

DEFENCE.

IN each of the Colonies a small permanent military force is maintained, consisting for the most part of artillery and submarine miners. There has always been manifested by the colonists of Australasia an objection to the maintenance of a standing army, and a disposition to rely mainly upon the patriotism and valour of the citizens for their own defence. But each Colony 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 the small permanent forces alluded to, 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 a steady nucleus around which to form an effective defence force if ever hostilities should unfortunately occur. The greater portion of the Australian forces is, however, comprised of volunteers under a system of partial payment, which affords a cheap and effective defence force without the disadvantages and expense of a standing army. The men receive a fixed amount of pay, in order to compensate them for loss of wages during the time they are away from their employment for the purposes of military instruction. In New South Wales and Victoria the remuneration amounts to £12 per annum to each man, and in Queensland and South Australia to about half that sum. It is computed on the basis of a certain number of whole or half-day parades or night drills at the rate of 10s. per day in the first two Colonies named, 6s. a day in Queensland, and 5s. a day in South Australia. In addition to the remuneration the partially-paid, in common with all the other military forces, receive free rations when in camp or on active service. There has been a marked tendency in most of the Colonies to discourage the services of the purely volunteers, as the system was found to work unsatisfactorily, especially in the country districts. In New Zealand and Western Australia alone is the volunteer system the mainstay of defence.

The following is the strength of the forces maintained by each province in 1892-3 :—

	Total Forces.	Paid.	Partially Paid.	Unpaid.
New South Wales	5,687	625	4,719	343
Victoria	6,864	400	3,899	2,565
Queensland	4,586	150	3,745	691
South Australia	2,629	79	1,734	816
Western Australia	610	2	608
Tasmania	1,780	22	508	1,250
New Zealand	6,701	334	6,367
Australasia	28,857	1,612	14,605	12,640

Included in the figures relating to Queensland, South Australia, and Tasmania, in the last column of the foregoing table, are rifle clubs or companies of a strength of about 2,800 men. By means of a liberal extension of these clubs, it is expected that there will be a large number of men, trained to the use of the rifle and not unaccustomed to drill, who in time of need may be available to fill the ranks of the regular forces. New South Wales also had its Rifle Companies, but they were disbanded at the end of 1892.

The relative strength of the various arms in the Colonies may be summarized as follows :—

Staff, Medical Staff, Instructors, Ambulance Corps, &c.	698
Artillery (Garrison, field and horse)	7,242
Engineers and Submarine Miners	1,000
Cavalry	1,000
Mounted Infantry and Mounted Rifles	3,227
Infantry	15,690

making a total strength, as shown above, of 28,857 men.

In addition to the forces enumerated above, all the Colonies, with the exception of Tasmania and Western Australia, have small corps of Naval Volunteer Artillery, or a partially paid force of a similar character, capable of being employed either as a light artillery land force, or to serve on board the local war vessels. In Victoria there was in 1892 a permanent naval force of 237 men. The marine forces are as follow :—

Colony.	Strength.
New South Wales	619
Victoria	617
Queensland	516
South Australia	143
New Zealand	1,185
Total	3,080

Thus the combined forces of all the Australasian Colonies on their present footing are 31,937 strong; and of these nearly 22,000 could be mobilised in any one of the Colonies of Queensland, New South Wales,

Victoria, or South Australia. Most of the Colonies have also Cadet companies comprising pupils in the Public Schools, 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 if need be. The Cadets have not been enumerated in the figures given.

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 12° N. lat., and along that parallel to 160° W. long., and on the south by the Antarctic Circle, including the numerous groups of islands situated within those limits.

The defence of the Australasian coast is mainly in the hands of the British ships on the Australian Station, and of 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. There were stationed in the Australasian waters at the close of 1893 nine Imperial vessels whose armament, speed, &c., are as follow :—

Name.	Class.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Guns.	Speed.	Coal endurance.	
									Coal that can be carried in bunkers.	Distance that can be steamed at 10 knots' speed.
Orlando ..	Twin-screw cruiser, 1st class, armoured.	tons. 5,600	3,500	ft. in. 24 2	ft. in. 300 0	ft. in. 56 0	20·2 in. 22-ton B.L.R. 10 6-in. 5-ton B.L.R. 10 Q.F. Hotchkiss, 7 M., 3 L.	knots. 13·5	tons. 900	knots 7,000
Curagoa ..	Screw cruiser, 3rd class.	2,330	2,540	18 10	225 0	44 6	4 6-in. 5-ton B.L.R., 85-in. 2-ton B.L.R. 1 Q.F. Hotchkiss, 9 M., 2 L.	13·0	470	3,800
Rapid	Screw cruiser, 3rd class.	1,420	1,400	15 9	200 0	38 0	2 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.	13·1	425	6,600
Royalist ..	Screw cruiser, 3rd class.	1,420	1,510	15 0	200 0	38 0	2 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.	13·1	425	6,600
Lizard ..	Screw gun-boat, 1st class.	715	1,000	13 6	165 0	29 0	64-in. 25-cwt. B.L.R. 4 M.	12·7	105	2,500
Goldfinch.	Screw gun-boat, 1st class.	805	1,200	12 8	165 0	30 0	64-in. 26-cwt. B.L.R. 2 Q.F. Hotchkiss, 2 M.	13·0	105	..
Ringdove.	Screw gun-boat, 1st class.	805	1,200	12 8	165 0	30 0	64-in. 26-cwt. B.L.R. 2 Q.F. Hotchkiss, 2 M.	13·0	105	..
Dart*	Screw yacht.	470	200	12 11	133 0	25 2	2 L.	8·8	64	..
Penguin*.	Screw sloop.	1,130	700	14 0	180 0	38 0	2 64-pr. M., 1 L., 2 M.	10·0	200	..

* Surveying service. M.L.R., Muzzle-loading rifled guns ; Q.F., Quick-firing guns ; M., Machine guns ; L., Light guns under 15 cwt. ; B.L.R., Breech-loading rifled guns.

The hull of the "Orlando" is of steel; that of the "Curagoa" of steel and iron, sheathed with wood; and the hulls of the other vessels are of composite materials. The "Orlando" has a 10-inch armoured belt at water-line, with 3-inch armoured deck, and 12-inch conning tower. In addition to the armament mentioned in the table, the "Orlando" and the "Curagoa" have each two torpedo tubes.

Early in 1894 the first-class cruiser "Crescent," the largest and most powerful warship ever seen in Australian waters, brought out relief crews for several vessels of the fleet, and returned to England with the time-expired officers and men.

An undertaking has been entered into by all the Colonies for the payment of a *pro rata* subsidy for the maintenance of an auxiliary fleet. The total subvention to be paid by all the Colonies amounts to £126,000 per annum, the contributions of each being determined on the basis of population. The amount paid by each Colony for the year 1893 was :—

	£
New South Wales	37,720
Victoria	36,968
Queensland	13,342
South Australia	10,663
Western Australia	1,858
Tasmania	4,850
New Zealand	20,599
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; of these three cruisers and one gunboat will be continuously kept in commission, the remainder being held in reserve in Australasian ports, but ready for commission whenever circumstances may require their use. The agreement is for a period of ten years, and shall then, or at the end of any subsequent year, be terminable, provided two years' notice has been given. The vessels have been built by the British Government, but the Australasian Colonies pay the interest on their prime cost at the rate of 5 per cent., provided such payment does not exceed £35,000. The Colonies are also to pay the actual charge for maintenance as mentioned above. On the termination of the agreement these vessels will remain the property of the Imperial Government. The strength of the fleet already in Australian waters will be maintained. The vessels specified in the agreement between Great Britain and the Colonies are to be in addition to these. The Australasian squadron is commanded by the Admiral on the Australian Station, whose headquarters are in Sydney, where a residence is provided for him by the

Colony. The squadron, which arrived in Port Jackson on 5th September, 1891, consists of the following vessels:—

Name.	Class.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Guns.	Special.	Coal endurance.	
									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 ..	Screw cruiser, 3rd class.	2,575	7,500	16 6	265 0	41 0	8 4·7 Q.F. guns, 8 3-pr. Q.F. guns, 1 7-pr. M. L. R. gun (boat and field), 4·45 in. 5-barrel Nordenfeldt.	16·5	300	6,000
Ringarooma	Screw cruiser, 3rd class.	2,575	7,500	16 6	265 0	41 0	do	16·5	300	6,000
† Mildura ..	Screw cruiser, 3rd class.	2,575	7,500	16 6	265 0	41 0	do	16·5	300	6,000
Wallaroo ..	Screw cruiser, 3rd class.	2,575	7,500	16 6	265 0	41 0	do	16·5	300	6,000
† Tauranga..	Screw cruiser, 3rd class.	2,575	7,500	16 6	265 0	41 0	do	16·5	300	6,000
† Boomerang	Torpedo gun-boat.	735	4,500	10 6	230 0	27 0	24·7 in. Q.F. guns, 4 3-pr. Q.F. guns	*18·75	160	2,500
Karrakatta..	Torpedo gun-boat.	735	4,500	10 6	230 0	27 0	do	*18·75	160	2,500

* This speed can be increased until, under favourable conditions, for a short period, a maximum of 21 knots can be obtained. Q.F.—Quick firing guns. † In reserve.

The hull of each of the vessels of the auxiliary squadron 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 boats, the towers of which have 1-in. armour. In addition to the armament mentioned in the table, each of the cruisers carries four, and each of the torpedo boats five, torpedo tubes.

The corvette "Wolverene," which had been presented to New South Wales by the Imperial Government, having been sold in August, 1893, the Colony now possesses no ships of war of its own, with the exception of the two small torpedo steam launches, the "Acheron" and the "Avernus," which are manned by members of the Naval Artillery Volunteers.

Victoria has a navy of its own for harbour defence, consisting of the following vessels:—

Name.	Class.	Displacement.	Armament.
Nelson	Wooden frigate..	Tons. 2,730	Two 7-in. M.L.R., fourteen 64-pdrs., two Gatlings.
Cerberus.....	Armoured turret ship (twin screw).	3,480	Four 10-in. M.L.R., four 1-in. Nordenfeldts, 4 barrels, twenty-four Q.F. guns, one 13½-pdr. and one 26-pdr. B.L. guns.
Victoria	Steel gunboat ... (twin screw).	530	Two 13-pdr. B.L.R. guns, two 1-in. Nordenfeldt M. guns, one 8-in. and one 6-in. B.L. gun.
Albert.....	do ...	350	One 8-in. and one 6-in. B.L. gun, two 2-barrel and two 4-barrel Nordenfeldt M. guns.
Countess of Hopetoun.	First-class steel torpedo boat.	120	Three 14-in. Fiume torpedoes, and two 2-barrel Nordenfeldt M. guns.
Childers	First-class steel torpedo boat.	63	Three 15-in. and three 14-in. Fiume torpedoes, and two 1-pdr. Hotchkiss Q.F. guns.
Nepean	Second-class steel torpedo boat.	12	Four 14-in. Fiume torpedoes.
Lonsdale.....	do	12	do do
Gordon	Wooden torpedo boat "Turnabout."	12	Four 14-in. Fiume torpedoes, three 2-barrel Nordenfeldt guns.
Batman	Armed steamer.. (twin screw).	387	One 6-in. R.B.L., two 1-in. Nordenfeldts, 2 barrels.
Fawknor	do ...	387	One 6-in. R.B.L., two Gatlings.
Gannet	do	347	One 6-in. R.B.L., two 1-in. Nordenfeldts, 2 barrels.
Lady Loch.....	Customs steamer (steel).	346	do do
Commissioner..	Wooden steam launch.	40	Spar torpedoes, and dropping gear for two 14-in. R.L. torpedoes.
Customs No. 1	do ...	30	do do

The two dredges ("Batman" and "Fawkner") and the tug ("Gannet") mentioned above have been specially built to carry heavy guns, and provision is also made by which some of the fast steamers belonging to the port could be fitted as cruisers at very short notice. Guns are kept in readiness in Melbourne in case it should be deemed necessary to put these vessels into commission.

Queensland has two gunboats, one of which, the "Paluma," is usually employed on survey service on the coast of Queensland at the joint expense of the Queensland and Imperial Governments; but this vessel has been lent temporarily to the Imperial Government, and is now in commission as tender to H.M.S. "Orlando." The following are the particulars of the vessels available for the defence of Queensland ports:—

Name.	Class.	Displacement.	Armament.
		Tons.	
Gayundah	Steel gunboat (twin screw).	360	One 8-in. B.L. Armstrong, one 6-in. B.L. Armstrong, two 3-pdr. Q.F., 2M.
Paluma	do	360	One 8-in. B.L. Armstrong, one 6-in. B.L. Armstrong, one 3-pdr. Q.F., 2 M.
Otter	Tender (twin screw).	120	One 64-pounder, M.L.R.
Bonito	Barge (twin screw).	450	One gun.
Stingaree	do	450	One gun.
Pumba	do	450	One gun.
Dolphin	do	450	One gun.
Bream	do	450	One gun.
Midge	Steam pinnace	Two machine guns.
Mosquito	Second-class steel torpedo boat.	Two machine guns.

South Australia maintains one twin-screw steel cruiser, the "Protector," of 920 tons. Her armament consists of one 8-in. 11½-ton B.L., seven 6-in. 4-ton B.L., four 3-pdr. Q.F., and five Gatling machine guns. Tasmania owns one torpedo boat, and Western Australia one schooner, the "Meda," of 150 tons, employed on survey service at the joint expense of the Imperial and Colonial Governments. New Zealand possesses four Thornycroft torpedo boats, and four steam launches fitted for torpedo work.

COST OF DEFENCE.

Most of the Colonies have spent considerable sums in works of defence, and the principal ports are well protected by extensive fortifications, erected by the various Governments at great cost.

The total expenditure from the Consolidated Revenue for defence purposes during 1892-93 was as follows :—

Colony.	Amount.	Per head of Population.
	£	s. d.
New South Wales	248,905	4 3
Victoria	221,195	3 9
Queensland	75,685	3 8
South Australia	52,623	3 2
Western Australia	4,057	1 5
Tasmania	19,282	2 6
New Zealand	75,254	2 4

The above table gives a total expenditure for Australasia of £697,001, at the rate of 3s. 7d. for each inhabitant.

In all the Colonies, with the exception of Western Australia, a certain amount of money has been spent out of loans on works of defence. Victoria, however, for several years has discontinued the expenditure of loan moneys for this service. The amounts thus spent during 1892-93 were as follow :—

	£
New South Wales	*77,851
Queensland	22,611
Tasmania	1,740
New Zealand	4,563
Total	£106,765

* Inclusive of £23,412 for naval station, Port Jackson.

The total debt incurred by each Colony for defence purposes to the end of 1892-93 was as follows :—

	Amount.	Per head of Population.
	£	s. d.
New South Wales	*1,096,530	18 7
Victoria	100,000	1 9
Queensland	191,423	9 2
South Australia	234,414	14 2
Tasmania	118,903	15 9
New Zealand	871,474	27 2
Australasia	2,612,744	13 3

* Inclusive of £225,610 for naval station, Port Jackson.

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 Colonies in the construction of works of defence; the amount of such payments, however, it is now impossible to determine.

A military commission was appointed in 1890 by the Imperial and the different Australian Governments, to take evidence and report on the fortification of King George's Sound, Hobart, Thursday Island, and Port Darwin, at the joint expense of the various Governments. The commission visited the points mentioned during 1891, and as a result of the evidence taken it may be anticipated that before long these four important strategical points will not be left at the mercy of any hostile cruiser that might choose to make a descent upon them. At Thursday Island the works have been completed, and the following sums have been apportioned to be paid towards their maintenance by the Colonies interested for the six months ended June 30, 1893 :—

	£
New South Wales	765
Victoria	750
Queensland	270
South Australia	213
Western Australia	38
Total	£2,036

The amounts are distributed in proportion to the population of the several Colonies. The total cost of the fortifications at Thursday Island was £21,573, the expense of which has been borne by the contributing Colonies as under :—

	£
New South Wales	8,133
Victoria	7,928
Queensland	2,861
South Australia	2,253
Western Australia	398
Total	£21,573

At King George's Sound the works are now complete, the armament being in position, and the garrison on the spot.