £372 to £562 per mile of line open is of no significance, such expenditure being due merely to the continued growth of the traffic.

Year ended 31st March.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	General Charges.	Total.
	£	£	£	£	£	£
1893	262,600	183,774	53,962	202,153	29,653	732,142
1894	268,451	177,833	56,470	201,166	31,440	735,360
1895	272,718	175,758	50,949	201,641	31,095	732,161
1896	282,593	185,669	54,692	207,253	21,161	751,368
1897	301,981	190,543	65,825	213,914	16,791	789,054
1898	327,987	209,289	65,344	232,646	21,925	857,191
1899	357,189	231,532	73,680	244,932	22,405	929,738
1900	394,619	295,542	76,555	262,552	23,090	1,052,358
1901	426,405	293,383	91,532	296,159	20,369	1,127,848
1902	436,847	351,172	99,522	333,211	31,485	1,252,237

Year ended 31st March.	Maintenance of Way, Works, and Buildings.	Locomotive Power.	Carriage and Waggon Repairs and Renewals.	Traffic Expenses.	General Charges.	Total.
PER TRAIN MILE.						
	d.	d.	d.	d.	d.	d.
1893	20·99	14·69	4·32	16·16	2·37	58·53
1894	20·70	13·71	4·35	15·51	2·42	56·69
1895	20·32	13·09	3·79	15·02	2·32	54·54
1896	20·51	13·47	3·97	15·04	1·54	54·53
1897	21·26	13·41	4·64	15·06	1·18	55·55
1898	21·47	13·70	4·27	15·23	1·44	56·11
1899	21·60	14·00	4·46	14·81	1·35	56·22
1900	22·61	16·93	4·39	15·05	1·33	60·31
1901	22·15	15·24	4·75	15·38	1·06	58·58
1902	20·69	16·64	4·71	15·79	1·49	59·32

PER MILE OPEN.						
	£	£	£	£	£	£
1893	140·18	98·12	28·82	107·94	15·83	390·89
1894	140·35	92·96	29·52	105·15	16·43	384·41
1895	138·57	89·31	25·89	102·45	15·80	372·02
1896	141·45	92·93	27·37	103·74	10·59	376·08
1897	149·77	94·50	32·65	106·09	8·33	391·34
1898	160·53	102·43	31·98	113·86	10·73	419·53
1899	172·92	112·09	35·67	118·56	10·85	450·09
1900	187·99	140·80	36·47	125·08	11·00	501·34
1901	196·14	134·95	42·11	136·23	9·37	518·80
1902	196·17	157·69	44·69	149·63	14·14	562·32

Interest Returned on Capital.

The basis employed in the case of the states comprised within the Commonwealth for ascertaining the net interest payable on the railway debts cannot be adopted for New Zealand, the necessary data not being available. The nominal loss is, therefore, shown in the following statement, the actual loss being somewhat higher:—

Year.	Interest Returned on Capital.	Average rate of Interest payable on Out- standing Loans.	Average Loss.
	Per cent.	Per cent.	Per cent.
1893	3·05	4·57	1·52
1894	2·88	4·59	1·71
1895	2·73	4·00	1·27
1896	2·80	3·94	1·14
1897	3·19	3·92	0·73
1898	3·24	3·89	0·65
1899	3·29	3·81	0·52
1900	3·42	3·79	0·37
1901	3·48	3·78	0·30
1902	3·43	3·76	0·33

The foregoing table indicates that the railways are approaching the stage of being self-supporting, the interest returned on capital cost for the past eight years showing an improvement each year.

Earnings and Expenses per Mile.

¶ The gross earnings, expenditure, and net earnings per train mile for the past ten years are shown in the following table :—

Year.	Gross Earnings per train mile.	Expenditure per train mile.	Net Earnings per train mile.
	d.	d.	d.
1893	94·50	58·53	35·97
1894	90·25	56·69	33·56
1895	85·75	54·54	31·21
1896	85·75	54·53	31·22
1897	90·50	55·55	34·95
1898	90·00	56·11	33·89
1899	89·00	56·22	32·78
1900	93·00	60·31	32·69
1901	89·75	58·58	31·17
1902	88·80	59·32	29·48

The gross earnings per train mile have varied very little during the ten years, the lowest point touched being 85½d., and the highest, 94½d., while the expenditure has varied even less. The expenditure during 1900 was higher than in any other year during the decennial period. The gross earnings per train mile for the past two years were less than those of 1900, and the net earnings show a slight but gradual reduction during the past five years. The results, however, compare very favourably with the other states, and are only exceeded by those of New South Wales, with the exception of the year just closed, when New Zealand showed a slightly higher net return.

¶ The gross earnings, expenditure, and net earnings per average mile open for the past ten years are as follow :—

Year.	Gross Earnings per average mile open.	Expenditure per average mile open.	Net Earnings per average mile open.
	£	£	£
1893	626	391	235
1894	613	384	229
1895	585	372	213
1896	592	376	216
1897	638	391	247
1898	673	419	254
1899	712	450	262
1900	774	501	273
1901	794	519	276
1902	842	562	280

The foregoing table indicates that the gross earnings have increased from £626 per average mile open to £842, and the net earnings from £235 to £280, the return for last year being the highest secured during the decennial period—evidence of the fact that the extensions in recent years have been judicious, and that the volume of traffic has been maintained.

Coaching and Goods Traffic.

The following table shows the number of passengers carried on the lines of the Colony during the year ended 31st March, 1882, and for the last ten years, together with the receipts from the traffic, and the average receipts per journey :—

Year.	Passengers carried.	Receipts from Coaching traffic.	Average Receipts per Journey.
	No.	£	d.
1882	2,911,477	329,492	27·16
1893	3,759,044	367,594	23·47
1894	3,972,701	378,480	22·89
1895	3,905,578	360,243	22·14
1896	4,162,426	359,822	20·74
1897	4,439,387	378,684	20·47
1898	4,672,264	399,262	20·51
1899	4,955,553	438,367	21·23
1900	5,468,284	474,793	20·83
1901	6,243,593	503,051	19·34
1902	7,356,136	575,697	18·78

It will be observed that there was a falling off during the decennial period in the average receipts per journey. The continued increase in the number of passengers carried is, however, very marked, the advance for the closing year of the period being upwards of 1,112,000, while the receipts from the traffic rose by over £72,000. Taking the returns for the year ended 31st March, 1884, as a basis, it has been found that those for 1902 show an increase of only 29 per cent. in the number of passengers who travelled first-class, while the increase in those who travelled second-class was not less than 108 per cent. While the marked prosperity of the past four years has induced more passengers to travel first-class, it is none the less evident that the tendency is towards one class of carriage, as already exists in the case of tramways.

The amount of goods tonnage for a similar period is shown in the following table:—

Year.	Tonnage of Goods exclusive of Live Stock.	Earnings.
		£
1882	1,437,714	491,057
1893	2,193,330	707,786
1894	2,060,645	686,469
1895	2,048,391	683,726
1896	2,087,798	698,115
1897	2,368,927	774,163
1898	2,518,367	837,590
1899	2,624,059	882,077
1900	3,127,874	985,723
1901	3,339,687	1,051,695
1902	3,529,177	1,110,575

The large increase in the tonnage of goods carried during 1900 over preceding years was caused by the bountiful harvest in the Middle Island, which was carried at freight rates averaging 20 per cent. below those ruling in the previous year. The further increase of 211,813 tons for 1901, was contributed to by all descriptions of goods, with the exception of wool. The grain traffic for 1901 compared with that of 1899 shows an increase of 84 per cent. The increase during 1902 over the traffic of 1901 was 189,490 tons. Increases occur under all the various headings, the largest being in grain and timber, the traffic in each class, with the exception of wool, being the largest on record.

The subdivision of the tonnage of goods and live stock for the year ended 31st March, 1902, is shown in the following table. Particulars of the goods traffic are set forth in seven classes, but the average distance for which goods of each class were carried cannot be given, and there are no data available showing the average earnings per ton per mile.

Description of Traffic.	Tons carried.	Number carried.
Lime and Chaff	86,378	.....
Wool.....	101,878	.....
Firewood	100,236	.....
Timber	427,153	.....
Grain	813,345	.....
Merchandise	556,395	.....
Minerals	1,443,792	.....
Cattle .....	.....	83,458
Sheep .....	.....	2,724,860
Pigs .....	.....	55,159

TRAMWAYS.

In all the Australasian states tramways are in operation, but it is chiefly in Sydney and Melbourne, the inhabitants of which numbered at the latest date 496,990 and 501,580 respectively, that the density of settlement has necessitated the general adoption of this mode of transit.

In New South Wales the three systems of electric, cable, and steam traction are in vogue. Within the metropolitan area, however, the electric is being substituted for steam power. The length of line under electric traction on the 30th September, 1902, was 45 miles 15 chains, comprising 11 miles 67½ chains at North Sydney; 2 miles 27 chains, Ocean-street, Woollahra, to Dover Road; 3 miles 36 chains, George-street-Harris-street tramway; 4 miles 11 chains, Glebe Junction to Newtown, Marrickville, and Dulwich Hill; 2 miles 73 chains, Forest Lodge Junction to Leichhardt; 2 miles 57½ chains, Newtown to St. Peters and Cook's River; 1 mile 53 chains, Railway to Bridge-street; 5 miles 55 chains, Waverley and Bondi; 2 miles 28 chains, Railway to Glebe and Forest Lodge; 2 miles 66 chains, Forest Lodge to Balmain; 1 mile 26 chains, Redfern to Moore Park; 3 miles 20 chains, Pitt and Castlereagh streets to Fort Macquarie; and 55 chains, George-street to Miller's Point. The only line worked by cable traction is that from King-street, Sydney, to Ocean-street, in the suburb of Woollahra, a distance of 2 miles 32 chains. On the remaining lines steam motors are still used. The length of Government tram lines open to 30th June, 1902, was 104 miles, which had cost for construction and equipment £2,829,363. The receipts for the year were £631,757, and the working expenses £541,984, leaving a profit of £89,773, or 3·17 per cent. on the invested capital. The number of passengers carried during 1902 was 108,135,111.

In Victoria the cable system is in operation in the metropolitan area, the lines having been constructed by a municipal trust at a cost of £1,705,794. The tramways are leased to a company, and the receipts for the year ended 30th June, 1902, were £474,835. The number of passengers carried during the year was 47,261,571. The miles of track operated on were 43¾ cable and 3¾ horse lines, or 47½ miles of double track. Besides the lines of the Tramway Trust, there are additional suburban systems worked by limited liability companies, as follows:—Horse, 8½ miles; electric, 4 miles; and cable, 2¼ miles.

In Queensland there is a system of electric trams controlled by a private company. The only information available shows that the capital of the company is £750,000 fully paid up, and that there are also debentures to the amount of £400,000. Particulars as to receipts and disbursements are not available, but the report presented to the shareholders in London during May, 1902, showed a net profit of £42,815 for the period from 20th November, 1900, to 31st December, 1901. The length of the tramways is 25 miles, or 43 miles of single line.

The company owned seventy-nine electric cars, and during the year 1901, 16,183,801 passengers were carried.

In South Australia there are no Government tramways, but horse trams are run in the principal streets of Adelaide by private companies. No particulars have been collected respecting the length of the lines, nor of the returns therefrom. A proposal is under consideration for the substitution of electric traction on these lines.

The Western Australian Government owns a line of horse tramway on a 2-foot gauge between Roeburne and Cossack, a length of $8\frac{1}{2}$ miles, constructed at a cost of £23,467. For the year ended 30th June, 1901, the gross earnings were £1,981, and the working expenses £2,285, leaving the loss on working expenses at £304.

In Tasmania there is an electric tramway from Hobart railway station, about 9 miles in length, owned by a private company. The cost of construction and equipment was £90,000; and the company possesses 20 cars. For the year ended 31st December, 1901, the receipts amounted to £16,097, and the working expenses, to £12,342. The passengers carried during the twelve months numbered 1,284,552. There is also a steam system at Zeehan, 2 miles in length, constructed at a cost of £3,212. No information is available as to the receipts, but the working expenses for the year ended 31st December, 1899, were £1,948. The number of passengers carried during the twelve months was 24,219.

There are also tramways in existence in New Zealand under municipal and private management, but no particulars in regard to them are at present available.

POSTS AND TELEGRAPHS.

THE first Australasian post-office was established by Governor Macquarie in the year 1810, Mr. Isaac Nichols being appointed Post-master. The office was in High-street (now known as George-street), Sydney, at the residence of Mr. Nichols, who was, "in consideration of the trouble and expense attendant upon this duty," allowed to charge on delivery to the addressee 8d. for every English or foreign letter of whatever weight, and for every parcel weighing not more than 20 lb., 1s. 6d., and exceeding that weight, 3s. The charge on Colonial letters was 4d., irrespective of weight; and soldiers' letters, or those addressed to their wives, were charged 1d. Very little improvement in regard to postal matters took place for some years.

In 1825 an Act was passed by Sir Thomas Brisbane, with the advice of the Council, "to regulate the postage of letters in New South Wales," giving power for the establishment of post-offices, and to fix the rates of postage. It was not, however, until 1828 that the provisions of the Act were put into full force. The rates of postage appear to have depended upon the distance and the difficulty of transmission. The lowest single inland rate was 3d., and the highest 12d., the postage on a letter increasing according to its weight, which was fixed for a single letter at $\frac{1}{4}$ -ounce. Letters between New South Wales and Van Diemen's Land were charged 3d. each (ship rate), and newspapers 1d. Other ship letters were charged 4d. single rate, and 6d. for any weight in excess. The privilege of franking was allowed to the Governor and a number of the chief public officials, and letters to and from convicts passed free under certain regulations.

In 1831 a twopenny post was established in Sydney; and in 1835, under Sir Richard Bourke, the Act of 1825 was repealed and another Act was passed, fixing the charge on a single letter at 4d. for 15 miles, 5d. for 20 miles, 6d. for 30 miles, and so on up to 1s. for 300 miles. In 1837 a post-office was established in Melbourne, and a fortnightly mail was established between that city and Sydney. Stamps were introduced in the same year in the shape of stamped covers or envelopes, which are believed to have been the first postage-stamps ever issued. By 1838 there were 40 post-offices in the state of New South Wales, which at that time, of course, included the territory now known as Victoria and Queensland; and in the Sydney office about 15 persons were employed. The revenue of the Department for the year was £8,390, and the expenditure £10,347; while payments were made by

the New South Wales Government to the post office at Kororareka, in New Zealand, which was not created a separate colony until 1841. In 1847 an overland mail between Sydney and Adelaide was established. Stamps in their present form were issued in 1849, and the postage rates were fixed at 1d. per $\frac{1}{2}$ oz. for town and 2d. for country letters, at which they remain in most of the states to-day.

Regular steam mail communication with Great Britain was first established in 1852. Until that time the Australian colonies had to depend upon the irregular arrival and despatch of sailing vessels for the carriage of mails; but in the year mentioned the steamships *Australia*, *Chusan*, and *Great Britain* were despatched from England, making the voyage in 60 days, and causing a strong desire in the minds of the colonists for a more frequent and steady system of steam communication with the Old World. The outbreak of the Crimean War in 1854 hindered for a while the accomplishment of this object; but in 1856 a line of steamers was again laid on, and the service was carried on by the *Peninsular and Oriental Company* and the *Royal Mail Company* for some years, but without giving so much satisfaction to the public as might have been expected.

As far back as 1854 a proposal was made for the establishment of a line of mail packets *via* Panama, and negotiations on the subject were carried on for several years between the British Government and the Governments of New South Wales and New Zealand. The result was that in 1866 the service was started, and continued in operation until the end of 1868, when it was terminated through the failure of the company by which it had been carried out. In the following year New South Wales, in conjunction with New Zealand, inaugurated a mail service *via* San Francisco, which, with a few interruptions and under various conditions, has been continued up to the present time.

The establishment of a mail route *via* America had the effect of stimulating the steamship-owners who were engaged in the service *via* Suez, and from that time there was a marked improvement in the steamers employed, as well as in the punctuality and speed with which the mails were delivered. The *Peninsular and Oriental Company* have carried mails for the colonies almost from the inception of the ocean steam service, with very few interruptions. Towards the end of 1878 the *Orient Company* commenced carrying mails between Australia and the United Kingdom, and have continued to do so ever since. In the year 1883 the fine steamers of the *Messageries Maritimes* of France entered the service, followed in 1887 by the *North German Lloyd's*, so that there are now sometimes two or even three mails received and despatched every week, and a voyage to Europe, which was formerly a formidable undertaking, involving great loss of time and much discomfort, is regarded as a mere pleasure trip to fill up a holiday.

In the year 1893 another mail service was established, by a line of steamers running from Sydney to Vancouver Island, in British Columbia. This line seems likely to open up a valuable trade between the Australian

states and British North America. There is also a line of steamers running between Brisbane and London, but the states other than Queensland make little use of these vessels.

Under the provisions of the 51st clause of the Commonwealth of Australia Constitution Act, the control of the Post and Telegraph services became vested in the Commonwealth, and by proclamation these services were taken over on the 1st March, 1901. The systems of administration, and the rates levied in force in each state at the date of union were however continued until the Commonwealth Postal Act was brought into operation on the 1st November, 1902, thus securing uniformity in all the states.

GROWTH OF POSTAL BUSINESS.

The growth of postal business in each of the states during the forty-one years from 1861 to 1901 is shown below. It will be seen that the number of letters for all Australasia in 1861 was less than is now transacted by any individual state, Tasmania excepted. The true total for Australasia is, of course, not to be found by adding the figures of the several states together, as interstate letters are counted both in the state from which they are despatched and in that in which they are received for delivery. A second total is therefore given from which this excess has been excluded:—

State.	Post Offices.		Letters and Post-cards.		Newspapers.		Packets.	
	1861.	1901.	1861.	1901.	1861.	1901.	1861.	1901.
New South Wales...	340	2,208	4,369,463	82,783,467	3,384,245	52,317,650	105,333	15,216,387
Victoria	360	1,637	6,100,929	83,005,029	4,277,179	27,125,251	....	13,481,076
Queensland	24	1,234	515,211	23,260,126	427,489	12,804,902	3,555	7,629,348
South Australia	160	713	1,540,472	21,818,724	1,089,424	9,921,641	....	1,343,622
Western Australia ..	..	187	193,317	17,450,878	137,476	7,975,208	....	4,421,673
Tasmania	100	376	835,873	11,173,493	895,656	7,440,146	....	2,238,632
Commonwealth ..	..	6,355	13,564,265	239,560,717	10,211,469	117,554,798	....	44,331,637
Commonwealth (excluding Inter-State excess) .....	..	..	12,844,300	220,593,000	9,603,000	103,000,000	....	39,775,000
New Zealand ..	..	1,739	1,236,768	54,080,937	1,428,351	18,973,632	....	18,536,008
Australasia .....	..	8,094	14,801,033	293,650,654	11,639,820	136,558,430	....	62,867,645
Australasia (excluding intercolonial excess) .....	..	..	14,061,000	273,582,000	10,941,400	121,000,000	....	57,818,000

A corresponding table to that already given, showing the number of letters, newspapers, and packets per head of population, is appended :—

State.	Letters and Post-cards.		Newspapers.		Packets.	
	1861.	1901.	1861.	1901.	1861.	1901.
New South Wales	12	60	10	38	1	11
Victoria	11	69	8	22	.....	11
Queensland	17	46	14	25	1	15
South Australia	13	60	9	27	.....	4
Western Australia	12	93	9	42	.....	23
Tasmania	9	64	10	42	.....	13
Commonwealth.....	11	63	8	31	.....	11
New Zealand	14	69	16	24	.....	24
Australasia*	11	59	9	26	.....	13

* Interstate excess excluded.

Western Australia takes the lead in the transmission of letters and equals Tasmania in newspapers, and is only surpassed by New Zealand in the matter of packets; while Victoria in letters and postcards, and New South Wales in newspapers come second. A comparison of the average number of letters and postcards per head of population in Australasia with similar figures for the principal countries of the world is afforded by the table given below. It will be seen that on a population basis the correspondence of Australasia exceeds that of any of the countries named, with the exception of the United Kingdom :—

Country.	Letters and Post-cards per head.	Country.	Letters and Post-cards per head.
United Kingdom.....	66	France	28
Australasia	59	Norway	25
Switzerland.....	40	Hungary.....	17
Germany.....	51	Portugal.....	12
Sweden.....	51	Italy	10
Denmark	39	Spain.....	7
Austria	40	Roumania.....	5
Canada.....	38	Chili	4
Belgium	34	Greece	3
Argentine Republic ...	50	Russia	4
Netherlands	30		

RATES OF POSTAGE.

The inland letter postage is 1d. per $\frac{1}{2}$ oz. on town and 2d. on country letters in all the states of the Commonwealth of Australia, except Victoria and South Australia. In Victoria the rate is 1d. per $\frac{1}{2}$ oz., and in South Australia 2d. per $\frac{1}{2}$ oz. on all letters posted for delivery within the state. In Victoria the minimum charge was altered in 1890 from 2d. per oz. to 1d. per $\frac{1}{2}$ oz.; but the loss at that time was too great, and in 1892 the rate was again raised to 2d. per oz.; in 1901 it was once more reduced to 1d. per $\frac{1}{2}$ oz. In New South Wales the city and suburban rate of 1d. per $\frac{1}{2}$ oz., which is in force in the Metropolitan Suburban District, is also in operation within a 12-mile radius of Newcastle, and a 13-mile radius of nearly sixty of the other principal country towns. The inter-state and intercolonial rate is uniformly 2d. per $\frac{1}{2}$ oz. in Australasia. On the 1st January, 1901, New Zealand adopted a universal penny postage, and the loss attendant thereon for the year may be set down at about £34,000. By arrangement with the Commonwealth, New Zealand letters come to Australia for 1d., but letters to New Zealand are charged 2d. When this matter was settled it was further arranged that New Zealand should reduce its terminal rate on cable messages exchanged with Australia from 1d. to $\frac{1}{2}$ d. per word; but, on the other hand, the Commonwealth made a liberal concession by reducing its terminal rate from 1d. per word per state to a uniform 1d. for the whole of Australia.

The diverse rates imposed on the carriage of newspapers in the various states of the Commonwealth, prior to the union, continued after the control became vested in the Federal Government, and up to the 1st November, 1902, when a uniform rate was imposed under the Post and Telegraph Rates Act, 1902. On all newspapers posted for delivery within the Commonwealth by registered newspaper proprietors, or by newsvendors, or returned by an agent or newsvendor to the publishing office, without condition as to the number contained in each addressed wrapper, a charge of 1d. per 20 oz. on the aggregate weight is imposed, and on all other newspapers posted within the Commonwealth for delivery therein, $\frac{1}{2}$ d. per 10 oz. or fraction thereof for each newspaper is levied. In New Zealand a charge of $\frac{1}{4}$ d. each is levied upon all newspapers, town and inland. The intercolonial postage is 1d. each to all the states except Queensland, to which province the charge is 1d. each if not exceeding 4 oz., and $\frac{1}{2}$ d. additional for every succeeding 2 oz.

REGISTERED LETTERS.

The number of registered letters and packets passing through the post-offices of the Australasian states has largely increased of late years. In New South Wales the number of such letters in 1901 was 1,213,277. This number has been exceeded in previous years, for instance in 1892, when the number was 1,075,241, but this total was largely made up of correspondence relating to so-called

“consultations,” or lottery sweeps connected with horse-racing, which were established in Sydney, and to support which large sums of money were sent to that city from all parts of Australasia, as well as from other countries. Probably not less than 600,000 of the total for New South Wales in 1892 were associated with these lotteries. The Government of that state dealt with the evil in an amending Postal Bill in 1893, and this illicit branch of the postal traffic was removed to Queensland, where the number of registered letters at once greatly increased, and numbered 541,148 in 1895. But in 1896 the Parliament of Queensland passed an Act making these lotteries illegal, and the evil was transferred to Hobart, the registrations in the northern state in 1901 numbered 581,752. In South Australia 254,138 registered letters were dealt with during the year. In Western Australia 431,417 registered letters and packets were passed through the head office; while in New Zealand the registered articles dealt with numbered 599,308. For Victoria and Tasmania no particulars of registrations are available.

PARCELS POSTS.

Excepting Western Australia, where there was no inland service, there were inland, intercolonial, and international parcels posts in operation in 1901; but statistics of the services on a uniform basis are not obtainable. During the year 736,496 parcels, weighing 2,716,917 lb., and having a value of £622,496, passed through the post-office of New South Wales, the postage collected amounting to £48,099; in Victoria 310,734 parcels, yielding a revenue of £15,770, were dealt with; in Queensland the number of parcels which passed through the post-office was 296,264, weighing 1,028,511 lb., and the revenue derived from the service amounted to £16,822; in South Australia 45,063 parcels weighing 117,765 lb. were forwarded and the revenue received was £2,938; in Western Australia 33,647 parcels, the declared value of which was £62,147, and which yielded a revenue of £999, were dealt with; in Tasmania 18,535 inland and 2,825 ship parcels were posted during the year, while 21,865 packets and parcels, valued at £30,104, were received from the United Kingdom and the other states; and in New Zealand the parcels dealt with numbered 273,442, weighing 928,237 lb., of which 39,951, weighing 142,141 lb., and valued at £109,683, were received from places outside the state; and 11,588, weighing 29,762 lb., and valued at £16,154, were despatched from the colony.

MONEY ORDERS AND POSTAL NOTES.

In all the states there are money order and postal note systems in operation; and in all the states, except Victoria, Queensland, and South Australia, post-office savings banks. In Queensland there is a Government Savings Bank, but it is not placed under the administration of the Postmaster-General. The Victorian Post Office Savings

Bank was amalgamated with the Commissioners' Savings Bank in September, 1897. Particulars of the working of these services will be found in the chapter dealing with Private Finance.

POSTAL FACILITIES.

The following table shows the number of inhabitants and the area in square miles to each post-office for the year 1901. It will be seen that the most sparsely populated states have the greatest number of post-offices in comparison with their population, but in order to judge of the relative extension of postal facilities the area of country to each office must also be taken into account :—

State.	Number of Inhabitants to each Post Office.	Number of Square Miles of Territory to each Office.
New South Wales	625	141
Victoria	738	54
Queensland	414	542
South Australia	512	1,267
Western Australia	1,042	5,219
Tasmania	463	70
Commonwealth	603	468
New Zealand	453	60
•Australasia	571	380

OCEAN MAIL SERVICES.

The Federal Ocean Mail Service, which is carried on by the Orient and Peninsular and Oriental Steam Navigation Companies, is subsidised by the United Kingdom and all the Australian states. New contracts were entered into on the 1st February, 1898, for a period of seven years. The total amount of the subsidy is £170,000, of which £98,000 is payable by the Imperial authorities and £72,000 by the states in proportion to their population. The sea transit rates collected from other countries and colonies making use of the service are credited to the Imperial and Colonial Governments in proportion to the amount of their contribution towards the subsidy. The following table shows the amount of the subsidy payable by each of the states during 1901, on the basis of the population at the end of the preceding year. In addition to the subsidy, there are other charges in connection with the service, such as transit rates in France and Italy and in Australia. After adding these, and deducting the postages collected in the states, and the proportion of sea transit rates payable by other countries using the service, the net cost charged to New South Wales in 1901 was £1,871, and to Victoria £425, as shown in the table on the next page. For the other states, the net cost of the service is not obtainable.

New Zealand, although not a contracting party, yet avails itself of the Federal Service for the carriage of mail matter, and its net loss during the year amounted to £2,674 :—

	Subsidy, 1901.	Net Cost, 1901.
United Kingdom	£98,000	90,900
Australasia—		
New South Wales.....	£25,889	£1,871
Victoria	22,836	425
Queensland.....	9,559	.....
South Australia.....	6,924	.....
Western Australia	3,488	.....
Tasmania	3,304	.....
	£72,000	.....
Total	£170,000	.....

The mail service has been performed with great regularity and expedition. The average time occupied by the outward and homeward services in 1901 was as follows :—

	Orient.	P. and O.
London to Sydney	33 $\frac{1}{2}$ days.	32 $\frac{2}{3}$ days.
Sydney to London	32 $\frac{1}{4}$ „	32 $\frac{1}{2}$ „

On several occasions the mails from London have been delivered in Sydney in 31 days.

In addition to the Federal Ocean Mail Service *via* Suez, New South Wales and New Zealand until November, 1890, subsidised the Union Steamship Company, in conjunction with the Pacific Steamship Company, for a four-weekly service, *via* San Francisco, to the amount of £37,000, of which New South Wales paid £25,750, and New Zealand £11,250. Under the new contract which was entered into, the amount of the subsidy was largely reduced, the contribution being based on the weight of mail matter carried, and New South Wales made an annual payment of £4,000 to the New Zealand Government, subject to appropriation by Parliament. Various extensions of the contract have been made, and at present the New Zealand Government is working under a temporary agreement with the J. D. Spreckels Company (the Oceanic Steamship Company of San Francisco). Until the whole question of ocean mail services, as affecting the Commonwealth and New Zealand, which was a subject for discussion at the Premier's Conference in London recently, has been dealt with, no contract for a definite period will be entered upon. During the year 1901 the net cost of the service to New Zealand was £17,094; to New South Wales, nil; and to Victoria, £256 in 1900. The average time occupied in carrying the mails by the San Francisco route during the same year was as follows :—

London to Sydney.....	35 $\frac{1}{2}$ days.
Sydney to London.....	35 $\frac{1}{4}$ „

During 1893 a calendar monthly service between Sydney and Vancouver was established by the Canadian-Australian Royal Mail Line,

the state of New South Wales granting an annual subsidy of £10,000, and the Canadian Dominion one of £25,000. This action was taken more in the interests of trade between the great British colonies in Australasia and America than in those of the postal service. The Government of New Zealand guaranteed a minimum payment of £7,500 annually to this line in consideration of Wellington being made a port of call. But on the expiry of this contract on the 31st March, 1899, a fresh agreement, to hold for four years, was made by the Shipping Company with the Governments of New South Wales and Queensland by which Brisbane was substituted for Wellington as a port of call, on condition that Queensland paid a subsidy of £7,500. New Zealand, therefore, does not now subscribe to the Vancouver service. During 1901 the net cost of the Vancouver service to New South Wales was £8,330; and to Victoria £404. The average time occupied by the mails in transit from Sydney to London was $37\frac{2}{3}$ days.

The Queensland line of steamers, sailing from Brisbane, *via* Torres Straits, carries mails for the Queensland Government, payment being made according to weight. This route is from four to ten days longer than those previously mentioned. Queensland, under a former contract, paid the company an annual subsidy of £55,000. This arrangement ceased in January, 1890, and under a new contract the state agreed to pay the company an annual subsidy of £19,800 for a four-weekly, or £32,500 for a fortnightly service. The latter service was commenced on 1st July, 1890, the monthly service having lasted nearly six months; but in November, 1891, the contractors, on account of the heavy losses under the fortnightly system, were allowed to revert to the four-weekly service, the subsidy being reduced to the smaller amount mentioned above, *viz.*, £19,800. When the contract expired, an agreement was arrived at for the institution of a subsidised service for purely commercial purposes. This arrangement lasted but a short time, when the subsidy was abandoned by the shipping company, who preferred to run their steamers without restriction. Payment is now only made in accordance with the weight of the mails carried. The amount of mail matter despatched from the other states by the Torres Straits route is very small.

Besides those mentioned, the other steamship companies trading with the Australasian states carry mails, notably the Messageries Maritimes Company and the North German Lloyd's, sailing from Sydney; and the Shaw, Saville, and Albion Company, and the New Zealand Shipping Company, sailing from Lyttelton, *via* Magellan Straits. The companies are paid by the states in proportion to the weight of mail matter carried, but the Messageries Maritimes Company and the North German Lloyd's are in receipt of large subsidies from the French and German Governments respectively.

The postage to the United Kingdom was reduced in January, 1891, from 6d. per $\frac{1}{2}$ ounce *via* Italy, and 4d. *via* the long sea route, to the uniform rate of $2\frac{1}{2}$ d. In 1891 the states were represented at the

Congress of the Universal Postal Union held in Vienna, and on the 4th July a convention was signed on their behalf, by which they joined the Union from the 1st October of that year. From that date the rate of postage to all British colonies and possessions and foreign countries included in the Union was reduced to 2½d.

A common scale of postage on newspapers to the United Kingdom and foreign countries has been adopted by the Australasian states, the rate being 1d. for the first 4 ounces, and ½d. for every additional 2 ounces.

TELEGRAPHS.

The electric telegraph was introduced into these states almost at the time of the earliest railway construction. The first telegraph messages were sent in New South Wales in 1851. In Victoria the telegraph line from Melbourne to Williamstown was opened in 1854. The first line in South Australia, from Adelaide to Port Adelaide, was opened in 1856; and the first Tasmanian line was completed in 1857. In New Zealand the first telegraph office was opened in 1862; and the line from Brisbane to Rockhampton, the first in Queensland, was opened in 1864. Telegraphic communication was established between Sydney, Melbourne, and Adelaide in 1858. The first telegraph in Western Australia was opened in 1869, and communication between that state and all the others of the group was completed in 1877.

All the states show very rapid progress in regard to telegraphic matters during the period from 1871 to 1881. In the case of Queensland this increase was largely a result of the construction of the line to the Gulf of Carpentaria; and in the case of South Australia, to the construction of the lines to Port Darwin and to Eucla, on the boundary of Western Australia. The following table shows the length of telegraphic lines in each state at the last five census periods, so far as the returns are available:—

State.	1861.	1871.	1881.	1891.	1901.
New South Wales ...	1,616	*4,674	8,515	11,697	14,272
Victoria .....	.....	*2,295	3,350	6,840	6,467
Queensland	169	2,525	6,280	9,996	10,246
South Australia	597	1,183	4,946	5,640	5,763
Western Australia ...	.....	*550	1,585	2,921	6,173
Tasmania .....	.....	*291	928	2,082	2,187
Commonwealth...	.....	11,518	25,604	39,176	45,108
New Zealand.....	.....	2,015	3,824	5,349	7,469
Australasia .....	.....	13,533	29,428	44,525	52,577

* In 1873.

The next table gives similar particulars, but the figures represent miles of wire instead of miles of line :—

State.	1861.	1871.	1881.	1891.	1901.
New South Wales.....	1,981	5,579	14,278	24,780	46,133
Victoria .....	.....	3,472	6,626	13,989	13,480
Queensland	169	2,614	8,585	17,646	20,537
South Australia	915	1,718	7,228	†12,707	17,853
Western Australia .....	.....	*750	1,593	3,546	9,104
Tasmania .....	.....	241	1,157	3,178	3,565
Commonwealth .....	.....	14,374	39,467	75,846	110,672
New Zealand.....	.....	3,287	9,653	13,235	21,705
Australasia .....	.....	17,661	49,120	89,081	132,377

* In 1873. † Including telephone wires.

The number of telegrams passing along the wires of each state and the revenue received by the Telegraph Departments during the year 1901 were as appended. In the total for Australasia a correction has been made for inter-state telegrams recorded in both the despatching and the receiving state :—

State.	Number of Telegrams.	Revenue received.
		£
New South Wales	3,449,315	191,664
Victoria	2,429,590	120,385
Queensland	1,374,727	83,939
South Australia	1,224,109	106,853
Western Australia	1,225,599	82,533
Tasmania	363,414	17,064
Commonwealth	10,066,754	602,438
Do (Inter-State excess excluded).	8,707,353	.....
New Zealand	4,296,820	151,934
Australasia	14,363,574	754,372
Do (Intercolonial excess excluded).	12,939,753	.....

In the whole of Australasia there were on 31st December, 1901, 4,118 telegraph stations, of which 978 were in New South Wales, 843

in Victoria, 481 in Queensland, 286 in South Australia, 167 in Western Australia, 325 in Tasmania, and 1,038 in New Zealand.

In no country in the world has the development of telegraphic communication been so rapid as in Australasia, and in none has it been taken advantage of by the public to anything like the same extent. Taking Australasia as a whole, there are only four countries that possess a greater extent of telegraph lines, and only seven in which a larger number of messages is actually sent. In no other countries, however, except the United Kingdom, Belgium, and Cape Colony, does the number of messages bear anything approaching the same ratio to the population. The following table illustrates these remarks:—

Country.	Length of Telegraph Lines.	Messages.	Messages per head of popu- lation.
	miles.	No.	No.
United Kingdom	46,295	89,576,961	2·15
France	90,170	48,144,151	1·25
Belgium	3,975	14,411,487	2·15
Netherlands*	3,831	5,393,872	1·04
Germany	84,016	46,008,795	0·82
Denmark	3,762	2,153,552	0·88
Sweden	9,049	2,643,742	0·51
Norway	9,040	2,267,915	1·01
Austria-Hungary	38,662	29,427,615	0·65
Switzerland	5,698	3,950,162	1·19
Italy	26,427	9,060,484	0·28
Spain	19,885	5,055,104	0·28
Portugal	5,180	3,420,453	0·63
Russia	98,570	18,376,969	0·17
Roumania	4,344	2,224,539	0·38
United States†	193,589	65,657,049	0·86
Canada	34,623	5,036,814	0·94
Cape Colony	7,467	3,562,039	2·33
Argentine Republic	27,584	5,296,184	1·10
Commonwealth of Australia	45,108	8,707,353	2·3
Australasia	52,577	12,939,753	2·8

* Government lines only. † Western Union Company only.

From the above table it appears that in Australasia during the year over two and a half messages were sent over the telegraph for each inhabitant. In the United Kingdom the number was two and three-twentieths for each inhabitant; and in the United States of America about one message to every inhabitant. The return for the United States, however, includes only the lines of the Western Union Company, which owns the principal part of the telegraph system of that country. The other countries shown in the table sent messages ranging from two and a third per inhabitant in the case of Cape Colony, to one-sixth per inhabitant in the case of Russia.

TELEGRAPH RATES.

The rates for the transmission of telegrams within the Commonwealth were determined by the Post and Telegraph Rates Acts, 1902, and came into force on the 1st November, 1902. For ordinary telegrams, not exceeding sixteen words, including the address and signature, the charges are 6d. in town and suburban districts within prescribed limits or within 15 miles from the sending station, 9d. to other places within the state, and 1s. for inter-state, that is, from any one state to any other, are levied, and for each additional word, an extra charge of 1d. in each case is made. On telegrams from and to Tasmania, the cable charges are added to those already specified, and double rates are imposed for the transmission of telegrams on Sunday, Christmas Day, and Good Friday, and for "urgent" telegrams. In New Zealand a charge of 6d. for the first twelve words, including address and signature, and 1d. for each additional word on all inland telegrams is made. Urgent messages are transmitted upon payment of double the ordinary rates.

CABLE SERVICES.

Australasia is in telegraphic communication with Europe and the rest of the world by means of five cables three of which are connected with the various Asiatic continental lines, one by America, and one by Durban and along the West Coast of Africa. The first of the three cables by Asia, which were all laid by the Eastern Extension Telegraph Company, Limited, was opened in October, 1872, joining Port Darwin to Banjoewangie, in Java, whence communication is provided with Europe by way of Batavia, Singapore, Madras, and Bombay. In 1879 a duplicate cable was laid down, the states of New South Wales, Victoria, South Australia, Western Australia, and Tasmania agreeing to pay the company a subsidy of £32,400 per annum for a period of 20 years, the amount to be apportioned between the states on the basis of population. At Port Darwin the cables connect with an overland wire, which extends to Adelaide, a distance of 1,971 miles, and to construct which cost the South Australian Government about half a million sterling. The total length of line between Adelaide and London is 12,576 miles, of which 9,146 miles are submarine cable, and 3,424 miles overland wire. The third cable was laid in 1888 from Broome, in Roebuck Bay, Western Australia, to Banjoewangie. The length of line by this route from Perth to London is 12,296 miles, 10,811 being cable and 1,485 land wire. The eastern states are connected with Broome by a line running from Adelaide, *via* Port Augusta, Eucla, and Albany, to Perth.

The cable joining Tasmania to the continent of Australia was laid in 1869, the length being about 170 miles. It starts from the township of Flinders, near Cape Schanck, in Victoria, and terminates at Low Head, at the mouth of the Tamar, in Tasmania. This line is subsidised to the extent of £4,200 yearly by the states of New South Wales, Victoria,

South Australia, Western Australia, and Tasmania, the contributions being based on the population figures.

New Zealand was joined to the continent by a cable laid in 1876, the length being about 1,191 miles. The line has its Australian terminus within sight of the spot where Captain Cook landed on the shores of Botany Bay, and within a stone's throw of the monument of La Perouse. The New Zealand terminus of the cable is at Wakapuaka, near Nelson, on the Middle or South Island, whence another cable, 109 miles in length, is laid to Wanganui, in the North Island, with an alternate line from White's Bay across Cook Strait to Wellington. For the first ten years after its opening, the New Zealand cable was subsidised by the Governments of New South Wales and New Zealand, their annual contributions being £2,500 and £7,500 respectively. Under agreement, dating from the 1st January, 1893, the Company which laid the cable was guaranteed £26,258 per annum in return for the reduction of the cable rates from 8s. 6d. for the first ten words and 10d. for every additional word to 2s. and 3d. respectively, the Company to bear one-fourth of any loss. On the 1st May, 1885, an amended agreement came into operation under which the guarantee was reduced to £20,000, and the Company ceased to share in any loss. This agreement expired on the 30th April, 1900, and the Company in proposing a renewal claimed that the guarantee should be increased to £26,000. This was absolutely declined by New Zealand, and the Company then determined on a uniform word rate of 3d., and abolished the minimum charge of 2s. for the first ten words. This was agreed to pending the laying of the Pacific Cable.

As a direct result of the completion of the Pacific cable of which the sections, Queensland-Norfolk Island and Norfolk Island-New Zealand, were opened for business on the 23rd April, 1902, the charges for New Zealand-Australian telegrams, except to and from Tasmania, were reduced to one uniform rate of 4½d. per word, and to Tasmania to 5½d.; the additional 1d. to Tasmania is to cover the transmission over the Australia-Tasmania cable. In addition to the reduction of the rates for telegrams to and from Australia, the opening of the Pacific cable has benefited senders of cable telegrams to places beyond Australia, by bringing about a general reduction of the rates in New Zealand to the more favourable rates obtaining in New South Wales and some of the other Commonwealth states. The rates on ordinary telegrams from New Zealand to Europe were reduced from 1st June, 1902, from 5s. 2d. to 3s. 4d. per word.

A cable connecting New Caledonia with Queensland at Bundaberg was opened in October, 1893. It was constructed by a French company, and is guaranteed by the French Government to the extent of £8,000, and by the states of New South Wales and Queensland to the amount of £2,000 each annually for a period of thirty years, in return for which the Governments of these states are entitled to use the cable for the transmission of official messages up to the amount of the guarantee.

During the year 1890 the states opened negotiations with the Eastern Extension Telegraph Company for a reduction in the cable rates to Europe, which at that time were 9s. 4d. per word for ordinary messages and 2s. 8d. per word for press messages sent from New South Wales; and at a conference of the postal and telegraphic authorities a proposal to reduce the tariff to 4s. per word for ordinary messages and 1s. 10d. per word for press messages was agreed to, the states contributing to the subsidy undertaking to make good half the loss which the company would sustain by this reduction in the schedule of charges, and New South Wales, Victoria, Western Australia, Tasmania, and New Zealand at the same time agreeing to pay to South Australia a proportion of the loss to the revenue of that state which the lower charges would cause in the working of the overland wires. The amended tariff came into force in May, 1891, and the amount to be guaranteed to the company for the portion of the year during which the contract was in existence was £158,491. The sum earned by the company for the same period was £120,141, so that the deficiency on the eight months' business was £38,350, one-half of which was made good by the contributing states according to population. But this sum, combined with the amount of the subsidy, was more than the states were prepared to bear, and on the 1st January, 1893, the rates were fixed at 4s. 11d. per word from Sydney to London for ordinary messages, and 1s. 10d. for press messages. Even at these charges there was a loss to be borne, the total amount payable to the cable company being £21,778 in 1893 (as compared with £27,520 in 1892), and £6,191 in 1894; and to the South Australian Government £7,675 in 1893 (as compared with £10,415 in 1892), £822 in 1894, and £1,125 in 1895. Since the years mentioned the amounts guaranteed—£227,000 to the cable company, and £37,552 to the South Australian Government—have been met by the revenue, and the states have therefore not been called upon to contribute. Queensland later joined the other states in the guarantee.

The agreement between the Australian Governments and the Company expired on the 30th April, 1900. In July, 1899, the Company offered to lay a cable to Australia, *via* the Cape of Good Hope, to reduce the tariff per word from 4s. 11d. to 4s. at once, and later to 2s. 6d. under a sliding scale, if the states would agree to certain conditions. South Australia, Western Australia, and Tasmania accepted the terms offered and now enjoy the reduced rates. The other states refused, but notified the Company that they also would accept if certain alterations were made in the agreement, these alterations being intended to safeguard the Pacific cable, to which these states were definitely committed. On the 16th January, 1901, New South Wales entered into the agreement.

The following table shows the amount paid by each state towards cable subsidies and guarantees during the year 1901. From the 1st

May, 1901, the whole of the subsidy in connection with the Tasmanian cable has been paid by Tasmania.

State.	Victoria-Tasmania Subsidy.	Queensland-New Caledonia Guarantee.	Total.
	£ s. d.	£ s. d.	£ s. d.
New South Wales	497 19 3	2,000 0 0	2,497 19 3
Victoria	501 11 1	.....	501 11 1
Queensland	173 3 2	2,000 0 0	2,173 3 2
South Australia	140 18 6	.....	140 18 6
Western Australia	21 17 11	.....	21 17 11
Tasmania	2,864 10 1	.....	2,864 10 1
Total	4,200 0 0	4,000 0 0	8,200 0 0

The desirability of constructing a Pacific cable, which shall touch only British territory on its way from Australia to America, was acknowledged by the Governments of most of the Australasian colonies as well as by those of the United Kingdom and Canada, and an informal Conference was held in London in July, 1898, of representatives of Great Britain, Canada, New South Wales, Victoria, Queensland, South Australia, and New Zealand, when it was suggested that Great Britain should pay one-third of the cost of laying such a cable, Canada two-ninths, and the Australian colonies the remaining four-ninths. This proposal was eventually adopted, and in July, 1899, a meeting was held in London by the representatives of the countries interested, and it was agreed that the cable should be laid and that the capital necessary to construct and manage it should be raised and controlled by a Board designated the Pacific Cable Board, comprising Sir Spencer Walpole, as president, representing the United Kingdom; Lord Strathcona, Canada; and the Australian Agents-General their respective states. A contract was entered into with the Telegraph Construction and Maintenance Company of Greenwich, and the Australian shore end of the cable was laid at Southport, Queensland, on the 13th March, 1902, and the cable was completed to Vancouver, and opened for traffic on the 3rd November, 1902. The cable comprises four sections, with a branch to New Zealand from Norfolk Island, the length of the sections being: Brisbane to Norfolk Island, 834 nautical miles; Norfolk Island to Fiji, 961 miles; Fiji to Fanning Island, 2,093 miles; and Fanning Island to Vancouver, 3,240 miles, the branch from Norfolk Island to New Zealand measuring 537 miles.

The direct Cape cable, from Durban to Fremantle, which provides an alternative all-British route to that of the Pacific, was completed on the 19th October, 1901.

TELEPHONES.

In connection with the telegraph departments of the various states, telephone exchanges have been established in the capitals and other important centres of population. In order to popularise the use of the instrument, the charges in some of the states have within the last few years been reduced, and the result is seen in a satisfactory extension of this means of communication. Information regarding telephones in the different states during 1901, as far as can be ascertained, will be found in the following table:—

State.	Exchanges.	Telephones.	Length of Telephone Wires.	Revenue.
	No.	No.	miles.	£
New South Wales	48	13,778	.....*	81,852
Victoria	20	6,049	17,354	62,019
Queensland.....	15	2,978	4,359	20,938
South Australia..	10	1,641	3,935	20,617
Western Australia	12	2,764	4,503	26,950
Tasmania.....	13	1,437	1,238	6,339
Commonwealth	118	28,647	.....	218,715
New Zealand	58	9,260	7,767	55,542
Australasia	176	37,907	.....	274,257

* Not ascertained.

In the Australasian states the rates for telephones at places of business range from £5 to £10 for the minimum length of wire—generally one mile, the colonies with a half-mile radius being New Zealand and Queensland—and the charge is higher in the city than in the country. In New South Wales and Victoria the city and suburban rates are £9 per annum, and the country rates £8 in the former State, and £7 in the latter. In South Australia the city rate is higher, being £10; but in the suburbs and country the rates range from £6 to £8. Queensland, for a radius of half-a-mile, has a uniform rate of £6, which is also the charge made in Tasmania, for a one mile radius, in Hobart,

Launceston, and Zeehan, while for the suburbs and country districts the rate is a matter of arrangement. In New Zealand a distinction is drawn between exchanges continuously open and those not continuously open, the charges being respectively £7 and £5; while in Western Australia, in the towns of Perth, Fremantle, and Guildford, the rate is £7, and £10 where the exchange has less than 100 subscribers. The charges for telephones at private residences is, of course, less than for places of business. In New South Wales, Victoria, and New Zealand, the rate is uniformly £5; and in Queensland, £6. In South Australia the charge is £6 for the city, and from £6 to £8 in the suburbs and country; in Tasmania, it is £4 10s. in Hobart, Launceston, and Zeehan, and a matter of arrangement in the suburbs and country; while in Western Australia, at Perth, Fremantle, and Guildford, the charge is £5, and £6 where the exchange has less than 100 subscribers.

POSTAL AND TELEGRAPHIC FINANCES.

The following table shows the revenue and expenditure of the Postal and Telegraph Departments of the States during 1901 :—

State.	Revenue.				Expenditure.
	Posts.	Telegraphs.	Telephones.	Total.	
	£	£	£	£	£
New South Wales	596,552	191,664	81,852	870,068	790,783
Victoria	437,894	120,385	62,019	620,298	517,609
Queensland	203,128	83,939	20,938	308,005	389,332
South Australia	148,336	106,853	20,617	275,806	240,846
Western Australia.....	109,335	82,533	26,950	218,818	251,289
Tasmania	72,009	17,064	6,339	95,412	97,470
Commonwealth	1,567,254	602,438	218,715	2,388,407	2,287,329
New Zealand	281,097	151,934	55,542	488,573	465,756
Australasia	1,848,351	754,372	274,257	2,876,980	2,753,085

In the expenditure shown in the table, interest on the outlay on post-office buildings and telegraph lines and maintenance of buildings is not taken into account. If allowance be made for these, so far as is possible from the very imperfect returns concerning the expenditure on post-offices

in each State, the total expenditure and the deficiency in revenue would be as follow :—

State.	Departmental Expenditure.	Interest and Maintenance of Works and Buildings.	Total charge.	Deficiency in Revenue.
	£	£	£	£
New South Wales.....	790,783	117,864	908,647	38,579
Victoria	517,609	94,873	612,482	*7,816
Queensland.....	389,332	65,091	454,423	146,418
South Australia.....	240,846	59,398	300,244	24,438
Western Australia	251,289	26,429	277,718	58,900
Tasmania.....	97,470	8,892	106,362	10,950
Commonwealth	2,287,329	372,547	2,659,876	271,469
New Zealand	465,756	72,942	538,698	50,125
Australasia	2,753,085	445,489	3,198,574	321,594

* Excess of Revenue.

With the progress of settlement and the increase of population, the expenditure on the postal and telegraphic services naturally expands year by year, and it is apparent that in order to keep pace with the growing needs of the community the department must be administered on ordinary business principles. Hitherto the application of such principles has not been obvious, and perhaps it has not been possible, but now that the affairs of the six states are centred under one control, much of past extravagant expenditure will be avoided, and there is every prospect of the service becoming self-supporting—that is, returning a revenue sufficient not only to meet current expenditure, but provide a surplus to cover maintenance of works and buildings, together with interest on capital cost.

MINERAL RESOURCES.

ALMOST all the principal metals of economic value are found in Australasia, and many are common to several of the States. In dealing with the occurrence and value of mineral deposits, a classification has been made into noble and other metals, carbon minerals, salts, stones and clays, and diamonds and other gem stones.

GOLD.

Gold, the most valuable of noble metals, is found throughout Australasia, and the important position at present occupied by these States is largely due to discoveries of this metal, the development of other industries being, in a country of varied resources, a natural sequence to the acquisition of mineral treasure. Settlement in Australia was still young when many-tongued rumour spoke of the existence of the precious metal, but it was not until the 16th February, 1823, that the Government was officially apprised of a discovery destined to be the precursor of a prosperity seldom surpassed in the history of nations. On the date mentioned Mr. Assistant-Surveyor M'Brien reported that at a spot on the Fish River, about 15 miles east of Bathurst, he had discovered gold. Mention is made in the early records of New South Wales of several other finds, but it remained for Count Strzelecki and the Rev. W. B. Clarke to demonstrate the existence of the precious metal in payable quantities, and to assert their belief in its abundance, an opinion strongly supported in England by several eminent authorities, and substantiated by Hargraves' discovery in the year 1851. The gold-fields of Lewis Ponds and Summer Hill Creek had hardly been opened up when, on the day that witnessed the severance of the Port Phillip district from the mother colony of New South Wales, Mr. J. M. Esmond discovered gold in Victoria. Shortly afterwards a rush set in for Ballarat, and the gold fever took possession of Australia. The following year (1852) saw gold found in South Australia and Tasmania; the rush to Canoona, in what is now Queensland, took place in 1858; and gold was discovered in New Zealand in the same year, though it was not until 1861 that a large population was, by the prospect of rapidly obtaining wealth, attracted to the last-mentioned colony. The last of the States in which extensive deposits of the precious metal were found was Western Australia, and the mines there are now the richest in Australasia, and have proved an enormous source of wealth to the State.

From the date of its first discovery, gold to the value of nearly 460 million pounds sterling has been obtained in Australasia. Towards this total Victoria has contributed no less than 260 millions, and for many

years that State was the largest gold producer of Australasia. In the year 1897, however, for the first time, the production was surpassed by that of Western Australia, and the latter State has increased its advantage each year until in 1901 the output was valued at £7,235,653, as against £3,102,753 in Victoria. The yield of gold in Victoria has been well maintained for many years, and each successive year from 1893 to 1899 showed an increase. In 1900, however, the output fell considerably short of that in 1899, being only 807,407 oz. compared with 854,500 oz., and in 1901 there was a further reduction to 789,562 oz., valued at £3,102,753. In 1901 the Bendigo district, with 212,026 oz., supplied the largest portion of the gold yield of the State, followed by the Ballarat district with 169,433 oz., and Beechworth with 114,331 oz. The number of men engaged in gold-mining during 1901 was 27,777, of whom 12,886 were alluvial miners and 14,891 quartz miners, the total being 1,258 less than the number in 1900. The dredging operations carried on during the year were attended with fair success. The quantity of material treated was about 6,000,000 cubic yards, from which 28,717 oz. of gold were recovered. The number of men engaged was 919.

Queensland promised at one time to overtake Victoria in the annual production of gold, but so far the southern State has maintained its position, although the production of Queensland advanced steadily up to the year 1900. In 1889 the production was valued at £2,586,860, but it then diminished, and this amount was not again reached until 1898 when the value was £2,750,349. In 1899 it increased to £2,838,119, and in 1900 to £2,871,709, being the highest value yet recorded. In 1901 the gold won amounted to 835,553 oz. or 589,382 oz. fine, valued at £2,541,892, showing a decrease of £329,817 on the value of the preceding year. The decrease is not attributed to the waning productiveness of the mines, but to the exhaustion of the creek sands and the heaps of old tailings that have for some years past helped to swell the output. The scanty water supply on some of the fields, especially Mount Morgan, where partial closing of the mines was necessitated, also tended to diminish production. The attempt to recover gold by the process of dredging has so far proved a failure. During 1901 five dredges were at work, but not one was even moderately successful, the roughness of the ground and want of water being the causes of failure.

For many years the Charters Towers field has been the thief gold-producing centre, and the year 1901 was no exception, although the output was considerably less than in 1900. The production in 1901 amounted to 366,431 oz., valued at £999,545, being 88,248 oz. less than in 1900. The decrease is due to the extinction of the industry having for its object the recovery of gold which had lodged in the beds of those creeks which in times past had served as channels for the escape of residue from the mills. Charters Towers is a field of deep sinking, and a gold-bearing reef has been intersected at a depth of 1,815 feet, while operations are now in progress by which it is hoped to cut one of the largest reefs at depths of 2,500 and 3,000 feet respectively.

The yield of the Mount Morgan field in 1901 amounted to 155,888 oz., valued at £615,679, and of this quantity no less than 155,421 oz. were obtained from the celebrated Mount Morgan mine. This mine continues to yield payable ore as fast as the treatment works can deal with it, notwithstanding the fact that up to 30th June, 1901, no less than 2,333,105 oz. of gold, valued at £9,516,694, had been obtained. The output for 1901 was 39,617 oz. less than in the preceding year, but this was caused by the scanty supply of water. The machinery employed in the Mount Morgan mine on the 31st December, 1901, was valued at £517,228, while about 2,000 men were employed in the mine and works. The total number of men engaged in gold-mining in Queensland at the end of 1901 was 9,438, of whom 7,340 were quartz miners and 2,098 alluvial miners, 465 of the latter being Chinese. As in Victoria, the number of Chinese engaged in gold-mining is decreasing.

In New South Wales the greatest annual production of gold occurred in 1852, soon after the first discovery of the precious metal, when it was valued at £2,660,946. The only other year which saw a production in excess of two millions sterling was 1862, the amount reaching £2,467,780. In 1874 the yield had fallen to 271,166 oz., valued at £1,041,614, and thenceforth the industry declined considerably in importance, reaching its lowest point in 1888, when only 87,541 oz., valued at £317,241, were produced. From that date a steady improvement took place, and in 1894 the Government took the step of furnishing large numbers of the unemployed with miners' rights and free railway passes, and sending them to the abandoned alluvial fields as fossickers. This action, with the increased attention paid to quartz-mining, nearly doubled the production, the quantity obtained during the year being set down at 324,787 oz., valued at £1,156,717; while in 1895 the yield reached 360,165 oz., of a value of £1,315,929—the highest since 1873. In 1896, however, this yield was not maintained, the production amounting to 296,072 oz., valued at £1,073,360. From 1897 to 1899 the yield showed a decided improvement, and in 1899 the production was 496,196 oz., valued at £1,751,815, being, with the exception of five years, the highest total recorded. In 1900 it fell to 345,650 oz., valued at £1,194,521, while in 1901 the production declined still further, and showed a total of only 267,061 oz., valued at £921,282. The total quantity of gold won up to the end of 1901 was 13,475,633 oz., valued at £49,661,815. The yield for 1901 is the lowest since 1893, and this may be accounted for by the dry season and the reduced number of gold-seekers. Owing to the scarcity of labour in the country districts and, consequently, the higher rate of wages prevailing many prospectors were induced to abandon their claims in favour of employment less precarious and more remunerative. In the Western district most of the mines, including Cobar, the chief gold-producing centre, were hampered in their operations by the want of water, while others were compelled to close altogether during part of the year. The great hopes entertained as to the future of gold-dredging

have only been partly realised, and until more care is exercised in the selection of suitable sites, a large measure of success cannot be looked for. The quantity of gold saved by dredges during 1901 was 23,585 oz., valued at £89,628. The number of plants erected or in process of erection at the end of the year was 43, and the value £273,333. The principal seats of alluvial mining in the State are the Bathurst and Mudgee districts, and the country watered by the various feeders of the Upper Lachlan, and also the Tumut and Adelong and Braidwood districts; while the principal quartz-veins are situated near Adelong, Armidale, Bathurst, Cobar, Hill End, Orange, Parkes, and Wyalong. Of the mines recently developed, that at Mount Boppy, near Cobar, is by far the most promising. The lode is of good depth and has already been traced over 1,000 feet on its course, and the mine now ranks as one of the foremost in the State. Cobar again maintained the position occupied in the preceding year as the chief gold-producing centre, the output for 1901 being 42,299 oz. The next fields in importance were—Wyalong, 21,717 oz.; Hillgrove, 14,749 oz.; and Araluen, 12,380 oz. The estimated value of the machinery on the gold-fields, including dredging plant, at the end of 1901 was £1,080,065, and the men engaged in the industry numbered 12,064.

Until a comparatively recent date, Western Australia was considered to be destitute of mineral deposits of any value, but it is now known that a rich belt of mineral country extends from north to south. The first important discovery was made in 1882, when gold was found in the Kimberley district, but it was not until a few years later that this rich and extensive area was developed. In 1887 gold was found at Yilgarn, about 200 miles east of Perth, the find possessing importance as the precursor of the discovery of the immense tracts of gold-bearing country, the knowledge of the existence of which has drawn population from all parts of Australasia and brought the State into the prominent position which it occupies at the present time. General attention was first attracted to these fields by further discoveries at Southern Cross, to the east of Yilgarn; and the sensational finds at Coolgardie, which followed in 1892, resulted in a rush to Western Australia which was reminiscent of the experiences of the fifties in the older-settled portions of the continent. Thereafter, before the march of the prospector, the known gold-bearing area was rapidly extended, and in 1894 the country was divided into separate gold-fields, so extensive were the preparations for its exploitation. At the present time, there are nineteen gold-fields in the State, the most important, from the point of production in 1901, being East Coolgardie, Mount Margaret, and North Coolgardie, in the eastern district; and Murchison, in the central district. For the past four years Western Australia has held the premier position among the Australasian States for its gold production, and the wonderful progress of the industry in preceding years has not only been fully maintained during 1901, but has surpassed anticipations. The total production for the year amounted to 1,879,391 oz., valued at £7,235,653, as

compared with 1,580,950 oz., valued at £6,007,610 in 1900. The output was the largest yet recorded, exceeding that for 1899, which had hitherto been the highest by 235,514 oz. Steady progress has been made on all the fields, but the most substantial increases were obtained from the Murchison, East Murchison, Mount Margaret, North Coolgardie, and East Coolgardie fields, the yields ranging from 39 to 18 per cent. higher than those of the preceding year. As there were no discoveries of note made in 1901, and the Phillips River field which was proclaimed during the year has developed but slowly owing to the absence of crushing facilities, the increased output may be ascribed to the more scientific methods employed and the improved class of machinery in use. The number of men engaged in gold-mining at the end of 1901 was 19,771, of whom 16,755 were quartz miners and 3,016 alluvial miners.

New Zealand was for many years a large producer of gold, and from 1865 to 1871 the value won amounted to over £2,000,000 each year. Since then the production has declined until in 1894 it was only £887,839, but this amount has been considerably increased of late years, and in 1901 the production was 455,561 oz., valued at £1,753,783, the highest yield since 1873. The increase of late years is due to the introduction of English capital into the mines which has enabled the claims to be opened up to greater depths, and to the establishment of the gold-dredging industry, which is being carried on successfully in many parts of the colony. A great deal of attention is being paid to the auriferous deposits in river beds and in deep wet ground on the southern gold-fields, and in 1901 there were 145 dredges, valued at £528,600, working in the Otago, Nelson, and West Coast districts. As showing the profitable nature of dredging, the value of the gold obtained in this manner during the year ended 31st March, 1901, was £287,061, while the industry gave employment to 965 men. The number of men engaged in gold-mining in 1901 was 12,533.

Although payable gold was found in Tasmania in 1852, yet it was not until the seventies that the metal was mined for on an extensive scale, the total production to the end of 1870 being less than 4,000 oz. In 1878 the value of gold produced suddenly rose to £100,000, and this total has been gradually increased, until in 1899 it was valued at £327,545, being the highest yet recorded. The production in 1901 amounted to 75,831 oz., valued at £295,176, and showed a slight decrease on the values in the two preceding years. Beaconsfield is the principal gold-field in the State. It is situated on the west side of the river Tamar, 26 miles north-west of Launceston, and formerly produced a large quantity of alluvial gold, while there is also a deep lead carrying good gold. The Tasmania mine, on this field, is the largest gold-producer in the State, and up to 30th June, 1901, yielded 520,614 oz., valued at £1,907,279, out of which £745,072 has been paid in dividends. The Lefroy field has been another important centre of gold-production, and, aided by Government assistance to the amount of £2,000, an effort is

being made to cut the reef by driving at the 1,200-foot level. At Mathinna a large quantity of gold has also been obtained. The principal mine on this field is the New Golden Gate, the deepest in the State, its main shaft being 1,330 feet. This mine has yielded 174,097 oz. of gold, valued at about £643,654, and up to 30th June, 1901, had paid £300,000 in dividends. At Mangana, active prospecting has been going on for some time, and rich stone has been obtained from the Golden Entrance and Fingal Reefs mines. In the Western District a little alluvial gold is obtained, while north of the Pieman River there is a large extent of auriferous country, but owing to the dense vegetation prospecting is difficult. Attempts are being made to recover gold by the process of dredging, and three dredges were at work on 30th June, 1901, but the results were disappointing. The men engaged in gold-mining during 1901 numbered 1,112.

Of all the Australian States, South Australia has produced the smallest quantity of gold, the total output from the commencement of mining operations being valued at less than £2,400,000. The highest production was in 1893, when it reached £153,132; but it has gradually declined, and the value has not amounted to £100,000 in any of the last four years. In the state proper the yield is very small, amounting to but 4,918 oz. in 1901, the balance of 22,572 oz. being obtained from the Northern Territory, the total value amounting to £93,222. The mines in the Northern Territory are largely in the hands of Chinese, but a number of properties have been acquired by an English company, which has erected the works necessary for their development. The total number of men engaged in gold-mining in South Australia was 2,000, of whom 1,000 were in the Northern Territory, the majority of the latter being Chinese. About a fourth of these Chinese are physically incapable of doing a fair day's work, and are dangerous from a sanitary point of view. Possessed of no means whatever, and with no proper tools for the search for the precious metal, they eke out a miserable existence by mining a little alluvial gold.

The following table gives the value of gold raised in each State up to the end of 1901, and its proportion to the total amount:—

State.	Production of Gold.	
	Value.	Proportion raised in each State.
	£	per cent.
New South Wales	49,661,815	10·8
Victoria	260,489,201	56·7
Queensland	52,751,675	11·5
South Australia	2,388,197	0·5
Western Australia	30,149,712	6·5
Tasmania	4,893,588	1·1
Commonwealth	400,334,188	87·1
New Zealand	59,159,883	12·9
Australasia	459,494,071	100·0

It will be readily understood from this and the following table how Victoria, although in area the smallest of the group with the exception of Tasmania, achieved the foremost position amongst the Australasian States, and retained that place so long as the powerful attraction of gold continued, while the source of Western Australia's progress is also fully disclosed. The following table shows the value of the gold raised in the various States during each year for which records are available, but, for reasons which are explained in the next paragraph, discrepancies exist in the total values shown for several of the States:—

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.
	£	£	£	£	£	£	£	£
1851	468,336	580,548	.....	.....	.....	.....	1,048,884	.....
1852	2,660,046	10,953,936	.....	.....	.....	.....	13,614,382	.....
1853	1,781,172	12,600,084	.....	.....	.....	.....	14,381,256	.....
1854	773,209	9,568,260	.....	.....	.....	.....	10,341,469	.....
1855	654,594	11,172,260	.....	.....	.....	.....	11,826,854	.....
1856	689,174	11,942,040	.....	.....	.....	.....	12,632,114	.....
1857	674,477	11,046,268	.....	.....	.....	.....	11,720,745	40,422
1858	1,104,175	10,112,908	.....	.....	.....	.....	11,217,083	52,464
1859	1,259,127	9,122,868	.....	.....	.....	.....	10,382,725	25,427
1860	1,465,373	8,626,800	.....	730	.....	.....	10,092,173	17,685
1861	1,806,171	7,869,812	.....	.....	.....	.....	9,675,983	751,873
1862	2,467,780	6,033,124	.....	12,442	.....	.....	9,113,346	1,691,389
1863	1,796,170	6,508,420	30,000	830	.....	.....	8,335,470	2,431,723
1864	1,304,926	6,181,748	.....	.....	.....	.....	7,486,674	1,650,837
1865	1,231,243	6,172,752	.....	.....	.....	.....	7,403,995	2,220,474
1866	1,116,404	5,913,120	79,143	.....	.....	4,882	7,113,049	2,844,517
1867	1,053,578	5,732,984	170,090	.....	.....	2,536	6,959,188	2,698,862
1868	994,665	6,536,800	429,907	2,936	.....	514	7,964,822	2,504,326
1869	974,149	5,349,184	451,352	15,593	.....	7,475	6,797,753	2,362,995
1870	931,016	4,891,192	351,412	24,217	.....	14,218	6,212,055	2,157,585
1871	1,250,485	5,421,908	504,876	6,000	.....	16,055	7,199,324	2,787,520
1872	1,644,177	5,130,934	592,993	6,363	.....	15,309	7,388,920	1,731,261
1873	1,396,375	4,964,820	555,310	293	.....	18,390	6,935,188	1,987,425
1874	1,041,614	4,623,888	561,255	4,175	.....	18,491	6,249,423	1,505,331
1875	877,694	4,383,148	506,242	7,034	.....	11,982	5,876,100	1,407,770
1876	613,190	3,855,040	660,136	9,888	.....	44,923	5,183,177	1,284,328
1877	471,448	3,238,612	838,544	.....	.....	23,289	4,571,893	1,496,080
1878	430,200	3,101,088	1,085,804	1,225	.....	100,000	4,718,377	1,240,079
1879	407,219	3,035,788	1,009,946	90	.....	230,895	4,683,938	1,148,103
1880	444,253	3,316,484	934,976	.....	.....	201,297	4,897,010	1,227,252
1881	573,532	3,435,400	943,318	112,825	.....	216,901	5,287,026	1,080,790
1882	526,522	3,594,144	787,125	80,720	.....	187,337	5,175,848	1,002,720
1883	468,580	3,240,188	744,731	87,729	.....	176,442	4,707,620	993,352
1884	396,059	3,114,472	1,077,314	93,404	.....	160,404	4,841,653	921,797
1885	378,665	2,940,872	1,083,294	83,709	.....	155,309	4,661,849	948,615
1886	366,294	2,660,784	1,193,493	95,674	1,148	117,250	4,434,643	903,569
1887	394,579	2,471,004	1,490,730	138,302	18,517	158,533	4,671,665	811,100
1888	317,241	2,500,104	1,685,750	66,160	13,273	147,154	4,729,682	801,066
1889	434,784	2,469,356	2,586,860	76,780	53,872	119,703	5,736,355	808,549
1890	460,285	2,354,244	2,137,054	106,105	86,664	87,114	5,231,466	773,438
1891	559,231	2,305,600	2,017,536	125,529	115,132	149,316	5,272,894	1,007,488
1892	575,290	2,617,824	2,154,453	139,370	226,234	174,070	5,837,300	954,744
1893	651,286	2,684,504	2,159,290	153,132	421,385	145,875	6,215,472	913,138
1894	1,156,717	2,694,720	2,378,289	152,092	787,099	225,485	7,394,402	887,839
1895	1,315,929	2,960,344	2,210,837	123,792	879,748	212,329	7,708,029	1,162,164
1896	1,073,360	3,220,848	2,241,347	112,750	1,068,808	237,574	7,954,196	1,644,233
1897	1,123,164	3,251,064	2,553,141	120,044	2,564,977	289,241	9,906,331	1,980,264
1898	1,244,330	3,349,028	2,750,349	95,143	3,990,698	281,485	11,711,033	1,680,610
1899	1,751,815	3,413,000	2,338,119	79,041	6,246,733	327,545	14,691,253	1,513,173
1900	1,194,521	3,229,628	2,871,709	82,188	6,007,610	316,220	13,701,876	1,439,692
1901	921,282	3,102,733	2,541,892	93,222	7,235,653	295,176	14,180,078	1,763,783

These figures do not in all cases add up to the total value of the production given elsewhere, as the information regarding earlier years is imperfect. The total for Victoria is £297,952 less than the actual value of production, while for Queensland the amount is deficient to the extent of £3,442,948, accounted for by the fact that prior to 1878 the figures only represent the gold sent by escort. There is a deficiency of £68,611 in South Australia which cannot be traced owing to the imperfect nature of the returns available in earlier years. The figures shown for Western Australia are £427,061 less than the total value of gold produced, as prior to 1899 they only show the value of gold exported. There is also a slight deficiency of £2,869 in the total shown for Tasmania. The gross production of gold in each State during 1901 and the contents in fine gold, are given below:—

State.	Weight of Gold.		Value of Gold.	
	Gross.	Fine Gold.	Total.	Proportion raised in each State.
	oz.	oz.	£	per cent..
New South Wales	267,061	216,888	921,282	5·8
Victoria	789,562	730,453	3,102,753	19·5
Queensland	835,553	598,332	2,541,892	15·9
South Australia	27,490	21,939	93,222	0·6
Western Australia.....	1,879,391	1,703,416	7,235,653	45·4
Tasmania	75,831	69,491	295,176	1·8
Commonwealth	3,874,888	3,340,569	14,189,978	89·0
New Zealand	455,561	412,855	1,753,783	11·0
Australasia	4,330,449	3,753,424	15,943,761	100·0

The number of men engaged in mining for gold is shown in the following table, and it would appear that the average value of gold won by each miner is £188 5s. Od. per annum. It is probable that the number of gold-miners in several of the States is largely overstated, otherwise the industry must be carried on at a great loss; and this will be the more apparent when it is remembered that a fairly large quantity of gold is obtained with other metals, the men employed at the working of which are not classified as gold-miners. Most likely many of the men employ themselves in mining for only a portion of their time, and devote the rest to more remunerative pursuits. But when full allowance is made on this score, it will be evident that, in some of the States at least, the search for gold is not a profitable occupation. The small return for South Australia is due to the large number of Chinese engaged in the

industry, many of them not possessing proper appliances for working the claims.

State.	Miners Employed.	Average production of Gold.	
		Quantity.	Value.
	No.	oz.	£ s. d.
New South Wales.....	12,064	22·14	76 7 4
Victoria	27,777	28·43	111 14 0
Queensland	9,438	88·53	269 6 6
South Australia.....	2,000	13·75	46 12 3
Western Australia	19,771	95·06	365 19 6
Tasmania.....	1,112	68·19'	265 8 11
Commonwealth	72,162	53·70	196 12 10
New Zealand	12,533	36·35	139 18 8
Australasia	84,695	51·13	188 5 0

The greatest development of quartz-reefing is found in Victoria, some of the mines being of a great depth. At the end of 1901 there were eight mines in the Bendigo district over 3,000 feet deep, and fourteen over 2,500 feet deep. In the Victoria mine a depth of 3,750 feet had been reached, and in the Lazarus Mine, 3,424 feet. On other fields there were six mines over 1,500 feet deep, the deepest of which were the South Star mine in the Ballarat district, where the shaft is down 2,520 feet, and the North Long Tunnel mine in the Walhalla district where a depth of 2,516 feet has been reached.

A notice of gold-mining would be incomplete without some reference to the remarkably large finds made at various times. Information on this point is meagre and not altogether reliable, as doubtless many nuggets were unearthed of which particulars were never published. Victoria's record is the best, and includes the following nuggets:—

	lb.	oz.	dwt.
“The Welcome Stranger,” found 9th February, 1869.....	190	0	0
“The Welcome,” found 9th June, 1858	184	9	16
Nugget found at Canadian Gully, 31st January, 1853	134	11	0

And others of the following weights:—98 lb. 1 oz. 17 dwt., 93 lb. 1 oz. 11 dwt., 84 lb. 3 oz. 15 dwt., 69 lb. 6 oz., 52 lb. 1 oz., 30 lb. 11 oz. 8 dwt., and 30 lb. 11 oz. 2 dwt.

New South Wales can boast of having produced some splendid specimens. In 1851 a mass of gold was found on the Turon, weighing 106 lb.; another, from Burrandong, near Orange, produced when melted at the Sydney Mint 98 lb 6 oz. 6 dwt. of pure gold; and a third, the "Brennan," was sold in Sydney in 1851 for £1,156. During 1880-82 several nuggets were discovered at Temora, weighing from 59 oz. to 1,393 oz.; and others, of 357 oz., 347 oz. (the "Jubilee"), 200 oz., 47 oz., and 32 oz. respectively, were found during the year 1887 in various parts of the State. Veins of gold of extraordinary richness have been worked in New South Wales. In January, 1873, at Beyers and Holterman's claim, at Hill End, 1.02 cwt. of gold was obtained from 10 tons of quartz, and a mass of ore, weighing 630 lb. and estimated to contain £2,000 worth of gold, was exhibited. The Mint returns for this mine during the year 1873 were 16,279.63 oz., valued at £63,234 12s.; obtained from 415 tons of stone. From Krolman's claim, at Hill End, gold to the value of £93,616 11s. 9d. was obtained during the same year. The foregoing figures, however, are insignificant when compared with the enormous yield of the Mount Morgan Mine, in Queensland, which has paid over £5,750,000 in dividends. This mine, which may be designated one of the wonders of the world, is a huge mound of ore, highly ferruginous, the peculiar formation, in the opinion of the Government Geologist of Queensland, being due to the action of thermal springs. To the end of May, 1901, 2,330,106 oz. of gold had been won from 1,509,424 tons of ore, yielding an average of 1 oz. 10 dwt. 21 gr. per ton of ore treated.

For the ten years ended 1901, the world's production of gold is estimated to have been as follows:—

Year.	Value.	Year.	Value.
	£		£
1892	29,260,000	1897	49,023,000
1893	31,110,000	1898	59,038,000
1894	38,035,000	1899	64,299,000
1895	41,413,000	1900	53,579,000
1896	44,077,000	1901	54,421,000

Of the production of £54,421,000 in 1901, Australasia produced 29.3 per cent.

SILVER.

Silver has been discovered in all the States, either alone or in the form of sulphides, antimonial and arsenical ores, chloride, bromide,

iodide, and chloro-bromide of silver, and argentiferous lead ores, the largest deposits of the metal being found in the last-mentioned form. The leading silver mines are in New South Wales, the returns from the other States being comparatively insignificant. Up to the year 1882 the quantity of silver raised in New South Wales was very small, but in that and the following years extensive discoveries of the metal, associated principally with lead and copper ore, were made in various parts of the State, notably at Boorook, in the New England district, and later on at Sunny Corner, near Bathurst, and at Silverton and Broken Hill on the Barrier Ranges in the Western district. The Sunny Corner Silver mines in 1886 paid handsome dividends, and produced £160,000 worth of silver, but since that period the yield has largely fallen off.

The fields of the Western district of New South Wales have proved to be of immense value. The yield of silver-lead ore in the Broken Hill and Silverton districts during 1901 was valued at £1,491,547; while the machinery employed was valued at £640,887. This is much less than the value set down some years ago, the reduction being chiefly due to the removal of machinery to Port Pirie, in South Australia, where the smelting operations of the Proprietary Company are now wholly carried on. The aggregate output of the mines in the Barrier country to the end of the year named was valued at £29,892,157. This rich silver-field, which was discovered in 1883 by Charles Rasp, a boundary rider on Mount Gipps Run, extends over 2,500 square miles of country, and has developed into one of the principal mining centres of the world. It is situated beyond the river Darling, and close to the boundary between New South Wales and South Australia. In the Barrier Range district the lodes occur in Silurian metamorphic micaceous schists, intruded by granite, porphyry, and diorite, and traversed by numerous quartz reefs, some of which are gold-bearing. The Broken Hill lode is the largest as yet discovered. It varies in width from 10 feet to 200 feet, and may be traced for several miles, the country having been taken up all along the line of the lode, and subdivided into numerous leases, held by mining companies and syndicates.

The Broken Hill Proprietary Company hold the premier position. They have at Port Pirie, in South Australia, a complete smelting plant on the latest and most approved principles. From the commencement of mining operations in 1885 to the end of May, 1902, the company treated 5,908,610 tons of silver and silver-lead ores, producing 114,346,940 oz. of silver and 533,284 tons of lead, valued in the London market at £24,440,000. Dividends and bonuses to the amount of £7,496,000 have been paid, besides the nominal value of shares from the several "Blocks." The sum spent in the erection and construction of plant, from the opening of the property, has been about £1,223,725. The mine wages and salary sheet for the twelve months represented a sum of £648,298, including £131,791 paid to contractors, and £22,705 for quarrying. The net profit for the year was £91,260.

The quantity and value of silver and silver-lead ore exported by New South Wales to the end of 1901 is shown in the following table:—

Year.	Silver.		Silver-Lead.			Total value.
	Quantity.	Value.	Quantity.		Value.	
			Ore.	Metal.		
Up to	oz.	£	tons cwt.	tons cwt.	£	£
1882	765,397	187,429	203 12	.....	5,385	192,814
1883	77,066	16,488	105 17	.....	1,625	18,113
1884	93,660	19,780	4,668 1	.....	123,174	142,954
1885	794,174	159,187	2,095 16	190 8	107,626	266,813
1886	1,015,434	197,544	4,802 2	.....	294,485	492,029
1887	177,308	32,458	12,529 3	.....	541,952	574,410
1888	375,064	66,668	11,739 7	18,102 5	1,075,737	1,142,405
1889	416,895	72,001	46,965 9	34,579 17	1,899,197	1,971,198
1890	496,552	95,410	89,719 15	41,319 18	2,667,144	2,762,554
1891	729,590	134,850	92,383 11	55,396 3	3,484,739	3,619,589
1892	350,661	56,884	87,504 15	45,850 4	2,420,952	2,477,836
1893	531,972	78,131	155,859 1	58,401 3	2,953,589	3,031,720
1894	846,822	94,150	137,813 8	42,513 2	2,195,339	2,289,489
1895	550,142	81,858	190,192 19	29,687 7	1,560,813	1,642,671
1896	202,789	26,518	267,363 1	19,573 4	1,758,933	1,785,451
1897	150,005	16,711	270,913 14	18,105 7	1,681,528	1,698,239
1898	533,059	59,278	388,460 4	10,168 13	1,644,777	1,704,055
1899	692,036	76,913	424,337 5	20,289 10	1,993,744	2,070,657
1900	774,203	90,243	420,909 11	17,928 6	2,513,874	2,604,117
1901	448,501	50,484	400,156 18	16,921 5	1,803,979	1,854,463
Total	10,021,330	1,612,985	3,008,723 9	428,966 12	30,728,592	32,341,577

This amount was approximately made up of 148,711,735 oz. of silver, valued at £23,391,985; and of 698,610 tons of lead, valued at £8,949,592. It will be seen that the production of silver in New South Wales rapidly increased until 1891, when it exceeded in value the largest annual production of gold, even in the palmiest days of the diggings. Since that year, however, there has been a decreased output consequent upon the lower grade of the ores now being worked, while the value has been still further reduced by the serious decline in the prices of silver and lead. The heavy fall in the price of silver has been severely felt of late years in mining circles, and in 1901 the strain was still further accentuated by a fall in the price of lead. Owing to the low price of silver many of the lower-grade mines at Broken Hill were only worked at a profit through the high value of lead contained in the ore, and the fall of over £6 per ton in the price of lead caused the closing of all the Barrier mines but three. The serious effects caused by the decline may be judged from a comparison of the employment afforded by the industry during the last three years. The number of miners engaged in silver and lead mines in 1899 was 7,893, and the average value of mineral

won by each miner engaged amounted to £262 6s. 10d. ; in 1900, owing to the increase in lead values, the number of men employed rose to 8,196, and the average value to £317 14s. 7d. ; while in 1901 the men engaged numbered only 6,298, and the average value of the mineral won was £294 9s. 1d.

There are two large smelting works in New South Wales situated at Cockle Creek, near Newcastle, and at Dapto. These works have proved of great service to the mining community, and the quantity of ore, the product of the State, treated during the year was 32,525 tons, the metal obtained being as follows :—

Gold	...	...	...	...	...	17,488 oz.
Silver	...	...	...	...	...	661,187 oz.
Lead	...	...	...	...	...	6,466 tons.
Copper	...	...	...	...	...	548 tons.

The number of men employed on these works during 1901 was 796.

Although indications of silver abound in all the other States, no fields of great importance have yet been discovered, the value of the yield of Australasia to the end of 1901, exclusive of that of New South Wales, being only £4,540,346.

The only other State where silver has been produced to any extent is Tasmania. The industry has been steadily developed, and the production for the last few years shows a considerable advance on that in former years. The value of the output during each of the last five years was—

	£
1897	197,225
1898	270,893
1899	377,788
1900	252,080
1901	207,228

In this State, as in New South Wales, the result of the fall in silver and lead values is seen in the diminished value of production, and in this connection it must be remembered that a decline in price not only decreases the value of the output, but checks production inasmuch as operations are restricted to dealing only with higher-grade ores. The principal silver fields are in the West Coast District, where the most important mines are the Western, Zeehan-Montana, and Mount Zeehan ; and in the North-Western District where the Mount Magnet mine is located. The largest output of silver, however, is from the Mount Lyell mine, where it is found in conjunction with copper, and the output from this and the three mines first mentioned, together with that from the Silver Queen and Onah mines, comprises nearly the whole of the production, as but little work has been done at Mount Magnet pending the completion of the tramway to connect with the Emu Bay railway.

Silver is found in various districts in Queensland, but generally associated with some other mineral, and the mines where silver predominates are but few. The chief of these is the Silver Spur mine in the Stanthorpe district, on the border of New South Wales, from which

75,055 oz. of silver, valued at £8,443, were obtained during 1901. The year 1901 saw a distinct improvement in the production of silver, and this in the face of a great decline in the prices of silver and lead. The production for the year was 571,561 oz., valued at £62,241, being the highest total recorded since 1887, when it amounted to £80,092. The great advance made in copper-mining during the year is responsible for the increased silver production, as these minerals are usually found in association. This may be seen from the fact that the Herberton district, which was the chief copper-producing centre in 1901, also contributed the greatest share of the silver produced.

In New Zealand, silver is found in various localities, principally on the Te Aroha, Thames, and Coromandel fields, but the metal is generally obtained in conjunction with gold. The production of the colony during the year 1901 was valued at £65,258.

There are no silver-mines in Victoria or Western Australia, the small amount of silver produced in those States being usually found associated with gold. During 1901 the value of the silver produced in Western Australia was only £7,609, while there was no production in Victoria. The production of silver in South Australia is very limited, the value in 1901 being only £12,067, and it would seem that the argentiferous lead-ore fields of Broken Hill and Silverton, which are almost on the border of the two States, are exclusively confined within the boundaries of New South Wales.

Up to the end of 1901 New South Wales had produced 87·7 per cent. of the total value of silver raised in Australasia; Tasmania came second with 6·5 per cent.; and of the remaining small proportion, Victoria claimed the largest share. The total production of silver in Australasia in 1901, and up to the end of that year, was as follows:—

State.	Value of Silver produced—	
	During 1901.	To end of 1901.
	£	£
New South Wales	1,854,463	32,341,577
Victoria .....	.....	856,539
Queensland	62,241	788,042
South Australia	12,067	118,630
Western Australia.....	7,609	11,453
Tasmania.....	207,228	2,384,886
Commonwealth	2,143,608	36,501,127
New Zealand	65,258	380,806
Australasia	2,208,866	36,881,933

The world's production of silver during the ten years ended 1901 is estimated to have been as follows:—

Year.	Ounces.	Year.	Ounces.
1892	152,940,000	1897	182,081,000
1893	162,162,000	1898	179,252,000
1894	178,668,000	1899	177,837,000
1895	182,220,000	1900	180,093,000
1896	176,707,000	1901	174,851,000

The output of New South Wales during 1901 therefore represented about 4·3 per cent. of the total production of silver.

COPPER.

Copper is known to exist in all the States, and has been mined for extensively in South Australia and Tasmania, and on a smaller scale in New South Wales and Queensland. The fluctuations in the market value of the metal have always been a check to the progress of the industry, and during 1901 some of the lower-grade mines were compelled to suspend operations. South Australia has produced the greatest quantity of copper, but during late years Tasmania has had by far the larger output. In Tasmania deposits were worked on a limited scale for a number of years; but the discovery of a rich belt of copper-bearing country, extending from Mount Lyell past Mount Tyndall, Mount Read, Mount Murchison, and north of the Pieman to the Rocky and Savage Rivers, has completely changed the character of the mining industry in the State, and from a small export of copper ore valued at £1,659 in 1896, the annual production has become the largest in Australasia. The following table, which shows the annual production during the last five years, will give some idea of the progress made:—

	£
1897.....	323,650
1898.....	382,640
1899.....	1,227,532
1900.....	901,660
1901.....	917,787

The chief mines belong to the Mount Lyell Mining and Railway Company which is reported to have spent over £400,000 on railway construction and developmental work at the mines before receiving any return. The company possesses reduction works at Queenstown, from

which a railway has been constructed through most difficult country to Teepookana and thence to Strahan. The output from these mines during the year ended 30th June, 1901, was 9,132 tons of copper, 619,734 oz. of silver, and 22,911 oz. of gold, and a bonus of £13,750 was paid in addition to dividends amounting to £110,000.

The discovery of copper had a marked effect upon the fortunes of South Australia at a time when the young and struggling colony was surrounded by difficulties. The first important mine, the Kapunda, was opened up in 1842. It is estimated that at one time 2,000 tons were produced annually, but the mine was closed in 1879. In 1845 the celebrated Burra Burra mine was discovered. This mine proved to be very rich, and paid £800,000 in dividends to the original owners. For a number of years, however, the mine has been suffered to remain idle, owing to the fact that the deposits originally worked were found to be depleted. For many years the average yield was from 10,000 to 13,000 tons of ore, yielding from 22 to 23 per cent. of copper. For the period of thirty years during which the mine was worked the output of ore amounted to 234,648 tons, equal to 51,622 tons of copper, valued at £4,749,224. Boring operations were conducted at the mine for the purpose of determining whether payable ore exists at greater depths than those reached by the original workings. One bore was put down to a depth of 1,004 feet, and in the the opinion of the Government Geologist, the result was highly satisfactory, as it proved the continuance downwards of the copper-bearing strata sufficiently to warrant the reopening of a portion of the mine. For the purpose of further testing the ground a second site for boring has been selected. The Wallaroo and Moonta mines, discovered in 1860 and 1861, proved to be even more valuable than the Burra Burra. The Moonta mine employed at one time upwards of 1,600 hands, and still keeps 1,138 men at work. In 1890 these mines were amalgamated, and the estimated value of the copper produced to the end of 1898 is set down at £9,218,482, out of which about £7,000,000 had been expended in wages. About 1,800 miners are now employed. The total dividends paid by these mines is stated to be upwards of £1,700,000. The production of copper in South Australia during the last few years has again increased, the output in 1899 being valued at £406,208; in 1900, £386,015; and in 1901, £500,077.

The copper-mining industry in New South Wales has been subject to great variations. The production reached its highest point in 1883, when its value was £472,982. From that year, however, there was a general decline, and in 1894 the value was only £63,617. As in the other States, however, increased attention has been paid to the industry of late years, and the production in 1900 and 1901 amounted to £425,301 and £412,292 respectively. The principal deposits of copper are found in the central part of the State, between the Macquarie, Bogan, and Darling Rivers. Deposits have also been found in the New England and Southern districts, as well as at Broken Hill, showing that

the mineral is widely distributed throughout the State. In addition to the mines already established, a new mine was opened in 1901 at Crowl Creek, about 30 miles from Nymagee; and from this mine, now known as Shuttleton, high-grade ore to the value of several thousand pounds sterling has already been obtained. Owing to the unexpected fall in the price of the metal much anxiety was felt as to the position of the copper-mining industry, and the gravity of the situation was accentuated by the fact that many of the mines are situated in the Western district, which has suffered severely through the drought. By the exercise of many economies, however, although the output was restricted, all the large mines were enabled to continue their operations; but some of the less important, and those working on low-grade ores, were compelled to suspend operations, as at the prevailing prices the ore would not realise a profit on the cost of raising and carriage to the smelting works at Cockle Creek or Dapto.

The largest proportion of the output of copper is obtained from the Cobar mining district. The value of the metal raised in this district during 1901 amounted to £246,820, of which £192,989 was received from the Cobar division, where the Great Cobar and Cobar-Chesney mines are situated. The former of these is the leading copper mine in New South Wales, and in the mines and works about 600 men are employed. The Nymagee division of the Cobar district, the locality of the Nymagee and Shuttleton mines, produced copper to the value of £42,191, and in the Mount Hope division an estimated value of £11,640 was raised. The principal mines in the latter district are the New Mount Hope and Great Central, and at each of them work is now being vigorously proceeded with. In the Burruga division of the Bathurst district one of the leading mines, the Lloyd Coppermine, is situated, and from this mine 21,508 tons of ore, valued at £64,599, were raised during 1901. The lode, which averages 5 feet in width, still maintains its richness, and there are sufficient supplies in sight to last some years. The company employs about 500 men in the mine and works, which are lighted throughout by electricity. The total number of men engaged in copper-mining during 1901 was 2,964, a decrease of 370 on the numbers of the preceding year.

Copper is found in many parts of Queensland, the principal deposits being in the Herberton, Mount Perry, and Cloncurry districts. In earlier years the State occupied a prominent position as a producer of copper, but the output in recent years was very small. The year 1901, however, saw a sudden revival in this branch of the mining industry, despite the great fall in prices, and the value of the production rose from £23,040 in 1900 to £194,227 in 1901, being the highest value recorded with the exception of 1872, when it reached £196,000. A noteworthy feature of the revival was the re-opening of the Mount Perry mine, which again promises to rank, as in former years, amongst the foremost mines in the State. The chief copper-producing centre in 1901 was the Herberton district, and it is, indeed, unfortunate

that a serious difficulty should have arisen at the Chillagoe mines which has caused a cessation of operations. Of the copper-mines in this district, and in the State as a whole, the foremost is Mount Garnet, which has produced copper and silver to the value of £163,000. The mine is well equipped with machinery, and a railway is now in course of construction. One of the chief obstacles to the successful development of copper and silver-mining has been the lack of facilities for transport, but with increased advantages in this respect, which are being afforded year by year, the output of copper and silver may be expected to increase materially.

In Western Australia, copper deposits have been worked for some years. Very rich lodes of the metal have been found in the Mount Malcolm, Northampton, Murchison, West Pilbarra, and Phillips River districts, but operations appear to be carried on systematically only in the first mentioned. The ore raised in this district is treated locally, while in the others it is exported for treatment, and, as the cost of carriage is heavy and the facilities for transport not too favourable, only high-grade ores can be profitably worked. The unfortunate fall in the price of copper has, no doubt, restricted operations, but as there seems no doubt that eminently payable copper lodes, carrying a little gold, exist in the State, it is surprising that the success of the last three years has not further stimulated the progress of the industry. The copper ore raised in the State during 1901 was 10,156 tons, valued at £75,246, of which the Mount Malcolm district contributed 7,660 tons, valued at £40,738. The quantity of ore raised during 1900 was 6,183 tons, valued at £43,673, and in 1899 the production was valued at £35,938. The number of men engaged in copper-mining in 1901 was 321, as against 218 in the preceding year.

Copper-mining has not attained any great proportions in Victoria, although deposits have been found in several parts of the State, particularly in the Beechworth district, where they have been traced over an area of some 50 square miles. The value of the total production is estimated at £206,395, but there has not been any output during the last few years.

The copper deposits of New Zealand have been worked to a small extent only, and for a number of years have been almost entirely neglected, the output in 1901 being valued at only £105.

Copper is sometimes found in the Australasian mines in a virgin state, and beautiful specimens of the pure metal have been exhibited at different times, but it occurs generally in the form of oxidised copper ores, carbonates, sulphates, phosphates, and silicates of copper. The museums of South Australia, Victoria, and New South Wales contain striking samples of azurite and malachite, magnificent blocks of which have been shown from time to time at exhibitions, not only in Australasia, but also in Europe and America. Copper sulphides and arsenides are generally found in deep sinkings. The metal has also been found associated with tin in the form of stannine.

The total value of copper produced in each State during 1901 and up to the end of that year are given below :—

State.	Value of Copper produced.	
	During 1901.	To end of year 1901.
	£	£
New South Wales	412,292	5,857,073
Victoria .....	.....	206,395
Queensland	194,227	2,249,692
South Australia ..	500,077	22,822,046
Western Australia	75,246	326,972
Tasmania	917,787	3,921,495
Commonwealth	2,099,629	35,383,673
New Zealand	105	18,088
Australasia	2,099,734	35,401,761

In June, 1872, copper realised as much as £112 per ton, whilst in December, 1886, the lowest price on record until that time was touched, and only £44 could be obtained for South Australian copper. At the end of 1887 the price had risen to £70 per ton, and in September, 1888, to £93. In March, 1889, there was a great fall in the price of the metal, and in April of that year the quotation in London was as low as £43 per ton. This was the lowest price reached until June, 1894, when it fell to £41 10s. From that date there was an upward movement, as the following quotations will show. At the close of 1896 the London price of copper stood at £52 10s. per ton; in February, 1897, £54 10s. was reached; and at the 31st December, 1898, £60 was the market value. This price was further increased during 1899, and in September of that year no less than £77 per ton was quoted. The price was well maintained during 1900, and, at the close of the year, stood at £73 per ton; but during 1901 a heavy fall occurred, and the quotations for the last week of the year were as low as £49 15s. per ton.

TIN.

Tin was known to exist in Australasia almost from the first years of colonisation, the earliest mention of the mineral appearing in a report of a discovery by Surgeon Bass on the north coast of Tasmania. In the form of cassiterite (oxide of tin) it occurs in all the states, but the richest deposits have been found in Tasmania—the Mount Bischoff being the most celebrated tin-mine in Australasia. The wealth of Queensland and the Northern Territory of South Australia in this mineral, according to the reports of Mr. Jack, a Government Geologist of the former State, and the late Rev. Tenison Woods, appears to be very great.

Tasmania has been the largest producer of tin in Australasia. As in New South Wales, a very large proportion of the metal hitherto produced has been from alluvial deposits, and the want of water has proved a great drawback to the successful development of the industry. There are, however, many promising lodes in the island, and the Waratah, Blue Tier, Ben Lomond, St. Helen's, Derby, and West Coast districts all produce large quantities of the metal. In the district first mentioned is situated the Mount Bischoff mine, worked as an open quarry, which, during the year ended 30th June, 1902, produced 1,291 tons of tin, and paid £60,000 in dividends. In the Blue Tier district, the Liberator, Australian, and Anchor mines are all working on good payable stone, and, at the latter mine, wages amounting to £10,727 were paid during the year ended 30th June, 1901. Tin ore is distributed more or less over the whole of the Ben Lomond district, which promises to develop into a very important field in the near future. On the West Coast, the Federation mine has been working successfully, while a parcel of 5 tons of ore, obtained from the North Dundas mine, has given satisfactory results. Tin-dredging has been carried on in some parts of the island; but, so far, only a moderate measure of success has been achieved. The production of tin during 1901 was valued at £216,186, the corresponding value for 1900 being £176,802.

In New South Wales lode tin occurs principally in the granite and stream tin under the basaltic country in the extreme northern portion of the State, at Tenterfield, Emmaville, Tingha, and in other districts of New England. The metal has also been discovered in the Barrier Ranges, at Poolamacca and Euriowie; near Bombala in the Monaro district; at Gundle, near Kempsey; at Jingellic, on the Upper Murray; at Dora Dora, on the Upper Murray; and in the Valley of the Lachlan; but in none of these districts has it been worked to any extent. The mineral was discovered by the Rev. W. B. Clarke so far back as the year 1853, but the opening of the tin-fields of New South Wales only took place in the year 1872. The industry soon attained considerable importance, the value of the output in 1881 amounting to £568,795. In 1889 the total production had fallen to £207,670, and in 1893 to £126,114, while in 1898 the lowest point was reached, when the value was only £45,638. Owing to a recovery in prices there was an increase in value of production in 1899 and 1900 when the totals were £90,482 and £142,724 respectively, but in 1901 there was a decline to £76,544. The fluctuations in the market price of the metal have always had a discouraging effect on the industry and the fall from £125 to £104 per ton no doubt tended to diminish the production during 1901. In addition to the fall in prices, the industry had to contend with a long-sustained drought, and as a large proportion of the tin obtained is recovered from alluvial deposits, any scarcity of water retards successful washing operations. A rich find of tin was made during 1901 at a place distant about 5 miles from Inverell, and a promising lode has been opened up. There is a large body of ore of good quality, and the prospects of the mine, known as the Leviathan,

are very encouraging. What appears to be an extension of the lode has been discovered 5 miles distant, where the Dolcoath Syndicate has opened a mine. Attempts have been made to establish the dredging industry, and the results obtained are fairly satisfactory. At Cope's Creek, the yield was up to expectations; but a larger plant, with more efficient saving appliances, was found to be necessary, and steps in this direction are now being taken. At Glen Elgin and Wylie's Creek dredges have been working with fair success. The total number of persons engaged in tin-mining during 1901 was 1,428, of whom 456 were Chinese.

In Queensland, the value of tin produced during 1873 was £606,184, and ranked next to gold, but it steadily declined, until in 1898 it was only £36,502. Since that year, however, there has been an upward movement, and in 1901 the value reached £93,723. The Herberton district was the chief producing centre, the output being valued at £61,040. The most important mines in this district are the Vulcan and Tornado, which produced 447 tons of black tin during 1901, and had the crushing plant been available this output could have been considerably increased. Of the newer mines opened, the Coolgarra is one of the most promising. The lodes are numerous, and during the short period from October to December the mill crushed 2,563 tons of stone, yielding 67 tons of tin. A new discovery of both lode and alluvial tin was made at Smith's Creek, near Mount Garnet, from which good results are expected. Although there has been a marked improvement during the past few years, it is surprising that greater efforts have not been made to take advantage of the satisfactory prices, which, despite the fall, are still remunerative. At present the mills are quite insufficient to cope with the output from the mines, and this constitutes a great drawback to the industry.

In Western Australia, tin has been found to exist in large quantities, but the ore is not very rich, and, until recent years, but little attention was directed to tin-mining owing to the superior attractions of the goldfields, the average annual production for the three years ending with 1898 being only £3,960. The increased price in 1899, however, stimulated the progress of the industry, and the output increased to £25,270, a total that has been exceeded in 1900 and 1901, when the values were £56,702 and £40,000 respectively. Of the production in 1901, which amounted to 734 tons, the Greenbushes district contributed 321 tons, valued at £18,852, and the Pilbarra field, in the Marble Bar district, 413 tons, valued at £21,148. In both districts the supply of water for treating the tin is inadequate, and consequently the resources of the fields cannot be thoroughly developed.

The yield of tin in Victoria is very small, and until lately no fields of importance had been discovered, but towards the latter end of 1890 extensive deposits were reported to exist in the Gippsland district at Omeo and Tarwin. In 1901 only 77 tons of tin, valued at £4,181, were produced.

In South Australia very little tin is produced. During 1901 the production was 83 tons of ore, valued at £5,584, of which the Northern Territory was responsible for 80 tons, valued at £5,498. There is no record of any production of tin in New Zealand.

The tin-mining industry has been subject to frequent fluctuations, especially of late years. The value of the metal in the European market was £159 per ton in 1872, £52 in 1878, £114 in 1880 and 1882, and £72 in 1884. A gradual recovery then took place, until in 1888 the price reached £121. During the ten years from 1888 to 1898 tin was subject to an almost continuous fall in price, realising in 1898 only one-half of that obtained a decade before. The metal, however, made a great advance in price during 1900, London quotations in December being £125 10s. per ton, as compared with £82 in 1898, and £63 in 1897, and although this value was not maintained during 1901, the prices current at the end of the year averaged £109 10s. per ton; and at this figure tin-mining should prove highly remunerative.

The value of the production of tin in Australasia during 1901, and up to the end of that year, was as given below :—

State.	Value of Tin produced.	
	During 1901.	To end of year 1901.
	£	£
New South Wales	76,544	6,601,806
Victoria	4,181	715,498
Queensland	93,723	4,693,866
South Australia	5,584	32,680
Western Australia	40,000	198,199
Tasmania	216,186	7,276,294
Australasia	436,218	19,518,243

The number of persons engaged in tin-mining in 1901 was as follows :—In New South Wales, 1,428; Tasmania, 1,065; Queensland, 1,148; and Western Australia, 413.

IRON.

Iron is distributed throughout Australasia, but for want of capital in developing the fields this industry has not progressed. In New South Wales extensive deposits of iron ore exist in the Mittagong, Piper's Flat, Goulburn, Queanbeyan, and Port Stephens districts.

At Carcoar and Cadia there are large deposits of rich ore, the quantities in sight being estimated by the Government Geological surveyor at 3,100,000 and 39,000,000 tons respectively. The pig iron produced from the Carcoar ore would be admirably adapted for foundry

purposes, and is suitable for use in the basic process of steel manufacture, while the ore at Cadia contains little phosphorus and could be utilised in the manufacture of steel by the cheaper acid processes. Considerable attention has been given to the question of establishing ironworks in this State, capable of supplying the requirements of Australia, and in 1901 the idea assumed a definite shape. Two schemes were advocated—one to smelt ore at Lithgow from the Carcoar and Cadia deposits, and the other to bring ore from the Blythe River, Tasmania, and smelt it in Sydney or elsewhere on the seaboard. Had the Bonus for Manufactures Bill, introduced into the Federal Parliament, been passed in the same form as submitted, there is no doubt that the first of these schemes would have been adopted and the industry established immediately by private enterprise. The amendments made in the Bill, however, provide only for a bonus to works established by a State of the Commonwealth, and in view of the importance of the question, the Federal Government has appointed a Select Committee to inquire into the whole matter.

The principal works in New South Wales for the manufacture of iron from the ore are situated at Eskbank, near Lithgow, where red siliceous ores, averaging 22 per cent., and brown hematite, yielding 50 per cent., metallic iron, have been successfully treated. Abundance of coal and limestone are found in the neighbourhood. This establishment, however, has for some time abandoned the manufacture of pig-iron, for which it was originally built. The work now carried on consists of the re-rolling of old rails, and the manufacture of iron bars, rods, and nails, and of ordinary castings. The quantity manufactured from scrap during 1901 was 10,424 tons, valued at £123,750. Large quantities of iron ore have been raised from the deposits situated in the Marulan, Picton, and Carcoar districts and despatched to the smelting-works at Dapto and Cockle Creek, where they have been used as flux, the gold contents of the ore helping to defray the extra cost of railway carriage. The total raised in 1901 was 27,803 tons, valued at £22,900. A considerable quantity of iron oxide is also raised each year and used for flux, while there is also a slight export, amounting, in 1901, to 128 tons, valued at £229.

In Tasmania a huge deposit of iron ore has long been known to exist at the Blythe River, near Burnie. During 1901 the deposit was tested by tunnelling and found to maintain its size and quality, and although arrangements for its exploitation are not yet completed, there is little doubt that in the near future it will prove an important addition to the industrial wealth of the State. Up to the present the production of iron ore has not been great, but in 1899 3,577 tons, valued at £3,474, and in 1900 5,375 tons, valued at £5,995, were exported.

In Queensland, deposits of iron ore have been found at Stanthorpe, and 430 tons, valued at £215, were raised during 1901.

Magnetite occurs in great abundance in Western Australia, together with hematite, which would be of enormous value if cheap labour were abundant. A considerable quantity of ironstone is raised in the State

and used for fluxing purposes, the production in 1901 being 20,569 tons, valued at £13,246.

Goethite, limonite, and hematite are found in New South Wales, at the junction of the Hawkesbury sandstone formation and the Wianamatta shale near Nattai, and are enhanced in value by their proximity to coal-beds. Near Lithgow extensive deposits of limonite or clay-band ore are interbedded with coal. Siderite or spathic iron (carbonate of iron) and vivianite (phosphate of iron) are found in New Zealand. The latter also occurs in New South Wales, intermingled with copper and tin ores.

The Government of South Australia has offered a bonus of £2,000 for the first 500 tons of pig-iron produced in that State.

ANTIMONY.

Antimony is widely diffused throughout Australasia, and is sometimes found associated with gold. The low price of the metal during late years has discouraged operations in this branch of the mining industry, and the output in all the States has fallen away considerably. In New South Wales, deposits of antimony occur in various places, chiefly in the Armidale, Bathurst, and Rylstone districts; and at Bowraville on the North Coast. The production, however, is confined to the Hillgrove mines, and in 1901 was valued at only £1,183, the total production to the end of the year being £194,233.

In Victoria the production up to the end of 1898 was valued at £177,174, and there has been no further production since that year, while in Queensland the production ceased in 1899, when the value raised was only £200. In New Zealand also, the production of antimony has practically ceased, although during 1901 there was an export of 3 tons, valued at £101. Good lodes of stibnite (sulphide of antimony) have been found near Roebourne, in Western Australia; but no attempt has yet been made to work them.

The following table shows the value of antimony produced in Australasia up to the end of 1901:—

State.	Value.
	£
New South Wales	194,233
Victoria.....	177,174
Queensland	35,458
Commonwealth	406,865
New Zealand	52,462
Australasia	459,327

BISMUTH.

Bismuth is known to exist in all the Australian States, but up to the present time it has been mined for in New South Wales, Queensland, South Australia, and Tasmania only. The demand for the metal is limited, and the price is carefully regulated by the Bismuth Association. The output in New South Wales during 1901 was valued at £6,665, and in Queensland £3,684, while the total production for each State up to the end of the year was £63,185 and £64,412 respectively.

MANGANESE.

Manganese probably exists in all the States, deposits having been found in New South Wales, Victoria, Queensland, South Australia, Western Australia, and New Zealand. Little, however, has been done to utilise the deposits, the demands of the local markets being extremely limited; but in the event of the extensive iron ores of New South Wales being worked on a large scale, the manganese deposits in that State will become of commercial importance. The ore generally occurs in the form of oxides, manganite, and pyrolusite, and contains a high percentage of sesquioxide of manganese. The production has never attained much importance in any of the States; the value of the output in New South Wales during 1901 was £24, making a total of £1,401 up to the end of that year, in Queensland the value during 1901 was £795 and the total value £7,991, while in New Zealand the value during 1900 was £588, and the total raised to the end of that year £60,232. In South Australia there was an export during 1901 of 132 tons, valued at £330.

PLATINUM.

Platinum and the allied compound metal iridosmine have been found in New South Wales, but so far in inconsiderable quantities, the latter occurring commonly with gold or tin in alluvial drifts. At present mining operations are confined to the deposits in the Fifield district, which, however, give evidence of depletion. A lease of 130 acres has been taken up at Macauley's Lead, about 20 miles from Woodburn, while the old claims at Little Darling Springs and Mulga Springs, in the Broken Hill district, are again to be thoroughly prospected. The value of the production during 1901 was £779, and the total to the end of that year, £13,211. Platinum and iridosmine have also been found in New Zealand.

TELLURIUM.

The noble metal tellurium has been found in New Zealand, associated with gold and silver (petzite) and with silver only (hessite). It has also been discovered in New South Wales at Bingara and other parts of the northern districts, as well as at Tarana, on the Western Line, though

at present only in such minute quantities as would not repay the cost of working; while at Captain's Flat it has been found in association with bismuth.

At many of the mines at Kalgoorlie, Western Australia, large quantities of ores of telluride of gold have been discovered in the lode formations.

LEAD.

Lead is found in each of the Australasian States, but is worked only when associated with silver. In Western Australia the metal occurs in the form of sulphides and carbonates of great richness, but the quantity of silver mixed with it is small, and the production of late years has been very limited. In 1900, 268 tons of lead ore were raised, the value being £533, while in 1901 only 9 tons, valued at £109, were obtained. In Queensland the lead raised during 1901 amounted to 561 tons, valued at £6,993, and from South Australia lead to the value of £722 was exported during the year. As will be gathered from the remarks made in a previous portion of this chapter, the association of lead with silver has proved a source of much wealth to the silver mines in New South Wales—those at Broken Hill particularly—several of these mines being only enabled to continue operations owing to the high price of the lead contained in the ore.

OTHER METALS.

Mercury, in the form of sulphides or cinnabar, is found in New South Wales, Queensland, and New Zealand. In New South Wales, in the form of cinnabar, it has been discovered on the Cudjegong River, near Rylstone, and it also occurs at Bingara, Solferino, Yulgilbar, and Cooma. In the latter place the assays of ore yielded 22 per cent. of mercury. Very large and rich deposits have been found on Noggriga Creek, near Yulgilbar, and three 40-acre blocks have been taken up. Cinnabar leases have also been applied for in the Bingara district.

Titanium, of the varieties known as octahedrite and brookite, is found in alluvial deposits in New South Wales, in conjunction with diamonds.

Wolfram (tungstate of iron and manganese) occurs in most of the States, notably in New South Wales, Tasmania, Queensland, and New Zealand. For some years there has been a small output in Queensland, and a rise in the price of the mineral so stimulated the industry that in 1899 the production reached £10,060. As the demand is limited, the increased price soon led to overproduction and a consequent fall in prices, and at present they are not sufficiently remunerative to encourage search for this mineral. The value of the production in 1901 was only £1,145. There was a little wolfram exported from South Australia during 1901, the quantity being 5 tons, valued at £175. Since 1899 Tasmania has shown a small output of wolfram, the value in 1900 amounting to £2,058. Scheelite, another variety of tungsten, is found

in Queensland and New Zealand, a little mining being carried on in the latter colony. Molybdenum, in the form of molybdenite (sulphide of molybdenum), is found in New South Wales, Victoria, and Queensland, but only in the last-mentioned State was there any production during 1901, the value being £1,609.

Zinc ores, in the several varieties of carbonates, silicates, oxide, sulphide, and sulphate of zinc, have been found in several of the Australasian States, but have attracted little attention, except in New South Wales, where the metal is usually found associated with silver, lead, and copper; and various experiments are being made for the purpose of ascertaining whether it can be profitably extracted. For some years attention has been directed by the Broken Hill Companies to the production of a high grade zinc concentrate from the sulphide ores, and a fair measure of success has attended their efforts. The Sulphide Corporation has a magnetic separating plant in operation, and is producing high-grade zinc concentrates from the old dump of middlings, while the Australian Metal Company has patented a very simple machine, which is doing excellent work. A zinc distillation plant was in course of operation at Cockle Creek at the end of the year. The profitable extraction of the zinc contents of products hitherto regarded as waste, must have an important effect on the future progress of Broken Hill. The value of zinc produced in the State and exported during 1901 was £4,057, the values in 1899 and 1900 being £49,207 and £44,187, while the total to the end of 1901 was £161,123.

Nickel, so abundant in the island of New Caledonia, has up to the present been found only in Queensland and Tasmania; but few attempts have been made to prospect systematically for this valuable mineral. In 1894 Tasmania produced 136 tons of nickel ore, valued at £544; but none has been raised since that date.

Cobalt occurs in New South Wales and Victoria, and efforts have been made in the former State to treat the ore, the metal having a high commercial value; but the market is small, and no attempt has yet been made to produce it on any large scale. The manganese ores of the Bathurst district of New South Wales often contain a small percentage of cobalt—sufficient, indeed, to warrant further attempts towards its extraction. The only deposits being worked at the present time are at Port Macquarie, where very promising ore has been opened up. During 1901, 110 tons, valued at £1,051, were exported.

Chrome iron or chrome ore has been found in New Zealand and Tasmania. In New South Wales chromium is found in the northern portion of the State in the Clarence and Tamworth districts, and also near Gundagai. It is usually associated with serpentine. Mining operations in New South Wales have been confined to the deposits at Gobarralong, near Gundagai, as it is uncertain whether those at Bowling Alley Point could be profitably worked. The export of chrome ore in 1901 was valued at £7,774, the values in 1899 and 1900 being £17,416 and £11,827 respectively, while the total value exported to the end of 1901

was £90,576. In New Zealand chrome ore to the value of £37,367 was extracted between 1858 and 1866, but there was no further production until the year 1900, when the value amounted to only £110.

Sulphur exists in large quantities in the volcanic regions of New Zealand, where it will doubtless some day become an important article of commerce. The output in 1900 was 1,692 tons, valued at £4,824. It is also said to occur in small quantities at Mount Wingen, in the Upper Hunter district of New South Wales; at Tarcutta, near Wagga Wagga; and at Louisa Creek, near Mudgee.

Arsenic, in its well-known and beautiful forms, orpiment and realgar, is found in New South Wales and Victoria. It usually occurs in association with other minerals, in veins.

COAL.

Australasia has been bountifully supplied by Nature with mineral fuel. Five distinct varieties of black coal, of well characterised types, may be distinguished, and these, with the two extremes of brown coal or lignite, and anthracite, form a perfectly continuous series. For statistical purposes, however, they are all included under the generic name of "coal," and therefore these minerals will be considered here only under the three main heads—lignite, coal, and anthracite.

Brown coal or lignite occurs principally in New Zealand and Victoria. Attempts have frequently been made to employ the mineral for ordinary fuel purposes, but its inferior quality has prevented its general use. In Victoria there is a small annual output, the quantity raised in 1901 amounting to 150 tons. The fields of lignite in New Zealand are roughly estimated to contain about 500 million tons; the quantity raised annually is increasing, and in 1900 it amounted to 42,538 tons.

Black coal forms one of the principal mineral resources of New South Wales; and in the other states and New Zealand the rich deposits of this valuable substance are rapidly being developed. That they form an important source of commercial prosperity cannot be doubted, as the known areas of the coal-fields of this class in New South Wales have been roughly estimated to contain about 79,198 million tons, and in New Zealand 500 million tons. New Zealand also possesses a superior quality of bituminous coal, which is found on the west coast of the Middle Island. An estimate of the probable contents of these coal-fields is given as 200 million tons. Coal of a very fair description was discovered in the basin of the Irwin River, in Western Australia, as far back as the year 1846. It has been ascertained from recent explorations that the area of carboniferous formation in that state extends from the Irwin northwards to the Gascoyne River, about 300 miles distant, and probably all the way to the Kimberley district. The most important discovery of coal in the state so far is that made in the bed of the Collie River, near Bunbury, to the south of Perth. The coal has been tested and found to be of good quality; and there are

grounds for supposing that there are 250 million tons on this field. Mr. Jack, formerly Government Geologist of Queensland, gave it as his opinion that the extent of the coal-fields of that state is practically unlimited, and that the carboniferous formations extend to a considerable distance under the Great Western Plains. It is roughly estimated that the Coal Measures at present practically explored extend over an area of about 24,000 square miles. In Tasmania and Victoria large deposits of coal have also been found; and in all the states the industry is being prosecuted with vigour.

Coal was first discovered in New South Wales in the year 1797, near Mount Keira, by a man named Clark, the supercargo of a vessel called the Sydney Cove which had been wrecked in Bass Straits. Later in the same year Lieutenant Shortland discovered the river Hunter, with the coal-beds situated at its mouth. Little or no use, however, was made of the discovery, and in 1826 the Australian Agricultural Company obtained a grant of 1,000,000 acres of land, together with the sole right, conferred upon them by charter, of working the coal-seams that were known to exist in the Hunter River district. Although the company held this valuable privilege for twenty years, very little enterprise was exhibited by them in the direction of winning coal, and it was not until the year 1847, when their monopoly ceased and public competition stepped in, that the coal-mining industry began to show signs of progress and prosperity. From the 40,732 tons extracted in 1847, the quantity raised had in 1901 expanded to the large figure of 5,968,426 tons, valued at £2,178,929, both the output and value in the latter year being the highest on record. To the end of 1901, the total quantity of coal extracted from the New South Wales mines, from their opening, amounted to 97,445,059 tons, valued at £39,494,844.

The coal-fields of New South Wales are classed in three districts—the Northern, Southern, and Western districts, but it is thought that coal deposits extend over nearly the whole length of the sea-coast. The first of these comprises chiefly the mines of the Hunter River district; the second includes the Illawarra district and, generally, the coastal regions to the south of Sydney, together with Berrima, on the table-land; and the third consists of the mountainous regions on the Great Western Railway, and extends as far as Dubbo. The total area of the carboniferous strata of New South Wales is estimated at 23,950 square miles. The seams vary in thickness. One of the richest has been found at Greta, in the Hunter River district; it contains an average thickness of 41 feet of clean coal, and the quantity underlying each acre of ground has been computed to be 63,700 tons.

It has long been known that a seam of coal existed under Sydney Harbour, and in 1899 a syndicate was formed to determine at what depth the deposit was situated. After boring operations had been carried on to a depth of 2,917 feet, a seam of coal 10 feet 3 inches—supposed to be identical with that at Bulli—was struck, and the syndicate now known as the Sydney Harbour Collieries (Limited)

acquired mining rights extending over 10,167 acres. Some difficulty occurred in the selection of a site, but it was at length determined to sink the mine at Balmain, and a small seam of coal was found at a depth of 2,880 feet, while two other seams were struck at depths of 2,933 feet and 2,950 feet. It is fully expected that these seams will be found to unite at a distance of about 300 yards from the shaft, and should this prove to be the case, the effect on the industrial progress of Sydney should be most important. At present the output from the mine is limited, but the coal is of good quality, and its capabilities for steaming purposes have been very favourably spoken of.

The number of coal-mines under inspection in New South Wales at the end of the year 1901 was 96 as compared with 95 in the previous year. They gave employment to 12,191 persons, of whom 9,644 were employed under ground, and 2,547 above ground. The average quantity of coal extracted per miner was 619 tons, as against an average of 612 tons in the previous year, and 559 tons in 1899. For the ten years ended 1901, the average quantity of coal extracted per miner was 530 tons, which, at the mean price of coal at the pit's mouth, was equivalent to £166 11s. 8d. Taking all persons employed at the mines, both above and under ground, the average for the ten years would be 428 tons equivalent to £134 10s. 6d. per man. This production is certainly large, and compares favourably with the results exhibited by the principal coal-raising countries of the world, as will be evident from the following figures, giving the averages for the leading countries, based on the number of persons employed :—

Country.	Quantity of coal raised per miner.	Value at the pit's mouth per ton.	Total value of coal raised per miner.
	tons.	s. d.	£ s. d.
New South Wales	428	6 3	134 10 6
Great Britain	272	10 1	137 2 8
United States.....	536	5 6	147 8 0
Germany	317	7 3	114 18 3
France	203	11 9	119 15 3
Belgium	174	13 5	116 12 6
Austria	605	6 3	189 1 3

. A large proportion of the coal raised is consumed in the state, and out of a total production of 5,968,426 tons in 1901, 2,497,441 tons—or

41·84 per cent.—were used locally. The exports to Australasian ports amounted to 2,130,638 tons, or 35·70 per cent., and to ports outside Australasia 1,340,347 tons, or 22·46 per cent. The quantity required for home consumption increases every year, and the annual consumption per head of population has risen from 16 cwt. in 1877 to 36 cwt. in 1901. The increased steam power employed in the manufacturing industries and on the railways accounts for a great deal of the advance in consumption, while the quantities of coal used in smelting works and gas works also account for a large proportion, but it must be borne in mind that the figures include the bunker coal used in the ocean-going steamers, and this amounted in 1901 to about 430,000 tons.

The progress of the export trade of New South Wales, from 1881 to 1901, is shown in the following table:—

Exported to—	Quantity.			Value.		
	1881.	1891.	1901.	1881.	1891.	1901.
	tons.	tons.	tons.	£	£	£
Australasian states	521,025	1,342,055	1,883,654	200,820	664,847	873,272
New Zealand	136,110	168,921	246,984	54,743	90,662	113,560
India, Ceylon, and China	136,511	188,000	60,120	59,944	105,208	25,292
Mauritius	6,249	19,760	10,398	2,414	10,313	5,549
Pacific Islands	19,526	141,055	361,785	8,011	75,803	187,565
United States	150,002	365,623	215,613	63,172	200,851	114,360
South America	8,017	221,700	482,280	3,243	123,136	255,977
Other countries	52,404	67,254	210,146	20,174	35,310	106,229
Total	1,029,844	2,514,368	3,470,985	417,530	1,306,630	1,681,824

None of the other states is in a position to export coal, but New Zealand is slowly working up an export trade, the progress of which since 1881 is shown below.

Exported to—	Quantity.			Value.		
	1881.	1891.	1901.	1881.	1891.	1901.
	tons.	tons.	tons.	£	£	£
Australasian States	6,049	14,277	25,428	5,022	8,488	20,903
United Kingdom .....	.....	68,871	88,909	.....	76,027	85,259
Fiji and Norfolk Island ...	21	3,282	8,115	25	2,469	5,999
Pacific Islands, etc.	551	5,234	37,191	563	4,189	30,015
Total	6,621	91,664	159,643	5,610	91,173	142,176

The exports to the United Kingdom from New Zealand, as well as from New South Wales, consisted entirely of bunker coal for the steamers. Most of the coal-beds of the former colony are on the West coast of the South Island. The total value of the coal produced in 1901 was £676,174, while the production in 1900 amounted to 1,093,990 tons, valued at £588,778. The chief mines are situated at Westport, Otago, and Greymouth, and the production in these districts during 1900 amounted to 380,146, 266,213, and 207,919 tons respectively.

There is a steady increase in the quantity of coal raised in the colony, and a corresponding decrease in the importation. In 1901 there were 145 coal-mines in operation in New Zealand, giving employment to 2,754 men, whose average earnings were £133 14s. 7d.

As showing the various kinds of coal found in New Zealand the following figures relating to the production in 1901 will be of interest :—

Bituminous coal	754,953 tons.
Pitch coal	14,584 „
Brown coal.....	405,152 „
Lignite	52,949 „
Total	1,227,638 „

Coal-mining is an established industry in Queensland, and is progressing satisfactorily. The production is steadily increasing and in 1901 it amounted to 539,472 tons, valued at £189,877, both production and value being in excess of the total for any previous year. The collieries now in operation are situated in the Ipswich and Wide Bay districts, on the Darling Downs, and at Clermont; but coal deposits are known to exist in the neighbourhood of Rockhampton and Gladstone. Operations are being conducted with the view of developing the coal beds in these localities; nine shafts have been sunk and a large seam of coal penetrated which is thought to extend a considerable distance. Should these mines prove successful they may lead to the establishment of an export trade, as their proximity to the coast gives them an advantage over other mines in the state. Of the total production of 539,472 tons during 1901, 420,500 tons were obtained in the Ipswich district, 110,849 tons at Wide Bay, and 7,000 tons in the Clermont district. There were 1,265 men engaged in the industry in 1901.

In Tasmania coal of good quality has been found in the Lower Measures of the Permo-Carboniferous rocks, principally in the basins of the Mersey and the Don in the north, and at Adventure Bay and Port Cygnet in the south, as well as in the Upper Measures of the Triassic or Jurassic rocks, which are extensively developed in the eastern and north-eastern parts of the state. The seams of coal known to exist on the east coast, in the vicinity of the Denison and Douglas Rivers, and at Landaff, are now being tested by means of the diamond drill. In the parish of Boulton, on the east coast, it is stated that three seams of coal—10 ft. 6 in., 4 ft. 9 in., and 2 ft. 7 in. in thickness—have been discovered. At the Jubilee mine, St. Mary's, a tunnel has been driven over 100 feet in a seam of coal 6 feet thick, which can be worked profitably. The production of coal in the state during 1900 amounted to 43,010 tons, valued at £21,711; and the output from the different collieries was—Cornwall 21,799 tons, Nicholas 17,962 tons, Mount Cygnet 2,345 tons, Dulverton 495 tons, and York Plains 409 tons.

Tasmania still relies largely on New South Wales to supply coal for local requirements. Since 1896 the export of coal from New South Wales to Tasmania has increased from 57,000 tons to 97,000 tons. During 1901 there were 174 men engaged in coal-mining in the state and the output amounted to 45,438 tons, valued at £38,451.

Black coal has been discovered in Victoria, and is now being raised in increasingly large quantities. In 1901 the production amounted to 209,329 tons, valued at £147,191, as compared with 22,834 tons, valued at £19,731, in 1891. There is still a large export of coal from New South Wales to Victoria, however, the quantity in 1901 amounting to 943,336 tons. The principal collieries in the state are the Outtrim Howitt, Jumbunna, and the Coal Creek Proprietary, the output from these during 1901 being 118, 168, 60,237, and 30,924 tons respectively.

In South Australia, coal-beds were discovered at Leigh's Creek, north of Port Augusta, but the results of a trial on the Government railways proved the coal to be unsuitable for use. There was no output during 1901. The export of coal from New South Wales to South Australia during 1901 was 540,282 tons.

The only coal-field in Western Australia is situated at Collie, and during 1901 the production was 117,836 tons, valued at £68,561. This was 574 tons less than in 1900, owing to a fire at the Wallsend, one of the principal collieries, and the fact that the West Collie mine was working on an unprofitable seam of coal. Satisfactory tests of Collie coal have been made, and it is now used extensively on the Government railways and on the gold-fields, and it has also been proved suitable for naval purposes, one great advantage being that it gives out little or no smoke.

The quantity of coal extracted annually in Australasia now exceeds 8,108,000 tons, valued at about £3,299,000. The production of each state during the year 1901 was as follows:—

State.	Quantity.	Value.	
		Total.	Proportion raised in each State.
	tons.	£	per cent.
New South Wales	5,968,426	2,178,929	66·0
Victoria	209,329	147,191	4·5
Queensland	539,472	189,877	5·8
Western Australia	117,836	68,561	2·1
Tasmania	45,438	38,451	1·2
Commonwealth	6,880,501	2,623,009	79·5
New Zealand	1,227,638	676,174	20·5
Australasia	8,108,139	3,299,183	100·0

The total quantity and value of the coal produced in Australasia up to the end of 1901 are shown below. A small quantity has been raised in South Australia, but is not yet of sufficient importance to warrant inclusion in the table :—

State.	Quantity.	Value.
	tons.	£
New South Wales	97,445,059	39,494,844
Victoria	1,947,893	1,042,358
Queensland	6,695,523	2,821,989
Western Australia.....	294,090	150,972
Tasmania	800,264	445,465
Commonwealth	107,182,829	43,955,628
New Zealand	15,780,508	8,364,567
Australasia	122,963,337	52,320,195

During the year 1901 this industry gave direct employment in and about the mines to the following numbers of persons in the several states :—

	No.
New South Wales	12,191
Victoria	877
Queensland	1,265
South Australia	50
Western Australia.....	383
Tasmania	174
New Zealand	2,754

The average price of coal per ton varies considerably in the states. In New South Wales, from the date of the commencement of mining to the end of the year 1901, the average price obtained has been 8s. 1d., but the mean of the last ten years has not been more than 6s. 3d. In 1901 the average price per ton of coal at the pit's mouth was as follows :—

	s.	d.
New South Wales	7	4
Victoria	14	1
Queensland	7	0
Western Australia.....	11	8
Tasmania	16	11
Commonwealth	7	7
New Zealand	11	0
Australasia	8	2

Anthracite is found in several of the Australasian states. It is a hard and heavy mineral, burning with difficulty, and possesses very little commercial value in countries where ordinary coal abounds.

Attention has lately been directed to the question of mining for this mineral in Queensland, and 50 tons are being obtained from the seam discovered at the Dawson River with a view of testing its utility. At Daaringa a bore is about to be sunk at a specially selected site, and the Government has agreed to grant a sum of money in aid of the undertaking.

The following table shows the annual coal production of the principal countries of the world. The figures refer to the year 1900, except those for Great Britain, United States, and Australasia, which refer to the year 1901 :—

Country.	Tons of 2,240 lb.
Great Britain	219,047,000
United States	° 266,079,000
Germany	147,381,000
Austria-Hungary	38,402,000
France	32,867,000
Belgium	23,086,000
Canada	4,760,000
Australasia	8,108,000

* Including lignite.

Kerosene shale (torbanite) is found in several parts of New South Wales. It is a species of cannel-coal, somewhat similar to the boghead mineral of Scotland, but yielding a much larger percentage of volatile hydro-carbon than the Scottish mineral. The richest quality yields about 100 to 130 gallons of crude oil per ton, or 17,000 to 18,000 cubic feet of gas, with an illuminating power of 35 to 40 sperm candles when gas only is extracted from the shale. The New South Wales Shale and Oil Company, at Hartley Vale, and the Australian Kerosene Oil and Mineral Company, at Joadja Creek and Katoomba, not only raise kerosene shale for export, but also manufacture from it petroleum oil and other products. From the year 1865, when the mines were first opened, to the end of 1901, the quantity of kerosene shale raised has amounted to 1,073,468 tons, worth £1,970,623. The average price realised during that period has been £1 16s. 9d. per ton. The prices ruling in 1901, when 54,774 tons were extracted, averaged 15s. 2d. per ton, representing a total value of £41,480 for the production of that year.

Extensive formations of oil shale have been found in New Zealand, in Otago and at Orepuhi, in Southland, where a mine has been opened and extensive works erected to treat the mineral for the extraction of oils, paraffin wax, ammonia, &c. A large amount of capital has been sunk in the venture, and great hopes are entertained of its success.

The annual import of kerosene oil into Australasia, based on the returns of the last three years, is shown below :—

State.	Quantity.	Value.
	gallons.	£
New South Wales	4,876,467	181,222
Victoria	4,552,454	151,935
Queensland	1,803,728	74,869
South Australia	1,479,971	44,651
Western Australia	1,552,732	51,062
Tasmania	312,208	12,365
Commonwealth	14,577,560	516,104
New Zealand	2,301,221	89,739
Australasia.....	16,878,781	605,843

OTHER CARBON MINERALS.

Of all the mineral forms of carbon the diamond is the purest; but as it is usual to class this precious substance under the head of gems that custom will be followed in the present instance.

Graphite, or plumbago, which stands second to the diamond in point of purity, has been discovered in New Zealand, in the form of detached boulders of pure mineral. It also occurs in impure masses where it comes into contact with the Coal Measures. This mineral, up to the present time, has not been found in any of the other states except New South Wales, where in 1889 a lode 6 feet wide, but of inferior quality, was discovered near Undercliff, in the New England district; and in Western Australia, where, however, owing principally to difficulties of transit, very little of it has been worked.

Ozokerite, or mineral wax, is reported to have been found at Coolah, in New South Wales.

Elaterite, mineral caoutchouc, or elastic bitumen, is said to have been discovered in New South Wales and South Australia. In the last-named state a substance very similar to elaterite has been discovered in the Coorong Lagoons, and has received the name of coorongite. Up to the present time neither the extent of these finds nor their commercial value has been ascertained.

Bitumen is known to exist in Victoria, and is reported to have been found near the township of Coonabarabran, in New South Wales.

Kauri gum, a resinous substance somewhat resembling amber in appearance, and like that product an exudation from trees, is found only in the Auckland province of New Zealand, and is included under the head of minerals, although more logically entitled to be considered as a vegetable product. The best is that dug out of the ground;

but considerable quantities of inferior grades are taken from the forks of standing trees. In New Zealand an extensive and lucrative commerce is carried on in kauri gum. It is computed that the total value of this product obtained from 1853 to the end of 1901 was £10,775,945. In the year 1901 the quantity obtained represented a value of £446,114, and gave employment to about 7,000 persons, both European and Maori. Kauri gum is included in the figures in this chapter giving the total mineral production.

SALTS.

Common rock salt has been found in rock crevices in several parts of New South Wales, but it is not known to exist in deposits large enough to be of commercial importance. Large quantities of salt are obtained from the salt lakes in South Australia by means of evaporation. The principal source of supply is Lake Fowler, and in summer the entire area is covered with a deposit of salt. In 1900 there were between 300 and 400 men employed in collecting the salt, while 73 hands were employed in refining works. The quantity of salt gathered during the year amounted to 32,574 tons.

Natron is said to occur in the neighbourhood of the Namoi River, in New South Wales. It appears as a deposit from the mud-wells of that region. Epsomite, or epsom salt (sulphate of magnesia), is seen as an efflorescence in caves and overhanging rocks of the Hawkesbury sandstone formation, and is found in various parts of New South Wales.

Large deposits of alum occur close to the village of Bulladelah, 30 miles from Port Stephens, New South Wales. Up to the end of the year 1901, 15,742 tons of alunite had been raised there, most of which had been sent to England for treatment. It is said to yield well, and a quantity of the manufactured alum is sent to Sydney for local consumption. During 1901 the Bulladelah mine yielded 3,146 tons of stone, valued at £9,438.

STONES AND CLAYS.

Marble is found in many parts of New South Wales, South Australia, New Zealand, and Tasmania. In New South Wales marble quarries have been opened in several districts, and some very fine specimens of the stone have been obtained.

Lithographic stone has been found in New Zealand, where another beautiful species of limestone known as Oamaru stone is also procured. This stone has a fine, smooth grain, and is of a beautiful creamy tint. It is in great demand for public buildings, not only in the colony where it is found, but in the great cities of continental Australia, which import large quantities of the stone for the embellishment of public edifices.

Limestone is mined for in New South Wales, and at Capertee the industry is assuming important dimensions, as extensive works, capable of producing 20,000 tons of cement, are being erected. In various

other parts of the state limestone is raised, and the total production in 1901 was 20,855 tons, valued at £16,247. In Western Australia a considerable quantity of limestone is raised for fluxing purposes, the production in 1901 being 20,569 tons, valued at £13,246. The establishment of the cyanide process for the recovery of gold, in which lime is freely used, has led to the opening up of limestone mines in various parts of Queensland, and the production in 1901 amounted to 6,514 tons, valued at £4,901.

Gypsum is found crystallised in clay-beds in New South Wales, and in isolated crystals in the Salt Lakes of South Australia, where a small proportion of sulphate of lime is present in the water. It is also found in portions of Victoria. This mineral is of commercial value for the manufacture of cement and plaster of Paris, and also as a fertiliser. A company in South Australia has recently raised a considerable quantity for this latter purpose. It is found in the form of an insoluble salt in New South Wales, Victoria, and New Zealand.

Apatite, another mineral of considerable commercial importance, and very valuable as a manure, occurs in several districts of New South Wales, principally on the Lachlan River, at the head of the Abercrombie, and in the Clarence River district.

Quartz is of common occurrence in all parts of Australasia. Rock crystal, white, tinted, and smoky quartz are frequently met with, as well as varieties of crystalline quartz, such as amethyst, jasper, and agate, which possess some commercial value.

Tripoli, or rotten stone, an infusorial earth, consisting of hydrous silica, which has some value for commercial purposes, has been found in New South Wales, Victoria, and New Zealand. Meerschäum is reported to have been discovered near Tamworth and in the Richmond River district, in New South Wales.

Mica is also found in granitic country, chiefly in the New England and Barrier districts. In Western Australia very good mica has been found at Bindoon, and also on the Blackwood River, near Cape Leeuwin. Several attempts at mining were made, but they proved unsuccessful, and have been abandoned. Some promising discoveries have been made near Herberton, in Northern Queensland. In the Northern Territory of South Australia mica has been obtained on a small scale. In 1895 the production was valued at £2,638, and in 1896 at £732; but of late years there has been no production.

Kaolin, fire-clays, and brick-clays are common to all the states. Except in the vicinity of cities and townships, however, little use has been made of the abundant deposits of clay. Kaolin, or porcelain clay, although capable of application to commercial purposes, has not as yet been utilised to any extent, though found in several places in New South Wales and in Western Australia.

Asbestos has been found in New South Wales in the Gundagai, Bathurst, and Broken Hill districts—in the last-mentioned district in considerable quantities. Several specimens of very fair quality have

also been met with in Western Australia; and the Government of the state offered a bonus not exceeding £500 for the export of 50 tons of asbestos, of a value of not less than £10 per ton. In Tasmania, in the vicinity of Beaconsfield, asbestos is known to exist in considerable quantities.

GEMS AND GEMSTONES.

Many descriptions of gems and gemstones have been discovered in various parts of the Australasian states, but systematic search has been made principally for the diamond and the noble opal.

Diamonds are found in New South Wales, Victoria, Queensland, and South Australia, but only in the first-named state have any attempts been made to work the diamond drifts. The existence of diamonds and other gem-stones in the territory of New South Wales had been known for years before an attempt was made to work the deposits in 1872. In the course of the following year several deposits of adamantiferous wash were discovered at Bingara, in the New England district. The output has never been very considerable, the largest value realised in any year being £15,375. In 1899 the value amounted to £10,350; but the output has declined in the last two years, although, owing to an increase in prices, the value has not decreased in like proportion, as in 1901 it reached £9,756. The total value of the diamonds produced up to the end of 1901 was £65,291; but this amount is believed to be considerably understated.

The finest opal known is obtained in the Upper Cretaceous formation at White Cliffs, near Wilcannia, New South Wales, and there are about 900 miners on the field. During the year 1895 good stone was found at a depth of 50 feet, and as the lower levels are reached the patches of opal appear to improve in quality and to become more regular and frequent. On block 7 a patch of stone was found which realised over £3,000. It is difficult to state with exactitude the value of the production, but it is believed that stone to the value of £576,600 has been sold up to the end of 1901. During 1901 a Special Commission was appointed to inquire into matters connected with the opal industry at White Cliffs. Their investigations tended to show that the annual value of production for some years had amounted to £100,000, and they recommended that the Government should redeem the unexpired portion of the leases held by the White Cliffs Opal Mines, Limited, extending over 300 acres, and that the land should be vested in the Crown and thrown open for mining in small areas under miners' right or mineral leases. No definite reply has yet been received to the offer of purchase by the Crown, but an alternative recommendation, that in lieu of the tribute system the area should be let in blocks at a small rental, has been adopted by the Company, and is working satisfactorily. The value of opal won during 1901 is estimated at £120,000.

In Queensland the opal is found in rocks of the desert sandstone formation, sometimes on the surface, but generally at a depth of about

14 feet. The chief fields are at Cunnamulla, Paroo, and Opalton, in the far western and north-western parts of the State, but the scanty water supply has been a great barrier to the progress of the industry. During 1901 the production was valued at £7,400, and there were 293 men on the fields, although in most cases they only worked in time spared from other occupations.

Other gem-stones, including the sapphire, emerald, oriental emerald, ruby, opal, amethyst, garnet, chrysolite, topaz, cairngorm, onyx, zircon, etc., have been found in the gold and tin-bearing drifts and river gravels in numerous localities throughout the states. The Emerald Proprietary Company, in the Emmaville district, near Glen Innes, New South Wales, have sunk two shafts, 100 feet and 50 feet respectively; and 25,000 carats have been won in a rough state. Their value when cut and finished, if of the best quality, is about £2 per carat. Owing to the difficulties of extraction, and the low price of the gems in the London market, the mines were closed for three years. In 1897 they were again opened up, and, although worked for some time during 1898, they are now closed, the company having obtained a suspension of the labour conditions. No gems were produced during the year.

The sapphire is found in all the States, and considerable attention has lately been directed to the sapphire fields of Anakie, in Queensland. During 1901 the Assistant Government Geologist inspected the locality, and his report indicates that the field is a large one, and the extent of sapphire wash second to none in the world. The gems are of a peculiar colour, quite distinct from those of any other country, and this seems to have slightly prejudiced their value. The value of the production of sapphires in Queensland during 1901 was estimated at £6,000. The oriental topaz has been found in New South Wales. Oriental amethysts also have been found in that State; and the ruby has been found in Queensland, as well as in New South Wales.

According to an authority on the subject of gemstones, rubies, oriental amethysts, emeralds, and topaz have been chiefly obtained from alluvial deposits, but have rarely been met with in a matrix from which it would pay to extract them.

Turquoises have been found near Wangaratta, in Victoria.

Chrysoberyls have been found in New South Wales; spinel rubies, in New South Wales and Victoria; white topaz, in all the states; and yellow topaz, in Tasmania. Chalcedony, carnelian, onyx, and cat's-eye are found in New South Wales; and it is probable that they are also to be met with in the other states, particularly in Queensland. Zircon, tourmaline, garnet, and other gemstones of little commercial value are found throughout Australasia.

In South Australia some very fine specimens of garnet were found, causing some excitement at the time, as the gems were mistaken for rubies. The stones were submitted to the examination of experts,

whose reports disclosed the true nature of the gems, and dispelled the hopes of those who had invested in the supposed ruby-mines of South Australia.

PRODUCTION OF MINERALS.

The foregoing pages show that Australasia possesses invaluable mineral resources, and although enormous quantities of minerals of all kinds have been won since their first discovery, yet the deposits, with the exception perhaps of gold, silver, and coal have only reached the first period of their exploitation. The development of the deposits of various other minerals has not reached a sufficiently advanced stage to enable an exact opinion to be expressed regarding their commercial value, though it is confidently held by mining experts that this must be enormous. The mineral production of the various states in 1901 will be found below :—

State.	Total Value.	Proportion of each State.	Average value per head.
	£	per cent.	£ s. d.
New South Wales	5,854,150	23·4	4 5 4
Victoria	3,312,162	13·3	2 15 1
Queensland	3,114,702	12·5	6 3 6
South Australia	613,930	2·5	1 13 10
Western Australia	7,445,772	29·8	39 14 2
Tasmania.....	1,675,290	6·7	9 13 0
Commonwealth	22,016,006	88·2	5 15 9
New Zealand	2,956,001	11·8	3 15 11
Australasia	24,972,007	100·0	5 9 0

The total value of the minerals raised in Australasia during 1901 was £24,972,007, being £114,198 in excess of the value for 1899, which had hitherto been the highest. The great advance of gold-mining in Western Australia and the increased activity displayed in coal-mining in New South Wales were the chief contributing factors to this desirable result. Gold has always constituted the largest proportion of the value raised, but the search for this mineral has led to the expansion of other branches of the mining industry which are commanding more attention each year. At the present time the number of persons in Australasia who gain their livelihood by mining is greater than at any previous

period. The total employment in each branch of mining during 1901 was :—

State.	Number of Persons engaged in Mining for—						Total.
	Gold.	Silver and Lead.	Copper.	Tin.	Coal, Coke, and Shale.	Other Minerals & Precious Stones.	
New South Wales	12,064	6,298	2,964	1,428	12,415	1,446	36,615
Victoria	27,777	.....	4	.....	877	12	28,670
Queensland	9,438	40	814	1,148	1,265	647	13,352
South Australia	2,000	150	4,057	.....	50	750	7,007
Western Australia	19,771	2	321	413	383	5	20,895
Tasmania	1,112	.....	†4,543	1,065	174	29	6,923
Commonwealth	72,162	6,490	12,703	4,054	15,164	2,889	113,462
New Zealand	12,533	*	*	*	2,754	*	*
Australasia	84,695	.....	.....	.....	17,913	.....	.....

* No information.

† Includes silver miners.

The greatest number of persons engaged in mining is in New South Wales, where, owing to the large employment afforded by the coal-mines, the total is 36,615; the greatest number of gold-miners is in Victoria. The total number of persons in the Commonwealth engaged in mining pursuits is 113,462, and in view of the known resources which await development, this number is likely to be still further increased.

The following table shows the value of the mineral production of each state during the four years 1871, 1881, 1891 and 1901, as well as the value per inhabitant for the whole of Australasia :—

State.	1871.	1881.	1891.	1901.
	£	£	£	
New South Wales	1,650,000	2,121,000	6,396,000	5,854,150
Victoria	5,400,000	3,467,000	2,339,000	3,312,162
Queensland	806,000	3,165,000	2,300,000	3,114,702
South Australia	725,000	421,000	366,000	613,930
Western Australia	5,000	11,000	130,000	7,445,772
Tasmania	25,000	604,000	516,000	1,675,290
Commonwealth	8,611,000	9,789,000	12,047,000	22,016,006
New Zealand	3,100,000	1,528,000	1,841,000	2,956,001
Australasia { Total	11,711,000	11,317,000	13,888,000	24,972,007
{ Per head	£ s. d. 6 1 0	£ s. d. 4 1 6	£ s. d. 3 12 3	£ s. d. 5 9 0

The foregoing table shows that the mineral production of 1901 was over eleven millions more than that of 1891. There were increases in all the states with the exception of New South Wales, in which state a decrease of slightly over £542,000 has to be recorded, owing to the fall in the value of silver and lead. The most notable increases were in Western Australia and Tasmania; the production of the former state exceeded that of 1891 by nearly £7,316,000, mainly on account of the great increase in the gold yield, which advanced in value from £115,182 to £7,235,653 during the period under review. The large increase in the Tasmanian production was due to the output of the Mount Lyell Copper-mines. In the other states, the increases were also substantial, ranging from 42 per cent. in Victoria to 68 per cent. in South Australia.

Comparing the value of the mineral production in 1901 with the population, the largest amount is shown by Western Australia, with £39 14s. 2d. per inhabitant; Tasmania ranks second, with £9 13s. 0d. per inhabitant; Queensland third, with £6 3s. 6d.; New South Wales fourth, with £4 5s. 4d.; and New Zealand fifth, with £3 15s. 11d. Victoria follows with an average of £2 15s. 1d. per head, and in South Australia the production per inhabitant was only £1 13s. 10d. The average per inhabitant for Australasia was £5 9s. 0d., and the average for the states constituting the Commonwealth was £5 15s. 9d. per head.

The following table shows the value of production in each of the states during 1901, distinguishing the principal minerals. With regard to some of the states the data are defective in respect to "other minerals," but not to such an extent as to seriously affect the gross total. The column "other minerals" includes kerosene shale in New South Wales and kauri gum in New Zealand:—

State.	Gold.	Silver and Silver- lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	921,282	1,854,463	412,292	76,544	2,173,929	410,640	5,854,150
Victoria	3,102,753	.....	.....	4,181	147,191	58,037	3,312,162
Queensland	2,541,892	62,241	194,227	93,723	189,877	32,742	3,114,702
South Australia	93,222	12,067	500,077	5,584	.....	2,980	613,930
Western Australia	7,235,653	7,609	75,246	40,000	63,561	18,703	7,445,772
Tasmania	295,176	207,228	917,787	216,186	38,451	462	1,675,290
Commonwealth	14,189,978	2,143,608	2,099,629	436,218	2,623,000	523,564	22,016,006
New Zealand	1,753,783	65,258	105	.....	676,174	*460,681	2,956,001
Australasia	15,943,761	2,208,866	2,099,734	436,218	3,299,133	984,245	24,972,007

* Inclusive of kauri gum of the value of £446,114.

The total mineral production to the end of 1901 is shown in the following table, in which the column "other minerals" again includes kerosene shale and kauri gum :—

State.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New South Wales	49,661,815	32,341,577	5,857,073	6,601,806	39,494,844	4,299,947	133,257,062
Victoria	260,489,201	856,539	206,395	715,498	1,042,358	346,031	263,656,022
Queensland	52,751,675	788,042	2,249,692	4,693,366	2,821,989	320,410	63,025,674
South Australia	2,388,197	118,630	22,822,046	32,680	.....	509,542	25,871,095
Western Australia	30,149,712	11,453	326,972	198,199	150,972	414,534	31,251,842
Tasmania	4,893,588	2,354,886	3,921,495	7,270,294	445,465	336,932	19,258,660
Commonwealth ..	400,334,188	36,501,127	35,383,673	10,518,343	43,955,628	6,227,396	541,920,355
New Zealand	59,159,883	350,806	18,088	.....	8,364,567	*11,030,547	73,953,891
Australasia	459,494,071	36,881,933	35,401,761	19,518,343	52,320,195	17,257,943	620,874,246

* Inclusive of kauri gum of the value of £10,775,945.

Coal was the only mineral raised in New South Wales prior to 1852, and its production up to that date was valued at £279,923. Deducting that amount from the total value of Australasian minerals raised up to the end of 1901, the remainder, £620,594,323, represents the value of mineral production from 1852, equal to an average of £12,411,886 per annum for the fifty years.

STATE FINANCE.

THE functions of government are much alike throughout Australasia, and it is only to be expected, therefore, that similar items of expenditure should be found in the budgets of the various states. The chief point of difference is the extent to which local requirements are provided for out of general revenue. In most of the states provision for local improvements is a matter of which the state has long since divested itself; but in New South Wales and Western Australia the central government still charges itself with the construction of works of a purely local character, especially in the rural districts; hence the appearance, in the statements of public expenditure of those states, of items of large amount which find no parallel in the other states. Also, when comparison is made with outside countries, other points of difference are found. In Australasia, as in other young communities, it has been necessary for the state to initiate works and services which in older countries have come within the province of the local authorities or have been left to be undertaken by private enterprise. Even at the present day it is deemed advisable that the Government should retain the control of services, such as the railways, which in the United Kingdom and some other countries are not regarded as forming part of the functions of the state, and it is on account of the administration of these services that the budgets of the Australasian states reach such comparatively high figures.

The revenues of the Australasian states have been subject to considerable fluctuations, due not so much to changes in the incidence of the revenue, as to variation in the amount of the imports, for it was upon taxation of imports that the states have most largely depended for revenue. The years of highest revenue ought, under normal conditions, to be coincident with the years of greatest prosperity; but some of the states have been able to efface the effect of unfavourable seasons by lavish borrowing, and the inflow of loans, as represented by taxable goods, has, at times, more than counterbalanced the shrinkage in the imports, due to failure in the wool or wheat crops, for which these imports are payment. This effect of the borrowing policy of the various states upon their revenue was not so great in the last decade as in the previous one, but that it was considerable may be gathered from the fact that in the ten years 1891-1901 the various State Governments contrived to borrow and spend £70,000,000, obtained in London. The unsteadiness of the railway revenue, due to variations in the seasons, is another cause of disturbance to Australian finance, and one which will not be obviated

until the resources of the states are so developed that wool and wheat will no longer play the important part they do at present in the railway trade of the country. In 1895 large reductions were made in the New South Wales tariff; these account for a reduction in the revenue of the state during that and the three following years, while to other influences must be added the financial crisis of 1893, which had a numbing effect upon trade throughout the states comprised in the Commonwealth. It will be observed from the table that Western Australia and New Zealand are in a different position to the more important mainland states. The financial position of Western Australia is exceptional, being due to the opening up of the goldfields, and the influx of a large amount of capital, and, as the tariff was of a wide range, the importation necessarily involved a large customs revenue, while the trade expansion increased the earnings of the railways. The configuration of the colony of New Zealand renders it to a very great extent immune from the droughts that so much affect the mainland of Australia, and the financial crisis of 1893 had only a comparatively slight influence on its trade; the progress of trade in that colony was, therefore, fairly regular during the years when the finances of the mainland states were most disturbed.

The establishment of the Commonwealth on the 1st January, 1901, necessitated the transfer of the Customs Department to the Federal Government; and, by proclamation, the Postal, Telegraph, and Defence Departments were taken over on the 1st March of the same year. The receipts of the six states are inclusive of the surplus returned by the Commonwealth, but the expenditure excludes all Federal transactions. The finances of the Commonwealth are dealt with on page 812.

The revenue for each state during the past ten years is shown in the following table. For New South Wales and New Zealand the figures shown for the years 1893 to 1895 inclusive, are those for the twelve months ended on the 31st December of the previous year; while for the remainder of the period the fiscal year ended on the 30th June in the former state, and on the 31st March in New Zealand. The amounts given for Tasmania are for the year ended 31st December prior to the years shown, while for the remaining states the financial year ends on the 30th June:—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£	£	£	£	£	£	£	£	£
1893	10,066,463	6,959,229	3,445,943	2,525,525	575,822	787,764	24,360,740	4,069,551	29,030,297
1894	9,499,910	6,716,814	3,343,069	2,591,271	681,246	706,972	23,539,232	4,692,463	28,231,745
1895	9,350,051	6,712,152	3,413,172	2,497,648	1,125,941	696,795	23,795,759	4,447,899	28,243,658
1896	9,091,368	6,458,682	3,641,568	2,585,230	1,858,695	761,971	24,397,529	4,556,015	28,953,544
1897	9,109,253	6,630,217	3,613,150	2,698,759	2,842,751	797,976	25,692,106	4,798,768	30,490,874
1898	9,304,884	6,598,240	3,768,152	2,633,727	2,754,747	845,019	26,204,769	5,070,230	31,283,999
1899	9,573,415	7,378,842	4,174,086	2,731,208	2,478,811	908,223	27,244,565	5,258,228	32,502,813
1900	9,973,736	7,450,676	4,588,207	2,853,329	2,875,306	943,970	28,635,314	5,699,618	34,334,932
1901	10,612,422	7,722,397	4,096,290	2,836,854	2,964,121	1,054,980	29,337,064	5,906,916	35,243,980
1902	11,007,356	7,006,333	3,535,062	2,477,432	3,354,123	826,163	28,206,469	6,152,839	34,359,308

The revenue per inhabitant for each state during the past ten years was as follows :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1893	8 11 0	5 19 5	8 8 6	7 10 0	9 16 4	5 3 1	7 7 7	7 5 5	7 7 3
1894	7 17 11	5 14 10	8 0 0	7 9 5	10 9 5	4 12 0	7 0 2	7 1 11	7 0 5
1895	7 12 5	5 14 5	7 19 4	7 1 11	13 14 5	4 9 5	6 19 0	6 11 0	6 17 8
1896	7 4 1	5 10 1	8 5 1	7 5 0	18 7 2	4 15 10	6 19 7	6 11 0	6 18 3
1897	7 2 5	5 13 10	8 0 6	7 10 6	20 12 2	4 17 8	7 4 3	6 15 1	7 2 9
1898	7 2 11	5 18 7	8 3 8	7 5 11	17 0 3	5 0 1	7 4 6	7 0 1	7 3 9
1899	7 4 8	6 7 2	8 17 1	7 9 7	14 14 10	5 4 2	7 8 4	7 2 2	7 7 4
1900	7 8 5	6 8 1	9 10 3	7 13 11	16 16 3	5 5 0	7 14 1	7 11 4	7 13 7
1901	7 15 7	6 9 0	8 4 5	7 19 10	16 9 1	6 2 3	7 15 5	7 13 4	7 15 1
1902	7 19 7	5 15 11	6 18 6	6 15 10	17 4 2	4 15 2	7 7 2	7 16 3	7 8 7

The following statements show that the expenditure of the six Commonwealth states has increased from £25,983,968 in 1893, to £29,240,334 for the year 1901-2, while the amount per inhabitant has decreased from £7 19s. 11d. to £7 12s. 7d. The expenditure of Australasia has increased, during the same period, from £30,308,958 to £35,155,249, while the amount per inhabitant has decreased from £7 16s. 1d. to £7 12s. 0d. The expenditure for each state during the past ten years is set forth in the following table :—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£	£	£	£	£	£	£	£	£
1893	10,103,272	7,989,757	3,557,620	2,784,145	629,372	919,802	25,983,968	4,324,990	30,308,958
1894	10,082,198	7,310,246	3,351,536	2,749,081	656,357	836,417	24,985,835	4,455,116	29,440,951
1895	9,329,353	6,760,439	3,308,434	2,661,934	936,729	789,806	23,786,095	4,266,712	28,053,407
1896	9,698,891	6,540,182	3,567,947	2,640,688	1,823,863	748,946	25,020,517	4,370,481	29,390,998
1897	9,316,620	6,568,932	3,604,264	2,779,110	2,839,453	750,244	25,858,623	4,509,981	30,368,604
1898	9,299,411	6,928,850	3,747,428	2,750,959	3,256,912	785,026	26,768,586	4,602,372	31,370,958
1899	9,562,739	7,001,663	4,024,170	2,777,614	2,539,358	830,168	26,735,712	4,858,511	31,594,223
1900	10,086,186	7,280,689	4,540,418	2,936,619	2,615,675	871,454	28,331,041	5,140,128	33,471,169
1901	10,729,741	7,683,079	4,624,479	3,007,034	3,051,331	923,731	30,019,395	5,479,703	35,499,098
1902	11,020,105	7,407,781	3,967,001	2,823,578	3,151,427	870,442	29,240,334	5,914,915	35,155,249

The expenditure per inhabitant for each state for the last ten years is as follows:—

Year.	New South Wales.	Victoria.	Queensland.	South Australia, including Northern Territory.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1893	8 11 8	6 17 2	8 13 11	8 5 4	10 14 7	6 0 4	7 19 11	6 14 8	7 16 1
1894	8 7 7	6 4 11	8 0 4	7 18 6	10 1 9	5 8 10	7 10 10	6 14 9	7 8 7
1895	7 12 1	6 15 3	7 14 5	7 11 3	11 8 3	5 1 4	7 1 3	6 5 8	6 18 11
1896	7 13 8	5 11 5	8 1 9	7 8 1	18 0 4	4 14 2	7 5 9	6 5 8	7 2 9
1897	7 5 9	5 16 10	8 0 1	7 15 0	20 11 8	4 11 10	7 7 11	6 7 0	7 4 9
1898	7 2 10	5 17 2	8 2 9	7 12 5	20 2 3	4 13 0	7 7 10	6 6 11	7 4 3
1899	7 4 6	5 18 4	8 10 8	7 12 2	15 2 1	4 15 2	7 5 10	6 11 4	7 2 3
1900	7 10 1	6 3 1	9 8 3	7 18 5	15 5 10	4 17 0	7 12 5	6 16 6	7 9 8
1901	7 17 3	6 8 4	9 5 8	8 6 5	16 18 9	5 7 0	7 19 1	7 2 3	7 16 3
1902	7 19 10	6 2 7	7 15 5	7 14 10	16 3 5	5 0 3	7 12 7	7 10 2	7 12 0

Below will be found a statement showing the total revenue and expenditure of each state for the financial year 1901-2, with the amounts per head of population. It must be pointed out that from the revenue and expenditure of New South Wales, Victoria, South Australia, Tasmania, and New Zealand, as given in the table, refunds are excluded; while for Queensland and Western Australia there is nothing in the published statements to show whether the amounts are gross or net:—

State.	Year ended—	Total.		Per head of population.	
		Revenue.	Expenditure.	Revenue.	Expenditure.
		£	£	£ s. d.	£ s. d.
New South Wales.....	30 June, 1902..	11,007,356	11,020,105	7 19 7	7 19 10
Victoria.....	30 June, 1902..	7,006,333	7,407,781	5 15 11	6 2 7
Queensland.....	30 June, 1902..	3,535,062	3,967,001	3 18 6	7 15 5
South Australia*.....	30 June, 1902..	2,477,432	2,823,578	6 15 10	7 14 10
Western Australia.....	30 June, 1902..	3,354,123	3,151,427	17 4 2	16 3 5
Tasmania.....	31 Dec., 1901..	826,163	870,442	4 15 2	5 0 3
Commonwealth.....	.....	28,206,469	29,240,334	7 7 2	7 12 7
New Zealand.....	31 Mar., 1902..	6,152,839	5,914,915	7 16 3	7 10 2
Australasia.....	.....	34,350,308	35,155,249	7 8 7	7 12 0

* Including Northern Territory.

As will be seen from the table, the revenue of the states included in the Commonwealth for the financial year 1901-2 was £28,206,469, or £7 7s. 2d. per head of population, and the expenditure £29,240,334, or £7 12s. 7d. per head, showing a total deficiency on the twelve months' transactions of £1,033,865. The revenue of the

whole of Australasia was £34,359,308, or £7 8s. 7d. per head of population, and the expenditure £35,155,249, or £7 12s. per head, showing a deficiency of £795,941. The only states which had a surplus were Western Australia and New Zealand.

SOURCES OF REVENUE.

The revenue of the states is mainly derived from taxation and public services. During the year 1901-2 the customs and excise duties, and postal and telegraph revenue of the states forming the Commonwealth were collected by the Federal Government, and the balance, after deducting expenses of the transferred and new services, was returned to the states. These balances amounted to £7,438,094, and other forms of taxation, £2,654,873; while the railways and tramways returned a revenue of £11,806,022, making altogether a sum of £21,898,989 derived from these sources, or 77·6 per cent. of the total receipts. For New Zealand, customs and excise duties yielded £2,291,349 and other taxation, £821,730; railways returned £1,869,489, and posts and telegraphs, £488,573; the receipts from the sources mentioned being £5,471,141, or 88·9 per cent. of the total. It will thus be seen that for the whole of Australasia the collections under the headings mentioned amounted to £27,370,150, or 79·7 per cent. of the gross revenue. A division of the revenue of each state is appended:—

State.	Taxation.		Railways and Tramways	Posts and Telegraphs.	Public Lands.	Surplus Commonwealth Revenue returned to State.	All Other Sources.	Total Revenue.
	Import and Excise Duties.	Other.						
	£	£	£	£	£	£	£	£
New South Wales	....	1,108,770	4,324,432	....	2,001,574	2,385,905	1,188,675	11,007,356
Victoria	....	716,446	3,362,044	....	354,195	1,820,974	652,074	7,006,333
Queensland	....	276,770	1,310,829	....	*580,633	904,775	456,055	3,535,062
South Australia	....	267,790	1,107,146	....	156,913	623,582	322,001	2,477,432
Western Australia	....	173,532	1,488,574	....	188,489	1,225,076	278,402	3,354,123
Tasmania	....	111,515	206,997	* 20,399	73,970	377,782	35,560	826,163
Commonwealth	....	2,654,873	11,806,022	* 20,399	3,355,774	7,438,094	2,931,307	28,206,469
New Zealand	2,291,349	821,730	1,869,489	488,573	249,019	....	432,079	6,152,839
Australasia	2,291,349	3,476,603	13,675,511	508,972	3,805,393	7,438,094	3,663,386	34,359,308

* Two months only.

Below will be found a statement of the revenue in 1901-2 on the basis of population. The average for the states included in the Commonwealth was £7 7s. 2d., and for the whole of Australasia was £7 8s. 7d. per head, the amount ranging from £4 15s. 2d. in Tasmania to £17 4s. 2d. in Western Australia. The high revenue in the latter state is attributable to the influx of foreign capital consequent on the discovery of the gold-fields. While oversea goods entering the state are

subject to the Federal tariff, importations from the other states are dutiable under the Special Western Australian Tariff, and as a consequence a large importation of capital necessarily means a large customs revenue and increased traffic and earnings of the railways:—

State.	Taxation.		Railways and Tramways.	Posts and Telegraphs.	Public Lands.	Surplus Commonwealth Revenue returned to State.	All Other Sources.	Total Revenue.
	Import and Excise Duties.	Other.						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales ..	.....	0 16 1	3 2 8	.....	1 9 0	1 14 7	0 17 3	7 19 7
Victoria ..	.....	0 11 10	2 15 8	.....	0 5 10	1 11 9	0 10 10	5 15 11
Queensland ..	.....	0 10 10	2 11 7	.....	1 2 9	1 15 5	0 17 11	6 18 6
South Australia ..	.....	0 14 8	3 0 9	.....	0 8 7	1 14 2	0 17 8	6 15 10
Western Australia ..	.....	0 17 10	7 12 9	.....	0 19 4	6 5 9	1 8 6	17 4 2
Tasmania ..	.....	0 12 10	1 3 10	* 0 2 4	0 8 0	2 3 7	0 4 1	4 15 2
Commonwealth ..	.....	0 13 10	3 1 7	* 0 0 1	0 17 6	1 18 10	0 15 4	7 7 2
New Zealand ..	2 18 2	1 0 10	2 7 6	0 12 5	0 6 4	.....	0 11 0	7 16 3
Australasia ..	0 9 11	0 15 0	2 19 2	0 2 2	0 15 7	1 12 2	0 14 7	7 8 7

* Two months only.

Dividing the revenue derived from taxation into that payable (a) directly and (b) indirectly by the people, the former including land and income taxes, stamp duties, &c., and the latter customs and excise, license fees, &c., the appended figures are obtained. The figures for the Commonwealth States include the collections of the Federal Government within each state as shown on page 815. As already stated, the Customs and Excise Duties were collected by the Commonwealth Government during the year ended 30th June, 1902, and from the 9th October, 1901, were not determined by the state, but by the Parliament of the Commonwealth.

State.	Total Taxation, 1901-2.			Per head of population.		
	Direct.	Indirect.	Total.	Direct.	Indirect.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales ..	954,332	2,937,160	3,921,492	0 14 3	2 2 7	2 16 10
Victoria ..	700,856	2,392,073	3,092,929	0 11 7	1 19 7	2 11 2
Queensland ..	219,791	1,354,644	1,574,435	0 8 7	2 13 1	3 1 8
South Australia ..	248,126	718,356	966,482	0 13 7	1 19 5	2 13 0
Western Australia ..	143,047	1,365,248	1,509,105	0 14 9	7 0 1	7 14 10
Tasmania ..	94,490	390,160	484,656	0 10 11	2 4 11	2 15 10
Commonwealth ..	2,391,543	9,157,641	11,549,189	0 12 6	2 7 9	3 0 3
New Zealand ..	821,730	2,291,340	3,113,079	1 0 10	2 18 2	3 19 0
Australasia ..	3,213,273	11,448,990	14,662,263	0 13 11	2 9 7	3 3 6

Comparing these figures with the returns for the year 1881, which are given below, it will be found that the general tendency has been to

increase the direct taxation of the people, on account of the diminished land sales and the shrinkage in other revenue.

State.	Total Taxation, 1881.			Per Inhabitant.		
	Direct.	Indirect.	Total.	Direct.	Indirect.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	192,503	1,578,345	1,770,848	0 5 0	2 1 3	2 6 3
Victoria	347,782	1,035,345	1,383,127	0 8 1	1 18 0	2 0 1
Queensland	49,311	608,443	657,754	0 4 7	2 16 7	3 1 2
South Australia	14,522	569,617	584,139	0 1 1	2 2 7	2 3 8
Western Australia	1,206	114,919	116,125	0 0 10	3 17 10	3 18 8
Tasmania	66,748	283,398	350,146	0 11 5	2 8 6	2 19 11
Commonwealth	672,072	4,790,067	5,462,139	0 5 11	2 1 11	2 7 10
New Zealand	405,802	1,480,507	1,886,309	0 16 6	3 0 1	3 16 7
Australasia	1,077,874	6,270,574	7,348,448	0 7 10	2 5 8	2 13 6

In respect of the proportion of revenue raised at the present time by direct taxation, the states differ considerably. Thus, no less than 11·44 per cent. of the revenue of Tasmania in 1901-2 was derived from that source; while in New Zealand the proportion was 13·36 per cent.; in Queensland, 6·22 per cent.; in Victoria, 10 per cent.; in Western Australia, 4·29 per cent.; in South Australia, 10·02 per cent.; and in New South Wales, only 8·94 per cent. The comparison, however, is chiefly interesting as showing the large territorial revenue that New South Wales is fortunate enough to possess.

In all the states probate duties are levied, and except in Western Australia and Queensland, land and income taxes. In Queensland, with few exemptions, all incomes are taxed as well as the dividends of joint-stock companies, and in Western Australia a dividend and companies tax has also been introduced since the close of the financial year 1898-9. In the edition of this work for 1895-6 the changes in the probate and succession duties, and in the land and income taxes, were traced; the description given below deals only with the duties as they stand at the present time.

PROBATE AND SUCCESSION DUTIES.

New South Wales.—In this state a duty of 1 per cent. was payable to the end of the year 1899 on the value of the real and personal estate of a testator or intestate, and on settlements of property taking effect after death, provided the value of the property was less than £5,000; 2 per cent. was payable on estates of the value of £5,000 and under £12,500; 3 per cent. upon £12,500 and under £25,000; 4 per cent. upon £25,000 and under £50,000; and 5 per cent. upon £50,000 and upwards. Estates not exceeding £200 in gross value were exempt from duty. On the 22nd December, 1899, an amending Act was assented

to, under which the following duties on the estates of deceased persons are now payable :—

Exceeding—	Not exceeding—	Rate.	Exceeding—	Not exceeding—	te.
£	£	per cent.	£	£	per cent.
.....	1,000	Nil.	34,000	36,000	6 $\frac{1}{2}$
1,000	5,000	2	36,000	38,000	6 $\frac{1}{2}$
5,000	6,000	3	38,000	40,000	6 $\frac{3}{4}$
6,000	7,000	3 $\frac{1}{2}$	40,000	44,000	7
7,000	8,000	3 $\frac{3}{4}$	44,000	48,000	7 $\frac{1}{2}$
8,000	9,000	3 $\frac{1}{2}$	48,000	52,000	7 $\frac{3}{4}$
9,000	10,000	3 $\frac{3}{4}$	52,000	56,000	7 $\frac{3}{4}$
10,000	12,000	4	56,000	60,000	7 $\frac{3}{4}$
12,000	14,000	4 $\frac{1}{2}$	60,000	64,000	8
14,000	16,000	4 $\frac{3}{4}$	64,000	68,000	8 $\frac{1}{2}$
16,000	18,000	4 $\frac{3}{4}$	68,000	72,000	8 $\frac{3}{4}$
18,000	20,000	4 $\frac{3}{4}$	72,000	76,000	8 $\frac{3}{4}$
20,000	22,000	5	76,000	80,000	8 $\frac{3}{4}$
22,000	24,000	5 $\frac{1}{2}$	80,000	84,000	9
24,000	26,000	5 $\frac{3}{4}$	84,000	88,000	9 $\frac{1}{2}$
26,000	28,000	5 $\frac{3}{4}$	88,000	92,000	9 $\frac{3}{4}$
28,000	30,000	5 $\frac{3}{4}$	92,000	96,000	9 $\frac{3}{4}$
30,000	32,000	6	96,000	100,000	9 $\frac{3}{4}$
32,000	34,000	6 $\frac{1}{2}$	100,000	.....	10

Only one-half of these rates is payable on the net amount received by the widow, children, and grand-children of the testator or intestate, provided the total value of the estate is not more than £50,000 after all debts have been paid.

Victoria.—The succession duties in force in Victoria are the same as those levied in New South Wales under the 1899 Act, with the exception that on estates exceeding £1,000, but not exceeding £5,000, an exemption of £1,000 is allowed in Victoria. The conditions as to half-rates payable by widows, children, and grand-children, on amounts received by them, are the same as in New South Wales.

Queensland.—A succession duty of 2 per cent. is levied in Queensland on property acquired by a person on the death of its former owner when the value of the property is £200 and under £1,000; 3 per cent. is chargeable upon property valued at £1,000 and under £2,500; 4 per cent. upon £2,500 and under £5,000; 6 per cent. upon £5,000 and under £10,000; 8 per cent. upon £10,000 and under £20,000; and 10 per cent. upon £20,000 and upwards. No duty is levied on estates under the net value of £200. When the successor is the wife or husband or lineal issue of the predecessor, one-half of these rates only is charged; and when the successor is a stranger in

blood to the predecessor double rates are charged. The following small probate duties are also payable on the net value of the property:—

Value.	Probates.	Letters of Administration.
Under £50	Nil.	Nil.
£50 and not exceeding £100.....	10s.	£1
Over £100 and not exceeding £200..	£1	£2
„ £200 „ „ £500.....	£2	£4
„ £500	£5	£10

Succession duty is chargeable on all property held within the state, although the testator or intestate may have been domiciled elsewhere; but power is taken to compound the duty and to accept one sum in respect of all successions, present and future, where the deceased has been domiciled in the United Kingdom or a British possession, and it has been found difficult to assess the value of the succession. Also, where the British Government or the Government of a British possession exempts from duty property held in Queensland by a person domiciled in the United Kingdom or the British possession referred to, no duty is chargeable by the Queensland Government on property held in the United Kingdom or such British possession by a person domiciled in the state.

South Australia.—Succession duties are imposed on real and personal property derived from the estate of a deceased person; on settlements of property to take effect after the death of the settlor; and on property made over by deed of gift during the lifetime of the donor, and not made before and in consideration of marriage, or in favour of a *bona-fide* purchaser or encumbrancer for valuable consideration. The duty is levied on the net present value, and is fixed at 10 per cent. when the legatee or beneficiary is a stranger in blood to the person from whom the property is received. When the person taking the property is the widow, widower, descendant, or ancestor, it is subject to a duty of $1\frac{1}{2}$ per cent. if the value is £500 and under £700; if £700 and under £1,000, 2 per cent.; £1,000 and under £2,000, 3 per cent.; £2,000 and under £3,000, $3\frac{1}{2}$ per cent.; £3,000 and under £5,000, 4 per cent.; £5,000 and under £7,000, $4\frac{1}{2}$ per cent.; £7,000 and under £10,000, 5 per cent.; £10,000 and under £15,000, $5\frac{1}{2}$ per cent.; £15,000 and under £20,000, 6 per cent.; £20,000 and under £30,000, $6\frac{1}{2}$ per cent.; £30,000 and under £40,000, 7 per cent.; £40,000 and under £60,000, $7\frac{1}{2}$ per cent.; £60,000 and under £80,000, 8 per cent.; £80,000 and under £100,000, $8\frac{1}{2}$ per cent.; £100,000 and under £150,000, 9 per cent.; £150,000 and under £200,000, $9\frac{1}{2}$ per cent.; and £200,000 and upwards, 10 per cent.; one-half of these rates only to be charged when the person taking the property is the child (under 21 years of age) or the widow of the deceased, and the net present value of the whole estate is under £2,000. When the property is taken by a brother or sister, or a descendant of a brother or sister, or a person in any other

degree of collateral consanguinity to the deceased person, settlor, or donor, a duty of 1 per cent. is charged if the net present value is under £200; if £200 and under £300, $1\frac{1}{2}$ per cent.; £300 and under £400, 2 per cent.; £400 and under £700, 3 per cent.; £700 and under £1,000, $3\frac{1}{2}$ per cent.; £1,000 and under £2,000, 4 per cent.; £2,000 and under £3,000, 5 per cent.; £3,000 and under £5,000, 6 per cent.; £5,000 and under £10,000, 7 per cent.; £10,000 and under £15,000, 8 per cent.; £15,000 and under £20,000, 9 per cent.; and £20,000 and upwards, 10 per cent.

Western Australia.—Probate duty is payable on the estates of deceased persons, and upon settlements of property to take effect after the death of the donor, with the exception of ante-nuptial settlements, on all post-nuptial settlements made in pursuance of an agreement entered into before marriage, all settlements, on or for the wife, or her issue, or the issue of the settlor, of property which has accrued to the settlor after the marriage in right of his wife; and upon all settlements made in favour of a purchaser or encumbrancer in good faith and for valuable consideration. The duty is imposed on the net value of the estate after all debts have been paid. The lowest sum subject to taxation is £1,500, and this sum is likewise exempted when the net value of the estate is less than £2,500, but when this value is exceeded no exemption is made. The rates of duty are as follow:—

£1,500 and under £2,500 (on excess of £1,500)	1 per cent.
£2,500 " £5,000	2 "
£5,000 " £10,000	3 "
£10,000 " £20,000	4 "
£20,000 " £30,000	5 "
£30,000 " £40,000	6 "
£40,000 " £60,000	7 "
£60,000 " £80,000	8 "
£80,000 " £100,000	9 "
Over £100,000	10 "

with half these rates when the beneficiaries comprise the parent, issue, husband, wife, or issue of husband or wife of the deceased.

Tasmania.—In this state duties are imposed on probates of wills and letters of administration. The duty is levied on the net value of the personal estate of the testator or intestate. When the amount is under £100 no duty is payable; when it is £100 and not more than £500 the duty is 2 per cent.; and when it is £500 and upwards the duty is 3 per cent. Life policies are exempt from taxation.

New Zealand.—The following duties are imposed in New Zealand on the final balance of the real and personal property left by a testator or intestate; on settlements of property taking effect after the death of the settlor; and on property made over by deed of gift taking effect

during the lifetime of the donor, and not being property granted before and in consideration of marriage, or in favour of a *bona-fide* purchaser or encumbrancer in return for valuable consideration:—

Not exceeding £100	Nil.
£100 and not exceeding £1,000—	
On first £100	Nil.
On remainder.....	2½ per cent.
Over £1,000 and not exceeding £5,000	3½ „
Over £5,000 and up to £20,000.....	7 „
On £20,000 and upwards	10 „

with 3 per cent. additional in the case of strangers in blood, except adopted children. It is provided that no duty shall be payable on property passing absolutely into the possession of the widow of the deceased, or of the widower of the deceased; and that only half-rates shall be payable on property acquired by the children, step-children, and grand-children of the testator or intestate. It is further provided that in the case of property in which a life estate or interest is acquired by the widow on the death of her husband, or by the widower on the death of his wife, payment of duty shall be made in ordinary course if the property possesses a capital value which would give an annual return of not less than £500 if invested at 6 per cent., and when the property is of lower value the widow or widower shall obtain a refund not exceeding 50 per cent. of the duty.

LAND AND INCOME TAXATION IN NEW SOUTH WALES.

In New South Wales, land tax is levied on the unimproved value; the present rate being 1d. in the £. An exemption of £240 is allowed, and if the unimproved value is in excess of this sum a deduction equal to the exemption is made, but when a person or company holds several blocks of land only one sum of £240 may be deducted from the aggregate unimproved value. Also, when a block of land is mortgaged, the mortgagor is allowed to deduct from the amount of his tax a sum which is equal to the income tax chargeable to the mortgagee on the interest derived from the mortgage of the whole property, including improvements. The exemptions from taxation comprise Crown lands not subject to right of purchase, or held under special or conditional lease, or as homestead selections; other lands vested in His Majesty or his representatives; lands vested in the Railway Commissioners; lands belonging to or vested in local authorities; public roads, reserves, parks, cemeteries, and commons; lands occupied as public pounds, or used exclusively for or in connection with public hospitals, benevolent institutions, and other public charities, churches and chapels, the University and its affiliated colleges, the Sydney Grammar School, and mechanics'

institutes and schools of arts; and lands dedicated to and vested in trustees and used for zoological, agricultural, pastoral, or horticultural show purposes, or for other public or scientific purposes. Should the tax remain unpaid for a period of two years after it becomes due the Commissioners may, after giving another year's notice, let the land for a period not exceeding three years, or, with the permission of a Judge of the Supreme Court, sell so much of it as may be necessary for the payment of the tax, with fines, costs, and expenses added.

A tax is also imposed upon so much of every income as may be in excess of £200, except in so far as it is derived from the ownership or use or cultivation of land upon which land tax is payable; the present rate being 6d. in the £. The exemptions include the revenues of local authorities; the income of life assurance societies and of other societies and companies not carrying on business for purposes of profit or gain, and not being income derived from mortgages; the dividends and profits of the Savings Bank of New South Wales and the Post Office Savings Bank; the funds and income of registered friendly societies and trade unions; the income and revenues of all ecclesiastical, charitable, and educational institutions of a public character; and income accruing to foreign investors from Government stock. The regulations provide that in the case of every company its income shall be taken as the income of the company in New South Wales and from investments within the state. Public companies are not allowed the exemption of £200.

The receipts from the land and income taxes since their imposition were as follows. The amounts are exclusive of refunds:—

Year.	Land Tax.	Income Tax.
	£	£
1896 .....	.....	27,658
1897	139,079	279,753
1898	364,131	144,269
1899	253,901	171,273
1900	286,227	166,051
1901	288,369	205,304
1902	301,981	190,315

The irregularities noticeable in the first three years are due to the difficulties inseparable from the introduction of a system of direct taxation; the returns for 1899 and subsequent years are under normal conditions.

The value of land assessed for taxation purposes is £124,015,000; but the owners of estates valued at £10,000,000 could not be discovered, while £13,200,000 represents the value of land falling below the minimum taxable value (£240). As an exemption of £240 is allowed for each person, the taxable amount is further reduced by £9,600,000; exemptions in respect of mortgages described in the text still further

reduce the taxable balance by £14,400,000, and balances due on land conditionally purchased from the state by £7,215,000, so that the actual taxable value is £69,600,000.

The number of persons owning land in New South Wales is about 110,000, but the deductions allowed by law reduced the actual number of taxpayers to 40,000.

The incomes liable to taxation do not vary greatly either in regard to their number or amount, and during the last three years were as follows:—

Year.	Number of Incomes.	Gross Income.	Net Income.
1899	19,775	£ 23,046,181	£ 11,123,343
1900	20,051	25,770,057	12,140,569
1901	19,991	26,293,249	12,065,842

The difference between the gross and the net income represents the deductions allowed to taxpayers on account of cost of earning their incomes, and certain allowances for life assurance on premium payments up to £50 per annum. A distribution of the incomes subject to taxation according to amounts taxable is given below for the same three years. It should be remembered that these represent only a proportion of the incomes derived from New South Wales, as incomes derived from land, or the use or occupancy of land, are not taxable. The amounts given are the net earnings:—

Grade.	1899.		1900.		1901.		
	Incomes.		Incomes.		Incomes.		
	No.	Net.	No.	Net.	No.	Net.	
£200 and under	£250	6,138	£ 1,370,404	5,824	£ 1,292,501	5,726	£ 1,277,561
250	300	3,814	1,024,882	3,830	1,035,180	3,923	1,060,673
300	400	3,819	1,295,990	3,946	1,338,668	3,968	1,358,333
400	500	1,758	778,758	1,840	814,349	1,836	810,742
500	700	1,710	992,752	1,783	1,035,137	1,839	1,068,134
700	1,000	1,028	848,779	1,184	964,218	1,071	879,489
1,000	1,200	345	378,713	326	354,290	360	392,947
1,200	2,000	623	936,024	690	1,032,815	671	1,020,669
2,000	5,000	386	1,131,300	434	1,238,487	423	1,252,534
5,000	10,000	99	679,392	111	748,346	99	667,483
10,000	20,000	32	432,469	54	709,028	45	617,970
20,000 and upwards	...	23	1,253,880	29	1,577,550	25	1,659,307
Total		19,775	11,123,343	20,051	12,140,569	19,991	12,065,842

LAND AND INCOME TAXATION IN VICTORIA.

The Land Tax Act in force in Victoria was passed with the object of breaking up large holdings. For this purpose it was declared that all "landed estates" should be subject to taxation; that a "landed estate" should consist of one or more blocks of land not more than 5 miles apart which possessed an aggregate area of upwards of 640 acres and a capital value of more than £2,500; that the value in excess of £2,500 should be taxed at the rate of $1\frac{1}{4}$ per cent. per annum, but that only one exemption should be allowed to a person or company owning more than one "landed estate"; and that the assessment of the capital value of the "landed estate" should be based upon the average number of sheep which it was estimated to be able to maintain, £4 per acre being fixed as the value of land which could carry 2 sheep or more to that area; £3 per acre if it could carry only $1\frac{1}{2}$ sheep; £2 per acre if it could carry only 1 sheep, and £1 if it could not maintain an average of a single sheep to the acre.

The rate of income tax payable in the state varies according to the source whence the income is derived and the taxable amount of such income. On incomes derived from personal exertion 4d. in the £ is payable up to £1,200; on every £ in excess of this sum up to £2,200, 6d.; and on every £ in excess of £2,200, 8d.; double these rates being payable on incomes the produce of property within the state. All incomes of and under £200 escape taxation, and this sum is exempted in all cases in which the income is higher, but no exemption is allowed if the taxpayer has been absent from Victoria for six consecutive months in the year during which the income was received. Land and buildings used by the owner for residential purposes are regarded as returning an income of 4 per cent. on the capital value; and the income of companies whose head office is not within the state is taken to be such a proportion of the total dividends of the company as the receipts or assets and liabilities (as may be prescribed) in Victoria bear to the total receipts or assets and liabilities. It is provided that shipowners whose principal place of business is outside the state shall pay £5 for every £100 received for the carriage of Victorian passengers, goods, and mails. In the case of sales of property, where the principal is not a resident of Victoria, the taxable amount of his income derived from such sale or disposal of property is assessed at 5 per cent. of the total amount for which the property was sold or otherwise disposed of, unless it should be proved to the satisfaction of the Commissioner that the amount received was less than 5 per cent., when a corresponding reduction will be made. The exemptions include the income of the state, local authorities, savings banks, University of Melbourne and affiliated colleges, Working Men's College, schools of mines, technical schools, religious bodies, registered friendly societies, building societies, and trade unions; of societies and public bodies not carrying on business for purposes of gain to shareholders or members; of mutual life assurance

companies whose head offices are in Australia ; of insurance companies (other than life) taking out an annual license under the Stamps Act ; and of mining companies, also such dividends derived from mining companies as may not be in excess of calls paid up during the year ; and income derived by foreign investors from the stock of Government or local bodies.

The land tax of Victoria affects an area of 7,424,542 acres of the nominal value of £11,775,026, the actual value being probably twice that amount. Private land having an area of 15,865,401 acres and land values to the extent of about £100,000,000 therefore escape taxation. The classification of land for taxation purposes has been given in a preceding paragraph, and the following table gives the number of taxpayers of each class, with the area, assessed capital value, and other particulars of taxable land.

Classification of land.	No. of Proprietors.	Area.	Capital Value.	Net taxable value allowing deduction of £2,500 for each proprietor.	Tax payable.
		acres.	£	£	£
I. (2 sheep per acre).....	95	266,765	1,104,482	866,982	10,838
II. (1½ sheep per acre)	199	683,480	2,155,673	1,658,173	20,726
III. (1 sheep per acre).....	313	2,202,547	4,240,058	3,457,558	43,220
IV. (less than 1 sheep per acre)	300	4,271,750	4,274,813	3,524,813	44,060
Total	907	7,424,542	11,775,026	9,507,526	118,844

The number of payers of income tax in Victoria is 34,513, of whom 28,464 are residents, and 6,049 are non-residents, the majority of the latter having incomes less than £200 a year. The taxpayers are divided into persons deriving income from personal exertion and income from property, and 18,536 belong to the former and 13,871 to the latter class, while 1,053 belong to both classes. The following is a statement of the taxpayers and their incomes according to the latest assessment, the tax payable being for the year 1901 :—

Incomes.	Total Taxpayers.		Taxable Incomes.		
	Personal Exertion.	Property.	From Personal Exertion.	From Property.	Total.
	No.	No.	£	£	£
Under £200	469	4,559	27,960	158,310	186,270
£201 to £1,200	18,285	9,975	3,304,560	1,050,690	4,355,250
£1,201 to £2,200	438	239	519,080	283,880	802,960
£2,201 and upwards	397	151	1,624,560	573,465	2,198,025
Total	19,589	14,924	5,476,160	2,066,345	7,542,505

The exemption of £200 is not allowed to absentees, hence the appearance in the table of incomes under that amount. This denial of the usual exemption of £200 to absentees benefits the revenue to the extent of about £11,750.

The number of absentees and the incomes were as shown in the following statement; included in the total taxpayers were seventy-nine persons obtaining income both from personal exertion and property, so that the actual number of absentee income-tax payers was 5,970 :—

Incomes.	Absentee Taxpayers.		Taxable Incomes.		
	Personal Exertion.	Property.	Personal Exertion.	Property.	Total.
	No.	No.	£	£	£
Under £200	469	4,559	27,960	158,310	186,270
£201 to £1,200	187	655	92,820	294,570	387,390
£1,201 to £2,200	28	84	32,680	96,700	129,380
£2,201 and upwards	21	46	65,580	183,315	248,895
Total... ..	705	5,344	219,040	732,895	951,935

The annual assessments, and the revenue obtained from all sources since the imposition of the income tax, were as follows :—

Year.	Tax Assessed.		Revenue.
	Personal Exertion.	Property.	
	£	£	£
1896	79,928	92,793	169,946
1897	85,977	85,133	168,320
1898	89,140	90,373	178,619
1899	89,444	83,976	172,721
1900	122,620	93,699	213,295
1901	116,326	89,005	194,141

The revenue in arrears is the difference between the total of the second and third columns and the last column.

INCOME AND DIVIDEND TAXES IN QUEENSLAND.

The Income Tax Act became law in November, 1902, and provided for the imposition of a tax on the income of all persons, except males under the age of 21 years and all females whose incomes do not respectively amount to £150. The rates levied are : (1.) If the total

income does not amount to £100, a fixed sum of 10s. (2.) If the total income exceeds £100, but does not amount to £150, a fixed sum of £1. (3.) If the total income amounts to £150 and upwards, on the first £150 a fixed sum of £1, and on income over £150, 6d. per £ from personal exertion; and 1s. per £ from produce of property. The incomes, revenues, and funds not liable to taxation are: Governor's salary and incidental expenses; revenues of local bodies; incomes of Mutual Assurance Companies; incomes of societies and institutions not carrying on business for profit or gain; funds of friendly societies and trade-unions; incomes of religious, charitable, and educational institutions; income from dividends which have paid dividend duty; income derived by absentees from debentures, stock, or treasury bills; sums expended on the maintenance of infirm, aged, and indigent relatives up to the amount of £26; premiums on life assurance up to £50; payments for superannuation or into friendly societies up to £50; calls or contributions to companies in liquidation.

Dividend tax is collected in Queensland on the dividends declared by public companies. The rate is 1s. per £ on dividends declared by all companies having their head office or chief place of business in Queensland, provided that when the operations of such a company extend beyond the state duty shall only be payable on so much of the dividends as is proportionate to the average capital employed within the state. In the case of companies which have not their head office in Queensland, and which are not companies carrying on insurance business only, the duty is payable on so much of the total dividends as is proportionate to the average amount of capital employed in the state during the year as compared with the total average capital of the company; and in the case of insurance companies duty is payable at the rate of 20s. for every £100 or part of £100 of gross premiums received. An exemption is allowed in the case of mining companies, the tax of 1s. per £ being payable only on dividends over and above those applied in repayment of the expenditure actually incurred by the company before the declaration of the first dividend in respect of labour or material employed in developing the mine, and in repayment of three-fourths of the cost of machinery erected for the raising of ores and other materials from the mine.

An additional tax, called the "Totalisator Tax," is imposed at the rate of $2\frac{1}{2}$ per cent. on all moneys received by conductors of authorised totalisators in connection with horse races.

LAND AND INCOME TAXATION IN SOUTH AUSTRALIA.

In South Australia the land tax is calculated on the unimproved value, the rate being $\frac{1}{2}$ d. in the £, with an additional tax of $\frac{1}{2}$ d. on every £ in excess of £5,000. The amount of tax payable by an absentee, who is defined as a person who has been absent from or

resident out of the state for two years, is increased by 20 per cent. The exemptions to the land tax comprise Crown lands which are not subject to any agreement for sale or right of purchase, park lands, public roads, public cemeteries, and other public reserves, and land used solely for religious or charitable purposes, or used by any institute under the provisions of the Institute Act of 1874. It is provided that an assessment shall be made every three years, and that the distribution of the tax shall be made according to the proprietary interest held in the land. It is further provided that if the payment of the tax has been in arrear for a period of two years the Commissioner may, after giving another year's notice of his intention, let the land from year to year, and after deducting from the rents the amount of tax, with costs and expenses, hold the balance for the benefit of the owner; or he may even go so far as to petition the Supreme Court for permission to sell so much of the land as may be necessary for the payment of the tax and costs and expenses.

The income tax varies according to the source whence the income is derived. On incomes derived from personal exertion the rate imposed is 4½d. in the £ up to and including £800, and 6d. for every £ in excess of that sum, with double these rates on incomes the produce of property. The sum exempted from taxation is £200, without any limitation. The exemptions from taxation comprise the incomes of municipal corporations and district councils; of companies, public bodies, and societies not carrying on business for purposes of gain to be divided amongst shareholders or members; and of friendly societies. Land and buildings occupied by the owner for residential purposes are taken as returning an income of 5 per cent. on the capital value, and the income of a company is declared to be the produce of property for taxation purposes.

The net receipts from land tax during the past ten years are shown below. The unimproved value, determined on the settlement of appeals from assessment, is at present £27,538,316, and as the receipts show, there has been no great alteration in the assessed value since the tax was first imposed.

Year.	Land Tax.	Year.	Land Tax.
	£		₹
1892	68,953	1897	78,130
1893	74,909	1898	78,534
1894	70,666	1899	78,228
1895	86,912	1900	77,931
1896	78,532	1901	78,983

The payers of income tax during 1901 number 9,632, viz., 7,922 on personal exertion, 752 on property, and 958 on both personal exertion and property. The taxable incomes from personal exertion amount to

£2,200,319, and from property, £962,104. The incomes for the three years, 1899 to 1901, were :—

Year.	Number of Taxable Incomes.	Amount of Assessment.
		£
1899	12,761	3,050,396
1900	8,528	3,384,928
1901	9,632	3,162,423

These sums do not represent the total income, being exclusive of the exemptions allowed by law to incomes under £200. For the year 1901 the total incomes subject to taxation were :—

9,632 incomes, exclusive of exemption	£3,162,423
Exemption of £200 on 8,858 incomes	1,771,600
	<u>£4,934,023</u>

Included in the taxable incomes are those of 135 persons not resident in the state, and 182 companies, both local and with head offices outside the state.

The receipts from income tax during the last ten years are shown in the following table :—

Year.	Income Tax Received.	Year.	Income Tax Received.
	£		£
1892	48,763	1897	86,476
1893	60,235	1898	82,396
1894	70,853	1899	84,184
1895	55,969	1900	92,281
1896	86,570	1901	85,746

DIVIDEND AND COMPANIES TAX IN WESTERN AUSTRALIA.

Of all the states, Western Australia was the last to introduce the system of direct taxation ; but, the field of taxation was restricted to the income and dividends of companies. The Act authorising this taxation is known as the Companies Duty Act of 1899. The main object aimed at by Parliament in sanctioning this partial taxation of incomes was to secure to the state some portion of the golden harvest of the mining fields ; and although the Act has not been sufficiently long in operation to enable a full estimate of its effects to be obtained, it is quite plain that the fears of its opponents—that it would scare capital away from the state—have not been, and are not likely to be, realised. It was originally proposed that the charges should be—5 per cent. on dividends, whether called by the name of dividends, bonuses, profits, interest, or any other term ; but on bonuses of insurance companies, 1 per cent. only. Ultimately, life insurance companies were

exempted from the operation of the Act, and fire and marine insurance companies were required to pay on their net premiums. All other incorporated companies and banks, were to pay on their declared profits, and local companies on their dividends. In view of the Act being regarded as legislation of an experimental character, it was thought desirable to limit its existence to a period of about three years. Provision was therefore made that the measure should only remain in force until the 31st December, 1902.

The net receipts from the tax on companies during the past three years were as follows :—

Year.	Amount of Tax received. £
1899.....	6,117
1900.....	83,971
1901.....	81,175

LAND AND INCOME TAXATION IN TASMANIA.

The land tax payable in Tasmania is at the rate of $\frac{1}{2}$ d. in the £ on the total capital value of land, with a deduction of $\frac{1}{8}$ d. in the £ on account of mortgages. The exemptions comprise land the property of a municipal corporation or other local authority, or of a registered friendly society; the site of a State school under the Education Department; of a public library or museum; of the Tasmanian Museum; of a hospital or benevolent asylum or other building used solely for charitable or religious purposes, or land vested in trust for public purposes; public roads; cemeteries which are not owned by joint-stock or public companies; and public reserves, gardens, and recreation grounds. Crown lands held on lease are also exempted from taxation, but if they have been purchased on credit the occupier is required to pay tax, provided one-half of the price has been paid or has become due. The owner of the land is looked to directly for the amount of the tax, unless he resides out of the state or cannot be found, in which case the occupier becomes responsible, but is allowed to deduct the sum from the amount of his rent. The Commissioner has power to let the land if the tax remains unpaid six months after it has become due, or, with the approval of a Judge of the Supreme Court, to sell it if the tax has remained unpaid for two years; and it is provided that the balance of the proceeds, after the amount of the tax, with costs and expenses, has been deducted, shall be handed over to the owner of the rented property or the original owner of the property which has been sold. As the value of the land rated is declared by law to be the sum which the fee simple would sell for, the tax is not purely a land tax, but a tax on real estate.

The Income Tax Act formerly in force in the state provided that 8d. per £ should be payable on incomes derived from personal exertion, 1s. per £ on incomes the produce of property, and 1s. per £ on the profits of public companies. The chief exemptions were the revenues of municipal corporations and other local authorities; incomes of

companies, societies, or public bodies or trusts not carrying on business with a view to a distribution of profits amongst their shareholders or members; the funds and incomes of registered friendly societies and trade unions; income accruing to foreign investors in Tasmanian Government stock; rents from land subject to land tax; incomes of banking and insurance companies which have not their head offices in the state (and which are specially taxed); and incomes of persons who had not been resident in the state for at least twelve months. It was provided that persons deriving income from sources outside the state should not be taxed in respect of the same if income tax had been paid upon the money in the state or country whence it was derived. In the case of incomes derived from personal exertion, an exemption was made of all incomes not exceeding £150; on incomes exceeding £150 and not exceeding £400, the sum of £120 escaped taxation; but all incomes exceeding £400 in amount were taxed to the full extent. Where the income was the produce of property, incomes not exceeding £100 in amount were exempt from taxation; but only £80 was exempted when the income exceeded £100 and did not exceed £400; and no exemption was allowed when the income was in excess of £400 per annum. It was also provided that, when the income was derived from both sources, no tax should be payable if the total amount exceeded £150 and the part derived from property was less than £100; but when the income from the combined sources exceeded £150 in amount and was less than £400, a certain deduction was made, provided the part derived from property was less than £100, or the part derived from personal exertion was less than £150; the deduction, however, was to be made in such a manner that the amount of tax payable should not be less than if the whole of such income had been derived either from property or from personal exertion. This Act expired on the 31st December, 1897, and, in the latter year, an Amending Act was passed, providing for the continuation of so much of the original Act as related to dividends and incomes of companies only, and further continuing Acts have been passed, the latest of which became law in 1899, extending the period to the 31st December, 1902.

The land tax of Tasmania is levied on a capital value of over 20 millions sterling, and yields from £30,000 to £40,000 a year. The estates subject to taxation in 1901 numbered 44,417. The following is the result of six years' working:—

Year.	Estates subject to Tax.	Capital Value of Land.	Amount of Tax.
	No.	£	£
1896	34,806	19,376,559	37,609
1897	34,980	19,213,591	37,226
1898	34,987	19,261,841	37,531
1899	42,739	20,020,051	38,223
1900	43,132	20,026,162	30,231
1901	44,417	20,258,393	42,209

The income tax, or more properly companies dividend tax, is levied on from thirty to forty companies, the major part of the tax being obtained from a few large mining companies. The returns for the last four years were—

Year.	Companies.	No.	Taxable Dividends.	Tax Paid.
1898	Mining	7	£ 284,850	£ 14,242
	Other	22	45,746	2,287
	Total	29	330,596	16,529
1899	Mining	16	365,437	18,272
	Other	23	45,732	2,286
	Total	39	411,169	20,558
1900	Mining	13	505,123	25,256
	Other	27	47,983	2,399
	Total	40	553,106	27,655
1901	Mining	9	302,823	15,141
	Other	25	47,934	2,397
	Total	34	350,757	17,538

LAND AND INCOME TAXATION IN NEW ZEALAND.

In New Zealand the Land and Income Tax Assessment Act imposes a tax upon incomes and an ordinary tax upon land and mortgages, the amount of which it is provided shall be fixed annually by a Rating Act; and also an additional graduated tax upon the unimproved value of land, the rates of which are fixed by the Assessment Act. The rate of the ordinary tax upon land and mortgages at present stands at 1d. in the £ of capital value. It is provided that the owner of any land shall pay the tax on the actual value of his land, and also on the value of any mortgages which he may hold over other land, less the value of improvements, and of any mortgage which may be owing on his land. If, then, the net value does not exceed £1,500, an exemption of £500 is allowed, but for every £2 by which the net value exceeds the sum of £1,500 the exemption of £500 is reduced by £1, so that when the value reaches the sum of £2,500 there is no exemption at all. In the case of land owned and mortgages held by persons incapacitated by age, ill-health, or other cause from earning further income from business or employment, the exemption of £500 is raised to £2,000 if the annual income produced by the land and mortgages does not amount to a larger sum than £200. Mortgages are treated as land, and the holder is allowed the exemption of £500 from the ordinary tax.

The graduated land tax is imposed on all land possessing an unimproved value of £5,000 and upwards, an important difference between the two taxes being that the mortgagee escapes the graduated tax, and no deduction is allowed to the mortgagor in consideration of any sum which may be advanced on the property. It is provided that on an unimproved value of £5,000 and under £10,000, $\frac{1}{8}$ d. per £ shall be payable; on £10,000 and under £15,000, $\frac{1}{4}$ d.; £15,000 and under £20,000, $\frac{3}{8}$ d.; £20,000 and under £25,000, $\frac{1}{2}$ d.; £25,000 and under £30,000, $\frac{5}{8}$ d.; £30,000 and under £40,000, $\frac{3}{4}$ d.; £40,000 and under £50,000, $\frac{7}{8}$ d.; £50,000 and under £70,000, 1d.; £70,000 and under £90,000, $1\frac{1}{8}$ d.; £90,000 and under £110,000, $1\frac{1}{4}$ d.; £110,000 and under £130,000, $1\frac{3}{8}$ d.; £130,000 and under £150,000, $1\frac{1}{2}$ d.; £150,000 and under £170,000, $1\frac{5}{8}$ d.; £170,000 and under £190,000, $1\frac{3}{4}$ d.; £190,000 and under £210,000, $1\frac{7}{8}$ d.; and £210,000 and over, 2d. per £.; and it is further provided that an absentee, who is declared to be a person who has been absent from or resident out of the colony for a period of three years or more, shall pay a graduated tax of 20 per cent. additional to the schedule rates.

It is provided that returns of land and mortgages shall be made biennially. Purchasers of Crown lands on credit are liable to taxation, and the owner of a leasehold interest in land is liable to taxation in respect of the value of such interest. The exemptions comprise Crown lands; lands vested in the Railway Commissioners and in local governing bodies; land used solely in connection with a place of worship or a place of residence for the clergy of any religious body, or in connection with public schools established under the Education Act of 1877, or with any other school not carried on exclusively for gain or profit, but the maximum area of land exempted for the purposes of any school carried on for profit is 15 acres; the site of a university or college, or school incorporated by any Act or Ordinance, or the site of a public library, athenæum, mechanics' institute, or school of mines; a public cemetery or burial-ground; the ground or place of meeting of any agricultural society, provided it be the property of such society; the place of meeting of a friendly society or Masonic lodge, or of a registered building society; land used for the purposes of public charitable institutions constituted under the Hospitals and Charitable Institutions Act, and of other charitable institutions not carried on for gain or profit; public gardens, domains, or recreation or other public reserves not occupied by a tenant, and all public roads and streets; land owned and occupied by Maoris, and not leased to or occupied by any person other than the Maori owner; and any public railway, including the land occupied and used as permanent way and for yards, stations, and sheds, and all buildings used for the purposes of railway traffic only. Further exemptions comprise all land owned and mortgages held by any friendly society within the meaning of the Act; all land owned and mortgages held by any savings bank constituted under the Savings Bank Act of 1858; all land owned and mortgages held by the Commissioners of Sinking Funds

under the Public Debts Sinking Funds Act of 1868, or by the trustees of any local authority whose revenues are exempt from taxation ; and all mortgages held by or on behalf of any charitable institution.

Still another exemption is provided for, namely, all land owned and mortgages held by or on behalf of any religious body, the proceeds of which land and mortgages are devoted to the support of aged or infirm ministers, or of widows or orphan children of ministers. It is also declared that native land occupied by any other person than the Maori owner shall be subject to one-half of the ordinary land tax in respect of the Maori landowner's interest therein, while being exempt from the graduated tax, and that all mortgages held by or in trust for Maoris shall be liable to the payment of ordinary land tax. Mortgages held by banking companies are reached by the income tax ; and land owned and mortgages held by any registered building society are exempted from taxation, the profits derived by members being subject to income tax. In the event of land being undervalued, the Commissioner may give notice to the owner, within twelve months of the signing of the assessment roll, that he must increase the value of the land to the sum placed upon it by the taxation authorities. If the owner is not willing to increase the value to the sum notified by the Commissioner, he may appeal to the Resident Magistrate to assess the value ; but should he neither adopt this course nor consent to the Commissioner's valuation within thirty days, the Commissioner may recommend that the Government shall purchase the land at the returned value plus 10 per cent. On the other hand, if the owner is not satisfied with the value at which the land has been assessed, whether by the Board of Review or not, he may call upon the Commissioner to reduce the valuation to a certain sum or to purchase the land at this price.

The income tax is payable upon income derived from employment and from business, including investments other than those in mortgages of land, upon which ordinary land tax is levied. An exemption of £300 is allowed to every person domiciled in the colony, this concession being withheld from absentees ; but no exemption is allowed to a public company. The rate of tax is 6d. in the £ on the first taxable £1,000, and 1s. on every additional £, except in the case of public companies, which pay 1s. per £ on the whole sum. The income of public companies is declared to be the amount of dividends earned, sums carried to reserve fund, and any other profits made or income derived by such companies. To this provision exception is made in the case of banking companies, insurance companies, shipping companies, and loan, building, and investment companies. It is provided that every banking company shall be assessed for income tax at the rate of 7s. 6d. per £100 of the average of the total liabilities and assets for the four quarters of the preceding year. The shareholders of loan, building, and investment companies are personally taxed upon the amount of income derived from such societies. The regulations declare that a person or company engaged in business as the owner or charterer of shipping shall be

assessed upon the income derived from such business carried on in New Zealand and with places beyond the colony; and that when the head office of a person or company engaged in such business is outside the colony the agent shall be liable to the payment of income tax of 5 per cent. of the receipts from the carriage of passengers, goods, and live stock shipped at New Zealand ports. It is also provided by these regulations that the income of every insurance company shall be taken as the income derived from business carried on in the colony, and from investments within the colony other than those in land and in mortgages of land. The exemptions to the income tax comprise the revenues of any county council, borough council, town board, road board, harbour board, public university, public school, education board, school commissioners, licensing committee, and every other local authority receiving revenue of any kind for the purposes of or in relation to local self-government; the income of friendly societies and building societies, and of all public bodies and societies not carrying on business for purposes of gain to be divided amongst the shareholders or members; and income derived by the owner or occupier from any land on which land tax is payable, and from mortgages of such land. The income of any savings bank constituted under the Savings Bank Act of 1858, and the income of any public charitable institution, are also exempted. Also, when a person occupies for purposes of business or employment land on which he pays land tax, he is allowed to deduct from his income a sum equal to 5 per cent. on the amount on which he is liable to pay land tax. It is imperative that a person who does not reside permanently in the colony, and who offers or exposes goods for sale or disposition by sample or otherwise, shall take out an annual license, the fee for which is fixed by regulation at £50.

There are about 110,000 land owners in New Zealand and of these 17,500 pay tax, the remainder being exempted from one cause or another. The land tax yielded £313,000 for the year ended 31st March, 1902, of which £234,000 came from ordinary land tax and £79,000 from graduated tax, the latter amount including £6,000 collected from absentees. The total value of land subject to taxation is about £30,175,000 out of a total unimproved value of £61,466,000. The following is a statement of the tax levied during the past five years :—

Year ended 31st March.	Ordinary Land Tax.	Graduated Land Tax.	Total Amount of Land Tax.
	£	£	£
1898	196,000	73,000	269,000
1899	215,000	83,000	298,000
1900	214,000	80,000	294,000
1901	222,000	72,000	294,000
1902	234,000	79,000	313,000

The income tax returns have shown great expansion during the last two years; indeed, the yield shows substantial increases in almost every year since the first imposition of the tax. The revenue obtained during each of the last ten years was as follows:—

Year ended 31st March.	Income Tax Paid.	Year ended 31st March.	Income Tax Paid.
	£		£
1893	67,367	1898	115,210
1894	75,238	1899	115,480
1895	89,891	1900	128,721
1896	92,778	1901	173,809
1897	105,504	1902	179,397

The number of taxpayers for 1902 was 6,556, including 620 absentees and 538 companies. The total incomes assessed for taxation amounted to £6,105,464, but the taxable amount was reduced to £4,486,064 by exemptions. The incomes of companies are assessed at £1,989,734, and of absentees £153,218.

REVENUE FROM DIRECT TAXATION.

The following table shows the amount of revenue received from the various sources of direct taxation during the year 1901-2:—

State.	Stamp Duties.		Land Tax.	Income Tax.	Dividend Tax.	Total.
	Probate.	Other.				
	£	£	£	£	£	£
New South Wales	257,727	234,309	301,981	190,315	.....	984,352
Victoria	217,796	164,569	97,862	220,629	.....	700,856
Queensland	146,513	.....	.....	.....	73,278	219,791
South Australia	61,106	29,776	82,738	74,506	.....	248,126
Western Australia	13,624	44,433	.....	.....	785,890	143,947
Tasmania	8,629	23,455	42,209	17,538	72,665	94,496
Commonwealth	1,201,937	.....	524,790	502,988	161,833	2,391,548
New Zealand	110,621	218,876	312,836	179,397	.....	821,730
Australasia	1,531,434	.....	837,626	682,385	161,833	3,213,278

* Includes £7,073 from Totalisator Tax. † From Companies' Tax.

LAND REVENUE.

The practice of treating as ordinary revenue money derived from the sale and occupation of Crown lands obtains in all the states, and the money so raised forms one of the largest items of their income. The propriety of so doing is open to grave doubt, but the argument used in

its justification is that the sums so obtained have enabled the Government either to construct works, which both enhance the value of the remaining public lands and facilitate settlement, or to endow municipalities, and thus enable them to carry out local works. The revenue from land sales is declining year by year, both absolutely and as compared with population. In New South Wales and South Australia the falling-off has been most noticeable; in the former state the revenue from this source is now some £1,214,000 less than was the case in 1881, while in South Australia the revenue from land sales is only slightly over £41,000.

Adopting the division of land revenue into receipts from sales and receipts from occupation, the following table shows the income for 1881:—

State.	Total Land Revenue, 1881.			Land Revenue per head.		
	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales.....	2,483,338	337,651	2,820,989	3 4 11	0 8 10	3 13 9
Victoria	701,276	135,194	836,470	0 16 4	0 3 2	0 19 6
Queensland	435,664	186,893	622,557	2 0 6	0 17 5	2 17 11
South Australia	651,914	97,042	748,956	2 8 9	0 7 3	2 16 0
Western Australia	5,750	34,695	40,445	0 3 11	1 3 6	1 7 5
Tasmania.....	37,269	39,487	76,756	0 6 5	0 6 9	0 13 2
Commonwealth	4,315,211	830,962	5,146,173	1 17 10	0 7 3	2 5 1
New Zealand	376,461	174,479	550,940	0 15 4	0 7 1	1 2 5
Australasia	4,691,672	1,005,441	5,697,113	1 14 2	0 7 4	2 1 6

Compared with 1881, the land revenue for 1901-2 shows a large decline, amounting to £1,790,399 for the states included in the Commonwealth, and to £2,091,720 for the whole of Australasia. The falling-off is found entirely in the amount of revenue from sales, that derived from rents having largely increased. However, general remarks applicable to all the states can scarcely be made. New South Wales obtained £2,483,338 from land sales in 1881, out of a total of £4,691,672 for all the states, or more than one-half; while from occupation its revenue was £337,651 out of £1,005,441, or little more than one-third. In 1901-2 the revenue of the state from sales amounted to £1,269,559—still a large amount, but £1,213,779 short of the receipts of 1881. In regard to occupation, a different condition of things is disclosed. The receipts in New South Wales during 1901-2 totalled £732,015, or an increase of £394,364 as compared with 1881, and amounting to 48·8 per cent. of the total of the states comprising the

Commonwealth, or to 43·6 per cent. of the total for Australasia. The following are the figures for 1901-2 :—

State.	Total Land Revenue, 1901-2.			Land Revenue per head.		
	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.	From Auction and other classes of sales.	Occupation, &c., of Crown lands.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	1,269,559	732,015	2,001,574	0 18 5	0 10 7	1 9 0
Victoria	255,823	98,372	354,195	0 4 3	0 1 7	0 5 10
Queensland	219,310	361,323	580,633	0 8 7	0 14 2	1 2 9
South Australia	41,130	115,783	156,913	0 2 3	0 6 4	0 8 7
Western Australia	36,723	151,766	188,489	0 3 9	0 15 7	0 19 4
Tasmania	35,698	38,272	73,970	0 4 1	0 4 5	0 8 6
Commonwealth	1,858,243	1,497,531	3,355,774	0 9 8	0 7 10	0 17 6
New Zealand	68,011	181,608	249,619	0 1 9	0 4 7	0 6 4
Australasia	1,926,254	1,679,139	3,605,393	0 8 4	0 7 3	0 15 7

In all the states, New South Wales and Victoria excepted, a general sinking fund is established to assist in the redemption of public loans on maturity, and in New South Wales and Victoria special sinking funds have been inaugurated in connection with portions of the local funded stocks. The desirability of establishing a general sinking fund is on all sides admitted, and a portion of the proceeds of land sales could with advantage be set apart from the general revenue and devoted to this purpose. Victoria deals with a portion of the proceeds from the sale of Crown lands apart from the general revenue, and at the close of the financial year 1890-1 a sum of £578,740 derived from that source had been placed to the credit of the Railway Construction Account; while since that year various sums amounting to £678,532 have been appropriated on account of the "Land Sales by Auction Fund" for expenditure on public works, and a total of £298,686 has been received from sales, &c., leaving a debit balance of £379,846 on the 30th June, 1901.

HEADS OF EXPENDITURE.

The amount disbursed by the Government of New South Wales is far larger than that expended by any other state of the group; in the last financial year it exceeded the expenditure of Victoria by £3,612,324, was nearly twice as great as that of New Zealand, and was over one million more than the united expenditure of Queensland, South Australia, and Western Australia. This is chiefly owing to the absence of a complete system of local government in New South Wales and the system of centralisation already referred to. Below will be found a

statement of the expenditure of each state during the financial year 1901-2 :—

State.	Railways and Tramways.	Posts and Telegraphs.	Public Instruction.	Interest and charges on Public Debt.	All other Services.	Total Expenditure.
	£	£	£	£	£	£
New South Wales	2,806,161	.....	852,200	2,773,300	4,588,444	11,020,105
Victoria	2,030,493	.....	647,806	2,043,815	2,685,667	7,407,781
Queensland	990,751	.....	287,375	1,480,376	1,208,499	3,967,001
South Australia	731,072	.....	159,899	1,055,944	877,163	2,823,578
Western Australia	1,269,619	.....	102,359	602,138	1,177,311	3,151,427
Tasmania	173,422	*7,568	57,106	327,822	304,524	870,442
Commonwealth	8,001,518	*7,568	2,106,245	8,283,395	10,841,608	29,240,334
New Zealand	1,280,997	463,817	539,817	1,822,939	1,807,845	5,014,915
Australasia	9,282,515	471,385	2,645,562	10,106,334	12,649,453	35,155,249

* Two months only.

It will be seen from the foregoing statement that for the states of the Commonwealth 27·4 per cent. of the whole expenditure is for working the railways—a service not undertaken by the Government in the United Kingdom and the United States. Public instruction accounts for 7·2 per cent., and interest on the public debt, 28·3 per cent. For the whole of Australasia the corresponding percentages are :—Railways, 26·4 ; public instruction, 7·5 ; and interest on the public debt, 28·7 per cent.

Adopting the classification of expenditure used in the preceding table, the amounts per inhabitant of each province are given below. It may be here mentioned that in New South Wales, and to some extent in South Australia and Western Australia, the tramways are the property of the State, and are under the same management as the railways, with which they are included in the various statements in this sub-chapter relating to revenue and expenditure :—

State.	Railways and Tramways.	Posts and Telegraphs.	Public Instruction.	Interest and charges on Public Debt.	All other Services.	Total Expenditure.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales..	2 0 8	.....	0 12 4	2 0 3	3 6 7	7 19 10
Victoria	1 13 7	.....	0 10 9	1 13 10	2 4 5	6 2 7
Queensland	1 18 10	.....	0 11 3	2 18 0	2 7 4	7 15 5
South Australia....	2 0 1	.....	0 8 9	2 17 11	2 8 1	7 14 10
Western Australia..	6 10 3	.....	0 10 6	3 1 10	6 0 10	16 3 5
Tasmania	1 0 0	*0 0 10	0 6 7	1 17 9	1 15 1	5 0 3
Commonwealth	2 1 9	.....	0 11 0	2 3 3	2 16 7	7 12 7
New Zealand	1 12 6	0 11 9	0 13 8	2 6 4	2 5 11	7 10 2
Australasia.....	2 0 2	0 2 1	0 11 5	2 3 9	2 14 7	7 12 0

* Two months only.

The most remarkable feature in the general expenditure of the Australasian states is the largeness of the amount required to pay interest and charges on the public debt, both in regard to the rate per head and the proportion of total revenue thus hypothecated. The proportion for the states of the Commonwealth is 28·33 per cent. of the total expenditure, or £2 3s. 3d. per head of population, and for the whole of Australasia 28·75 per cent., or £2 3s. 9d. per head. The actual expenditure for each state during 1901–2 was as shown below. The amounts given are actual payments made during the financial year, and do not represent the interest liabilities of that period, the amounts of which will be found on page 1020 :—

State.	Interest and Charges on Public Debt.		
	Total.	Per head of Population.	Proportion of Total Expenditure.
	£	£ s. d.	per cent.
New South Wales	2,773,300	2 0 3	25·16
Victoria	2,043,815	1 13 10	27·59
Queensland	1,480,376	2 18 0	37·32
South Australia	1,055,944	2 17 11	37·40
Western Australia	602,138	3 1 10	19·11
Tasmania	327,822	1 17 9	37·66
Commonwealth	8,283,395	2 3 3	28·33
New Zealand	1,822,939	2 6 4	30·82
Australasia	10,106,334	2 3 9	28·75

A casual glance at the figures quoted will lend colour to the suggestion sometimes hazarded that the states are too rapidly mortgaging their resources, and that the expense of the public debt will prove a greater burthen than can easily be borne. However true this may be so far as any individual state is concerned, it is certainly erroneous as regards the whole of Australasia. Out of the sum of £8,283,395 required to pay interest and charges on the public debt by the states of the Commonwealth during 1901–2, £3,804,504 was directly recouped by the net revenue from public railways, while water supply and sewerage yielded a further sum of £371,457 making a total of £4,175,961. For the whole of Australasia, the sum required to pay interest and charges on the public debt was £10,106,334, but of this £4,763,887 was directly recouped, viz., £4,392,996 by the net revenue from railways, and £370,891 by water supply and sewerage. Besides this, there is a large indirect revenue obtained by each of the states from the opening-up of its public lands, and from the construction of breakwaters, wharves, bridges, and other works of public utility. But even these advantages might have been bought at too high a price if production had not

correspondingly advanced. Fortunately such has been the case, as will be seen from the chapters in this volume which deal with the leading items of Australasian production.

ADJUSTED REVENUE AND EXPENDITURE.

The form in which the public accounts of the states are presented has led to a great deal of misconception regarding the actual requirements of the various Governments for public purposes. Nor has it been possible to do other than follow that form in the foregoing pages, as otherwise the figures quoted would differ from the various Treasury statements, and add another element of confusion; nevertheless, it would be well before closing the remarks on this branch of public finance to make a separation of the items of revenue and expenditure according to the principles which should govern the presentation of the public accounts. This is effected by treating the services which are generally regarded as outside the functions of the central Government, namely, railways and tramways, and water supply and sewerage, as matters apart from the general receipts and expenditure, and only crediting the State with the surplus from, or debiting it with the cost of these services, after deducting working expenses and making allowance for the estimated interest on the invested capital. Posts and telegraphs have not been excluded in the case of New Zealand, but the exclusion has been made from the returns of the six states of the Commonwealth as the administration is now with the Federal Government. The adjusted revenue for the year 1901-2 will be found below :—

State.	Revenue, excluding Services.*	Net Revenue from Services.*	Total adjusted Revenue.	Per head of Population.
	£	£	£	£ s. d.
New South Wales.....	6,306,138	.....	6,306,138	4 11 5
Victoria	3,605,617	.....	3,605,617	2 19 8
Queensland	2,218,233	.....	2,218,233	4 6 11
South Australia.....	1,261,340	.....	1,261,340	3 9 2
Western Australia.....	1,850,515	..	1,850,515	9 9 11
Tasmania	619,166	.....	619,166	3 11 4
Commonwealth	15,861,009	.....	15,861,009	4 2 9
New Zealand	4,279,378	.....	4,279,378	5 8 8
Australasia.....	20,140,387	.....	20,140,387	4 7 2

* Railways, tramways, water supply and sewerage.

It will be seen that none of the states obtained a revenue from its services during 1901-2, after working expenses and interest on capital had been allowed for, owing chiefly to the decrease in the revenue of most of the states, due to the prolonged drought. The next table shows the adjusted expenditure:—

State.	Expenditure, excluding Services.*	Net Expenditure on Services.*	Total adjusted Expenditure.	Per head of Population.
	£	£	£	£ s. d.
New South Wales	6,118,610	200,277	6,318,887	4 11 7
Victoria	3,702,356	304,709	4,007,065	3 6 4
Queensland	2,124,768	525,404	2,650,172	5 3 10
South Australia	1,362,886	244,600	1,607,486	4 8 2
Western Australia	1,549,930	97,889	1,647,819	8 9 1
Tasmania	550,698	112,747	663,445	3 16 5
Commonwealth	15,409,248	1,485,626	16,894,874	4 8 2
New Zealand	3,908,143	133,311	4,041,454	5 2 7
Australasia	19,317,391	1,618,937	20,936,328	4 10 8

* Railways, tramways, water supply and sewerage.

The figures just given show that the actual cost of government is materially less in the states than would appear from the ordinary statement of revenue and expenditure.

POSITION OF REVENUE ACCOUNTS.

The following table has been compiled with the view of showing the position of the Revenue Account of each state at the close of the last financial year. It will be seen that five of the states have large overdrafts, partly cash and partly in the form of Treasury bills, and that to establish the necessary equilibrium between income and outgo a restricted expenditure by future administrations will be absolutely necessary. For Tasmania the figures refer to the end of the year 1901; for New Zealand, to the 31st March, 1902; and for the other five states, to the 30th June, 1902. The figures given in the last column of the table represent the total debit balances at these dates. It is very necessary

that this fact should be borne in mind, as it often happens that the official statements of the states show only the cash overdraft, the amount represented by outstanding Treasury bills being omitted from consideration:—

State.	Cr. Balance.	Dr. Balance.		
		Overdraft liquidated by Treasury Bills.	Cash Overdraft.	Total Dr. Balance.
	£	£	£	£
New South Wales.....	.....	2,477,626	236,781	2,714,407
Victoria .....	.....	150,000	2,463,377	2,613,377
Queensland.....	.....	529,189	431,940	961,129
South Australia.....	.....	849,500	353,789	1,203,289
Western Australia	123,185	.....	.....	.....
Tasmania.....	.....	.....	96,835	96,835
Commonwealth	123,185	4,006,315	3,582,722	7,589,037
New Zealand	543,852	.....	.....	.....
Australasia.....	667,037	4,006,315	3,582,722	7,589,037

It will be seen that for the state of New South Wales the table shows an overdraft of £2,477,626 which has been liquidated by Treasury bills, and a cash overdraft on 30th June, 1902, of £236,781, inclusive of £152,187 brought forward from the previous year. In reference to the South Australian cash overdraft of £353,789, it should be pointed out that £239,174 represents the debit balance for South Australia proper, and £114,615 for the Northern Territory, while the overdraft liquidated by Treasury bills belongs entirely to the Northern Territory. It is the intention of the Government to issue Treasury bills to the amount of £239,000 to liquidate portion of the deficiency for the state proper.

The condition of the revenue accounts of New South Wales, Victoria, and New Zealand needs further explanation. In New South Wales land was resumed in 1889 for the purpose of facilitating certain improvements in connection with a street facing the General Post-office, Sydney, and it was determined that the sum paid for resumption should not be treated as a matter of ordinary expenditure, but be held in suspense pending the sale of the land resumed, or so much of it as was not needed for the formation of the Post-office street. Another resumption of land by the Government of New South Wales was authorised by the Centenary Celebration Act of 1887, which provided for the acquisition of a large area of land, close to Sydney, for the formation of a public park to

commemorate the centenary of the state. Of the area so acquired, 640 acres were to be set aside for the park, and the remainder was to be sold, and the proceeds placed against the expenditure. So far no sales have been effected, and in 1894 the payments on account of the formation of the park were transferred from the Consolidated Revenue Fund Account to a special Suspense Account. On the 30th June, 1901, the debit balance of the Centennial Park Account was £228,417, and of the General Post-office New Street Resumption Account, £376,762, neither of which amounts is included in the above table. Legislation has been passed, and Treasury bills have been issued covering the liability under the Suspense Accounts referred to, and the replacing of £150,000 to the credit of the sinking fund for Railway Loan, 53 Vic. No. 24, which was applied to the redemption of the balance of Railway Loan, 31 Vic. No. 11. The authority was for the issue of Treasury bills to the amount of £755,179, which will cover all deficiencies to 30th June, 1902, with the exception of the debit balance of the Consolidated Revenue Fund. Provision is made that on the 31st December, 1902, and on the same day in each year thereafter, until all the payments provided for have been made, the sum of £100,000 is to be paid from the Consolidated Revenue Fund to the credit of the respective accounts mentioned. Such annual sums are in the first place to be paid to the credit of a special Trust Account. In addition to the annual sum of £100,000, the net proceeds of the sales of the unsold portions of the land resumed under the General Post Office (Approaches Improvement) Act of 1889, and the net proceeds of the sale of the unsold portions of the land referred to in the Centenary Celebration Act of 1887 (Centennial Park), are to be paid to the credit of the account. The moneys at credit of such account are to be applied to the purpose of redeeming the bills issued under the Treasury Bills Deficiency Acts of 1901 and 1902, and when all such bills have been redeemed the account is to be closed. The appropriation of £100,000 is, however, to continue to redeem bills issued under the Deficiency Act of 1889, and on the redemption of these bills, the same annual appropriation is to be applied to redeem bills issued under the Deficiency Act of 1895. When this has been effected the appropriation is to lapse. The annual appropriation of £150,000 under the Deficiency Act of 1889 continues, so that the total annual appropriation for the liquidation of the unfunded debt for revenue purposes will be £250,000.

In Victoria certain public works to the amount of £678,624 were undertaken on the understanding that the cost should be defrayed from the proceeds of the sale of certain lands specifically set apart for the purpose. These works have been constructed, but the sales have fallen short to the extent of £379,913, and this sum has been placed to a Suspense Account, which is likewise excluded from the debit balance given above. In the credit balance of New Zealand, shown on page 1014, allowance has been made for the transactions of several Suspense Accounts, viz., the State Forests Account, the Local Bodies Account,

and the Deposits Account ; but in order to place the revenue and expenditure of that colony on the same footing as those of the other provinces, the operations on the accounts referred to have not been taken into consideration in the table on page 983. The credit balance of the Consolidated Revenue Fund proper amounted to £270,489.

The practice of issuing Treasury bills for the purpose of liquidating an overdraft, which is illustrated by the above table, obtains in all the states, the bills being in this respect somewhat like the exchequer bills issued by the British Treasury. This, however, is the only point of resemblance between the two. The British exchequer bills bear interest at a rate which is fixed from year to year, and at the end of every twelve months the holder has the option of retaining them or presenting them at the Treasury for payment. They are, therefore, readily saleable, and are used with great freedom in commercial transactions, for, as will be seen, they combine the two advantages of ready money and money bearing interest. The Treasury bills of these states, on the other hand, are only payable at the Treasury on the expiry of the period for which they are issued, and they carry interest at a fixed rate during the whole term of currency ; consequently they are not used to any extent in commerce. The nearest approach to the British system seems to prevail in New Zealand, where Treasury bills to the amount of £700,000 were outstanding at the close of the financial year, but are not included in the public debt. With the exception of these New Zealand bills, Treasury bills are regarded as unfunded or floating debt, and until wiped off form part of the public debt.

TRUST FUNDS.

It may be pointed out here that all the Governments in Australasia hold sums in trust, either directly or indirectly. In some instances these sums are considerable, and are found extremely useful in adjusting the finances, forming a strong reserve which a Government is able to use in tiding over temporary difficulties. It is, however, very questionable whether the existence of a large balance, out of which a necessitous Treasurer can make advances to an overdrawn Revenue or Loans Account, is desirable. In past years it has led to much extravagance that a Treasurer forced to rely on the legitimate revenue of the country would have been compelled to avoid. Several states have seen this, and in Victoria, New Zealand, and South Australia, public trustees have been appointed to control Trust Funds in the hands of the Government ; but in the other states these funds are directly subject to the Treasury. The following are the balances of the Trust Funds at the close of the financial year, exclusive of the Funds now dealt with by the Federal Government. The figures for New South Wales, Queensland, and South Australia, are for the year ended 30th June, 1902 ; for Victoria, and Western Australia, for the year ended 30th June, 1901 ; for

Tasmania, for the year ended 31st December, 1901; and for New Zealand, for the year ended 31st March, 1902 :—

State.	Invested.	Uninvested.	Total.
	£	£	£
New South Wales.....	6,560,340	5,160,549	11,720,889
Victoria	5,153,183	3,984,829	9,138,012
Queensland	3,086,513	976,514	4,063,027
South Australia	56,715	384,806	441,521
Western Australia	1,736,628	420,392	2,157,020
Tasmania	536,612	23,210	559,822
Commonwealth	17,129,991	10,950,300	28,080,291
New Zealand	8,073,464	961,137	9,034,601
Australasia	25,203,455	11,911,437	37,114,892

The New Zealand figures include £2,467,614 in the hands of the Public Trustees.

GROWTH OF PUBLIC DEBT.

The practice of raising money for State purposes by means of public loans was begun in 1842, when New South Wales issued debentures redeemable in two years and bearing interest at the rate of 8 per cent. per annum. The sum raised—£45,900—was devoted to immigration purposes. This, as well as the succeeding loans, nine in number, raised prior to 1855, was obtained locally; in the year named, however, New South Wales placed on the London market the first instalment of a 5 per cent. loan for £683,300, which was the first external loan raised, and may be rightly said to mark the commencement of the present Australasian indebtedness.

So far as most of the states are concerned, their public debts date from about the time of their assuming the control of their own affairs; but Western Australia, which obtained responsible government in 1890, incurred liabilities in London as far back as 1872. In the case of that state, however, the granting of Parliamentary government was unduly delayed. The following table is interesting as showing the liabilities of each of the provinces at the date of its taking charge of its own affairs:—

State.	Date of obtaining Responsible Government.	Amount of Debt Liability at that date.
		£
New South Wales	1855	1,366,770
Victoria	1855	480,000
Queensland	1859	Nil
South Australia	1856	294,900
Western Australia	1890	1,367,444
Tasmania	1855	Nil
New Zealand	1856	Nil

No feature of Australasian finance is so astonishing as the growth of the public indebtedness, and this fact has formed the gravamen of the many indictments which have been urged against the states during recent years. The debts have undoubtedly grown at a much more rapid pace than the population; but as the states were in an entirely undeveloped state when public borrowing first came into favour, the more rapid growth of their indebtedness as compared with the population was in a sense the corollary of the position taken up by the various Governments—that the State should reserve to itself the construction of railways and similar undertakings which in other countries are prosecuted by private enterprise. Even with this explanation, however, the figures in the following statement are sufficiently striking:—

State.	1861.	1871.	1881.	1891.	1901-2.
	£	£	£	£	£
New South Wales	4,017,630	10,614,330	16,924,019	52,950,733	71,592,485
Victoria	6,345,060	11,994,800	22,426,502	43,638,897	53,547,659
Queensland	70,000	4,047,850	13,245,150	29,457,134	39,338,427
South Australia ...	866,500	2,167,700	11,196,800	20,347,125	27,272,545
Western Australia	1,750	Nil	511,000	1,613,594	14,942,310
Tasmania	Nil	1,315,200	2,003,000	7,110,290	9,095,735
Commonwealth .	11,300,940	30,139,880	66,306,471	155,117,773	215,789,161
New Zealand	600,761	8,900,991	29,659,111	38,844,914	52,966,447
Australasia	11,901,701	39,040,871	95,965,582	193,962,687	268,755,608

The Queensland figures are exclusive of £1,079,750 for Savings Bank Inscribed Stock.

The amounts for the year 1901-2 represent both funded and unfunded debt. In round figures the increase for the states of the Commonwealth from 1861 to 1871 was 19 millions; from 1871 to 1881, 36 millions; from 1881 to 1891, 89 millions; and from 1891 to 1901-2, 60 millions; or for the whole of Australasia, from 1861 to 1871, 27 millions; from 1871 to 1881, 57 millions; from 1881 to 1891, 98 millions; and from 1891 to 1901-2, 75 millions. It must be pointed out that the figures in the last column show the public indebtedness as represented by outstanding debentures or stock; but the real sum is less by the amount of sinking funds in the case of all the states viz., New South Wales, £655,796; Victoria, £429,138; Queensland, £9,079; South Australia, £92,985; Western Australia, £486,737; Tasmania, £186,446; and New Zealand, £1,128,816. In New South Wales, sinking funds have been established in connection with some of the recent loans for the purpose of extinguishing portions of the expenditure on works of an unproductive character, the total amount accrued to 30th June, 1902, being £205,796. There are also annual

payments on account of one of the railway loans and the Treasury bills in aid of revenue, but the instalments in the latter case are deducted annually, and the net indebtedness is shown in the statement of the public debt, while for the redemption of the railway loan an amount of £450,000 was in hand at the same date, inclusive of £150,000 from proceeds of Treasury Bills.

The figures showing the total amount of the debt of each state would be incomplete without corresponding information respecting the debt per head of population. In 1861 the public debt of the states included in the Commonwealth stood at £9 13s. 8d. per inhabitant; in 1871, at £17 13s. 11d.; in 1881, at £28 10s. 9d.; in 1891, at £47 14s. 1d.; while in 1901-2 it was £55 17s. 4d. The corresponding figures for Australasia were: in 1861, £9 8s.; in 1871, £19 16s. 4d.; in 1881, £34 0s. 2d.; in 1891, £49 18s. 4d.; and in 1901-2, £57 15s. 11d. For each state the figures are as follows:—

State.	1861.	1871.	1881.	1891.	1901-2.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	11 4 5	20 10 0	21 14 8	45 10 8	51 6 0
Victoria	11 14 3	16 0 11	25 9 7	37 14 4	44 7 6
Queensland	2 0 9	32 6 11	58 7 2	73 12 5	76 8 6
South Australia ...	6 16 8	11 13 7	39 2 1	62 9 11	75 2 10
Western Australia	0 2 3	Nil.	17 0 6	30 5 8	71 14 6
Tasmania	Nil.	12 18 5	16 16 10	46 11 10	52 4 1
Commonwealth .	9 13 8	17 13 11	28 10 9	47 14 1	55 17 4
New Zealand	6 1 4	33 6 9	59 4 2	61 5 3	67 4 11
Australasia	9 8 0	19 16 4	34 0 2	49 18 4	57 15 11

The figures in the subsequent tables relating to the Public Debt differ slightly from those shown in the previous pages, owing to the fact that complete details of the Victorian debt on the 30th June, 1902, are not yet available, and consequently the amount shown for Victoria represents the debt on the 30th June, 1901, as shown in the report of the Commissioners of Audit.

Of the £215,312,777 which constituted the debt of the states of the Commonwealth in 1901-2, £207,013,151 represented funded debt raised either as debentures or as funded or inscribed stock, and £8,299,626 unfunded or floating debt. For the whole of Australasia, the total debt of £268,279,224 was divided into £259,979,598 of funded debt

and £8,299,626 of unfunded debt. The particulars for each state will be found below :—

State.	Date.	Debenture Bonds.	Inscribed and Funded Stock.	Treasury Bills.		Total.
				For Works.	In aid of Revenue.	
New South Wales..	30 June, 1902	£8,777,250	£7,331,109	£13,006,500	£2,477,626	£71,592,485
Victoria	30 June, 1901	20,266,795	31,369,480	1,185,000	250,000	53,071,275
Queensland	30 June, 1902	13,969,180	24,838,247	.....	531,000	39,338,427
South Australia ..	30 June, 1902	9,351,500	17,071,545	.....	849,500	27,272,545
Western Australia..	30 June, 1902	276,000	14,666,310	.....	.....	14,942,310
Tasmania	31 Dec., 1901	3,133,500	5,962,235	.....	.....	9,095,735
Commonwealth..	.....	55,774,225	151,238,926	4,191,500	4,108,126	215,312,777
New Zealand	31 Mar., 1902	9,153,697	43,812,750	.....	.....	52,966,447
Australasia .....	.....	64,927,922	195,051,676	4,191,500	4,108,126	268,279,224

* £1,650 overdue.

† £6,500 overdue.

The relative burthen of the public debt of the various states is not to be determined only by comparing the gross amounts with the population, for the rate of interest payable must also be taken into consideration. Thus the general average interest payable by Western Australia is 3·36 per cent., while South Australia pays 3·75 per cent., so that a debt of £100 in the former is not more burthensome than £89 12s. 0d. in the latter state. A more exact basis of comparison is obtained by taking the interest liability, which is shown below. The interest given is on the supposition that the debt is outstanding for the whole of the year following the day on which the amounts are made up. The whole debt, funded and unfunded, has been included :—

State.	Average rate of Interest.			Amount of Interest.	
	Funded Debt.	Unfunded Debt.	Total.	Amount on Outstanding Liabilities.	Per Inhabitant.
	per cent.	per cent.	per cent.	£	£ s. d.
New South Wales.....	3·56	3·38	3·55	2,540,625	1 18 10
Victoria	3·59	3·71	3·59	1,923,013	1 12 0
Queensland	3·70	4·00	3·70	1,456,928	2 17 1
South Australia	3·76	3·50	3·75	1,024,080	2 16 2
Western Australia.....	3·36	.....	3·36	502,729	2 11 7
Tasmania	3·47	.....	3·47	315,626	1 16 4
Commonwealth.....	3·60	3·49	3·60	7,763,001	2 0 6
New Zealand	3·76	.....	3·76	1,992,743	2 10 7
Australasia	3·63	3·49	3·63	9,755,744	2 2 3

In 1884 the nominal rate of interest on New South Wales loans floated in London was reduced to 3½ per cent., at which rate stock to the amount of £29,326,200 and Treasury bills for £2,000,000 had been sold to June, 1902. This example was not followed by any of the other states until 1888, when Queensland successfully floated a loan of £2,520,000

at the reduced rate; and in 1889 Victoria, South Australia, Tasmania, and New Zealand, in the order named, were successful in issuing stock at a similar nominal rate. Through the pressure of the financial crisis, the nominal rate for those states which issued in 1893 was increased to 4 per cent. Early in the following year, however, South Australia and Tasmania again placed loans on the market at the lower rate. New Zealand, in May, 1895, was the first colony to issue a 3 per cent. loan—an example which was followed by New South Wales in October of the same year, and by all the states since that date. Tasmania, however, did not place a 3 per cent. loan in London till 1901, but local inscribed stocks had been previously sold at the rate mentioned. Below will be found the amount of the total debt under each rate of interest. For Victoria, the figures refer to the 30th June, 1901; for Tasmania, to the 31st December, 1901; for New Zealand, to the 31st March, 1902; and for all the other states to the 30th June, 1902:—

Rate of Interest.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
FUNDED DEBT.									
cent.	£	£	£	£	£	£	£	£	£
Nil.	1,650	.....	.....	.....	.....	.....	1,650	.....	1,650
6	12,300	.....	.....	533,900	.....	3,100	549,300	56,000	605,300
5	400,000	.....	.....	290,000	40,100	100	799,200	609,400	1,408,600
4½	3,700	5,000,000	.....	.....	73,600	.....	5,077,300	52,900	5,130,200
4	21,065,440	26,310,795	21,384,300	16,302,400	3,005,230	4,120,600	92,107,765	33,427,852	125,625,617
3½	.....	.....	.....	.....	.....	.....	.....	349,000	349,000
3¼	30,300,197	12,000,000	11,524,434	3,363,000	4,404,380	4,207,107	65,850,118	10,438,338	76,207,456
3¼	.....	.....	.....	.....	.....	24,918	24,918	.....	24,918
3	14,265,072	8,325,480	5,898,693	5,933,745	7,350,000	730,910	42,503,000	8,032,957	50,536,557
Total	86,108,359	51,636,275	38,807,427	26,423,045	14,942,310	9,095,735	207,013,151	52,966,447	259,979,598
UNFUNDED DEBT. (<i>Treasury Bills for Works and Deficiencies in Revenue.</i>)									
Nil.	6,500	.....	.....	.....	.....	.....	6,500	.....	6,500
4	1,131,500	750,000	531,000	.....	.....	.....	2,412,500	.....	2,412,500
3½	2,000,000	410,000	.....	840,500	.....	.....	3,259,500	.....	3,259,500
3¼	.....	275,000	.....	.....	.....	.....	275,000	.....	275,000
3	2,346,126	.....	.....	.....	.....	.....	2,346,126	.....	2,346,126
Total	5,484,126	1,435,000	531,000	840,500	.....	.....	8,299,626	.....	8,299,626
Total Debt	71,502,485	53,071,275	39,338,427	27,272,545	14,942,310	9,095,735	215,312,777	52,966,447	268,279,224

The treasury bills of New Zealand do not rightly form part of the public debt, and such of these as were outstanding have therefore been excluded from the foregoing statement.

REDEMPTION OF LOANS.

Loans are either redeemed or renewed. In the former case, the amount of the obligations of the state to its public creditors is reduced; in the latter case, the liability remains the same or is only slightly

altered. Repayments, however, are chiefly effected under the head of renewals, the amount of loans redeemed from revenue—by sinking fund, annual drawings, or directly from the general account—being small. The principle of extinguishing public debt by the operation of sinking funds or by annual drawings does not extend to the whole of the public debt of Australasia, and the loans affected do not amount to a large sum. In the case of sinking funds, the money is held until the date of redemption; but exactly the opposite course is followed where annual drawings are provided, for in such cases the Government retire a certain amount of their debentures yearly, and thus effect a gradual extinction of the loan. As already explained, all the states have sinking funds in operation, the amounts to the credit of which will be found on page 1018. The system of annual drawings has been adopted to a very limited extent only by New Zealand, New South Wales, and Western Australia; the only loan so issued by New South Wales has, however, been redeemed.

With the exception of one or two small amounts of perpetual or interminable stock, all the Australasian loans are redeemable at prescribed dates; hence the Governments frequently find themselves at the mercy of an adverse market when they are compelled to raise a loan to pay off stock falling due. Within the last few years, however, practical steps have been taken by Victoria, Queensland, South Australia, Western Australia, and Tasmania to avoid this disability, the Governments of those states, in their late issues, having reserved to themselves the option of redeeming at a minimum or a maximum date, or any intervening period, on giving the necessary six or twelve months' notice. Canada was the first of the British possessions to introduce this principle.

DATES OF MATURITY.

Australasian loans have been issued for fixed periods, and the amount maturing in each year is given in the following statement. No combined action is taken to regulate the raising of loans, each state acting according to the exigencies of its Government, regardless of the financial condition of its neighbours. The placing of a loan on the London market, especially if it be for a large amount, generally results in an all round fall in the prices of Australasian stocks, and subsequent issues of other states are placed at a disadvantage if the market is approached before it has recovered its tone; in fact, the states have in this respect all the evils of disintegration and all the liabilities of federation, without any of the advantages which federation would give. The evil effects of this lack of consultation between the Australian Treasurers will be seen from the table on the opposite page. In ten years only of the next fifty is there no loan to be renewed or to be paid off, and the amounts to be met range as high as £31,323,199. Happily, the amounts to be redeemed during the next decade are moderate, and the fact of heavy obligations requiring to be met in any remote year may prove of advantage, as it will simplify negotiations when the time is

ripe for the conversion of Australasian loans into one consolidated stock. Only one colony—New Zealand—is at present systematically working with this end in view, but so far it has treated the question from a provincial standpoint only. The principle of adopting a minimum and a maximum date for repayment has been so recently introduced that, in the table now given, no attempt has been made to show specially the amounts to which it is applicable, the period of redemption in each case being assumed to be the more remote date.

Due Dates.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
FUNDED DEBT.									
Over-due..	£ 1,650	£	£	£	£	£	£ 1,650	£	£ 1,650
1901	.....	3,000,000	.....	.....	.....	.....	3,000,000	.....	3,000,000
1902	400,300	.....	.....	.....	.....	167,441	576,741	260,100	836,841
1903	1,003,700	.....	.....	65,000	31,500	163,794	1,263,994	480,000	1,748,994
1904	58,000	5,457,000	.....	62,500	.....	24,840	5,602,340	1,448,950	7,051,290
1905	903,800	.....	.....	72,500	.....	17,600	1,171,886	1,070,800	2,842,186
1906	224,900	.....	.....	37,500	.....	.....	233,811	496,211	1,445,977
1907	.....	4,000,000	.....	1,037,500	.....	26,418	5,063,918	1,750,800	6,823,718
1908	2,865,500	2,000,000	.....	1,951,100	.....	343,815	7,160,415	400,438	7,560,853
1909	384,000	.....	.....	3,122,700	.....	115,466	3,622,166	523,000	4,145,166
1910	2,863,700	.....	.....	60,300	1,334,380	20,892	4,279,272	493,324	4,772,596
1911	.....	.....	.....	68,300	.....	1,024,661	1,092,961	2,843	1,095,804
1912	7,533,049	.....	.....	85,000	.....	1,000	7,669,049	.....	7,669,049
1913	.....	4,000,000	1,466,500	40,300	.....	546,650	6,059,450	490,300	6,559,750
1914	.....	.....	.....	35,000	.....	.....	835,000	.....	1,166,800
1915	.....	.....	11,728,800	35,000	.....	.....	11,763,800	3,800	11,767,600
1916	.....	.....	.....	6,633,930	.....	100	6,634,030	12,700	6,646,730
1917	.....	.....	.....	1,363,800	.....	.....	1,363,800	.....	1,363,800
1918	12,826,200	.....	.....	1,474,400	.....	.....	14,300,600	.....	14,300,600
1919	245,050	4,000,000	.....	26,000	.....	.....	4,271,050	.....	4,271,050
1920	.....	6,000,000	.....	336,300	.....	300,000	6,636,300	.....	6,636,300
1921	.....	.....	.....	.....	.....	170,161	170,161	500,000	670,161
1922	.....	63,000	.....	.....	.....	.....	63,000	.....	63,000
1923	.....	7,746,795	.....	.....	.....	.....	7,746,795	.....	7,746,795
1924	16,698,065	.....	12,973,834	1,651,300	.....	.....	31,323,199	.....	31,323,199
1925	222,255	.....	.....	.....	.....	100	222,355	.....	222,355
1926	.....	7,107,000	.....	839,500	.....	67,600	8,014,100	.....	8,014,100
1927	.....	.....	.....	.....	2,500,000	.....	2,500,000	.....	2,500,000
1929	.....	.....	.....	200,000	.....	.....	200,000	20,150,302	20,350,302
1930	.....	532,495	3,704,800	.....	.....	.....	4,237,295	.....	4,237,295
1931	.....	.....	.....	.....	1,876,000	.....	1,876,000	.....	1,876,000
1933	9,636,300	.....	.....	.....	.....	.....	9,636,300	.....	9,636,300
1934	.....	.....	.....	.....	975,930	.....	975,930	.....	975,930
1935	9,600,000	.....	.....	1,560,400	6,880,000	.....	18,040,400	.....	18,040,400
1936	.....	.....	.....	2,515,300	1,100,000	.....	3,615,300	.....	3,615,300
1939	.....	.....	.....	2,719,800	.....	.....	2,719,800	.....	2,719,800
1940	.....	.....	.....	.....	.....	4,906,500	4,906,500	6,161,167	11,067,667
1945	.....	.....	2,000,000	.....	.....	.....	2,000,000	8,032,957	10,032,957
1947	.....	.....	4,498,693	.....	.....	.....	4,498,693	.....	4,498,693
1949	.....	4,583,413	.....	.....	.....	.....	4,583,413	.....	4,583,413
1950	.....	.....	934,800	.....	.....	.....	934,800	.....	934,800
1951	.....	.....	1,000,000	.....	.....	.....	1,000,000	.....	1,000,000
Inter-minable..	532,890	.....	.....	.....	.....	.....	532,890	.....	532,890
Annual Drawings...	.....	.....	.....	.....	226,900	.....	226,900	283,400	515,300
Undefined	.....	3,146,572	500,000	423,505	.....	.....	4,070,137	.....	4,070,137
Total	66,103,359	51,636,275	38,807,427	26,423,045	14,942,310	0,095,735	207,013,151	52,966,447	259,979,598

Due Dates.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.	Australasia.
UNFUNDED DEBT. (<i>Treasury Bills for Works and Deficiencies in Revenue.</i>)									
Overdue..	£ 6,500	£	£	£	£	£	£ 6,500	£	£ 6,500
1902	.....	935,000	.....	.....	.....	.....	935,000	.....	935,000
1903	.....	275,000	1,000	.....	.....	.....	276,000	.....	270,000
1904	.....	25,000	.....	316,600	.....	.....	341,600	.....	341,600
1905	2,000,000	25,000	.....	532,900	.....	.....	2,557,900	.....	2,557,900
1906	1,000,000	25,000	.....	.....	.....	.....	1,025,000	.....	1,025,000
1907	.....	25,000	.....	.....	.....	.....	25,000	.....	25,000
1908	.....	25,000	.....	.....	.....	.....	25,000	.....	25,000
1909	.....	25,000	.....	.....	.....	.....	25,000	.....	25,000
1910	.....	25,000	.....	.....	.....	.....	25,000	.....	25,000
1911	.....	25,000	.....	.....	.....	.....	25,000	.....	25,000
1912	.....	25,000	530,000	.....	.....	.....	555,000	.....	555,000
Annual Drawings...	2,477,626	.....	.....	.....	.....	.....	2,477,626	.....	2,477,626
Total	5,484,126	1,435,000	531,000	849,500	.....	.....	8,299,626	.....	8,299,626
Total Debt	71,592,485	53,071,275	39,338,427	27,272,545	14,042,310	9,095,735	215,312,777	52,966,447	268,279,224

EXPENSES OF NEGOTIATION.

From 1855, when the first New South Wales loan was placed on the London market, until the present time, the Australasian states have obtained from the same source a large proportion of the money which they have borrowed.

The following table shows the amounts raised locally, and in London, but small sums raised in states other than those incurring the debt have been included with the London flotations:—

State	Raised locally.	Raised in London.	Total Debt.	Percentage of Loans raised locally to Total Debt.
	£	£	£	
New South Wales.....	13,838,035	57,754,450	71,592,485	19·33
Victoria	5,423,862	47,647,413	53,071,275	10·22
Queensland.....	4,689,080	34,649,347	39,338,427	11·92
South Australia.....	4,045,745	23,226,800	27,272,545	14·83
Western Australia	1,334,380	13,607,930	14,942,310	8·93
Tasmania	1,265,485	7,830,250	9,095,735	13·91
Commonwealth	30,596,587	184,716,190	215,312,777	14·21
New Zealand	6,354,721	46,611,726	52,966,447	12·00
Australasia.....	36,951,308	231,327,916	268,279,224	13·77

The dependence on the English market was originally due to lack of local capital; but even in late years, when such capital has been fairly abundant, the Governments have still turned to London, and, strange to say, have offered the London investor a higher rate than that at which they have been able to place the small loans raised locally.

The charges incidental to the floating of an inscribed stock loan in England are heavy. The chief expense is the stamp duty of 12s. 6d. per cent. imposed by the British Government on inscribed stock, the other

charges being for services rendered. New South Wales, Queensland, and New Zealand issue their stock through the Bank of England; the London and Westminster Bank acts for Victoria and Western Australia; South Australia issues its loans through its Agent-General in London; while in the case of Tasmania also the Agent-General is the channel through whom the loans are placed, but he has the assistance of the London and Westminster Bank.

The cost of negotiation by the Bank of England is $\frac{1}{2}$ per cent. commission; and by the London and Westminster Bank, $\frac{1}{4}$ per cent. Brokerage costs $\frac{1}{4}$ per cent. In addition to these charges and the stamp duty referred to above, there has usually to be added 4d. or 5d. per £100 for incidental expenses. The charges annually made by the Bank of England for the inscription and management of stock and the payment of the half-yearly dividends were formerly £600 per million for the first ten millions, £550 for the next five, and £500 per million for all subsequent amounts. In 1895, however, these rates were reduced by £100 per million to the three states employing the Bank; while from May, 1899, all amounts raised through the agency of the Bank of England, on behalf of New South Wales, are charged £200 per million. The charges of the London and Westminster Bank were £500 per million for the first ten millions, £450 for a second like sum, and £400 per million for any subsequent amount to the end of 1897, when the Victorian Government arranged with the Bank to reduce its rates for inscription of stock to £250 per million, without regard to the total amount inscribed.

On the old form of debenture the stamp duty imposed is 2s. 6d. per cent., or £1,250 per million. The expenditure per £100 debentures or inscribed stock floated in London of those states for which information is obtainable is given in the subjoined table. The debenture loans shown are some of the last issued. It will be seen that the cost of floating inscribed stock loans is much greater than that under the debenture system, but the extra outlay is inappreciable when compared with the advantages gained:—

State.	Year of Negotiation.	Principal.		Expenses per £100 Debenture and Stock.	Class of Stock.
		Rate of Interest.	Amount.		
New South Wales.....	1883	4	£ 2,000,000	£ s. d. 0 11 5	Debentures.
	1889	3½	3,500,000	1 7 10	Inscribed.
	1891	3½	4,500,000	1 7 9	do.
	1893	4	2,500,000	1 8 0	do.
	1894	3½	832,000	1 9 5	do.
	1895	3	4,000,000	1 7 10	do.
	1898	3	1,500,000	1 8 5	do.
	1901	3	4,000,000	*2 12 8	do.
	1902	3	3,000,000	*2 12 11	do.

* Including underwriting commission.

State.	Year of Negotiation.	Principal.		Expenses per £100 Debenture and Stock.	Class of Stock.
		Rate of Interest.	Amount.		
Victoria	1880	4½	£ 2,000,000	£ s. d. 0 17 9½	Debentures.
	1891	3½	3,000,000	1 2 9	Inscribed.
	1892	3½	2,000,000	1 3 0	do.
	1893	4	2,107,000	1 3 0	do.
	1899	3	1,600,000	1 2 11	do.
	1901	3	3,000,000	2 8 0	do.
Queensland	1881	4	1,089,500	0 15 9	Debentures.
	1890	3½	2,264,734	1 8 0	Inscribed.
	1891	3½	2,500,000	1 8 2	do.
	1893	3½	1,182,400	2 18 8	do.
	1895	3½	1,250,000	1 11 7	do.
	1896	3	1,500,000	1 9 4	do.
	1900	3	1,400,000	2 15 0	do.
	1901	3	1,374,213	2 15 0	do.
South Australia.....	1883	4	1,438,500	0 9 0	Debentures.
	1889	3½	1,317,800	0 19 1	Inscribed.
	1892	3½	932,300	1 1 2	do.
	1893	3½	125,000	.....	do.
	1894	3½	475,600	.....	do.
	1894	3½	200,000	.....	do.
	1896	3	839,500	1 2 5	do.
	1897	3	500,000	1 0 11	do.
	1899	3	1,500,000	2 4 5	do.
	1900	3	1,000,000	2 7 7	do.
Western Australia ...	1891	4	250,000	1 3 6	do.
	1892	4	400,000	1 3 7	do.
	1894	4	540,000	1 5 6	do.
	1895	3½	750,000	1 3 7	do.
	1896	3	750,000	1 3 8	do.
	1897	3	1,000,000	1 3 7	do.
	1898	3	1,000,000	1 3 11	do.
	1898	3	1,000,000	1 3 11	do.
	1900	3	1,000,000	2 9 0	do.
Tasmania.....	1900	3½	880,000	2 12 3	do.
	1886	4	1,000,000	0 18 0	Debentures.
	1889	3½	1,000,000	1 3 6	Inscribed.
	1893	3½	600,000	1 3 5	do.
	1894	4	1,000,000	1 3 8	do.
	1895	3½	750,000	1 4 5	do.
New Zealand.....	1901	3	450,000	.. .....	do.
	1895	3	1,500,000	2 2 8	do.
	1899	3	1,000,000	1 13 0	do.
	1901	3	1,000,000	.....	do.

Against several loans the expenses have not been stated, as the information has not been published by the state interested. The high

rate of expenses on the 1893 Queensland loan is accounted for partly by the fact that the amount was underwritten at the rate of 1 per cent. The latest loans issued by all the States and New Zealand have also been burdened with a charge for underwriting.

QUOTATIONS OF STOCK.

In another chapter the growth of Australasian indebtedness on private account has been traced over a period of about thirty-one years, and it has been shown that during that time nearly the whole of the advances made to the various State Governments, and nearly one hundred and eight millions of private advances, have been obtained in Great Britain. This condition of dependence on external capital for the development of the country has on more than one occasion proved a great danger to Australasia, but never to the same extent as during the crisis of 1892-93, when the withdrawal of confidence on the part of the British investor caused widespread confusion in almost every department of industry, and intense financial unrest, from which some of the states have not yet recovered, although, as will be seen from the appended table, Australasian stocks are now quoted at satisfactory prices.

The quotations for Colonial stocks in the London markets at the close of June, 1892, 1893, 1894, and 1902 are given below, the price in every instance being "cum dividend." With one exception—India—the quotations are for loans raised on the security of the local revenues of the country borrowing; in the case of India there is an Imperial guarantee. This advantage has also been extended to some Canadian, Mauritius, and New Zealand loans, but these are not quoted in the following list. In passing, it may be mentioned that the guarantee of the British Government is certainly to the advantage of the dependencies to which it has been extended, as in addition to the absolute security afforded, it carries the right of trustees in the United Kingdom to invest trust funds in the stock—a privilege which was not extended to Australasian securities till September, 1901:—

Country.	Class of Stock.	Selling Price, "cum dividend."			
		June, 1892.	June, 1893.	June, 1894.	June, 1902.
Australasia—					
New South Wales	3½ per cent. Inscribed	96½	93	98½	104
Victoria	3½ do do	97	88½	97½	103
Queensland	4 do do	103½	99	104	109
South Australia	4 do do	106	103	106½	106½
Western Australia	4 do do	103½	104	108	112
Tasmania	4 do do	103	98½	103	104½
New Zealand	4 do do	104½	104½	108½	113
Canada	3 do do	94½	96	97	102
Cape Colony	4 do do	106	108	112	106
Natal	4 do do	103	108	109	118
India	3 do Stocks	97½	98½	99½	101½

In order to make the comparison between different stocks quite fair, other things than bare quotations on a given date—chiefly the accrued interest and the unexpired currency of the scrip—have to be considered. A uniform date for the payment of interest on loans has not been adopted, so that the amount of interest accrued at the above-quoted dates varies with each loan; while the date on which the loan is repayable is a factor not to be neglected in estimating the price of a stock. The return obtained by investors from the inscribed stock of each colony on the basis of previous quotations, allowing for interest accrued and redemption at par on maturity, is given below:—

Country.	Nominal rate of Interest.	Selling Price, "ex dividend."	Cur-rency.	Effective annual Rate of Interest per £100 sterling.	
				If no allowance is made for redemption at par on maturity.	Rate if Stock is held till date of maturity..
				per cent.	£ s. d.
June, 1892.					
Australasia—					
New South Wales.....	3½	96·19	32	3 13 5	3 14 2½
Victoria	3½	95·45	31	3 13 11½	3 15 0
Queensland.....	4	101·72	32	3 19 5	3 19 1½
South Australia.....	4	105·22	44	3 16 9½	3 16 4
Western Australia.....	4	101·72	42	3 19 5	3 19 3
Tasmania.....	4	101·22	16	3 19 10.	3 19 0
New Zealand	4	104·05	37	3 17 8	3 17 1½
Canada	3	93·17	46	3 4 10½	3 5 7½
Cape Colony	4	105·89	31	3 16 3½	3 15 1½
Natal	4	102·55	34	3 18 9½	3 18 4½
India	3	96·69	56	3 2 6¼	3 2 9

June, 1893.

Australasia—					
New South Wales.....	3½	92·33	31	3 16 5½	3 18 2½
Victoria	3½	86·97	30	4 1 2½	4 4 3½
Queensland.....	4	97·25	31	4 3 1	4 3 7½
South Australia.....	4	102·23	43	3 19 0½	3 18 10
Western Australia.....	4	102·25	41	3 19 0½	3 18 9½
Tasmania	4	96·75	15	4 3 6	4 6 0½
New Zealand	4	104·06	36	3 17 8	3 17 1
Canada	3	94·68	45	3 3 10	3 4 5½
Cape Colony	4	107·90	30	3 14 10½	3 13 2½
Natal	4	107·56	33	3 15 1½	3 13 9½
India	3	97·92	55	3 1 8½	3 1 0½

Country.	Nominal rate of Interest.	Selling Price, "ex dividend."	Currency.	Effective annual Rate of Interest per £100 sterling.	
				If no allowance is made for redemption at par on maturity.	Rate if Stock is held till date of maturity.
				£ s. d.	£ s. d.
	Per cent.	£	Years.		

June, 1894.

Australasia—					
New South Wales.....	3½	98·21	30	3 11 10¾	3 12 4
Victoria	3½	95·92	29	3 13 7½	3 14 8
Queensland.....	4	102·25	30	3 19 0¼	3 18 6½
South Australia.....	4	105·74	42	3 16 5	3 15 10½
Western Australia	4	106·25	40	3 16 0½	3 15 4¼
Tasmania	4	101·25	14	3 19 9½	3 18 9
New Zealand	4	108·45	35	3 14 6	3 13 2½
Canada	3	95·68	44	3 3 2¼	3 3 8
Cape Colony	4	111·91	29	3 12 2½	3 9 5
Natal	4	108·57	32	3 14 5	3 12 9¾
India	3	98·68	54	3 1 3	3 1 4¼

June, 1902.

Australasia—					
New South Wales.....	3½	103·22	22	3 8 5	3 4 9½
Victoria	3½	101·36	34	3 9 8	3 9 5
Queensland.....	4	107·12	22	3 15 5	3 12 7½
South Australia.....	4	105·61	34	3 16 6	3 15 8¾
Western Australia.....	4	110·12	32	3 13 4½	3 11 5½
Tasmania	4	102·62	6	3 18 8¾	3 11 8
New Zealand	4	112·44	27	3 11 10¼	3 8 6
Canada	3	100·59	36	3 0 1	2 19 11¾
Cape Colony	4	105·78	21	3 16 4½	3 13 10¾
Natal	4	117·11	24	3 9 0	3 3 2¾
India	3	100·83	46	3 0 2	3 0 1

The figures given in the last column of the table show the relative positions of the various stocks quoted. As will be seen, the credit of each division of Australasia was somewhat better in 1894 than in 1892, notwithstanding the financial panic which occurred between

those dates. In 1893 there was naturally a heavy fall, as compared with the preceding year, in all Australasian securities except those of New Zealand and Western Australia. Victorian stock showed the largest fall—which was only to be expected in view of the fact that the panic originated in that state, and Victorian finances generally were at a low ebb. The quotation for New Zealand stock at the middle of 1893 was the same as that of the preceding year, which seemed to point to the conclusion that the London market did not consider the interests of New Zealand to be bound up with those of the states on the mainland. In 1895 a great improvement took place in the prices of stock of all the states, and the rise has since been well maintained. To illustrate the fluctuations in the prices of colonial securities, the rates obtained during 1892, 1893, 1894, and 1902 are given below in a simpler form than in the preceding table. During the same periods British consols were selling at 98½, 97, 99, and 96½:—

Country.	1892.	1893.	1894.	1902.
Australasia—	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	3 14 2½	3 18 2½	3 12 4	3 4 9½
Victoria	3 15 0	4 4 3½	3 14 8	3 9 5
Queensland	3 19 1½	4 3 7½	3 18 6½	3 12 7½
South Australia	3 16 4	3 18 10	3 15 10½	3 15 8½
Western Australia	3 19 3	3 18 9½	3 15 4½	3 11 5½
Tasmania	3 19 0	4 6 0½	3 18 9	3 11 8
New Zealand	3 17 1½	3 17 1	3 13 2½	3 8 6
Canada.....	3 5 7½	3 4 5½	3 3 8	2 19 11½
Cape Colony	3 15 1½	3 13 2½	3 9 5	3 13 10½
Natal	3 18 4½	3 13 9½	3 12 9½	3 3 2½
India	3 2 9	3 1 0½	3 1 4½	3 0 1

So far, only the return yielded to the investor has been considered. The following table shows the average prices obtained by the Australasian Governments for some of their last issues, and the quotations for

the same stocks in June, 1902, the latter prices being, of course, "ex dividend":—

State.	Date of Negotiation.	Rate per cent.	Amount of Issue.	Net average price realised.	Quotation, ex-dividend, June, 1902.
			£	£	£
New South Wales.....	1895	3	4,000,000	95·14	95·33
Do	1898	3	1,500,000	98·65	95·33
Do	1901	3	4,000,000	91·12	°
Victoria	1893	4	2,107,000	96·00	101·13
Do	1899	3	1,600,000	93·21	°
Do	1901	3	3,000,000	89·86	°
Queensland	1897	3	1,500,000	95·61	93·59
Do	1900	3	1,400,000	91·26	°
Do	1900	3	1,374,213	91·50	*
South Australia.....	1896	3	839,500	95·34	94·09
Do	1897	3	500,000	96·05	94·09
Do	1899	3	1,500,000	92·67	94·09
Do	1900	3	1,000,000	90·81	94·09
Western Australia	1897	3	1,000,000	93·45	93·59
Do	1898	3	1,000,000	94·76	93·59
Do	1898	3	1,000,000	91·96	93·59
Do	1900	3	1,000,000	89·66	93·59
Do	1900	3½	880,000	97·39	°
Tasmania	1895	3½	750,000	98·30	102·59
Do	1895	3	450,000	.....	°
New Zealand.....	1895	3	1,500,000	93·73	95·33
Do	1899	3	1,000,000	96·55	95·33
Do	1901	3	1,000,000	.....	°

* No quotation.

CHARACTER OF STOCK ISSUED.

By far the larger part of Australasian loans is inscribed, and the outstanding issues under the debenture system are being converted into inscribed stock as quickly as circumstances permit. New Zealand was the first colony to introduce inscription in 1877, in which year was passed the Consolidated Stock Act, a measure made necessary by the abolition of the Provincial Councils. Under this Act the liabilities of the various provinces were merged into the general debt of the colony; and under the same Act and its amendment of 1884 the Government has worked systematically to consolidate the debt by conversion and inscription, so that in March, 1902, the whole of the public liabilities were inscribed, with the exception of £9,153,697 represented by debentures. The Consolidated Stock Act of New Zealand was assented to in December, 1877; and in August of that year the Imperial Parliament passed the Colonial Stock Act, which provided for the inscription and transfer of Colonial stock raised in the United Kingdom. Certain steps were required to be taken before a colony could take advantage of

the provisions of the Imperial Act. As already mentioned, New Zealand passed the necessary legislation at the end of 1877; but nothing was done by the other states until 1882, when Victoria and South Australia passed Inscribed Stock Acts; New South Wales and Queensland passed similar legislation in the following year, Western Australia in 1884, and Tasmania in 1889. It will thus be seen that a gradual change in the mode of floating loans for public purposes has been going on since 1877, and the time cannot be far distant when the whole debt of each state will be represented by one class of stock. In 1879, or two years after passing the Consolidated Stock Act, New Zealand placed on the market a 5 per cent. loan of £5,000,000 at $97\frac{1}{2}$ in the form of debentures, the subscribers having the option up to March, 1881, of exchanging for 4 per cent. inscribed stock, at the rate of £120 of stock for each £100 of debentures. The loan was successfully floated, and within the stated period £4,476,000 of the £5,000,000 debentures were exchanged for £5,371,200 inscribed stock at 4 per cent. The other colonies issued inscribed stock loans shortly after passing the respective Acts.

The Imperial "Colonial Stock Act, 1877," as previously mentioned, provides for the inscription and transfer of stock raised in the United Kingdom and for stamp duty to be levied thereon. It also defines the position of the British Government as regards Colonial indebtedness, and provides that every document connected with stock transactions shall have printed upon it a distinct intimation that no liability, direct or indirect, is incurred by the British Government in respect of such stock, unless the loan is under Imperial guarantee.

Under the provisions of the Colonial Stock Act, 1900, trustees are empowered to invest in Australasian securities after certain conditions have been complied with, and these conditions were proclaimed in the *London Gazette* of 6th September, 1901.

The difference between registered and inscribed stock is practically small. Transactions under the former head are confined to a few old funded stock loans. Debentures and inscribed stock form the principal classes of securities, and, as previously pointed out, the debenture form is rapidly giving way to inscription. Debenture coupons are, like ordinary scrip, negotiable by bearer, and are liable to the risk of forgery. By inscription the possibilities of fraud in transfer are minimised, as the stock is inscribed in the books of the bank, and transferable therein by the stock-holders personally or by their attorneys, without the issue of certificates of stock. In the case of registered stock, certificates are issued transferable by deed.

The practice of issuing Treasury bills, either in anticipation of or to make good deficiencies in revenue, obtains in each state, and, as previously explained, is an old-established custom; but Treasury bills have been made to serve another purpose, and money has been raised by their sale to meet certain obligations for public works. This is an innovation which could not well be avoided in the disturbed markets of the last few years. The bills are in reality ordinary loans with short currencies, and carry

generally a higher rate of interest than issues of the funded debt. The unsatisfactory state of Australasian finance does not allow of the absolute redemption of these bills; consequently they will either have to be renewed or converted into stock, an operation which will entail an additional expenditure to the charges of first negotiation. The New Zealand Treasury bills are issued direct by the Treasury at par, and the expenses of negotiation are small. The bills are usually redeemed during the year of issue, and for this reason they have not been included with or considered as part of the public debt of New Zealand, though in the case of the other states Treasury bills have been so included. Australasian Treasury bills are like the British Treasury bills in name only, but they have some points in common with the British exchequer bills.

CONVERSION AND CONSOLIDATION OF LOANS.

Conversion and consolidation as applied to loans are not interchangeable terms, but represent two distinct transactions in so far related that without conversion consolidation would be impracticable. All the states are systematically converting their old loans into inscribed stock, and by so doing they are taking a step towards consolidation. Since the Consolidated Stock Act was passed in 1877, New Zealand has been engaged in converting its old loans into inscribed stock, and consolidating the whole debt by adopting three uniform interest rates of 4, 3½, and 3 per cent., and fixing the dates of maturity at 1929, 1940, and 1945 respectively. The transactions in conversion and consolidation in New Zealand from 1877 to 31st March, 1901, were as stated below. In addition to the transactions shown, old debentures to the amount of £6,225,500 were converted into short-dated debentures under the 1884 Consolidated Stock Act, pending subsequent conversion into inscribed stock; of these short-dated debentures, £4,257,700 have since been converted into 4 per cent. stock, and are included in the £19,724,400 shown below. The amount of these debentures outstanding on 31st March, 1901, was £1,967,800:—

Amount of Old Debentures Converted or Redeemed.	Additional Capital added to Principal by Conversion or Consolidation.	New Stock Issued.		
		Nominal Rate of Interest.	Amount.	Date of Maturity.
£	£		£	
19,724,400	1,600,902	4 per cent.	21,325,302	1929
5,720,550	440,617	3½ „	6,161,167	1940
3,324,252	49,558	3 „	3,373,810	1945

The loading of the principal by conversion appears heavy; but New Zealand was saddled with a number of small loans, much after the type of municipal borrowings, which it was most desirable should be consolidated without delay, and some sacrifice was made to accomplish this; besides, the compensation obtained in a lower rate of interest must be set against the increased capital. The annual saving in interest on the

amount converted to the 31st March, 1901, is stated as £199,520, viz., £102,114 on the 4 per cent., £59,262 on the 3½ per cent., and £38,144 on the 3 per cent. stock. All conversions into short-dated debentures took place at par, the saving in interest thereby amounting to £7,990 annually, in addition to the £199,520 shown above. The subject of the New Zealand conversion is a large one, and inquirers should consult the publications of the Government of that colony, which give details that would hardly be in place in a volume such as this.

In Victoria the 4 per cent. stock floated in Melbourne to the amount of £2,089,613 has been converted into 3 per cent. stock, with the exception of £120,062 subsequently redeemed. The saving in interest by the conversion is £19,696.

LATE ISSUES OF LOANS AND TREASURY BILLS.

As late as the year 1890 the states could borrow in London on very favourable terms, but in the year named the conditions were no longer satisfactory. This change had for its immediate cause a condition of things not of Australasia's own creation, the Baring failure and the Argentine crisis being primarily responsible for the stoppage of Australasian credit; but there is no reasonable ground for supposing that if the Baring failure had not taken place the London markets would have been much longer open to the Australasian states. The Treasurers of the various provinces were entirely unprepared for this revulsion in credit. They were committed to engagements for the construction of public works which they could not terminate; contracts had been entered into for large sums on the assumption that funds would be available; besides this, no preparations had been made to meet debentures falling due in a short time. The sudden stoppage of credit greatly embarrassed the Governments, and most of the states had recourse to treasury bills to enable them to adjust their finances to the altered circumstances. The amounts received from the sale of these bills were devoted to meeting loans maturing, and providing funds for public works already contracted for. Pressing necessities and the improved condition of the London market encouraged several of the states during 1893 and 1894 to place ordinary loan issues, which were successfully negotiated; and the proceeds of these loans relieved the liabilities on matured treasury bills and current obligations. In 1895 the credit of the Australasian states was fully re-established in London.

New South Wales.—In 1892 and 1893 the Treasury had authority to issue £3,000,000 of 4 per cent. funded stock at a minimum price of par. Up to the 30th June, 1902, £2,549,350 had been disposed of, leaving stock to the amount of £450,650 yet to be raised, the cost of the issue being practically nil.

The Loan Acts 58 Vic. No. 14, 59 Vic. No. 6, 60 Vic. No. 32, 61 Vic. No. 43, 62 Vic. No. 36, and 63 Vic. No. 42, passed in 1894, 1895, 1896, 1897, 1898, and 1899 respectively, provided for the establishment

of other local stocks. The stocks under the first-mentioned Act are known as New South Wales 1924 stock and Funded Stock, the latter running *pari passu* with the stock floated under 56 Vic. No. 1, the amounts outstanding on 30th June, 1902, being £198,065 and £863,947 respectively; the stocks under the 1895 Act are known as New South Wales 1925 Stock and Funded Stock, the latter also being subject to the same conditions as that floated under 56 Vic. No. 1 (Funded Stock Act of 1892). The amounts outstanding on the 30th June, 1902, were £222,255 and £1,332,945 respectively. The stocks under the 1896 Act are known as New South Wales 1927 Stock and Funded Stock, and are subject to conditions similar to those imposed in respect of the issues under the 1894 and 1895 Acts. Up to the 30th June, 1902, sales of funded stock had been effected to the extent of £1,802,810. The rate of interest on the stock is 3 per cent., and the date of maturity, 1912. No sales of the 1927 stock have yet been effected. The stocks under the 1897 Act are known as New South Wales 1928 Stock and Funded Stock, and are issued under the same conditions as those already referred to. The amount of Funded Stock sold to 30th June, 1902, was £973,997, the rate being $3\frac{1}{2}$ per cent., and the date of maturity, 1912. The only expense attached to the issues was a small amount for brokerage. Provision has been made for sinking funds to liquidate certain portions of the loans expended on works of an unproductive character. With regard to the loans authorised under the Loan Acts of 1897, 1898, and 1899, it must be mentioned that no sales have yet taken place under these Acts, but the annual instalments for the Sinking Funds have been appropriated each year.

The Loan Act of 1899 gave authority for the local issue of £500,000 inscribed stock at 3 per cent., and maturing in 1919, for the purpose of making advances to settlers. Of this stock, £245,050 were issued to the 30th June, 1902. As in the case of the 4 per cent. funded stock, the only expense in connection with the later local issues of funded and inscribed stock was a small amount of brokerage.

In October, 1893, an inscribed stock loan of £2,500,000 was floated in London, the rate of interest being 4 per cent., and the currency forty years. The minimum price was fixed at $98\frac{1}{2}$, and the average price realised was £100 11s. $10\frac{1}{2}$ d. The rate paid by the Government, allowing for redemption at par on maturity, was £4 3s. $0\frac{1}{4}$ d.; while the return to investors was £4 1s. $8\frac{1}{2}$ d.

During 1894 several small 5 per cent. loans matured, amounting in the aggregate to £832,000. In September of that year a $3\frac{1}{2}$ per cent. covering loan was successfully issued, the average price realised on the gross proceeds being £101 15s., which is reduced to £99 13s. 6d. if allowance be made for accrued interest and charges. The rate paid by the Government is £3 10s. 11d. per cent., and the interest yielded to investors, £3 9s. $4\frac{1}{4}$ d. The loan was subscribed over five-fold, the amount tendered being £4,268,000.

In October, 1895, an inscribed stock loan for £4,000,000 was floated, the rate of interest being 3 per cent., and the currency forty years. The minimum price was fixed at 94, and the gross proceeds averaged £96 18s. 3d. The next flotation on the London market took place in January, 1898, when a loan of £1,500,000, bearing interest at 3 per cent., with a minimum of 99, was successfully floated, the gross proceeds being £1,506,269. The actual rate paid by the Government was £3 1s. 6d., and the yield to investors, allowing for redemption at par, was £3 0s. 4½d.

In September, 1901, stock to the amount of £4,000,000 was authorised to be raised for the purpose of resuming wharfs and other premises and services generally. The loan was negotiated at '94, the nominal rate being 3 per cent., and the due date 1935. The actual cost to the Government was £3 9s. per cent., while the yield to investors was £3 5s. 10d. In May, 1902, a 3 per cent. loan of £3,000,000 was placed in London at a fixed price of 94½, the total applications being £35,420,000. The gross proceeds amounted to £2,835,000, and the net proceeds available for expenditure, after allowing for accrued interest, underwriting, and other expenses, were £2,727,191, or £90 18s. 1½d. per £100. The actual rate per cent. payable by the Government, allowing for redemption at par on maturity, is £3 8s. 7d. per £100, and the yield to investors £3 6s. 1¼d.

In 1895 authority was given to issue treasury bills to the amount of £1,174,700 to cover the accumulated deficiencies in revenue on the 30th June of that year. The rate of interest allowed is 3 per cent., and a sum of £150,000 is set aside annually for the repayment of the debt, together with the treasury bills issued under the Act of 1889.

In 1899 the London market was practically closed to the State Government, chiefly on account of the South African war; and, as money was urgently required to complete existing contracts, and to provide for urgent works, authority was obtained under Act 63 Vic. No. 46 for the issue of short dated Treasury Bills to the amount of £4,000,000. The first instalment, viz., £1,000,000 at 4 per cent. was negotiated in London, the net proceeds realising £99 12s. per £100—the cost to the Government being £4 9s. 11¾d., and the yield to investors £4 6s. 0¼d. The second instalment, amounting to £500,000, was placed locally at 3½ per cent., the net average price realised being 100·14 per £100. The actual cost to the Government was £3 10s. 7½d., and the yield to investors £3 9s. 6d. During 1900–1 three instalments of £500,000 each at 3½ per cent. were sold at the Treasury in Sydney. The net averages per £100 were 99·92, 99·71, and 99·37 respectively, and the corresponding amounts paid by the Government were £3 10s. 11¾d., £3 11s. 9¾d., and £3 13s. 3¼d., the yield to investors being £3 10s. 3¼d., £3 11s. 4¼d., and £3 12s. 9d. respectively. The balance, viz., £1,000,000, was floated in London at 4 per cent., the net price per £100 being 98·63—the cost to Government, £4 8s. 1d., and the actual yield to investors, £4 6s. 1d. During 1901 Treasury bills to

the amount of £755,179 were issued to cover deficiencies in revenue to the 30th June, 1902, exclusive of the debit balance of the Consolidated Revenue Fund. The rate allowed is 3 per cent., and the bills are repayable by annual instalments of £100,000.

Victoria.—An inscribed stock loan of £2,107,000 was floated in London in October, 1893, the rate of interest being 4 per cent., and the date of maturity between 1911 and 1926, at the option of the Government on due notice being given. A 3 per cent. inscribed stock loan of £1,600,000 was floated in London in February, 1899—the minimum price fixed being £95. The gross proceeds amounted to £1,522,835, and the net proceeds to £1,491,355, or to £93 4s. 2d. per £100. The date of maturity is from 1929 to 1949. Four per cent. debentures were also disposed of locally from March, 1893, to June, 1901, to the amount of £746,795, and 3 per cent. debentures, amounting to £1,063,000, had been sold in Melbourne to the same date.

During 1896 an Act was passed providing for the conversion of the 4 per cent. stocks on the Melbourne register into a 3 per cent. stock. The amount of 4 per cent. stock sold from January, 1895, to June, 1901, was £249,130, holders of which have availed themselves of the privilege of conversion. The amount of new 3 per cent. stock sold under the Conversion Act to 30th June, 1901, was £2,290,482.

In December, 1898, an Act was passed providing for the issue of local inscribed stock at 3 per cent. to the amount of £300,000, and on the 30th June, 1901, the total sales amounted to £150,911. Another Act for the same purpose became law in November, 1899, the amount authorised being £500,000 at 3 per cent., of which £204,951 had been sold to 30th June, 1901.

An issue of 4 per cent. treasury bills in aid of revenue to the amount of £1,250,000 was authorised in 1893; in 1898, however, the amount was reduced to £250,000. The amount sold to 30th June, 1901, was £250,000.

In September, 1896, authority was given for the issue of £375,000 treasury bills for public works and services. The amount sold to the 30th June, 1901, was £350,000, bearing interest at $3\frac{1}{4}$ per cent., and repayable in annual instalments of £25,000 each. The total amount of treasury bills outstanding under this Act on the 30th June, 1901, was £275,000.

A further issue of £1,000,000 treasury bills was authorised in December, 1898, and, to the 30th, June, 1901, bills to the amount of £410,000 were sold locally at $3\frac{1}{2}$ per cent. interest, and to the amount of £500,000 at 4 per cent. interest in London. These bills have been renewed from year to year, and the total amount of treasury bills outstanding on 30th June, 1901, was £1,435,000.

On the 22nd March, 1901, a loan of £3,000,000 at 3 per cent. was floated in London for conversion purposes, the price being fixed at $93\frac{1}{2}$. The expenses were increased by a charge of $1\frac{1}{4}$ per cent. for underwriting, and, consequently, the net proceeds realised only £89 17s. 3d.

per £100. Debentures to the amount of £500,000 at 3 per cent. were disposed of locally on the 21st August, 1900, realising £96 10s. 5d. per £100, and a further instalment of £500,000, sold on 4th June, 1901, realised £96 8s. 1d. per £100. Local 3 per cent. Inscribed Stock, amounting to £86,833, was also taken up during 1900-1, at par or a slight premium.

Queensland, in January, 1893, placed a 3½ per cent. loan of £1,182,400 on the London market, the average price obtained being £88 14s. 0½d. The charges were heavier than usual, as the loan was underwritten at the rate of 1 per cent.

In June, 1895, another 3½ per cent. loan for £1,250,000, with a currency of fifty years, was placed on the market. The gross price obtained was £101 12s. 7d., and deducting accrued interest the Government received about £100 0s. 2d. In addition, stock to the amount of £750,000 was sold locally, the net proceeds being £743,750, or £99 3s. 4d. per £100.

In June, 1897, a 3 per cent. loan for £1,500,000, repayable in 1947, was floated in London, the average price realised being £97 1s. 5d. Local sales of 3 per cent. stock were also negotiated during the year, the total issued being £124,480, which was sold at the average price obtained in London.

In July, 1898, an amount of £100,000 at 3 per cent. was sold locally at £97 1s. 5d. per £100, and in December, 1899, further sales to the extent of £750,000, also at 3 per cent., took place at an average of 97. In July, 1900, loans amounting to £150,000 at 3 per cent., and £1,400,000 at the same rate, were floated in Brisbane and London respectively, the average prices realised being £97 for the former issue, and £94 0s. 2d. for the latter. The expenses of the London issue were largely increased owing to an underwriting commission of 1¼ per cent. In 1900, further sales to the amount of £2,374,213 took place, £1,000,000 of which bearing interest at 3½ per cent. were sold locally, and the balance, which carries 3 per cent., in London. The former realised £99 7s. 7¾d. (net) per £100, and the latter, £88 12s. 4d. per £100.

Another class of stock was authorised in 1895, viz., Government Savings Bank Stock. The object of the establishment of this class of security was to enable depositors of over £200 to earn interest on such excess. On the 30th June, 1902, the amount outstanding was £1,079,750; of which £989,060 is bearing interest at 3½ per cent., and £90,690 at 3 per cent.

During 1893 three issues of treasury bills were placed locally, viz., £222,500 in January, £5,000 in April, and £11,000 in December. The rate of interest was 4 per cent., and the bills have been redeemed. In January, 1894, bills to the amount of £1,000 were also disposed of locally, the rate being the same as for the previous issues, and the date of redemption, 1903. Bills to the amount of £286,000, which were issued during 1897-8, under the 1893 Act, have been purchased with the proceeds of the Savings Bank Stock. Under the Treasury Bills Act

of 1901, authority was given for the issue of bills to the amount of £530,000 to cover deficiencies in revenue. The rate of interest was fixed at 4 per cent., and the due date is 1912. The total amount realised, less expenses, was £535,119, or £100 19s. 5d. per £100.

South Australia.—In 1893 a small loan of £125,000, being portion of the 1890 loan of £1,532,900, was floated in London. The rate of interest is $3\frac{1}{2}$ per cent., and the loan is redeemable in 1939. An instalment of the £1,013,279 loan of 1892 was placed in Adelaide in February, 1894. The amount of the issue was £200,000, the price realised per £100 being £92. The rate of interest is $3\frac{1}{2}$ per cent. In June, 1895, a further issue of £311,000 was floated in Adelaide. In February, 1896, a loan of £839,500 was issued in London, bearing interest at 3 per cent., and redeemable in 1926. The net proceeds, after allowing for charges and accrued interest, amounted to £800,406, or £95 6s. 10d. per cent. In May, 1897, the first of a number of loans under the "Consolidated Stock Act" was floated in London, amounting to £500,000. Further issues took place in Adelaide for £295,835 and £606,800; in London and Adelaide, for £1,500,000; and in Adelaide, for £249,075. Of the last issue, £36,000 were sold at par, on condition of being placed on the London Register, while the balance realised £98 17s. 3d. per cent. The first issue of £500,000 was sold for £94 7s. 4d.; the £295,835 for £99 18s. 8d.; the £606,800, for £98 3s. 9d.; and the £1,500,000, for £94 17s. $10\frac{1}{2}$ d. per cent. The total issues under the "Consolidated Stock Act" to the 30th June, 1902, amounted to £5,094,245. All these loans bear interest at the rate of 3 per cent., and mature in 1916. On the 4th April, 1900, an issue of £1,000,000 at 3 per cent. was floated in London, being part of the loan authorised under the "Public Purposes Loan Act of 1898," the minimum price being fixed at $94\frac{1}{2}$. The net proceeds, after allowing for charges, amounted to £92 3s. $1\frac{1}{2}$ d. per £100. During 1899–1900, stock to the amount of £518,970 was disposed of in Adelaide, the net price realised being £95 7s. 11d., while in 1900–1, further local sales, amounting to £384,325, were effected at an average price of £94 7s. $6\frac{1}{4}$ d. These issues bear the same rate, and are redeemable on the same date, as the former Consolidated Stock Loans. During 1901–2, a small parcel of £64,240 was sold locally, but no particulars relating to the flotation are yet to hand.

In June, 1892, treasury bills were issued to the amount of £349,225 with interest at the rate of £4 11s. 3d. per cent., and payable in five years; and in March and July, 1893, further issues of £250,000 each were made bearing the same rate; the bills have all been redeemed.

In order to liquidate the debt due by the Northern Territory to South Australia proper, authority was obtained in 1901 to issue treasury bills to the amount of £849,500 at $3\frac{1}{2}$ per cent. The whole of the bills were floated at par, and, with the exception of £200,000 sold in London, were negotiated locally.

Western Australia.—In June, 1894, a loan of £540,000, at 4 per cent., was floated in London at a minimum of 102, the average price

realised being £103 6s. 1d. In May, 1895, the state floated a 3½ per cent. loan of £750,000, having a forty years' currency, but redeemable from 1915 on twelve months' notice being given. The minimum price was fixed at 99, and the average obtained was £103 1s. 5d., or, deducting accrued interest, £101 9s. 2d.

In May, 1896, Western Australia, following the example of New Zealand and New South Wales, placed on the market a 3 per cent. loan for £750,000, having a currency until 1935, but redeemable from 1915 on twelve months' notice being given. A sinking fund is to be established in connection with this loan, commencing three years after flotation, the contribution being 1 per cent. per annum. The gross price obtained was £100 16s. 8d., and the accrued interest amounted to about 7s. 6d., so that the Government obtained £100 9s. 2d. This is the cheapest loan yet floated by any of the Australasian states.

In May, 1897, an issue of £1,000,000 was floated in London, the minimum price being fixed at 95, and the rate of interest 3 per cent. The loan is redeemable in 1935, and the net proceeds per £100, after allowing for charges and accrued interest, amounted to £93 8s. 11d.

In January, 1898, an issue of £1,000,000 was placed in London, being the first instalment under the Coolgardie Gold-fields Water Supply Loan Act, the minimum price being fixed at £95, and the rate of interest 3 per cent. For this, applications to the amount of £2,891,250 were received. The loan matures in 1927, and the net proceeds were £94 15s. 3d. per £100.

In July, 1898, a further issue of £1,000,000 was floated in London, being the second instalment under the Loans Act of 1896, the minimum price being fixed at £94, and the rate of interest 3 per cent. At the public tendering only £550,000 were offered, which brought an average price of £94 3s. 4d. The balance was sold afterwards at the minimum, which brought the average down to £94 1s. 10d. per cent. The loan is redeemable in 1935, and the net proceeds per £100 amounted to £91 19s. 4d.

In March, 1900, another issue of £1,000,000 was floated in London, the minimum price being fixed at £93½, and the rate of interest 3 per cent. The amount offered was £1,570,000, and the average price obtained was £93 12s. 9¾d. per cent., while the net proceeds per £100, after deducting accrued interest and expenses, came to £89 13s. 2d. In November, 1900, loans to the amount of £880,000 were negotiated, the rate of interest being raised to 3½ per cent. The net proceeds per £100 were £96 8s. 3d. and the rate paid by the Government, allowing for redemption at par at the latest date of maturity (1935) was £3 13s. 8d., while the corresponding yield to original investors was £3 11s.

The Government has authority to issue treasury bills, but there were no bills outstanding on the 30th June, 1902.

Tasmania, in March, 1893, issued a 3½-per cent. loan of £800,000, which was part of the £2,100,000 authorised in December, 1892. The loan was only a partial-success, £600,000 being taken up and the balance

withdrawn. The average price realised per £100 was £92 2s. 2d. In 1894 a loan of £1,000,000 was negotiated in London, the rate of interest being 4 per cent., and the date of maturity between 1920 and 1940, at the option of the Government on 12 months' notice being given. The average amount realised per £100 was £101 4s. 3d. In February, 1895, a 3½ per cent. loan of £750,000 was floated, redeemable in 1940, or from 1920 on 12 months' notice being given. The price realised was £98 6s. 1d. In 1901, stock to the amount of £450,000 was sold in London, being the first 3 per cent. loan placed in London. The amount realised averaged 92 per £100, but no other particulars are available.

In 1895 authority was given for the issue of £250,000 "local inscribed stock" to cover deficiencies in revenue, and in 1896 and 1897 further sums of £250,000 in each year, and a sum of £100,000 in 1898, were authorised. Prior to the passing of the Appropriation Act of 1899 the whole of the local inscribed stock hitherto raised in the state was placed in the Treasury books to an account for stock raised temporarily in aid of Consolidated Revenue; but as the amount raised was far in excess of revenue requirements, and was largely being used to meet expenditure on loans and public works accounts, which had not otherwise been provided for, a transfer of the whole of the local inscribed stock then issued, and maturing subsequently to the year 1900, was effected by that enactment, and was marked as an addition to the funded debt of the state. The amount so treated was £510,747, leaving a sum outstanding on the 31st December, 1899, of £91,727, which has been duly paid off.

Local inscribed stock for general purposes was sold during 1900 to the amount of £270,258, the rate of interest being 3 per cent., while during 1901, £136,000 was sold at 3 per cent., £25,000 at 3¼ per cent., and £252,000 at 3½ per cent.

During 1894, treasury bills to the amount of £96,900 were negotiated in the state, viz., £40,500 at 4 per cent. and £56,400 at 4½ per cent., the bills having a currency until 1899 and 1900 respectively. The total amount of treasury bills floated was £215,000, and they have been all redeemed.

New Zealand.—Under the amending Consolidation Act of 1884, short-dated debentures are issued pending the sale of inscribed stock under the Act of 1877. In May, 1895, New Zealand placed a loan for £1,500,000 on the market. With the exception of some New South Wales treasury bills, this was the first 3 per cent. loan floated by any of the Australasian colonies. The loan has a currency of fifty years, and the minimum price was fixed at 90. The average gross price obtained was £94 8s. 9d., so that, after deducting accrued interest, the Government obtained £93 14s. 6d.

In February, 1899, a further issue of £1,000,000 was placed in London, the minimum price being fixed at £96, and the rate of interest 3 per cent. For this stock applications to the amount of £3,027,500 were received. The loan is redeemable in 1945, and the average price secured was £96 11s. per cent. This was the last flotation in London

till November, 1901, when a loan of £1,000,000 was floated at 3 per cent. The price of issue was £94 per £100, and the loan was underwritten at a fee of £1 per cent. No further particulars are yet available. Debentures and stocks have been sold locally, £500,000 being disposed of in 1900-1, bearing interest at 4 per cent., and £250,000 in 1901-2 at the same rate of interest.

The amount of treasury bills outstanding on the 31st March, 1901, was £700,000; the issue during the ensuing twelve months amounted to £1,380,000, while bills representing £1,380,000 were paid off, leaving the amount outstanding on the 31st March, 1902, at £700,000. As, however, allowance is made for these at the end of the financial year when carrying forward the balance of the Revenue Account, the liability is practically wiped out.

The particulars of the latest issues of the Funded Debts negotiated in London for which particulars are available are as follows:—

State.	Year of Issue.	Year of Maturity.	Nominal—		Net Proceeds, less charges and accrued Interest.		Effective annual Interest per £100 sterling, paid by Government.	
			Interest.	Amount of Loan.	Total.	Per cent.	Nominal Interest on net Proceeds.	Rate paid, allowing for redemption at par on maturity
			per cent.	£	£	£	£ s. d.	£ s. d.
New South Wales.....	1893	1933	4	2,500,000	2,440,540	97'62	4 2 9½	4 3 0½
"	1894	1918	3½	832,000	829,551	99'70	3 10 10	3 10 11
"	1895	1935	3	4,000,000	3,804,573	95'14	3 3 0½	3 4 3½
"	1898	1935	3	1,500,000	1,479,746	98'65	3 1 2½	3 1 6
"	1901	1935	3	4,000,000	3,644,918	91'12	3 6 4	3 9 0
"	1902	.....	3	3,000,000	2,727,191	90'91	3 6 6	3 8 7
Victoria.....	1892	1921-26	3½	2,000,000	1,810,666	90'53	3 18 0	3 19 8½
"	1893	1911-26	4	2,107,000	1,999,733	94'91	4 5 1½	4 6 0
"	1899	1926-49	3	1,600,000	1,491,355	93'21	3 4 4	3 5 7
"	1901	1926-49	3	3,000,000	2,695,875	89'86	3 7 2½	3 8 3
"	1893	1930	3½	1,182,400	1,014,162	85'77	4 2 4	4 4 4½
Queensland.....	1895	1945	3½	1,250,000	1,230,274	98'42	3 11 0	3 11 10½
"	1896	1947	3	1,500,000	1,434,122	95'61	3 3 2½	3 3 7½
"	1900	1950	3	1,400,000	1,277,590	91'26	3 6 3	3 7 0
"	1900	1947	3	1,374,213	1,217,790	88'61	3 8 2½	3 9 4½
South Australia.....	1890-4	1939	3½	1,532,900	1,417,457	92'47	3 16 4½	3 17 0
"	1892-4	1939	3½	513,200	497,052	96'85	3 12 11	3 13 2½
"	1896	1926	3	830,500	800,406	95'34	3 3 5	3 4 8½
"	1897	1916	3	500,000	480,246	96'05	3 2 11½	3 5 4½
"	1899	1916	3	1,500,000	1,390,034	92'67	3 5 2½	3 10 2½
"	1900	1916	3	1,000,000	905,125	90'81	3 6 6½	3 14 1
Western Australia.....	1892	1911-31	4	400,000	393,211	98'30	4 2 2½	4 2 4½
"	1894	1911-31	4	540,000	544,964	100'92	4 0 0½	4 0 0
"	1895	1915-35	3½	750,000	760,934	101'46	3 9 7	3 9 5
"	1896	1915-35	3	750,000	744,542	99'27	3 3 10½	3 1 0
"	1897	1915-35	3	1,000,000	934,465	93'45	3 4 8½	3 5 9½
"	1898	1927	3	1,000,000	947,610	94'76	3 3 4	3 5 3
"	1898	1915-35	3	1,000,000	919,648	91'96	3 5 8	3 7 8
"	1900	1915-35	3	1,000,000	896,583	89'86	3 7 5	3 9 6
"	1900	1920-35	3½	880,000	848,426	96'41	3 12 7	3 11 0
Tasmania.....	1893	1920-40	4	1,000,000	994,912	99'49	4 1 2½	4 1 3
"	1895	1920-40	3½	750,000	737,308	98'31	3 11 10	3 12 0
"	1901	.....	3	450,000	.....	.....	.....	.....
New Zealand.....	1895	1945	3	1,500,000	1,394,117	92'94	3 5 0½	3 5 9½
"	1899	1945	3	1,000,000	*933,375	93'34	3 4 9	3 5 6
"	1901	.....	3	1,000,000	.....	.....	.....	.....

* Approximate.

The treasury bills outstanding on the 30th June, 1902, were issued to cover deficiencies in revenue, with the exception of £3,006,500 in New South Wales, of which a sum of £6,500 is overdue, and £1,185,000 in Victoria. The expenses incurred in these issues were practically nil—except for the flotations by New South Wales in London, the usual charges being made for brokerage, commission, and stamp duty—as the bills were sold at par, or a very small discount, and in some cases even at a premium. Particulars of the cost of treasury bills negotiated prior to 1896 will be found in previous editions of this work.

EXPENDITURE FROM LOANS.

In the foregoing pages the chief points dwelt upon have been the amount of the public indebtedness and the credit enjoyed by each state as tested by the selling price of its loans. Before closing this chapter it would be well to consider for what purpose the debts were incurred. The services upon which the proceeds of the public loans were expended are various, but the bulk of the expenditure may be placed to the account of the construction of railways, water supply and sewerage, and electric telegraphs. In the early stages of Australasian borrowing the expenditure was moderate, loans being difficult to raise and interest high; but latterly, as the conditions under which loans could be contracted became favourable, especially since 1881, few of the states have set any bounds to their requirements. It was a repetition of the old experience—the opportunity engendered the desire, and the open purses of the investors tempted the states to undue borrowing and lavish expenditure. What is termed a “vigorous public works policy” was the order of the day, and works were pressed forward which under other circumstances would either not have been undertaken, or have been held back until the growth of population warranted their construction. The plethora of money has been harmful in many ways, the most apparent being the construction of not a few branch railways, in outlying and sparsely-settled districts, which do not pay even their working expenses. But when every allowance is made for unwise or improvident expenditure, it will be found that by far the larger portion of the proceeds of loans has been well expended. In some instances it will be years, taking a most hopeful view of the situation, before many of the revenue-producing works will yield a sum sufficient to pay working expenses and interest; nevertheless, a practical consideration of the conditions which surround Australasian settlement will demonstrate that in some instances the construction of these works was justifiable, for apart from the consideration that they will ultimately be self-supporting, they have already materially assisted in developing the country's resources, and have largely enhanced the value of the public estate. Whether their cost in all cases should have been charged against the loans account is a

different matter, seeing that the rents obtained from public lands, and proceeds of sales, invariably go into the ordinary revenue of the states.

The following statement gives, under a convenient classification, the loan expenditure of each state during 1901-2 :—

State.	Year ended.	Amount spent on Works yielding direct Revenue.				Other Works and Services.	Total.
		Railways.	Water Supply and Sewerage.	Electric Telegraphs.	Total.		
		£	£	£	£	£	£
New South Wales..	30 June, 1902	2,243,072	480,205	39,287	2,769,164	2,169,048	4,938,212
Victoria	30 June, 1902	461,824	88,902	3,910	554,636	334,695	889,331
Queensland	30 June, 1902	751,451	7,462	17,551	776,464	385,225	1,161,689
South Australia ..	30 June, 1902	118,074	212,506	12,456	343,636	222,445	566,081
Western Australia..	30 June, 1902	578,085	731,989	.....	1,310,974	234,849	1,545,823
Tasmania	31 Dec., 1901	80,948	.....	11,520	92,468	249,520	341,994
Commonwealth..	.....	4,235,554	1,527,064	84,724	5,847,342	3,595,788	9,443,130
New Zealand.....	31 Mar., 1902	1,333,941	15,325	31,729	1,380,995	1,903,937	3,284,932
Australasia .....	.....	5,569,495	1,542,389	116,453	7,228,337	5,499,725	12,728,062

The expenditure of the Commonwealth states during 1901-2 from funds derived from the proceeds of loans was £9,443,130. Of this amount, the sum of £5,847,342 was spent on services directly revenue-producing, and the remainder was chiefly devoted to works such as the construction of roads and bridges, the improvement of harbours and rivers, and the erection of lighthouses, schools, and public buildings, less obviously a proper charge against loan votes. The loan expenditure of the six Commonwealth states and New Zealand during 1901-2 was £12,728,062, of which amount £7,228,337 was spent on works directly revenue-producing.

In most of the states the expenditure from loans was greatly reduced during the years 1893 to 1896. In some cases this was to be attributed to a settled policy of retrenchment; but in others, the difficulty of raising a loan in London affords a more probable explanation. The expenditure, however, since 1897-8, shows a tendency to increase, the figures for the last financial year being largely in excess of the previous five years in the states of New South Wales, Tasmania, and New Zealand. The expenditure was chiefly on account of revenue-producing works; and in the case of New Zealand and Queensland large advances from loans were also made to local bodies. The

expenditure of each state during the last five years is given in the following table:—

State.	1897-8.	1898-9.	1899-1900.	1900-1.	1901-2.
	£	£	£	£	£
New South Wales	1,653,143	2,025,944	2,400,943	2,788,120	4,938,212
Victoria	462,094	775,841	1,033,588	939,890	889,331
Queensland	937,066	1,054,787	1,182,668	1,212,020	1,161,689
South Australia	495,193	581,577	602,650	422,343	566,081
Western Australia	1,896,145	1,032,690	878,329	1,495,292	1,545,823
Tasmania	79,602	130,257	176,257	283,537	341,994
Commonwealth	5,523,243	5,601,096	6,274,435	7,141,202	9,443,130
New Zealand	1,428,502	1,836,863	2,051,899	2,246,221	3,284,932
Australasia	6,951,745	7,437,959	8,326,334	9,387,423	12,728,062

The total expenditure of the proceeds of loans from the commencement of borrowing to the end of the financial year 1901-2 for the six Commonwealth states was £206,118,355, and for the whole of Australasia £257,702,272. Of these sums, £161,158,989, or over three-fourths, was spent by the Commonwealth states, and £181,278,705, or nearly three-fourths, by the six states of Australia and New Zealand in the construction of railways, water supply and sewerage works, and electric telegraphs; and the balance was expended on services which, though non-productive, were claimed by their proposers as being necessary in the interests of national development. The expenditure on defence and the payments made to meet deficiency in revenue are the exceptions to the rule which has governed the expenditure of the proceeds of loan issues. The expenditure to cover deficiency in revenue has not been large, and is looked upon as but a temporary charge on the loan funds; while the expenditure on defence has been extremely small in all the states except New South Wales and New Zealand. The following table shows the total loan expenditure of each province up to the close of the last financial year:—

State.	Expenditure to—	Amount spent on works yielding direct Revenue.				Other Works and Services.	Total
		Railways.	Water Supply and Sewerage.	Electric Telegraphs.	Total.		
		£	£	£	£	£	£
N. S. Wales	30 June, 1902	45,414,483	10,305,038	1,294,887	57,074,408	15,206,341	72,280,749
Victoria	30 June, 1902	37,740,161	8,569,518	8,366	46,318,045	4,202,343	50,520,888
Queensland	30 June, 1902	22,592,617	358,389	1,034,578	23,985,584	11,460,030	35,455,514
South Australia...	30 June, 1902	13,450,880	5,051,646	992,214	19,494,740	6,300,058	25,794,798
West'n Australia	30 June, 1902	7,547,949	2,329,365	269,308	10,146,622	3,324,412	13,471,034
Tasmania	31 Dec., 1901	3,997,873	.....	141,717	4,139,590	4,455,782	8,595,372
Commonwealth .....	.....	130,743,963	26,673,956	3,741,070	161,158,989	44,959,366	206,118,355
New Zealand	31 Mar., 1902	18,501,967	679,802	937,887	20,119,716	31,464,201	51,583,917
Australasia .....	.....	149,245,930	27,353,818	4,678,957	181,278,705	70,423,567	257,702,272

In the New Zealand returns, old provincial debts contracted prior to 1876, amounting to £11,535,469, have been included under the head "Other works and services," as there is no available record of the services upon which the loans of the old Provincial Governments were expended, except where such was for the construction of railways. The figures given for New South Wales, South Australia, Western Australia, and Tasmania under the head of "Railways" include loan expenditure on State tramways, but, except in the case of the first-mentioned state, the amount thus expended is unimportant, as this service in the other states is generally in the hands of municipal authorities or private companies. The Governments of New South Wales and New Zealand have borrowed money for the purpose of making advances to settlers for the improvement of their holdings, such advances being interest bearing and repayable by instalments. The sums advanced by the respective Governments named were—New South Wales to the 30th June, 1902, £268,902, and New Zealand to 31st March, 1902, £3,073,685.

In the preceding table a large sum has been placed under the head of "Other works and services"; in the following statement this amount has been subdivided and is shown under several heads. In regard to New Zealand, the sum under the heading of "Miscellaneous" also includes the provincial loans prior to 1876; but it is certain that a very large proportion of this miscellaneous expenditure was incurred for war purposes, the cost of suppressing the Maori risings between 1860 and 1870 being charged to loan votes:—

State.	Roads and Bridges, Harbours, &c.	Defence Works.	Immigra- tion.	Advances to Settlers.	Miscella- neous.	Total.
	£	£	£	£	£	£
New South Wales ..	8,832,306	1,422,957	194,430	268,902	4,487,746	15,206,341
Victoria	784,473	137,435	.....	.....	3,280,935	4,202,843
Queensland	3,900,217	358,773	2,935,326	.....	4,275,614	11,469,930
South Australia	2,809,753	289,290	.....	.....	3,201,015	6,300,058
Western Australia ..	1,977,749	.....	27,697	.....	1,318,966	3,324,412
Tasmania	2,545,144	127,834	235,000	.....	1,547,804	4,455,782
Commonwealth	20,849,642	2,336,289	3,392,453	268,902	18,112,080	44,959,366
New Zealand	7,007,152	696,836	2,147,859	3,073,685	18,538,669	31,464,201
Australasia	27,856,794	3,033,125	5,540,312	3,342,587	36,650,749	76,423,567

In the case of New South Wales a sum of £724,733 was spent on immigration before the inauguration of the General Loan Account, but it is not included in the above table. The total expenditure on immigration in the states comprising the Commonwealth was, therefore, £4,117,186, and for Australasia, £6,265,045.

The subjoined table shows the expenditure per inhabitant on the basis of the figures given in the table on page 1045 :—

State.	Amount spent on Works yielding direct Revenue.				Other Works and Services.	Total.
	Railways.	Water Supply and Sewerage.	Electric Telegraphs	Total.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales	32 18 4	7 10 3	0 18 9	41 7 4	11 0 5	52 7 9
Victoria	31 4 5	7 1 10	0 0 2	38 6 5	3 9 6	41 15 11
Queensland.....	44 5 1	0 14 1	2 0 6	46 19 8	22 9 4	69 9 0
South Australia.....	36 17 5	13 16 11	2 14 5	53 8 9	17 5 5	70 14 2
Western Australia	38 14 7	11 19 0	1 7 8	52 1 3	17 1 2	69 2 5
Tasmania	23 0 7	.....	0 16 4	23 16 11	25 13 4	49 10 3
Commonwealth.....	34 2 4	6 19 3	0 19 6	42 1 1	11 14 8	53 15 9
New Zealand	23 9 9	0 17 3	1 3 10	25 10 10	39 18 11	65 9 9
Australasia	32 6 1	5 18 5	1 0 3	39 4 9	16 10 10	55 15 7

EXPENDITURE BY THE GOVERNMENT AND LOCAL BODIES.

The question of Local Government is dealt with in another chapter. It is well, however, to give here a statement of the total amount which passes through the hands of the general and local governments. The sum can in no sense be taken as the cost of governing the various states; as will appear from page 1013, this may be taken as £16,894,874 for the six Commonwealth states, or £20,936,328 for the whole of Australasia.

The total sum expended by the general and local governments of the Commonwealth states during the year 1901-2 was £41,465,629, or £10 16s. 5d. per head, and for Australasia £51,969,820, or £11 4s. 9d. per head. Of these large sums, £29,240,334, or £7 12s. 7d. per inhabitant, was spent by the general governments of the six Commonwealth states from their revenues, and £9,443,130, or £2 9s. 4d. per inhabitant, from loans; the local expenditure—exclusive, of course, of a sum equal to the Government endowment—was £2,782,165, or 14s. 6d. per inhabitant. For the six Commonwealth states and New Zealand the

expenditure by the general government from revenue was £35,155,249, or £7 12s. 0d. per inhabitant, and from loans £12,728,062, or £2 15s. 1d. per inhabitant; while the local expenditure, exclusive of government endowment, amounted to £4,086,509, or 17s. 8d. per inhabitant.

The following table shows the general, loan, and local expenditure for each state :—

State.	General Government.		Local Government.	Total.
	From Revenue.	From Loans.		
	£	£	£	£
New South Wales.....	11,020,105	4,938,212	791,719	16,750,036
Victoria	7,407,781	889,331	1,034,968	9,332,080
Queensland.....	3,967,001	1,161,689	432,262	5,560,952
South Australia.....	2,823,578	566,081	231,008	3,620,667
Western Australia.....	3,151,427	1,545,823	157,169	4,854,419
Tasmania.....	870,442	341,994	135,039	1,347,475
Commonwealth	29,240,334	9,443,130	2,782,165	41,465,629
New Zealand	5,914,915	3,284,932	1,304,344	10,504,191
Australasia	35,155,249	12,728,062	4,086,509	51,969,820

The expenditure per inhabitant, under the same classification, will be found below. The distribution of the expenditure for New South Wales, between general and local government, is to some extent misleading, as nearly 40 per cent. of the population live outside the boundaries of the municipalities :—

State.	General Government.		Local Government.	Total.
	From Revenue.	From Loans.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
New South Wales..	7 19 10	3 11 7	0 11 5	12 2 10
Victoria	6 2 7	0 14 8	0 17 2	7 14 5
Queensland	7 15 5	2 5 6	0 16 11	10 17 10
South Australia ...	7 14 10	1 11 0	0 12 8	9 18 6
Western Australia..	16 3 5	7 18 7	0 16 2	24 18 2
Tasmania	5 0 3	1 19 5	0 15 7	7 15 3
Commonwealth	7 12 7	2 9 4	0 14 6	10 16 5
New Zealand	7 10 2	4 3 5	1 13 1	13 6 8
Australasia ...	7 12 0	2 15 1	0 17 8	11 4 9

COMMERCE.

It is reasonable to expect that the trade of the states which now form the Commonwealth of Australia, and the colony of New Zealand would increase as quickly as the population; but as a matter of fact its growth for many years was much more rapid, and at the present time the total commerce of Australasia per head of population is exceeded by that of no country except Belgium, half of whose trade consists of goods in course of transit to and from the north-western and central parts of the continent of Europe. Below will be found a statement of the trade of Australasia for various periods since the year 1825, prior to which date no information is available:—

Year.	Trade of Australasia.	
	Total Value.	Value per head.
	£	£ s. d.
1825	511,998	10 13 11
1841	5,573,000	22 4 0
1851	8,957,610	18 10 7
1861	52,228,207	41 19 10
1871	69,435,524	35 17 10
1881	101,710,967	36 12 7
1891	144,766,285	37 14 11
1892	122,761,263	31 5 10
1893	117,172,258	29 5 8
1894	109,691,901	26 17 10
1895	112,810,793	26 2 9
1896	129,139,621	30 10 0
1897	138,101,106	32 0 5
1898	147,287,268	33 12 1
1899	161,248,140	36 5 8
1900	165,860,269	36 15 6
1901	167,663,713	36 11 8

It will be seen that the average value of trade per inhabitant increased by £1 17s. 1d. during the twenty years extending from 1871

to 1891, of which the period from 1881 to 1891 accounted for no less than £1 2s. 4d. This, however, does not show the full extent of the growth in trade, for the prices of produce—especially of wool, which has been the staple product since very early years—had fallen heavily during the same period. From 1891 till 1894, the trade of Australasia seriously declined, a state of affairs partly brought about by the continued fall in prices and partly resulting from the financial crisis of 1893. Since 1894, however, as shown by the table, the value has steadily increased, reaching its maximum in 1901 with a sum of £167,663,713, the largest total yet recorded, and thus proving that the states have now shaken off to a great extent the ill effects of the period of depression.

The following series of tables shows the distribution of the total trade of Australasia, and also of the Australian Commonwealth, for the years 1881, 1891, and 1901, with the average value per head of population. The first table represents the imports:—

State.	Total Value of Imports.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	17,587,012	25,333,397	26,928,218	23 2 7	22 4 5	19 12 6
Victoria	16,718,521	21,711,608	13,927,340	19 4 3	18 19 2	15 14 8
Queensland	4,063,625	5,079,004	6,376,239	13 5 8	12 16 2	12 12 10
South Australia	5,320,549	10,051,123	7,417,769	19 4 3	31 3 4	20 8 7
Western Australia	404,831	1,280,093	6,454,171	13 14 3	25 14 3	34 8 4
Tasmania	1,431,144	2,051,964	1,965,199	12 5 0	13 15 6	11 6 5
Commonwealth	45,525,682	65,557,189	63,068,936	19 18 7	20 9 1	17 17 11
New Zealand	7,457,045	6,503,849	11,817,915	15 2 7	10 6 5	15 3 4
Australasia	52,982,727	72,061,038	79,886,851	19 1 7	18 15 9	17 8 7

The values of the total exports for the same years were as given below:—

State.	Total Value of Exports.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	16,307,905	25,944,020	27,351,124	21 9 0	22 14 3	19 18 8
Victoria	16,252,103	16,006,743	18,646,097	18 13 6	13 19 7	15 10 0
Queensland	3,540,366	8,305,387	9,249,366	15 18 6	20 18 11	18 6 8
South Australia	4,508,754	10,642,416	8,187,471	16 5 7	33 0 0	22 11 0
Western Australia	502,770	799,466	8,515,623	17 0 8	16 1 2	45 8 3
Tasmania	1,555,576	1,440,818	2,945,757	13 6 3	9 13 6	16 19 4
Commonwealth	42,667,374	63,138,850	74,895,438	18 13 6	19 13 11	19 13 10
New Zealand	6,060,806	9,566,397	12,881,424	12 5 11	15 3 8	16 10 8
Australasia	48,723,240	72,705,247	87,776,862	17 11 0	18 19 2	19 3 1

The total trade, similarly classified, was as follows :—

State.	Value of Total Trade.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	33,894,817	51,327,417	54,279,342	44 11 7	44 18 8	39 11 2
Victoria	32,970,624	37,718,351	37,573,437	37 17 9	32 18 9	31 4 8
Queensland	7,603,991	13,334,391	15,625,605	34 4 2	33 15 1	30 19 6
South Australia	9,829,303	20,693,539	15,605,240	35 9 10	64 3 4	42 19 7
Western Australia	907,601	2,079,559	14,969,794	30 14 11	41 15 5	79 16 7
Tasmania	2,986,720	3,492,782	4,910,956	25 11 3	23 9 0	28 5 9
Commonwealth	88,193,056	123,696,039	142,964,374	38 12 2	40 3 0	37 11 9
New Zealand	13,517,911	16,070,246	24,699,339	27 8 6	25 10 1	31 14 0
Australasia	101,710,967	144,766,285	167,663,713	36 12 7	37 14 11	30 11 8

The point most notable in this series of tables is the very marked impetus which the trade of South Australia received during the period 1881-91—a trade of £64 3s. 4d. per inhabitant, the value transacted by that state during 1891, being almost without parallel in any important country. This huge trade was, however, not drawn altogether from its own territory, for in 1891 more than £5,731,000, or about £17 15s. per inhabitant, and in 1901, £2,589,188, or £7 2s. 7d. per inhabitant, was due to the Barrier District of New South Wales, of which South Australia is the natural outlet; and it must also be remembered that considerable quantities of goods on their way to Broken Hill are entered as imports in South Australia when they arrive in that state, and as exports to New South Wales when they cross the border. Of the total shrinkage of £21 3s. 9d. per head from 1891 to 1901, £7 3s. 3d. must be attributed to the falling-off in the Barrier trade. The large production of the gold-fields is the chief cause of the enormous increase in the trade of Western Australia, which will be noticed when comparing the years 1891 and 1901.

The trade of New South Wales in 1891 was valued at no less than £51,327,417. Five years later, owing in great measure to the same influences as affected the trade of Australia generally, the total had fallen to £43,571,859; but for 1901, the last year shown in the table, the total stood at £54,279,342, the largest amount yet recorded. In 1901, the returns for imports, exports, and total trade are in every

case higher than the corresponding figures for 1881, while, as compared with 1891, Victoria, South Australia, and Tasmania show a decrease in imports, South Australia in exports, and in total value of trade Victoria and South Australia each show a decrease. If the figures for the years 1901 and 1891 be compared for the states comprising the Commonwealth, it will be found that, there is an increase of upwards of £2,500,000 in the total value of imports, and the exports show an increase amounting to £11,756,588, while the value of the total trade advanced during the period in question from £128,696,039 to £142,964,374, representing an expansion of upwards of £14,268,000.

INTERSTATE TRADE.

The trade shown in the above series of tables represents, not only the business transacted with countries outside Australasia, but the trade maintained by the states of the Commonwealth with one another, and also with New Zealand. This trade, which forms a considerable proportion of the total which has just been dealt with, reached a total of £58,061,610 in 1901, which in proportion to population is somewhat lower than that for the previous census years. The following figures represent the total value of this important branch of the general trade, as well as the value per inhabitant. It is obvious that the total interstate trade which is shown by the table represents in reality twice the actual value of goods passing from one state to another, the same merchandise figuring in one place as exports, and in another as imports. The value of goods passing through a state on their way to foreign countries, as well as of goods imported from abroad and re-exported, is, of course, also included in the figures. The actual movement is therefore less than half of the values given below:—

Year.	Total.	Value per Inhabitant of Australasia.
	£	£ s. d.
1861	17,166,925	13 16 0
1871	29,745,068	15 7 6
1881	37,156,289	13 8 4
1891	60,114,797	15 12 11
1901	58,061,610	12 13 4

The figures given in the following table represent the total interstate trade of each state in 1881, 1891, and 1901, and although they are affected by the circumstances just mentioned, they afford

interesting evidence of the way in which the prosperity of one province is bound up with that of the others :—

State.	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	per cent	per cent	per cent
New South Wales..	13,211,372	22,730,348	20,368,098	35·6	37·8	35·1
Victoria	10,686,172	13,575,205	12,896,896	28·8	22·6	22·2
Queensland	4,810,286	6,822,366	7,819,177	12·9	11·3	13·5
South Australia ...	3,089,466	11,034,215	7,256,407	8·3	18·4	12·5
Western Australia.	341,156	822,125	3,267,607	0·9	1·4	5·6
Tasmania	2,027,781	2,411,428	2,480,274	5·5	4·0	4·3
New Zealand.....	2,990,056	2,719,110	3,973,151	8·0	4·5	6·8
Australasian Exports & Imports	37,156,289	60,114,797	58,061,610	100·0	100·0	100·0

EXTRA-AUSTRALASIAN TRADE.

If Australasia be regarded as a whole, and an elimination made of the real trade which the provinces carry on with each other, as well as the value of the goods which pass through one state on their way to another, as shown under the heading of Interstate trade, the total and average amounts will, of course, be greatly reduced. Such an elimination has been made in the following table, which shows the growth since 1861 of what may be called the external trade—that is, trade transacted with all countries outside of Australasia :—

Year.	External Trade.	
	Total Value.	Value per head.
	£	£ s. d.
1861	35,061,282	28 3 10
1871	39,729,016	20 10 10
1881	64,554,678	23 6 3
1891	84,651,488	22 0 8
1901	109,602,103	23 18 4

By far the greater part of the external trade of Australasia is carried on with the United Kingdom ; and of the remainder the larger proportion is transacted with foreign countries, principally the United States, Germany, France, and Belgium. The trade with British possessions, which for a few years had considerably declined in value, reached in 1901 a total of £15,387,679, a figure largely in excess of that for any previous year shown in the table. The subjoined table shows the distribution of the external trade with the three divisions named :—

Trade with—		1861.	1871.	1881.	1891.	1901.
		£	£	£	£	£
The United Kingdom	Imports ..	13,467,370	12,006,419	25,662,185	30,823,474	32,122,863
	Exports ..	12,207,223	18,486,703	24,342,422	32,638,841	34,490,298
	Total ...	25,674,598	30,493,122	50,004,607	63,462,315	66,613,161
British Possessions ..	Imports ..	1,767,391	2,382,148	3,078,105	3,094,417	3,904,509
	Exports ..	3,656,065	764,052	4,257,961	2,231,608	11,483,170
	Total ...	5,423,456	3,146,800	7,336,156	5,326,025	15,387,679
Foreign Countries ..	Imports ..	3,216,788	2,245,124	4,603,326	7,490,424	14,430,554
	Exports ..	746,490	3,843,970	2,610,589	8,372,724	13,170,709
	Total ...	3,963,228	6,089,094	7,213,915	15,863,148	27,601,263
Total	Imports ..	18,451,499	16,633,691	33,343,706	41,408,315	50,457,926
	Exports ..	16,609,783	23,095,325	31,210,972	43,243,173	59,144,177
	Total ...	35,061,282	39,729,016	64,554,678	84,651,488	109,602,103

Prior to the year 1883 the European trade of Australasia was almost exclusively carried on with the United Kingdom, but since that time direct commercial relations have been established with the leading Continental countries. The British trade increased during the ten years ended 1891 by £13,457,708, equal to nearly 27 per cent. ; while the trade with foreign countries increased during the same period by £8,649,233, or nearly 120 per cent. From 1891 to 1901, chiefly due to the cultivation of direct business relations with the Continent of Europe, trade with the United Kingdom only increased £3,150,846 ; while the foreign trade increased during the same period by the large sum of £11,738,115. The trade with British possessions was returned in 1901 as £15,387,679, as against £5,326,025 in 1891, and £7,336,156 in 1881. As compared with 1891, the year 1901 shows an increase in trade with the United

Kingdom of 4.96 per cent., while with British possessions there was an increase of 188.91 per cent., and with foreign countries an increase of 74.0 per cent.

The tables of imports and exports shown below give the direct trade with foreign countries, in accordance with the returns furnished to the various statistical offices. With respect to some countries, however, principally France and Belgium, and in a less degree other European countries, a certain proportion, both of the import and export trade, is carried in British vessels to London, and thence distributed—in some instances at a much later date. It is impossible to expect that the whole of this trade could with absolute exactitude be referred to the country of origin, particularly when it is considered that in all countries of the world consignees of various lines of goods do not always furnish reliable information as to ultimate origin or destination of merchandise. The defects above referred to are not common to the Australasian trade returns alone, but more or less disfigure those of every country.

The following table shows separately for the Commonwealth of Australia and the colony of New Zealand the value of the goods imported direct from each of the principal countries during the years 1891 and 1901:—

Imports direct from—	Commonwealth of Australia.		New Zealand.		Australasia.	
	1891.	1901.	1891.	1901.	1891.	1901.
British Empire—						
Commonwealth of Australia.	£	£	£	£	£	£
New Zealand	1,793,038	1,814,516	1,013,549	1,979,320	.....	.....
United Kingdom	26,453,841	25,287,032	4,399,633	6,885,831	30,823,474	32,122,863
India and Ceylon	982,824	1,683,586	275,248	467,489	1,258,072	2,151,075
Canadian Dominion	149,786	330,969	1,941	33,538	151,727	364,507
Cape Colony	373	6,365	9	330	382	6,695
Fiji	155,067	45,423	177,707	349,706	332,774	305,129
Mauritius	388,529	119,232	70,650	442	459,179	119,674
Hongkong	626,882	284,963	21,903	18,245	648,785	303,298
Straits Settlements	178,516	320,584	10,055	25,538	188,571	346,122
Other Possessions	54,256	178,841	671	39,258	54,927	218,099
Total	30,783,112	30,021,511	5,941,366	9,709,697	33,917,891	36,027,372
Foreign Countries—						
France and New Caledonia	359,951	486,175	9,084	27,714	369,035	513,889
Germany	1,707,175	2,800,342	66,102	198,521	1,773,277	2,998,563
Italy	56,617	156,389	1,807	9,211	58,484	165,000
Belgium	314,434	567,803	6,591	63,053	321,025	630,886
Sweden and Norway	459,046	506,457	365	11,993	459,414	518,420
United States	2,558,320	5,854,239	361,795	1,415,260	2,920,115	7,269,499
Netherlands and Java	652,517	993,778	2,143	100,730	654,660	1,094,508
South Sea Islands	12,792	73,966	65,493	68,733	78,285	142,699
China	680,328	159,485	18,815	15,324	699,143	174,809
Japan	52,887	288,216	8,399	45,465	61,286	333,681
Other Countries	73,874	525,486	21,826	62,214	95,700	587,700
Total	6,927,941	12,412,336	562,483	2,018,218	7,400,424	14,430,554
Total, British and Foreign	37,711,053	42,433,847	6,503,849	11,817,915	41,408,315	50,457,926

The external exports for the same years were as follows :—

Exports direct to—	Commonwealth of Australia.		New Zealand.		Australasia.	
	1891.	1901.	1891.	1901.	1891.	1901.
British Empire—	£	£	£	£	£	£
Commonwealth of Australia.	660,213	1,458,374	1,705,561	1,993,881	.....	.....
New Zealand	25,498,010	25,194,923	7,140,831	9,295,375	32,638,841	34,490,298
United Kingdom	998,920	3,277,214	2,551	10,194	1,000,871	3,287,408
India and Ceylon	40	37,327	.....	747	40	38,074
Canadian Dominion	171,312	4,814,795	100	119,758	171,412	4,984,558
Cape Colony	122,430	200,741	43,896	43,709	166,326	253,450
Fiji	107,147	60,572	4	.....	107,151	60,572
Mauritius	484,363	413,711	7,408	29,792	491,771	443,503
Hongkong	151,143	113,523	100	211	151,243	113,739
Straits Settlements	139,464	1,642,701	3,330	709,170	142,794	2,351,871
Other Possessions .....	.....	.....	.....	.....	.....	.....
Total	28,332,442	37,223,386	8,903,781	12,202,787	34,870,449	45,973,468
Foreign Countries—						
France and New Caledonia..	1,807,905	2,475,406	27,879	1,771	1,835,784	2,477,177
Germany	859,557	2,552,458	4,258	10,470	863,815	2,562,928
Italy	27,956	139,166	43	.....	27,999	139,166
Belgium	1,484,073	1,505,635	1,658	14	1,485,731	1,505,649
Sweden and Norway .....	.....	4,040	.....	692	.....	4,732
United States	2,754,053	3,373,876	515,208	519,079	8,269,261	3,892,955
Netherlands and Java	92,645	322,970	.....	100	92,645	323,070
South Sea Islands	55,963	107,857	93,407	109,460	149,370	217,317
China	30,185	128,976	564	15,407	30,749	144,383
Japan	16,485	123,355	93	1,640	16,678	124,995
Other Countries	581,286	1,758,333	19,506	20,004	600,792	1,778,837
Total	7,710,108	12,492,072	662,616	678,637	8,372,724	13,170,709
Total, British and Foreign	36,042,550	49,715,458	9,566,397	12,881,424	43,243,173	59,144,177

The values of the combined external imports and exports were as given below :—

Total direct trade with—	Commonwealth of Australia.		New Zealand.		Australasia.	
	1891.	1901.	1891.	1901.	1891.	1901.
British Empire—	£	£	£	£	£	£
Commonwealth of Australia.	2,453,251	3,273,390	2,719,110	3,973,151	.....	.....
New Zealand	51,951,851	50,431,955	11,510,464	16,181,206	63,462,315	66,613,161
United Kingdom	1,981,144	4,960,800	277,799	477,683	2,258,943	5,438,483
India and Ceylon	149,826	368,296	1,941	34,285	151,767	402,581
Canadian Dominion	171,685	4,821,160	109	120,088	171,794	4,941,248
Cape Colony	277,497	255,164	221,603	393,415	499,100	648,579
Fiji	495,676	179,304	70,654	442	566,330	180,246
Mauritius	1,111,245	698,674	29,311	48,037	1,140,656	746,711
Hongkong	329,659	434,112	10,155	25,749	339,814	459,861
Straits Settlements	193,720	1,821,542	4,001	748,428	197,721	2,569,970
Other Possessions .....	.....	.....	.....	.....	.....	.....
Total British	59,115,554	67,244,897	14,845,147	22,002,484	68,788,340	82,000,840
Foreign Countries—						
France and New Caledonia..	2,167,856	2,961,581	36,963	29,485	2,204,819	2,991,066
Germany	2,566,732	5,352,800	70,380	208,991	2,637,092	5,561,791
Italy	84,573	295,555	1,910	0,211	86,483	304,766
Belgium	1,798,507	2,073,438	8,249	63,097	1,806,756	2,130,535
Sweden and Norway	459,046	510,407	368	12,655	459,414	523,152
United States	5,312,373	9,228,115	877,003	1,934,389	6,189,370	11,162,454
Netherlands and Java	745,162	1,310,748	2,143	100,839	747,305	1,417,578
South Sea Islands	68,755	181,823	168,900	178,193	227,655	360,016
China	710,513	288,401	19,379	30,731	729,892	319,192
Japan	69,372	411,571	8,492	47,105	77,864	458,676
Other Countries	655,160	2,283,819	41,332	82,218	696,492	2,366,037
Total Foreign	14,628,049	24,904,408	1,225,099	2,696,855	15,363,148	27,061,263
Total British and Foreign	73,753,603	92,149,305	16,070,246	24,699,339	84,651,488	109,662,103

TRADE WITH THE UNITED KINGDOM.

In order to make a useful comparison of the value of the Australasian trade to the United Kingdom, it is necessary to refer to the British Board of Trade returns, and these returns have been used in the ensuing comparisons. The figures relating to Australasia, especially for late years, approximate very closely to the local Customs statistics. From the table it will be observed that while in 1881 the produce of the Commonwealth of Australia and the colony of New Zealand formed 29·5 per cent. of the imports of the United Kingdom from her possessions, in 1891 the proportion was 31·4 per cent., and in 1901 it was 33·0 per cent. :—

Year.	As returned by British Customs.				Proportion of Imports from Australasia to total from British Possessions.		
	Total Imports from British Possessions.	Imports from Australasia.			Commonwealth of Australia.	New Zealand.	Total.
		Commonwealth of Australia.	New Zealand.	Total.			
	£	£	£	£	per cent.	per cent.	per cent.
1881	91,539,660	21,837,709	5,125,859	26,963,568	23·9	5·6	29·5
1891	99,464,718	23,068,972	8,192,594	31,261,566	23·2	8·2	31·4
1901	105,573,706	24,217,669	10,594,587	34,812,256	23·0	10·0	33·0

Although it is very little more than a century since the commencement of Australasian settlement, an examination of the trade statistics of the mother country with her numerous dependencies shows that the total trade of the Commonwealth and New Zealand with the United Kingdom exceeds that of India by £1,256,000, while it is more than double that of Canada, and in a larger degree exceeds the trade of any other British possession. The following table, which is also compiled from the returns of the Board of Trade, shows the total trade of the United Kingdom, exclusive of specie and diamonds for the three years 1881, 1891, and 1901, with the most important of British possessions :—

Country.	1881.	1891.	1901.	Proportion of Trade of United Kingdom with British possessions.		
				1881.	1891.	1901.
	£	£	£	per cent.	per cent.	per cent.
India	63,682,308	64,783,605	63,135,133	35·7	33·6	28·9
British North America	20,608,159	20,906,357	30,075,709	11·6	10·8	13·7
Cape Colony and Natal	13,105,204	14,892,965	24,071,455	7·4	7·7	11·0
Straits Settlements	6,527,675	7,946,127	9,395,032	3·7	4·1	4·3
Hongkong	4,315,905	3,833,859	3,400,819	2·7	2·0	1·6
Australasia—						
Commonwealth of Australia ..	41,662,820	47,522,331	47,731,331	23·4	24·7	21·8
New Zealand	9,206,331	11,970,988	16,662,817	5·2	6·2	7·6
Total, Australasia	50,869,151	59,493,319	64,394,148	23·6	30·9	29·4

If, again, a comparison be made of the total trade transacted by the United Kingdom with all countries during the year 1901, it will be found that the trade with Australasia, amounting to £64,394,148, was only exceeded by that carried on with three countries, namely, the United States, with a total of £178,666,615; France, with £74,914,244; and Germany, with £66,428,294. The amounts taken by other countries will be found below, and it must be noted that the values given do not include specie:—

Country.	1881.	1891.	1901.	Proportion to Total Trade of United Kingdom		
				1881.	1891.	1901
	£	£	£	per cent	per cent	per cent
France	70,069,848	69,114,136	74,914,244	10·1	9·3	8·6
Germany	52,927,199	56,976,104	66,428,294	7·6	7·7	7·6
Belgium	25,047,833	30,525,737	37,290,772	3·6	4·1	4·3
Holland	38,295,414	42,290,587	46,615,964	5·5	5·7	5·4
Spain	14,421,326	10,050,936	19,495,707	2·1	2·2	2·2
Italy	10,792,615	10,272,329	11,677,342	1·6	1·2	1·3
United States	139,990,876	145,475,197	178,666,615	20·2	19·5	20·5
Argentine Republic	4,000,090	7,817,256	19,337,566	0·6	1·0	2·2
Chili	5,417,363	5,916,225	7,739,595	0·8	0·8	0·9
Brazil	13,254,733	12,855,202	9,307,855	1·9	1·7	1·1
Uruguay	1,881,522	1,568,891	1,842,358	0·3	0·2	0·2
Australasia—						
Commonwealth of Australia ..	41,662,820	47,522,331	47,731,331	6·0	6·4	5·5
New Zealand	9,206,331	11,970,988	16,662,817	1·3	1·6	1·9
Total, Australasia ..	50,869,151	59,493,319	64,394,148	7·3	8·0	7·4

TRADE WITH FOREIGN COUNTRIES.

Every year steamers of greater tonnage and higher speed are visiting the Commonwealth of Australia and the colony of New Zealand from Europe, and a considerable expansion of commerce must of necessity take place, owing to the new outlets for trade which have been opened up thereby. The values of the imports from the principal foreign countries for the years 1891 and 1901 are separately shown below for the Commonwealth of Australia and the colony of New Zealand:—

Country.	Commonwealth of Australia.		New Zealand.		Australasia.	
	1891.	1901.	1891.	1901.	1891.	1901.
	£	£	£	£	£	£
Belgium	314,434	567,803	6,591	63,033	321,025	630,886
France and New Caledonia	359,951	486,175	9,084	27,714	369,035	513,889
Germany	1,707,175	2,800,342	66,102	198,521	1,773,277	2,998,863
Netherlands and Java	652,517	993,778	2,143	100,730	654,660	1,094,563
Italy	56,617	156,389	1,867	9,211	58,484	165,600
Sweden and Norway	459,046	506,457	368	11,963	459,414	518,420
China	680,328	159,485	18,815	15,324	699,143	174,809
Japan	52,887	288,216	8,399	5,465	61,286	333,681
South Sea Islands	12,792	73,966	65,493	68,733	78,285	142,699
United States	2,558,320	5,854,239	361,795	1,415,260	2,920,115	7,269,499
Other Foreign Countries	73,874	525,486	21,826	62,214	95,700	587,700
Total	6,927,941	12,412,336	562,483	2,018,218	7,490,424	14,430,554

The exports from Australasia to the countries mentioned in the preceding table are appended :—

Country.	Commonwealth of Australia.		New Zealand.		Australasia.	
	1891.	1901.	1891.	1901.	1891.	1901.
	£	£	£	£	£	£
Belgium	1,484,073	1,505,635	1,658	14	1,485,731	1,505,649
France and New Caledonia ...	1,807,905	2,475,406	27,879	1,771	1,835,784	2,477,177
Germany	859,557	2,552,458	4,258	10,470	863,815	2,562,928
Netherlands and Java	92,645	322,970	.....	100	92,645	323,070
Italy	27,956	139,106	.....	43	27,999	139,166
Sweden and Norway .....	.....	4,040	.....	692	.....	4,732
China	30,185	128,976	564	15,407	40,749	144,383
Japan	16,485	123,355	93	1,640	16,578	124,995
South Sea Islands	55,963	107,857	93,407	109,460	149,370	217,317
United States	2,754,053	3,373,876	515,208	519,079	3,269,261	3,892,955
Other Foreign Countries	581,296	1,758,333	10,500	20,004	600,792	1,778,337
Total	7,710,108	12,492,072	662,616	678,637	8,372,724	13,170,709

From the year 1861 to 1901 the total imports to Australasia from foreign countries were as under :—

Country.	1861.	1871.	1881.	1891.	1901.
	£	£	£	£	£
Belgium .....	.....	.....	26,713	321,025	630,886
France and New Caledonia	136,124	153,992	340,750	369,035	513,889
Germany	109,172	3,899	225,672	1,773,277	2,908,863
Netherlands and Java	114,304	194,519	466,444	654,060	1,004,608
Italy .....	.....	.....	7,374	55,434	165,000
Sweden and Norway	22,666	106,720	259,156	459,414	518,420
China	827,347	874,925	1,430,993	699,143	174,809
Japan .....	.....	.....	23,245	61,286	333,631
South Sea Islands	40,200	135,060	124,447	78,235	142,099
United States	1,030,673	616,625	1,593,038	2,920,115	7,269,499
Other foreign Countries	886,252	154,384	104,944	95,700	587,700
Total	3,216,738	2,245,124	4,603,326	7,490,421	14,430,554

The following table shows the exports from Australasia to foreign countries during the years 1861-1901 :—

Country.	1861.	1871.	1881.	1891.	1901.
	£	£	£	£	£
Belgium .....	.....	.....	100,437	1,485,731	1,505,649
France and New Caledonia	26,793	101,758	336,493	1,835,784	2,477,177
Germany .....	.....	.....	70,422	863,815	2,562,928
Netherlands and Java	3,907	39,517	52,192	92,645	323,070
Italy .....	.....	.....	152,914	27,999	139,166
Sweden and Norway .....	.....	.....	.....	.....	4,732
China	114,149	29,137	73,590	30,749	144,383
Japan	1,805	9,470	6,372	16,578	124,995
South Sea Islands	36,130	153,563	140,299	149,370	217,317
United States	78,154	367,361	1,208,905	3,269,261	3,892,955
Other foreign Countries	487,582	3,143,159	373,451	600,792	1,778,337
Total	746,490	3,843,970	2,610,589	8,372,724	13,170,709

The commerce with foreign countries from the commencement of the period under review exhibits very satisfactory progress; the imports have increased 348·61 per cent., while the exports have grown to over seventeen times their original value, the increase in the total trade being 596·43 per cent. This expansion is chiefly due to the development of the European continental trade, consequent on the diversion of part of the wool business from London, which was largely brought about by the display of local resources at the Sydney and Melbourne International Exhibitions of 1879 and 1880. The annual increase per cent. of the trade of Australasia with the four principal foreign countries with which they have commercial relations is shown below, the period covered being the twenty years extending from 1881 to 1901 :—

Country.	Imports.	Exports.	Total Trade.
	per cent.	per cent.	per cent.
Belgium	17·11	14·50	15·15
France and New Caledonia	2·08	10·53	7·78
Germany	13·81	19·69	15·80
United States	7·89	5·64	6·99

It will be seen from the table on the previous page that trade with these countries has now reached a fairly large volume, but its beginnings were small, hence the large percentage of increase just shown. Turning to individual countries, Germany exhibits the greatest progress, and Belgium ranks second. From Antwerp, in the latter country, a great portion of German and French manufactures is shipped. This port is also the distributing centre for a considerable part of the wool destined for the Continent, and large quantities of this product landed there ultimately find their way to Germany, France, and other countries. The French, early in 1883, were the first to establish direct commercial relations with Australia, the steamers of the Messageries Maritimes, a subsidised line, making their appearance for the first time in Australian waters in the year named. In 1887 the vessels of the Norddeutscher Lloyd Company, of Bremen, commenced trading with Australasia; and in the latter part of 1888 a line of German cargo-boats opened up further communication between the great wool-exporting cities of Sydney, Melbourne, and Adelaide and the ports of Antwerp, Hamburg, and Dunkirk. Belgium has also established a line of steamships; and the latest foreign testimony to the growing importance of Australasia is the regular running of the Nippon Yusen Kaisha's steamers between Japanese ports and Sydney, and a line of steamers which run between San Francisco and Sydney, calling at New Zealand. In addition to the companies mentioned, some British lines run their vessels direct to Continental ports.

The result of these efforts to establish commercial relations is evident from the increase of trade which the foregoing table discloses, and from the diversion, now rapidly being effected, in the channel by which the wool required for Europe reaches the market. The example of the South American Republics, the bulk of whose produce now finds a market at the ports of Antwerp, Hamburg, Havre, and Dunkirk without passing through London, was not lost on Continental buyers. It was manifest that direct shipments of wool to Europe could as readily be made from Sydney or Melbourne as from Buenos Ayres or Monte Video; hence the presence in the local markets, in increasing numbers, of buyers representing Continental firms.

Australasia has for many years maintained important commercial relations with the United States of America, and in 1901 America's share of the trade of Australasia with foreign countries was 40.4 per cent. The greater part of this trade was carried on with the states of New South Wales and Victoria, and the colony of New Zealand. The main exports to the United States are specie, wool, coal, kauri gum, and New Zealand flax—chiefly the two first mentioned; so that, though large in its nominal amount, the trade is less valuable than would at first sight appear. The export of wool, which had formerly been unimportant, amounted in 1891 to £514,551—an increase of £325,314 over the total of the previous year; but this high value has not been maintained, and owing to tariff changes in the United States there was a fall to £228,040 in 1894, followed by a rise to £441,049 in 1896, while the figures for 1901 stood at £273,933.

Under present conditions little extension of commercial relations with the United States can be looked forward to; but trade with the East gives good promise for the future, especially with India, China, Japan, and the East Indian Archipelago, where markets for Australasian wool will possibly in time be found, little in that direction having been accomplished up to the present time. As mentioned above, Japan has established a national line of steamers to foster the trade between that country and Australasia; and with the abolition of the duty on wool, and the benefits to be derived from wearing woollen clothing impressed upon the people, there ought to be a good opening in that country for the staple product of these States. The foundation of such a trade has already been laid down, the exports of wool from New South Wales ports to Japan in 1901 being valued at £32,000. A large amount of business is already transacted with India and Ceylon, and this trade bids fair to increase, particularly in the tea of those places, which now strongly competes with the Chinese leaf in public estimation. The value of the direct import of Indian teas increased from £280,780 in 1890 to £826,276 in 1901; while the imports of this article from China decreased from £788,943 in 1890 to £92,612 in 1901.

For 1901 the total of the Australasian exports to China was recorded as £144,383. The Customs returns, however, do not represent the whole amount of the trade with China, as a considerable portion of the

commerce with Hongkong is in reality transacted with the Chinese Empire, Hongkong being to a large extent a distributing centre for the Empire. In view of this fact, the following table, showing the trade with the Chinese Empire and Hongkong, has been compiled:—

Country.	Commonwealth of Australia.		New Zealand.		Australasia.		
	1891.	1901.	1891.	1901.	1891.	1901.	
Chinese Empire ...	Imports....	680,323	159,485	18,815	15,324	699,143	174,809
	Exports....	80,185	128,976	564	15,407	30,740	144,383
Hongkong	Imports ...	626,882	234,963	21,908	18,245	648,785	303,208
	Exports....	484,363	413,711	7,408	29,792	491,771	443,503
Total	Imports....	1,307,210	444,443	40,718	33,569	1,347,928	478,017
	Exports....	514,543	542,687	7,972	45,199	522,520	587,886
	Total Trade	1,821,753	987,135	48,690	78,768	1,870,448	1,065,903

Trade with the South Pacific Islands, which on the whole may be said to be increasing, consists mostly of the importation of raw articles in exchange for Australasian produce. The bulk of the trade is done with Fiji and New Caledonia, the French colony dealing principally with New South Wales, as Sydney is the terminal port for the mail-steamers of the Messageries line. But owing to the enforcement of the new French Customs tariff, which is highly protective in its character, in the colonies of that country as well as in France itself, the New Caledonian trade bids fair to be lost to Sydney; for while the exports from New South Wales to New Caledonia in 1892 amounted to £184,128, they had fallen in 1901 to £165,020, or by more than 10 per cent. The trade with New Guinea is at present but small, though when the resources of that prolific island come to be developed a large increase may be expected. Besides the countries mentioned, Australasia maintains a not inconsiderable trade with Java and Scandinavia, but it consists mainly of imports,

The figures relating to the trade of each State with countries outside Australasia would be extremely interesting if they could be given with exactness. Unfortunately this is impossible, as the destination of goods exported overland cannot be traced beyond the State to which they are in the first instance despatched—all that can be given is the trade by sea, which the following series of tables shows. The imports from

countries outside Australasia for the states comprising the Commonwealth, together with the total for Australasia, were as follows :—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	11,357,006	14,256,219	17,560,207	14 18 9	12 9 4	12 15 11
Victoria	10,768,791	13,045,493	12,686,880	12 7 6	11 7 9	10 10 11
Queensland	1,492,305	3,183,209	3,515,607	6 14 3	7 18 0	6 19 5
South Australia	3,566,917	4,038,763	3,964,744	12 17 7	12 10 1	10 18 5
Western Australia	208,743	695,358	3,895,151	7 1 5	13 12 11	20 15 5
Tasmania	445,576	698,973	811,198	3 16 3	4 13 10	4 13 5
Commonwealth.....	27,839,428	35,918,015	42,433,847	12 3 9	11 4 1	11 3 1
New Zealand.....	5,504,278	5,490,300	11,817,915	11 3 4	8 14 4	15 3 4
Australasia	33,343,706	41,408,315	54,251,762	12 0 10	10 15 7	11 16 9

This statement is somewhat defective, for whereas in 1901 it has been necessary to treat New Zealand as a place beyond Australia, for the other years shown the trade of the different states with New Zealand was not so counted. An effort has been made to recast the figures for 1881 and 1891, but without satisfactory results, and the original figures have been allowed to stand. The difference in the method makes the 1901 returns comparatively larger than would have been the case otherwise, the extent of the difference being about ten shillings per inhabitant. The exports to countries outside Australia on the same basis as the imports were as follows :—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	9,326,349	14,340,850	18,210,627	12 5 4	12 10 10	13 5 5
Victoria	11,515,661	11,097,653	13,975,259	13 4 8	9 13 9	10 17 4
Queensland	1,301,400	3,378,816	4,333,846	5 17 1	8 8 3	8 11 10
South Australia	3,172,920	5,620,561	4,461,969	11 9 2	17 8 0	12 5 9
Western Australia	357,702	562,076	7,941,001	12 2 4	11 0 7	42 6 11
Tasmania	513,363	382,381	1,692,756	4 7 10	2 11 4	9 15 0
Commonwealth.....	26,187,305	35,382,337	40,715,458	11 9 3	11 0 9	13 1 5
New Zealand.....	5,023,577	7,860,836	12,881,424	10 3 10	12 9 7	16 10 8
Australasia	31,210,972	43,243,173	62,596,882	11 5 5	11 5 1	13 13 2

The total extra-Australasian trade was therefore as follows:—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	20,683,445	28,597,060	35,770,834	27 4 1	25 0 2	26 1 4
Victoria	22,284,452	24,143,146	25,762,130	25 12 2	21 1 6	21 8 3
Queensland	2,793,705	6,562,025	7,849,513	12 11 4	16 6 9	15 11 3
South Australia	6,739,837	9,659,324	8,426,713	24 6 9	29 18 1	23 4 2
Western Australia	566,445	1,257,434	11,886,152	19 3 9	24 13 6	63 2 4
Tasmania	958,939	1,081,354	2,503,954	8 4 1	7 5 2	14 8 5
Commonwealth	54,026,823	71,300,352	92,140,305	23 13 0	22 4 10	24 4 6
New Zealand	10,527,855	13,351,136	24,699,339	21 7 2	21 3 11	31 14 0
Australasia	64,554,678	84,651,488	116,848,644	23 6 3	22 0 8	25 9 11

It will be seen that the growth of the import and export trade of the various states has not been uniform. The imports of New South Wales in 1891 exceeded those in 1881 by nearly 3 millions sterling, while in 1901 they were only about £6,203,000 in excess of the returns for 1881. The exports of 1891 exceeded those of 1881 by over 5 millions, but from 1891 to 1901 they increased by £3,870,000. The Victorian imports increased from 1881 to 1891 in about the same ratio, but in 1901 they were £358,600 less than in 1891; while the exports, which in 1891 had decreased by £418,000, showed an increase in 1901 of almost £1,978,000 on the figures for 1891. The Tasmanian import trade in 1901 shows an increase of about £366,000 on that of 1881, while the exports in 1901 exhibit an increase of 229 per cent. as compared with those of 1881, and of over 342 per cent. on those of 1891. The South Australian imports in 1901 were only £397,827 more than they were in 1881; while the exports, which in 1891 nearly doubled those of 1881, shrunk by about £1,158,000 during the next ten years. The value of the New Zealand imports in 1901 was about £6,314,000 more than in 1881, but the exports increased during the period by over 156 per cent. The Queensland imports more than doubled from 1881 to 1891, and from the latter year they had increased by about £332,000 in 1901; the exports, however, increased steadily, and in 1901 were over 233 per cent. larger than in 1881. The imports of Western Australia increased from 1881 to 1891 more than threefold, and from 1891 to 1901 by over 460 per cent., while the exports increased over fourteen times from 1891 to 1901, about half the Western Australian gold being exported by way of the other states. No rigid deductions, however, can be drawn from the facts just given; for, as is well known, some of the states—notably Queensland and Tasmania—are not yet in a position to maintain a direct foreign trade, and in a forced comparison with the rest of Australasia are apt to suffer.

If the total trade of 1901 be considered, New South Wales heads the list with a commerce valued at £35,770,834; Victoria, with £25,762,139, being second; while New Zealand ranks third, with a

trade of £24,699,339. Taking all the states together, the external imports and exports combined equal a trade of £25 9s. 11d. per inhabitant—an increase of £3 9s. 3d. as compared with 1891, and of £2 8s. 8d. as compared with 1881. It is interesting to compare the volume of the external trade of the Commonwealth of Australia and the colony of New Zealand with the latest returns of other countries.

Country.	Total Trade.			Per Inhabitant.
	Merchandise.	Specie and Bullion.	Total.	
	£	£	£	£ s. d.
United Kingdom	869,854,000	58,232,000	928,086,000	22 4 7
France	460,408,000	39,771,000	500,179,000	12 16 9
Germany	554,445,000	20,930,000	575,375,000	10 2 7
Italy	132,970,000	952,000	133,922,000	4 2 6
Belgium.....	275,677,000	11,783,000	287,460,000	42 18 11
Spain	72,903,000	1,057,000	73,960,000	4 1 1
Canada	74,910,000	3,484,000	78,394,000	14 11 6
United States ...	480,645,000	47,334,000	527,979,000	6 16 0
Commonwealth of Australia...	74,282,208	17,867,097	92,149,305	24 4 6
New Zealand.....	22,404,060	2,295,279	24,699,339	31 14 0
Australasia	96,686,268	20,162,376	116,848,644	25 9 11

The trade of Australasia per head of population exceeds that of any country appearing in the list with the exception of Belgium.

An excess in the value of imports over exports was for many years a prominent feature of the trade of Australasia taken as a whole, although in some states the reverse was the case. The surplus of imports was due to two causes: (1) the importation, by the Governments and local bodies of the various states, of money to cover the cost of construction of public works; and (2) the private capital sent to Australasia for investment. Taking the states as a whole, these two items combined exceeded the payments made for interest on past loans, both public and private, and the sums drawn from the country by absentees; but as some of the states have ceased to borrow, and the amount borrowed by the others has fallen below their yearly payments for interest, the whole of Australasia now shows an excess of exports, and the same fact is also exhibited in the trade returns for 1901 for all the states. The present excess of exports and its cause come more properly within the parts of this work dealing with Public and Private Finance, and are dealt with at some length there.

EXPORTS OF DOMESTIC PRODUCE.

The values of the exports of Australasia and of its various provinces have been given in the previous pages without respect to the countries where the articles were produced. It is important to find to what

extent the exports have been the produce of each of the states whence they were shipped. The following table shows the value of the exports of domestic produce of each state as returned by the Customs for the years 1881, 1891, and 1901, and the value thereof per inhabitant :—

State.	Total Value.			Value per Inhabitant.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
New South Wales	10,784,327	21,065,712	19,015,884	14 1 11	13 8 9	14 10 3
Victoria	12,480,567	13,026,426	14,134,023	14 6 10	11 7 6	11 14 11
Queensland	3,478,876	7,979,080	9,009,696	15 12 11	19 17 4	17 17 3
South Australia	3,755,781	4,810,512	4,392,364	13 11 3	14 17 10	12 1 11
Western Australia	498,634	788,873	8,216,718	10 17 10	15 9 7	43 16 4
Tasmania	1,548,116	1,307,927	2,933,873	13 5 0	9 3 8	10 18 0
Commonwealth	32,545,801	49,058,530	58,602,568	14 4 11	15 16 1	15 8 2
New Zealand	5,762,250	9,400,094	12,690,460	11 13 9	14 18 6	16 5 9
Australasia	38,308,051	58,458,624	71,293,028	13 15 11	15 4 4	15 11 1

These figures, however, must be regarded as merely approximate, for it is difficult to ascertain with exactitude the domestic exports of some of the states, chiefly New South Wales, South Australia, and Victoria. In the last-mentioned state, a large proportion of the domestic export of wool consisted, in former years, of New South Wales produce, but the amount so stated is now comparatively small. There is also an export by South Australia, as local produce, of wool grown in New South Wales, but the value thereof is by no means large. Wool, chiefly from Queensland, has in some years been exported as domestic produce by New South Wales, but in 1901 no such overstatement took place. Also, as regards New South Wales, tin and copper ore, the former chiefly from Queensland and Tasmania and the latter from South Australia, which are imported for the purpose of being refined, are exported as domestic produce. An attempt has been made to remove these elements of error from the returns as they are presented by the Customs, and the amounts shown in the following table may be accepted as the true values of domestic produce exported by each state during 1901 :—

State.	Domestic Exports.		
	Total Value.	Proportion to Total.	Value per Inhabitant.
	£	per cent.	£ s. d.
New South Wales	19,837,223	27·9	14 9 2
Victoria	13,882,246	19·6	11 10 9
Queensland	9,009,696	12·7	17 17 3
South Australia	4,384,584	6·2	12 1 6
Western Australia	8,216,718	11·6	43 16 4
Tasmania	2,933,878	4·1	16 18 0
New Zealand	12,690,460	17·9	16 5 9
Australasia	70,954,805	100·0	15 9 8

As the table shows, the largest values per inhabitant were returned by Western Australia and Queensland, with £43 16s. 4d. and £17 17s. 3d. respectively per head of population. The growth of the domestic exports of Western Australia has been extremely rapid, the total value rising from £1,273,638 at the end of 1895 to £8,216,718 for the year 1901, an increase of 545 per cent. Of course, this great expansion is in the main due to the export of gold, the value of the total export of the precious metal being returned at £3,941,797 in 1901 as against £879,748 in 1895. With regard to Queensland, a great increase has taken place in the exports of such articles as gold, pearl shell, sugar, and various pastoral products. Tasmania also shows a large increase both in actual and comparative value of domestic export trade, the returns for 1901 showing a total value of £2,933,878, with £16 18s. per head of population, as against £1,473,283 and £9 0s. 3d. in 1896. The phenomenal mineral export of Tasmania for the year 1901, when the gross total reached the sum of £1,778,500, is chiefly accountable for this expansion, and, so far as can be seen, there is every prospect of this being sustained.

Placing the values of the external exports of domestic production of Australasia side by side with those of some of the more important countries of the world, a useful comparison is afforded, and from whatever standpoint the matter be viewed these states appear in a very favourable light. The following table shows the value of the domestic exports, exclusive of coin and bullion, of some of the principal countries of the world, the figures referring to the year 1900. The figures for Australasia only represent the external exports of domestic produce; in the preceding table the values include the domestic produce of each state consumed in the other provinces:—

Country.	Exports of Domestic Produce (exclusive of Coin and Bullion).	Value per Inhabitant.
	£	£ s. d.
United Kingdom	291,192,000	7 0 6
France	164,348,000	4 4 4
Germany	230,570,000	4 1 2
Austria-Hungary	80,917,000	1 15 6
Italy	53,530,000	1 13 0
Belgium	76,915,000	11 9 10
Canada	35,486,000	6 12 1
Argentine Republic	30,920,000	7 12 11
United States	302,710,000	3 18 0
Australasia	38,151,000	8 6 6

The extent to which the geographical position of a state enables it to benefit by the production of its neighbours is illustrated by the proportion which the non-domestic bear to the total exports. The following table shows the value of the total re-export trade and the proportion

which it bears to the total export trade of each state in 1901; and it would appear that South Australia, New South Wales, and Victoria, in the order named, benefit largely by their position, the re-export trade of the other states being insignificant:—

State.	Total Re-exports.	Proportion to Total Exports.
	£	per cent.
New South Wales	7,435,240	27·18
Victoria	4,512,069	24·20
Queensland	239,670	2·59
South Australia	3,795,107	46·35
Western Australia	298,905	3·51
Tasmania	11,879	0·40
Commonwealth	16,292,870	21·75
New Zealand	190,964	1·48
Australasia	16,483,834	18·78

More than one-half of this re-export trade is external, the amount being £8,911,658, as compared with £7,572,176 of interstate trade.

THE WOOL TRADE.

The rapid growth of the Continental wool trade during the periods from 1881 to 1891, and from 1891 to 1901, is illustrated by the following table, which shows the value of the staple exported direct to the principal countries, and the proportion of the total amount taken by each:—

Country.	Value.			Proportion.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	per cent	per cent	per cent
United Kingdom ...	15,777,327	19,891,218	13,497,871	97·8	82·7	71·3
Belgium	96,557	1,453,755	1,146,349	0·6	6·0	6·0
Germany	53,809	782,676	1,852,053	0·3	3·3	9·8
France	26,965	1,386,768	2,003,197	0·2	5·8	10·6
United States	132,699	514,551	273,933	0·8	2·1	1·5
Other Countries ...	48,725	34,259	147,460	0·3	0·1	0·8
Total.....	16,136,082	24,063,227	18,920,863	100·0	100·0	100·0

As the table shows, there has been an increase of over £2,784,000 in the value of wool shipped from Australasia since 1881. Since 1891,

however, there has been a decline in value to the extent of £5,142,000. This decline is accounted for by the fact that during the last few years the total number of sheep has decreased enormously, owing to severe and protracted droughts. In 1891, the sheep depastured in the Commonwealth of Australia and New Zealand numbered 124,548,000, but at the end of 1901, the total had fallen to 92,359,000; a decrease of over 32 millions. It will be observed that since 1881 the wool exported to the United Kingdom has decreased in value to the extent of £2,279,000, or from 97·8 to 71·3 per cent., while the export to foreign countries, with one exception, has increased both absolutely and relatively.

It is necessary to point out here that all the figures in the present chapter dealing with the export of wool are based on the Customs returns of the different states, and represent the values placed on the wool by the exporters. The figures relating to the value of the wool clip which are given in the chapter on the pastoral industry are less than those just given, the difference being made up of the cost of carriage and other charges from the sheep-runs to the ship's side.

The following table shows the total and proportionate value of the wool shipped direct to countries outside Australasia by each state :—

State.	Value.			Proportion.		
	1881.	1891.	1901.	1881.	1891.	1901.
	£	£	£	per cent	per cent	per cent
New South Wales..	4,485,295	7,917,587	7,743,473	27·8	32·9	40·9
Victoria.. .. .	5,327,934	7,070,661	4,318,332	33·0	29·4	22·8
Queensland	996,047	2,438,321	1,438,028	6·2	10·1	7·6
South Australia ...	1,747,696	1,888,107	1,103,994	10·8	7·8	5·8
Western Australia.	256,689	311,925	373,959	1·6	1·3	2·0
Tasmania	416,572	313,422	242,207	2·6	1·3	1·3
New Zealand	2,905,849	4,123,204	3,700,870	18·0	17·2	19·6
Australasia ...	16,136,082	24,063,227	18,920,863	100·0	100·0	100·0

It will be seen from the table just given that Victoria was credited in 1881 with exporting wool to a considerable value in excess of that of New South Wales. In 1891 and 1901, however, the positions were reversed. In 1881 the wool produced in other states, chiefly New South Wales, but credited to Victoria, was valued at £2,780,600; in 1891, £2,767,000; but in 1901, a careful discrimination was made by the Victorian Customs Department between wool of actual Victorian production and that produced by the other states. The wool imported from other states and credited to New South Wales for the year 1891 was £109,000, while for 1901 there was no such over-statement. South Australia also receives a large quantity of New South Wales wool for shipment, though not nearly to so great an extent as Victoria.

In connection with this subject, a statement of the value of wool of its own production which each state exports direct and by way of the other states may not be without interest. The figures, which are given below, relate to the year 1901:—

State.	Domestic Wool Exported.			Proportion of Export of Australasia.
	Direct.	By way of the other states.	Total.	
	£	£	£	per cent.
New South Wales	7,417,852	1,617,585	9,035,437	46·8
Victoria	2,733,488	28,513	2,762,001	14·3
Queensland	1,438,028	693,836	2,131,864	11·0
South Australia	917,438	118,190	1,035,628	5·3
Western Australia	373,959	4,176	378,135	2·0
Tasmania	242,207	38,140	280,347	1·5
New Zealand	3,693,945	5,158	3,699,103	19·1
Australasia	16,816,917	2,505,598	19,322,515	100·0

In the table given on the preceding page the value of the direct export of wool is quoted at £18,920,863. The apparent discrepancy, however, is of no moment when it is remembered that about one-fifth of the clip of Australasia is subject to valuation first at the border of the state in which it is produced, and again at the port from which it is finally shipped to Europe or America. In the amount of £19,322,515 shown above is, besides, included the value of such wool as was exported during 1901 to one of the adjacent states, and there held over for the sales in January of the following year.

The following figures serve to illustrate the development of the local wool sales in those states where such sales are held, viz., in New South Wales, Victoria, Queensland, South Australia, and New Zealand, for the ten seasons from 1892-93 to 1901-1902. The seasons are taken as extending from the 1st July to the 30th June. The number of bales sold during each period shown was as follows:—

Season.	New South Wales.	Victoria.	Queensland.	South Australia.	New Zealand.	Total.
	bales.	bales.	bales.	bales.	bales.	bales.
1892-93	362,688	310,828	.....	54,285	85,505	813,306
1893-94	401,185	305,700	.....	65,000	82,547	854,432
1894-95	425,135	328,142	.....	64,056	82,547	899,880
1895-96	415,538	315,543	.....	80,234	82,965	894,280
1896-97	401,048	310,835	.....	63,804	82,515	853,202
1897-98	444,808	286,625	.....	51,287	100,514	883,234
1898-99	447,517	278,482	10,925	60,531	90,806	888,261
1899-1900	399,893	312,571	27,015	70,717	108,846	919,042
1900-1901	388,946	273,641	13,453	42,637	90,235	803,912
1901-1902	522,003	321,482	25,936	65,239	100,860	1,035,520

The importance of the pastoral industry to Australasia will be made clear in another part of this volume. Its value to each state varies considerably, as the statement hereunder shows. In no state, however, Western Australia and Tasmania excepted, does the proportion of exports of this class fall below 30 per cent. of the total value of domestic produce exported. In the case of New South Wales it reaches over 63 per cent., while in New Zealand it is 54 per cent., and in Queensland 53 per cent. :—

State.	Wool.	Other Pastoral Products.	Total.	Proportion of Exports of Pastoral Produce to Total Exports of Domestic Products.
	£	£	£	per cent.
New South Wales	9,035,437	3,524,237	12,559,674	63·3
Victoria.....	2,762,001	1,521,098	4,283,099	30·9
Queensland	2,131,864	2,667,979	4,799,843	53·3
South Australia	1,035,628	595,361	1,630,989	37·2
Western Australia	378,135	113,067	491,202	6·0
Tasmania	280,347	125,248	405,595	13·8
New Zealand	3,699,103	3,202,837	6,901,940	54·4
Australasia—				
All Domestic	19,322,515	11,749,827	31,072,342	43·8
External Domestic.	16,816,917	8,396,709	25,213,626	50·2

It will be observed that the figures given in this table are not those furnished by the various Customs Departments; they have been corrected in the manner already explained in order to allow for the incorrect information furnished by shippers in regard to the state of origin.

MOVEMENTS OF GOLD.

Since the discovery of gold in the year 1851 large quantities of the metal—in the form of coin as well as of bullion—have been exported from the Australasian states every year. In the figures given below, showing the excess of exports of gold of each state, no attempt has been made to exclude the interstate trade. The largest exporters, it will be found, are also the largest producers, namely, Victoria, New Zealand, and Queensland. The other states, except Western Australia, now produce very little more than what suffices to meet their

requirements. The returns of the gold imports and exports for New South Wales are swollen by large quantities of Queensland gold sent to Sydney to be minted and then exported in the shape of coin, but only the excess of exports appears in the following table:—

State.	1851-60.	1861-70.	1871-80.	1881-90.	1891-1900.	1901.	1851-1901.
	£	£	£	£	£	£	£
New South Wales....	8,337,067	13,656,650	5,248,004	277,500	7,478,424	381,055	35,379,699
Victoria	86,342,134	62,609,042	37,222,632	23,106,371	21,903,262	3,104,911	234,288,352
Queensland		1,768,575	9,430,137	11,540,245	21,672,494	2,003,774	46,420,225
South Australia.....	1,900,955	*395,633	*1,100,309	*673,548	1,206,945	33,286	971,696
Western Australia....		19,586	*38,000	*41,320	19,266,987	6,749,717	25,953,070
Tasmania	843,029	*34,255	165,040	872,754	1,599,253	192,164	3,637,990
New Zealand	48,981	20,294,822	14,215,143	7,037,381	9,433,361	1,324,141	52,963,329
Total Excess of Exports	97,472,166	97,918,787	65,143,637	42,716,392	32,560,731	13,794,048	399,605,761
Average per annum..	9,747,217	9,791,879	6,514,364	4,271,639	8,256,073	13,794,048	7,835,407

* Excess of Imports.

DISTRIBUTION OF IMPORTS IN REGARD TO CONSUMPTION.

Former tables show the import of goods into the Commonwealth, but do not show their ultimate destination, and it will therefore be interesting to follow these goods to the point of consumption. It has been shown that the total imports into the states were £68,068,936; of this amount £25,635,089 represented inter-state trade, and £42,433,847 imports from countries outside the Commonwealth. Of the total import £50,369,707 was retained for home consumption, the balance being re-exported, and of the former amount £41,167,791 represented the value of goods coming from places outside the Commonwealth, and £9,201,916 were inter-state goods. From these totals the value of bullion and specie has been excluded.

The following table shows the value of goods of other states consumed in each state of the Commonwealth, as well as the imports from countries outside the Commonwealth, whether such goods are imported direct or through another state.

State.	Home Consumption of Imported Goods.		
	Australian goods entering into local consumption.	Foreign goods entering into consumption.	Total.
	£	£	£
New South Wales	3,505,586	15,987,392	19,492,978
Victoria	1,864,363	11,357,201	13,221,564
Queensland	1,312,079	4,647,770	5,959,849
South Australia	164,598	3,422,132	3,586,730
Western Australia.....	1,903,850	4,251,416	6,155,266
Tasmania	451,440	1,501,880	1,953,320
Total	9,201,916	41,167,791	50,369,707

The value of all foreign goods brought to Australia amounts to £42,433,847. Of this amount £942,511 is bullion re-exported in the shape of coin, and therefore not properly speaking an import for consumption, and £323,545 goods re-exported to places outside Australia, so that the net consumption of foreign goods is £41,167,791, as shown above. Dividing this sum again, £2,664,302 represents the value of narcotics and stimulants, and £38,503,489 of general merchandise. A careful analysis of the tariff now in force for the Commonwealth shows that the last-mentioned goods to the amount of £28,246,160 are dutiable, and £10,257,329 are non-dutiable, so that, excluding narcotics and stimulants, the proportion of free goods to general merchandise is 26·64 per cent., which varies in different states of the Commonwealth, ranging between 24·6 per cent. in the case of Tasmania to 31·3 per cent. in that of Western Australia.

The value of the two classes of goods entering into consumption in each state of the Commonwealth is as follows :—

State.	Narcotics and Stimulants.	General Merchandise.
	£	£
New South Wales	1,144,684	14,842,708
Victoria	664,826	10,692,375
Queensland	352,416	4,295,354
South Australia	139,553	3,282,579
Western Australia.....	303,168	3,948,248
Tasmania.....	59,655	1,442,225
Total.....	2,664,302	38,503,489

The tariff of the Commonwealth on dutiable merchandise averages 16·7 per cent., and on all merchandise, excluding of course narcotics and stimulants, the average is 12·2 per cent.

For further information in regard to Customs duties the reader is referred to page 818.



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