

# VICTORIAN YEAR-BOOK,

## 1906-7.

BY

E. T. DRAKE GOVERNMENT STATIST.

---

TWENTY-SEVENTH ISSUE.

---



*BY AUTHORITY.*

MELBOURNE:

J. KEMP, ACTING GOVERNMENT PRINTER: AND SOLD BY ALL BOOKSELLERS  
IN VICTORIA.

3633.

This page was added on 11 January 2013 to included the Disclaimer below.  
No other amendments were made to this Product

#### DISCLAIMER

Users are warned that this historic issue of this publication series may contain language or views which, reflecting the authors' attitudes or that of the period in which the item was written, may be considered to be inappropriate or offensive today.



# CONTENTS.

---

	PAGE
MAP OF VICTORIA	
GENERAL INDEX ... ..	VII. TO XXXV.
INTRODUCTORY REMARKS ... ..	1 to 39
CONSTITUTION AND GOVERNMENT ... ..	40 to 112
FINANCE ... ..	113 to 158
MUNICIPAL STATISTICS ... ..	159 to 180
ACCUMULATION ... ..	181 to 208
SOCIAL CONDITION ... ..	209 to 312
VITAL STATISTICS—	
MARRIAGES ... ..	313 to 324
BIRTHS ... ..	324 to 335
DEATHS ... ..	335 to 374
INTERCHANGE ... ..	375 to 398
LAW AND CRIME ... ..	399 to 440
POPULATION ... ..	441 to 468
PRODUCTION—	
LAND SETTLEMENT, WATER SUPPLY, ETC. ... ..	469 to 502
AGRICULTURAL AND PASTORAL PURSUITS ... ..	503 to 581
MINING ... ..	582 to 617
MANUFACTORIES ... ..	617 to 658
STATISTICAL SUMMARY OF VICTORIA (FOLDING SHEET) No. 1.	
SUMMARY OF AGRICULTURAL STATISTICS (FOLDING SHEET) No. 2.	

# PREFACE.

---

THE present volume of the Victorian Year-Book has been prepared generally upon the same lines as previous issues. A number of new tables have been added, and new subjects dealt with, more particularly in the part relating to Production; and all the figures have been brought on to the latest dates.

Two folding sheets have been introduced summarizing General Statistics and Agricultural Statistics since their first tabulation. A map of Victoria—prepared by the Surveyor-General—has also been introduced, in which the various Counties of the State are distinguished. The map will enable the Statistics relating to Production, which are grouped to a large extent in Counties, to be better understood.

The work this year consists of ten parts, one less than last year, it having been arranged at the Conference of Statisticians held in December, 1906, that the publication of the section known as Australasian Statistics should, for the future, be left to the Commonwealth Statistician.

The practice of publishing each part as soon as completed has again been followed, so that the information collected might be disseminated at the earliest possible date. During the current year the parts were issued in the following order :—

Introductory Remarks and Constitution and				
Government	...	...	...	May
Finance	...	...	...	"
Municipal Statistics	...	...	...	"
Accumulation	...	...	...	June
Social Condition	...	...	...	July
Vital Statistics	...	...	...	August
Interchange	...	...	...	"
Law, Crime, &c.	...	...	...	September
Population	...	...	...	October
Production	...	...	...	"

As the volume contains information, relating not only to 1906, but to various dates in 1907, both years have been included in the title of the book.

E. T. DRAKE,  
Government Statist.

Office of the Government Statist,  
Melbourne, 28th October, 1907.

# GENERAL INDEX.

	Page
Aborigines in Victoria .. .. .	464
"    Australian States and New Zealand .. .. .	468
Accidents and negligence, death rate from .. .. .	368
"    mining .. .. .	617
Accumulation .. .. .	181
Acts of Parliament, Commonwealth, 1901 to 1906 .. .. .	92
"    "    State, 1906 .. .. .	60
Adelaide, population .. .. .	460
Administration, letters of .. .. .	404
Ages at three Census years, 1881, 1891, and 1901 .. .. .	446
"    of persons arrested .. .. .	426
"    scholars in State schools .. .. .	218
Agricultural and grazing allotments, conditions relating to .. .. .	471
"    "    lands unalienated .. .. .	470, 471
"    pastoral produce imported by the United Kingdom .. .. .	580
"    bonuses, expenditure on .. .. .	521
"    cultivation .. .. .	531
"    Department .. .. .	515
"    education .. .. .	503
"    "    endowment areas .. .. .	508
"    grants .. .. .	521
"    high schools .. .. .	510
"    industry .. .. .	521
"    labourers' allotments .. .. .	482
"    produce, prices of .. .. .	546
"    production .. .. .	533
"    pursuits, persons engaged in .. .. .	530
"    societies .. .. .	511
"    subsidies .. .. .	523
"    wages .. .. .	531
Agriculture, areas occupied for .. .. .	524 to 527
"    as evidence of progress .. .. .	8
"    bonuses and subsidies to .. .. .	521
"    in Victoria and Great Britain .. .. .	581
Alcoholism, death rate from .. .. .	355
"    decrease in death rate from .. .. .	357
Alfred Hospital, history, &c. .. .. .	281
Alluvial workings, gold yield from .. .. .	606
Anæmia, death rate from .. .. .	358
Aneurism, death rate from .. .. .	355
Annuity policies .. .. .	203
Apoplexy, cerebral hæmorrhage, &c., death rate from .. .. .	355, 364
Appendicitis, death rate from .. .. .	367
Aquarium at Exhibition Buildings .. .. .	260
Area of British Dominions .. .. .	461
"    Greater Melbourne .. .. .	6, 454
"    States .. .. .	84
"    the World .. .. .	463
"    under cultivation .. .. .	523, 531
"    Victoria .. .. .	9

	Pag
Arrested persons, birthplaces and education of .. .. .	426
"    "    sentences of .. .. .	428
Arrests .. .. .	415
"    for drunkenness .. .. .	416
"    serious crimes, Victoria and New South Wales .. .. .	425
"    various offences .. .. .	427
"    in age groups, decrease .. .. .	417
"    of males and females .. .. .	415
Arrivals (see also Immigration) .. .. .	441 <i>et seq.</i>
Artificial grasses, area and produce .. .. .	548
"    manures, use of .. .. .	559
Asiatics in Victoria .. .. .	466
Assembly, Legislative (see Constitution, Parliament).	
"    "    1907, members .. .. .	72
Assurance fund, Transfer of Land Act .. .. .	474
"    life .. .. .	201
Asthma, emphysema, death rate from .. .. .	355
Asylum for the Blind (see also Charitable Institutions) .. .. .	290
"    "    Deaf and Dumb (see also Charitable Institutions) .. .. .	291
Asylums, Benevolent (see also Charitable Institutions) .. .. .	292
"    Lunatic .. .. .	305
"    Orphan .. .. .	292
Auriferous lands unalienated .. .. .	470, 473
Austin Hospital .. .. .	283
Australia, High Court of .. .. .	399
Australian exploration, &c. (see Discovery, Settlement).	
"    Health Society .. .. .	299
"    Industries Preservation Act 1906 .. .. .	101
"    States, banking business .. .. .	191
"    "    birth rates .. .. .	327
"    "    "    illegitimate .. .. .	333
"    "    births excess over deaths .. .. .	458
"    "    "    per cent. of, over deaths .. .. .	373
"    "    Capitals .. .. .	84
"    "    Chinese and aborigines .. .. .	468
"    "    coal production .. .. .	615
"    "    consumption of spirits, wine, and beer .. .. .	422
"    "    crime and drunkenness .. .. .	418
"    "    crops, principal, yield from .. .. .	547
"    "    cultivation per head .. .. .	532
"    "    death rates .. .. .	336
"    "    debts, funded .. .. .	148
"    "    "    and unfunded .. .. .	149
"    "    drink bill .. .. .	424
"    "    drunkenness, convictions for .. .. .	425
"    "    enrolment, net, of scholars .. .. .	218
"    "    expenditure on police and gaols .. .. .	440
"    "    gold production .. .. .	609
"    "    Government and Local taxation .. .. .	156
"    "    infantile mortality .. .. .	350
"    "    instruction, primary, cost of .. .. .	219
"    "    live stock .. .. .	574
"    "    "    per square mile .. .. .	574
"    "    lunatics, number, recoveries and deaths .. .. .	305
"    "    marriage rates .. .. .	320
"    "    migration .. .. .	458
"    "    natives of, in Victoria .. .. .	452
"    "    offences .. .. .	418
"    "    old persons in .. .. .	459
"    "    police force, strength of .. .. .	414

	Page
Australian States, population, 1906 .. .. .	457
"    "    "    1851 to 1901 .. .. .	457
"    "    "    increase since 1851 .. .. .	458
"    "    "    strength of .. .. .	459
"    "    prices of stocks .. .. .	197
"    "    private wealth .. .. .	181
"    "    "    diffusion of .. .. .	184
"    "    proportion of population in age groups .. .. .	343
"    "    savings banks .. .. .	194
"    "    sinking funds .. .. .	146
"    "    wool production .. .. .	569
Bacon and ham-curing industry .. .. .	645
"    "    imports and exports .. .. .	646
Bairnsdale District School of Mines .. .. .	232
Ballarat Agricultural and Pastoral Society .. .. .	513
"    District Hospital .. .. .	284
"    East School of Art .. .. .	240
"    population .. .. .	457
"    public libraries .. .. .	258
"    revenue and expenditure .. .. .	170
"    riots .. .. .	6
"    School of Mines .. .. .	233
"    West School of Art .. .. .	241
Banking in Australasia .. .. .	191
"    Victorian returns .. .. .	189
Barley, area under, and production of .. .. .	541 to 543
"    prices of .. .. .	546
"    production in Australasia .. .. .	547
Batman in Port Phillip .. .. .	5
Batteries, Government, crushings and gold yields .. .. .	617
Beans and peas, area under, and production of .. .. .	548, 549
Beaumaris tramway .. .. .	397
Bee farm site licences .. .. .	471
Bee-keepers, hives and honey .. .. .	576
Beef, frozen, imports and exports .. .. .	647
"    preserved .. .. .	647
Beer brewed, and materials used in breweries .. .. .	649
"    consumed .. .. .	422
Bendigo Agricultural and Horticultural Society .. .. .	514
"    Hospital .. .. .	284
"    Mechanics' Institute .. .. .	258
"    Miners' Association—the Watson Fund .. .. .	310
"    population of .. .. .	457
"    revenue and expenditure .. .. .	170
"    School of Mines .. .. .	236
Benevolent asylums (see also Charitable Institutions) .. .. .	292
"    societies .. .. .	292
Bent administration .. .. .	69
Berry dead-lock .. .. .	44
Bills and contracts of sale .. .. .	206
Birth and infantile death rates in various countries .. .. .	334
"    rate, 1860-1906 .. .. .	325
"    children surviving fifth year .. .. .	353
"    connected with infantile mortality .. .. .	353
"    corrected for various countries and cities .. .. .	329
"    ordinary, misleading .. .. .	325
"    rates in Australia and New Zealand .. .. .	327
"    "    Capital cities in Australasia .. .. .	333
"    "    Country towns .. .. .	332
"    "    European countries .. .. .	334
"    "    sub-districts of Greater Melbourne .. .. .	332

Birth rates in town and country .. .. .	331
Birth-places of parents of legitimate children .. .. .	330
"    "    persons arrested .. .. .	426
Births .. .. .	324
"    ages of parents .. .. .	330
"    "    "    of first-born children .. .. .	331
"    and birth rates in Capital Cities in Australasia .. .. .	333
"    Chinese and half-caste Chinese .. .. .	330
"    excess over deaths .. .. .	442
"    "    "    Australasia .. .. .	373
"    "    "    in States.. .. .	458
"    "    "    per cent., European countries .. .. .	374
"    "    "    "    States and New Zealand .. .. .	373
"    illegitimate, in Australasia and United Kingdom .. .. .	333
"    "    proportion to single women .. .. .	334
"    in Greater Melbourne .. .. .	333
"    number, 1891-1906 .. .. .	324
"    proportion of, to married women .. .. .	325
"    "    "    "    States and New Zealand .. .. .	327
"    "    "    "    various countries .. .. .	328
"    "    "    population, States and New Zealand .. .. .	327
"    registration .. .. .	314
Bladder and prostate, diseases of, death rate from .. .. .	355
Blind Asylum (see also Charitable Institutions) .. .. .	290
Blood vessels, diseases of, death rate from .. .. .	364
Boards, Military and Naval .. .. .	111
Boilers Inspection Act 1906 .. .. .	66
Bonuses, agricultural, granted under Loan Acts .. .. .	521
Boot and shoe industry .. .. .	651
"    factories, operatives, &c. .. .. .	653
Boots and shoes, imports and exports .. .. .	654
"    "    manufactured .. .. .	655
Boring for gold, coal, water .. .. .	617
Borough, definition of .. .. .	81
Botanic Garden, Melbourne .. .. .	260
Brain or its membranes, inflammation of, death rate from .. .. .	355, 363
"    softening of, death rate from .. .. .	355, 363
Breadstuffs and population .. .. .	539
"    disposal of .. .. .	540
"    imports and exports .. .. .	648
Breadwinners and dependents .. .. .	270
Breweries, output, materials used, &c. .. .. .	649
Brickyards and bricks .. .. .	644
Bright's disease of kidneys, death rate from .. .. .	355, 367
Brisbane, population .. .. .	460
British consols and Colonial stocks .. .. .	198
"    Dominions, area and population .. .. .	461
Broadmeadows Foundling Hospital .. .. .	294
Bronchitis, death rate from .. .. .	355, 364
Building societies .. .. .	204
"    stones, &c. .. .. .	605
"    "    production, quantity, and value .. .. .	617
Bullocks, prices of .. .. .	565
Butter and cheese factories, hands, output, &c. .. .. .	646
"    "    "    made .. .. .	563, 646
"    "    "    in factories .. .. .	646
"    "    "    on farms .. .. .	646
"    imports and exports of .. .. .	646
"    produced .. .. .	8
Cabs licensed in Melbourne .. .. .	397

	Page
Cadet system .. .. .	227
Calves, prices of .. .. .	565
Cancer, death rate from .. .. .	358
"    "    "    in age groups .. .. .	358
"    "    "    various countries .. .. .	360
"    parts affected by .. .. .	359
Candle and soap works .. .. .	643
Candles, imports and exports .. .. .	643
Capital, Federal .. .. .	84
Capitals, Australasian, population 1861 to 1906 .. .. .	460
"    of Australian States .. .. .	84
Castlemaine Free Library .. .. .	259
"    Hospital .. .. .	285
"    population .. .. .	457
"    School of Mines .. .. .	237
Cattle, census returns, 1861 to 1901 .. .. .	563
"    frozen .. .. .	567, 647
"    in Australasia .. .. .	574
"    in 1905, 1906, and 1907 .. .. .	564
"    prices of .. .. .	565
"    slaughtered .. .. .	566
Census and Statistics Act 1905, Commonwealth .. .. .	97
"    bread winners and dependents .. .. .	270
"    education of the people .. .. .	224
"    eleventh (see also Population) .. .. .	36
"    occupations of the people .. .. .	269
"    religions of the people .. .. .	229
Charitable and reformatory institutions, inmates and finances .. .. .	274
"    institutions, accommodation, &c. .. .. .	276
"    "    cost of .. .. .	274, 278
"    "    "    maintenance .. .. .	279
"    "    distribution of Hospital Sunday collections .. .. .	302
"    "    inmates and deaths .. .. .	277
"    "    Neglected Children's Act, Part VIII. .. .. .	308
"    "    receipts and expenditure .. .. .	278
Charities, Hospital Saturday and Sunday donations .. .. .	301
Charity Organization Society .. .. .	296
Cheese and butter factories .. .. .	646
"    imports and exports .. .. .	646
"    made .. .. .	646
"    "    in factories .. .. .	646
"    "    on farms .. .. .	646
Children boarded out from Industrial and Reformatory Schools .. .. .	307
"    defective .. .. .	222
"    surviving fifth year in various countries .. .. .	353
Children's Court Act 1906 .. .. .	64
"    Hospital (see also Charitable Institutions) .. .. .	289
Chinese .. .. .	464
"    and half-caste Chinese births .. .. .	330
Churches, number of .. .. .	230
Cider making .. .. .	556
Cigars and cigarettes made in tobacco factories .. .. .	651
City, definition of .. .. .	81
Clergy, number of .. .. .	230
Climate .. .. .	501
"    and rainfall .. .. .	10
Closer Settlement, acquisition and administration of estates .. .. .	478
"    "    Act 1906 .. .. .	65
"    "    Acts 1898, 1904, and 1906 .. .. .	476 et seq.
"    "    agricultural labourers' allotments .. .. .	482

	Page
Closer settlement, estates purchased and acquired ..	477, 480, 482
"    "    Fund .. .. .	147
"    "    holdings and occupiers .. .. .	481
"    "    production on estates .. .. .	481
"    "    workmen's homes .. .. .	482
Coal, boring for .. .. .	617
"    geological distribution of .. .. .	600
"    industry, Royal Commission on .. .. .	613
"    miners, number employed .. .. .	613
"    mining, men employed in principal countries .. .. .	616
"    net imports or exports of principal countries .. .. .	616
"    output of collieries .. .. .	612
"    produced and imported .. .. .	614
"    production, of principal countries .. .. .	616
"    "    total for Australasia .. .. .	615
"    "    "    recorded .. .. .	612
"    "    value at collieries in principal countries .. .. .	616
Coin and bullion held by banks .. .. .	190, 191
"    "    imports and exports .. .. .	188
"    "    issued from Mint .. .. .	188
Coinage, gold and silver, of principal countries .. .. .	611
College, Training, for Teachers .. .. .	220
"    Working Men's .. .. .	241, 254
Collieries, output of .. .. .	612
Collins in Port Phillip .. .. .	3
Colony of Victoria, founding of .. .. .	3
Coloured persons .. .. .	466
Commerce (Trade Descriptions) Act 1905, Commonwealth .. .. .	97
Commission, Coal .. .. .	613
Committals for trial .. .. .	415
Commonwealth (see also Elections, Parliament, and Australian States).	
"    Acts passed, 1901 to 1906 .. .. .	92
"    "    and States, financial relations of .. .. .	152
"    "    balances paid to Victoria .. .. .	114, 116, 134
"    "    Constitution .. .. .	85
"    "    elections .. .. .	86
"    "    "    expenditure on .. .. .	90
"    "    "    franchise .. .. .	86
"    "    Judiciary Act 1903 and 1906 .. .. .	400
"    "    Ministries .. .. .	105
"    "    officers, principal .. .. .	108
"    "    Parliament, opening of first .. .. .	86
"    "    proclamation of .. .. .	36, 104
"    "    revenue and expenditure in Victoria .. .. .	133
Companies, trading .. .. .	207
Compensation Fund Licensing Act 1906 .. .. .	437
Concentrated milk made in factories .. .. .	646
Conciliation and Arbitration Act 1904, Commonwealth .. .. .	95
Conference of Federal and State Treasurers .. .. .	36
"    "    Premiers .. .. .	36, 37
"    "    Statisticians .. .. .	55
Conjugal condition, census years 1881, 1891, 1901 .. .. .	448
"    "    of persons marrying .. .. .	322
Consolidated Inscribed Stock Redemption Fund .. .. .	147
Constitution Act, passing of first .. .. .	41
"    "    1906 .. .. .	67
"    "    and Government .. .. .	40
"    "    "    Reform Act 1903 .. .. .	45
"    "    changes in the .. .. .	42
"    "    Commonwealth .. .. .	85



	Page
Constitution of 1855 .. .. .	41
"    "    bi-cameral and cabinet system, introduction of .. .. .	41
"    "    voting by ballot provided for .. .. .	42
"    State changes in .. .. .	42
"    "    .. .. .	73
Consuls, foreign .. .. .	293
Consumptive sanatoriums (see also Charitable Institutions) .. .. .	98
Contract Immigrants Act 1905, Commonwealth .. .. .	293
Convalescent homes .. .. .	36
Convention between Great Britain and France .. .. .	355
Convulsions, death rate from .. .. .	2
Cook's discovery of Victoria .. .. .	208
Co-operative societies .. .. .	605
Copper ore produced .. .. .	98
Copyright Act 1905, Commonwealth .. .. .	440
Coroners' inquests .. .. .	329
Corrected birth rates for various countries .. .. .	47
Council, Executive .. .. .	45
"    Federal .. .. .	71
"    Legislative (see Constitution, Parliament).	
"    "    members, 1907 .. .. .	111
"    of Defence .. .. .	74
County Court Judges .. .. .	402
"    "    litigation .. .. .	399
Court, High, of Australia .. .. .	563
Cows and cowkeepers .. .. .	574
"    milk, in Australasia .. .. .	565
"    prices of .. .. .	562, 563
Cream separators in use .. .. .	646
"    sold by factories .. .. .	646
Creameries .. .. .	194
Crédit Foncier .. .. .	413
Crime (see also arrests, offences, and prisoners)	
"    decrease, in age groups .. .. .	417
"    in States and New Zealand .. .. .	418
"    undetected .. .. .	415
"    .. .. .	425
Crimes, serious, Victoria and New South Wales .. .. .	413
Criminal law, administration of .. .. .	440
Criminals hanged .. .. .	438
"    in prison .. .. .	557
Crops, minor .. .. .	548
"    other than principal .. .. .	543
"    principal, area, produce, and averages per head .. .. .	531
"    "    land under .. .. .	545
"    "    percentage in each district of total cultivation .. .. .	544
"    "    "    of total of each in districts .. .. .	545
"    "    proportion of area to total cultivation .. .. .	547
"    "    yields in Australasia .. .. .	656
"    value in 1904, 1905, and 1906 .. .. .	523, 531
Cultivation, area under .. .. .	532
"    areas and yearly increase .. .. .	531
"    "    of principal crops .. .. .	518, 537
"    experimental .. .. .	523
"    of holdings .. .. .	532
"    per head in Australasia .. .. .	545
"    percentage of area under principal crops .. .. .	545
"    principal crops, proportion to total area .. .. .	656
"    value in 1904, 1905, and 1906 .. .. .	552
Currants and raisins .. .. .	92
Customs Act 1901, Commonwealth .. .. .	375
"    and Excise, inter-state adjustments .. .. .	

	Page
Customs and Excise, revenue .. .. .	134, 155, 384
"    "    transfer to Commonwealth .. .. .	375
"    Tariff Act 1906 .. .. .	102
Dairy cattle, prices of .. .. .	565
"    cows .. .. .	563
"    farms .. .. .	563
Dairying industry, bonuses to .. .. .	521
"    "    value in 1904, 1905, and 1906 .. .. .	657
"    pursuits, persons engaged in .. .. .	529, 530
Dalgety, Federal Capital Site .. .. .	84
Darling dead-lock .. .. .	43
Daylesford Technical School .. .. .	237
Deaf and Dumb Asylum (see also Charitable Institutions) .. .. .	291
Death rate of illegitimate infants .. .. .	348
"    "    "    "    from certain causes .. .. .	348
"    "    ordinary, unreliable .. .. .	341
"    rates adjusted .. .. .	345
"    "    from various causes .. .. .	355
"    "    in age groups .. .. .	345
"    "    British and foreign cities .. .. .	341
"    "    Capital cities in Australasia .. .. .	340
"    "    child-bed according to age .. .. .	370
"    "    country towns .. .. .	338
"    "    European countries .. .. .	337
"    "    States and New Zealand .. .. .	336
"    "    sub-districts of Greater Melbourne .. .. .	339
"    "    town and country .. .. .	337
"    "    of sexagenarians .. .. .	347
Deaths .. .. .	335
"    and death rates in capital cities in Australasia .. .. .	340
"    excess of births over, Australasia and Europe .. .. .	374
"    in charitable institutions .. .. .	277
"    child-bed .. .. .	370
"    Greater Melbourne .. .. .	340
"    hospitals, &c., in Greater Melbourne .. .. .	340
"    quarters .. .. .	335
"    index of mortality .. .. .	342
"    "    States and New Zealand .. .. .	344
"    of children under five years .. .. .	351
"    "    proportion to population .. .. .	352
"    infants (see also Infantile Mortality) .. .. .	347
"    members of friendly societies .. .. .	268
"    proportion of, in age groups .. .. .	354
"    "    general hospitals .. .. .	340
"    "    elderly persons in Greater Melbourne .. .. .	341
"    registration .. .. .	314
Debentures, Government, prices in Melbourne .. .. .	200
Debts in various countries .. .. .	151
"    of Australian States and New Zealand .. .. .	148
Deep shafts, gold mining .. .. .	606
Defective children .. .. .	222
Defence Acts, Commonwealth 1903 and 1904 .. .. .	94, 95
"    Commonwealth, Boards of Administration .. .. .	111
Defences, expenditure on .. .. .	134
Departures (see also Emigration and Immigration) .. .. .	441 et seq.
Deposits and depositors in savings banks .. .. .	192
"    in banks .. .. .	189, 191
Designs Act 1906 .. .. .	100
Diabetes mellitus, death rate from .. .. .	358
Diamond drills .. .. .	617

	Page
Diarrhoeal diseases, death rate from .. .. .	357
Digestive diseases, death rate from .. .. .	366
Diphtheria, death rate from .. .. .	355, 357
Discovery of Australia .. .. .	1
" gold .. .. .	6
Diseases, classification of, altered .. .. .	355
" in live stock .. .. .	516
Dispensaries, free .. .. .	293
Dissolution of Parliament, granting a .. .. .	47
Distilleries, output and materials used .. .. .	650
Dividends paid by dredge mining and hydraulic sluicing .. .. .	607
" gold mining companies .. .. .	608
Divorce, grounds of .. .. .	406
Divorced persons re-marrying .. .. .	323
Divorces and judicial separations .. .. .	407
" in States and New Zealand .. .. .	407
Dookie Agricultural College and Experimental Farm .. .. .	503
Drawbacks .. .. .	384
Dredge mining and hydraulic sluicing .. .. .	607
Dredging plants engaged in gold mining .. .. .	607
Dried fruits .. .. .	556
Drills, diamond .. .. .	617
Drink bill, States and New Zealand .. .. .	424
" intoxicating, consumption of, in Australasia, British, and other countries .. .. .	422
Drunkenness, arrests for .. .. .	416
" in States and New Zealand .. .. .	418
" percentage of convictions, States and New Zealand .. .. .	425
Dwellings in Greater Melbourne .. .. .	6
" inhabited and uninhabited .. .. .	159
Echuca Technical Art School .. .. .	240
Economic minerals and rocks of Victoria .. .. .	582
Education (see also State schools) .. .. .	209
" agricultural .. .. .	503
" cost of primary instruction .. .. .	132
" expenditure on .. .. .	130
" of persons arrested .. .. .	426
" the people, census returns .. .. .	224
" system, boards of advice .. .. .	216
" " compulsory clauses .. .. .	215
" " extra subjects .. .. .	216
" " free subjects .. .. .	216
" " of the State .. .. .	214
" " standard of education .. .. .	217
" " teachers .. .. .	217
" technical .. .. .	230
" " article by the late Inspector Dennant .. .. .	244
Election expenses, limitation of .. .. .	50
" of members, first Victorian Council .. .. .	40
Elections, Commonwealth .. .. .	86
" " franchise .. .. .	86
" " informal ballot-papers .. .. .	89
" " votes of male and female electors .. .. .	87, 89
" State percentage of votes, 1866 to 1907 .. .. .	59
" voters' certificates .. .. .	43
" voting by post .. .. .	43, 58, 65
" 1907, Legislative Assembly electors and votes .. .. .	57
" " Council electors and votes .. .. .	56
Electoral Acts, Commonwealth .. .. .	93, 99, 102
" districts, first .. .. .	40

	Page
Electors and votes, Commonwealth elections .. .. .	87
„ municipal franchise, &c. .. .. .	82
„ proportion voting for successful candidates .. .. .	89
Electric light works .. .. .	655
Electricity, factories using machinery worked by .. .. .	628
Emigration by rail .. .. .	445
„ sea .. .. .	444
„ Chinese .. .. .	465
„ coloured persons .. .. .	466
„ to South Africa .. .. .	444
„ various places .. .. .	445
„ Western Australia .. .. .	442
„ Victorians in other States .. .. .	452
Endocarditis, valvular disease of heart, &c., death rate from .. .. .	355, 364
Endowment to municipalities .. .. .	164
Ensilage .. .. .	575
Enteritis and gastro-enteritis, death rate from .. .. .	355, 364
Epilepsy, death rate from .. .. .	355
Estates of deceased persons .. .. .	184
Events, principal, 1901-6 .. .. .	36
Evidence Act 1905, Commonwealth .. .. .	96
Excise Acts, Commonwealth .. .. .	92, 102
Executions of criminals .. .. .	440
Executive Council .. .. .	47
Exhibition Buildings .. .. .	260
Exhibitions for State school scholars .. .. .	221
Expenditure, as evidence of progress .. .. .	8
„ Commonwealth .. .. .	133
„ from loans .. .. .	140
„ in aid of agriculture .. .. .	521
„ „ mining .. .. .	602, 603
„ on Commonwealth elections .. .. .	90
„ education .. .. .	130
„ police and gaols, States and New Zealand .. .. .	440
„ railways .. .. .	126
„ State, principal heads .. .. .	127
Experimental farms .. .. .	503
„ field work .. .. .	518
Experiments in grain and hay manuring .. .. .	519
Exploration of Australia .. .. .	1
Exports (see Imports and Exports).	
„ dried and canned fruits .. .. .	498
„ principal articles of Victorian produce .. .. .	381
„ Victorian .. .. .	8
„ wool .. .. .	7, 8
Eye and Ear Hospital (see also Charitable Institutions) .. .. .	289
Factories .. .. .	617
„ and shops, legislation .. .. .	270
„ „ town and country, hands employed .. .. .	626
„ buildings, land, and improvements, value of .. .. .	618
„ classification .. .. .	617
„ „ according to hands employed .. .. .	626
„ „ of hands employed .. .. .	629
„ cost of production and value of produce .. .. .	630
„ metropolitan and country .. .. .	626
„ power, hands, wages, machinery, land, buildings, &c. .. .. .	618
„ proportion of wages, fuel, light, and materials to work done .. .. .	631
„ rates of wages and wages boards .. .. .	272, 631
„ summary for five years .. .. .	628
„ value of fuel and light, and of materials, raw and finished .. .. .	630

	Page
Factories, value of production by .. .. .	657
" wages boards .. .. .	272
" " paid in various industries .. .. .	630
Factory, definition of .. .. .	617
Fallow land .. .. .	548, 557
Farm implements and machinery .. .. .	562
Farmers .. .. .	529
Farms, hands employed on .. .. .	530
Fathers, proportion of, in age groups .. .. .	330
" " of first born-children, in age groups .. .. .	331
Fauna .. .. .	16
Fawcner on the River Yarra .. .. .	5
Federal Council, constitution of .. .. .	45
" High Court, inauguration of .. .. .	36
" State, and local revenue and expenditure .. .. .	135
Federation of Australian States .. .. .	45, 84
" steps leading up to .. .. .	45
Fellmongeries .. .. .	642
Female suffrage, Commonwealth elections .. .. .	87 to 89
Finance .. .. .	113
Financial relations of the Commonwealth and States .. .. .	152
Fire Brigades Boards .. .. .	177
" " " revenue and expenditure .. .. .	135
Firewood .. .. .	645
Fish, imports of, quantity and value .. .. .	580
" preserved .. .. .	647
" sold in Melbourne market, quantity and value .. .. .	579
" value of production .. .. .	657
Fisheries, number of men and boats .. .. .	579
Flax, area and production .. .. .	548, 550
Flocks of sheep, number of .. .. .	570
" " sizes of .. .. .	570
Flora .. .. .	35
Flour, imports and exports .. .. .	648
" mills, grain used, flour made, &c. .. .. .	648
Fodder, experimental crops .. .. .	518
Forage, green .. .. .	548, 550
Foreign Consuls .. .. .	73
Forest produce, value of .. .. .	657
" reserves .. .. .	469
" saw-mills .. .. .	644
Forestry .. .. .	520
Foundling Hospital and Infants' Home (see also Charitable Institutions)	294
Franchise, Commonwealth .. .. .	86
" State .. .. .	48, 49
Freezing works .. .. .	646
Friendly Societies .. .. .	267
" " Act 1906 .. .. .	66
Frozen rabbits and hares exported .. .. .	578
Fruit, area under, and produce .. .. .	554
" canned and dried, exports of .. .. .	497
" dried .. .. .	556
" gathered .. .. .	554
" growers .. .. .	554
" growing .. .. .	553
" large and small .. .. .	554
" preserved and pulped in manufactories .. .. .	648
" sold, valuation of .. .. .	555
" trees, average produce .. .. .	555
" " bushes, and plants .. .. .	553

	Page
Fruit, used in manufacturies .. .. .	648
Fuel, percentage of, to articles produced in factories .. .. .	631
Gambling, law relating to .. .. .	408
Game, frozen, imports and exports .. .. .	647
Gaols and prisoners .. .. .	438
" expenditure on .. .. .	439
" " States and New Zealand .. .. .	440
Gardens and orchards, area under .. .. .	548, 553
" parks, in country towns .. .. .	267
" " Greater Melbourne area of .. .. .	6, 264
" market .. .. .	556
" Melbourne Botanic .. .. .	260
Gas, factories using machinery worked by .. .. .	628
" works .. .. .	656
Gastro-enteritis and enteritis, death rate from .. .. .	355, 366
Geelong Hospital and Benevolent Asylum .. .. .	286
" Library and Museum .. .. .	258
" population .. .. .	457
" settlement .. .. .	5, 6
Geographical position, area, and climate .. .. .	9
Geography, physical .. .. .	10
" " coast line .. .. .	12
" " mountains .. .. .	10, 21
" " rivers and lakes .. .. .	11, 26, 31
Geological notes .. .. .	582
Geology .. .. .	12
Gold, alluvial and quartz .. .. .	606
" boring for .. .. .	617
" coin and bullion, imports and exports .. .. .	188
" coinage of principal countries .. .. .	611
" crushings and yields by Government batteries .. .. .	617
" discovery and production .. .. .	6, 8
" geological distribution thereof .. .. .	583
" miners .. .. .	605
" mining, deep shafts .. .. .	606
" " dividends .. .. .	607, 608
" " dredging and hydraulic sluicing .. .. .	607
" production .. .. .	605, 606
" " of Australasia .. .. .	609
" " principal countries .. .. .	610
" " the world .. .. .	609
" " total recorded .. .. .	605
" received at and issued from Mint .. .. .	188
" yields, alluvial workings and quartz reefs .. .. .	606
" " and dividends .. .. .	608
" " in mining districts .. .. .	606
Gold-fields, reservoirs .. .. .	483
" value of machinery on .. .. .	608
Gout, death rate from .. .. .	355, 358
Government and Constitution .. .. .	40
" " division of functions .. .. .	45
" deposits in banks .. .. .	190
" Labour Bureau .. .. .	273
" local .. .. .	80
" stocks, prices and return to investors .. .. .	195
Governor-General, the .. .. .	104
Governor, the .. .. .	46
Governors of Australasian States .. .. .	104
" Victoria .. .. .	67

	Page
Grapes, production of .. .. .	552
Grass and clover seeds, area under, and production of .. .. .	548, 550
Grasses, artificial, area under .. .. .	548
Graziers, number of .. .. .	529
Grazing allotments, conditions relating to .. .. .	471
" area lease, Crown lands occupied under .. .. .	469
" lands available for selection .. .. .	471
" licences, annual .. .. .	473
Great Britain and Victoria, agriculture and live stock .. .. .	581
Green forage, area under .. .. .	548, 550
Hands employed in factories .. .. .	626
Harbor Trust, Melbourne, members, &c. .. .. .	79
" " revenue and expenditure .. .. .	135, 172
" " " from taxation .. .. .	156
Hay, area under, and production .. .. .	542
" prices of .. .. .	546
" yield in Australasia .. .. .	547
Health, Board of Public, members .. .. .	80
" Society, Australian .. .. .	299
Heart disease (undefined), death rate from .. .. .	355, 364
" diseases of, death rate from .. .. .	355, 364
Hemiplegia, brain paralysis, death rate from .. .. .	355
Henty in Portland .. .. .	5
Hides tanned .. .. .	642
High Court of Australia .. .. .	399
Hills and mountains in Victoria .. .. .	21
History of Australian exploration .. .. .	1
" Victorian, principal events in .. .. .	36
Hobart, population .. .. .	460
Holdings, classification of area, cultivation, and live stock .. .. .	523
Homes, convalescent .. .. .	293
" Salvation Army (see also Charitable Institutions) .. .. .	295
Homestead associations .. .. .	475
Homœopathic Hospital, history, &c. .. .. .	282
Honey and beeswax, value of production .. .. .	657
" hives and bee-keepers .. .. .	576
Hops, area under, and production .. .. .	548, 550
Horses, census returns, 1861-1901 .. .. .	563
" in Australasia .. .. .	574
" in 1905, 1906, 1907 .. .. .	564
" prices of .. .. .	565
Horticultural societies .. .. .	515
Horticulture, School of .. .. .	510
Horticulturists, number of .. .. .	530, 553
Hospital and Benevolent Asylum at Geelong .. .. .	286
" " " Stawell .. .. .	287
" " " Warrnambool .. .. .	287
" Alfred, history, &c. .. .. .	281
" Austin, for Incurables .. .. .	283
" Ballarat District .. .. .	284
" Bendigo .. .. .	284
" Castlemaine .. .. .	285
" Children's (see also Charitable Institutions) .. .. .	289
" Eye and Ear .. .. .	289
" Homœopathic .. .. .	282
" Maryborough .. .. .	286
" Melbourne .. .. .	280
" Queen Victoria Memorial .. .. .	289
" Saturday and Sunday donations .. .. .	301
" St. Vincent's .. .. .	284

	Page
Hospital, Women's (see also Charitable Institutions) .. ..	288
Hospitals (see Charitable Institutions).	
"    &c., deaths in .. ..	340
"    for the Insane .. ..	305
"    Foundling .. ..	294
House of Representatives, names of members of .. ..	107
Houses connected with the sewerage system .. ..	176
Humane Society, Royal .. ..	300
Hydatids, death rate from .. ..	357
Hydraulic sluicing and dredge mining .. ..	607
Illegitimacy, decrease of .. ..	334
"    in town and country .. ..	334
Illegitimate birth rates in Australasia and United Kingdom .. ..	333
"    births, proportion of, to single women .. ..	334
"    children, legitimated .. ..	333
"    infants, death rate of .. ..	348
"    "    "    from certain causes .. ..	348
Illiteracy .. ..	228
Immigration .. ..	441 <i>et seq.</i>
"    by rail .. ..	445
"    sea .. ..	444
"    Chinese .. ..	465
"    coloured persons .. ..	466
"    encouragement of .. ..	446
"    excess over emigration .. ..	458
"    from South Africa .. ..	444
"    Western Australia .. ..	442
"    Restriction Acts, Commonwealth .. ..	93, 97, 98, 468
Imports and exports—Breadstuffs .. ..	539
"    "    butter and cheese .. ..	646
"    "    from and to principal countries .. ..	377
"    "    inter-state .. ..	380
"    "    live stock .. ..	567
"    "    of timber .. ..	383
"    "    values, total and per head .. ..	376
"    "    wool .. ..	568
"    coal, quantities and values .. ..	614
"    of classified articles from countries beyond Australia .. ..	379
"    Victorian .. ..	8
Imprisonment, sentences of .. ..	428
Income tax .. ..	116
"    Act 1906 .. ..	61
"    assessments .. ..	119
"    revenue from .. ..	156
"    taxpayers, incomes, and tax payable .. ..	118
"    "    occupations .. ..	120
Index of mortality .. ..	342
"    "    States and New Zealand .. ..	344
Industrial museum .. ..	257
"    schools (see also Charitable Institutions) .. ..	306
Infantile mortality .. ..	347
"    "    as affecting birth rate .. ..	334
"    "    at different ages .. ..	349
"    "    decrease in Australasia .. ..	350
"    "    in town and country .. ..	347
"    "    various countries .. ..	350
"    "    of males and females .. ..	349
Infants, death rate of, from chief causes .. ..	369
"    illegitimate, death rates from certain causes .. ..	348



	Page
Infants, legitimate, death rates from certain causes .. .. .	348
"    probable mortality of .. .. .	350
Influenza and respiratory diseases, death rate from .. .. .	365
"    death rate from .. .. .	366
Inquests, coroners' .. .. .	440
Insanity, death rate from .. .. .	355
"    lunatics in States and New Zealand .. .. .	305
Insolvencies .. .. .	404
Insolvents, occupations of .. .. .	405
Instruction, public (see also Education and State schools) .. .. .	209
Insurance, fire and marine, accident and guarantee, &c. .. .. .	204
"    life .. .. .	201
Intemperance, death rate from .. .. .	357
Interchange .. .. .	375
Interest on loans .. .. .	141
"    "    expenses in paying .. .. .	144
"    payable in London and Melbourne .. .. .	143
"    rates on outstanding loans .. .. .	144
Inter-state adjustments of Customs and Excise duties .. .. .	375
Iron ore produced .. .. .	605
Irrigation, abolished trusts .. .. .	495
"    and water supply districts .. .. .	487
"    areas .. .. .	490
"    capital expenditure on works .. .. .	483
"    Government advances and expenditure .. .. .	484
"    State works .. .. .	486
"    storage capacities of reservoirs .. .. .	483
"    under the Water Act 1905 .. .. .	484
"    valuation and rating .. .. .	489
"    works—capital written off .. .. .	484
Jam, pickle, and sauce, imports and exports .. .. .	648
"    "    "    works .. .. .	648
"    "    "    materials used and output .. .. .	648
Jubilee of Responsible Government in Victoria .. .. .	50
Judges .. .. .	74
Judiciary Acts 1903 and 1906, Commonwealth .. .. .	400
"    Commonwealth .. .. .	94, 100
Juvenile Smoking Prevention Act 1906 .. .. .	61
Kyneton Agricultural Association .. .. .	514
"    Technical School .. .. .	238
Labour Bureau, Government .. .. .	273
"    Colony, Leongatha .. .. .	297
Lakes in Victoria .. .. .	32
Lamb raising .. .. .	571
Lambs, prices of .. .. .	566
"    wool clip .. .. .	568
Land Acts .. .. .	469, 470
"    agricultural and grazing allotments .. .. .	471
"    area cultivated, and stock on .. .. .	523
"    "    under cultivation, 1896-7 to 1906-7 .. .. .	532
"    classified holdings, cultivation, pasture, and live stock .. .. .	524
"    cultivated holdings, area of .. .. .	523
"    in fallow .. .. .	548, 557
"    in occupation in each district .. .. .	526
"    "    Victoria .. .. .	526
"    Mallee pastoral leases .. .. .	469
"    mortgages and releases .. .. .	205
"    tax .. .. .	125
"    "    revenue from .. .. .	126
"    Transfer Act .. .. .	474

	Page
Land Transfer Act assurance fund .. .. .	474
" under principal crops .. .. .	531
" various annual licences .. .. .	473
Landed property, capital, ground, and rateable values .. .. .	187
Lands, agricultural and grazing, available for selection .. .. .	471
" alienated .. .. .	469, 474
" annual grazing licences .. .. .	473
" auriferous .. .. .	470, 473
" available for occupation .. .. .	469 <i>et seq.</i>
" classification of unalienated .. .. .	470
" Crown, amount realized by sale of .. .. .	474, 475
"   " occupied .. .. .	524
"   " pastoral occupation of .. .. .	474
"   " total area .. .. .	469
" endowment for agricultural purposes .. .. .	508
" for sale by auction .. .. .	472
" in process of alienation .. .. .	469
" Mallee .. .. .	470, 473
" occupied areas, cultivation, live stock on holdings .. .. .	523
"   " for agriculture and pasture .. .. .	523
"   " under grazing area leases .. .. .	469
"   " use, areas, and percentages .. .. .	526
" pastoral, available for selection .. .. .	470, 472
" private, occupied .. .. .	524
"   " purchased for closer settlement .. .. .	476 <i>et seq.</i>
"   " total area .. .. .	469
" reclaimed .. .. .	472
" reserved for various purposes .. .. .	469
" selecting, leasing, licensing .. .. .	471
" settlement .. .. .	469 <i>et seq.</i>
" swamp or reclaimed .. .. .	472
Law as to marriages .. .. .	313
" Crime, &c. .. .. .	399
Leases, perpetual, selecting under .. .. .	472
Leasing Crown lands, conditions relating to .. .. .	471
Leather, imports and exports .. .. .	642
" industry .. .. .	642
Legal system in Victoria .. .. .	401
Legislative Assembly (see also Constitution, Parliament) .. .. .	42, 49
"   " electors and voters .. .. .	57
"   " members, 1907 .. .. .	72
"   " Council (see also Constitution, Parliament) .. .. .	40, 48
"   " electors on rolls, 1906-7 .. .. .	56
"   " members, 1907 .. .. .	71
Legitimated, number of children .. .. .	333
Leongatha labour colony .. .. .	297
Letters of administration .. .. .	404
Liabilities paid out of ordinary revenue .. .. .	113
Libraries .. .. .	255
" free, public .. .. .	257
Library, Patent Office .. .. .	257
" Public, of Victoria .. .. .	255
" Supreme Court .. .. .	257
Licence and lease, selecting land by .. .. .	471
" fees paid to municipalities .. .. .	165
Licences, annual grazing .. .. .	473
" bee farm site .. .. .	471
" number and revenue .. .. .	157
" Reduction Board .. .. .	432

	Page
Licensing Act Fund .. .. .	165
"  Acts 1890 and 1906 .. .. .	429
Liens on wool and crops .. .. .	205
Life Assurance Companies Act 1905, Commonwealth .. .. .	97
"  insurance, 1900 to 1906 .. .. .	201
"  "  business of Australian and other companies .. .. .	202
Lifts Regulation Act 1906 .. .. .	63
Lighthouses and lights .. .. .	388
Limestone raised .. .. .	605
Liquor, intoxicating, consumed in States and other countries .. .. .	422
"  licensing laws .. .. .	429
Litigation and legal business .. .. .	402
"  in County Courts .. .. .	402
Liver, cirrhosis and other diseases of, death rate from .. .. .	355
Live stock .. .. .	8
"  census returns .. .. .	563
"  diseases .. .. .	516
"  imported and exported .. .. .	567
"  in Australasia .. .. .	574
"  Victoria and Great Britain .. .. .	581
"  numbers in 1905, 1906, and 1907 .. .. .	564
"  on holdings .. .. .	524
"  per square mile, census years .. .. .	564
"  prices in Melbourne .. .. .	565
"  slaughtered .. .. .	566
"  total, and per head, census years .. .. .	563
"  "  "  square mile, Australasia .. .. .	574
Loan expenditure .. .. .	140
"  "  State and local .. .. .	136
Loans authorized but not raised .. .. .	144
"  floated in London .. .. .	136
"  "  Melbourne .. .. .	138
"  municipal, receipts and expenditure .. .. .	166
"  "  unexpended balances .. .. .	167
"  outstanding and rates of interest .. .. .	144
"  purposes for which raised .. .. .	141
"  redemption fund .. .. .	147
"  when repayable .. .. .	141
Local Government .. .. .	80
Longerenong Agricultural College and Experimental Farm .. .. .	505
Lotteries Gaming and Betting Act 1906 .. .. .	64, 408
Lunatic asylums (see also Charitable Institutions) .. .. .	305
Lunatics in States and New Zealand .. .. .	305
Machinery and implements on farms and pastoral holdings .. .. .	562
"  plant in factories, approximate value of .. .. .	628
"  steam, gas, oil, &c., in factories .. .. .	628
"  value of, on gold-fields .. .. .	608
Magistrates, offences dealt with by .. .. .	415
"  sentences by .. .. .	428
Maize, area under, and production .. .. .	548, 549
Mallee land account .. .. .	146
"  lands .. .. .	470, 473
Mangel-wurzel, area and production .. .. .	548, 549
Manslaughter and murder, death rate from .. .. .	368
Manufactories. (See Factories.) .. .. .	
Manure used for fertilization .. .. .	561
Manured and unmanured wheat crops .. .. .	561
Manures, artificial, use of .. .. .	559
Manuring experiments .. .. .	519
Marine Board, members, &c. .. .. .	80

	Page
Marine Inquiry, Court of, members .. .. .	80
Market gardens, area and value of produce .. .. .	556
"    "    value of production .. .. .	657
Marriage, ages of bridegrooms and brides in combination .. .. .	318
"    average ages of parties at .. .. .	319
"    decrees for dissolution of .. .. .	407
"    rates .. .. .	315
"    "    factors in .. .. .	316
"    "    in age groups .. .. .	317
"    "    Australasia .. .. .	320
"    "    urban and rural districts .. .. .	321
"    "    various countries .. .. .	320
"    tendency amongst men to defer .. .. .	317
"    usual residence of parties at .. .. .	321
Marriages .. .. .	315
"    1891-1906 .. .. .	315
"    at matrimonial agencies .. .. .	324
"    by principal denominations .. .. .	323
"    conjugal condition of parties .. .. .	322
"    during each quarter .. .. .	322
"    law as to .. .. .	313
"    of divorced persons .. .. .	323
"    minors .. .. .	323
"    proportion of bridegrooms and brides in age groups .. .. .	318
"    "    to marriageable men and women .. .. .	316
"    "    "    "    in Australasia .. .. .	321
"    "    population .. .. .	315
"    registration .. .. .	314
"    signing register with marks .. .. .	228
Married women, percentage of, in age groups under 45 .. .. .	326
Maryborough Hospital .. .. .	286
"    population .. .. .	457
"    Technical School .. .. .	237
Matriculation, lectures, &c. .. .. .	210
Matrimonial agencies, marriages at .. .. .	324
Measles, death rate from .. .. .	355
Meat freezing and preserving .. .. .	646
Meats, frozen and preserved, imports and exports .. .. .	647
Mechanics' institutes .. .. .	257
Melbourne and Metropolitan Board of Works .. .. .	172
"    "    "    members, &c. .. .. .	79
"    "    "    revenue and expenditure .. .. .	135, 177
"    suburbs, birth rate in .. .. .	332
"    "    death rate in .. .. .	339
"    "    marriage rate in .. .. .	321
"    "    population of .. .. .	454
"    Botanic Garden .. .. .	260
"    foundation of .. .. .	5
"    Greater .. .. .	6
"    "    parks and gardens area .. .. .	264
"    Harbor Trust, members, &c. .. .. .	79
"    "    wharfs, plant, and dredging .. .. .	389
"    Hospital .. .. .	280
"    revenue and expenditure .. .. .	168
"    sewerage system .. .. .	174
"    tramway returns .. .. .	397
"    Tramway Trust .. .. .	395
"    University .. .. .	209
"    "    professors, &c. .. .. .	77
Merinos introduced by Macarthur .. .. .	7

	Page
Meteorology .. .. .	501
"    Act 1906 .. .. .	99
Miasmatic diseases, death rates from .. .. .	357
Migration (see also Emigration, Immigration) .. .. .	441 <i>et seq.</i>
Mildura, irrigation colony .. .. .	496
Military administration, Board of .. .. .	112
Milk, concentrated, made in factories .. .. .	646
"    consumed, value of .. .. .	657
"    received at butter and cheese factories .. .. .	646
Mineral production .. .. .	605
"    "    value of .. .. .	605, 657
Minerals and rocks of Victoria .. .. .	582
Miners, coal, number of .. .. .	613
"    gold .. .. .	605
Mines, schools of .. .. .	232
Mining .. .. .	582
"    Accident Relief Fund .. .. .	309
"    accidents .. .. .	617
"    allocation of loan expenditure .. .. .	602
"    deep shafts .. .. .	606
"    development .. .. .	602
"    districts, gold yield, alluvial and quartz .. .. .	606
"    dredging and hydraulic sluicing .. .. .	607
"    expenditure in aid of .. .. .	602, 603
"    gold .. .. .	606
"    "    dividends .. .. .	607, 608
"    "    persons engaged in, at census, 1901 .. .. .	604
Ministers of religion, number of .. .. .	230
"    prior to responsible government .. .. .	68
"    responsible .. .. .	41, 47, 70, 106
Ministries since responsible government .. .. .	69
Ministry, Commonwealth, personnel of .. .. .	106
"    formation of .. .. .	46
"    State, personnel of .. .. .	70
Minor crops, areas and produce .. .. .	548, 557
Mint returns, Melbourne .. .. .	188
Money, approximate stocks of, in principal countries .. .. .	611
"    Lenders Act, 1906 .. .. .	65
"    orders .. .. .	390
Mortality, index of .. .. .	342
"    "    States and New Zealand .. .. .	344
Mortgages and releases of land .. .. .	205
"    of personal chattels .. .. .	206
"    stock .. .. .	205
Mothers, proportion of, in age groups .. .. .	330
"    "    of first-born children in age groups .. .. .	331
Mountains and hills in Victoria .. .. .	21
Municipal and corporation debts in Australian States .. .. .	149
"    assets and liabilities .. .. .	163
"    councillors .. .. .	81
"    electors, franchise, &c. .. .. .	82
"    endowment .. .. .	164
"    loans .. .. .	166
"    ratings .. .. .	160
"    revenue and expenditure .. .. .	135, 162
"    "    increase in .. .. .	160
"    statistics .. .. .	159
"    taxation .. .. .	156
Municipalities in Greater Melbourne .. .. .	6
"    local government .. .. .	80

	Page
Murder and manslaughter, death rate from .. .. .	368
Murray river, Sturt's navigation of.. .. .	4
Mutton, frozen, imports and exports .. .. .	647
"    preserved .. .. .	647
"    production and consumption, United Kingdom and United States .. .. .	528
National Gallery and Museum .. .. .	256
Natural increase of population .. .. .	371
Naturalization, 1871 to 1906 .. .. .	467
"    Act 1903, Commonwealth .. .. .	94
Naval administration, Board of .. .. .	112
"    Agreement Act 1903, Commonwealth .. .. .	94
Neglected Children, &c., schools .. .. .	306
"    "    cost of maintenance .. .. .	308
"    "    total number of .. .. .	309
"    Children's Act, Part VIII. .. .. .	308
Nephritis (acute), death rate from .. .. .	355
Nervous system, diseases of, death rate from .. .. .	363
New Zealand, birth rate in .. .. .	327
"    births, excess per cent. of, over deaths .. .. .	373
"    "    illegitimate .. .. .	333
"    Chinese and aborigines .. .. .	468
"    coal production .. .. .	615
"    consumption of spirits, wine, and beer .. .. .	422
"    crime and drunkenness .. .. .	418
"    crops, principal .. .. .	547
"    cultivation per head.. .. .	532
"    death rate in .. .. .	336
"    debt .. .. .	148
"    diffusion of wealth .. .. .	184
"    drink bill .. .. .	424
"    drunkenness, convictions for .. .. .	425
"    enrolment, net, of scholars .. .. .	218
"    expenditure on police and gaols .. .. .	440
"    gold production .. .. .	609
"    infantile mortality .. .. .	350
"    instruction, primary, cost of .. .. .	219
"    live stock .. .. .	574
"    "    per square mile .. .. .	574
"    lunatics .. .. .	305
"    marriage rate in .. .. .	320
"    natives of, in Victoria .. .. .	452
"    old persons in .. .. .	459
"    police force, strength of .. .. .	414
"    population, 1906 .. .. .	457
"    "    1851 to 1901 .. .. .	457
"    "    strength of .. .. .	459
"    "    towns .. .. .	461
"    prices of Government stock .. .. .	197
"    private wealth .. .. .	181
"    proportion of population, in age groups .. .. .	343
"    savings banks .. .. .	194
"    wool production .. .. .	569
Nhill School of Art .. .. .	240
Night shelters .. .. .	295
North-Eastern and Goulburn Valley Agricultural and Pastoral Association .. .. .	514
North Gippsland Agricultural Society .. .. .	515
Notes, bank, in circulation .. .. .	189, 191
Nuts gathered .. .. .	554

	Page
Oats, area and production .. .. .	541, 543
" prices of .. .. .	546
" yield in Australasia .. .. .	547
Observatory records .. .. .	501
Occupations, census periods 1891, 1901 .. .. .	448
" of income taxpayers .. .. .	120
" insolvents .. .. .	405
" persons connected with mining .. .. .	604
" the people .. .. .	269
Offences against person and property in States and New Zealand .. .. .	418
" reported .. .. .	414
" various, heard by magistrates .. .. .	415
Officers, principal, of the Commonwealth .. .. .	108
" " State .. .. .	74
Official and Parliamentary, Commonwealth .. .. .	104
" " State .. .. .	67
Old age, death rate from .. .. .	369
" pensions .. .. .	302
" " Australia and New Zealand .. .. .	304
" " expenditure on .. .. .	303
" persons, proportion of, in Australasia .. .. .	459
Onions, area and production .. .. .	548, 549
Opium Smoking Prohibition Act 1906 .. .. .	60
Orchards and gardens, area and produce .. .. .	548, 553
" orchardists .. .. .	554
" inspection of .. .. .	516
Ormond College .. .. .	212
Orphan Asylums .. .. .	292
Pacific Islanders Labourers Act, Commonwealth .. .. .	92, 103
Palæontology .. .. .	12
Papua Act, 1905, Commonwealth .. .. .	96
Paralysis (undefined), death rate from .. .. .	355
Paraplegia and spinal diseases, death rate from .. .. .	355
Parks and gardens, in country towns .. .. .	267
" " Greater Melbourne, area of .. .. .	6, 264
Parliament, Acts of Commonwealth .. .. .	92
" Commonwealth, franchise, powers, &c. .. .. .	85, 86, 93
" " opening of first .. .. .	36, 86
" " representation of States .. .. .	86
" division of Government functions .. .. .	45
" State, constitution of .. .. .	40, 41, 45
" " Darling dead-lock .. .. .	43
" " franchise, tenure, powers, &c. .. .. .	46
" " granting a dissolution .. .. .	47
" " members, 1907 .. .. .	71
" " members, qualification, franchise, &c. .. .. .	46
" " plural voting abolished .. .. .	42
" " voters' certificates .. .. .	43, 58
" " voting by post .. .. .	43, 58, 65
" third Commonwealth, members of .. .. .	106
Parliaments and Sessions, duration of, 1856 to 1907 .. .. .	59
Pastoral industries, value of production .. .. .	657
" lands available for occupation .. .. .	470, 472
" occupation of Crown lands .. .. .	474
" pursuits, persons engaged in .. .. .	529, 530
" wages .. .. .	531
Pasture, areas occupied for .. .. .	524
Patent office, library .. .. .	257
Patents Act 1903, Commonwealth .. .. .	95

	Page
Peas and beans, area and production .. .. .	548, 549
Pensions, gratuities, &c. .. .. .	128
"  old-age .. .. .	302
Persons employed in factories .. .. .	628
"  "  upon farming, dairying, and pastoral holdings .. .. .	530
"  engaged in agricultural pursuits .. .. .	530
"  "  mining pursuits .. .. .	604
"  "  pastoral and dairying pursuits .. .. .	529, 530
Perth, population .. .. .	460
Phthisis, death rate from .. .. .	361
"  "  in age groups .. .. .	361
"  "  various countries .. .. .	362
Pickles, imports and exports .. .. .	648
"  made in manufactories .. .. .	648
Pigs, census returns, 1861 to 1901 .. .. .	563
"  in Australasia .. .. .	574
"  numbers in 1905, 1906, and 1907 .. .. .	564
"  prices of .. .. .	566
"  slaughtered .. .. .	566
Pipes and tiles made, value of .. .. .	644
Pleurisy, death rate from .. .. .	355
Plural voting abolished .. .. .	42
Pneumonia, death rate from .. .. .	355, 364
Police courts, civil business .. .. .	403
"  expenditure on .. .. .	439
"  number in States and New Zealand .. .. .	414
Population .. .. .	441
"  actual rate of increase in various countries .. .. .	372
"  ages compared, Sweden and Australia .. .. .	341
"  and breadstuffs .. .. .	539
"  British dominions .. .. .	461
"  cities of the world .. .. .	463
"  coloured persons .. .. .	466
"  density .. .. .	451
"  "  in capital cities of Australasia .. .. .	460
"  "  of the world .. .. .	463
"  effective strength, Australasia .. .. .	459
"  estimated for 1906 .. .. .	441
"  excess per cent. of births over deaths, States and New Zealand .. .. .	373
"  increase, 1891 to 1906 .. .. .	442
"  "  1861 to 1906 .. .. .	453
"  "  of males and of females .. .. .	453
"  movement of, 1891 to 1906 .. .. .	442
"  "  in States .. .. .	458
"  natural increase in Australasia .. .. .	371
"  "  various countries .. .. .	372
"  New Zealand towns .. .. .	461
"  of Australasian capitals .. .. .	460
"  "  towns .. .. .	460
"  chief towns in Victoria .. .. .	457
"  Greater Melbourne .. .. .	6, 454
"  States and New Zealand, 1906 .. .. .	457
"  "  increase since 1851 .. .. .	458
"  the world .. .. .	463
"  Victoria .. .. .	8, 441
"  proportion of, Greater Melbourne to Victoria .. .. .	456
"  "  in age groups in States and New Zealand .. .. .	343
"  "  sexes .. .. .	453
"  urban and rural .. .. .	456
"  Victorians, in States and New Zealand .. .. .	452



	Page
Railways, consumption and carriage of Victorian coal .. ..	395
" length of lines and cost of construction .. ..	392
" mileage and traffic .. ..	8, 393
" receipts and expenditure .. ..	393
" " " per train mile .. ..	394
Rainfall .. ..	10
" records and averages .. ..	499
Raisins and currants made .. ..	552
Rateable property, definition of .. ..	82
Ratepayers, number of .. ..	159
Rates, municipal .. ..	83
Referendum, Commonwealth, result of .. ..	91
Reformatory schools (see also Charitable Institutions) .. ..	306
Refuges for females (see also Charitable Institutions) .. ..	294
Registration of births, deaths, and marriages .. ..	314
Religions of the people .. ..	229
Representation Act 1905, Commonwealth .. ..	97
Reserves, land .. ..	469
" public .. ..	264
Reservoirs .. ..	483
Respiratory diseases and influenza, death rate from, in age groups .. ..	365
" " death rate from, in age groups .. ..	364
Responsible government .. ..	41
" " jubilee of .. ..	50
Revenue and expenditure, Commonwealth .. ..	133
" " " and State .. ..	134
" " " State and local .. ..	135
" " Fire Brigades Boards .. ..	180
" " Harbor Trust .. ..	172
" " Melbourne and Metropolitan Board of Works .. ..	177
" " Melbourne, Ballarat, and Bendigo .. ..	168
" " State, 1905-6 .. ..	113
" " " 1899-1900 to 1905-6 .. ..	115
" appropriated towards paying off liabilities .. ..	113
" as evidence of progress .. ..	8
" from licences .. ..	157
" " railways .. ..	126
" heads of, State .. ..	116
Rheumatic fever, rheumatism of heart, death rate from .. ..	358
Rheumatism, death rate from .. ..	355, 358
Rivers in Victoria .. ..	26
Royal Agricultural Society .. ..	511
" Commission on coal .. ..	613
" Horticultural Society .. ..	263
" Humane Society .. ..	300
" Victorian Institute for the Blind .. ..	290
Rutherfordglen Viticultural Station .. ..	506
Rye, area and production .. ..	548, 549
Sale Technical School .. ..	239
Salt works, output, &c. .. ..	650
Salvation Army rescue homes (see also Charitable Institutions) .. ..	295
Sanatoriums, consumptive .. ..	293
Sandhurst Mechanics' Institute .. ..	258
Sauces, imports and exports .. ..	648
" made in manufactories .. ..	648
Savings banks, 1875 to 1906 .. ..	191
" " assets and liabilities .. ..	193
" " deposits .. ..	8
" " in Australasia .. ..	194

# *Index.*

xxix

	Page
Pork, frozen, imports and exports .. .. .	647
Portland settlement .. .. .	4
Port Phillip settlement .. .. .	3, 5
Postal business .. .. .	8, 389
" notes .. .. .	390
" returns .. .. .	389
Post, voting by, in Commonwealth and State elections .. .. .	43, 58
Posts and Telegraphs, revenue and expenditure .. .. .	134
Potatoes, area and production .. .. .	542, 543
" prices of .. .. .	546
" produce of, Australasia .. .. .	547
Pottery made, value of .. .. .	644
Poultry and poultry owners .. .. .	577
" census returns .. .. .	577
" frozen .. .. .	647
" imports and exports .. .. .	647
" value of production (estimated) .. .. .	577, 657
Power employed in factories .. .. .	628
Precious stones .. .. .	591
Prices of agricultural produce .. .. .	546
" live stock in Melbourne .. .. .	565
Prisoners and gaols .. .. .	438
Private schools .. .. .	219
Probate returns .. .. .	184
Probates and letters of administration .. .. .	404
Production .. .. .	469
" total value of Victorian .. .. .	656
" values per head, Victorian .. .. .	658
Property, annual and capital values, 1880 to 1907 .. .. .	186
" capital, and ground values, 1906-7 .. .. .	187
" left by deceased persons .. .. .	184
" rateable, definition of .. .. .	82
" number and classification of .. .. .	161
" value of .. .. .	159, 160
Prostate and bladder, diseases of, death rate from .. .. .	355
Publicans' licences, fees payable for .. .. .	430
Public Debt (see also Loans) .. .. .	8, 136
" and interest, payable in London and Melbourne .. .. .	143
" due dates .. .. .	141
" growth of and interest .. .. .	145
" of Australasia .. .. .	148
" various countries .. .. .	150
" State and local .. .. .	150
Public Meetings Act 1906 .. .. .	63
Quarries, stone, output, &c. .. .. .	616
Quartz reefs, gold yields .. .. .	606
Queen Victoria Memorial Hospital (see also Charitable Institutions) .. .. .	289
Queen's College .. .. .	213
" Fund .. .. .	312
Rabbits and game received at Melbourne market .. .. .	578
" hares, exports of frozen .. .. .	578
" value of production .. .. .	657
" frozen .. .. .	578, 647
" imports and exports .. .. .	647
" preserved .. .. .	647
" State expenditure on destruction of .. .. .	577
Racecourse licence and percentage fees .. .. .	412
" meetings, restrictions on .. .. .	411
Railway accident fund .. .. .	127
" revenue and expenditure, 1901-2 to 1905-6 .. .. .	126

	Page
Savings Banks in various countries .. .. .	195
"    "    investment of deposits .. .. .	193
"    "    loans to farmers .. .. .	193
Saw-mills, forest .. .. .	644
Scarlet fever, death rate from .. .. .	355
Scholars in private schools .. .. .	219
"    State schools .. .. .	217
Scholarships, State school .. .. .	221
Schools, industrial and reformatory (see also Charitable Institutions) .. .. .	306
"    of art .. .. .	240
"    mines .. .. .	232
"    private .. .. .	219
"    State, teachers, and scholars .. .. .	217
"    technical .. .. .	231
Sea-Carriage of Goods Act 1904, Commonwealth .. .. .	96
Seat of Government Act 1904, Commonwealth .. .. .	95
Secret Commissions Act 1905, Commonwealth .. .. .	96
Selection of land, conditions relating to .. .. .	471
Senate, names of members .. .. .	106
Sentences of persons arrested .. .. .	428
Separators, cream, in use .. .. .	562, 563
Septic diseases (puerperal), death rate from .. .. .	371
Settlement, closer .. .. .	476
"    of Australia .. .. .	3
"    "    discovery of gold .. .. .	6
Sewerage system of Melbourne .. .. .	174
Sheep, census returns, 1861 to 1901 .. .. .	563
"    flocks of .. .. .	570, 571
"    frozen .. .. .	647
"    in Australasia .. .. .	574
"    principal countries .. .. .	527
"    introduction and increase of .. .. .	5, 7, 8
"    number in 1905, 1906, and 1907 .. .. .	564
"    prices of .. .. .	566
"    slaughtered .. .. .	566
"    wool clip .. .. .	568
Shelters, night .. .. .	295
Shepparton Agricultural Society .. .. .	515
Shipping, inward and outward .. .. .	385
"    nationality of vessels .. .. .	386
"    vessels on register .. .. .	387
"    "    owned in Australasia .. .. .	387
"    Victorian .. .. .	8
Shire, definition of .. .. .	81
Shops and factories, legislation .. .. .	270
Silver, coinage of principal countries .. .. .	611
"    production of principal countries .. .. .	610
"    "    Victoria .. .. .	605
"    "    world .. .. .	609
Sinking funds .. .. .	146
Skins tanned .. .. .	642
Slaughtering .. .. .	566
Sluicing, hydraulic, plants .. .. .	607
Soap and candle works .. .. .	643
"    imports and exports .. .. .	643
Social condition .. .. .	209
Societies, benevolent .. .. .	292
"    friendly .. .. .	267
"    horticultural .. .. .	264
Society, Charity Organization .. .. .	296

	Page
Society for the Protection of Animals .. .. .	301
„ Victorian Discharged Prisoners' Aid .. .. .	295
Softening of the brain, death rate from .. .. .	355
Soils, characteristics of Victorian .. .. .	557
South Africa migration .. .. .	444
Spinal diseases, paraplegia, death rate from .. .. .	355
Spirits Act 1906 .. .. .	102
„ beer, and wine consumed .. .. .	422
„ distilled .. .. .	650
„ expenditure on .. .. .	424
St. John's Ambulance Association .. .. .	296
St. Vincent's Hospital .. .. .	284
State education system .. .. .	214
„ expenditure, heads of .. .. .	127
„ officers, principal .. .. .	74
„ revenue, heads of .. .. .	116
„ Rivers and Water Supply Commission .. .. .	484 <i>et seq.</i>
„ schools, teachers, and scholars .. .. .	217
„ taxation .. .. .	155
States and Commonwealth—financial relations of .. .. .	152
Statistical Summary of Victoria .. .. .	8
Statistics Act 1905, Commonwealth .. .. .	97
„ of progress, 1856 to 1906 .. .. .	51
Stawell Hospital and Benevolent Asylum .. .. .	287
„ Library, &c. .. .. .	259
„ population .. .. .	457
„ School of Mines .. .. .	237
Stock (see Live Stock). .. .. .	
„ mortgages .. .. .	205
Stocks, Australasian, investors' interest .. .. .	198
„ mean prices .. .. .	197
„ British and Colonial .. .. .	198
„ Victorian, prices in London .. .. .	195
„ Melbourne .. .. .	200
Stomach, diseases of, death rate from .. .. .	355
Stone quarries, output, &c. .. .. .	616
Street betting, penalty for .. .. .	410
Subsidies to agriculture .. .. .	522, 523
Sugar Bounty Acts, Commonwealth .. .. .	93, 98
„ imports and exports .. .. .	649
„ refineries, output, &c. .. .. .	649
Suicide, death rate from .. .. .	369
Summonses, criminal .. .. .	415
„ for various offences .. .. .	427
Superannuation allowances paid .. .. .	128
Superior courts, sentences by .. .. .	428
Supreme Court, civil business .. .. .	402
„ criminal jurisdiction .. .. .	413
„ Judges .. .. .	74
„ Library .. .. .	257
Surplus Revenue Act 1906 .. .. .	61
Sydney, population .. .. .	460
Syncope, death rate from .. .. .	355, 364
Syphilis, death rate from .. .. .	355
Tanneries, &c., output, &c. .. .. .	642
Tariff Commission, appointment of .. .. .	37
„ Federal .. .. .	36, 102
Taxation, Commonwealth, State, and Local .. .. .	155
„ in Australia and United Kingdom .. .. .	156
„ income tax .. .. .	116

	Page
Taxation, land tax .. .. .	125
Teachers in State schools .. .. .	217
" remuneration and classification .. .. .	217
Technical education .. .. .	230
" " article by the late Inspector Dennant .. .. .	244
" schools .. .. .	231
" " expenditure on .. .. .	232
Telegraphs and telegrams .. .. .	390
Telephones .. .. .	391
Temperature .. .. .	10, 501, 502
Tiles and pipes made, value of .. .. .	644
Timber sawn, in forest sawmills .. .. .	644
Tin ore, total production .. .. .	605
Tobacco, area and production .. .. .	548, 551
" colonial, used in factories .. .. .	651
" experimental station .. .. .	505
" factories, output, &c. .. .. .	651
Town, definition of .. .. .	81
Towns, Australasian, population .. .. .	460
Township, definition of .. .. .	81
Trade Marks Act 1905, Commonwealth .. .. .	98
" total values .. .. .	376
" with Australian States .. .. .	380
" " principal countries .. .. .	377
Trading companies registered .. .. .	207
Training College for Teachers .. .. .	220
Tram cars licensed in Melbourne .. .. .	398
Tramway Trust, Melbourne .. .. .	395
Tramways, Melbourne, mileage traffic and receipts .. .. .	397
" suburban and country .. .. .	397
Treaty between Great Britain and Japan .. .. .	37
Trinity College .. .. .	212
Trust funds .. .. .	132
Tubercular diseases, deaths of recent arrivals in Victoria from .. .. .	360
" " (excluding phthisis), death rate from .. .. .	362
Typhoid fever, death rate from .. .. .	355, 357
Ulceration of intestine and appendicitis, death rate from .. .. .	355, 366
Unclaimed Moneys Act 1906 .. .. .	63
United Kingdom, annual imports of agricultural and pastoral produce .. .. .	580
" " taxation in .. .. .	156
University, affiliated colleges .. .. .	212
" degrees conferred .. .. .	211
" endowment .. .. .	209
" extension .. .. .	213
" fees .. .. .	209
" matriculation and attendance at lectures .. .. .	210
" of Melbourne .. .. .	209
" professors, lecturers, &c. .. .. .	77
Uræmia, death rate from .. .. .	355
Urinary diseases, death rate from .. .. .	367
Value of Victorian production, detailed .. .. .	656
Valvular disease of heart, endocarditis, &c., death rate from .. .. .	355, 364
Vehicles licensed in Melbourne .. .. .	397
Victoria and Great Britain, agriculture and live stock .. .. .	581
" discovery and settlement of .. .. .	2, 3
" position, area, and climate .. .. .	9
" statistical summary of .. .. .	8
Victorian agricultural and pastoral produce imported by Great Britain .. .. .	580

	Page
Victorian coal, consumption of .. .. .	395
" Deaf and Dumb Institution .. .. .	291
" Discharged Prisoners' Aid Society .. .. .	295
" Loans Redemption Fund .. .. .	147
" Mining Accident Relief Fund .. .. .	309
" produce, distribution of .. .. .	383
" " exports of .. .. .	381
Vignerons, number of .. .. .	552
Village communities .. .. .	475
" settlements .. .. .	475
Vines and wine making .. .. .	552
" area and production .. .. .	548, 552
Vital Statistics .. .. .	313
Viticulture, Rutherglen .. .. .	506
Voters at elections .. .. .	57, 87
Voters' certificates .. .. .	43
Voting by post .. .. .	43, 58, 65
" plural, abolished .. .. .	42
Wages, agricultural and pastoral .. .. .	531
" boards, Factories Acts .. .. .	272
" in Melbourne, industrial rates of .. .. .	631
" " unclassified trades, rates of .. .. .	641
" paid in factories .. .. .	630
" percentage of, to article produced .. .. .	631
Warrnambool Hospital and Benevolent Asylum .. .. .	287
" Mechanics' Institute and Free Library .. .. .	259
" population .. .. .	457
" School of Art .. .. .	240
Water Act 1905 .. .. .	484
" boring for .. .. .	617
" consumption of, in Melbourne .. .. .	174
" supply and irrigation .. .. .	482
" " valuation and rating .. .. .	489
" trusts abolished .. .. .	495
" works controlled by trusts and corporations .. .. .	491
" " for domestic supply .. .. .	482
" " municipal, capital indebtedness and interest outstanding .. .. .	495
" " receipts and expenditure, Geelong and Coliban .. .. .	488
" " " State Rivers and Water Supply Commission .. .. .	487
" " summary of State advances and expenditure .. .. .	484
" " storage capacity and capital expenditure .. .. .	482
" " trusts, capital indebtedness and interest outstanding .. .. .	491
" " receipts and expenditure .. .. .	493
" " vested in State Rivers and Water Supply Commission .. .. .	486
Watson Fund, the Bendigo Miners' Association .. .. .	310
Wealth, diffusion of .. .. .	54
" " in Australian States and New Zealand .. .. .	184
" private, Australian States and New Zealand .. .. .	181
" " various countries .. .. .	183
Wellington, population .. .. .	460
Western Australia, migration .. .. .	442
Westernport settlement .. .. .	4
Wharfs, Plant, &c., of Melbourne Harbor Trust .. .. .	389
Wheat and flour exported, &c. .. .. .	539
" " produced, disposal of .. .. .	540
" " area and production .. .. .	534, 543
" average yields in wheat-growing countries .. .. .	534, 535, 536
" consumption .. .. .	540
" estimate of yield .. .. .	533

# *Index.*

XXXV

	Page
Wheat, falling off in cultivation, certain counties .. ..	536
" first cultivation of .. ..	533, 535
" flour, and biscuits, net exports .. ..	539
" ground in flour mills .. ..	648
" growing counties, area and production .. ..	534, 535
" experiments .. ..	518, 537
" manured and unmanured .. ..	561
" prices of .. ..	546
" production of the world .. ..	541
" returns, 1896-7 to 1906-7 .. ..	537
" stocks .. ..	540
" weights, standard and actual .. ..	537
" yield, Australasian .. ..	547
" in countries .. ..	534
" yields from experimental fields .. ..	537
Whooping cough, death rate from .. ..	355, 357
Widows and Young Children Maintenance Act 1906 .. ..	66
Wild fowl received at Melbourne market .. ..	578
Wine consumption in Australia .. ..	422
" quantity made .. ..	552
Wireless Telegraphy Act 1905, Commonwealth .. ..	96
Women's Hospital (see also Charitable Institutions) .. ..	288
" suffrage, Commonwealth elections .. ..	87, 89
Wood-working factories .. ..	645
Wool, exports and production .. ..	7, 8
" imports and exports .. ..	568
" liens registered .. ..	205
" prices of .. ..	569
" produced in Australasia .. ..	569
" production .. ..	568
" used in manufactories .. ..	568, 651
" washing .. ..	642
Woollen mills, output, &c. .. ..	651
Working Men's College .. ..	241
" Horsham .. ..	243
Workmen's homes .. ..	482
World, population and area .. ..	463
" principal cities .. ..	463
Yarra River, discovery of .. ..	5
Zoological Gardens .. ..	263
Zoology .. ..	16



# REFERENCE

Railways

State Schools Free

Towns having Public Water Works

Reservoirs and Weirs

Districts having Public Irrigation Supplies

Domestic and Stock Supplies

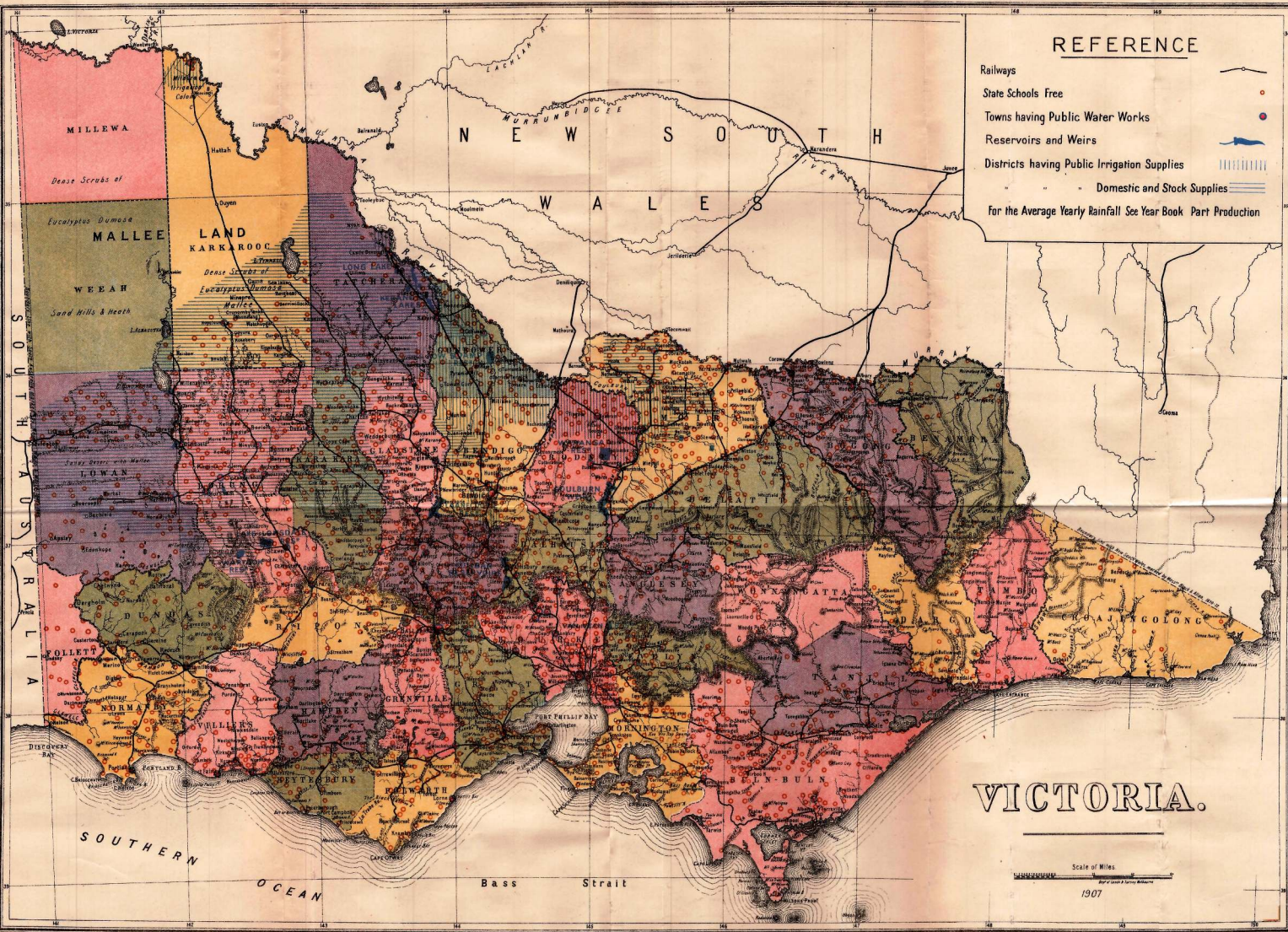
For the Average Yearly Rainfall See Year Book Part Production



## VICTORIA.

Scale of Miles

1907





# VICTORIAN YEAR-BOOK, 1906-7.

## INTRODUCTORY REMARKS.

Records of early discoveries show a lamentable ignorance of the geography of the Southern and Indian Oceans, since the venturesome sailors who first attempted to explore these seas were not skilled in cartography, and their maps, or the maps plotted from their verbal narratives, were of necessity crude and inaccurate. A map published with the account of Frobisher's voyages in 1578 encircles the whole Southern Pole with a vast stretch of land, separated from South America by the Strait of Magellan, and stretching further north in those regions which we now know as Australia, indicating a belief and an assurance in the existence of our continent. It is an interesting fact that in Burton's *Anatomy of Melancholy*, published in 1621, references are made to this land as *Terra Australis Incognita*.

History of  
early  
discoverers  
and  
settlers.

Frobisher reports that the Portuguese and Spaniards in their voyages to the East Indies saw and touched on the north edge of the southern continent. In 1526 the trading vessels of the former nation reached New Guinea, though their masters were unaware of the existence of the Strait which separates it from Australia. After the discovery of the sea route to India by Vasco da Gama in 1497, the Portuguese began to trade with the East Indies, and were followed by the Spaniards and Dutch, the latter largely replacing the Portuguese traders in the East.

Frobisher.

In 1606 the Dutch Governor of the Moluccas, De Houtman, despatched an exploring party, who surveyed the east coast of the Gulf of Carpentaria, but the report of Captain Jansen, the leader of the expedition, was unfavorable, and it was many years before the Dutch again visited this territory, which at the time they believed formed part of New Guinea.

De Houtman  
and Jansen.

De Quiros. De Quiros, a Portuguese in the service of Spain, made strenuous efforts to reach the Great South Land, as he was convinced that the rumours concerning its existence were true. In December, 1605, he set sail to discover it, with Torres as captain of the second vessel of his small fleet, but his efforts proved unsuccessful. De Quiros may be regarded as the last of the Southern European explorers, whose work was now taken up by the Dutch.

Dutch ex-  
ploration.

In 1595 the Dutch East India Company was formed, with headquarters at Batavia, whence ten years later Jansen was sent on a voyage of discovery, when he surveyed the south coast of New Guinea, and the east coast of Cape York Peninsula, without, however, discovering the passage between the two.

Carstens  
and Poole.

In 1623 Carstens coasted part of the northern shores, and again, in 1636, Poole followed the coast line of the whole of the Gulf of Carpentaria.

Van Diemen  
and  
Tasman.

In 1642 Anthony Van Diemen, Governor of the Dutch East India Colonies, selected Abel Jansen Tasman to make explorations in the South Seas. On 24th November, 1642, the west coast of Tasmania was discovered. Rounding this and the south coast, Tasman entered Storm Bay and Frederick Henry Bay, where he hoisted the Dutch flag. Naming the locality Van Diemen's Land, he sailed eastwards, and discovered New Zealand, returning afterwards to Batavia. In the following year Tasman surveyed portions of the north and west coasts of Australia, from the Gulf of Carpentaria to Sharks Bay.

Dampier.

In January, 1688, New Holland (so named by the Dutch) was visited near Roebuck Bay by Dampier, the first Englishman who sighted our shores. The description of his voyages includes his opinions respecting Australia and the people he found there, as well as of its flora and fauna. He was selected in 1699 to make further exploration of the place, to ascertain whether the land was a continent or a group of islands. He visited Sharks Bay, coasting northwards 9,000 miles, and then returned to England. His unfavorable report concerning the country suspended British exploration for many years.

Cook

That our continent ever became a portion of the British Empire is due to the enterprise, skill, and courage of Captain James Cook. In 1768 the British Government sent a scientific expedition, under his command, to Tahiti, with permission to undertake exploration in the South Seas. Cook first visited New Zealand, and, sailing westward, land was sighted on 19th April, 1770, by Lieutenant Hicks, at a point which has since borne his name, on the Victorian coast. Cook sailed northwards, and, after seven or eight days on the water,

landed at Botany Bay, and further north at other places on the east coast, passed through Torres Strait, and, having thus demonstrated the fact that Australia was an island (although believed to be joined to Van Diemen's Land), returned home.

Cook's description of Botany Bay was so favorable that in 1787 <sup>Phillip.</sup> the British Government despatched Captain Arthur Phillip, in charge of a squadron of eleven vessels, to found a penal colony in Australia. Finding Botany Bay, which he entered on the 20th January following, unsuitable for settlement, he sailed northward to Port Jackson, where he formally took possession of the country on 26th January, 1788, in the name of His Majesty King George III.

The first landing effected in Victoria was in 1797, from a vessel <sup>Clarke.</sup> wrecked on Furneux Island, in Bass Strait. Mr. Clarke, the supercargo, and two sailors, out of a total of seventeen, reached Sydney overland, and these were probably the first white men who landed on Victorian shores.

Notable discoveries by sea were afterwards made by Flinders, <sup>Flinders, Bass, Grant, Murray.</sup> Bass, Grant, Murray, and others, the former of whom sailed through the strait separating Australia from Van Diemen's Land, and circumnavigated the latter island, thus demonstrating it to be an island. In 1802 Port Phillip Bay was discovered by Lieutenant Murray, sent from Sydney in the *Lady Nelson*, to survey the south coast.

In 1803 an attempt was made to colonize Victoria, then known as <sup>Collins.</sup> the territory of Port Phillip, by means of a convict colony, which, luckily, proved abortive. A penal expedition, under Captain Collins, arrived in Port Phillip Bay on 7th October. It consisted of nearly 400 persons, of whom over 300 were convicts. A sandy site, chosen at Sorrento, proved to be unsuitable for the colony, chiefly because of the scarcity of fresh water, and Collins sent out an exploring party in search of a better place. The hostility of the blacks, preventing any satisfactory land exploration, and stormy weather in the bay, precluding efficient observation, combined to produce a gloomy report; and Collins applied to his chief at Sydney for permission to remove to Van Diemen's Land. Governor King readily assented, and after three months of wretchedness in Port Phillip, the colony crossed Bass Strait, and founded the settlement at the Derwent. Among the few children who had accompanied their parents in this expedition was John Pascoe Fawkner, who, 32 years later, led a party to the Yarra, and assisted in the foundation of Melbourne.

Hume and  
Hovell.

In 1824, a young Australian-born explorer, Hamilton Hume, of Lake George, in company with Hovell, a sea captain, six convicts as servants, set out overland to found a settlement on the southern coast. After accidents by flood and field, swimming rivers, climbing mountains, and hewing their way with difficulty through rough forest country, they reached the river which now separates Victoria from New South Wales, and which they called the Hume. After much toil and many disappointments, they reached Corio Bay, near the site of the present town of Geelong. The expedition, having accomplished the object of their task, returned to Sydney. Two

Westernport  
Settlement.

years later an expedition, under Captain Wright, settled at Westernport, Hovell, under the impression that it was an inlet of Westernport he and Hume had reached, accompanying it as guide. The place, after a year's struggle for existence, was abandoned, and the settlement withdrawn, lack of energy and general discontent being the apparent causes of failure.

Sturt and  
Macleay, on  
the Murray.

In 1829, Sturt and Macleay, with eight convicts, rowed down the Murrumbidgee, and reached the river which Hume and Hovell had crossed some years previously, and which Sturt, in ignorance of the fact that it was the same as that to which the name Hume was given, called the Murray. The party then continued their journey past the mouth of the Darling, the upper waters of which Sturt had himself previously discovered, until they reached the broad waters of Lake Alexandrina. Unable to cross the bar which blocked the passage to the open, they turned back, and, after a laborious and perilous journey, reached headquarters, having explored a thousand miles of new country, and navigated the greatest of Australian rivers.

Mitchell.

In 1836, Major Mitchell, Surveyor-General of New South Wales, with 25 convicts, followed the Lachlan and Lower Murrumbidgee, and having crossed the Murray, beheld, from the summit of Mount Hope, a wide extent of good pasture land. Holding his course southward, with a declination slightly to the west, he crossed the verdant plains past the mountain-range, which he called the Grampians, and reached the southern coast of Discovery Bay. At Portland the party met the Henty family, who had, two years previously, established a sheep and cattle station there for the convenience of whalers, who made Portland Bay a place of resort. The expedition followed a north-east course home. The name applied by Mitchell to that part of our State which he traversed was *Australia Felix*.

Portland  
Settlement.

Whilst these overland expeditions were being conducted toilsomely and with difficulty and danger, anxious eyes looked from Tasmania across the narrow straits. Whale and seal hunting prevailed in the waters of the Victorian coast, or on the rocky islets that studded them. As early as 1828 sealers had erected temporary dwellings upon suitable spots on the southern coast of Victoria. The principal traders were William Dutton, John Griffiths, and John and Charles Mills. The first-named of these, William Dutton, established a whaling station at Portland in 1832, and was followed a year later

Dutton.

by Edward Henty, who crossed in the *Thistle*, and with the servants, horses, cattle, and sheep, which he brought with him, became the first of that class of people who are now, to such a large extent, the backbone of our State, the agriculturists. Henty.

But it was the Bay of Port Phillip, after all, that was destined to become the principal channel of the new district's commerce. Thither John Batman came in 1835, entering the Heads on 29th May in the *Rebecca*. After landing near Geelong, and with characteristic acumen, ingratiating himself with the natives, he proceeded up the bay, and anchored off what is now Williamstown. He proceeded, with fourteen well-armed men, along the banks of the Lower Yarra and Saltwater as far as the site of Sunbury, and the natives, friendly because of Batman's favour in the eyes of the Geelong natives, were ready to treat with him. The famous barter, afterwards declared informal, by which the natives conveyed to him about 600,000 acres of rich grassy land for a quantity of knives, scissors, looking-glasses, blankets, and similar articles of native ambition, was drawn up by Batman near the site of Melbourne. Proceeding southwards, he came upon the main stream of the Yarra, and again boarded his vessel. Next day he ascended the river in a boat, and on reaching the Yarra Falls, entered in his diary the famous legend, "This will be the place for a village." Leaving a small party at Indented Head, Batman and his associates returned to Tasmania to prepare for the transportation of their households and worldly possessions, which speedily followed. Port Phillip Settlement.  
Batman.  
Geelong.  
The Yarra.  
Melbourne.

But Batman was not to have things all his own way. John Pascoe Fawcner, who was one of the children whose brightness had illumed for a time the gloomy Sorrento settlement of 1803, formed a small party, and sailed in the *Enterprise* from Launceston a few weeks after Batman's departure. After visiting Westernport, whose aspect was particularly discouraging to the settlers, the *Enterprise* entered Port Phillip on 15th August, 1835. Batman's party at Indented Head, speedily and in due form intimated that their master was the owner of all the western side of the bay and the noble river at its head. Fawcner appears to have been prepared for such a claim, presumptuous as he declared it to be, for the *Enterprise* proceeded up the South Channel, and moved slowly northwards along the coast, in order that an exploring party might land from time to time to view the country. In this way Dromana, Frankston, Mordialloc, Brighton, and St. Kilda were tried and found wanting, and eventually the vessel anchored in Hobson's Bay, near the river mouth. The Yarra was entered in a boat, and the site of the present Custom-house selected for the settlement. Next day, the *Enterprise* was towed up, and the landing of the colonists, with their horses, provisions, ploughs, grain, fruit trees, building material, and other necessities of a new settlement, accomplished the foundation of Melbourne. The settlement at Indented Head was removed to "the place for a village," and encamped quietly on the site of St. James's Cathedral, close beside the Fawcner settlement. Fawcner.

**The Capital.**

Thus arose the present capital of the State, which, under the name of Greater Melbourne, now comprises the cities of Melbourne, South Melbourne, St. Kilda, Footscray, Fitzroy, Collingwood, Hawthorn, Richmond, and Prahran; the towns of Malvern, Brighton, Port Melbourne, Williamstown, Essendon, Brunswick, Northcote, Caulfield, Camberwell; the boroughs of Kew, Oakleigh, and Coburg; the shire of Preston; and parts of the shires of Moorabbin, Mulgrave, Nunawading, Doncaster, Templestowe, Heidelberg, Whittlesea, Epping, Broadmeadows, Keilor, Braybrook, Wyndham and Eltham. The total area of Greater Melbourne is 163,480 acres of which 5,405 acres are reserved as parks and gardens. At the census of 1901 there were 97,653 dwellings, containing 538,569 rooms, and housing 494,167 persons, which had increased to 114,000 dwellings, with a population of 526,400 at the end of 1906.

**Port Phillip district.**

Rapid progress was made by the new settlement. In little more than a year Sir Richard Bourke, the Governor of New South Wales, sent Captain Lonsdale from Sydney as Magistrate. He himself visited the place in 1837, and planned out the towns of Melbourne, Williamstown, and Geelong, to the last of which places Captain Fyans was appointed police magistrate in September of the year named. Up to 1851, the district formed a part of New South Wales, under the name of Port Phillip. On the 1st July of that year it became a separate Colony, and was called Victoria, after Her late Most Gracious Majesty.

**GOLD PRODUCTION.****Gold.**

An important element in the development and prosperity of the new Colony was the discovery of gold, which took place in 1851. The precious metal was first discovered at Clunes, then at Anderson's Creek, and soon after at Buninyong and Ballarat, afterwards at Mount Alexander, and eventually at Bendigo. Large and important fields were subsequently opened up in the districts around Ararat, Stawell, Beechworth, and Maryborough, and in Gippsland. The discovery brought about a large immigration from many parts of the world. All persons were allowed to dig for gold on payment of a licence-fee of £1 10s. per month, afterwards reduced to that amount per quarter. In the early days the diggers found no difficulty in paying this fee, as they were not very numerous, and were generally successful. As time went on, however, the gold-fields population increased largely, many men were unsuccessful, and the payment of the fee became burdensome. The mode of collecting it was objectionable. The outcome of the whole matter was dissatisfaction and discontent, which culminated in a riot at Ballarat towards the close of 1854, when the diggers erected a stockade at Eureka, and set the authorities at defiance. Troops were despatched to Ballarat, and the disturbance was speedily quelled. A Royal Commission was subsequently appointed, who made recommendations for the removal of the licence-fee, and for other concessions, the carrying out of which ultimately restored peace and harmony.

Since its discovery, the quantity of gold recorded for Victoria up to the end of 1906 is 69,202,178 ounces, valued at £276,516,978, this being about one-half the quantity recorded for the whole of Australia.

## WOOL PRODUCTION.

Important as was the discovery of gold in aiding the early development of the Colony, wool production has been hardly less notable. It is to the Tasmanian flocks of sheep that the best Victorian stock owes its origin. The original Henty flock was formed at Sussex, England, towards the close of the eighteenth century, and brought by members of the family to Tasmania, whence it was transferred to Portland, at the time Edward Henty settled there. Good Merinoes were also overlanded from the Camden flock, established in New South Wales by Captain Macarthur in 1797, with Merinoes imported from England. This strain has been preserved pure in Victoria. The first official return of sheep in this State was in 1836, when the number was 41,332. At the end of 1842 the number recorded for the Port Phillip district was 1,404,333. The herds increased year by year, until at the census of 1891 the number was 12,692,843, which, owing to dry and unfavorable seasons between that year and 1901, decreased to 10,841,790. The number had increased in 1906 to 11,455,115.

Wool was first exported in 1837, the quantity being 175,081 lbs., valued at £11,639; in the following year 320,383 lbs., valued at £21,631, were exported; in 1839, 615,603 lbs., valued at £45,226; in 1840, 941,815 lbs., valued at £67,902; and in 1841, 1,714,711 lbs., valued at £85,735.

Soon after this time the figures of the export trade of wool from Victoria include small returns from New South Wales; but it was not until 1864 that wool to any considerable extent was exported from that Colony through Victoria. In 1862 and in 1863 the export from Victoria was about 25,000,000 lbs.; in 1864 it was nearly 40,000,000 lbs.; the increase being mainly derived from the Riverina district, which was placed in communication with Melbourne by means of the Echuca railway. In 1905-6, the wool production was 75,738,303 lbs. Prior to 1890 no returns were prepared to show the average weight of fleeces. Since that year, however, records have been kept, and the average (sheep and lambs) for the whole period may be put down at 5 lbs. 8½ ozs. This may be taken as an indication of the suitability of Victoria in soil, climate, and natural pasturage for sheep-breeding.

## GENERAL PROGRESS.

The following table has been prepared to illustrate the advance made by the Colony since 1842, the year of the introduction of representative government into New South Wales, which then included the Port Phillip district. The years 1850 and 1855 have been chosen—the former as being the year immediately preceding the separation of the Colony from New South Wales, and the latter the date of

the introduction of responsible government for Victoria. The subsequent years are census years, except the last:—

	1842.	1850.	1855.	1861.	1871.	1881.	1891.	1901.	1905-6.
Population, 31st December ..	23,799	76,162	364,324	541,800	747,412	879,886	1,157,678	1,210,882	1,237,998
Revenue .. £	87,296	259,433	2,728,656	2,592,101	3,734,422	5,186,011	8,343,588	7,712,099	7,811,475
Expenditure from Revenue .. £	124,631	196,440	2,612,807	3,092,021	3,659,534	5,108,642	9,128,699	7,672,780	7,261,475
Public Funded Debt .. £	..	..	480,000	6,345,060	11,994,800	22,426,502	43,638,897	49,546,275	52,904,800
Gold produced .. oz.	..	..	2,793,065	1,967,453	1,355,477	858,850	576,400	789,562	834,775
Wool produced .. lbs.	2,752,330	16,345,468	22,470,443	22,040,745	37,177,646	45,970,560	76,503,635	73,235,138	75,738,303
Butter produced .. "	..	..	..	..	..	..	16,703,786	46,867,572	57,606,821
Agriculture—									
Land in cultivation .. acres	8,124	52,341	115,060	427,241	793,918	1,582,998	2,512,593	3,647,459	4,269,877
Wheat .. bushels	55,360	556,167	1,148,011	3,607,727	4,500,795	8,714,377	13,679,268	12,127,382	23,417,670
Oats .. "	66,100	99,535	614,614	2,136,430	3,299,889	3,612,111	4,455,551	6,724,900	7,232,425
Wine .. gallons	..	4,621	9,372	47,568	713,589	539,191	1,554,130	1,981,475	1,726,444
Live Stock—Horses .. No.	4,065	21,219	33,430	84,057	181,643	278,195	440,696	392,237	385,513
" Cattle .. "	100,792	378,806	534,113	628,092	799,509	1,286,677	1,812,104	1,602,384	1,737,690
" Sheep .. "	1,404,333	6,032,783	4,577,872	6,239,258	10,002,381	10,267,265	12,928,148	10,841,790	11,455,115
" Pigs .. "	..	9,260	20,686	43,480	177,447	239,926	286,780	350,370	273,682
Imports—Value .. £	277,427	744,925	12,007,939	13,532,452	12,341,995	16,718,521	21,711,608	18,927,340	25,234,301
Exports—Value .. £	198,783	1,041,796	13,493,338	13,828,606	14,557,820	16,252,103	16,006,743	18,646,097	28,915,184
Shipping .. tonnage	78,025	195,117	1,133,283	1,090,002	1,355,025	2,411,902	4,715,109	6,715,491	8,136,991
Railways open .. miles	..	..	..	214	276	1,247	2,764	3,288	3,398
Telegraph wire .. "	..	..	..	2,586	3,472	6,626	13,989	15,356	16,082
Postal business—Letters .. No.	97,490	381,651	2,990,992	6,109,929	11,716,166	26,308,347	62,526,448	83,973,499	119,689,073
" Newspapers .. "	147,160	381,158	2,349,656	4,277,179	5,172,970	11,440,732	22,729,005	27,125,251	41,919,311
Savings Bank Deposits .. £	..	52,697	173,090	582,796	1,117,761	2,569,438	5,715,687	9,662,006	11,764,179

NOTE.—In a few instances in the earlier years, where it is not possible to give figures for the exact date or period shown, those for the nearest dates or periods are given. Gold was discovered in 1851, in which year the return was 145,137 oz. Butter figures were not collected prior to 1891.



The population of the State at the end of 1842 was 23,799; and at the end of 1906 it had increased to 1,237,998. Prior to 1851, the net immigration was 64,545; during the decennial period, ended 1861, it was 400,045; in that ended 1871 it was 41,789; in that ended 1881 there was a loss of 15,322 by emigration; between 1881 and 1891 there was an increase of 116,950; but during the period 1891-1901 there was a loss of 111,577, making a total gain by immigration up to the census of 1901 of 496,430.

During the period 1842-1906, the revenue steadily increased from £87,296 to over £7,800,000. There was no public debt until after separation. In 1855, the State indebtedness was £480,000, which steadily increased until, in 1906, the funded debt had reached £52,904,800. The land in cultivation in 1842 was slightly over 8,000 acres; it now amounts to over 4,250,000; in the number of horses, cattle, and pigs increases are generally shown. The value of imports in 1842 was £277,427; in 1906 it was over £25,000,000. Exports amounted to £198,783 in 1842; and in 1906 to nearly £29,000,000. No railways or telegraphs were in existence up to the end of 1855; in 1861 there were 214 miles of railway open, and 3,398 miles in 1906; 2,586 miles of telegraph wires had been erected up to 1861, 16,082 miles up to the end of 1905. Postal business in letters and newspapers shows a large increase, and the deposits in savings banks rose from £52,697 in 1850 to £11,764,179 in 1906.

### GEOGRAPHICAL POSITION, AREA, AND CLIMATE.

Victoria is situated at the south-east extremity of the Australian continent, of which it occupies about a thirty-fourth part, and contains about 87,884 square miles, or 56,245,760 acres. Area of  
Victoria. It is bounded on the north and north-east by New South Wales, from which it is separated by the River Murray, and by a right line running in a south-easterly direction from a place near the head-waters of that stream, called The Springs, on Forest Hill, to Cape Howe. On the west it is bounded by South Australia, the dividing line being about 242 geographical miles in length, approximating to the position of the 141st meridian of east longitude, and extending from the River Murray to the sea. On the south and south-east its shores are washed by the Southern Ocean, Bass Strait, and the Pacific Ocean. It lies between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. Its extreme length from east to west is about 420, its greatest breadth about 250, and its extent of coast-line nearly 600 geographical miles. Great Britain, exclusive of the islands in the British Seas, contains 88,309 square miles, and is therefore slightly larger than Victoria.

The southernmost point in Victoria, and in the whole of Australia, is Wilson's Promontory, which lies in latitude 39 deg. 8 min. S., longitude 145 deg. 26 min. E.; the northernmost point is the place where the western boundary of the State meets the Murray,

latitude 34 deg. 2 min. S., longitude 140 deg. 58 min. E.; the point furthest east is Cape Howe, situated in latitude 37 deg. 31 min. S., longitude 149 deg. 59 min. E.; the most westerly point is the line of the whole western frontier, which, according to the latest correction, lies upon the meridian 140 deg. 58 min. E., and extends from latitude 34 deg. 2 min. S. to latitude 38 deg. 4 min. S., or 242 geographical miles.

Climate.

From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other State upon the Continent of Australia. In the forty-nine years ended with 1906, the maximum temperature in the shade recorded at the Melbourne Observatory was 111.2 deg. Fahr., viz., on the 14th January, 1862; the minimum was 27 deg., viz., on the 21st July, 1869; and the mean was 57.3 deg. Upon the average, on four days during the year, the thermometer rises above 100 deg. in the shade; and, generally, on about three nights during the year, it falls below freezing point. The maximum temperature in the sun ever recorded (*i.e.*, since 1857) was 178.5 deg., viz., on the 4th January, 1862. The mean atmospheric pressure, noted at an Observatory 91 feet above the sea-level was, in the 49 years ended with 1906, 29.93 inches; the average number of days on which rain fell was 132, and the average yearly rainfall was 25.59 inches.

## PHYSICAL GEOGRAPHY, GEOLOGY, AND FAUNA OF VICTORIA.

*By T. S. Hall, Esq., M.A. (University of Melbourne).*

### PHYSICAL GEOGRAPHY.

In shape, Victoria is roughly triangular, its breadth from north to south along its western border being about one-half its length from east to west. The highlands also form a triangle, but in this case the greatest north and south measurement is in the east, while the base stretches nearly to the western boundary. This area of high land attains its greatest elevation in the east, and gradually sinks towards the west. The elevated region consists of palæozoic, and perhaps older rocks, of various ages, with, in a few cases, as at Dargo High Plains, and at Bogong High Plains, patches of older-tertiary basalts.

There are thus constituted two main drainage areas. A series of rivers flows northwards from the highlands, forming the Murray and its southern tributaries, while another series flows southwards to the sea. At the western end the Glenelg taps streams which arise both on the northern and the southern slopes. The water-parting between the north and the south flowing streams is spoken of as the Main Dividing Range, and along its course are some of the highest mountains of the State, as Mount Cobboras, 6,030 feet, Mount Hotham 6,100 feet, and several others nearly as high. The average elevation of the Divide is about 3,000 feet. The highest mountains in Victoria lie to the north of the water-parting, namely, Mount Bogong, 6,508 feet, and Mount Feathertop, 6,306

feet. On the higher mountains snow occasionally lies in sheltered localities throughout the year, but we have no permanently snow-clad mountains in Australia. The Divide, which is of considerable geological age, forms a well-marked boundary between two distinct zoological areas. The animals to the north are allied to those of Central Australia, while those to the south are almost identical with the Tasmanian.

The strike of the palæozoic rocks is, roughly, north and south, so that the direction of the Dividing Range is not due to the primary rock-folding. The Divide, owing to stream capture and general denudation, has doubtless shifted its position from time to time, but the existence of the highlands is probably, in part, due to an east and west series of folds, of which the "pitch" in the anticlines of our older rocks affords evidence.

Highlands also occur to the north of Cape Otway, rising to a height of over 2,000 feet, and also in South Gippsland. These districts are densely clothed with forests, and rich in fern gullies, the rocks consisting of fresh-water jurassic strata. Geographically isolated from the rest of the State is the rugged granitic area of Wilson's Promontory, which rises in places to about 2,500 feet.

The north-west of Victoria is occupied by a large plain which borders the highlands on the north, and sweeps west, and especially north far beyond the boundaries of the State. It represents in the main the flood-plain of the Murray and its tributaries. This area is for the most part covered by a dense growth of several dwarf species of *Eucalyptus*, known collectively as Mallee.

The south-west is occupied by another plain, consisting chiefly of recent basalts and tuffs. It is typically treeless, owing to the small depth of soil, and to poor subsoil drainage, but it is richly grassed, and contains some of the best and most easily worked agricultural land in the State.

As already indicated, the main river system consists of the Murray and its tributaries, the Murray itself being our only stream that is navigable for any distance, and forming an important highway. Owing to the building up of its flood plain by the river its western tributaries can no longer reach it, but spread out in times of flood into broad, shallow lakes which disappear in dry seasons.

As regards the streams to the south of the Dividing Range, the south-westerly drift bars the mouths of all which debouch into the open sea, and long continued action has built up a ridge off the Gippsland coast behind which the rivers spread out to form large shallow lakes. The volcanic plains of the west are dotted with lakes and swamps owing to the imperfect drainage of the almost level expanse, the low barriers formed by the irregular flows of lava, and the distribution of the sheets of volcanic ash. Some of these lakes have been ascribed to sinking of the surface as a subsequent result of the volcanic outburst, while others, many of which are very deep, occupy the sites of volcanic vents. Many of the western lakes have no outlet, and are salt, while those with a permanent or occasional overflow are fresh.

Rivers and  
lakes.

## Coastline.

From the Glenelg on the west as far eastward as the Gellibrand river, the western plains abut on the sea. Sometimes it is the volcanic rocks which reach the coast, but in most places the underlying marine tertiaries border the shore, with or without an intervening belt of sand dunes. Where the plain, as at its eastern end, reaches the height of 200 or 300 feet it is deeply eroded, and, as is the case in the area occupied by the Heytesbury forest, its essential character is not at first apparent, and the coast itself is bordered by vertical cliffs. East of the Gellibrand, and sweeping past Cape Otway to near Split Point, the highlands of the Otway Ranges with their forests, streams, and waterfalls afford a coast of great beauty. From Split Point, as far as Wilson's Promontory, the land shows no great elevation, rarely rising more than 200 feet. Sand dunes and cliffs of marine tertiaries, or of basalt, border it nearly all the way. At Cape Woolamai we have an isolated mass of granite, and about Cape Patterson the jurassic coal series forms the shore line. Near Cape Liptrap is a small, rugged outcrop of palæozoic rocks. Beyond Wilson's Promontory, with its beautiful scenery of small bays backed by lofty tree-clad ranges, and with its clusters of precipitous islets, comes the long, dune-fringed Ninety-mile-beach. Behind these dunes at their eastern end lie the Gippsland Lakes. Beyond Lakes' Entrance high ranges of palæozoic rocks and granite front the sea, and extend to Cape Howe, the most easterly point in the State.

The only good natural harbor is the land-locked basin of Port Phillip. Portland Bay, on the west, is formed under the lee of a projecting tongue of volcanic rocks. Lady Bay, Warrnambool Bay, Port Campbell, and it is said Apollo Bay and Loutit Bay, owe their main outlines to the fact that they are drowned valleys. Port Phillip has itself a similar origin, its eastern side being defined by a north and south fault. Western Port, Corner Inlet, and Malla-coota Inlet are also due to subsidence. The estuaries of the Curdie, Gellibrand, Aire, Barwon, and other smaller streams were formerly inlets of a similar nature, but are now more or less filled with river-borne material.

As regards islands, we are poorly off. Lady Julia Percy Island, near Portland, is volcanic. East of this, where hard bands occur at sea-level, in the marine tertiaries, the coast is fringed by stacks and precipitous islets carved out by the waves. These are absent along the Otway coast, where the jurassic rocks reach the shore. Phillip and French Islands, like those off Wilson's Promontory, are due to subsidence, the old hill tops standing above the sea, which now fills the intervening valleys.

## GEOLOGY.

The triangular shape of the area occupied by the palæozoic rocks has already been pointed out. The stratified rocks of this age have a general north and south strike, and the older ones are acutely folded. The mesozoic and tertiary strata show no great crumpling, though considerable faulting has occurred in places. Their strike is in the main parallel to the coast, or east and west.

For details as to the distribution of the rocks reference may be made to the beautiful geological map of the State published a few years ago by the Department of Mines.

Scattered irregularly over the State are numerous outcrops of quartz-mica-diorites and granitoid rocks of various types. They are post-silurian, and intrude the older rocks. They range from Cape Howe to beyond the Glenelg, and from Wilson's Promontory in the south to near Swan Hill in the north. Older  
Plutonic  
rocks.

At Mounts Macedon and Dandenong occurs a series of dacites and various other associated rocks of uncertain age. Long regarded as palæozoic, they have of late years, on very slender evidence, been spoken of as cretaceous. The results of more recent work on them have not yet been published.

Another series of rocks, and possibly older, of basic composition, is found to the north of Heathcote, and in a few other localities.

In the extreme north-east in Benambra, and in the south-west in Dundas, are two large areas of crystalline schists. Their age is in dispute. By some they are regarded as archæan, and by others as altered ordovician. A few small patches occur elsewhere. Metamor-  
phic.

At Heathcote fossils have been found, which have been referred to middle cambrian age, but this reference has been disputed in favour of ordovician. At Dookie and at Waratah Bay certain other beds have been thought to be cambrian, but fossils are wanting. Cambrian.

Slates and sandstones of ordovician age, all acutely folded, and more or less cleaved, occur. Limestones are practically absent. One large area is situated in the east, and the same rocks re-appear in the centre of the State. From Ballarat westward is a large mass of rocks having similar characters, but as no fossils have been found we cannot be certain of the age of the old rocks of even Ballarat itself, though they are generally regarded as ordovician. Recently many places which were thought to be occupied by silurian rocks have yielded ordovician fossils, as will be seen on comparing the last two editions of the geological map. Since then ordovician, in the place of silurian, has been proved on the Mornington Peninsula. Ordovician.

As regards fossils, the absence of calcareous beds greatly limits their variety. A few sponges and lower types of crustacea occur. No trilobites have been found, unless the Heathcote rocks be ordovician, and not cambrian. The dominant forms are graptolites, of which a large number are known. The series is divided into upper and lower. Of the former there is but little accurate information available. The rocks of the eastern area, a prolongation of similar beds in New South Wales, are of this age, as also are certain rocks near Matlock, Sunbury, and some other places north of Melbourne. The lower ordovician has been divided into four. These, in descending order, are typically developed at Darriwell (north of Geelong), and at Castle-maine, Bendigo, and Lancefield. Most of our auriferous quartz veins occur in the ordovician, but some are in younger, and perhaps some in older, rocks. The best studied gold-field is that of Bendigo, where the veins fill lenticular spaces arching over the anticlines. They have considerable extension along the strike, and several usually occur on the same anticline, one below the other. These veins are known as "saddle-reefs." "Pitch" of the strata, or undulation of the axis

of the anticlines in a vertical direction, is a marked feature, and of considerable importance from its effect on mine working.

Silurian.

The older rocks round Melbourne, and for some distance to the north and east, are of this age. Sandstones, mudstones, and, at a few places, as at Lilydale, near Mansfield, and on the Thomson River, limestones occur. The rocks have not been subjected to the same amount of disturbance as the ordovician, and fossils are fairly common, though, except in the limestones, rarely well preserved. A large number have been recorded. Monograptus, corals, polyzoa, brachiopoda, mollusca, trilobites, and crustacea have been found. An apparent approach to a devonian facies is shown at some localities. In the neighbourhood of Melbourne the strata are much disturbed. There is an upper and a lower series, formerly known by names borrowed from British geology, though the local names, Melbournian for the lower or graptolite bearing series, and Yeringian for the upper, are now more suitably employed. The rocks are frequently auriferous.

Devonian.

A long and narrow belt of quartz-porphyrries, and allied rocks, running parallel to the Snowy River, and partly intersected by it, marks a volcanic axis. In places tuffs rest on the edges of the ordovician, and are in turn overlain by limestones rich in devonian fossils. The volcanic rocks have been referred to lower devonian, and the limestones to middle devonian. Several patches of these limestones occur widely scattered over the eastern parts of the State, the largest being at Buchan and at Bindi. Corals, brachiopods, and molluscs abound in them. A series of much-folded shales and quartzites of apparently the same age, judging by the fossils, is to be seen at Tabberabbera and Cobannah. In places overlying these highly-inclined, middle devonian beds are found nearly horizontal strata. These, as at Iguana Creek, yield plant remains, and are regarded as upper devonian. The Grampian sandstones, which form a bold range with an abrupt south-easterly fault-scarp over 2,000 feet in height, have yielded no fossils, but are provisionally regarded as upper palæozoic. The Cathedral Range, near Marysville, belongs probably to the same series.

Carboniferous.

Certain sandstones on the Avon with *Lepidodendron* are, it is considered, of this age. From here northward, across the Divide, a belt of similar rocks extends, forming very rugged mountains. A series of fossil fish from near Mansfield, at the northern extremity, has lately been critically examined, and declared to be of carboniferous age, and not devonian, as was formerly held.

Permian-Carboniferous.

At several localities occur beds of glacial origin, sometimes of considerable thickness. At Bacchus Marsh the boulder beds are associated with sandstones containing the fossil fern-like plant *Gangamopteris*, which affords a means of correlating them with beds elsewhere.

Jurassic.

About Coleraine and in the Otway district, and in South Gippsland, there are large areas of fresh-water shales and sandstones, in places conglomeratic. A few fish and fresh-water molluscs have been found; but the chief fossils are plants, of which a large number are now known, as *Baiera*, *Taeniopteris*, &c. Coal is worked in the beds in Gippsland, as at Jumbunna and Outtrim.

The rocks hitherto spoken of are confined in the main to the high-<sup>Tertiary.</sup> lands previously described. The lowlands are for the most part occupied by tertiary rocks of volcanic and marine origin, with, over large tracts, a cover of fluvatile, or wind-formed source. They form a belt between the Dividing Range and the sea, or the jurassic rocks, where these occur, from near the mouth of the Snowy River to beyond the western boundary of the State. They sweep round the western end of the Divide, and underlie the greater part of the Mallee district in the north-west. Where they, or the fluvatile or the aeolian deposits, overlie auriferous bedrock, the buried river channels usually contain gold. In other places lignite beds, sometimes of considerable extent and thickness, are formed, as at Deans Marsh, Altona Bay, Lal Lal, and several localities in South Gippsland. Both these types of deposit, the gold and lignite bearing, are of various ages, from oldest tertiary upwards.

The marine beds are extremely rich in fossils, and have been divided into three main groups. Owing to the difficulty, or perhaps the impossibility, of correlating them with the subdivisions of the northern hemisphere, local names are now generally applied.

*Barwonian* (? Eocene).—Sands, clays, and limestones composing beds of this age are widely spread, occurring about the Gippsland Lakes, and along the southern coast from Flinders to the Glenelg. Inland they underlie the western plains from Geelong to beyond Hamilton, and have been proved in bores from Stawell to beyond the Murray northwards. East of this line they appear to be bounded by a ridge of palæozoic rocks, extending northwards from the Divide, and only thinly mantled by non-marine beds. The fauna of the marine beds is extremely rich and varied, all types being represented, and in number of species and excellence of preservation is scarcely anywhere surpassed. Associated with the marine beds is a series of basalts and tuffs, which are found more especially in the central and eastern parts of the State. Under certain climatic conditions these rocks have decomposed to form a valuable agricultural soil.

*Kalimnan* (? Miocene).—These rocks are widely spread, though not so extensively as the Barwonian. They are well represented near Bairnsdale, Shelford, Hamilton, and, though the age is in dispute, at Beaumaris. As a rule they are more arenaceous than the lower beds, and ferruginous sands are typical. The fauna is fairly rich.

*Werrikooian* (? Pliocene).—Marine beds of this age are not common, but are found in the lower Glenelg district, overlying Barwonian. The fossils are almost all existing species.

After the deposit of these beds there occurred an extensive outpouring of basaltic lavas in the southern and south-western parts of the State, and large lava plains were formed, through which deep gorges have been cut by the creeks and rivers. Fine examples of volcanic cones in all stages of denudation are plentiful. In deposits, both immediately before and after this last volcanic outburst, there are found the bones of numerous extinct marsupials, such as *Diprotodon*, *Nototherium*, and gigantic kangaroos. Raised beaches point to an elevation of some twenty feet since the previous subsidence, which formed many of our harbors.

In conclusion, it may be stated that many of the writer's sins of omission are due to the small space allotted to him, and even that small space has been exceeded.

#### FAUNA.

The peculiarity of the Australian mammalian fauna has often been remarked upon. Nowhere else in the world do we find representatives of the three great groups into which the class is divided, namely, the eutheria, the marsupials, and the monotremes. The last group, containing the spiny anteater (*Echidna*) and the platypus (*Ornithorhynchus*), is confined to the continent and neighbouring islands, while the marsupials exist, nowadays, only in the Australian region and America.

Of the eutheria, which comprises all mammals above the marsupials, we have but a few terrestrial forms—the dingo, a few bats, and rats and mice. The seas afford a few more, such as whales and porpoises, seals, and in certain places the dugong (*Halicore*).

In Victoria itself we find the Australian fauna typically developed. The echidna ranges over the whole continent, while its ally, the platypus, is confined to the eastern side of Australia, from Tasmania to the tropics. Both are still common in certain parts of the State.

Among the marsupials the kangaroo family (*Macropodidæ*) is well represented, though the larger forms are rapidly disappearing. These comprise the red, grey, and the black-faced kangaroos. The smaller forms, such as wallabies and rat-kangaroos, are still plentiful in many of the more densely forested regions. The southern wallaby (*Macropus billardieri*) is identical with the Tasmanian one, and the other common one (*M. ualabatus*) ranges far to the north of our boundaries. A few other northern forms come down south as far as the Dividing Range. The small kangaroo-rats (*Bettongia*), dwelling in thick scrub, are hard to catch sight of, and still harder to shoot.

The Australian opossum family (*Phalangeridæ*) comprises our so-called opossums, flying squirrels, and the native bear—unfortunate names, but the only local ones in common use. The silver opossum and the Tasmanian brown are the same species (*Trichosurus vulpecula*), the island form being a little larger and of a darker hue. This species ranges over practically the whole of Australia. They form their nests in hollow trees, or, where these are absent, as on some of the islands in Bass Straits and in Central Australia, on the ground. The ring-tailed opossum (*Pseudocheirus peregrinus*) builds a hollow, ball-like nest of grass and bark in the dense scrub. The flying opossums, or, as they are sometimes called, flying foxes (*Petaurus*) and the flying squirrels (*Acrobates*) are represented by several species, ranging from the size of a cat to that of a mouse, and are very beautiful forms. They have not the power of true flight, but can glide for a considerable distance from a greater to a less height. The native bear (*Phascolarctos cinereus*) has a very restricted range. It does not occur in South Australia nor Tasmania, but passes north up the eastern coastal region. Despite its name, it is a harmless vegetable feeder, and its valuable skin dooms it to early extermination.



Of the wombat family we have but one representative (*Phascolomys mitchelli*), which is still common in the eastern parts of the State.

In the native cat family we have three of the spotted species, the large tiger cat (*Dasyurus maculatus*) and the common native cat (*Dasyurus viverrinus*), which occur south of the Dividing Range, and dwell also in Tasmania. The third species (*Dasyurus geoffroyi*) occurs only to the north of the Divide. The weasels (*Phascologale*) and the pouched mice (*Sminthopsis*) are numerous in species and fairly common. Some are arboreal, others terrestrial. The pouched mice are fierce little cannibals, and a few years ago about fifty were sent down alive in a case to the University. Two days after there were two living, while a few rags of fur represented the other four dozen. The survivors engaged in mortal combat in the glass jar in which they were put to be chloroformed. Examples of these small forms and of their skeletons are desiderata in the National Museum. The jumping pouched mouse (*Antechinomys laniger*), which hops like a diminutive kangaroo, comes south only into North-western Victoria, and is not well known with us.

The bandicoot family is a small one, though three species of bandicoot (*Perameles*) are found in the State. They live in grass land. The rabbit-bandicoot, or bilbie (*Peragale*) and the pig-footed bandicoot (*Choeropus castanotis*) occur in the north-west, the latter being a rare animal.

In eutheria, the higher mammals, we are, as already stated, poorly off. The dingo, apparently, got here before man arrived, and its remains are found fossil. Bass Straits was a barrier to it, and it did not reach Tasmania.

Among bats the large flying-fox (*Pteropus poliocephalus*) often does harm to the fruit in the northern parts of the State and in Gippsland. It is widely spread up the eastern sea-board of the continent. We have also several other small bats, but must pass them over.

Among rats, the golden water rat (*Hydromys chrysogaster*) is a large, handsome animal ranging all over Australia, and occurring also in Tasmania and New Guinea. There appears to be only the one species. The bush rats of the State (*Mus gouldi* and *Mus greyi*) are common, and probably others occur. They have not been satisfactorily worked out here, and specimens are needed in the Museum.

Only one species of seal, the Australian sea-bear (*Euotaria cinerea*) is now found in Bass Straits, and is protected. There are colonies on a few outlying islands and rocks. Other species occasionally stray up from the far south. The yellow-sided dolphin (*Delphinus novae-zelandiae*) is common in our waters, and whales of several species are occasional visitors.

As regards birds, we have only some two or three species practically confined to the State, the Victorian lyre-bird (*Menura superba*) being the best known. The emu is still common in the north-west. Wild fowl are plentiful, and occasionally great incursions are made from the north. Our most striking birds are the lorries and honey-eaters, which gather "the harvest of the honey-gums." Quail are

common at times, and pigeons of various kinds occur. The mound-building lowan, or mallee-hen (*Leipoa ocellata*), and the bower birds (*Ptilonorhynchus violaceus* and *Chlamydodera maculata*) are remarkable for their habits, so often described, while the mutton bird (*Puffinus brevicaudus*) is of great economic value for its eggs, which are gathered, together with its young, in countless numbers. Field naturalists have investigated our birds more thoroughly than any other group of our fauna, and are now busy collecting data for the study of their migrations, an almost untouched subject here.

Turning to the reptiles, we have two tortoises, the short-necked (*Emydura macquariae*), found north of the Divide, and the long-necked (*Chelodina longicollis*) occurring both there and in South Gippsland.

As regards lizards, the most remarkable are the so-called legless forms of the family Pygopidae. They have no front legs, while the hind ones are represented by two scaly flaps usually fitting into grooves on the side of the body, and so escaping casual examination. They are the main source of the stories of snakes with legs which occasionally fill our newspapers. The large "goanna" (*Varanus varius*) derives its name from Iguana, a genus not found in Australia. It is common north of the Divide, and reaches a length of five or six feet. A smaller cousin (*Varanus gouldi*) ranges as far south as Gippsland, and as it frequents streams is dignified by the name of the Gippsland crocodile. Our other lizards are small and harmless, though some have such terrifying names as "bloodsucker" (*Amphibolurus*), and so on. Altogether we have some fifty species of lizards in the State.

Among snakes, we find the non-venomous blind-snakes (*Typhlops*), with bodies as smooth as glass, the green tree snakes (*Dendrophis*) and the carpet snake (*Python spilotes*). All these forms are commoner in the north of the State. We have about a dozen venomous species, though some from their small size are not dangerous to man. The tiger snake (*Notechis scutatus*), a handsomely marked species, is the most active and dangerous. Most of the others are timid, though quite as deadly when large. The deaf-adder of the drier parts of the State lies quite still till nearly or quite stepped on, and then strikes without warning. It is a short thick-set reptile, and to be dreaded on account of its habits.

We have about eighteen amphibians in Victoria, all of them being frogs and toads. The largest is the handsome green and gold "bull-frog" (*Hyla aurea*), very common in Southern Victoria. The sand frogs (*Limnodynastes*) are widely distributed, even far from water. All the frogs are great insect-eaters, and in their turn are a favorite food of the snakes.

In fresh-water fish we are not rich, owing mainly to our poor river development. There is a marked distinction between the forms found to the north of the Divide, and those to the south. In the Murray basin we have the Murray cod (*Oligorus macquariensis*), which occasionally reaches the weight of 100 lbs. This fish, together with the cat-fish (*Copidoglanis tandanus*), the bony bream (*Chaetoesus richardsoni*), and a few others are absent from the southern waters. The southern forms are nearly all found also in

Tasmania as well, and include the blackfish (*Gadopsis marmoratus*), and the eel (*Anguilla australis*). The voracious little mountain trout (*Galaxias truttaceus*), which rarely reaches a quarter of a pound in weight, has a similar southern distribution, while the minnow (*Galaxias attenuatus*), common in the south, is said to range into the Murray waters as well, though we need specimens in the Museum to settle the point. Most of our other southern river-fish occur in the sea as well, and only pass up into the rivers for a longer or a shorter distance. Lampreys are found in most of our streams, but are not often caught.

Want of space prevents any discussion of the marine fish, which are of considerable economic value, though fish-preserving is a very small industry with us.

The treatment of our invertebrate fauna must be brief, and confined to land and fresh water forms, though of some of the marine groups, as for instance the mollusca, we now know a good deal. In shell-fish we are poorly off. There is black-shelled snail (*Paryphanta atramentaria*), about  $\frac{3}{4}$  inch in diameter in our southern fern-gullies, and another snail (*Panda atomata*) about the same size in Eastern Gippsland. Most of the other species are small, and attract the eye of the naturalist only. One water-dwelling form (*Bulinus tenuistriata*), which has its shell coiled in the opposite way to the ordinary—a left-handed screw—is the temporary host of the liver-fluke of the sheep, and this is the reason why wet ground is “fluky country.”

Scorpions are very common in the warmer parts, but none are very large. Amongst the spiders, we have only one harmful species, the katipo (*Latrodectes scelio*), which is identical with the New Zealand form. It is black with a scarlet, or deep orange spot on the hinder end of its back. The so-called “tarantula,” though hideous and terrifying to most people, is quite harmless, and could not bite a human being, if it wanted to. A spider with a much larger body is found in the northern districts, and spins a very strong web from bush to bush.

Among insects, the beetles, butterflies, and moths alone have been examined with anything like thoroughness. Many of our striking beetles, while in the larval stage, are injurious to vegetation, such as the buprestids, longicorns, cetonids, and cockchafers. The lady-birds (*Coccinellidae*), are carnivorous in the larval stage, and great foes of the scale insects. We have no large butterflies such as occur in Queensland, but possess some very fine moths, some of which, in their larval stage, are plant-eaters, and work considerable damage. We have a few fine stick-insects which mimic dead twigs, and are therefore not often detected, though when seen they always attract notice. Locusts and grasshoppers at times do considerable harm. Dragon-flies, white ants, and ant lions are common enough in certain districts. Our native bee is stingless, but is being starved out by the imported bee, which is now widely spread. The shrill deafening song of the cicada (*Cicada mærens*) in its countless thousands must be heard on a hot day to be appreciated. Hosts of other forms must be passed unnoticed, though it may be said that our bull-dog ant is the largest ant known.

Of crustacea, we can mention only the fresh-water crayfish, of which we have several kinds. The Murray crayfish (*Astacopsis serratus*) is a spiny form growing to the length of a foot, and occasionally seen in the Melbourne market. The yabbie, or pond crayfish (*Astacopsis bicarinatus*) is found in all suitable situations, and ranges widely over Australia. It is a small species, but is eaten. The so-called land-crab (*Engaeus*) is really a crayfish, and is found in the damper parts of the State. It also occurs in Tasmania.

Centipedes are common, especially in the warmer parts, but do not seem to do much harm to human beings.

We are rich in earthworms, though our native species are disappearing before the imported European ones, which are now found everywhere in the State. In the Gippsland giant earthworm we have by far the largest species known. A living specimen recently measured at the University was seven feet two inches long. Gorgeously coloured planarian worms, a few inches in length, abound in the moister parts of the State, being generally found under logs.

The same localities are the home of two or three species of land-leech, which are blood-thirsty, though small. A fresh-water leech (*Limnodynastes quinquevittata*), used surgically, is common enough in ponds.

Pond life generally is actively studied by our field naturalists, but an attempt to deal with it would require a volume in itself, and appeal to professed naturalists alone. Suffice it to say that it is rich and varied, and presents us with many interesting problems.

As to the origin of our fauna, much has been said and written. Briefly, the marsupials, and, perhaps, some birds, the tortoises, certain frogs, fresh-water fish, many insects, earthworms, and other animals point definitely to a former land connexion with South America, where they find their nearest living relatives. The eutheria are of Malaysian origin, as also are most of our birds, some of our land mollusca, and the fresh-water crayfishes. This incursion is of later date than the Antarctic one. It may almost be said that the fauna and flora of the Queensland and New South Wales scrubs represent an invasion in force from the north.

In conclusion, one point may be noticed, and that is the popular names given to our animals and plants. The early settlers found themselves in a new world where nearly every thing alive differed from what they had been accustomed to. In their difficulties about names they adopted a few—far too few—from the aborigines, but in the main applied the names they knew to the fresh forms they found. Some of the names came from Britain, others from America, and a small number from other countries. So we have oaks and gum trees, box trees, and so on among plants. Among animals, we have bears, badgers, cats, bandicoots, opossums, squirrels, weasels, magpies, larks, wagtails, robins, turkeys, trout, cod, and a host of others, which are in no way related to their namesakes elsewhere. The result is often very confusing, but not nearly as much so as when scientific names, such as *iguana*, are wrongly applied to animals of a very different character from the rightful owners of the names.

## MOUNTAINS AND HILLS.

The highest mountain in Victoria is the Bogong Range,\* situated in the county of the same name, 6,508 feet above the sea-level; the next highest peaks are—Mount Feathertop, 6,306 feet; Mount Hotham, 6,100 feet; and Mount Cope, 6,015 feet; all situated in the same county; also the Cobboras, 6,030 feet, situated in the county of Tambo. These, so far as is known, are the only peaks which exceed 6,000 feet in height; but, according to the following list, which has recently been corrected for this work by Mr. J. M. Reed, the Surveyor-General, there are 20 peaks between 5,000 and 6,000 feet high, and 25 peaks between 4,000 and 5,000 feet high; it is known, moreover, that there are many peaks rising to upwards of 4,000 feet above the level of the sea whose actual heights have not yet been determined:—

Mountains and hills.

## \*MOUNTAINS AND HILLS IN VICTORIA.

Name of Mountain.	County.	Approximate Height above Level of Sea.	Name of Mountain.	County.	Approximate Height above Level of Sea.
		feet.			feet.
Abrupt ..	Dundas, Ripon and Villiers	2,721	Barker ..	Talbot and Bendigo	—
Aceland ..	Polwarth ..	—	Bass Range ..	Mornington	—
Aitken's Hill	Bourke ..	1,608	Battery ..	Delatite ..	—
Alexander ..	Talbot ..	2,435	Baw Baw ..	Evelyn ..	5,062
Alexander's Head	Bourke and Dalhousie	—	Bealiba ..	Gladstone ..	—
Alexander's Crown	Bourke and Dalhousie	—	Bear's Hill ..	Bendigo ..	—
Alexina ..	Anglesey ..	—	Beckwith ..	Talbot ..	2,087
Almond Peak	Ripon ..	—	Bellarine ..	Grant ..	463
Anakie, Mount	Grant ..	1,327	Benambra ..	Benambra ..	4,843
Angus ..	Tanjil ..	—	Ben Cruachan	Tanjil ..	2,765
Arapiles ..	Lowan ..	1,176	Bindi ..	Tambo ..	—
Ararat ..	Ripon ..	2,020	Bendock ..	Croajingolong	—
Ararat ..	Mornington	—	Ben Nevis ..	Kara Kara	2,875
Arnold ..	Anglesey, Evelyn and Wonnangatta	—	Big Hill ..	Bourke ..	—
Arthur's Seat	Mornington	1,031	Big Hill ..	Evelyn ..	—
Atkinson ..	Bourke ..	—	Birch Hill ..	Talbot ..	—
Avoca ..	Kara Kara	2,461	Black Mount	Rodney ..	—
Bald Head ..	Dargo ..	4,502	Black Hill ..	Grant ..	2,310
Bald ..	Dargo and Bogong	5,541	Black Hill ..	Grenville ..	—
Bald Hill ..	Ripon ..	1,117	Black Range	Anglesey ..	—
Balmattum Range	Delatite ..	—	Black Range	Polwarth ..	—
Bainbridge ..	Dundas ..	—	Black Range	Lowan ..	—
Baranhet ..	Delatite ..	—	Blackwood, or Myrningong	Bourke ..	2,432
Baringhup ..	Talbot ..	—	Bland ..	Bourke ..	—
			Blowhard ..	Ripon ..	—
			Blue Mountain	Bourke ..	—
			Blue Range ..	Delatite ..	—
			Bogong Mt. ..	Bogong ..	6,508
			Bolangum ..	Kara Kara	1,225
			Bolga ..	Benambra ..	2,860

\* The highest mountain on the Australian Continent is Mount Kosciusko in New South Wales; one peak of which is 7,328 feet high.

MOUNTAINS AND HILLS—*continued.*

Name of Mountain.	County.	Approximate Height above Level of Sea.	Name of Mountain.	County.	Approximate Height above Level of Sea.
		feet.			feet.
Bolton ..	Talbot ..	—	Cole ..	Ripon ..	—
Boon ..	Croajingolong ..	4,500	Colite ..	Grant ..	—
Boswell ..	Ripon ..	1,748	Concongella ..	Borong ..	1,376
Boulder ..	Buln Buln ..	1,725	Concord ..	Anglesey ..	1,500
Boundary Hill ..	Anglesey ..	—	Conical Hill ..	Evelyn ..	—
Bowen ..	Croajingolong ..	—	Consultation ..	Talbot ..	—
Brenanah ..	Gladstone ..	—	Coopragambra ..	Croajingolong ..	—
Brigg's Bluff ..	Borong ..	—	Cooyatong ..	Benambra ..	3,270
Brock's Hill ..	Bourke ..	—	Cope ..	Bogong ..	6,015
Brown's Hill ..	Heytesbury ..	—	Corranwarra bul ..	Mornington ..	—
Bryarty's Hill ..	Evelyn ..	—	Cotterill ..	Bourke ..	—
Buangor ..	Kara Kara ..	3,247	Crinoline ..	Wonnangatta ..	4,500
Buckle ..	Croajingolong ..	1,465	Cunningham ..	Anglesey ..	1,920
Buckrabanyule ..	Gladstone ..	—	Dandenong ..	Evelyn and Mornington ..	2,077
Budgee Budgee ..	Tanjil and Wonnangatta ..	—	Dargo Hill ..	Dargo ..	—
Buffalo ..	Delatite ..	5,645	Darriwil ..	Grant ..	—
Bulla Bulla ..	Croajingolong ..	—	Dawson ..	Tambo ..	—
Bullancrook ..	Bourke ..	2,306	Deddick ..	Croajingolong ..	—
Bullarook ..	Talbot ..	2,400	Deboobetic ..	Kara Kara ..	—
Buller ..	Wonnangatta ..	5,934	Delegete Hill ..	Croajingolong ..	4,307
Bulloh ..	Benambra ..	2,360	Despair ..	Anglesey ..	—
Buninyong ..	Grant ..	2,443	Difficult ..	Borong ..	2,657
Burramboot ..	Rodney ..	—	Dingle Range ..	Bogong ..	—
Burrowa ..	Benambra ..	4,181	Diogenes ..	Dalhousie ..	—
Burrumbeep Hill ..	Ripon ..	—	Direction ..	Kara Kara ..	—
Byron ..	Lowan ..	—	Disappointment ..	Bourke ..	2,631
Callender ..	Ripon ..	—	Djoandah ..	Wonnangatta ..	2,000
Camel ..	Rodney ..	—	Drummond ..	Borong ..	—
Camel's Hump ..	Bourke and Dalhousie ..	3,295	Dryden ..	Borong ..	—
Cameron ..	Talbot ..	—	Dundas ..	Dundas ..	1,535
Cannibal Hill ..	Mornington ..	—	Duneed ..	Grant ..	—
Carlyle ..	Croajingolong ..	1,189	Eccles ..	Normanby ..	590
Cardinal, The ..	Ripon ..	—	Eckersley ..	Normanby ..	529
Castle Hill ..	Borong ..	—	Egbert ..	Gladstone ..	—
Castle Hill ..	Wonnangatta ..	4,860	Egerton ..	Grant ..	—
Cathedral ..	Anglesey ..	2,120	Elephant ..	Hampden ..	1,294
Cavendish ..	Dundas ..	—	Eliza ..	Mornington ..	530
Cavern ..	Talbot and Ripon ..	—	Ellery ..	Croajingolong ..	4,251
Chalamber ..	Ripon ..	1,549	Ellery E. Bump ..	Croajingolong ..	3,908
Chaliceum ..	Ripon ..	1,594	Emu ..	Ripon ..	1,687
Charlton Hill ..	Dargo ..	2,090	Enterprise ..	Hampden ..	—
Chaucer ..	Normanby ..	—	Erica ..	Wonnangatta ..	—
Christmas Hills ..	Evelyn ..	—	Erip ..	Tanjil ..	4,800
Clay ..	Normanby ..	622	Everard ..	Grenville ..	1,539
Cobbler ..	Delatite ..	5,349	Everard ..	Croajingolong ..	1,200
Cobboras ..	Tambo ..	6,030	Fainter ..	Bogong ..	—
Coghill's Creek ..	Talbot ..	—	Fainting Range ..	Tambo ..	—
			Fatigue ..	Buln Buln ..	2,110
			Feathertop ..	Bogong ..	6,306

## MOUNTAINS AND HILLS—continued.

Name of Mountain.	County.	Approximate Height above Level of Sea.	Name of Mountain.	County.	Approximate Height above Level of Sea.
		feet.			feet.
Ferguson's Hill	Polwarth ..	708	Juliet, Mount	Evelyn ..	3,631
Forest Hill ..	Tambo on the N.S.W. frontier	5,000	Kangaroo Range	Normanby ..	—
Forest Hill ..	Talbot ..	—	Kay ..	Croajingolong	3,284
Franklin ..	Talbot ..	2,092	Keilawarra ..	Moirs ..	—
Franklin Range	Bogong ..	—	Kent ..	Wonnangatta	5,129
Friday ..	Dargo ..	2,700	Kerang ..	Gladstone ..	—
Fyans ..	Hampden ..	957	Kerang ..	Gunbower ..	—
Gap ..	Talbot ..	—	Kerange Moorah	Polwarth ..	—
Gaspard ..	Talbot ..	—	Kernot ..	Tanjil ..	4,800
Gellibrand ..	Grenville ..	871	Kersop Peak	Buln Buln ..	740
Genoa Peak	Croajingolong	1,611	Kincaid ..	Normanby ..	655
George ..	Polwarth ..	—	Kinross ..	Hampden ..	908
Gibbo ..	Benambra ..	5,764	Kirk's Hill ..	Ripon ..	—
Glasgow ..	Talbot ..	—	Koala ..	Dalhousie ..	—
Glenrowen ..	Moirs ..	1,680	Koang ..	Hampden ..	891
Good Morning Bill	Ripon ..	1,716	Kooroongh ..	Talbot ..	—
Gowar ..	Gladstone ..	—	Kooyoorra ..	Gladstone ..	—
Graham ..	Evelyn ..	—	Korong ..	Gladstone ..	1,408
Granyah ..	Benambra ..	3,620	Kororoit ..	Bourke ..	—
Green Hill ..	Dalhousie ..	—	Kurtweeton ..	Hampden ..	—
Green Hill ..	Grenville ..	—	Lady Franklin	Bogong ..	1,789
Greenock ..	Talbot ..	—	Lady Mount ..	Ripon ..	—
Gregory ..	Evelyn, Wonnangatta, and Tanjil	4,000	Langdale Pike	Polwarth ..	—
Hamilton ..	Hampden ..	1,050	Landsborough Hill	Kara Kara	1,903
Hardie's Hill	Grenville ..	—	Langi Ghiran	Ripon ..	3,123
Hat Hill ..	Delatite ..	2,544	La Trobe ..	Buln Buln ..	2,366
Heath Point ..	Normanby ..	627	La Trobe's Range	Polwarth ..	—
Hermit ..	Bogong ..	—	Lawaluk ..	Grenville ..	—
Hesse ..	Grenville ..	—	Leading Hill	Mornington ..	—
Hoad ..	Dargo ..	2,160	Leinster ..	Dargo and Benambra	—
Hoddle Range	Buln Buln ..	—	Leura ..	Hampden ..	1,030
Hollowback Hill	Talbot ..	—	Lianiduk ..	Karkaroc ..	—
Hooghly ..	Gladstone ..	—	Livingstone ..	Bogong ..	4,007
Hope ..	Gunbower ..	—	Liptrap ..	Buln Buln ..	551
Hope ..	Benambra ..	4,505	Lock ..	Bogong ..	5,900
Hore's Hill ..	Benambra ..	—	Loinman ..	Karkaroc ..	—
Hotspur ..	Villiers ..	—	Lookout (2) ..	Tanjil ..	3,500
Hotham ..	Bogong ..	6,100	Lyall ..	Mornington ..	—
Howe Hill ..	Croajingolong	1,292	Macedon ..	Bourke ..	3,324
Howitt ..	Delatite ..	5,718	Mackenzie ..	Anglesey ..	—
Hume's Range	Bourke ..	—	Mackersey ..	Dundas ..	—
Hunter ..	Buln Buln ..	1,136	Magdala ..	Wonnangatta	—
Ida ..	Rodney ..	1,537	Maindample	Delatite ..	—
Jeffcott ..	Kara Kara	—	Major ..	Moirs ..	1,251
Jenkins ..	Weeah ..	339	Mannibadar ..	Grenville ..	—
			Maramingo ..	Croajingolong	1,274

## MOUNTAINS AND HILLS—continued.

Name of Mountain.	County.	Approximate Height above Level of Sea.	Name of Mountain.	County.	Approximate Height above Level of Sea.
		feet.			feet.
Martha ..	Mornington	544	Prospect ..	Anglesey ..	1,025
Martin ..	Bogong ..	—	Puckapanyal	Dalhousie ..	—
Matlock ..	Wonnangatta	4,544	Hill		
Maxwell ..	Anglesey ..	740	Puzzle Range	Anglesey ..	—
Melbourne Hill	Bourke ..	—	Pyramid Hill	Gunbower ..	—
Meningorot ..	Hampden ..	766	Quoin Hill ..	Talbot and	—
Mercer ..	Grenville ..	—	Ripon		
Misery ..	Ripon ..	—	Raven's Hill	Kara Kara	—
Mitchell ..	Talbot ..	—	Ravenscroft	Ripon and	—
Moliagul ..	Gladstone ..	—	Hill	Talbot	—
Mournot ..	Ripon ..	—	Raymond ..	Croajingolong	980
Monda ..	Evelyn and	2,974	Red Hill ..	Buln Buln ..	—
	Anglesey		Red Hill (Mount	Ripon ..	1,211
Monk, The ..	Talbot ..	—	Weejort)		
Moolort ..	Talbot ..	—	Richmond Hill	Normanby ..	727
Moorokyle ..	Talbot ..	—	Riddell ..	Evelyn ..	—
Moornambool	Ripon ..	—	Ross ..	Ripon ..	—
Moorul ..	Talbot ..	—	Rouse ..	Villiers ..	1,220
Moriac ..	Grant ..	839	Sabine ..	Polwarth ..	1,912
Mormbool ..	Dalhousie ..	—	Samaria ..	Delatite ..	3,138
Mueller ..	Tanjil ..	5,400	Sargent ..	Talbot ..	—
Murindal ..	Tambo ..	—	Scobie ..	Rodney ..	—
Murramurrang- bong	Bogong ..	—	Selwyn ..	Wonnangatta and Dela- tite	—
Myrtoon ..	Hampden ..	713			
Nanimia ..	Ripon ..	—	Separation ..	Delatite ..	—
Napier ..	Normanby ..	1,453	Shadwell ..	Hampden ..	962
Navarre Hill	Kara Kara	1,355	Sherwin's	Evelyn ..	—
Nibo ..	Anglesey ..	—	Range		
Noorat ..	Hampden ..	1,024	Shillinglaw ..	Wonnangatta	—
Norgate ..	Buln Buln ..	1,390	Serra Range	Dundas and	—
Notch Hill ..	Dargo ..	4,507		Ripon	—
Nowa Nowa	Tambo ..	—	Singapore ..	Buln Buln ..	451
Oberon ..	Buln Buln ..	1,968	Singleton ..	Wonnangatta	—
Ochertyre ..	Bogong ..	—	Sister Rises ..	Hampden ..	—
One-Mile Hill	Talbot ..	—	Sisters ..	Anglesey ..	—
One-tree Hill	Evelyn ..	—	Skene ..	Wonnangatta	—
One-tree Hill	Normanby ..	—	Smeaton ..	Talbot ..	—
Paradox ..	Anglesey ..	—	Snake's Ridge	Buln Buln ..	—
Peter's Hill ..	Polwarth ..	1,280	Snodgrass ..	Anglesey ..	—
Pierrepoint ..	Normanby ..	936	Spring Hill ..	Gladstone ..	—
Pilot Range ..	Bogong ..	—	Spring Hill ..	Ripon ..	—
Pine Mount ..	Benambra ..	—	Spring Hill ..	Talbot ..	—
Pininbar ..	Benambra ..	4,100	Square Mount	Dargo ..	4,900
Pisgar ..	Ripon and Tal- bot	—	Stanley ..	Bogong ..	3,444
Pleasant ..	Rodney ..	—	Station Peak	Grant ..	1,154
Pollock ..	Grant ..	—	Stavely Range	Villiers ..	1,070
Porndon ..	Heytesbury	947	Steel's Hill ..	Evelyn ..	—
Powlett's Hill	Talbot ..	—	Steiglitz ..	Bourke ..	—
			St. Bernard ..	Bogong ..	5,060



## MOUNTAINS AND HILLS—continued.

Name of Mountain.	County.	Approximate Height above Level of Sea.	Name of Mountain.	County.	Approximate Height above Level of Sea.
		feet.			feet.
St. George ..	Polwarth ..	—	Tower Hill ..	Villiers ..	322
St. Gwinear ..	Tanjil ..	5,000	Traawool ..	Anglesey ..	—
St. Leonard's ..	Evelyn and Anglesey ..	—	Twins, The ..	Delatite and Wonnangatta ..	5,582
St. Mary's Hill ..	Ripon ..	—	Tyers ..	Tanjil ..	4,900
St. Phillack ..	Tanjil ..	5,210	Upton Hill ..	Delatite ..	—
Strathbogie Ranges ..	Delatite ..	—	Useful ..	Wonnangatta and Tanjil ..	4,720
Sturgeon ..	Dundas ..	1,946	Valentia ..	Wonnangatta ..	—
Sugarloaf (Bear's) ..	Evelyn ..	—	Vandyke ..	Normanby ..	—
Sugarloaf (Mt. Piper) ..	Dalhousie ..	—	Vereker ..	Buln Buln ..	2,092
Suggan Buggan ..	Tambo ..	—	Victoria Range ..	Dundas ..	—
Survey Peak ..	Anglesey ..	—	Vite Vite ..	Hampden ..	—
Table Top ..	Delatite ..	—	Wagra ..	Benambra ..	2,638
Talbot ..	Lowan ..	—	Wallace ..	Grant ..	—
Tallarook ..	Anglesey ..	2,652	Wallerson ..	Tambo ..	—
Talgarna ..	Benambra ..	2,101	Warrambal ..	Wonnangatta ..	—
Tambo ..	Benambra ..	4,707	Warrenheip ..	Grant ..	2,463
Tamboritha ..	Wonnangatta ..	5,381	Warrior Hill, Gt. ..	Grenville ..	921
Tara ..	Tambo ..	2,009	Warnambool ..	Hampden ..	712
Tarragower ..	Talbot ..	1,861	Watershed Hill ..	Ripon ..	—
Taylor ..	Dargo ..	1,571	Weejort ..	(See Red Hill) ..	—
Telegraph Hill ..	Ripon ..	1,854	Wellington ..	Mornington ..	314
Templar ..	Tatchera ..	—	Wellington (Trig) ..	Wonnangatta and Tanjil ..	5,355
Tennyson ..	Croajingolong ..	3,422	Wellington (Nap-Nap-Marra) ..	Tanjil ..	5,269
Terrick Terrick ..	Gunbower ..	—	Wermatong ..	Benambra ..	—
Thackeray ..	Dundas ..	—	Whittaker's ..	Croajingolong ..	—
The Brothers ..	Benambra ..	4,667	Widderin ..	Hampden ..	1,132
The Sisters ..	Benambra and Dargo ..	4,038	William ..	Ripon and Borung ..	3,827
Timbertop, or Warrambat ..	Wonnangatta ..	—	Wills ..	Bogong ..	5,758
Tingaringy ..	Croajingolong ..	4,771	Wilson ..	Buln Buln ..	2,350
Tikatory Hill ..	Delatite ..	2,002	Wilson ..	Bourke ..	—
Tom's Cap ..	Buln Buln ..	1,258	Wiridgil ..	Hampden ..	—
Tongio ..	Tambo ..	—	Wombat ..	Delatite ..	2,659
Tooborac Hills ..	Dalhousie ..	—	Wombat Hill ..	Talbot ..	—
Torbreck ..	Anglesey and Wonnangatta ..	5,001	Yandoit Hill ..	Talbot ..	—
Towanga ..	Bogong ..	4,151	Zero, Mount ..	Borung ..	—

## Rivers.

With the exception of the Yarra, on the banks of which the metropolis is situated; the Goulburn, which empties itself into the Murray about eight miles to the eastward of Echuca; the La Trobe and the Mitchell, with, perhaps, a few other of the Gippsland streams; and the Murray itself, the rivers of Victoria are not navigable except by boats. They, however, drain the watershed of large areas of country, and many of the streams are used as feeders to permanent reservoirs for irrigation and water supply purposes and manufactures. The Murray, which forms the northern boundary of the State, is the largest river in Australia. Its total length is 1,300 miles, for 980 of which it flows along the Victorian border.\* Several of the rivers in the north-western portion of the State have no outlet, but are gradually lost in the absorbent tertiary flat country through which they pass. The names and lengths of the principal Victorian rivers, with their positions and approximate lengths, recently corrected by the Surveyor-General, Mr. J. M. Reed, according to the latest information, are as follow:—

## RIVERS IN VICTORIA.

Name of River.	Position.	Approximate Length.
		Miles.
Aberfeldy .. ..	Tanjil. Falls into Thomson .. ..	30
Acheron .. ..	Anglesey. Falls into Goulburn, 4 miles S. of Alexandra	35
Aire .. ..	Polwarth. Falls into sea, 6 miles W. of Cape Otway	25
Arthur's Creek ..	Evelyn. Falls into Yarra Yarra .. ..	30
Avoca .. ..	Tatchera, and western boundary of Gladstone	163
Avon, or Dunlop ..	Tanjil. Flows into Lake Wellington .. ..	60
Avon .. ..	Kara Kara. Source about a mile N. of Navarre	55
Back Creek .. ..	Moirra. Falls into Broken Creek .. ..	60
Back Creek .. ..	Villiers. Falls into Moyne .. ..	25
Baillie's Creek ..	Ripon. Falls into Mount Emu Creek .. ..	20
Barkly .. ..	Wonnangatta. West of Macallister .. ..	20
Barr Creek .. ..	Bendigo. Falls into Murrabit .. ..	20
Barwon .. ..	Grant. Runs into Lake Connemawarre. Part of W. boundary of county	95
Bass .. ..	Mornington. Falls into Western Port near East Head	35
Bemm .. ..	Croajingolong. Falls into sea at Sydenham Inlet	60
Benambra Creek ..	Benambra. Near Lake Omeo .. ..	45
Bet Bet Creek ..	Between Talbot and Gladstone. Falls into Loddon	70
Big .. ..	Wonnangatta. Joins Goulburn, 16 miles S.W. of Mansfield	32
Birregurra Creek ..	Polwarth and Grenville. Falls into Barwon ..	20
Black .. ..	Wonnangatta. Falls into Goulburn .. ..	24
Boggy Creek .. ..	Tambo. Falls into Lake Tyers .. ..	20
Boort Creek .. ..	Gladstone. Overflow from Loddon into Lake Boort	25
Bream Creek .. ..	Grant. Falls into the sea W. of Barwon ..	30
Broadbent Creek ..	Croajingolong. Falls into Snowy River ..	25

\* From the source of its longest tributary, the Darling, to the Murray mouth, the total length of this river is 2,345 miles.

## RIVERS—continued.

Name of River.	Position.	Approximate Length.
		Miles.
Brodribb .. ..	Croajingolong. Falls into Snowy River near its mouth	80
Broken .. ..	Delatite and Moira. Joins Goulburn, 2 miles S. of Shepparton	120
Broken Creek ..	Moira, effluent of Broken River. Falls into Murray near Lake Moira	120
Broken Creek ..	Ripon. Falls into Mount Emu Creek ..	20
Bruthen Creek ..	Buln Buln. Falls into Shoal Inlet ..	25
Buchan .. ..	Tambo. Tributary of Snowy River from westward	75
Buckland .. ..	Delatite. 40 miles S.E. of Wangaratta ..	35
Buffalo .. ..	Delatite. S. of Ovens, 25 miles S.E. of Wangaratta	50
Bullabul Creek ..	Gladstone. Falls into Loddon ..	30
Bullarook Creek ..	Ripon. Falls into Tullaroop Creek ..	35
Bundarra .. ..	Bogong. Falls into Victoria River. Tributary of Mitta Mitta	25
Buneep .. ..	Part of eastern boundary of Mornington ..	20
Burnt Creek .. ..	Borong. Falls into Wimmera ..	30
Burrunbeet Creek ..	Part of southern boundary of Ripon. Falls into Lake Burrunbeet	35
Campaspe .. ..	Dalhousie, at Kyneton. Flows into Murray at Echuca	150
Cann .. ..	Croajingolong. Falls into Tamboon Inlet, 5 miles west Cape Everard	55
Castle Creek .. ..	Delatite. Falls into Goulburn ..	50
Chetwynd .. ..	Dundas. Falls into Glenelg ..	30
Cherry-tree Creek ..	Kara Kara. Falls into Avoca ..	25
Cobungra Creek ..	Bogong. Falls into Victoria ..	26
Cochrane's Creek ..	Gladstone. Falls into Avoca ..	20
Coliban .. ..	Dalhousie. Boundary between counties of Talbot and Dalhousie. Flows into Campaspe	60
Concongella Creek ..	Borong. Falls into Wimmera ..	30
Cornella Creek ..	Rodney. Falls into Lake Cooper ..	35
Crawford .. ..	Normanby. Joins Glenelg at Dartmoor ..	45
Cudgee Creek .. ..	Heytesbury. Falls into Hopkins ..	25
Cudgewa Creek ..	Benambra. Falls into Murray, 8 miles N. of Towong	45
Curdie's River ..	Heytesbury. Flows from Lake Purrunbete. Falls into sea, 28 miles S.E. from Warrnambool	50
Corryong Creek ..	Benambra. Falls into Murray, 3 miles N. of Towong	55
Dabyminga Creek ..	Anglesey, western boundary. Falls into Goulburn	35
Dandenong Creek ..	Mornington, western boundary. Falls into Port Phillip Bay	30
Dargo .. ..	Dargo. Joins Mitchell River ..	85
Darlot's Creek ..	Normanby. Falls into Fitzroy ..	25
Dart .. ..	Benambra. Falls into Mitta Mitta ..	25
Delatite, or Devil's River	Boundary between Delatite and Wonnangatta. Joins the Goulburn, 10 miles below Darlingford	60
Deegay Ponds ..	Dalhousie. Falls into Goulburn ..	20

## RIVERS—continued.

Name of River.	Position.	Approximate Length.
		Miles.
Delegete .. ..	Croajingolong. Joins Snowy River in New South Wales	30*
Doma Mungi .. ..	Bogong. Falls into Murray .. ..	45
Drysdale Creek .. ..	Villiers. Falls into Merri .. ..	25
Dundas .. ..	Dundas. Joins Wannon 1½ miles W. of Caven-dish	20
Dunmunkle Creek .. ..	Borong. Effluent of Wimmera .. ..	60
Dwyer's Main Creek .. ..	Normanby. Falls into Wannon .. ..	25
Emu Creek .. ..	Bourke. Falls into Saltwater .. ..	30
Eumerella .. ..	Normanby. Falls into Lake Yambuk .. ..	80
Ferrer's Creek .. ..	Grenville. Falls into Woody Yaloak .. ..	35
Fiery Creek .. ..	Ripon. Falls into Lake Bolac .. ..	90
Fifteen-Mile Creek .. ..	Delatite. Joins Three-Mile Creek .. ..	50
Fitzroy .. ..	Normanby. Falls into Portland Bay .. ..	35
Ford's Creek .. ..	Delatite. Falls into Delatite .. ..	20
Franklin .. ..	Buln Buln, at Corner Inlet, W. of Welshpool .. ..	25
Fyan's Creek .. ..	Borong. Falls into Lake Lonsdale .. ..	30
Gellibrand .. ..	Polwarth. Falls into sea, 23 miles W. of Cape Otway	75
Genoa .. ..	Croajingolong. Falls into sea, 12 miles S.W. of Cape Howe	45†
Gibbo .. ..	Benambra. Falls into Mitta Mitta .. ..	25
Glenelg .. ..	Normanby. Part of western boundary of county; a bend at the mouth enters South Australia	281
Gnarkeet Ponds .. ..	Hampden, on eastern boundary. Falls into Lake Corangamite	30
Goulburn .. ..	Anglesey, part of western boundary of county. Joins Murray, 6 miles E. of Echuca	345
Gray's Creek .. ..	Villiers. Falls into Hopkins .. ..	25
Gunbower Creek .. ..	Bendigo. Falls into Murray .. ..	75
Happy Valley Creek .. ..	Bogong. Falls into Ovens .. ..	20
Henty's Creek .. ..	Normanby. Falls into Wannon .. ..	25
Hodgson's Creek .. ..	Bogong. Falls into Ovens .. ..	20
Holland .. ..	Delatite. Source at Wombat Hill and Tabletop. Joins Broken River at Benalla	45
Hopkins .. ..	Villiers. Falls into sea at Warrnambool .. ..	155
Howqua .. ..	Wonnangatta. Rises at Mount Howitt. Falls into Goulburn	45
Hughes' Creek .. ..	Anglesey, part of northern boundary of county. Falls into Goulburn	50
Indigo Creek .. ..	Bogong. Falls into Murray .. ..	20
Jackson's Creek .. ..	Bourke. Falls into Saltwater .. ..	55
Jamieson .. ..	Wonnangatta. Falls into Goulburn .. ..	60
Jim Crow Creek .. ..	Ripon, part of southern boundary of county. Falls into Loddon	35
Jingallala or Deddick .. ..	Croajingolong. Joins Snowy from eastward .. ..	37
Joyce's Creek .. ..	Ripon. Falls into Middle Creek .. ..	35
Kiewa .. ..	Bogong. Falls into Murray, 8 miles below confluence of Mitta Mitta with Murray	95
King .. ..	Delatite. Joins Ovens at Wangaratta .. ..	90
King Parrot Creek .. ..	Anglesey. Falls into Narrangeanong .. ..	20

\* Length in Victoria only.

† Length in Victoria only; total length, 60 miles.

## RIVERS—continued.

Name of River.	Position.	Approximate Length.
		Miles.
Koetong Creek ..	Benambra. Falls into Murray ..	25
Koroit Creek ..	Normanby. Falls into Wannon ..	35
Kororoit Creek ..	Bourke. Falls into Port Phillip Bay ..	40
Lang Lang ..	Mornington. Falls into Western Port Bay ..	30
La Trobe ..	Buln Buln. Falls into Lake Wellington. Boundary between Tanjil and Buln Buln	140
Leigh ( <i>see</i> Yarrowee).		
Lerderderg ..	Bourke. Falls into Werribee at Bacchus Marsh	35
Lindsay ..	Millewa. Falls into Murray ..	35
Little ..	Grant. Falls into Port Phillip Bay ..	40
Little ..	Tambo. Falls into Tambo ..	15
Little Woody Yaloak	Grenville. Falls into the Woody Yaloak ..	20
Loddon ..	Talbot, and western boundary of Bendigo and Gunbower. Joins Murray at Swan Hill	225
Macallister ..	Tanjil and Wonnangatta. Falls into Thomson	115
Marraboer ..	Tatchera. Falls into Murray ..	35
Mather's Creek ..	Normanby. Falls into Glenelg ..	20
Merri ..	Villiers. Falls into sea at Warnambool ..	40
Merri Merri Creek ..	Bourke. Falls into Yarra Yarra ..	50
Merriman's Creek ..	Buln Buln. Falls into sea at Ninety-mile Beach	60
Middle Creek ..	Ripon. Falls into Loddon ..	40
Mitchell ..	Boundary between Dargo and Tanjil. Falls into Lake King	80
Mitta Mitta ..	Boundary between Benambra and Bogong. Joins Murray about 8 miles east from Wodonga	175
McKenzie ..	Borong. Falls into Wimmera, 5 miles W. of Horsham	55
Moorarbool ..	Grant. Joins Barwon at Fyansford, near Geelong	80
Moroka ..	Wonnangatta. Joins Wonnangatta, 12 miles N. of Mount Wellington	30
Morwell ..	Buln Buln. Tributary of La Trobe ..	35
Mountain Creek ..	Croajingolong. Falls into Snowy ..	25
Moyne ..	Villiers. Falls into sea at Belfast ..	45
Mount Cole Creek ..	Borong. Falls into Wimmera ..	25
Mount Emu Creek ..	Hampden. Falls into Hopkins ..	150
Mount Greenock Creek	Ripon. Falls into Tullaroop Creek ..	35
Mount Hope Creek	Bendigo and Gunbower. Falls into Kow Swamp	120
Mount Pleasant Creek	Rodney. Falls into Campaspe ..	25
Mount William Creek	Borong. Falls into Lake Lonsdale, thence into Wimmera, 12 miles E. of Horsham	80
Muckleford Creek ..	Talbot. Falls into Loddon ..	20
Muddy or Pranjip Creek	Delatite. Falls into Goulburn ..	35
Murray ..	Northern boundary line of State of Victoria ..	980*
Murrabit ..	Bendigo. Falls into Loddon ..	35
Murrindal ..	Tambo. Falls into Buchan ..	35
Muston's Creek ..	Villiers. Falls into Hopkins ..	50
Myer's Creek ..	Bendigo ..	30
Myrtle Creek ..	Ripon, part of north boundary. Falls into Coliban	20
Naringhil Creek ..	Grenville. Falls into Woody Yaloak ..	30

\* Length in Victoria only; total length, 1,300 miles.

## RIVERS—continued.

Name of River.	Position.	Approximate Length.
		Miles.
Nicholson ..	Dargo. Falls into Lake King ..	50
Norton Creek ..	Lowan, part of eastern boundary. Falls into Wimmera ..	35
Outlet Creek ..	Weeah. Flows from Lake Hindmarsh into Lake Albacutya; thence north to Pine Plains ..	80
Ovens ..	Boundary between Bogong, Delatite, and Moira. Joins Murray, 23 miles below Wangaratta ..	140
Perry ..	Tanjil. Falls into Lake Wellington ..	38
Plenty ..	Bourke. East boundary of county ..	35
Pyramid Creek ..	Bendigo and Gunbower. Falls into Loddon at Kerang ..	160
Reedy Creek ..	Bogong. Falls into Ovens ..	45
Richardson ..	Kara Kara. Joins Avon about 26 miles N.W. from Navarre ..	35
Rose ..	Delatite. Falls into Buffalo ..	50
Salt Creek ..	Hampden, outlet of Lake Bolac. Falls into Hopkins ..	35
Saltwater ..	Bourke. Joins the Yarra at Footscray ..	170
Serpentine Creek ..	Bendigo. Falls into Loddon ..	35
Seven Creeks ..	Delatite. Falls into Goulburn ..	35
Shaw ..	Villiers. Falls into Lake Yambuk ..	20
Snowy ..	Tambo and Croajingolong. Falls into sea near Point Ricardo ..	120*
Snowy Creek ..	Bogong. Falls into Mitta Mitta ..	26
Spring Creek ..	Villiers. Falls into Merri Merri ..	30
Stokes, or Emu ..	Normanby. Joins the Glenelg, 5 miles N. of Dartmoor ..	30
Stony Creek ..	Delatite. Falls into Violet Ponds ..	32
Sugarloaf Creek ..	Dalhousie. Falls into Goulburn ..	30
Sunday Creek ..	Dalhousie. Falls into Sugarloaf Creek ..	35
Surrey ..	Normanby. Falls into Portland Bay ..	28
Sutherland Creek ..	Grant. Falls into Moorarbool ..	20
Tallangatta Creek ..	Benambra. Falls into Mitta Mitta ..	40
Tambo, or Thomson ..	Boundary between Tambo and Dargo. Falls into Lake King ..	120
Tanjil ..	Buln Buln and Tanjil. Falls into La Trobe ..	50
Tarra Tarra ..	Buln Buln. Falls into Shoal Inlet, near Tarra-ville ..	25
Tarwin ..	Buln Buln. Falls into sea at Anderson's Inlet ..	60
Thomson ..	Tanjil. Falls into La Trobe ..	100
Thowgla Creek ..	Benambra. Falls into Coryong Creek ..	30
Thurra ..	Croajingolong. Falls into sea at Cape Everard ..	55
Toonginbooka ..	Tambo. Joins Snowy River ..	30
Tom's Creek ..	Tanjil. Falls into Lake Victoria ..	20
Trawalla Creek ..	Ripon. Falls into Mount Emu Creek ..	20
Tsheea Creek ..	Rodney. Falls into Murray ..	25
Tulla-roop Creek ..	Talbot. Falls into Loddon near Eddington, with Creswick's and Adekate Creeks ..	120
Tyers ..	Tanjil. Tributary of La Trobe ..	35
Tyrrell Creek ..	Kara Kara and Tatchera. Effluent of Avoca. Falls into Lake Tyrell ..	95

\* Length in Victoria only; total length, 300 miles.

## RIVERS—continued.

Name of River.	Position.	Approximate Length.
		Miles.
Victoria .. ..	Bogong. Falls into Mitta Mitta, 8 miles W. of Lake Omeo	30
Violet Ponds ..	Moirs. Falls into Goulburn .. ..	35
Wabba Creek ..	Benambra. Falls into Cudgewa Creek ..	20
Wallpolla Creek ..	Millewa. Falls into Murray .. ..	30
Wando .. ..	Dundas. Falls into Wannon .. ..	25
Wannon .. ..	Dundas. Part of south boundary of county ..	150
Watts .. ..	Evelyn. Falls into Yarra Yarra .. ..	25
Warrambine Creek ..	Grenville. Falls into Barwon .. ..	45
Wellington ..	Wonnangatta .. ..	24
Wentworth ..	Dargo. Falls into Mitchell .. ..	55
Western Moorarbool	Grant. Falls into Moorarbool .. ..	30
Werribee .. ..	Bourke. West boundary of county .. ..	70
Whorouly ..	Delatite. Joins Ovens about 15 miles S.E. of Wangaratta	20
Wimmera .. ..	Wimmera district. Falls into Lake Hindmarsh	228
Wingan .. ..	Croajingolong. Falls into sea at Ram Head	30
Woody Yaloak ..	Grenville. Flows from north into Lake Corangamite	60
Wongungarra ..	Falls into Wonnangatta, 43 miles N.W. of Lake Wellington	50
Wonnangatta ..	Falls into Mitchell .. ..	75
Woori Yaloak ..	Evelyn. Joins Yarra Yarra about 4 miles west from Warrandyte	25
Yackandandah Creek	Bogong. Falls into Kiewa .. ..	30
Yarra Yarra ..	Bourke. Falls into Hobson's Bay .. ..	150
Yarriambiack Creek	Borong. Effluent of Wimmera. Falls into Lake Coorong	95
Yarrowee, or Leigh	Grant. Joins Barwon at Inverleigh .. ..	80
Yea .. ..	Anglesey. Falls into Goulburn .. ..	35

## LAKES.

Victoria contains numerous salt and fresh water lakes and Lagoons; but many of these are nothing more than swamps during dry seasons. Some of them are craters of extinct volcanoes. Lake Corangamite, the largest inland lake in Victoria, covers 90 square miles, and is quite salt, notwithstanding it receives the flood waters of several fresh-water streams. It has no visible outlet. Lake Colac, only a few miles distant from Lake Corangamite, is a beautiful sheet of water,  $10\frac{1}{2}$  square miles in extent, and quite fresh. Lake Burrumbeet is also a fine sheet of fresh water, embracing 8 square miles. The Gippsland lakes—Victoria, King, and Reeve—are situated close to the coast, and are separated from the sea only by a narrow belt of sand. Lake Wellington, the largest of all the Gippsland lakes, lies to the westward of Lakes Victoria and King, and is united to the first-named by a narrow channel. South-east

of Geelong is Lake Connewarre, connected with the sea at Point Flinders. The following is a list of the lakes in Victoria, with their localities and areas, supplied by Mr. Surveyor-General Reed:—

## LAKES IN VICTORIA.

(Those lakes which contain fresh water are distinguished by the letter *f*, and those which consist of salt or brackish water are indicated by the letters *s* and *b* respectively.)

Name of Lake.	Position.	Approximate Area.
		Acres.
Albacutya ..	Weeah, 10 miles N. of Lake Hindmarsh ( <i>f</i> ) ..	14,430
Albert Park ..	South Melbourne ( <i>f</i> ) ..	105
Bael Bael ..	Tatchera, 9 miles W. of Kerang ( <i>f</i> ) ..	1,075
Baker ..	Tatchera, 7 miles S.E. of Castle Donnington ( <i>f</i> ) ..	700
Barracootta ..	Croajingolong, 6 miles W. of Cape Howe ( <i>f</i> ) ..	600
Beeac ..	Grenville, 10 miles N. of Colac ( <i>s</i> ) ..	1,500
Birdebush ..	Hampden, 8 miles N.W. of Camperdown ( <i>b</i> ) ..	64
Bitterang ..	Karkarooc, 45 miles N.W. of Lake Tyrrell ( <i>f</i> ) ..	180
Boga ..	Tatchera, 8 miles S.E. of Castle Donnington ( <i>f</i> ) ..	2,120
Bolac ..	Ripon, 6 miles E. of Wickliffe ( <i>f</i> ) ..	3,500
Bookaar ..	Hampden, 6 miles N.W. of Camperdown ( <i>b</i> ) ..	1,075
Boorookpi ..	Lowan 14 miles E. of South Australian boundary line ( <i>f</i> ) ..	1,030
Boort ..	Gladstone, fed by overflow of Loddon ( <i>f</i> ) ..	1,127
Bringalbert ..	Lowan, 10 miles N.E. of Apsley ( <i>f</i> ) ..	250
Bullen Merri ..	Hampden, 1 mile S.W. of Camperdown ( <i>b</i> ) ..	1,330
Buloke ..	Borong, 4 miles N. of Donald ( <i>occasionally dry for a series of years</i> ) ( <i>f</i> ) ..	600
Bunga ..	Tambo, 3 miles S.W. of Lake Tyers ( <i>f</i> ) ..	300
Bungaa ..	Tanjil, 90-mile beach ( <i>b</i> ) ..	1,000
Buninjon ..	Ripon, 6 miles S.W. of Ararat ( <i>f</i> ) ..	430
Burn ..	Grenville, 10 miles N.E. of Colac ( <i>s</i> ) ..	130
Burrunbeet ..	Ripon, 10 miles W. of Ballarat ( <i>f</i> ) ..	5,200
Calvert ..	Grenville, 5 miles N. of Colac ( <i>s</i> ) ..	5,200
Cantala ..	Karkarooc, 44 miles N.W. of Lake Tyrrell ( <i>f</i> ) ..	250
Carchap ..	Lowan, 20 miles N. of Mostyn ( <i>f</i> ) ..	220
Catcarrong ..	Villiers, near township of Winslow ( <i>f</i> ) ..	80
Catherine ..	Polwarth, W. boundary of county, 13 miles from sea ( <i>f</i> ) ..	130
Centre ..	Lowan, 10 miles N.W. of Mostyn ( <i>f</i> ) ..	660
Charm ..	Tatchera, 10 miles N. of Kerang ( <i>f</i> ) ..	1,390
Clear ..	Lowan, 17 miles N. of Mostyn ( <i>f</i> ) ..	300
Colac ..	Polwarth, at Colac ( <i>f</i> ) ..	6,650
Colongulac ..	Hampden, 3 miles N. of Camperdown ( <i>b</i> ) ..	3,500
Connewarre ..	Grant, 5 miles S.E. of Geelong ( <i>tidal</i> ) ..	3,880
Cooper ..	Rodney, 9 miles E. of Runnymede ( <i>f</i> ) ..	2,400
Coorong ..	Karkarooc, fed by Yarriambiak Creek ( <i>f</i> ) ..	2,000
Cope Cope ..	Kara Kara, 16 miles N.W. of St. Arnaud ( <i>f</i> ) ..	400
Coragulac ..	Grenville, 7 miles N.W. of Colac ( <i>b</i> ) ..	90
Corangamite ..	Grenville ( <i>s</i> ) ..	57,700
Corringale ..	Tambo, 2 miles from coast ( <i>f</i> ) ..	400
Craver ..	Polwarth, 5 miles N.W. of Cape Otway ( <i>tidal</i> ) ..	200
Cullens ..	Tatchera, 8 miles N.W. of Kerang ( <i>f</i> ) ..	1,660
Cundare ..	Grenville, 12 miles N. of Colac ( <i>s</i> ) ..	350
Curlip ..	Croajingolong, fed by overflow of Snowy River ( <i>f</i> ) ..	400
Denison ..	Buln Buln, 28 miles N.E. of Alberton ( <i>f</i> ) ..	350
Dock ..	Borong, 6 miles S.E. of Horsham ( <i>f</i> ) ..	370
Doling Doling ..	Dundas, 3 miles N.E. of Hamilton ( <i>f</i> ) ..	50



## LAKES—continued.

(Those lakes which contain fresh water are distinguished by the letter *f*, and those which consist of salt or brackish water are indicated by the letters *s* and *b* respectively.)

Name of Lake.	Position.	Approximate Area.
		Acres.
Drung Drung or Taylor's	Borong, 11 miles S.E. of Horsham ( <i>f</i> ) ..	750
Duck .. ..	Tatchera, 6 miles N.W. of Kerang ( <i>f</i> ) ..	870
Durridwarrah ..	Grant, reservoir for town of Geelong, 25 miles N.W. ( <i>f</i> ) ..	—
Elingamite ..	Heytesbury, 11 miles S.W. of Camperdown ( <i>f</i> ) ..	800
Elizabeth ..	Tatchera, 5 miles W. of Kerang ( <i>f</i> ) ..	200
Eyang ..	Hampden, 9 miles E. of Chatsworth ( <i>f</i> ) ..	180
Furnell ..	Croajingolong, 8 miles N.W. of Cape Everard ( <i>f</i> ) ..	800
Garnouk ..	Tatchera, 10 miles S.E. of Castle Donnington ( <i>f</i> ) ..	500
Garry ..	Moir, 10 miles N.W. of Shepparton ( <i>f</i> ) ..	1,700
Ghentghen ..	Ripon, 5 miles E. of Wickliffe ( <i>s</i> ) ..	40
Gherang Gherang ..	Grant, 3 miles E. of Winchelsea ( <i>f</i> ) ..	250
Gnarput ..	Hampden, at Northern extremity of Lake Corangamite ( <i>s</i> ) ..	5,800
Gnotuk ..	Hampden, 2 miles W. of Camperdown ( <i>s</i> ) ..	600
Goldsmith ..	Ripon, 7 miles S. of Beaufort ( <i>f</i> ) ..	2,130
Goulburn Weir ..	Moir and Rodney ( <i>f</i> ) ..	4,500
Green ..	Borong, 7 miles S.E. of Horsham ( <i>f</i> ) ..	250
Hattah ..	Karkaroc, 42 miles N.W. of Lake Tyrrell ( <i>f</i> ) ..	150
Hindmarsh ..	Lowan, fed by Wimmera River ( <i>f</i> ) ..	30,000
Jollicum ..	Hampden, 4 miles S.W. of Streatham ( <i>f</i> ) ..	130
Kakydra ..	Tanjii, 7 miles E. of Sale ( <i>b</i> ) ..	452
Kanaguik ..	Lowan, 6 miles N.E. of Mostyn ..	870
Kangaroo ..	Tatchera, 11 miles N.W. of Kerang ( <i>f</i> ) ..	2,250
Kariah ..	Hampden, 5 miles N.E. of Camperdown ( <i>b</i> ) ..	350
Karnak ..	Lowan, 18 miles N.E. of Edenhope ( <i>b</i> ) ..	300
Keilambete ..	Hampden, 15 miles W. of Camperdown ( <i>b</i> ) ..	770
Kemi Kemi ..	Lowan, 2 miles S. of Edenhope ( <i>f</i> ) ..	130
Kennedy ..	Villiers, 8 miles N.W. of Peshurst ( <i>b</i> ) ..	690
Kerferd ..	Bogong, Beechworth Water Supply ( <i>f</i> ) ..	100
King ..	Tanjil, near Bairnsdale, 23 miles N.E. of Seacombe ( <i>tidal</i> ) ..	22,500
Konardin ..	Karkaroc, 44 miles N.W. of north shore of Lake Tyrrell ( <i>f</i> ) ..	300
Koreetnung ..	Hampden, 6 miles N.E. of Camperdown ( <i>s</i> ) ..	560
Kow ..	Gunbower ( <i>f</i> ) ..	6,800
Laanecoorie Weir ..	Bendigo and Gladstone ( <i>f</i> ) ..	1,620
Lalbert ..	Tatchera, 31 miles W. of Kerang ( <i>f</i> ) ..	1,250
Leaghur ..	Tatchera, 18 miles S.W. of Kerang ( <i>f</i> ) ..	130
Learmonth ..	Ripon, 11 miles N.W. of Ballarat ( <i>f</i> ) ..	1,200
Linlithgow ..	Villiers, 8 miles N.W. of Peshurst ( <i>b</i> ) ..	2,450
Little ..	Tatchera, 10 miles S.W. of Kerang ( <i>f</i> ) ..	80
Lockie ..	Karkaroc, 42 miles N.W. of Lake Tyrrell ( <i>f</i> ) ..	350
Long ..	Tatchera, 8 miles S.E. of Castle Donnington ( <i>f</i> ) ..	500
Lonsdale ..	Borong, 7 miles S.W. of Glenorchy ( <i>f</i> ) ..	6,000
Lookout ..	Tatchera, 14 miles W. of Kerang ..	130
Mallacoota ..	Croajingolong, 12 miles W. of Cape Howe ( <i>tidal</i> ) ..	1,700
Malmsbury ..	Dalhousie and Talbot, reservoir for northern gold-fields' population, borough of Malmsbury ( <i>f</i> ) ..	640
Mannaor ..	Tatchera, fed by overflow of Murray ( <i>f</i> ) ..	40

## LAKES—continued.

(Those lakes which contain fresh water are distinguished by the letter *f*, and those which consist of salt or brackish water are indicated by the letters *s* and *b* respectively.)

Name of Lake.	Position.	Approximate Area.
		Acres.
Marmal .. ..	Gladstone, 12 miles N.E. of Charlton ( <i>f</i> ) ..	250
Marsh, The .. ..	Tatchera, 10 miles N.W. of Kerang ( <i>f</i> ) ..	1,700
Meering .. ..	Tatchera, 11 miles S.W. of Kerang ( <i>f</i> ) ..	500
Melanydra .. ..	Tanjil, 6 miles E. of Sale ( <i>b</i> ) ..	153
Middle .. ..	Tatchera, 4 miles N. of Kerang ( <i>f</i> ) ..	560
Miga .. ..	Lowan, 20 miles N.W. of Mostyn ( <i>f</i> ) ..	230
Mitre .. ..	Lowan, 20 miles W. of Horsham ( <i>s</i> ) ..	1,280
Modewarre .. ..	Grant, 6 miles E. of Winchelsea ( <i>s</i> ) ..	1,025
Moodemere .. ..	Bogong, 3 miles W. of Rutherglen ( <i>f</i> ) ..	850
Morea .. ..	Lowan, 13 miles N. of Edenhope ( <i>f</i> ) ..	180
Mournpall .. ..	Karkarooc, 44 miles N.W. of Lake Tyrrell ( <i>f</i> ) ..	600
Mundi .. ..	Follett, 1 mile E. of South Australian boundary line ( <i>f</i> ) ..	1,280
Murdeduke .. ..	Grenville, 25 miles W. of Geelong ( <i>s</i> ) ..	2,800
Murphy's .. ..	Tatchera ( <i>f</i> ) ..	560
Natimuk .. ..	Lowan, 14 miles W. of Horsham ( <i>f</i> ) ..	922
Omeo .. ..	Benambra, 10 miles N.E. of Omeo ( <i>f</i> ) ..	1,966
Ondit .. ..	Grenville, 5 miles N. of Colac ( <i>s</i> ) ..	250
Oundell .. ..	Hampden, 5 miles S.W. of Streatham ( <i>f</i> ) ..	180
Paragalmir .. ..	Ripon, 6 miles E. of Wickliffe ( <i>s</i> ) ..	160
Pelican .. ..	Tatchera, 2 miles W. of Kerang ( <i>f</i> ) ..	94
Pertobe .. ..	Villiers, town of Warnambool ( <i>tidal</i> ) ..	50
Pine .. ..	Borong, 8 miles S.E. of Horsham ( <i>f</i> ) ..	360
Pine Hut .. ..	Lowan, 22 miles N.W. of Mostyn ..	200
Powell .. ..	Karkarooc, 36 miles N. of Lake Tyrrell ( <i>f</i> ) ..	322
Punpundhal .. ..	Hampden, W. of Lake Corangamite ( <i>s</i> ) ..	60
Purgagoolah .. ..	Croajingolong, 18 miles W. of Cape Howe ( <i>tidal</i> ) ..	30
Purumbete .. ..	Heytesbury, 4 miles S.E. of Camperdown ( <i>f</i> ) ..	1,450
Racecourse .. ..	Tatchera, 10 miles N.W. of Kerang ( <i>f</i> ) ..	196
Reedy .. ..	Tatchera, 3 miles N. of Kerang ( <i>f</i> ) ..	550
Reeve .. ..	Buln Buln, 2 miles S.E. of Seacombe on coast ( <i>tidal</i> ) ..	9,000
Repose .. ..	Villiers, 7 miles S.E. of Dunkeld ( <i>f</i> ) ..	280
Rosine .. ..	Grenville, 3 miles W. of Cressy ( <i>s</i> ) ..	380
Round .. ..	Tatchera, 10 miles S.W. of Kerang ( <i>f</i> ) ..	35
Salt Lakes .. ..	Weeah, 46 miles N.W. of Lake Albacutya ( <i>s</i> ) ..	4,480
Salt .. ..	Grenville, 9 miles N.E. of Colac ( <i>s</i> ) ..	870
" .. ..	Ripon, 6 miles N.E. of Streatham ( <i>s</i> ) ..	500
" .. ..	Ripon, 9 miles S. of Beaufort ( <i>s</i> ) ..	180
" .. ..	Lowan, 12 miles N.W. of Mostyn ( <i>s</i> ) ..	500
" .. ..	Lowan, 5 miles N.W. of Natimuk ( <i>s</i> ) ..	600
" .. ..	Tatchera, 13 miles N.W. of Kerang ( <i>s</i> ) ..	700
" .. ..	Tatchera, 8 miles W. of Kerang ( <i>s</i> ) ..	100
" .. ..	Tatchera, 13 miles W. of Kerang ( <i>s</i> ) ..	160
Sand Hill .. ..	Karkarooc ( <i>f</i> ) ..	30
Sea Lake .. ..	Tatchera, 10 miles S.W. of Kerang ( <i>f</i> ) ..	128
Spectacle (Great) .. ..	Tatchera, 10 miles S.W. of Kerang ( <i>f</i> ) ..	43
" (Little) .. ..	Lowan, 4 miles W. of Mount Arapiles ( <i>f</i> ) ..	230
St. Mary's .. ..	Mornington, in Phillip Island ( <i>f</i> ) ..	60
Swan .. ..	Croajingolong, 8 miles E. of Cape Conran ( <i>tidal</i> ) ..	2,300
Sydenham .. ..	Croajingolong, 8 miles W. of Cape Everard ( <i>tidal</i> ) ..	1,150
Tamboon .. ..	Hampden, W. of Lake Corangamite ( <i>s</i> ) ..	50
Tatutong .. ..		

## LAKES—continued.

(Those lakes which contain fresh water are distinguished by the letter *f*, and those which consist of salt or brackish water are indicated by the letters *s* and *b* respectively.)

Name of Lake.	Position.	Approximate Area.
		Acres.
Tcham .. ..	Tatchera, near Birchip ( <i>f</i> ) .. ..	260
Terang .. ..	Hampden, 12 miles W. of Camperdown ( <i>f</i> ) ..	300
Terang Pom ..	Hampden, 11 miles N.E. of Camperdown ( <i>s</i> ) ..	500
Timboon .. ..	(See Colongulac.)	
Tobacco .. ..	Tatchera, 10 miles S.W. of Kerang ( <i>f</i> ) ..	25
Tooliorook ..	Hampden, 4 miles S.E. of Lismore ( <i>b</i> ) ..	850
Tower Hill ..	Villiers, 7 miles N.E. of Belfast ( <i>f</i> ) ..	850
Turang-moroke ..	Ripon, 9 miles E. of Wickliffe ( <i>s</i> ) ..	250
Tyers .. ..	Tambo, 22 miles west of mouth of Snowy River ( <i>tidal</i> )	3,950
Tyrrell .. ..	Karkarooc, fed by overflow of Avoca River ( <i>s</i> )	42,600
Upper Coliban Reservoir	Talbot and Dalhousie ( <i>f</i> ) .. ..	574
Victoria .. ..	Tanjil, 21 miles E. of Sale ( <i>tidal</i> ) .. ..	28,500
Walwalla .. ..	Millewa, 13 miles S.E. of intersection of South Australian boundary line by Murray River ( <i>f</i> )	600
Wallace .. ..	Lowan, at Edenhope ( <i>f</i> ) .. ..	450
Wangoom .. ..	Villiers, 6 miles N.E. of Warrnambool ( <i>f</i> ) ..	200
Waranga Basin ..	Rodney ( <i>f</i> ) .. ..	11,009
Wartook Reservoir	Borong ( <i>f</i> ) .. ..	2,556
Wau Wauka .. ..	Croajingolong, near Cape Howe ( <i>f</i> ) ..	600
Weerancanuck ..	Hampden, 7 miles N.E. of Camperdown ( <i>s</i> ) ..	1,280
Weering .. ..	Grenville, 17 miles N. of Colac ( <i>s</i> ) ..	921
Wellington .. ..	Tanjil, 8 miles E. of Sale ( <i>f</i> ) .. ..	34,500
Wendouree .. ..	Grenville, at Ballarat ( <i>f</i> ) .. ..	500
White .. ..	Lowan, 8 miles N.W. of Mostyn ( <i>s</i> ) ..	1,400
Wirraan .. ..	Hampden, 9 miles N. of Camperdown ( <i>s</i> ) ..	60
Wooronook .. ..	Kara Kara, 10 miles W. of Charlton ( <i>f</i> ) ..	250
Wurdee Bolue ..	Grant, 5 miles S.E. of Winchelsea ( <i>f</i> ) ..	440
Yallakar .. ..	Lowan, 7 miles N.E. of Edenhope ( <i>f</i> ) ..	870
Yambuk .. ..	Villiers, 10 miles W. of Belfast ( <i>tidal</i> ) ..	200
Yando .. ..	Tatchera, 22 miles S.W. of Kerang ( <i>f</i> ) ..	200
Yan Yean .. ..	Evelyn, reservoir for supply of metropolis, 22 miles N.E. of Melbourne ( <i>an artificial lake</i> ) ( <i>f</i> )	1,360
Yeeangmaria ..	Ripon, 10 miles E. of Wickliffe ( <i>s</i> ) ..	75
Yellwell .. ..	Karkarooc, 44 miles N.W. of Lake Tyrrell ( <i>f</i> )	200
Yerang .. ..	Karkarooc, 44 miles N.W. of Lake Tyrrell ( <i>f</i> )	160

## THE FLORA OF VICTORIA.

In the last issue of the *Year-Book* will be found an interesting and instructive article upon the flora of Victoria, from the pen of Gustav Weindorfer, Esq. (late Chancellor Austro-Hungarian Consulate, Melbourne). That gentleman divides the flora into three main divisions, and describes each in detail in his article.

## PRINCIPAL EVENTS.

Principal  
events.

The following are the dates of some of the principal events connected with the history of Victoria since the establishment of the Commonwealth on 1st January, 1901. For principal events prior to that year the reader is referred to previous issues of this work :—

1901. January 1st—Proclamation and inauguration of the Commonwealth at Sydney, and swearing in of the Rt. Hon. E. Barton, first Prime Minister, and other members of the Ministry. State departments of Customs and Excise transferred, whilst those of the Post and Telegraph and Defence followed on 1st March.
- „ January 22nd—Death of Queen Victoria. Accession of King Edward VII. His Majesty's Coronation took place on 9th August, 1902.
- „ March 31st—Eleventh census of Victoria, and third simultaneous census of Australia and New Zealand.
- „ May 9th—Opening of the first Parliament of the Commonwealth of Australia, in Melbourne, by His Royal Highness the Duke of Cornwall and York, Heir-Apparent to the Throne, under commission from His Majesty King Edward VII.
- „ October 8th—Inter-State free-trade established by the introduction of a provisional tariff by resolution of the Commonwealth House of Representatives.
1902. September 16th—The Commonwealth Tariff finally passed.
1903. April 15th-22nd—Conference of Premiers, held at Sydney. Temporary settlement, pending appointment of the Inter-State Commission, of the rival claims to the waters of the River Murray. The question of taking over of States' debts by the Commonwealth and several other matters were also considered.
- „ October 6th—Inauguration of the Federal High Court, and the swearing-in of Sir Samuel Griffith, late Chief Justice of Queensland, as Chief Justice, and of the Right Hon. Sir Edmund Barton, K.C., late Prime Minister of the Commonwealth, and the Hon. R. E. O'Connor, K.C., as judges.
- „ December 16th—Commonwealth elections. Female franchise exercised for the first time in Victoria.
1904. February 1st—The British Government decided on important changes in the British Army, including the establishment of an Army Council, on the lines of the Board of Admiralty.
- „ February 5th-12th—Conference of States and Federal Treasurers at Melbourne to consider the question of the taking over by the Commonwealth of the States' debts.
- „ March 17th—Death of H.R.H. the Duke of Cambridge. The deceased peer was a grandson of King George III., and first cousin of the late Queen Victoria.
- „ April 8th—Signing of Convention adjusting foreign and colonial questions at issue between Great Britain and France.
- „ August 9th—House of Representatives chose Dalgety as site for Federal Capital.
- „ August 10th—Senate agreed to Dalgety site.

1904. December 12th—Appointment of Tariff Commission, in Federal House of Representatives, to inquire into the effect of the operation of Customs Tariff of the Commonwealth of Australia upon Australian industries, and into the working of the Tariff generally.
1905. February 1st—Beginning of the poundage system in English mail contracts.
- „ February 6th—Conference of Premiers and other Ministers (State and Commonwealth) at Hobart opened.
- „ February 15th—Tariff Commission opened at Melbourne.
- „ February 15th—Opening of the Continuation School, Melbourne. The purpose is to give an advanced education to those who wish to qualify as teachers. Details are furnished in part "Social Condition" of this work.
- „ April 25th—Royal Letters Patent for the Constitution of the Transvaal colony issued. There is to be a Legislative Assembly, to be re-elected every four years, the franchise being extended to every burgher of the late Boer Republic who was entitled to vote for its first Volksraad; and all white Britishers earning £100 per annum, or occupying a house with a rental of £10 per annum. Power of initiating taxation bills is withheld from the chamber. Members are to receive £2 per day during the session, but not more than £200 per annum. The House comprises the Lieutenant-Governor of the Transvaal, between six and nine official members, and between thirty and thirty-five elected members. The debates will be conducted in English, but, with the President's consent, the Dutch language may be used by members. The Orange River Colony has not yet been given a new Constitution.
- „ May 16th.—Agreement signed between the Butter Export Committee and the White Star, Lund, and Aberdeen lines of steamers, for the carriage of butter. The freight reduction effected by the contract is 50 per cent. on former rates, and the temperature of the butter in transit is not to exceed 20 deg.
- „ May 24th—Empire Day—first observation in Melbourne.
- „ August 12th—Treaty signed between Great Britain and Japan, renewing, for ten years, the old treaty, and adding thereto.
- „ August 29th—Peace arranged between Japan and Russia.
- „ September 26th—Text of the English-Japanese treaty made public. The preamble states that the Governments have agreed upon articles having for their object:—First, the consolidation, maintenance, and general peace of the regions of Eastern Asia and India; second, the preservation of the common interests of all the powers in China, by ensuring the independence and integrity of the Chinese Empire, and the principle of equal opportunities in commerce and industry to all nations in China; third, the maintenance of the territorial rights of the high contracting parties, and the defence of their special interests, in the said regions.
- „ October 30th—Annexation under an Order-in-Council, of Town of North Melbourne and Borough of Flemington and Kensington, with City of Melbourne.

1905. December 5th—Balfour Ministry (Imperial) having resigned, Sir Henry Campbell-Bannerman undertook to form a Cabinet. Five days later the new Ministry was submitted to the King, and on 11th December the seals of office were transferred.
1906. January 1st—Importation of opium into Australia prohibited (other than for medical purposes).
- „ January 16th—Second annual conference of the Federal Council of the Chambers of Manufactures of the Commonwealth commenced.
- „ January 27th—Opening of the A.N.A. Exhibition of Australian Manufactures.
- „ January 29th—Death of King Christian IX. of Denmark, father of the reigning Queen of England.
- „ February 9th—Government loan of £1,600,000, for the purpose of redeeming in part a loan falling due in London, floated with decided success in Melbourne.
- „ February 19th—Opening of the Imperial Parliament by His Majesty the King.
- „ February 22nd—Loss of the sailing vessel *Speke*, wrecked on Phillip Island.
- „ February 23rd—Tobacco Commission's report (a majority report) to Prime Minister. Nationalization of the tobacco industry favoured.
- „ March 14th—Death of Mr. G. S. Coppin, veteran actor, at the age of 86 years.
- „ March 18th—Death of Mr. Geo. Lansell, pioneer quartz miner of Bendigo, at the age of 83 years.
- „ March 19th—Mr. L. F. B. Cussen appointed to the Supreme Court Bench.
- „ April 5th—Conference of Premiers and other Ministers opened at Sydney. The principal subjects discussed were the taking over by the Commonwealth of State debts, the liability for transferred properties, and the disputed territory between Victoria and South Australia.
- „ April 23rd—Melbourne University jubilee celebrations commenced.
- „ April 24th—Conference of Federal and State electoral officers opened in Melbourne.
- „ April 29th—Census of New Zealand taken.
- „ June 10th—Death of the Right Hon. R. J. Seddon, Prime Minister of New Zealand.
- „ July 12th—Wireless telegraphy installed—Queenscliff (Victoria) to Devonport (Tasmania).
- „ August 15th—Mr. J. Murray resigned portfolio as Minister of Lands.
- „ August 15th—Conference of Federal and State public works officers with reference to transferred properties.
- „ August 17th—Mr. J. E. Mackey sworn in as Minister of Lands.
- „ September 1st—Papua Act came into operation by proclamation of the Governor-General.
- „ October 8th—Commonwealth free-trade instituted, by disappearance of the Western Australian special Tariff.
- „ October 8th—Inter-State Conference of Premiers opened at Melbourne. The subjects considered were the transfer of the State debts and the future of the Braddon clause. Further particulars will be found in part "Finance" of this Work.

1906. October 12th—Hon. I. A. Isaacs, K.C., Attorney-General, and Hon. H. B. Higgins, K.C., appointed to the High Court Bench. In the consequent re-arrangement of Ministerial portfolios, upon the appointment of Mr. Isaacs, Hon. L. E. Groom became Attorney-General, Hon. T. T. Ewing, Minister of Home Affairs, Senator Keating, Vice-President of the Executive Council, and the Hon. S. Mauger joined the Cabinet as Honorary Minister.
- „ October 12th—Prorogation of the Federal Parliament.
- „ November 1st—Strike in the building trade in Melbourne. About 1,000 men directly affected. The demand of the strikers was that 44 hours, instead of 48 hours, constitute a week's work at the current rate of wages. After being on strike for ten weeks, both sides agreed that the dispute should be submitted to Judge Cussen for arbitration, and he decided that the men should continue to work 48 hours per week, but receive an increase of wages.
- „ November 21st—Celebration of the first 50 years of Responsible Government in Victoria.
- „ November 30th—Conference of the Statists of the Australian States and New Zealand (with Mr. G. H. Knibbs, Commonwealth Statistician, president), convened for the purpose of securing uniformity in the compilation of statistical information, and of preventing overlapping between the Commonwealth and States.
- „ December 2nd—Judgment delivered by the Privy Council in *Webb v. Outtrim*, affirming the liability of members of the Commonwealth Public Service to pay State income tax.
- „ December 12th—Elections for the third Commonwealth Parliament held
- „ December 12th—New constitution of the Transvaal Colony proclaimed.
- „ December 28th—Prorogation of the State Parliament.

## CONSTITUTION AND GOVERNMENT.

Separation  
from New  
South  
Wales.

Prior to the first day of July, 1851, the district known as Port Phillip formed part of the Colony of New South Wales. This district was, under the provisions of an Imperial Act of 5th August, 1850, entitled "An Act for the Better Government of Her Majesty's Australian Colonies," separated from New South Wales, and constituted into a self-governing colony under the name of Victoria, its territories being defined as those "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 source of the River Murray, and thence by the course of that river to the eastern boundary of the Colony of South Australia."

Pursuant to the provisions of the Imperial Act the Governor and Legislative Council of New South Wales passed the Victorian Electoral Act in 1851, which provided that a Legislative Council be constituted for Victoria, consisting of thirty members, ten to be nominated by the Crown, and twenty to be elected by the inhabitants of the new colony. This Act also divided Victoria into sixteen electoral districts, as follow :

1. Northern Division of Bourke County.
2. Southern Bourke County, Evelyn, and Mornington.
3. County of Grant.
4. Counties of Normanby, Dundas, and Follett.
5. Counties of Villiers and Heytesbury.
6. Counties of Ripon, Hampden, Grenville, and Polwarth.
7. Counties of Talbot, Dalhousie, and Anglesey.
8. Pastoral District of Gippsland.
9. Pastoral District of Murray, except that part included in Anglesey.
10. Pastoral District of the Loddon, formerly Western Port, except parts included in Dalhousie, Bourke, Anglesey, Evelyn, Mornington, and Talbot.
11. Pastoral District of the Wimmera.
12. City of Melbourne.
13. Town of Geelong.
14. Town of Portland.
15. United towns of Belfast and Warrnambool.
16. United towns of Kilmore, Kyneton, and Seymour.

Amongst these constituencies, the twenty members were distributed thus:—Melbourne, three members; Northern Bourke and Geelong, two each; and each other electorate, one member; the areas comprised within the towns having separate representation being excluded from the county franchise.

On 1st July, 1851, the Governor-General of the Australian possessions issued writs for the election of members to the newly constituted Victorian Council, and proclaimed the District of Port Phillip to be separated from New South Wales, and to have been erected into a separate colony, designated the Colony of Victoria, of which



Mr. C. J. Latrobe, the superintendent, was raised to the Governorship. The qualifications for electors were: (1) ownership of a freehold of the clear value of £100; (2) householding resident occupation of dwelling-house value £10 per annum; (3) holding of a pasturing licence; (4) ownership of a leasehold estate in possession, with three years to run, of the value of £10 per annum.

In December, 1852, the Secretary of State for the Colonies invited the Legislative Council of Victoria to take steps to pass a Bill more nearly assimilating the form of the colony's institutions to that prevailing in the mother country, particularly in reference to the creation of a second Chamber. This invitation was acted upon without delay, and on 24th March, 1854, a Bill was passed to establish a Constitution for Victoria. This Bill received the Royal assent on 16th July, 1855, and the new Act, denominated The Constitution Act, became law when proclaimed in the *Government Gazette* of 23rd November, 1855.

Steps leading up to responsible government.

### THE CONSTITUTION OF 1855.

When the change to responsible government was made, the bicameral and cabinet systems were introduced. In the new Parliament, which met on 21st November, 1856, the members of the Legislative Council numbered 30, who were elected for ten years, and represented six provinces. This House was not to be dissolved, but five of its members were to retire every two years. The Legislative Assembly consisted of 60 members, representing 37 districts, liable to dissolution at the end of five years, or earlier, at the discretion of the Governor.

Responsible government.

Certain officers of the Government, four at least of whom were to have seats in Parliament, were to be deemed "Responsible Ministers," and any member of either House accepting a place of profit under the Crown was required to vacate his seat, but was capable of being re-elected.

The qualifications for members of the Council were, having attained the age of 30 years, being natural-born subjects of Her Majesty, and possessing freehold estate in the colony to the value of £5,000, or £500 annual value; for members of the Assembly, having attained the age of 21 years, being natural-born, or naturalized for five years, having resided in Victoria for two years previous to the election, and possessing freehold estate in the colony to the value of £2,000, or £200 annual value.

Qualifications of Members.

The Council franchise was attainment of age of 21 years, being natural-born, or naturalized for three years, having resided in Victoria for one year, and possessing freehold estate in the electoral province valued at £1,000, or £100 annual value, or a leasehold of five years' duration in the province of £100 annual value, residing in province, or being a graduate of any university in the British dominions, or a barrister or solicitor on the roll, or a medical practitioner, or an officiating minister, or an officer or retired officer of Her Majesty's land or sea forces.

Council franchise.

Assembly  
franchise.

The Assembly franchise was attainment of the age of 21 years, being natural-born or naturalized, having resided in Victoria for one year, and possessing freehold estate in the electoral district valued at £50, or £5 annual value, or leasehold in the district of £10 annual value, or being a householder occupying premises of £10 annual value, or having permissive occupancy of Crown lands for which payment was made to the Crown, or receiving salary of £100 per annum.

Vote by  
ballot.

Immediately preceding the inauguration of the Constitution of 1855, it was provided that electors recording their votes should do so by secret ballot. Victoria is thus the first country where, in modern times, elections were carried out on this principle. All Parliamentary and other public and quasi-public elections are now conducted by ballot.

### CHANGES IN THE CONSTITUTION.

The first alteration made by the Victorian Parliament in the Constitution was the abolition of the property qualification of members of the Legislative Assembly on 27th August, 1857, and the establishment of universal manhood suffrage on 24th November of the same year. On 17th December, 1858, the number of members of the Legislative Assembly was increased to 78, to be returned for 49 electoral districts. It was not until over ten years later, viz., on the 1st January, 1869, that another change was made, when the property qualification of members of the Legislative Council was reduced from £5,000 capital value or £500 annual value to half those amounts respectively, and that of electors from £1,000 capital value or £100 annual value to an annual value of £50, if the lands were rated to that amount in some municipal district or districts. On 2nd November, 1876, the number of members of the Legislative Assembly was increased to 86, and the districts to 55. The property qualification of members and electors of the Legislative Council was further reduced, on the 28th November, 1881, to a freehold of the annual rateable value of £100, free of all incumbrances, in the case of a member, and to freehold of the annual rateable value of £10, or a leasehold originally created for not less than five years, or occupying tenancy of the rateable annual value of £25, in the case of an elector. By the same Act the number of members of the Council was increased from 30 to 42, the number of provinces from six to fourteen, whilst the tenure was reduced to six years. The final increase in the number of members was made on the 22nd December, 1888, when the number for the Council was increased to 48, and that for the Assembly to 95 for 84 districts.

Plural  
voting  
abolished.

On the 30th August, 1899, plural voting was abolished, it being provided that no person should on any one day vote in more than one electoral district at an election for the Assembly. Plural voting is still, however, permissible in elections for the Upper House, but owing to the large area of the provinces, it is improbable that the right is exercised to any extent.

To facilitate the exercise of the franchise in sparsely populated districts, the *Voting by Post Act* 1900 was passed on the 17th October, 1900. This measure enables any elector, who is resident, or is likely to be staying, on the polling day, more than five miles from the nearest polling booth, or who is prevented by reason of sickness or infirmity from voting personally, to obtain a ballot paper entitling him to vote by post for any candidate in his district standing for either House of Parliament. This Act came into force on 1st December, 1900, and was to continue in force for three years, and thence until the end of the next ensuing session of Parliament. Subsequent Acts continued the measure to 31st December, 1907. Voting by post is also provided for in the Commonwealth Electoral Act. The first experience of the working of this Act was at the Commonwealth Elections held in March, 1901, at which 1,269 postal ballot papers were used in eighteen out of the nineteen contested districts for the House of Representatives, being about 1 per cent. of the total votes recorded. The number of electors who voted by post for the Senate throughout the whole State was 1,227, or one in every 144 who voted. At the last Commonwealth Elections, held in December, 1906, 6,643 postal ballot papers were used for the Senate Election in Victoria, and 6,725 for the House of Representatives, or about 1½ per cent. of the votes recorded.

Voting by  
post at  
elections.

In cases where a person is entitled to become an elector and his name does not appear on the Ratepayers' or General Roll, such person could, by an Act passed in 1898, take out a Right at any time before the day of election, after giving seven days' notice, and apply to a Court of Petty Sessions for a Certificate enabling him to vote. The "Reform Act of 1903" has now, however, restricted the issue of these certificates. No certificate shall now be granted between the day of dissolution and the day of polling in the case of a Parliament dissolved before its expiry by effluxion of time; nor between 30 days before the time at which the Assembly would expire by effluxion of time, if not sooner dissolved, and the day of polling; nor between the day on which any member's seat becomes vacant and the day of polling.

Voters'  
certificates.

The first difficulty in the working of the Constitution of 1855 occurred in 1865, when the Government of Mr. McCulloch was anxious to pass a protective Tariff. It was certain that a majority of the Council would resist such a Tariff, that body having (unlike the House of Lords in the Imperial Parliament) power to reject Money Bills. The Assembly, fearing such a course, passed the Tariff, and tacked it to the Appropriation Bill. The Council laid aside the double Bill, and Parliament was prorogued without having passed supply. The Ministry, having no money, applied to the Governor, Sir Charles Darling, who sanctioned a levy of the new duties as passed by the Assembly, and performed the necessary executive acts to enable Ministers to negotiate loans with a bank to provide for necessities, sanctioning also the expending of money in payment of salaries. The Governor then communicated these facts to the Secretary of State for the Colonies, Mr. Cardwell, who replied that his acts had been illegal. Meantime Parliament had been dissolved,

Constitutional  
difficulties  
experienced.

and the electors returned a large majority in favour of the Government's protective Tariff. Great indignation was manifested on account of Mr. Cardwell's missive, and the Cabinet resigned on the ostensible ground that the opposition of the Council made it impossible to carry on the Government. Attempts to form a new Ministry were unsuccessful. The old Cabinet resumed office, and the difficulty was finally met by a separation of the two Bills. Sir Charles Darling was recalled in 1866.

In consideration of the late Governor's services, the Assembly in 1867 voted £20,000 to Lady Darling, and fearing the rejection of the grant by the Council, again included the amount in the Appropriation Bill. On the Council's rejection of this Bill, the Ministry suggested a short prorogation to enable negotiations to be carried on. The new Governor, Sir J. H. T. Manners-Sutton, proposed the resignation of Ministers, that he might communicate with the leaders of the other side. He found that none of these would give him such an assurance of ability to remove the deadlock which had occurred as would justify him in asking them to become Ministers.

The Government therefore returned to office, and the Governor granted a short prorogation. When the Parliament re-assembled, the Governor dissolved it at the request of Ministers, and in 1868 the new Parliament met with a strong Ministerial following—the issue before the electors having been the independence, in matters of finance, of the Legislative Assembly. Before the meeting of Parliament, a despatch was received from Mr. Cardwell, revealing the view of the Colonial Office as to relations between the Houses and the Governor and the Home authorities, disapproving of the Darling grant being tacked to the Appropriation Bill, as tending to prevent discussion in the Council, and advising the Governor not to approve of such a grant without an assurance that the Ministry would give the Council full opportunity of discussion. Ministers complained that Imperial interference endangered responsible government. The Governor, holding himself responsible to the Home Government, regarded his instructions, and insisted on the grant being separated from the Appropriation Bill. The Ministry resigned, and Mr. Sladen accepted office, only to be almost immediately defeated. The former Ministry returned, and the difficulty was overcome by Sir Charles Darling refusing the grant.

Again, in 1877, the Houses were in conflict. The first part of the proceedings was like the preceding cases. Payment of members had been adopted by two temporary Acts, the latter of which was about to expire, and the Government of Mr Graham Berry included the grant (£18,000) in the Appropriation Bill, thus purposing to provide the money as an ordinary form of expenditure. The Council laid the Bill aside, and the Government proceeded to raise supplies for their service by collecting the duties voted by the Assembly in the Appropriation Bill. A decision of the Law Courts was against the Government, who were therefore unable to enforce their demands. Reductions and dismissals in the Civil Service were made. A crisis ensued, and both Houses addressed the Crown. In March, 1878, the disputed item was withdrawn from the Appropriation Bill, and the Council

accepted a separate Payment of Members Bill. The question of the removed civil servants remained. Ministers said that the Service was overmanned, and only a sufficient number would be reinstated, and the rest pensioned or compensated.

The position in regard to these constitutional difficulties has now been met by Section 30 of *The Constitution Act* 1903.

On 14th August, 1885, a very important Act was passed, constituting the Federal Council of Australasia. The first session of the Council took place at Hobart on 25th January, 1886. Seven additional sessions were held, the last at Melbourne on 24th January, 1899. The Acts passed by the Council had force only in those States which were specially legislated for, until repealed by the Federal Council. The labours of this body led up to and culminated in the establishment of the Commonwealth of Australia.

Steps leading up to Federation.

Victoria is now one of the six States forming the Commonwealth of Australia; and is still, except as regards matters dealt with by the Federal Parliament, a self-governing colony under the British Crown, empowered generally "to make laws in and for Victoria in all cases whatsoever." The powers of the Victorian Parliament have been considerably curtailed by the federation of the Australian Colonies, and the transfer of various functions to the Commonwealth Parliament. Although the matters which will ultimately be dealt with by that body will remove from the State Parliament many of its present functions, the internal development of the State still depends upon the local Parliament; the power of taxation for State purposes (other than by Customs and Excise) is retained; Crown lands, agriculture, mining, and factory legislation also remain; neither the State railways nor the public debts have yet been taken over by the Commonwealth, though their transfer has been discussed in conferences of Federal and State Ministers; and it will probably be many years before that Parliament will be able to assume all the multifarious functions assigned to it, and which must in the interim be dealt with by the States. The Victorian Parliament has delegated to municipalities, mining and land boards, fire brigade boards, the Melbourne and Metropolitan Board, water supply trusts, the Melbourne Harbor Trust, the Tramways Trust, and other bodies, power to deal with the immediate local and special necessities of their districts. This decentralization of Government functions is generally permitted and exercised in regard to the minor affairs of each particular district, whose representatives deal with the matters within their jurisdiction.

Division of Governmental functions.

## THE PRESENT CONSTITUTION.

After the establishment of the Federal Government it became abundantly evident that the representation of the States in the States' Houses was excessive, and steps were taken to reform the States' Constitutions. Accordingly an Act was passed in Victoria "to provide for the Reform of the Constitution," and reserved for the Royal assent on the 7th April, 1903. After an interval of some months the Royal assent was proclaimed on the 26th November, 1903. This

Reform Act 1903.

Act, entitled *The Constitution Act 1903*, provides for a reduction in the number of responsible Ministers from ten to eight, and their salaries from £10,400 to £8,400; in the number of members of the Legislative Council from 48 to 35, including one special representative for the State railways and public servants; but an increase in the number of electoral provinces from fourteen to seventeen, each being now represented by two members elected for six years—one retiring every three years by rotation, except at a general election, when one-half of the members are to be elected for only three years. The property qualification of members of the Council was reduced from £100 to £50 as the annual value of the freehold, and that of electors qualifying as lessees or occupying tenants from an annual value of £25 to one of £15. A reduction was also made in the number of members of the Legislative Assembly from 95 to 68—including two to be specially elected by the railway officers, and one by the State public servants, and in that of the electoral districts from 84 to 65. The Constitution was again amended in 1906 by the repeal of the provisions in the Act of 1903 relating to the separate representation of railway officers and State public servants. The Assembly now consists of 65 members, and the Council 34.

Both Houses were prorogued on 24th December, 1903, being several weeks after the Royal assent to the Act had been proclaimed, Acts having been passed determining the boundaries of the new constituencies. Power is given to any Minister who is a member of the Assembly to sit in the Council—or *vice versa*—in order to explain the provisions of any measure connected with any department administered by him. The Council is empowered to suggest alterations in any Appropriation Bill once at each of three stages of the Bill, viz.—(a) when in Committee, (b) on the Report of the Committee, (c) on the third reading. The remedy provided to meet disagreements between the two Houses is the simultaneous dissolution of both after a Bill has been twice submitted to, and rejected by, the Council—viz., once before, and once after, a dissolution of the Assembly in consequence of such first rejection.

The  
Governor.

The Governor acts under the authority of Letters Patent under the Great Seal of the United Kingdom, and according to Royal instructions issued by the Colonial Office. He is the official head of the Legislature, and assents in the name of the Crown to all Acts passed by the Parliament, reserving for the Royal assent certain Bills already described. The only matters in which the exercise of any discretion is required on the part of the Governor are the assenting to or dissenting from, or reserving, of Bills passed by the Parliament; the granting or withholding of a dissolution of Parliament when requested by a Premier; or the appointment of a new Ministry.

Forming  
a new  
Ministry.

When a Ministry is defeated in Parliament or at the polls, its members tender their resignations to the Governor, whose duty it is to announce his intention of accepting them. The outgoing Premier generally suggests to the Governor, as his successor, the name of the most prominent of his opponents, generally the leader of the Opposition. Thereupon the Governor "sends for" the in-

dividual suggested, who, if he feels in a position to carry on the Government, endeavours to form a Ministry. If he fails, he informs the Governor of the fact and some one else is applied to. The distribution of portfolios is first arranged by the proposed Ministers themselves, and submitted to the Governor for approval, who always adopts it, unless the list should contain the name of any one against whom very serious objections exist, or propose a new and revolutionary arrangement.

When a Ministry finds that it is unable to carry on the affairs of the country in the manner it deems essential for the well-being of the community, or when it is defeated on a measure which it considers vital, or when it has not a proper working majority, the Premier may, instead of advising the Governor to "send for" some one else, ask for a dissolution; and the principle which decides a Governor in granting or refusing such a request is the probability of success for the Ministry in the event of its being granted. In regard to these matters, however, the instructions issued to the Governor are elaborate and definite; and it is very rarely that any personal exercise of discretion is necessary. In other matters the Governor acts on the advice of the Executive Council.

Granting a dissolution.

The Executive Council consists of two classes of members, viz.:—(a) Members forming the Ministry of the day, whether salaried or honorary; (b) all ex-Ministers who have not actually resigned or vacated their seats. These Executive Councillors take no active part, as such, in the deliberations of the Ministry, the title being merely an honorary distinction. The expression "Governor in Council," occurring so frequently in Victorian Acts, means the Governor by and with the advice of such members of the Executive Council as are included in the former category mentioned above. Even in its active phase, that of the existing Ministry, the Executive Council has two shapes, the formal and the informal. The latter, which is spoken of as the "Cabinet," is the real core and essence of the Government. In its private meetings at the Premier's office no one is admitted but the actual Ministry of the day, no records of the meetings transpire, and no official notice is ever taken of the proceedings. The former is presided over by the Governor, and attended by the Clerk of the Council, who keeps a formal record of its proceedings and deliberations, which are frequently published, with the names of its members prefixed. Here the decisions of the Cabinet are put into official form.

The Executive Council.

The number of salaried Ministers is now limited to eight, and the salaries to £8,400; and four at least must be members of the Council or Assembly, but not more than two shall be members of the Council nor more than six of the Assembly. Upon accepting salaried office a Minister vacates his seat in Parliament, but he is re-eligible, and a subsequent change from one office to another does not necessitate his re-election. Although only four Ministers are required to be members of either House, in practice all members of a Ministry are always members. The head of the Ministry—the Premier, a merely titular distinction—almost invariably fills the

Responsible Ministers.

office of Treasurer as well, and may occupy any office. The present Premier, the Hon. Thomas Bent, is also Treasurer and Minister of Railways.

The Parlia-  
ment.

The Parliament consists of two Chambers, the Legislative Council and the Legislative Assembly. The general power of legislation is conferred upon "His Majesty, by and with the advice and consent of the said Council and Assembly." By Section 56 of The Constitution Act it was provided that—"All Bills for appropriating any part of the revenue of Victoria, and for imposing any duty, rate, tax, rent, return, or impost shall originate in the Assembly, and may be rejected, but not altered by the Council." There was great difference of opinion as to the interpretation of this section, it being held by many that the words "all Bills for appropriating" (revenue) "and for imposing" (taxes) signified Bills having for their principal object the authorizing of payments or the granting of supply; whilst others contended that legislation which merely incidentally or consequentially authorizes the collection of money or the payment of officials may be dealt with as ordinary legislation by the Council. This matter has now been dealt with by Section 30 of the Reform Act of 1903, which declares that a Bill shall not be deemed for appropriating, &c., or for imposing, &c., 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 licences or fees for services under such Bill." In regard to the latter portion of Section 56, providing that Money Bills must originate in the Assembly, and may be rejected but not altered by the Council, the new Act provides, as in the Commonwealth Constitution, that the Council may suggest alterations as mentioned previously.

It is also provided by Section 57 of The Constitution that Appropriation Bills must have been first recommended by a message of the Governor to the Assembly before they can be introduced. The Governor, of course, acts in this matter on the advice of the Ministry.

The Legis-  
lative  
Council.

The Council — called the Upper House — now consists of 34 members. The State is now divided into seventeen electoral provinces, each returning two members. The member in each constituency at the first election who, of the two elected, receives the highest number of votes retains his seat for six years, whilst the other member retains his seat for three years only, subject, of course, to the dissolution of both Houses in case of a deadlock, as previously described. One-half of the members thus retire every three years. To be qualified for membership, a candidate must be a male of the age of 30 years, either a natural-born subject or naturalized and resident in Victoria for ten years, and must have been beneficially entitled to a freehold estate in Victoria of the clear annual value of £50 for one year "previously to" his election. The following male persons aged 21 or over, if they are natural-born subjects or naturalized for three years and resident in Victoria for twelve months, are entitled to vote for the Council in that electoral division



on the rolls of which their names appear:—The owner of a freehold rated at an annual value of £10; the owner of a leasehold, created originally for five years, or the occupying tenant of land rated at £15 annual value; graduates of a British University, matriculated students of the University of Melbourne, barristers and solicitors, legally-qualified medical practitioners, duly appointed ministers of religion, certificated schoolmasters, naval and military officers, active and retired. All voters, except those claiming in respect of property, must take out electors' rights in the division in which they reside.

The Assembly, commonly called the Popular or Lower House, now consists of 65 members. For the whole of the seats single electorates are now provided. Each Assembly expires by effluxion of time at the end of three years from its first meeting, and may be sooner dissolved by the Governor. To be qualified for election to the Assembly, a candidate must be a natural-born subject or a person who has been naturalized for five years and resident in Victoria for two years. The following persons are ineligible:—Judges, ministers of religion, Government contractors, uncertificated insolvents, holders of offices of profit under the Crown (except Ministers), and persons who have been attainted of treason, or convicted of felony or infamous offence in the British dominions. Moreover, a member vacates his seat if he resigns; is absent for a whole session without permission of the House; takes any oath or declaration of allegiance or adherence to a foreign power, or becomes a subject of a foreign State; becomes bankrupt, insolvent, or a public defaulter; is attainted of treason, or convicted of felony, &c.; becomes *non compos mentis*; or enters into a Government contract. Universal manhood suffrage is in force for the Assembly, all males over the age of 21 years, natural-born or naturalized, untainted by crime, being allowed a vote if they hold an elector's right, and their names are on a general roll, and are resident in the State twelve months and in the district one month. If a person is on a ratepayers' roll it is unnecessary to take out an elector's right or to reside in the district, although the occupying tenant is entitled to be entered as the ratepayer in priority to the owner, and is in most cases so entered. Where a tenant finds that his landlord has paid the rates in his own name, and is consequently entered as the ratepayer in respect of the premises occupied by the tenant, an elector's right must be taken out. Even where the tenant is entered on the ratepayers' roll in respect of the premises occupied by him, and the property is of the capital value of £50 or the annual value of £5, the owner may take out an elector's right in respect thereof. There are, consequently, a large number of persons on the rolls for several districts who were formerly entitled to vote in all of such districts; but, in August, 1899, plural voting was abolished in respect of the Assembly, and now a vote is allowed in only one constituency, although the elector may, if on the roll for more than one district, choose which district he shall vote in. A member of the Assembly receives reimbursement of his expenses in

The Legis-  
lative  
Assembly.

relation to his attendance at the rate of £300 per annum. The Assembly is presided over by a Speaker, who is elected at the first meeting after every general election, and vacates his seat by expiry or dissolution of the House, and by death, resignation, or a removing vote of the House. When the Assembly resolves itself into a Committee of the whole House to consider the details of any measure, it is presided over by a Chairman of Committees. The Assembly cannot proceed to business unless twenty members, exclusive of the Speaker, are present; and the Speaker has a casting but no substantive vote.

Limitation  
of election  
expenses.

By an Act (No. 1891) passed on the 24th December, 1903, it is provided that the electoral expenses (other than personal expenses of a candidate in travelling and attending election meetings) of a candidate for the Legislative Council and Assembly shall not exceed £400 and £150 respectively. A limitation is also placed upon the matters in respect of which such sums may be expended. No electoral expenses shall be incurred by or on behalf of a candidate except in respect of:—(1) The expenses of printing, advertising, publishing, issuing, and distributing addresses and notices, and purchase of rolls. (2) The expenses of stationery, messages, postage, and telegrams. (3) The expenses of holding public meetings, and hiring halls for that purpose. (4) The expenses of committee rooms. (5) One scrutineer at each polling booth, and no more. (6) One agent for any electoral province or district.

## JUBILEE OF RESPONSIBLE GOVERNMENT IN VICTORIA.

On the 21st November, 1906, fifty years had passed since the first Parliament of Victoria under Responsible Government met, at 12 o'clock noon, "in the Parliament Houses on the Eastern Hill, in the City of Melbourne," pursuant to proclamation by His Excellency Major-General Edward Macarthur, the officer administering the government, and the jubilee of the event was celebrated by the presentation to Parliament of a paper prepared by Mr. Thos. Greenlees Watson, Clerk of the Legislative Assembly. The paper from which the following extracts have been taken contains the rolls of Parliament and some statistics of progress from 1856 to 1906.

The names of 584 gentlemen are recorded on the roll of members of the Legislative Assembly. The Hon. Thomas Bent, the present Premier, Treasurer, and Minister of Railways, holds the honour of having been elected to the Legislative Assembly before any member now in the House, having been chosen to represent Brighton on the 16th March, 1871. Amongst the ex-members, the only one elected to the first Parliament who still takes part in public affairs is the Hon. John Dennistoun Wood, now representing the electorate of Cumberland in the House of Assembly, Tasmania. Mr. Wood was first elected a member of the Legislative Assembly of Victoria in 1857, and is the oldest surviving member of the Executive Council.

There are 194 names recorded on the roll of the Legislative Council. The Hon. Nicholas FitzGerald, the present Chairman of Committees, has sat continuously as a member of that House since 1864, a period of nearly 43 years, the record for the Parliament of Victoria and probably for any Australian Parliament. The paper also contains "A Retrospect" of the principal events in Parliament during the 50 years, and the names of those who took the most prominent part therein.

The following are a few of the principal items in the statistics presented:—

POPULATION.

	Males.	Females.	Total.
1856 ...	255,827 ...	141,733 ...	397,560
1906 (30th Sept.)	613,228 ...	613,002 ...	1,226,230

NUMBER OF ELECTORS ON THE ROLLS.

	1856.	1906.
Legislative Council ...	10,775 ...	177,999
Legislative Assembly ...	60,000 ...	243,702

STATE EDUCATION.

	1856.	1906.
Number of Schools ...	455 ...	1,953
" " Scholars enrolled...	26,323 ...	229,179
Total expenditure, 1856 to 1905-6, £26,003,280.		

Of the total expenditure, £22,614,193 has been expended since the introduction of the present Education Act on the 1st January, 1873.

PRIVATE SCHOOLS.

	1856.	1905-6.
Number of Schools ...	145 ...	757
" " Scholars ...	3,545 ...	52,193

EDUCATION OF THE PEOPLE AGED 15 YEARS AND UPWARDS (exclusive of Chinese and Aborigines).

Census Year.	Number of Persons in every 100 able to read and write.
1857 ...	84.82
1901 ...	97.02

MELBOURNE UNIVERSITY.

	1856.	1905.
Students attending lectures ...	13 ...	802
Degrees conferred ...	3 ...	118

The total amount of money contributed by the Government to the University from 1853 to 1905-6 is £784,967, viz., building and apparatus, £168,467; annual endowment and other grants, £616,500.

## CRIMINAL STATISTICS.

*Arrests and Convictions.*

	1861.	1905.
Offences for which arrests were made per 1,000 of the population ... ..	47.62	21.49
Persons convicted and sentenced in superior Courts per 100,000 of the population ... ..	137.52	31.50

*Prisoners in Confinement.*

	1861.	1905.
Per 10,000 of population aged 15 years and over ...	51.58	13.17

In 1861 persons of Victorian birth comprised 26 per cent. of the population; in 1871, 45 per cent.; in 1881, 58 per cent.; in 1891, 63 per cent.; and in 1901, 73 per cent. The present Education Act came into force on 1st January, 1873.

## FINANCE.

*State Revenue and Expenditure.*

	1856.	1905-6.
	£	£
State Revenue ... ..	2,972,496	7,793,981
State Expenditure ... ..	2,668,834	7,093,453

*Loan Expenditure, 1856 to 30th June, 1906.*

	£
Railways ... ..	38,866,197
Metropolitan Water Supply ... ..	2,621,178
Country Waterworks ... ..	5,885,067
Closer Settlement ... ..	965,079
Public Works, Public Buildings, and other services ...	4,947,113
Total ... ..	<u>£53,284,634</u>

The money has been well spent, as will be seen by the following table:—

## NET BURDEN OF PUBLIC DEBT, 30TH JUNE, 1906.

	£
Loans outstanding, 30th June, 1906 ... ..	53,079,801*
Covered by—	£
Earnings of reproductive works ... ..	48,903,690
Accumulated sinking funds, &c. ... ..	938,010
	<u>49,841,700</u>
Net burden, 30th June, 1906 ... ..	3,238,101
Net burden per head of population ... ..	£2 12s. 10d.

Although the public debt at the 30th June, 1906, represented £43 5s. 9d. per head of the population, the people of Victoria had only to find the interest on £2 12s. 10d. of that amount—less than 2s. each for the year.

## SAVINGS BANKS.

	1856.	1906.
Number of depositors ... ..	3,620	466,752
Amount deposited ... ..	£245,923	£11,764,179

\* Includes £175,000 under Act 1451, borrowed in aid of revenue.

BANKS OF ISSUE.

	1856.	1906.
Number of banks ...	8	11
Paid-up capital ...	£5,068,378	£12,965,593
Assets ...	£11,944,545	£39,515,384

AREA UNDER CULTIVATION.

	Acres.
1855-6 ...	115,059
1905-6 ...	4,269,877

Value of Principal Crops

1855-6 ...	£1,513,151
1905-6 ...	£6,641,009

Value of some Primary Products.

	Year.	£	Year 1905.	£
Live stock—Value ...	1856	8,719,699	...	23,473,004
Wool produced ...	1856	1,488,322	...	3,313,550
Butter and cheese made ...	1860	74,725	...	2,599,143
Export of frozen meat ...	1893	1,838	...	518,832
Gold produced ...	1856	12,214,976	...	3,173,744
Coal produced ...	1891	19,731	...	79,035

MANUFACTURING INDUSTRY.

	1880.	1905.
Number of factories ...	2,460	4,264
Hands employed ...	38,133	80,235
Estimated value of machinery and plant ...	£3,039,017	£6,187,919
„ „ land and buildings ...	4,416,461	7,771,238
„ „ materials used ...	7,997,745	15,058,471
„ „ articles produced ...	13,370,836	25,200,648

VICTORIAN RAILWAYS.

	1862.	1906.
Miles open for traffic ...	226	3,394
Passengers carried ...	12,000,000	65,088,394
Train miles travelled ...	936,404	9,392,069
Receipts—	£	£
From passenger traffic ...	251,610	1,501,597
From goods, live stock, &c. ...	184,130	2,286,022

In 1856 there were only two railway stations in Victoria, viz., Hobson's Bay and Sandridge. At the present time there are 829.

POST AND TELEGRAPHS.

	1856.	1905.
Number of post offices ...	125	1,673
Letters and newspapers despatched ...	6,126,755	161,608,384
Telegraph stations ...	66 (1863)	969

MUNICIPALITIES.

	1860.	1905-6.
Number ...	83	206
Rateable properties—	£	£
Total value ...	24,125,248	216,615,624
Annual value ...	2,803,216	11,795,143

## GREATER MELBOURNE.

	1857.	1905.
Population ... ..	99,354	515,350
Number of dwellings ... ..	21,697	111,182
Total value of rateable property ...	£12,241,623	£88,116,415

## CHURCHES, CHAPELS, AND BUILDINGS USED FOR PUBLIC WORSHIP.

1856	...	...	...	...	473
1905	...	...	...	...	4,465

## SUNDAY SCHOOLS.

	1880.	1905.
Number of schools ... ..	1,742	2,842
„ „ teachers ... ..	14,063	20,554
„ „ scholars ... ..	130,274	209,656

## NUMBER OF CHARITABLE INSTITUTIONS AND SOCIETIES.

1856	...	...	...	...	30
1905	...	...	...	...	208

## FREE LIBRARIES.

1860	...	...	...	...	16
1905	...	...	...	...	414

## FRIENDLY SOCIETIES.

	1864.	1905.
Number of societies ... ..	6	26
„ „ branches ... ..	186	1,306
„ „ members ... ..	15,130	111,557
Total amount of funds ... ..	£84,802	£1,568,425
Total income ... ..	£48,654	£417,782
Average capital per member ...	£5 12s.	£14 1s. 2d.

On page 8, some additional statistics will be found, comparing early years with the present time.

## DIFFUSION OF WEALTH.

Wealth is widely diffused among the people of Victoria.

In 1905, 3,853 estates, of a total value of £6,003,478, were dealt with in the Probate Office; and as the number of deaths of persons over 21 years was 10,461, the figures show that on the average more than one in every three of the adults who died in 1905 left an estate of £1,558. Twenty years ago, the proportion was one in four, with an estate of £2,218.

The table relating to depositors and deposits in the Savings Banks shows that in 1906 the former numbered 466,752, with deposits amounting to £11,764,179; that is, more than one person out of every three in the State (including children and infants, who themselves number more than one-third of the population) is a depositor in the Savings Bank, with a credit balance on the average of over £25.

# CONFERENCE OF STATISTICIANS.

A conference of statisticians of the Commonwealth and States of Australia and the Colony of New Zealand was held in Melbourne in November and December, 1906, for the purpose of securing uniformity in statistical methods throughout Australia and New Zealand, of making more efficient provision for the mutual supply of statistical information to the Commonwealth and State Bureaux, and of co-ordinating the entire scheme of work therein.

The following representatives constituted the conference:—

*Commonwealth of Australia*—G. H. Knibbs, Esq., F.S.S., F.R.A.S., &c., Commonwealth Statistician, President.

*New South Wales*—H. C. L. Anderson, Esq., M.A., Director of Intelligence Department and Bureau of Statistics.

*Victoria*—E. T. Drake, Esq., Government Statist.

*Queensland*—Thornhill Weedon, Esq., F.S.S., Government Statistician and Registrar-General.

*South Australia*—L. H. Sholl, Esq., I.S.O., Chief Under-Secretary and Government Statist.

*Western Australia*—C. H. Wickens, Esq., A.I.A., late Actuary and Compiler, Government Statistician's Office, Perth, Western Australia.

*Tasmania*—R. M. Johnston, Esq., F.S.S., I.S.O., Government Statistician and Registrar-General.

*New Zealand*—E. J. Von Dadelszen, Esq., Registrar-General and Government Statistician.

The main objects of the conference were as indicated hereunder, viz.:—

1. To secure, as far as possible, uniformity in the whole method of collection, compilation, and presentation of statistics in all the States of the Commonwealth, and, if possible, also in New Zealand.

2. To make arrangements for the supply of statistical information, at the earliest possible moment, to all parties concerned.

3. To decide on the method by which these objects can be best secured, and to determine the forms desirable to be used as a means thereto.

4. To determine the general conditions under which the State Statisticians shall supply any statistical information needed by the Commonwealth Statistician, and reciprocally, under which the Commonwealth Statistician shall supply information needed by the State Statisticians.

5. To make such general arrangements in regard to the detail of the professional activities of the Commonwealth and State Statistical Bureaux as will render the statistical resources of the latter available to the Commonwealth Statistician, and conversely those of the Commonwealth Bureau to the State Statisticians.

6. To so delimit the activity of each, that unnecessary duplication of work, printing, and expense will be avoided.

A comprehensive memorandum, prepared by the Commonwealth Statistician, was communicated to the conference on the opening thereof, and a complete series of forms was submitted for consideration, indicating what might be attempted through an adequate organization of the State Statistical Bureaux, and illustrative of the range of the requirements of the Commonwealth Statistician. These were

reviewed in detail, and after examining the matter in its entirety, the conference accepted a series of resolutions to give effect to the above. The desirableness of a quinquennial enumeration was affirmed by the following resolution:—"That, having in view the characteristics of the movement of the population in Australia, as well as the expectation of a considerable increase in the total thereof, as the result of means taken to attract it, the conference is unanimously of opinion that it is desirable that there should be a limited quinquennial enumeration."

### LEGISLATIVE COUNCIL.

Electors—  
Legislative  
Council.

At the last elections for the Legislative Council, held on the 1st June, 1904, the number of provinces in which elections were contested was ten—in seven no contest took place. The total number of electors on the rolls was 172,256, and in contested provinces 104,865, of whom 66,182, or 63 per cent., voted. The next elections for the Legislative Council will be held in June, 1907, when seventeen seats will become vacant. The following table shows the names of the electoral provinces and the number of electors on the rolls for each province in 1906-7:—

NUMBER OF ELECTORS ON THE ROLLS FOR EACH PROVINCE OF THE  
LEGISLATIVE COUNCIL, 1906-7.

Electoral Provinces.	Number of Electors on the Rolls.		
	Ratepayers.	Non-Ratepayers.	Total.
Bendigo .. .. .	8,544	14	8,558
East Yarra .. .. .	13,838	51	13,889
Gippsland .. .. .	9,468	17	9,485
Melbourne .. .. .	13,963	38	14,001
Melbourne East .. .. .	11,398	26	11,424
Melbourne North .. .. .	13,012	24	13,036
Melbourne South .. .. .	13,443	52	13,495
Melbourne West .. .. .	13,526	8	13,534
Nelson .. .. .	7,994	18	8,012
Northern .. .. .	8,671	14	8,685
North-Eastern .. .. .	8,897	35	8,932
North-Western .. .. .	9,756	24	9,780
Southern .. .. .	9,523	34	9,557
South-Eastern .. .. .	10,868	23	10,891
South-Western .. .. .	9,258	11	9,269
Wellington .. .. .	8,686	19	8,705
Western .. .. .	9,466	19	9,485
Total .. .. .	180,311	427	180,738



# ELECTIONS FOR THE LEGISLATIVE ASSEMBLY, 1907.

For the Legislative Assembly, there were contests in 45 of the 65 constituencies, each returning one member. The number of electors on the rolls for the Assembly (including voters' certificates issued by the Courts), was 261,088 (of whom 69,957 were in uncontested districts), and of these 117,098 voted, being 61.26 per cent. of the number entitled. The following table shows the number of electors, the votes polled, and the percentage of the latter to the former, in the different electoral districts:—

## NUMBER OF ELECTORS AND VOTES POLLED FOR THE LEGISLATIVE ASSEMBLY AT THE GENERAL ELECTIONS ON THE 15TH MARCH, 1907.

Electoral Districts.	Number of Electors on Rolls at Date of General Election, including Voters' Certificates.	Electors who Voted.	
		Total Number.	Percentage of Number on the Rolls.
Abbotsford .. .. .	4,304	2,735	63.54
Albert Park .. .. .	5,045	3,497	69.31
Allandale .. .. .	3,153		
Ballaarat East .. .. .	4,278		(Uncontested)
Ballaarat West .. .. .	4,041	2,640	65.33
Barwon .. .. .	3,891	2,470	63.48
Benalla .. .. .	3,563		(Uncontested)
Benambra .. .. .	2,672		
Bendigo East .. .. .	3,841	2,644	68.83
Bendigo West .. .. .	4,382	2,645	60.36
Boroondara .. .. .	5,931	2,365	39.87
Borong .. .. .	3,127		(Uncontested)
Brighton .. .. .	4,121		
Brunswick .. .. .	5,330	3,877	72.73
Bulla .. .. .	3,764	2,220	58.98
Carlton .. .. .	4,439	2,570	57.89
Castlemaine and Maldon .. .. .	3,388	2,464	72.73
Collingwood .. .. .	4,499	2,936	65.26
Dalhousie .. .. .	3,346	2,621	78.33
Dandenong .. .. .	4,263	1,681	39.43
Daylesford .. .. .	3,156	2,113	66.95
Dundas .. .. .	3,098	2,059	66.46
Eaglehawk .. .. .	3,582	2,399	66.97
East Melbourne .. .. .	4,346	2,031	46.73
Essendon .. .. .	5,810	3,581	61.63
Evelyn .. .. .	3,641		(Uncontested)
Fitzroy .. .. .	4,269	2,721	63.74
Flemington .. .. .	5,394	3,166	58.69
Geelong .. .. .	4,414	2,800	63.43
Gippsland East .. .. .	3,101	1,963	63.30
Gippsland North .. .. .	3,060	1,762	57.58
Gippsland South .. .. .	3,875		(Uncontested)
Gippsland West .. .. .	3,303		
Glenelg .. .. .	3,600		
Goulburn Valley .. .. .	3,257		

Electoral Districts—Legislative Assembly.

NUMBER OF ELECTORS AND VOTES POLLED FOR THE LEGISLATIVE  
ASSEMBLY AT THE GENERAL ELECTIONS ON THE 15TH MARCH,  
1907—continued.

Electoral Districts.	Number of Electors on Rolls at Date of General Election, including Voters' Certificates.	Electors who Voted.	
		Total Number.	Percentage of Number on the Roll.
Grenville .. .. .	3,693	(Uncontested)	
Gunbower .. .. .	3,067	"	
Hampden .. .. .	4,064	"	
Hawthorn .. .. .	5,833	3,304	56·64
Jika Jika .. .. .	5,660	3,167	55·95
Kara Kara .. .. .	3,229	2,000	61·93
Korong .. .. .	2,736	(Uncontested)	
Lowan .. .. .	3,102	"	
Maryborough .. .. .	3,828	2,614	68·28
Melbourne .. .. .	5,918	2,821	47·67
Mornington .. .. .	4,275	1,965	45·96
North Melbourne .. .. .	5,364	3,352	62·49
Ovens .. .. .	3,035	2,004	66·03
Polwarth .. .. .	3,774	2,132	56·49
Port Fairy .. .. .	3,580	2,542	71·01
Port Melbourne .. .. .	5,483	(Uncontested)	
Prahran .. .. .	4,903	3,133	63·90
Richmond .. .. .	5,091	3,484	68·43
Rodney .. .. .	3,542	2,666	75·27
Stawell and Ararat .. .. .	3,260	2,081	63·83
St. Kilda .. .. .	4,840	2,505	51·76
Swan Hill .. .. .	3,114	(Uncontested)	
Toorak .. .. .	4,751	2,345	49·36
Upper Goulburn .. .. .	3,667	2,399	65·42
Walhalla .. .. .	2,830	(Uncontested)	
Wangaratta .. .. .	3,735	2,326	62·27
Waranga .. .. .	2,953	2,009	68·03
Warrenheip .. .. .	3,073	2,052	66·78
Warrnambool .. .. .	3,278	(Uncontested)	
Williamstown .. .. .	6,126	4,237	69·16
Less uncontested districts (20)	261,088	..	..
	69,957	..	..
Total .. .. .	191,131	117,098	61·26

The number of persons who voted by post was 2,307, and 303 voters' certificates were issued by the Courts. Amongst the metropolitan constituencies the greatest proportion of votes was recorded in Brunswick, viz., 72·73 per cent.; and in the country constituencies, Dalhousie, with 78·33 per cent.; Rodney, 75·27 per cent.; Castle-maine and Maldon, 72·72 per cent.; and Port Fairy, 71·01 per cent., were the highest.

The following are the proportions who voted at the last seventeen general elections of the State Lower House in districts in which the elections were contested :—

Proportion  
of votes  
polled,  
1866 to  
1907.

PROPORTION OF VOTERS AT GENERAL ELECTIONS FOR THE  
LEGISLATIVE ASSEMBLY, 1866 TO 1907.

Year of General Election.	Proportion of Electors of Contested Districts who voted.	Year of General Election.	Proportion of Electors of Contested Districts who voted.
	Per cent.		Per cent.
1866 ... ..	55·10	1886 ... ..	64·70
1868 ... ..	61·59	1889 ... ..	66·58
1871 ... ..	65·02	1892 ... ..	65·12
1874 ... ..	61·00	1894 ... ..	70·99
1877 ... ..	62·29	1897 ... ..	70·33
1880 (February) ...	66·56	1900 ... ..	63·47
1880 (July) ... ..	65·85	1902 ... ..	65·47
1883 ... ..	64·96	1904 ... ..	66·72
		1907 ... ..	61·26

The first session of the twentieth Parliament (the first Parliament elected under the Reform Act) was opened on the 29th June, and prorogued on the 30th November, 1904; the second on 27th June, 1905, and prorogued 12th December; and the third session on 27th June, 1906, and prorogued 28th December, 1906, the Parliament being dissolved 21st February, 1907.

Twentieth  
Parliament.

The following is a statement of the duration of each Parliament since the establishment of responsible government, the number of days in session during each Parliament, and the percentage of the latter to the former :—

Duration of  
Parliam-  
ents and  
sessions.

DURATION OF PARLIAMENTS AND SESSIONS, 1856 TO 1907.

Number of Parliament.	Period.	Duration of Parliament.	Days in Session.	
			Number.	Percentage to Duration.
1st	1856-8	991	691	69·7
2nd	1859-60	637	566	88·8
3rd	1861-4	1,091	728	66·7
4th	1864-5	378	366	96·8
5th	1866-7	686	391	57·0
6th	1868-70	1,048	734	70·0
7th	1871-3	1,049	639	60·9
8th	1874-6	1,072	700	65·3
9th	1877-9	993	684	68·9
10th	1880	49	46	93·9
11th	1880-2	926	802	86·6
12th	1883-6	1,088	543	49·9
13th	1886-9	1,091	653	59·9
14th	1889-92	1,093	636	58·2
15th	1892-4	845	524	62·0
16th	1894-7	1,089	684	62·8
17th	1897-00	1,088	586	53·9
18th	1900-02	671	358	53·4
19th	1902-3	436	300	68·8
20th	1904-7	968	509	52·6

Long  
sessions  
and  
recesses.

It will be seen that there was a greater percentage of working days during the nineteenth Parliament than any other since 1882. Excluding the nineteenth Parliament, the tendency of late years is, according to the above figures, towards shorter sessions than formerly. The longest recess was in 1866-7, when 230 days elapsed between the closing of the second and the opening of the third session of the fifth Parliament; in 1905-6 the recess lasted 196 days.

### STATE ACTS PASSED DURING 1906.

The following is a short synopsis of the Acts passed during 1906 by the Victorian Parliament:—

Act No.	Date.	
2017.	July	11th.—This Act applies £1,022,868 out of the consolidated revenue for the service of the year 1906-7.
2018.	July	31st.—This Act applies £145,477 out of the consolidated revenue for the service of the year 1905-6.
2019.	August	9th.—The <i>Talbot Colony for Epileptics Act</i> 1906 is to be read with the Act of 1905, and gives power to erect homes for epileptics at "Masonmeadows"—a grant of 165 acres at Clayton made by Mr. James Mason, of Brighton-road, St. Kilda—and also to manage the property in such manner as the council may consider best.
2020.	August	9th.—The <i>Redbank Recreation Reserve Act</i> 1906 revokes the permanent reservation of certain land in the Shire of Avon and re-vests it in the Crown, to be dealt with as unoccupied Crown land.
2021.	August	9th.—The <i>Hamilton Land Act</i> 1906 cancels the reservation of certain land in the Borough of Hamilton as a site for market purposes and re-vests it in the Crown as unalienated land.
2022.	September	11th.—The <i>Trusts Act</i> 1906, to be read with the Act of 1890, amends the law relating to the investments by trusts in Government and other securities.
2023.	September	11th.—The <i>Opium Smoking Prohibition Act</i> 1906 amends the Act of 1905 by authorizing the issue of a special warrant by any justice, on information made on oath by a member of the police force, that there is reasonable cause to suspect that in any house or premises opium is being smoked. This warrant authorizes the police to enter (whether by breaking open doors or otherwise), seize and carry away all opium suitable for smoking, and arrest all persons found in such premises.
2024.	September	11th.—An Act to repeal the <i>South Melbourne Land Act</i> 1905 which provided for the sale by the Government to the City of South Melbourne, for £23,500, of about 15 acres of land for market and storage purposes.
2025.	September	11th.—The <i>Municipal Endowment Act</i> 1906 fixes the sum of £75,000 as the municipal endowment payable during 1906-7.
2026	September	11th.—The <i>Victorian Loans Redemption and Conversion Act</i> 1906 provides for creating, or issuing, Victorian Government stock or debentures when required for paying off, re-purchasing, or redeeming Government securities, or for exchanging therefor.

Act No. Date.

2027. September 11th.—The *Borhoneyghurk Land Act* 1906 revokes the permanent reservation, for the growth of timber, of certain land in the county of Grant, which land may be dealt with as unoccupied Crown land.
2028. September 11th.—The *Juvenile Smoking Prevention Act* 1906, which came into operation on 1st January, 1907, provides for the imposition of fines on all persons supplying tobacco to any one under the age of sixteen years on first and second convictions, and in the case of a third conviction the licence of the seller is cancelled. Such person is also disqualified for five years from holding a licence. The fact that the seller had reasonable cause to believe the person so supplied with tobacco was sixteen years of age or over, may be accepted as a defence. Parents may send a written order under which tobacco (other than cigarettes and cigarette tobacco) may be supplied, in a sealed packet, to persons under sixteen years of age. No prosecution for an offence under this Act shall be commenced after the expiration of one month after the commission of the offence.
2029. September 11th.—The *Surplus Revenue Act* 1906 allocates the surplus revenue of 1905-6 as follows:—£500,000 to the Commissioners of Savings Banks in reduction of the amount owing to them under section 19 of the Savings Banks Amendment Act No. 1481; £50,000 for the erection and repairs of State Schools; £60,000 to the credit of the "Rolling Stock Replacement Fund;" and of the balance not appropriated or used for the purposes aforesaid a sum not exceeding £66,000 to be paid into the "Railway Loans Repayment Fund," and to be used only for additions to, and improvements on, existing lines, and for providing additional rolling stock.
2030. September 25th.—The *Income Tax Act* 1906 fixes the rates of income tax for the year 1907, payable on incomes earned in 1906. Incomes of £200 a year or under are not taxable. On incomes from £201 to £500 there is an exemption of £100, which, however, does not apply to companies. Incomes from personal exertion are taxed 3d. in the £1 up to £500; 4d. from £500 to £1,000; 5d. from £1,000 to £1,500, and 6d. over £1,500. Taxes on incomes from property are double these rates. The tax on the incomes of life insurance companies is 8d. in the £1, and on other companies 7d.
2031. September 25th.—This Act applies £756,100 for the service of the year 1906-7.
2032. October 9th.—The *Administration and Probate Duties Act* 1906, to be read in conjunction with the 1890 and amending Acts, shows when certain amendments, relating to the duties on the estates of deceased persons, apply.
2033. October 9th.—The *Drainage Areas Act* 1906 amends the Acts of 1898 and 1905.

- | Act No. | Date.          |  |
|---------|----------------|--|
| 2034.   | October 30th.  | —The <i>Railways Audit Act</i> 1906 abolishes the office of railway auditor, and authorizes the Public Service Commissioner to create such positions in the Public Service, and make appointments thereto, as may be necessary, to enable the Auditor-General to audit and report upon the accounts of the Railway Department. These officers may be taken from either the Public or Railway Service, and their salaries are to be chargeable to the Railway Department. |
| 2035.   | October 30th.  | —The <i>St. Kilda and Brighton Electric Street Railway Extension Act</i> 1906 authorizes the extension of the electric railway to the Brighton Beach Station—the cost, excluding rolling stock, not to exceed £6,500.  |
| 2036.   | November 13th. | —This Act applies £379,343 to the service of the year 1906-7.  |
| 2037.   | November 20th. | —The <i>South Africa Contingents Pensions Act</i> 1906 amends a similar Act of 1905, and directs that pensions be paid quarterly in advance. It also extends the periods in certain cases for which pensions are payable.  |
| 2038.   | December 4th.  | —This Act applies £361,091 for the service of the year 1906-7.   |
| 2039.   | December 14th. | —The <i>Companies Act</i> 1906, to be read with the Act of 1890 and amending Acts, authorizes companies registered in Victoria to prepare and use an official seal in connexion with business done in countries outside Victoria.  |
| 2040.   | December 14th. | —The <i>Loans Acts Amendment Act</i> 1906 amends the <i>Treasury Bonds Act</i> 1896 by reducing the amount available for expenditure under the latter Act by £6,639, and allocating it to railways and works connected therewith. The schedule to the Victorian Government 3 per cent. Stock Act 1899 is struck out, and the third schedule to this Act takes its place.   |
| 2041.   | December 14th. | —The <i>Victorian Railway Loan Act</i> 1906 gives power to raise £1,250,000—£730,000 to be expended on railways and works, £70,000 on tramways or motors, £250,000 on irrigation and water supply works, and £200,000 for the improvement of Crown lands. Provision is made for the payment annually of 1 per cent. of the amount borrowed to the Victorian Loans Redemption Fund.   |
| 2042.   | December 14th. | —The <i>Railway Loan Application Act</i> 1906 authorizes the application of £388,439 out of loan funds and moneys in the Railway Loans Repayment Fund, for railways and works connected therewith.   |
| 2043.   | December 14th. | —The <i>Water Supply Loans Application Act</i> 1906 authorizes the advance by way of loan of £64,484 to certain waterworks trusts and municipalities, and also the expenditure of £412,968 on national water supply and irrigation works.  |
| 2044.   | December 14th. | —The <i>Trust Funds Act</i> 1906, to be read with the Act of 1897 and amending Acts, directs that the interest accruing in respect of moneys invested under the latter Act be paid into the consolidated revenue to reduce the revenue deficiency (if any), or otherwise, into the Victorian Loans Redemption Fund.  |

Act No.                      Date.

2045. December 21st.—This Act applies £2,091,243 out of the consolidated revenue to the service of the year 1906-7, and appropriates the supplies granted in the parliamentary session, amounting to £4,756,122, to the service of the Government.
2046. December 28th.—The *Crown Grants Act* 1906 deals with the custody of undelivered Crown grants issued prior to the commencement of the *Real Property Act* 1862 on which the fees to the Crown chargeable on delivery have not been paid, and also regulates the payment of contributions to the assurance fund.
2047. December 28th.—The *Public Meetings Act* 1906 imposes a penalty for behaving in an offensive or threatening manner in or near any building where a public meeting is being held, and gives the chairman of the meeting power to direct a member of the police force to remove persons so offending.
2048. December 28th.—The *Lifts Regulation Act* 1906, to operate as from the 1st March, 1907, gives the Chief Inspector of Factories authority to inspect the working of lifts, and in the case of those considered dangerous, or in the operation of which these regulations are not being observed, to stop the working of such lifts until his directions for the improvement thereof are complied with. Persons under 18 years of age are not allowed to work lifts.
2049. December 28th.—The *Maldon Rates Act* 1906 enables the council of the Shire of Maldon to remit or excuse the payment of certain rates and interest.
2050. December 28th.—The *Vegetation Diseases Act* 1906, to be read with the Act of 1896 and amending Acts, gives power to seize any diseased tree, plant, or vegetable in Victoria, and to charge fees and expenses for taking any measures that may be necessary in carrying out the provisions of the Act.
2051. December 28th.—The *Unclaimed Moneys Act* 1906 enacts that every company, bank, life assurance society, building society, or association carrying on business for gain in Victoria must keep a register of unclaimed moneys, such register to be open for inspection by all persons on payment of a fee of 2s. A copy of the register is to be advertised by the company in the *Government Gazette* annually during the month of January. All unclaimed moneys which have not been paid to the owner within 12 months after the first publication of the notice must be paid to the receiver of revenue in Melbourne to be placed to the credit of the "Unclaimed Moneys Fund." Should a lawful claimant arise, the Treasurer may direct payment to be made to him out of the fund. This Act does not apply to the Savings Banks Commissioners, nor to certain unclaimed moneys of trustee companies and insolvent estates.
2052. December 28th.—The *Stock Diseases Act* 1906, to be read with the Act of 1890, gives power to make regulations as to fees for services of inspectors examining stock entering Victoria. All fees so charged are to be paid into the revenue.

Act No.            Date.

2053. December 28th.—The *Small Improved Holdings Act* 1906 empowers the Government to acquire land in rural districts and as close as possible to centres of population, in order to enable deserving persons to enter into the keeping of live stock, poultry, bees, or the growing of vegetables, fodder, plants, and the like.
2054. December 28th.—The *Waterworks Land Sales Act* 1906 provides for the sale of land originally acquired for water supply purposes, but in excess of the quantity required for that purpose.
2055. December 28th.—The *Lotteries Gaming and Betting Act* 1906 provides severe penalties against illegal lotteries, and makes it unlawful to forward parcels to promoters of such lotteries. Power is given to the police to arrest, without warrant, persons found gaming in the streets. Betting houses or rooms are declared unlawful; newspapers are prohibited from publishing betting quotations before a race; betting placards or notices must not be posted anywhere; and advertising by tipsters, circulating or selling tips is an offence. Any house where a totalisator is in use is declared a common gaming house, and acting as totalisator agent, laying totalisator odds, wearing disguises in or about gaming houses, are offences. All race-courses must be licensed, the fee for which is £1, and the number of days on which races may be held is limited. An annual charge of 3 per cent. is levied on the gross revenue of race-courses if over £1,500, and 2 per cent. if between £600 and £1,500; where the gross revenue is less than £600 no contribution is exacted.
2056. December 28th.—The *Vacant Unclaimed Lands Act* 1906 authorizes the sale of certain undelivered Crown grants which have for over 30 years been unclaimed, and the disposal of the proceeds of such sale.
2057. December 28th.—The *South and East Melbourne Lands Act* 1906 provides for the sale of certain Crown land in South Melbourne to the Melbourne and Metropolitan Board of Works, and authorizes the said board to sell certain land in the City of Melbourne to the Eye and Ear Hospital.
2058. December 28th.—The *Children's Court Act* 1906 establishes and regulates courts for children, i.e., persons under 17 years of age. The principal object of this measure is to create legal machinery to allow charges against children to be heard *in camera*.
2059. December 28th.—The *Fruit Cases Act* 1906 provides for the size of cases to be used for fruit offered for sale and for export.
2060. December 28th.—The *Consolidated Revenue Application Act* 1906 authorizes the Treasurer to pay to the Commissioners of Savings Banks, or to the trustees under the Trust Funds Act, a sum not exceeding £520,360 in reduction of the liability in respect to certificates issued to the Commissioners or Trustees.



Act No.            Date.

2061. December 28th.—The *Money Lenders Act* 1906 makes provision for the registration of money lenders, and also enacts that if the rate or total amount of interest is not expressly stipulated, not more than 12 per cent. per annum can be recovered. All loans purporting to be loans of money are to be made in bank notes or cheques on bankers, and must be paid in full without any deduction for interest. Any assignment of the right, title, or interest, whether actual or expectant, in property or in any contingent whatever, must be executed in writing before a magistrate, clerk of petty sessions, or an independent solicitor.
2062. December 28th.—The *Marriage Act* 1906 amends the Act of 1890 by giving the Prothonotary power to make the decree nisi absolute without request from the petitioner, but the petitioner may, in writing, request that the decree be not made absolute, and the Prothonotary can order its discharge.
2063. December 28th.—This Act continues the *Voting by Post Acts* Nos. 1701 and 1719.
2064. December 28th.—*St. James' Church Land Act* 1906 provides that the dioceses of Bendigo, Wangaratta, and Gippsland, formed since the passing of the original Acts, shall share in the disposition of the income from such lands, and also vests in the Trusts Corporation for each diocese, the land in that diocese formerly vested in the Church of England Trusts Corporation for the Diocese of Melbourne.
2065. December 28th.—The *Kingower Land Act* 1906 sanctions the exchange of certain land reserved for race-course and recreation purposes at Kingower for certain other land.
2066. December 28th.—This Act raises the classification and increases the salary of a State school teacher named William Burston, to take effect from the 1st July, 1905.
2067. December 28th.—The *Closer Settlement Act* 1906 amends the Act of 1904 in several details, and also enacts that if an offer, in writing, to sell land or an estate be made, with a promise that the offer remain open for a specified time, such promise shall be binding as if made for valuable consideration. Provision is made for advertising in the *Government Gazette* lands available exclusively for persons residing in the United Kingdom and other countries. Applicants are directed to apply to the Agent-General in London, who will issue permits entitling them to enter into occupation of the land.
2068. December 28th.—The *Licensing Act* 1906, to be construed as one with the Act of 1890 is a very important measure. Full details of this Act will be found in part "Law and Crime."
2069. December 28th.—The *Medical Act* 1906, to be read with the Act of 1890, limits the number of members of the Medical Board to not more than nine, and prescribes the fees payable by medical men for registration. No person shall be entitled to registration as a legally qualified medical practitioner, unless he has passed through a regular course of medical and surgical study of five or more years' duration. Power is given to remove from the register any person convicted of felony or misdemeanour.

Act No.                      Date.

2070. December 28th.—The *Friendly Societies Act* 1906 amends the Act of 1890, and gives power to appoint an Acting Actuary for Friendly Societies, who may hold office until the 30th June, 1908.
2071. December 28th.—The *Boilers Inspection Act* 1906 provides for the registration and inspection of boilers. On the first inspection of a boiler, a record is to be made of the age and construction of such boiler, the name of the maker (if known), the pressure it is calculated to sustain, the working pressure allowed, and any other particulars relating to the state and condition of the boiler, the appliances used in connexion therewith, and their fitness for the purposes required. If the inspector is satisfied that the boiler is in good repair, he can give the owner written permission to use the boiler for 28 days, and must report to the Chief Inspector, who, after the fees for such inspection have been paid, issues a certificate, which remains in force for not more than 12 months. On the occurrence of an accident or explosion, notice must be sent to the Chief Inspector, stating the precise locality and the day and hour of the explosion or accident, the number of persons killed or injured, the purposes for which the boiler was used, and the part of the boiler which failed. The Minister may order an inquiry into the explosion by a police magistrate, who, in addition to the powers possessed by a Court of Petty Sessions, may appoint persons to enter and inspect the place or building used, require the attendance of such persons as are considered necessary, and enforce the production of any books or documents.
2072. December 28th.—This Act amends the *Printers and Newspapers Act* 1895 in several details.
2073. December 28th.—The *Companies Act Amendment Act* 1906 amends the Act of 1896 by making a member of the Society of Accountants and Auditors of Victoria who has been acting as accountant for five years before the passing of this Act, eligible to hold a licence as an auditor for companies. It also provides that after the 30th June, 1907, no person is qualified to hold such licence unless he has a thorough knowledge of accounts and auditing, and also of the provisions of the Companies Act.
2074. December 28th.—The *Widows and Young Children Maintenance Act* 1906 empowers the Supreme Court, in the event of a person disposing of his property either wholly or partly, by will or codicil, in such a manner that, upon his death, his widow or children are left without sufficient means of support, to order such provision, as may seem proper to be made out of the estate, towards the maintenance and support of such widow or children. A similar order may be made against the estate of a widow who has disinherited her children. No more than £1,000 per annum can be granted to a widow under this Act, nor more than the income or interest on the estate she would have been entitled to, had the deceased person died intestate.

2075. January 26th.—The *Constitution Act* 1906 amends the Act of 1903 (1907) by abolishing the separate representation of railways and public officers in the Parliament of the State. The number of members of the Legislative Council is consequently reduced from 35 to 34, and of the Legislative Assembly from 68 to 65. Officers in the service of the Government are forbidden to take any part in the political affairs of the State, otherwise than by recording a vote, and are prohibited from using any influence in respect to any matter affecting their remuneration or position in the Public Service.

The following return shows the names and periods of office of Governors and Acting Governors of the State, since the first appointment of Mr. Charles Joseph La Trobe as Superintendent, in 1839 :—

Name.	Date of Assumption of Office.	Date of Retirement from Office.
Charles Joseph La Trobe ...	30th Sept., 1839	5th May, 1854
John Vesey Fitzgerald Foster (acting)	8th May, 1854 ...	22nd June, 1854
Captain Sir Charles Hotham, R.N., K.C.B.	22nd June, 1854 ...	31st Dec., 1855
Major-General Edward Macarthur (acting)	1st January, 1856...	26th Dec., 1856
Sir Henry Barkly, K.C.B. ...	26th December, 1856	10th Sept., 1863
Sir Charles Henry Darling, K.C.B....	11th Sept., 1863 ...	7th May, 1866
Brigadier-General George Jackson Carey, C.B. (acting)	7th May, 1866 ...	15th August, 1866
The Honorable Sir John Henry Thomas Manners-Sutton, K.C.B.	15th August, 1866...	2nd March, 1873
Sir William Foster Stawell, Kt. (acting)	3rd March, 1873 ...	19th March, 1873
Sir George Ferguson Bowen, G.C.M.G.	31st March, 1873 ...	22nd Feb., 1879
Sir Redmond Barry, Kt. (acting) ...	3rd January, 1875...	10th January, 1875
Sir William Foster Stawell, Kt. (acting)	11th January, 1875	14th January, 1876
The Most Honorable George Augustus Constantine Phipps, Marquis of Normanby, G.C.M.G., P.C.	27th Feb., 1879 ...	18th April, 1884
Sir William Foster Stawell, Kt. (acting)	18th April, 1884 ...	15th July, 1884
Sir Henry Brougham Loch, f G.C.M.G., K.C.B.	15th July, 1884 ...	8th March, 1889
Sir William Foster Stawell, K.C.M.G., Lieutenant-Governor (acting)	18th October, 1889 6th Nov., 1886 ...	15th Nov., 1889 12th March, 1889

GOVERNORS OF VICTORIA—*continued.*

Name.	Date of Assumption of Office.	Date of Retirement from Office.
Sir William Cleaver Francis Robinson, G.C.M.G. (acting)	9th March, 1889 ...	17th October, 1889
The Right Honorable John Adrian Louis Hope, Earl of Hopetoun, G.C.M.G.	16th Nov., 1889 ...	27th Nov., 1889
	28th November, 1889	12th July, 1895
The Honorable John Madden, LL.D. (acting)	26th January, 1893	11th May, 1893
	27th March, 1895	24th October, 1895
The Right Honorable Baron Brassey, K.C.B.	25th October, 1895	31st March, 1900
The Honorable Sir John Madden, K.C.M.G., LL.D. (acting)	29th December, 1896	16th February, 1897
	27th September, 1897	10th October, 1897
	23rd March, 1898	21st October, 1898
The Honorable Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	15th January, 1900	10th December, 1901
Sir George Sydenham Clarke, K.C.M.G., F.R.S.	10th December, 1901	24th November, 1903
The Honorable Sir John Madden, K.C.M.G., LL.D., Lieutenant-Governor (acting)	24th November, 1903	25th April, 1904
Major-General Hon Sir Reginald Arthur James Talbot, K.C.B.	25th April, 1904 ...	Still in office

Captain William Lonsdale, formerly of the 4th Regiment, was appointed Police Magistrate of the District of Port Phillip on the 9th September, 1836, and assumed office on the 29th of the same month. In that capacity he was in charge of the District until the appointment of Mr. C. J. La Trobe, as Superintendent. Subsequently, Captain Lonsdale acted as Superintendent during the temporary absence of Mr. La Trobe, who was called on to administer the Government of Tasmania from the 13th October, 1846, to the 25th January, 1847. Sir John Madden appointed Lieutenant-Governor, to act in the absence of the Governor, by Commission dated 29th April, 1899.

Ministers of  
the Crown,  
1851 to  
1855.

The following list shows the names of Ministers who held office from the separation of the Colony from New South Wales in 1851, up to the establishment of responsible government in 1855:—

## MINISTERS PRIOR TO RESPONSIBLE GOVERNMENT.

Name of Minister.	Office.	Date of Assumption of Office.
William Lonsdale ..	Colonial Secretary ..	15th July, 1851
Alastair Mackenzie ..	Colonial Treasurer ..	
Charles Hotson Ebdon ..	Auditor-General ..	
Robert Hoddle ..	Surveyor-General ..	
Alexander McCrae ..	Chief Postmaster ..	
William Foster Stawell ..	Attorney-General ..	13th April, 1852
Redmond Barry ..	Solicitor-General ..	
James Horatio Nelson Cassell	Collector of Customs	
Edward Eyre Williams ..	Solicitor-General ..	
James Croke ..	Solicitor-General ..	
Frederick Armand Powlett	Colonial Treasurer ..	21st July, 1852
Hugh Culling Eardley Childers	Auditor-General ..	30th September, 1852
Andrew Clarke ..	Surveyor-General ..	11th October, 1852
John Fitzgerald Leslie Foster	Colonial Secretary ..	1st July, 1853
Hugh Culling Eardley Childers	Collector of Customs	20th July, 1853
Edward Grimes ..	Auditor-General ..	5th December, 1853
Robert Molesworth ..	Solicitor-General ..	8th December, 1853
William Clark Haines ..	Colonial Secretary ..	4th January, 1854
		12th December, 1854

In the following list will be found the names of the Premiers of the several Governments from 1855 to the present date:—

Ministries,  
1856 to 1907.

MINISTRIES SINCE RESPONSIBLE GOVERNMENT.

Number of Ministry and Name of Premier.	Date of Assumption of Office.	Date of Retirement from Office.	Duration of Office.
			Days.
1. William Clark Haines...	28th November, 1855	11th March, 1857 ...	469
2. John O'Shanassy ...	11th March, 1857 ...	29th April, 1857 ...	49
3. William Clark Haines...	29th April, 1857 ...	10th March, 1858 ...	315
4. John O'Shanassy ...	10th March, 1858 ...	27th October, 1859 ...	596
5. William Nicholson ...	27th October, 1859...	26th November, 1860 ...	396
6. Richard Heales ...	26th November, 1860	14th November, 1861 ...	353
7. John O'Shanassy ...	14th November, 1861	27th June, 1863 ...	590
8. James McCulloch ...	27th June, 1863 ...	6th May, 1868 ...	1,775
9. Charles Sladen ...	6th May, 1868 ...	11th July, 1868 ...	66
10. James McCulloch ...	11th July, 1868 ...	20th September, 1869 ...	436
11. John Alexander Mac- Pherson	20th September, 1869	9th April, 1870 ...	201
12. James McCulloch ...	9th April, 1870 ...	19th June, 1871 ...	436
13. Charles Gavan Duffy...	19th June, 1871 ...	10th June, 1872 ...	357
14. James Goodall Francis	10th June, 1872 ...	31st July, 1874 ...	781
15. George Briscoe Kerferd	31st July, 1874 ...	7th August, 1875 ...	372
16. Graham Berry ...	7th August, 1875 ...	20th October, 1875 ...	74
17. Sir James McCulloch, Kt.	20th October, 1875...	21st May, 1877 ...	579
18. Graham Berry ...	21st May, 1877 ...	5th March, 1880 ...	1,019
19. James Service ...	5th March, 1880 ...	3rd August, 1880 ...	151
20. Graham Berry ...	3rd August, 1880 ...	9th July, 1881 ...	340
21. Sir Bryan O'Loghlen...	9th July, 1881 ...	8th March, 1883 ...	607
22. James Service ...	8th March, 1883 ...	18th February, 1886 ...	1,078
23. Duncan Gillies ...	18th February, 1886	5th November, 1890 ...	1,722
24. James Munro ...	5th November, 1890	16th February, 1892 ...	469
25. William Shiels ...	16th February, 1892	23rd January, 1893 ...	343
26. James Brown Patterson	23rd January, 1893	27th September, 1894 ...	612
27. Sir George Turner, P.C., K.C.M.G.	27th September, 1894	5th December, 1899 ...	1,895
28. Allan McLean ...	5th December, 1899	19th November, 1900 ...	350
29. Sir George Turner, P.C., K.C.M.G.	19th November, 1900	12th February, 1901 ...	85
30. Sir Alexander James Peacock, K.C.M.G.	12th February, 1901	10th June, 1902 ...	483
31. William Hill Irvine ...	10th June, 1902 ...	16th February, 1904 ...	616
32. Thomas Bent ...	16th February, 1904	Still in office	

On the 16th February, 1904, the Irvine Ministry resigned, the Premier, Mr. Irvine, and the Minister of Railways, the late Mr. Shiels, retiring on account of ill-health. The Lieutenant-Governor intrusted the formation of a new Government to the Hon. Thos. Bent, who held office in the Irvine Ministry as Commissioner of Public Works and Minister of Health. The task was undertaken successfully. Mr. Bent took the offices of Treasurer and Minister of Railways in the new Ministry; Messrs. Davies, Sachse, Taverner, Murray, and Pitt retained the same positions that they held in the previous Ministry; Mr. Cameron was placed in charge of the departments of Public Health and Public Works in lieu of the Mines

The Bent  
Adminis-  
tration.

and Water Supply Departments then under his control; Mr. McLeod, an honorary Minister in the Irvine Government, was appointed Minister of Mines, and Mr. Thos. Langdon was selected as an honorary Minister. On the 18th February, 1904, Mr. J. E. Mackey was appointed honorary Minister. On the 19th February Mr. Taverner resigned the portfolios of Minister of Lands and Agriculture (subsequently being appointed Agent-General), which were taken by Mr. Murray, then Chief Secretary and Minister of Labour, the latter offices being filled by Sir Samuel Gillott. On the 10th March Mr. McLeod was appointed Minister of Water Supply pending the arrival from England of Mr. George Swinburne, who assumed administration on the 26th April. On the 8th November Mr. Murray resigned the office of Minister of Agriculture, retaining that of Minister of Lands, and Mr. Swinburne took up the duties in addition to those of the Water Supply Department. On the same date Mr. McLeod was appointed Minister of Mines and Forests instead of Minister of Mines.

Change in  
the  
Ministry,  
1906-7.

Mr. Murray resigned the portfolio of Minister of Lands on 15th August, 1906, and Mr. Mackey was appointed to the position on the 17th August, 1906. Sir S. Gillott vacated the office of Chief Secretary and Minister of Labour on the 4th December, 1906. Mr. Langdon temporarily took charge of the Department from 4th January to 22nd February, 1907, at which date Sir A. J. Peacock, K.C.M.G., assumed control, Mr. Langdon retiring from the Ministry. On the 21st February, 1907, Messrs. D. Mackinnon and J. A. Boyd joined the Ministry as honorary Ministers. At that date Ministers and their offices were as follow:—

The State  
Ministry  
and depart-  
ments.

#### STATE MINISTRY.

Name.	Office.
Bent, Thomas ...	Premier, Treasurer, Minister of Railways, and a Vice-President of the Board of Land and Works.
Davies, John Mark, M.L.C.	Attorney-General, Solicitor-General.
Mackey, John Emanuel ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey.
Peacock, Sir Alexander J., K.C.M.G.	Chief Secretary and Minister of Labour.
Sachse, Arthur Otto, M.L.C.	Minister of Public Instruction, Vice-President of the Board of Land and Works.
Cameron, Ewen Hugh ...	Minister of Public Health, Commissioner of Public Works, and Vice-President of the Board of Land and Works.
McLeod, Donald ...	Minister of Mines and Forests.
Swinburne, George ...	Minister of Water Supply and Minister of Agriculture.
Pitt, William, M.L.C.	Honorary Minister.
Mackinnon, Donald	Honorary Minister.
Boyd, James Arthur	Honorary Minister.

On the 19th March, the Premier, the Hon. Thos. Bent, left on a visit to England, accompanied by his private secretary, Mr. J. H. Owen, the Under-Treasurer, Mr. H. W. Meakin, and the Chairman

of the Railways Commissioners, Mr. Thos. Tait. The Premier's mission is to deal with several important matters relating to the State. Prior to Mr. Bent's departure it was arranged that the Hon. J. M. Davies, M.L.C. (the Attorney-General), should be acting Premier and Treasurer, and Mr. Swinburne (the Minister for Agriculture and Water Supply) acting Minister for Railways.

MEMBERS OF THE STATE PARLIAMENT, 1907.

THE LEGISLATIVE COUNCIL.

President: The Hon. Sir Henry J. Wrixon, K.C.M.G., K.C.

Name of Province.	Name of Member.	Date of Retirement.
Bendigo ..	Hon. J. Sternberg .. .. .	1910
	Hon. A. Hicks .. .. .	1907
East Yarra ..	Hon. J. Balfour .. .. .	1910
	Hon. E. Miller .. .. .	1907
Gippsland ..	Hon. E. J. Crooke .. .. .	1910
	Hon. W. Pearson .. .. .	1907
Melbourne ..	Hon. W. Cain .. .. .	1910
	Hon. J. M. Davies (Attorney-General and Solicitor-General)	1907
Melbourne East ..	Hon. W. Pitt (Honorary Minister) .. ..	1910
	Hon. A. McLellan .. .. .	1907
Melbourne North..	Hon. D. Melville .. .. .	1910
	Hon. F. Stuart .. .. .	1907
Melbourne South..	Hon. T. H. Payne .. .. .	1910
	Hon. T. Luxton .. .. .	1907
Melbourne West ..	Hon. J. G. Aikman .. .. .	1910
	Hon. W. H. Edgar .. .. .	1907
Nelson ..	Hon. E. H. Austin .. .. .	1910
	Hon. J. D. Brown .. .. .	1907
Northern ..	Hon. W. L. Baillieu .. .. .	1910
	Vacant .. .. .	1907
North-Eastern ..	Hon. A. O. Sachse (Minister of Public Instruction)	1910
	Hon. W. Little .. .. .	1907
North-Western ..	Hon. R. B. Rees .. .. .	1910
	Hon. J. M. Pratt .. .. .	1907
Southern ..	Hon. Dr. W. H. Embling .. .. .	1910
	Hon. N. FitzGerald (Chairman of Committees)	1907
South-Eastern ..	Hon. J. C. Campbell .. .. .	1910
	Hon. D. E. McBryde .. .. .	1907
South-Western ..	Hon. T. C. Harwood .. .. .	1910
	Hon. Sir Henry J. Wrixon, K.C.M.G., K.C., (President)	1907
Wellington ..	Vacant .. .. .	1910
	Hon. J. Y. McDonald .. .. .	1907
Western ..	Hon. W. S. Manifold .. .. .	1910
	Hon. R. B. Ritchie .. .. .	1907

Clerk of Parliaments and of the Legislative Council: Sir G. H. Jenkins.

Clerk Assistant: J. M. Pitts.

Usher and Accountant: R. W. V. McCall.

## THE LEGISLATIVE ASSEMBLY.

Speaker: Vacant.

Name of Electoral District.	Name of Member.
Abbotsford	... Wm. D. Beazley.
Albert Park	... Geo. A. Elmslie.
Allandale	... Hon. Sir A. J. Peacock, K.C.M.G. (Chief Secretary and Minister of Labour).
Ballaarat East	... Hon. R. McGregor.
Ballaarat West	... Hon. J. W. Kirton.
Barwon	... J. F. Farrer.
Benalla	... J. J. Carlisle.
Benambra	... A. W. Craven.
Bendigo East	... T. Glass.
Bendigo West	... D. Smith.
Boroondara	... Hon. Frank Madden.
Borung	... W. Hutchinson.
Brighton	... Hon. Thomas Bent (Premier, Treasurer, and Minister of Railways).
Brunswick	... F. Anstey.
Bulla	... A. R. Robertson.
Carlton	... F. H. Bromley.
Castlemaine and Maldon	... H. S. W. Lawson.
Collingwood	... E. Wilkins.
Dalhousie	... R. I. Argyle.
Dandenong	... W. S. Keast.
Daylesford	... Hon. D. McLeod (Minister of Mines and Forests).
Dundas	... J. Thomson.
Eaglehawk	... T. Tunnecliffe.
East Melbourne	... H. Weedon.
Essendon	... Hon. W. A. Watt.
Evelyn	... Hon. E. H. Cameron (Minister of Public Health and Commissioner of Public Works).
Fitzroy	... J. W. Billson.
Flemington	... E. C. Warde.
Geelong	... Hon. W. Gurr.
Gippsland East	... J. Cameron.
Gippsland North	... H. P. Keogh.
Gippsland South	... T. Livingston.
Gippsland West	... Hon. J. E. Mackey (Minister of Lands).
Glenelg	... H. J. M. Campbell.
Goulburn Valley	... Hon. George Graham.
Grenville	... D. C. McGrath.
Gunbower	... J. Cullen.
Hampden	... D. S. Oman.
Hawthorn	... Hon. George Swinburne (Minister of Water Supply and Agriculture).
Jika Jika	... J. G. Membrey.
Kara Kara	... P. McBride.
Korong	... Hon. Thos. Langdon.
Lowan	... R. Stanley.
Maryborough	... Hon. A. R. Outtrim.
Melbourne	... Hon. J. A. Boyd (Honorary Minister).
Mornington	... A. Downward.
North Melbourne	... G. M. Prendergast.
Ovens	... A. A. Billson.
Polwarth	... C. L. Forrest.
Port Fairy	... J. F. Duffus.
Port Melbourne	... G. Sangster.
Prahran	... Hon. D. Mackinnon (Honorary Minister).
Richmond	... G. H. Bennett.



MEMBERS OF THE STATE PARLIAMENT, 1907—LEGISLATIVE ASSEMBLY—*continued*.

Name of Electoral District.	Name of Member.
Rodney ...	H. McKenzie.
St. Kilda ...	R. G. McCutcheon.
Stawell and Ararat ...	R. F. Toutcher.
Swan Hill ...	J. Gray.
Toorak ...	N. Bayles.
Upper Goulburn ...	T. Hunt.
Walhalla ...	A. Harris.
Wangaratta ...	J. Bowser.
Waranga ...	J. W. Mason.
Warrenheip ...	G. F. Holden.
Warrnambool ...	Hon. John Murray.
Williamstown ...	J. Lemmon.

Clerk of the Assembly: T. G. Watson.  
 Clerk Assistant and of Private Bills: H. H. Newton.  
 Clerk of the Papers: J. M. Worthington.  
 Accountant and Clerk: W. R. Heywood.  
 Chief *Hansard* Reporter: E. B. Loughran.

FOREIGN CONSULS.

The following is a return of Consuls of foreign countries for Victoria during the year 1906:—

CONSULS-GENERAL.					Countries Represented.
Name.					
Bosschart, W. L. ...	...	...	...	...	Netherlands.
Lyle, M. ...	...	...	...	...	Colombia.
Were, F. W. ...	...	...	...	...	Denmark.
Bray, John P. ...	...	...	...	...	United States.
Sanders, Lewis ...	...	...	...	...	Liberia.
Huylebroeck, F. ...	...	...	...	...	Belgium.
Moore, Frederick H. ...	...	...	...	...	Hawaii.
Ryan, Dr. Charles ...	...	...	...	...	Turkey.
Smith, William Lamb ...	...	...	...	...	Paraguay.
Oustinoff, M. ...	...	...	...	...	Russia.
Bertola, Cav. C. ...	...	...	...	...	Italy.
Waddell, G. W. ...	...	...	...	...	Peru.
Pinard, A. ...	...	...	...	...	France.
Iwasaki, K. ...	...	...	...	...	Japan.
Walsh, F. ...	...	...	...	...	Honduras.
Römcke, Otto ...	...	...	...	...	Norway.
Irmer, George ...	...	...	...	...	Germany.
Tillock, Don Diego T. ...	...	...	...	...	Argentine Republic.
O'Carroll, Baron von H. ...	...	...	...	...	Austria-Hungary.
Love, J. R. ...	...	...	...	...	Greece.

CONSULS.					
Pinschof, Carl A. ...	...	...	...	...	Austria-Hungary.
Meyer, S. (Chancellor) ...	...	...	...	...	Austria-Hungary.
Brahe, William Alexander ...	...	...	...	...	German Empire.
Martin, Charles ...	...	...	...	...	Swiss Confederation.
Hunter, David ...	...	...	...	...	Japan.
Langdon, Charles P. ...	...	...	...	...	Hawaii.
Pfaff, Alfred ...	...	...	...	...	Peru.
Jack, W. L. ...	...	...	...	...	Portugal.

## CONSULS—continued.

Name.	Countries Represented.
Webster, A. ... ..	Chile.
Abourizk, W. (Chancellor, &c.) ... ..	Turkey.
De Possel, H. ... ..	Bolivia.
Curtain, R. ... ..	Greece.
Walters, H. A. ... ..	Uruguay.
Passek, N. ... ..	Russia.
Corte, Cav. Pasquale ... ..	Italy.
Vanderkelen, F. ... ..	Belgium.
Paxton, J. M. ... ..	Venezuela.
De Bavay, A. ... ..	Guatamala.
Cave, Henry ... ..	Spain.
Oldham, J. ... ..	Servia.
Assche, O. Van ... ..	Netherlands.
Medina, R. ... ..	Nicaragua.
McKinley, A. ... ..	Mexico.

## DEPUTY CONSUL-GENERAL.

Bouton, W. K. ... ..	United States.
----------------------	----------------

## VICE-CONSUL-GENERAL.

Merrill, A. P. ... ..	United States.
-----------------------	----------------

## VICE-CONSULS.

Gollin, Alfred ... ..	Argentine Republic.
Holdenson, P. J. ... ..	Denmark.
Maistre, M. P. ... ..	France.
Belcher, George Frederick ... ..	Sweden and Denmark.
Gundersen, H. J. ... ..	Norway.
Martin, G. ... ..	Norway.
Moore, A. E. ... ..	Liberia.
Sheppard, H. A. ... ..	Brazil, United States of
Pirandello, A. ... ..	Italy.

## PRINCIPAL STATE OFFICERS.

Appended is a list of the principal officers in the Public Service of Victoria, including the judiciary and other officers not under the provisions of the Public Service Acts. Officers of Parliament are given above, in conjunction with members of the Houses. Those in the Departments of Trade and Customs, Post and Telegraph, and Defence are given under the section dealing with the Commonwealth, of which those Departments now form a part:—

Chief Justice ... ..	The Hon. Sir John Madden, G.C.M.G., LL.D.
Puisne Judges ... ..	Thomas A'Beckett. H. E. A. Hodges. J. H. Hood. L. F. B. Cussen. A. W. Chomley (acting)
County Court Judges ... ..	H. Molesworth. W. E. Johnston. J. G. Eagleson. J. B. Box.

PRINCIPAL STATE OFFICERS—*continued.*

Master-in-Equity and Lunacy and Commissioner of Taxes	...	T. P. Webb, K.C.
Commissioner of Titles	...	E. T. de Verdon, K.C.
Public Service Commissioner	...	C. A. Topp, M.A., I.S.O.
Inspector-General of the Insane	...	Dr. W. E. Jones.
Agent-General, London	...	Hon. J. W. Taverner.
Auditor-General	...	F. H. Bruford.
Chairman of the Board of Public Health and Medical Inspector	...	Dr. W. P. Norris.
Chief Commissioner of Police	...	T. O'Callaghan.
Curator of Estates of Deceased Persons	...	Dr. T. F. Bride.
Director of Agriculture	...	T. Cherry, M.D., M.S.
Chief Crown Prosecutor	...	C. B. Finlayson, K.C.
Chief Clerk, Supreme Court	...	G. H. Neighbour, K.C.
Government Botanist	...	Dr. A. J. Ewart.
State Rivers and Water Supply Commissioners—		
Chairman	...	S. Murray, C.E.
Commissioner	...	G. Garson, C.E.
Commissioner	...	W. Cattanach.

CHIEF SECRETARY'S DEPARTMENT.

	Under Secretary,	G. C. Morrison.
Chief Secretary's Office ...	...	Chief Clerk, W. A. Callaway.
		Chief Electoral Inspector, H. E. Macdowell.
Audit Office ...	...	Chief Clerk, G. W. Fyfe.
Executive Council, &c. ...	...	Clerk to the Council and Secretary to Premier, R. S. Rogers.
Explosives ...	...	Chief Inspector, C. N. Hake.
Friendly Societies ...	...	Actuary, E. F. Owen (retired 31st Dec., 1906).
		Acting Actuary, D. Barry.
Government Shorthand Writer ...	...	H. E. Wade.
Government Medical Officer ...	...	Dr. J. A. O'Brien.
Government Statist ...	...	E. T. Drake.
Inspection of Factories ...	...	Chief Inspector, H. Ord.
Inspection of Stores ...	...	Inspector, A. Roche.
Marine Board ...	...	Secretary, J. G. McKie.
Mercantile Marine ...	...	Superintendent, C. A. Parsons.
Neglected Children and Reformatory Schools		(Vacant).
Observatory ...	...	Government Astronomer, P. Baracchi.
Penal and Gaols ...	...	Inspector-General, E. C. Connor.
Public Library, Museums, and National Gallery		Chief Librarian and Secretary, E. La T. Armstrong, B.A., LL.B.
Public Service Commissioner ...	...	Secretary, J. D. Merson.

TREASURY DEPARTMENT.

Under-Treasurer	...	H. W. Meakin.
Accountant	...	M. A. Minogue.
Chief Clerk	...	C. H. Wheatland.
Receiver and Paymaster, Melbourne	...	J. W. Stranger.
Inspector of Charities	...	Inspector, F. T. Short.
Tender Board	...	Secretary, T. M. Callan.
Income Tax	...	Deputy Commissioner, V. E. Henderson.
Government Printer	...	(Vacant). J. Kemp, Acting.

PRINCIPAL STATE OFFICERS—*continued.*

## DEPARTMENT OF PUBLIC INSTRUCTION.

Director of Education	...	...	Frank Tate, M.A., I.S.O.
Chief Inspector	...	...	S. J. Swindley.
Assistant Chief Inspector...	...	...	W. Hamilton, B.A.
Training College	...	...	Principal, John Smyth, M.A., D.Ph.
Secretary	...	...	C. W. H. James.

## LAW DEPARTMENT.

Secretary	...	...	W. R. Anderson.
Parliamentary Draftsman	...	...	E. Carlile, K.C.
Crown Solicitor	...	...	E. J. D. Guinness.
Police Magistrates	...	...	J. A. Panton, C.M.G., and 18 others.
Chief Clerk and Accountant	...	...	D. F. McGrath.
Master-in-Equity's Office	...	...	Chief Clerk and Officer for Assessing Duty, J. F. Poole. Registrar of Probates, W. McDonald.
Prothonotary	...	...	J. W. O'Halloran.
Sheriff	...	...	I. Martin.
Registrar of County Courts, &c.	...	...	W. S. A. Ponsford.
Comptroller of Stamps, &c.	...	...	J. Davidson.
Chief Examiner of Titles	...	...	D. C. Rees.
Registrar-General	...	...	T. Byrne.

## DEPARTMENT OF LANDS AND SURVEY.

Secretary for Lands	...	...	J. W. Skene.
Surveyor-General	...	...	J. M. Reed, I.S.O.
Chief Clerk	...	...	J. Macgibbon.
Director of Botanic Gardens and Domain, &c.	...	...	W. R. Guilfoyle.
Closer Settlement, Secretary	...	...	J. E. Jenkins.

## DEPARTMENT OF PUBLIC WORKS.

Secretary for Public Works	...	...	D. Martin, I.S.O.
Inspector-General of Public Works	...	...	W. Davidson.
Chief Clerk and Accountant	...	...	R. I. Cullen.
Architects	...	...	J. H. Marsden and 3 others.
Engineer Ports and Harbors	...	...	C. W. Maclean.
Engineer Roads, Bridges, and Harbor Works	...	...	C. Catani, C.E.

## DEPARTMENT OF MINES AND WATER SUPPLY.

Secretary for Mines and Water Supply	...	...	W. Dickson.
Chief Engineer of Water Supply	...	...	S. Murray, C.E.
Director of Geological Survey	...	...	E. J. Dunn.
Chief Clerk	...	...	P. Cohen.
Chief Mining Inspector	...	...	A. H. Merrin.
Chief Draughtsman and Mining Surveyor	...	...	G. Groube.
Conservator of Forests	...	...	A. W. Crooke (acting).

## DEPARTMENT OF PUBLIC HEALTH.

Secretary	...	...	J. W. Colville.
-----------	-----	-----	-----------------

PRINCIPAL STATE OFFICERS—*continued.*

DEPARTMENT OF AGRICULTURE.

Secretary for Agriculture...	...	E. G. Duffus (acting).
Government Analytical Chemist	...	W. P. Wilkinson.
Entomologist	...	C. French, sen.
Inspector of Food for Export	...	Dr. A. A. Brown.
Chief Inspector of Stock	...	J. R. Weir.

DEPARTMENT OF RAILWAYS

Commissioners	...	...	T. Tait (Chairman), W. Fitzpatrick, C. Hudson.
Secretary	...	...	L. J. McClelland.
Engineer-in-Chief	...	...	M. E. Kernot.
General Passenger and Freight Agent	...	...	E. B. Jones.
General Superintendent of Transportation	...	...	S. Jones.
Superintendent Passenger Train Service	...	...	J. A. Robertson.
Superintendent Goods Train Service	...	...	John Richmond.
Chief Accountant	...	...	Lt.-Col. J. W. Hacker, V.D.
Assistant Accountant	...	...	T. F. Brennan.
Auditor of Receipts	...	...	W. G. Ritchie.
Chief Mechanical Engineer	...	...	T. H. Woodroffe.
Chief Engineer of Ways and Works	...	...	C. E. Norman.
Telegraph Superintendent	...	...	W. A. Holmes.

ROYAL MINT (UNDER IMPERIAL GOVERNMENT).

Deputy Master	...	...	E. S. Wardell.
Superintendent of Bullion Office	...	...	Major M. L. Bagge.
First Assayer	...	...	F. R. Power.
Registrar and Accountant	...	...	A. M. Le Souëf.
First Clerk	...	...	W. M. Robins.

COMMISSIONERS OF LAND TAX.

C. A. Topp, Public Service Commissioner (Chairman); J. M. Reed, Surveyor-General; and D. Martin, Secretary for Public Works.

MELBOURNE UNIVERSITY.

Return of the Professors, Lecturers, and Demonstrators of the Melbourne University during the year 1906:—

PROFESSORS.

Office.	Name.
Mathematics	Nanson, E. J., M.A.
History and Political Economy	Elkington, J. S., M.A., LL.B.
Anatomy and Pathology	Allen, H. B., M.D., B.S.
Engineering	Kernot, W. C., M.A., M.C.E.
Classical Philology	Tucker, T. G., M.A., Litt.D.
Mental and Moral Philosophy	Laurie, H., LL.D.
Chemistry	Masson, D. O., M.A., D.Sc., F.R.S.
Biology	Spencer, W. B., C.M.G., M.A., F.R.S.
Natural Philosophy	Lyle, T. R., M.A., D.Sc.
Law	Moore, W. H., B.A., LL.B.

MELBOURNE UNIVERSITY—*continued.*PROFESSORS—*continued.*

Office.	Name.
Musical Music ... ..	Peterson, Franklin S., Mus. Bac.
Physiology and Histology ... ..	Osborne, W. A., M.B., B.Ch., D.Sc.
Geology and Mineralogy ... ..	Skeats, E. W., D.Sc., F.G.S.
Anatomy ... ..	Berry, R. J. A., M.D., Ch.M., F.R.C.S., F.R.S.E.
Botany ... ..	Ewart, A. J., D.Sc., Ph.D., F.L.S.

## LECTURERS.

Equity ... ..	Mackey, J. E., M.A., LL.B.
Law of Contracts ... ..	Duffy, F. G., M.A., LL.B.
Wrongs ... ..	Woinarski, C. J. Z., M.A., LL.M.
Law of Property ... ..	Guest, W. C., M.A., LL.B.
Classics and Philology ... ..	Allen, H. W., M.A.
Mathematics ... ..	Michell, J. H., M.A., F.R.S.
French ... ..	Maurice-Carton, F. I., M.A., B.ès L.
German ... ..	von Dechend, W.
Surgery ... ..	Bird, F. D., M.B., M.S., M.R.C.S.
Theory and Practice of Medicine ... ..	Jamieson, J., M.D., M.S.
Obstetrics and Diseases of Women... ..	Adam, G. R. W., M.D., M.S.
Forensic Medicine ... ..	Mollison, C. H., M.B., B.S., M.R.C.S.
Therapeutics, Dietetics, and Hygiene ... ..	Springthorpe, J. W., M.A., M.D., M.R.C.P.
Bacteriology ... ..	Bull, R. J., M.D., B.S.
Mining ... ..	Merrin, A. H., M.C.E.
Classics ... ..	Cornwall, E. W., B.A.
Classics ... ..	Ulrich, E. D., M.A.
Classics ... ..	Blackwood, R. L., B.A.
Metallurgy ... ..	Mills, A. L.
Engineering ... ..	Higgins, Geo., M.C.E.
Education ... ..	Smyth, J., M.A., D.Ph.
English ... ..	Murdoch, W. L. F., M.A.
Logic ... ..	Latham, J. G., M.A., LL.M.
History ... ..	Arthur, J. A., M.A., LL.M.
Bio-Chemistry ... ..	Rothera, A. C. H., B.A., M.R.C.S., L.R.C.P.

## LECTURERS AND DEMONSTRATORS.

Chemistry ... ..	Green, W. H., D.Sc., and Steele, B. D., D.Sc.
Biology ... ..	Hall, T. S., M.A.
Natural Philosophy ... ..	Love, E. F. J., M.A., F.R.A.S.
Natural Philosophy ... ..	Grant Kerr, M.Sc.
Physiology and Histology ... ..	Fielder, W., F.R.M.S.

## DEMONSTRATORS.

Anatomy ... ..	Mackenzie, W. C., M.D., B.S., F.R.C.S.
Pathology ... ..	Ellis, Constance, M.D., B.S.
Drawing ... ..	Lupson, J. T.
Natural Philosophy ... ..	Holmes, W. M.
Natural Science ... ..	Grayson, H. J.

## OFFICE STAFF.

Registrar ... ..	Cornwall, W. E., M.A.
Librarian ... ..	Bromby, E. H., M.A.

# THE MELBOURNE AND METROPOLITAN BOARD OF WORKS.

Chairman	...	...	...	Major W. J. C. Riddell.
Commissioners—				
Sir A. Snowden, M.L.C., W. Strong, J.P., W. Cook, J. H. Gardiner, A. L. Crichton, W. W. Cabena, Jacob Marks, J.P., Frank Stapley, representing the City of Melbourne.				
J. Baragwanath, J.P., J. S. White, J.P., John Sloss, W. O. Strangward, representing the City of South Melbourne.				
E. Naylor, Hon. T. Luxton, M.L.C., H. Upton, representing the City of Prahran.				
J. Gahan, J.P., W. Rain, J.P., representing the City of Collingwood.				
J. G. Yager, J.P., George R. Jeffries, J.P. " " " " Fitzroy.				
E. Crawcour, G. W. Freeman, J.P. " " " " Richmond.				
S. Jacoby, G. Connibere, J.P. " " " " St. Kilda.				
F. E. Shillabeer " " " " Footscray.				
J. S. Riddell " " " " Hawthorn.				
T. Wilson, J.P. " " " " Town of Brighton.				
Thos. Passfield " " " " Brunswick.				
Robert Beckett " " " " Camberwell.				
Major W. J. C. Riddell " " " " Caulfield.				
A. E. Young " " " " Essendon.				
Alex. Cameron " " " " Malvern.				
Chas. Mitchell " " " " Northcote.				
Henry N. Edwards, J.P. " " " " Port Melbourne.				
W. H. Treganowan " " " " Williamstown.				
E. A. Atkins, representing the Borough of Kew.				
A. Voice, J.P. " " " " Coburg.				
T. Latham, J.P. " " " " Shire of Heidelberg.				
C. T. Crispe, J.P. " " " " Preston.				
Secretary	...	...	...	Geo. A. Gibbs.
Treasurer	...	...	...	R. Richardson.
Engineer-in-Chief	...	...	...	W. Thwaites, M.A., M.C.E.
Superintending Engineer of Sewerage and Water Supply	...	...	...	C. E. Oliver, M.C.E.
Designing Engineer	...	...	...	C. Kussmaul.

## MELBOURNE HARBOR TRUST.

Commissioners appointed by—				
Governor-in-Council	...	...	...	J. S. White; Hon. W. Pitt, M.L.C. (Chairman); J. B. Tucker; Hon. D. Melville, M.L.C.; D. Methven.
Corporation of Melbourne	...	...	...	W. Strong, T. J. Davey.
Municipality of South Melbourne	...	...	...	A. Parker.
" Port Melbourne	...	...	...	T. N. Tarver.
" Williamstown	...	...	...	W. H. Treganowan.
" Footscray	...	...	...	J. Stewart.
Shipowners registered at Melbourne	...	...	...	H. C. Pigott.
Merchants of Melbourne	...	...	...	W. T. Appleton.
	...	...	...	E. Northcote.
	...	...	...	C. Duckett.
	...	...	...	G. Lush.
Secretary	...	...	...	W. M. McPherson.
Treasurer	...	...	...	R. P. Rudd.
Engineer	...	...	...	J. H. McCutchan.
Harbor Master	...	...	...	John Halliday.
				W. G. Vincent.

## BOARD OF PUBLIC HEALTH.

Chairman and Medical Inspector	...	Wm. Perrin Norris, M.D., D.P.H.
Members	...	Hon. J. Styles, appointed by Governor in Council.
		W. Burton, City of Melbourne.
		J. Johnston, M.D., North Yarra Group.
		F. G. Wood, J.P., South Yarra Group.
		J. P. Carolin, Eastern Country Boroughs.
		C. C. Shoppee, J.P., Western Country Boroughs.
		A. H. Smith, J.P., Eastern Shires.
		H. A. Austin, J.P., Western Shires.
Port Health Officers	...	J. C. Johnston, M.B., Quarantine Station, Portsea.
		H. R. Maclean, M.B., Port of Melbourne.
		H. Howard, M.B., Port of Melbourne.
		W. B. Docker, M.B., Portland.
		W. H. Orchard, M.B., Port Fairy.
		T. J. M. Kennedy, M.B., Geelong.
		T. J. Fleetwood, M.B., Warrnambool.

## MARINE BOARD, MELBOURNE.

President	...	Archibald Currie.
Vice-President	...	W. D. Garside.
Members	...	C. W. Maclean, A. Agnew, R. Dickins, D. Y. Syme, C. F. Orr, J. McK. Corby, G. W. Lilley, J. G. Little, H. Belfrage, J. Ogilvie.
Examiner in Navigation and Seaman-ship		H. Goodrham.
Examiner in Pilotage	...	G. Bevis.
Counsel	...	E. J. D. Guinness.
Secretary	...	J. G. McKie.

## COURT OF MARINE INQUIRY.

President	...	Senior Police Magistrate presiding.
Skilled Members	...	J. A. Roberts, J. F. Anderson, A. Dunbar, V. E. E. Gotch, J. Garson, T. Boyd, A. McGowan, J. Sloss, J. Tozer, H. W. H. Chatfield.

## LOCAL GOVERNMENT.

Amongst the various enactments which became law for Victoria on its separation from New South Wales, was a provision in the Imperial Act authorizing the Governor to incorporate the inhabitants of every county to form districts for the purpose of local government, and to establish elective District Councils, with power to frame by-laws for making and maintaining roads, establishing schools, levying local tolls and rates, &c. Many of the provisions of the Act were found to be unworkable and expensive in the details, and the District Councils therefore discontinued their meetings and practical working under the Act. Improved legislation being required, an Act was passed in 1853 establishing a central Road Board for the whole Colony, with an Inspector-General, and staff, and also providing for the creation of local Road Districts under the management of Road Boards. This Act made provision chiefly for local government in



country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act. In the meanwhile suburban districts and towns were growing up, and in 1859 an Act was passed for the establishment of municipal institutions in Victoria. This Act also continued in force till 1863, when its chief provisions were merged into the Municipal Corporations Act. Further improvements and extensions have been from time to time made in the Acts dealing with local government, and it is now practically universal throughout Victoria, all but about  $\frac{3}{4}$  per cent. of its whole area being divided into urban or rural municipal districts. The former are called cities, towns, and boroughs, and the latter shires.

The laws relating to local government have lately been amended and consolidated by the *Local Government Act* 1903, passed on 24th December, 1903. The councils of municipalities have power to levy rates, which, together with licence-fees, subsidies received from the State, market dues, rents, and sanitary charges, form their chief sources of income. Their principal functions are to make, maintain, and control all streets, roads, bridges, ferries, culverts, sewers, drains, water-courses, and jetties within their respective boundaries; also, under proper by-laws, to control the traffic, regulate the markets, pounds, abattoirs, baths, places of recreation, and the arrangements for sewerage, lighting, water supply, and carrying on of noxious trades, and to act as local Boards of Health.

Cities,  
towns,  
boroughs,  
and shires

Any portion of Victoria, not exceeding in area nine square miles, and having no point in such area distant more than six miles from any other point therein, which contains at least 500 householders, and rateable property capable of yielding £300 per annum upon a rate of one shilling in the pound, may be constituted a borough. Any borough having during the preceding financial year a revenue of £10,000 may be declared a town; or, having a revenue of £20,000, may be declared a city. Any portion of Victoria containing rateable property capable of yielding £1,500 on a rate of one shilling in the pound may be constituted a shire. There are 60 cities, towns, and boroughs in Victoria, and 146 shires. The Governor in Council may unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified; may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire; and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

On petition by twenty-five ratepayers resident in any portion, not exceeding three square miles in extent, of any shire, and distant more than ten miles from the City of Melbourne, the Governor in Council may proclaim such portion a township.

Townships.

Each municipality existing at the commencement of the original Act—now incorporated in the Act of 1903—is allowed the number of councillors then assigned to it; but in other cases the number

Municipal  
councillors.

must be some multiple of three, not less than six nor more than 24. The number is usually nine. If the district is subdivided, the number of councillors is three for each subdivision. If at any time in any municipality there is no council or not enough councillors to form a quorum, a commissioner may be appointed by the Governor in Council to exercise the powers of the council. Male persons liable to be rated in respect of property in the municipal district of the rateable annual value of £20 at least, whether consisting of one or more tenements, are qualified to hold the office of councillor. The election of councillors takes place annually. One-third of the councillors retire each year by rotation, but retiring councillors may be re-elected. The councillors elect their own chairman, who, in the case of cities, towns, and boroughs, is called the mayor; in the case of shires, the president.

Municipal  
electors.

Every person (male or female) 21 years of age or upwards, liable to be rated in respect of property within a municipal district, in respect of which all rates, made before 10th March of the year, have been paid, shall be entitled to be enrolled as a voter. Plurality of votes is allowed upon the following scale:—

#### IN CITIES, TOWNS, AND BOROUGHES.

Properties rated at an annual value of under £50 ...	... One vote.
" " " " " £50 to £100 ...	Two votes.
" " " " " £100 and upwards ...	Three votes.

#### IN SHIRES.

Properties rated at an annual value of under £25 ...	... One vote.
" " " " " £25 to £75 ...	Two votes.
" " " " " £75 and upwards ...	Three votes.

No person may be enrolled in respect of property rated under £5 a year, unless there is a house on the property, and he resides there. The occupier and the owner are not to be both enrolled in respect of the one property, the former having the prior right to enrolment. Corporations liable to be rated may nominate not more than three persons to be enrolled in their stead, and joint occupiers and owners, not exceeding three, are each entitled to be enrolled. If there be more than three, then the three standing first on the last rate valuation or return are so entitled. The *Voting by Post Act* 1900 may be made applicable to the elections for any municipality on the petition of the councillors.

Rateable  
property.

All land situated in a municipal district is rateable property except the following:—Crown lands; land used exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, and charitable purposes; land vested in or held by or in trust for any municipality, local governing body,

or commissioners under the Water Acts; land vested in fee in the Railways Commissioners, Minister of Public Instruction, Board of Land and Works, Harbor Trust Commissioners, and Melbourne and Metropolitan Board of Works. The expression land includes, of course, all buildings and improvements thereon.

Rates levied in municipal districts are of three kinds, viz:— General, extra, and separate rates. General rates are levied at least once in every year by the council of every municipality, and shall not exceed in any one year 2s. 6d. in the pound of the net annual value, or be less than 6d. in the pound of such value. Every general rate is made and levied on the occupier of the property rated, or if there be no occupier, or the occupier be the Crown or public or local body, then upon the owner of the property. Extra rates may be levied in any one or more subdivisions of a district, on requisition by not less than two-thirds of the councillors for the subdivision, provided that both rates together in any subdivision do not exceed 2s. 6d. in the pound. Extra rates are levied on all properties alike in the subdivision; but where any works or undertakings are for the special benefit of any particular portion of the municipal district, "a separate rate" may be levied, with the consent of a majority of the occupiers, and of one-third at least of the owners of the properties affected. The rates to be levied may be differential according to the benefits to be received by different properties, and the amount of the rate must be such as will, in the opinion of the council, suffice to provide for the payment of interest, and periodical repayments of, or sinking fund for, the loan raised on the security of such rate.

Rates—  
general,  
separate,  
&c.

Where under any Act a council is empowered to execute any work at the cost of the owners, or to require such owners to do so, a special improvement charge may be made on the properties affected, on the security of which money may be borrowed for the carrying out of such work.

Improve-  
ment  
charge.

Melbourne and Geelong, the latter of which was for many years of second importance in the colony, having been incorporated under special statutes prior to the establishment of municipal government on a large scale throughout the colony, are not subject to the Local Government Acts, except in a few comparatively unimportant particulars. Melbourne was incorporated as a town in 1842, and was ordained a city in 1847. Geelong was incorporated as a town in 1849.

Incorpora-  
tion of  
Melbourne  
and  
Geelong.

Detailed particulars of the existing municipalities in 1906—their area, population, number of ratepayers, rated properties, estimated total annual value, &c.—will be found under Municipal Statistics.

## THE COMMONWEALTH.

The Commonwealth of Australia comprises the States of Victoria, New South Wales, Queensland, South Australia, Western Australia, and Tasmania, and its area is estimated to be somewhat under three

million square miles. The following are the areas of the different States, as officially computed:—

#### AREA OF STATES.

	Sq. Miles.
Victoria ... ..	87,884
New South Wales ... ..	310,700
Queensland ... ..	668,497
South Australia ... ..	903,690
Western Australia ... ..	975,920
Tasmania ... ..	26,215
Total Australia ... ..	2,972,906

Position of  
Austral-  
asian  
capitals.

The following are the latitudes and longitudes of the capital cities of the different Australian States, the positions being the observatories at Melbourne, Sydney, Brisbane, and Adelaide, the Barracks Observatory at Hobart, and the Government House at Perth:—

#### POSITION OF STATES CAPITAL CITIES.

State.	Capital City.								
	Name.			Latitude S.			Longitude E.		
				°	'	"	°	'	"
Victoria ... ..	Melbourne	...	...	37	49	53	144	58	32
New South Wales ... ..	Sydney	...	...	33	51	41	151	12	23
Queensland ... ..	Brisbane	...	...	27	28	0	153	1	36
South Australia ... ..	Adelaide	...	...	34	55	34	138	35	4
Western Australia ... ..	Perth	...	...	31	57	24	115	52	42
Tasmania ... ..	Hobart	...	...	42	53	25	147	19	57

#### FEDERAL CAPITAL.

Site.

By section 125 of the Commonwealth Constitution Act it was decreed that the capital city of the Australian Commonwealth should be in New South Wales, distant not less than 100 miles from Sydney. Until such time as the Federal Government should meet at the seat of government, Parliament was to sit at Melbourne. In August, 1904, the Parliament of the Federation proceeded to fix the permanent seat of government, the following clauses being enacted in the *Seat of Government Act 1904*:—

Dalgety.

It is hereby determined that the seat of government of the Commonwealth shall be within seventeen miles of Dalgety, in the State of New South Wales.

The territory to be granted to, or acquired by, the Commonwealth, within which the seat of government shall be, should contain an area not less than nine hundred square miles, and have access to the sea.

# THE CONSTITUTION.

The Act constituting the Commonwealth was passed by the Imperial Parliament and proclaimed in Australia on 1st January, 1901. Its leading features are as follow:—

Leading features of the Commonwealth Constitution.

Constitution indissoluble, and to come in force by Imperial Proclamation.

The Parliament is to consist of the Queen, a Senate, and a House of Representatives. Governor General appointed to act for the Queen.

Parliament.

Senate to consist of six members from each State; number may be increased or diminished, but so that equal representation of the States be maintained. Qualification of electors of Senate and of Senators to be same as that of House of Representatives. Each elector shall vote only once.

Senate.

House of Representatives shall have twice the number of members of the Senate, and the number of members for each State shall be in proportion to population, but not less than five for any State. Qualification of electors to be that of the more numerous House in each State. Each elector to vote only once. Qualifications of a member—(a) 21 years of age, (b) to be an elector or entitled so to be, (c) resident three years, (d) natural born or naturalized five years.

House of Representatives.

The general powers of the Parliament are 39 in number, the principal of which are to make laws for trade, taxation, bounties, borrowing, postal services, naval and military, statistics, currency, banking, insolvency, corporations, divorce, marriage, old age pensions, immigration and emigration, railways, &c. Exclusive powers in regard to the seat of Government, State departments transferred, are other matters declared by the Constitution to be within the exclusive power of the Parliament.

Powers of Parliament.

Money Bills not to originate in, nor to be amended by the Senate, which House may, however, return the Bill requesting any omission or amendment: Equal power in all other matters. Tacking Bills prohibited.

Money Bills.

Provision for Dead-locks.—Joint dissolution, and if again passed in lower House and rejected in Senate, a joint sitting to be held, and if passed by an absolute majority of the total members of both Houses, disputed Bill to become law.

Dead-locks.

A Bill having passed both Houses the Governor-General shall either assent, withhold assent, reserve the Bill, or return it and recommend amendments.

Executive power vested in Queen and exercisable by Governor-General in Council who may appoint Ministers of State.

Executive.

State departments of Customs and Excise transferred to Commonwealth on its establishment. Departments of posts and telegraphs, defence, light-houses, &c., and quarantine, on a date or dates to be proclaimed.

Departments transferred.

High Court of Australia established; appellate and original jurisdiction.

Judicature.

Collection of Customs to pass. Customs and Excise duties to be uniform, and intercolonial free-trade established within two years after the establishment of the Commonwealth, after which the Federal Government shall have exclusive power to levy such duties as well as bounties in the production or export of goods.

Finance and Trade.

Of the net revenue from Customs and Excise not more than one-fourth to be applied by Commonwealth towards its expenditure. This provision is liable to variation or repeal after 10 years from the establishment of the Commonwealth.

Right of States to reasonable use of river waters for conservation or irrigation reserved.

Water rights.

Inter-State Commission established to regulate trade and commerce, and prevent discriminations being made by any State which may be deemed unreasonable or unjust to any other State.

Inter-State Commission.

Constitutions, powers, and laws of States protected. State Debts may be taken over.

State Debts.

Admission of new States provided for. Commonwealth to protect States against invasion or domestic violence.

Protection to States.

Seat of Government to be fixed by the Parliament at some place in New South Wales, but at least 100 miles from Sydney, and to be federal territory.

Federal Capital.

Constitution may be altered by an absolute majority of both Houses; or of one House if passed twice successively with three months interval; subject to the approval of a majority of the electors voting in a majority of the States, and in the whole Commonwealth.

Alteration of Constitution.

The representation of the States in the present House of Representatives is as follows:—

New South Wales ...	...	...	...	...	27
Victoria ...	...	...	...	...	22
Queensland ...	...	...	...	...	9
South Australia ...	...	...	...	...	7
Western Australia ...	...	...	...	...	5
Tasmania ...	...	...	...	...	5
Total Members, House of Representatives					<u>75</u>

Previously Victoria had 23 members, and New South Wales 26.

### OPENING OF FIRST PARLIAMENT.

Opening of  
the first  
Common-  
wealth  
Parliament.

The first Parliament of the Commonwealth was opened in Melbourne on the 9th May, 1901, by His Royal Highness the Duke of Cornwall and York, K.G., K.T., K.P., G.C.V.S., who was authorized as His Majesty's High Commissioner by letters patent. Besides the Duke and Duchess and suite, the Governor-General, and Members of Parliament, there were present at this memorable function an assemblage of 12,000 people—embracing official representatives from other British Colonies, the Foreign Consuls, Admirals and Captains of visiting war ships (British and Foreign), Commonwealth and State Government officials, representatives of Provincial bodies, societies, and institutions, as well as leading Australian citizens and visitors.

### ELECTIONS, 1906.

The third Commonwealth elections were held on the 12th December, 1906.

Franchise

All persons 21 years of age, male or female, who have lived in Australia for six months continuously, are natural-born or naturalized subjects, and whose names are on the roll for any division, are entitled to vote at the election of members of the Senate and the House of Representatives. No person of unsound mind, or attainted of treason, or convicted and under sentence or subject to be under sentence for any offence punishable by imprisonment for one year or longer, shall be entitled to vote. No aboriginal native of Australia, Asia, Africa, or the Islands of the Pacific, except New Zealand, shall be enrolled, unless he is entitled to vote for the more numerous House of the Parliament of a State. No person is allowed to vote more than once at the same election. The following is a statement of the number of electors, votes polled, and percentage of the latter to the former, for the Senate and the House of Representatives:—

ELECTORS ENROLLED AND VOTES POLLED, 1906.

State.	Number of Electors.		Electors who Voted.		Percentage of Electors who Voted.	
	Total.	In contested districts for House of Representatives.	Senate.	House of Representatives.	Senate.	House of Representatives.
Victoria ..	672,054	672,054	381,185	381,265	56·72	56·73
New South Wales	737,599	678,500	381,336	357,377	51·70	52·67
Queensland ..	271,109	271,109	124,539	124,482	45·94	45·92
South Australia ..	193,118	80,643	70,517	32,519	36·51	40·32
Western Australia	145,473	145,473	52,712	52,716	36·23	36·24
Tasmania ..	90,209	72,618	48,879	40,194	54·18	55·35
Australia ..	2,109,562	1,920,397	1,059,168	988,553	50·21	51·48

This table shows that the greatest proportion of votes was recorded in Victoria, Tasmania and New South Wales—these being the only States in which more than 50 per cent. of the total were polled. The proportion of persons who voted for the House of Representatives in Australia, as a whole, was slightly higher than in 1903—51·48 per cent. as against 50·27 per cent.—but lower than at the first Commonwealth elections held in March, 1901, when 55·69 in every 100 electors exercised the franchise. In the State of Queensland remarkable apathy existed as compared with previous elections. This is manifest when it is considered that in 1901 and 1903, 60·35 per cent. and 57·03 per cent. respectively of the electors voted, but in 1906 only 45·92 per cent. performed this duty of citizenship. Western Australia, where in 1903 the polling was abnormally low—only 30·41 per cent. of the electors voting—shows an improvement at this election, the percentage recorded being 36·24. In tables further on full comparative details will be found of the voting at the three Commonwealth elections which have now been held.

The following are statements of the male and female electors enrolled, votes recorded, and percentage of votes to electors at the Senate and House of Representatives elections of December, 1906 :—

Males and females—votes recorded.

SENATE ELECTIONS, 1906.—MALE AND FEMALE ELECTORS, AND VOTES RECORDED.

State.	Electors Enrolled.		Votes Recorded.		Percentage of Votes to Electors.	
	Males.	Females.	Males.	Females.	Males.	Females.
Victoria ..	335,886	336,168	209,252	171,933	62·30	51·14
New South Wales	392,077	345,522	229,654	151,682	58·57	43·90
Queensland ..	150,037	121,072	79,567	44,972	53·03	37·14
South Australia	97,454	95,664	43,318	27,199	44·45	28·43
Western Australia	91,427	54,046	37,180	15,532	40·67	28·74
Tasmania ..	47,306	42,903	29,164	19,715	61·65	45·95
Australia ..	1,114,187	995,375	628,135	431,033	56·38	43·30

ELECTIONS FOR THE HOUSE OF REPRESENTATIVES, 1906.—MALE AND FEMALE ELECTORS, AND VOTES RECORDED.

State.	Electors Enrolled.		Electors Enrolled in Contested Divisions.		Votes Recorded.		Percentage of Votes to Electors.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Victoria ..	335,886	336,168	335,886	336,168	209,266	171,999	62·30	51·16
New South Wales	392,077	345,522	363,723	314,777	216,150	141,227	59·43	44·87
Queensland ..	150,037	121,072	150,037	121,072	79,540	44,942	53·01	37·12
South Australia	97,454	95,664	42,065	38,578	19,850	12,669	47·19	32·84
Western Australia	91,427	54,046	91,427	54,046	36,976	15,740	40·44	29·12
Tasmania ..	47,306	42,903	37,779	34,839	23,753	16,441	62·87	47·19
Australia ..	1,114,187	995,375	1,020,917	899,480	585,535	403,018	57·35	44·81

It will be seen, by comparing the percentage of males who voted with the percentage who voted in State elections previously given, that a greater amount of interest is aroused in State elections than in elections for the Commonwealth, the percentage of votes recorded in the former fluctuating from 60 to 70 per cent. at various times. The above figures show that the female vote was exercised to a greater extent in Victoria and Tasmania than in the other States, New South Wales being next in this respect; but only about one female in every three entitled to vote in South and Western Australia took advantage of her right to do so. In Western Australia, at the previous election, only one female in every seven on the rolls voted.

The following tables contain some interesting comparisons, under several heads, of the results of the three Commonwealth elections held in 1901, 1903 and 1906:—

PERCENTAGE OF TOTAL ELECTORS WHO VOTED.

State.	Senate.			House of Representatives.		
	1901.	1903.	1906.	1901.	1903.	1906.
Victoria .. ..	53.09	51.18	56.72	56.04	53.83	56.73
New South Wales ..	65.81	47.21	51.70	66.38	48.88	52.67
Queensland .. ..	49.45	54.83	45.94	60.35	57.03	45.92
South Australia ..	40.80	32.65	36.51	40.76	40.53	40.32
Western Australia ..	32.68	28.35	36.23	36.95	30.41	36.24
Tasmania .. ..	47.62	45.00	54.18	46.99	44.99	55.35
Australia .. ..	53.04	46.86	50.21	55.69	50.27	51.48

Percentage of electors who voted three Commonwealth Elections.



PERCENTAGE OF MALE AND FEMALE ELECTORS WHO VOTED.

State.	Senate.					House of Representatives.				
	Male.			Female.		Male.			Female.	
	1901.	1903.	1906.	1903.	1906.	1901.	1903.	1906.	1903.	1906.
Victoria ..	53.09	56.89	62.30	45.63	51.14	56.04	59.08	62.30	48.70	51.16
New South Wales ..	65.81	62.70	58.57	41.16	43.90	66.38	54.12	59.43	43.08	44.87
Queensland ..	49.45	62.49	53.03	44.94	37.14	60.35	64.64	53.01	47.17	37.12
South Australia ..	40.80	41.58	44.45	23.28	28.43	40.76	51.95	47.19	29.97	32.84
Western Australia ..	32.68	35.96	40.67	14.86	28.74	36.95	40.54	40.44	15.57	29.12
Tasmania ..	47.02	54.53	61.65	34.30	45.95	46.99	54.53	62.87	34.28	47.19
Australia ..	53.04	53.09	56.38	39.96	43.30	55.69	56.47	57.35	43.50	44.81

Female franchise is in force in New Zealand and in all the Australian States, except Victoria, for the State as well as the Commonwealth elections.

The following were the number and percentage of ballot-papers which were informal for both Houses of the Commonwealth Parliament at the elections in 1903 and 1906:—

INFORMAL BALLOT PAPERS, ELECTIONS, 1903 AND 1906.

State.	Senate.				House of Representatives.			
	1903.		1906.		1903.		1906.	
	Number.	Percentage Recorded.	Number.	Percentage Recorded.	Number.	Percentage Recorded.	Number.	Percentage Recorded.
Victoria ..	7,003	2.23	23,481	6.16	4,818	1.83	14,515	3.81
New South Wales ..	15,796	4.87	28,016	7.35	7,834	2.77	11,705	3.28
Queensland ..	4,612	3.70	7,344	5.90	3,057	2.64	5,212	4.19
South Australia ..	1,208	2.20	2,735	3.88	542	2.69	1,622	4.99
Western Australia ..	2,001	6.03	3,550	6.73	1,251	5.89	2,228	4.23
Tasmania ..	1,441	3.89	2,192	4.48	1,164	3.15	1,583	3.94
Australia ..	32,061	3.61	67,318	6.36	18,666	2.52	36,865	3.73

It will be seen that there was a considerable increase in 1906 in the number of informal ballot papers.

The proportion of electors, in all the States and for both Houses, who recorded their votes in favor of successful candidates is very small, as will be seen from the following:—

PERCENTAGE OF VOTERS WHO RECORDED THEIR VOTES IN FAVOR OF SUCCESSFUL CANDIDATES TO TOTAL NUMBER OF ELECTORS ENROLLED.

	House of Representatives.
Victoria ..	28.18
New South Wales ..	30.13
Queensland ..	26.42
South Australia ..	23.63
Western Australia ..	22.43
Tasmania ..	29.54
Australia ..	28.05

Proportion of Electors voting for successful candidates.

In the Senate the percentage ranged from 16.31 for the lowest successful candidate in South Australia to 28.02 for the highest successful candidate in Victoria.

Cost of Commonwealth Elections.

There was a decrease of about £4,700 in the cost of the Commonwealth elections in 1906 as compared with 1903, and of £9,600 compared with 1901.

EXPENDITURE ON THE COMMONWEALTH ELECTIONS, 1901, 1903 AND 1906 (including cost of Printing Rolls).

State.	1901.	1903.	1906.
	£	£	£
Victoria .. ..	13,827	12,924	14,281
New South Wales .. ..	19,027	21,254	15,739
Queensland .. ..	12,342	9,311	7,632
South Australia .. ..	5,873	3,160	4,002
Western Australia .. ..	3,613	2,301	2,673
Tasmania .. ..	1,650	2,464	2,352
Australia .. ..	56,332	51,414	46,679

Referendum (Constitution Alteration) 1906.

A referendum relating to a proposed law for the alteration of the Constitution was held on the same day as the general election. The result of the referendum was in favour of altering the Constitution, so that the elections may in future be held in the autumn.

# RESULT OF REFERENDUM, 1906.

State.	Electors enrolled.			Number of Electors to whom Ballot-papers were issued.			Votes recorded.		Informal Ballot-papers.	Ballot-papers issued but unaccounted for.	Percentage of Voters to Electors enrolled.		
	Male.	Female.	Total.	Male.	Female.	Total.	In favour of the proposed Law.	Not in favour of the proposed Law.			Male.	Female.	Total.
Victoria ..	335,886	336,168	672,054	209,177	171,776	380,953	282,739	57,487	38,936	1,791	62.28	51.10	56.68
New South Wales ..	392,077	345,522	737,599	229,561	151,458	381,019	286,888	55,261	37,929	941	48.55	48.83	51.66
Queensland ..	150,837	121,072	271,109	79,494	44,858	124,352	81,295	24,502	15,325	3,230	52.98	37.05	45.87
South Australia ..	97,454	95,664	193,118	43,299	27,180	70,479	54,297	8,121	7,892	169	44.48	28.41	36.50
Western Australia ..	91,427	54,046	145,473	37,180	15,532	52,712	34,736	9,274	6,312	2,390	40.97	28.74	36.23
Tasmania ..	47,306	42,903	90,209	29,121	19,641	48,762	34,056	7,825	5,761	1,120	61.56	45.78	54.05
Australia ..	1,114,187	995,375	2,109,562	627,832	430,445	1,058,277	774,011	162,470	112,155	9,641	56.35	43.24	50.17

## COMMONWEALTH ACTS PASSED.

The following is a short synopsis of the principal Acts passed from the inauguration of the Commonwealth to the end of 1905 and of all Acts passed during 1906:—

- 1901.
- No. 4. 7th August.—The *Audit Act* 1901 makes provision for the collection and payment of the public moneys, the audit of the public accounts, and the protection and recovery of public property.
- No. 5. 5th September.—The *State Laws and Records Recognition Act* 1901 provides for the recognition throughout the Commonwealth of the laws, the public acts and records, and the judicial proceedings of the States.
- No. 6. 3rd October.—The *Customs Act* 1901 regulates the customs, and deals with the importation, exportation, and warehousing of goods, the administration and control of the customs, duties and drawbacks, ships' stores, the coasting trade, agents and officers, forfeitures and penalties, prosecutions and settlement of cases by the Minister. This is a machinery Act, and does not impose any duties.
- No. 7. 5th October.—The *Beer Excise Act* 1901 regulates the excise on beer, the licensing of brewers, and regulation of breweries, excise supervision, duty stamps, computation and payment of duty and refunds, removal of beer from breweries, powers of officers, and prohibition and penalties. The Act does not impose the rate of duty.
- No. 8. 5th October.—The *Distillation Act* 1901 regulates distillation, stills, licences, vigneron, excise supervision, removal of spirits, computation and payment of duty, powers of officers, and prohibitions and penalties.
- No. 9. 5th October.—The *Excise Act* 1901 regulates excise generally, and deals with administration, producers, and dealers, licensing of manufacturers and regulation and supervision of factories, payment of duty and excise control, drawbacks, officers, disputes, prohibitions, and penalties.
- No. 11. 16th October.—The *Service and Execution of Process Act* 1901 provides for the service and execution throughout the Commonwealth of the civil and criminal process, and the judgments of the courts of the States and of other parts of the Commonwealth, and matters connected therewith.
- No. 14. 17th December.—The *Punishment of Offences Act* 1901 makes provision for the punishment of offences against the laws of the Commonwealth, by enacting that the laws of each State respecting the arrest and custody of offenders, and the procedure for their summary conviction, or for their examination and commitment for trial on indictment or information, and for holding accused persons to bail, shall apply generally to persons charged with offences committed within that State against the Commonwealth laws.
- No. 16. 17th December.—The *Pacific Island Labourers Act* 1901 provides for the regulation, restriction, and prohibition of the introduction into the Commonwealth of labourers from the Pacific Islands. No Pacific Islander is to enter Australia after 31st March, 1904, nor, except under a licence, before that date.

1901.  
No. 17. 23rd December.—The *Immigration Restriction Act* 1901 places restriction on immigration of undesirables, and provides for the removal from the Commonwealth of prohibited immigrants. The persons whose immigration is prohibited are persons likely to become a charge upon the public, lunatics and idiots, persons suffering from infectious or contagious diseases, convicted criminals, persons living on prostitution, persons who fail to pass a prescribed education test, and persons under a contract or agreement to perform manual labour within the Commonwealth (subject to exemptions for special skill, or for crews of coasting vessels, if the wages are on a par with those ruling in the Commonwealth), and for others specially exempted by the Minister.
1902.  
No. 5. 5th May.—The *Commonwealth Public Service Act* 1902 regulates the public service. It deals with the Commissioner and the inspectors, and their respective duties; the division of the service into administrative, professional, clerical, and general, and the officers included in each; salaries and wages; appointments, transfers, and promotions; dismissals and removals; life assurance; leave of absence, holidays, and furlough.
- No. 8. 12th June.—The *Commonwealth Franchise Act* 1902 provides for a uniform Federal franchise. Persons above 21 years of age of both sexes, who have lived in Australia for six months continuously, are natural-born or naturalized, and who are enrolled for any electoral division, are entitled to vote for both the Federal Houses, and only one vote is permitted to each adult. Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable for one year or longer, are disqualified from voting.
- No. 19. 10th October.—The *Commonwealth Electoral Act* 1902 regulates Parliamentary elections, dealing with the appointment and duties of electoral officers, the partition of each of the States into electoral divisions, the fixing of polling places, the preparation of electoral rolls, the constitution and jurisdiction of special courts of revision, the issue and return of the writs, nomination of candidates, voting by post, elections, scrutiny, limitation of electoral expenses, offences and punishments, and disputed returns.
1903.  
No. 2. 15th July.—*Senate Elections Act* 1903 provides that the election of Senators to fill periodical and casual vacancies shall be conducted as one election, and for a casting vote by the Commonwealth electoral officer of the State in the case of an equal number of votes. The powers of the Court of Disputed Returns are added to, and other formal matters dealt with.
- No. 4. 30th July.—*Sugar Bounty Act* 1903 provides for a bounty to every grower of sugar-cane or beet in the production of which white labour only has been employed, at the rate of 4s. per ton on cane giving 10 per cent. of sugar, or in the case of beet, at the rate of 40s. per ton on the sugar-giving contents of the beet. Ancillary provisions are included, and regulations may be made by the Governor-in-Council.

1903.

- No. 6. 26th August.—*Judiciary Act* 1903 provides for the establishment of the High Court of Australia, to consist of a Chief Justice and two other justices, to be appointed by Commission. The seat of Government shall be the principal seat of the Court, but district registries may be established in each State, where the Court shall sit when required. Chamber business, interlocutory proceedings, &c., may be dealt with by a Judge of the High Court, and (except in matters within the exclusive jurisdiction of the High Court) by a Judge of the Supreme Court of a State. Provision is made for a Full Court to hear appeals, and to grant appeals to the Privy Council. The jurisdiction, original and appellate, is fully defined and regulated. Provision is made for officers of the Court, and in regard to barristers and solicitors, those of any State being entitled to practise in any Federal Court. Suits by and against the Commonwealth and the States are regulated; and the criminal jurisdiction in regard to offences against the laws of the Commonwealth is fully regulated.
- No. 8. 28th August.—*Naval Agreement Act* 1903 ratifies an agreement entered into between the British Admiralty and the Governments of the Commonwealth and New Zealand relating to the naval force on the Australian station. The Commonwealth is to pay the Imperial Government five-twelfths and New Zealand is to pay one-twelfth of the total annual cost of maintaining the naval force on the Australian station, not to exceed £200,000 and £40,000 respectively in any year.
- No. 11. 13th October.—*Naturalization Act* 1903. Any resident of the Commonwealth, not being a British subject, and not being an aboriginal native of Asia, Africa, or the islands of the Pacific, who intends to settle in the Commonwealth, has resided there continuously for the preceding two years, or has been naturalized in the United Kingdom, may, at the discretion of the Governor-in-Council, be naturalized. Provision is also made as to the naturalization of women by marriage, and of children of naturalized persons; and for the recognition of persons previously naturalized under State laws; and as to the exclusive power of the Commonwealth in regard to naturalization.
- No. 20. 22nd October.—*Defence Act* 1903. For the purposes of administration the Governor-General in Council may appoint a General Officer Commanding the Military Forces of the Commonwealth, a similar Naval Officer, and Commanding Officers of Districts, apportion the forces amongst the districts and sub-districts, and generally appoint and promote officers, and issue commissions. The powers, duties, and tenure of certain officers is provided for; and also seniority, promotion, and reserves. A Naval and Military College may be established to impart education in the various branches of naval and military science. The defence force is to consist of the permanent and citizen forces, the latter of which is divided into Militia, Volunteer Forces, and Reserve Forces, and provision is made for the raising of the force. The permanent forces are at all times liable to be employed on active service, and the citizen forces

1903.

may be called out in time of war by proclamation. The military forces are not liable to serve beyond the Commonwealth, but the naval forces are. Where the Governor of a State proclaims that domestic violence exists therein, the permanent forces may be called out. All male inhabitants (except persons specially exempt from service) aged 18 to 60 years, who are British subjects and resident six months, shall, in time of war, be liable to serve in the Militia forces. Other general provisions of a comprehensive character are also included.

No. 21. 22nd October.—*Patents Act* 1903 provides for the transfer of the administration of the State Patent Acts and for the establishment of a new system, with the saving of rights accrued under State Acts. State patents in existence may be extended to the Commonwealth. A Commissioner of Patents is to be appointed, and a Patent Office established, and the mode of registration and procedure is fully dealt with.

1904.

No. 7. 15th August.—The *Seat of Government Act* 1904 determines that the Seat of Government of the Commonwealth shall be within seventeen miles of Dalgaty, in the State of New South Wales.

No. 12. 9th December.—The *Defence Act* 1904 is to be read with the *Defence Act* 1903. The positions of "General Officer Commanding" and "Naval Officer Commanding" are abolished, and, in their stead, those of Inspector-General of the Military Forces and Director of the Naval Forces are created, the duties appertaining to the new offices being defined. A Council of Defence is substituted for the Board of Advice, and Boards of Administration for the Military and Naval Forces are constituted. Provision is also made for the appointment of commanding officers in time of war.

No. 13. 15th December.—The *Commonwealth Conciliation and Arbitration Act* 1904 provides for the prevention of lock-outs and strikes in relation to industrial disputes. It constitutes a Commonwealth Court of Conciliation and Arbitration having jurisdiction for the prevention and settlement of industrial disputes, and for the exercise of the jurisdiction of the Court by conciliation, with a view to amicable agreement between employers and employé. In default of such amicable agreement, the Court is to exercise its jurisdiction by equitable award. States may refer industrial disputes to the Court, and the Court may call up cases under review by State industrial authorities, and may override such authorities. Its awards and orders are to prevail over theirs, and are to be binding on all parties to the dispute who appear or are represented before the Court, on all parties who have been properly summoned to appear, on all organizations and persons on whom the award is at any time declared by the Court to be binding, and on all members of organizations bound by the award. The organization of representative bodies of employers and employés, and their submission of industrial disputes to the Court is facilitated and encouraged, such organizations being registered, and preference being given to their members where other things are equal. Provision is made for the enforcement of orders and awards, and for their registration in the principal registry and in the district registry, which may be inspected by any person on payment of a fee of sixpence.

1904.

- No. 14. 15th December.—The *Sea Carriage of Goods Act* 1904, to come into operation on 1st January, 1905, declares to be null and void all clauses in bills of lading which relieve ship masters and owners from liability for loss or damage caused through negligence in loading or carelessness in stowage and custody of goods; or which lessen or destroy the obligations of ship-owners to properly man the ship, make and keep her seaworthy, and make and keep all parts of the ship where goods are carried fit and safe for their reception and preservation; or which lessen or destroy the masters' and agents' obligations to carefully handle and stow, and to preserve and properly deliver, all goods. Clauses thus declared illegal are not in future to be inserted in bills of lading. In bills of lading, a clause that the ship is seaworthy and properly manned and equipped is to be implied; as also a clause whereby, if the ship is seaworthy and properly manned and equipped at the beginning of the voyage, owners and masters are not responsible for damage resulting from errors in navigation, perils of the sea, acts of God or the King's enemies, inherent defect of the goods, or their faulty packing, or their seizure under legal process, or for omission of owner of goods or his agent, or saving or attempting to save life or property at sea.

1905.

- No. 4. 25th August.—The *Evidence Act* 1905 relates to the law of evidence, directing all courts to take judicial notice of the seal of the Commonwealth, and of the official signatures and seals of the Governor-General and other high officers, and defining how evidence of proclamations, commissions, orders, &c., by the Governor-General or a Minister, or of public documents, or of the Government Gazette, or of votes and proceedings of Parliament, may be given.
- No. 8. 18th October.—The *Wireless Telegraphy Act* 1905 gives to the Postmaster-General the exclusive privilege of establishing and using stations and appliances for the purposes of wireless telegraphy. The Minister may grant licences on fulfilment of prescribed conditions, and payment of prescribed fees. The Act does not apply to ships belonging to the King's Navy.
- No. 9. 16th November.—The *Papua Act* 1905 provides for the acceptance of British New Guinea as a territory under the authority of the Commonwealth, and for the Government thereof. The Act is to come into operation by proclamation of the Governor-General.
- No. 10. 16th November.—The *Secret Commissions Act* 1905 applies to trade and commerce with other countries and among the States, and to agencies and contracts with the Commonwealth or any department or officer thereof. Under very heavy penalties, the following offences are defined:—Accepting by, or offering to, an agent, secret gifts as inducement or reward; giving an agent, or, being an agent, receiving and using, false documents or accounts, with intent to deceive the principal; being an agent, secretly buying from or selling to himself. Aiding and abetting offences under the Act, are declared to be punishable as the offence itself. The principal may recover the amount of secret gift.



1905.

- No. 11. 23rd November.—The *Representation Act* 1905 relates to the representation of the several States in the House of Representatives. The determination of the number of members of the House of Representatives, and of the representation of the States, is to be made by the Chief Electoral Officer, according to population, ascertained by an enumeration conducted as prescribed in the Act.
- No. 12. 23rd November.—The *Life Assurance Companies Act* 1905 relates to assurance on the lives of children, limiting the amount which life assurance companies may contract to pay in cases of deaths of children, to the sums set out in the schedule.
- No. 15. 8th December.—The *Census and Statistics Act* 1905 relates to the census and statistics of the Commonwealth. The appointment of a Commonwealth Statistician is authorized, and arrangements may be made with the States in regard to the collection of statistics. The census is to be taken in the year 1911, on a day to be appointed for that purpose by proclamation, and in every tenth year thereafter. The particulars required to be furnished in householders' schedules include the name, sex, age, condition as to, and duration of, marriage, relation to head of the household, profession or occupation, sickness or infirmity, religion, education, birthplace, length of residence in Australia (where person born abroad), and nationality of every person abiding in the dwelling during the night of the census day, as well as the material of the dwelling, and the number of rooms, and any other matters that may be prescribed. Annual statistics, similar to those now collected by States' Statisticians, are to be collected and compiled by the Commonwealth Statistician, and published by him according to Ministerial direction. No person is bound to state his religion.
- No. 16. 8th December.—The *Commerce (Trade Descriptions) Act* 1905 relates to commerce with other countries, and is incorporated with the *Customs Act* 1901. Customs officers may enter any ship, wharf, or other place, and inspect imports and exports, and take samples of them, for the purposes of the Act. Imports and exports of articles used for food or drink, or in the preparation thereof; medicines, manures, apparel (including boots and shoes), jewellery, and seeds and plants, not bearing the prescribed trade description, may be prohibited under the regulations. Importation and exportation of falsely-marked goods are forbidden.
- No. 17. 21st December.—The *Immigration Restriction Amendment Act* 1905 amends the Act of 1901. Several machinery clauses are more exactly defined. Subjects or citizens of a country with which an arrangement has been made are exempted from the dictation test, and a person who has resided five years in Australia may, on leaving the Commonwealth, obtain a certificate excepting him from the test on his return. The master, owners, &c., of a vessel bringing a prohibited immigrant to the Commonwealth must provide a return passage for him.

- 1905.
- No. 18. 21st December.—The *Queen Victoria Memorial Act* 1905 grants and applies £25,000 out of the Consolidated Revenue Fund, which is appropriated accordingly, for the purpose of enabling the Commonwealth to join with Great Britain and British countries throughout the world, in the erection of a memorial in honour of the late Queen Victoria.
- No. 19. 21st December.—The *Contract Immigrants Act* 1905 relates to immigrants under contract to perform manual labour in the Commonwealth. The provisions of the *Immigration Restriction Act* 1901, which prohibit the immigration of persons under a contract or agreement to perform manual labour are repealed. Such a person may unless otherwise prohibited by law, land in the Commonwealth, provided that the contract is in writing, and the Minister has approved of its terms.
- No. 20. 21st December.—The *Trade Marks Act* 1905 relates to the registration, &c., of trade marks. A trade marks office, with a registrar, is instituted, and a register, open to the inspection of the public, is to be kept. Rights and duties which have accrued under State Acts are continued, but their administration is transferred to the Commonwealth, otherwise they cease to operate. The Common Law of England applies generally. The essential and additional particulars which constitute a trade mark, which must be for particular goods, are set out. The machinery to be used in registering a trade mark, including the methods of application and opposition, is defined. Registration is for fourteen years, and may be renewed. It gives to the registered proprietor power to use and assign the trade mark; and the use of a mark substantially identical, or so nearly resembling it as to be likely to deceive, is an infringement of the trade mark. Falsely applying to goods for trade or sale a trade mark registered by an Australian worker or workers, or knowingly trading in or importing goods so marked, is prohibited. A Commonwealth trade mark, consisting of a distinctive device, or label, bearing the words "Australian labour conditions," is provided for, and the authority of the Minister may be given for its use in regard to goods made under those conditions. Protection of trade marks is also provided for, and heavy penalties are enacted for importing, selling, &c., goods with false marks.
- No. 23. 21st December.—The *Sugar Bounty Act* 1905 provides for a bounty, to be paid after 1st January, 1907, to growers of sugar cane and beet on plantations where white labour only is employed.
- No. 25. 21st December.—The *Copyright Act* 1905 relates to the registration, &c., of copyright. A Copyright Office, with a registrar, is instituted, and registers of literary copyrights, of fine arts copyrights, and of international and State copyrights are to be kept, and are to be open to the inspection of the public. The machinery of registration is defined. State copyright Acts are not to apply to copyright under this Act, but rights acquired under them are conserved, and the transfer of their administration to the Commonwealth may be declared by proclamation. The Common Law of England

1905.

applies generally. Copyright in a book, performing right, lecturing right, and artistic copyright, are defined, and decreed to subsist for forty-two years or for the author's life and seven years, whichever shall last the longer. The Minister may grant permission to translate a book into a particular language after ten years, if the owner of the copyright fails to make arrangements for translation. A lecture may be reported in a newspaper if no notification of prohibition to do so has been made. Protection of copyrights is also provided for, and heavy penalties are enacted for dealing with pirated books, and for other infringements. Importation of pirated works is forbidden. Provision is made for the protection in Australia of international and State copyright, and for registration of the former. If a copyright owner refuses, after the author's death, to have the work republished, and such refusal withholds it from the public, the Governor-General may grant a licence for its republication to any person applying for it.

- No. 26. 21st December.—The *Commonwealth Electoral Act* 1905, to be read with the Act of 1902, relates to parliamentary elections, and incorporates the *Commonwealth Franchise Act* 1902, the *Senate Elections Act* 1903, and the *Electoral Divisions Act* 1903. This Act modifies the provisions for appointment and duties of electoral officers, redistribution of the States into electoral divisions, and fixing of polling places, preparation of electoral rolls, and appeals to magistrates concerning them; nomination of candidates, voting by post, elections, scrutiny, limitation of electoral expenses, offences and punishments, and disputed returns.

### COMMONWEALTH ACTS PASSED DURING 1906.

1906.  
No. 1. 28th June.—The *Supply Act* (No. 1) 1906-7, grants and applies £459,064 out of the consolidated revenue for the service of the year 1906-7.  
No. 2. 8th August.—The *Governor-General's Residences Act* 1906 provides that the Governor-General may enter into arrangements with the Governors of Victoria and New South Wales for the use and occupation of the Government House in Melbourne and that in Sydney, for a period not exceeding five years.  
No. 3. 28th August.—The *Meteorology Act* 1906 provides for the establishment of observatories and the appointment of a Commonwealth Meteorologist. Amongst the duties which may be assigned to that officer are the taking and recording of meteorological observations; the forecasting of weather; the issue of storm-warnings; the display of weather, flood, frost, and cold-wave signals; the distribution of meteorological information, and such other duties as may be prescribed to give effect to the provisions of this Act. To facilitate this work, the Governor-General may enter into arrangements with the Governor of any State for the transfer to the Commonwealth, on such terms as may be agreed upon,

1906.

of any observatory, and the instruments, books, registers, records, and documents used or kept in connexion therewith; the taking and recording of meteorological observations by State officers; the interchange of meteorological information between the Commonwealth and State authorities; and any other matters that may be necessary in carrying out the Act.

No. 4. 28th August.—The *Designs Act* 1906 relates to copyright in industrial design. A design is described as an industrial design applicable in any way to the purpose of the ornamentation, pattern, shape, or configuration of an article, or to any two or more of those purposes. No new registrations are to be made under State Acts unless made by virtue of a right acquired before the commencement of this Act. The Commissioner of Patents is appointed Registrar of Designs, and deputy-registrars, under his control, may be appointed. An office, called the Designs Office, is established, with a sub-office in each State. The Governor-General may, by proclamation, declare that on a specified date the State Designs Acts of each State shall cease to be administered by the State, and be thereafter administered by the Commonwealth; that the Registrar shall collect for each State all fees payable; and that all registers, deeds, and documents which are lodged in or belong to the office in which designs are registered, and which are subject to the control of the State, be vested in the Commonwealth. Copyright in a design is defined as the exclusive right to apply the design, or authorize another person to apply it, to the articles in respect of which it is registered, and shall subsist in every design registered under the Act. The author of a design is declared to be the first owner, and the person entitled to make application for the registration. Penalties are provided for infringement of copyright in designs, or for false representation to the registrar.

No. 5. 28th August.—The *Judiciary Act* 1906 amends the *Judiciary Act* 1903 by providing for two extra Judges of the High Court of Australia, and authorizes the High Court to make rules for the admission of barristers and solicitors to practise in any Federal Court.

No. 6. 29th August.—The *Supply Act* (No. 2) 1906-7, grants and applies £748,363 out of the Consolidated Revenue Fund for the service of the year 1906-7.

No. 7. 7th September.—The *Appropriation (Works and Buildings) Act* 1906-7 grants and applies £479,724 out of the Consolidated Revenue Fund for the purposes of additions, new works, buildings, &c.

No. 8. 24th September.—The *Audit Act* 1906 amends the *Audit Act* 1901, and is to be read in conjunction with that Act. It relates principally to the method of dealing with the public accounts and auditing the same.

1906.

- No. 9. 24th September.—The *Australian Industries Preservation Act* 1906 deals with the repression of monopolies and the prevention of "dumping." Monopolies are defined as combinations existing with intent to restrain trade or commerce to the detriment of the public, or with intent to destroy or injure by means of unfair competition any Australian industry. The penalty is a fine of £500. Unfair competition is deemed to be competition that would probably, or does in fact, result in an inadequate remuneration for labour in the Australian industry, or in creating substantial disorganization by throwing workers out of employment, also the giving of rewards, rebates, refunds, discounts, upon condition of dealing with certain corporations. In determining whether competition is unfair, regard shall be had to the management, processes, plant, and machinery employed in the Australian industry affected by the competition being reasonably efficient and up-to-date. Any person or corporation who monopolises, or attempts to monopolise, or combines or conspires with any other person to monopolise any part of the trade with other countries or among the States with intent to control to the detriment of the public the supply or price of any service, merchandise or commodity, is guilty of an offence for which a penalty of £500 may be exacted. With regard to "dumping," if the Comptroller-General of Customs is of opinion that imported goods have been purchased abroad at prices greatly below their ordinary cost of production, and for the purpose of destroying or injuring any Australian industry, he shall certify to the Minister accordingly, giving full particulars. On receipt of the certificate, the Minister may, by order in writing, refer to a Judge of the High Court the investigation and determination of the question whether the goods are being imported with the intent alleged, and if so whether the importation of the goods should be prohibited either absolutely or subject to any specified conditions, restrictions, or limitations. The determination of the Judge is to be final and without appeal. In all cases of prohibition the determination of the Judge must be laid before Parliament within seven days after publication in the *Gazette*.
- No. 10. 28th September.—The *Tasmanian Cable Rates Act* 1906 amends the *Post and Telegraph Rates Act* 1902, by omitting the Tasmanian cable charges.
- No. 11. 8th October.—The *Referendum (Constitution Alteration) Act* 1906 makes provision for submission to the electors of any proposed alteration of the Constitution.
- No. 12. 8th October.—The *Electoral Validating Act* 1906 legalizes the new electoral names and boundaries of the electoral divisions for the State of New South Wales.
- No. 13. 12th October.—The *Lands Acquisition Act* 1906 relates to the mode of acquisition by the Commonwealth of land required for public purposes, and for dealing with land so acquired.

- 1906.
- No. 14. 12th October.—The *Customs Tariff Act* 1906 amends the Customs Tariff 1902, by altering the rates of duties on strippers, stripper-harvesters, and parts of these machines. It also makes provision for the maximum selling price of Australian stripper-harvesters and drills; but if the Governor-General is satisfied that the cash price of these machines exceeds the price in the schedule, he may reduce the rates of duty, but not to less than one-half provided in the Act.
- No. 15. 12th October.—The *Excise Tariff (Amendment) Act* 1906 amends the *Excise Tariff Act* 1905 relating to the excise duty payable on sugar.
- No. 16. 12th October.—The *Excise Tariff Act* 1906 imposes excise duties on agricultural machinery, but directs that such duties shall not apply if the goods are manufactured in the Commonwealth under reasonably remunerative conditions of labour, or in accordance with an industrial award or agreement of the *Commonwealth Conciliation and Arbitration Act* 1904.
- No. 17. 12th October.—The *Customs Tariff (South African Preference) Act* 1906 reduces the rates of duty on certain articles mentioned in the schedule, imported from and being the produce or manufacture of the British South African Colonies or Protectorates.
- No. 18. 12th October.—The *Commonwealth Electoral Act* 1906 amends the Commonwealth Electoral Acts in regard to the insertion of electoral advertisements.
- No. 19. 12th October.—The *Patents Act* 1906, which is to be read with the *Patents Act* 1903, gives power to extend the time limit under section 29 of the Principal Act, and also to revive any application for a patent which has lapsed by reason of an omission to take the necessary steps within the prescribed time. Provision is also made for dealing with applications which may have lapsed owing to errors in the Patents Office.
- No. 20. 12th October.—The *Excise Tariff Act* 1906 amends the Act of 1902 by increasing the rates of excise duty payable on spirits distilled in Australia. Exception is made in regard to spirits not having been matured by storage in wood for a period of two years, which may until the 31st December, 1907, be delivered at the old rates. If any distiller does not, after the expiration of one year from the passing of this Act, pay his employés a fair and reasonable rate of wages per week of forty-eight hours, or if he employs more than a due proportion of boys to men, an extra duty of 1s. per gallon may be imposed on such spirits as he distils.
- No. 21. 12th October.—The *Spirits Act* 1906 defines the different kinds of spirits, deals with the certificates and marking in relation to spirits, and enacts penalties for forging such marks or for describing spirits contrary to the Act. Imported and Australian spirits (other than gin, schnapps, or liqueurs), are required to be matured by storage in wood for not less than two years, and brandy delivered for human consumption is required to be distilled from grape wine. The Minister may order inferior spirits under the

1906.

control of the Customs to be methylated, or if imported, to be re-distilled in Australia or exported. Methylated spirits are described, and the use thereof, in the manufacture or preparation of any articles of food or drink, or of any scents, essences, tinctures, or medicines prohibited. Heavy penalties are imposed for refining methylated spirits in contravention of the Act, or for selling or having in possession any illicit methylated spirit or any article of food or drink, scents, essences, tinctures, or medicines containing such spirits. Spirits methylated before the Act came into operation are not to be deemed illicit methylated spirits. Licences to make or sell methylated spirits in prescribed quantities may be granted by the Collector of Customs.

No. 22. 12th October.—The *Pacific Island Labourers Act* 1906 amends the Act of 1901. A certificate of exemption may be granted to a Pacific Island labourer who proves (1) that he was introduced into Australia prior to the 1st September, 1879; (2) that he is of such extreme age or suffering from such bodily infirmity as to be unable to obtain a livelihood if returned to his native island; (3) that having been married before the 9th October, 1906, to a native of some other island than his own, he cannot be deported without risk to the life either of himself or his family; (4) that he has been married before the 9th October, 1906, to a female not a native of the Pacific Islands; (5) that he was on the 1st July, 1906, and still is, registered as the beneficial owner of a freehold in Queensland; or (6) that he has been continuously resident in Australia for a period of not less than twenty years prior to the 31st December, 1906. A special certificate (not to be issued or remain in force after 30th June, 1907) may be granted to a Pacific Island labourer whom, in the opinion of the Minister, it will not be convenient to return to his island immediately after the 31st December, 1906. Any certificate may be cancelled if obtained by means of false representation, and persons aiding and abetting in obtaining such certificate are liable to fine and imprisonment.

No. 23. 12th October.—This Act applies £3,054,780 out of the consolidated revenue to the service of the year 1906-7, and appropriates the supplies granted during the session, and amounting to £4,262,207, to the service of the Government.

## OFFICIAL AND PARLIAMENTARY.

Governor-General and Proclamation of Commonwealth.

The Right Hon. the Earl of Hopetoun, P.C., K.T., G.C.M.G., G.C.V.S., was on the 29th October, 1900, appointed Governor-General and Commander-in-Chief of the Commonwealth, and arrived at Sydney on the 16th December. The Proclamation of the Commonwealth and the swearing-in of the Governor-General took place at Sydney on the 1st day of January, 1901, in the presence of representatives of most of the principal countries of the world, and of a vast assemblage from all parts of the Commonwealth and elsewhere. The Governor-General continued in office until the 9th May, 1902, when he was, at his own request, recalled. On 17th July, 1902, the Right Hon. Hallam, Baron Tennyson, K.C.M.G., was appointed Acting Governor-General; and on 16th January, 1903, he was appointed as Lord Hopetoun's successor. Lord Tennyson retired on 21st January, 1904, and was succeeded by the Right Hon. Henry Stafford, Baron Northcote, C.B., who was in occupation of the office on the 31st December, 1906.

Governors of Australasian States.

The names of the present Governors of the States and New Zealand and the dependencies, and the dates of their assumption of office, are as follow:—

## GOVERNORS OF AUSTRALASIAN STATES.

	Name.	Date of Assumption of Office.
Victoria ...	Major-General Hon. Sir Reginald Arthur James Talbot, K.C.B.	25 April, 1904
	The Hon. Sir John Madden, G.C.M.G., LL.D. (Lieutenant-Governor)	29 April, 1899
New South Wales ...	Admiral Sir Harry Holdsworth Rawson, K.C.B.	27 May, 1902
	The Right Honorable Sir Fred. M. Darley, P.C., G.C.M.G. (Lieutenant-Governor)	29 Oct., 1900
Queensland ...	Frederick J. N. Thesiger Lord Chelmsford	30 Nov., 1905
South Australia ...	Sir George Ruthven Le Hunte, K.C.M.G.	1 July, 1903
	The Right Honorable Sir Samuel J. Way, Bart., P.C. (Lieutenant-Governor)	29 Oct., 1900
Western Australia ...	Admiral Sir Frederick George Denham Bedford, G.C.B.	24 March, 1903
Tasmania ...	Sir Gerald Strickland, Count Della Catena, K.C.M.G.	28th Oct., 1904
New Zealand ...	The Right Honorable William Lee, Baron Plunket, K.C.V.O.	20th June, 1904
Fiji ...	Sir Everard Ferdinand im Thurn, Esq., K.C.M.G., C.B.	11th Oct., 1904
New Guinea (British)	Captain Francis Rickman Barton, C.M.G.	16 June, 1904



# COMMONWEALTH MINISTRIES.

At the Proclamation ceremony the members of the first Commonwealth Ministry were sworn in. The following were their names and the respective offices filled by them:—

First Commonwealth Ministry.

Prime Minister and Minister for External Affairs : The Right Hon. Edmund Barton, P.C.  
 Attorney-General : The Hon. Alfred Deakin.  
 Treasurer : The Right Hon. Sir George Turner, P.C., K.C.M.G.  
 Minister of Home Affairs : The Hon. Sir William John Lyne, K.C.M.G.  
 Minister of Trade and Customs : The Right Hon. Charles Cameron Kingston, P.C., K.C.  
 Minister of Defence : The Hon. Sir James Robert Dickson, K.C.M.G. Died January, 1901, succeeded by Sir John Forrest.  
 Postmaster-General : The Right Hon. Sir John Forrest, P.C., G.C.M.G. Succeeded in January, 1901, by Hon. J. G. Drake (re-arrangement of portfolios).  
 Honorary Ministers : Richard Edward O'Connor, Esq., K.C. (Vice-President of the Executive Council), The Honorable Neil Elliott Lewis, succeeded by the Hon. Sir Philip Fysh, K.C.M.G.

Consequent upon the resignation of the Right Hon. C. C. Kingston from the Ministry, and the subsequent appointment of the Right Hon. Sir Edmund Barton, P.C., and Mr. R. E. O'Connor, K.C., to the bench of the newly-constituted High Court of Australia, several changes were made in the Ministry. The following were the members of the Ministry at the beginning of the first session of the second Commonwealth Parliament, in 1904:—

Changes in the Ministry

Prime Minister and Minister of External Affairs : The Hon. Alfred Deakin.  
 Minister of Trade and Customs : The Hon. Sir William John Lyne, K.C.M.G.  
 Treasurer : The Right Hon. Sir George Turner, P.C., K.C.M.G.  
 Minister of Home Affairs : The Right Hon. Sir John Forrest, P.C., G.C.M.G.  
 Attorney-General : The Hon. James George Drake.  
 Postmaster-General : The Hon. Sir Philip Oakley Fysh, K.C.M.G.  
 Minister of Defence : The Hon. Austin Chapman.  
 Vice-President of the Executive Council : The Hon. Thomas Playford.

On 27th April, 1904, Mr. Deakin's Ministry resigned, and was succeeded by a Ministry with Mr. J. C. Watson as Prime Minister. This Ministry consisted of the following members:—

Prime Minister and Treasurer : The Hon. John Christian Watson.  
 Minister of External Affairs : The Hon. William Morris Hughes.  
 Attorney-General : The Hon. Henry Bournes Higgins, K.C.  
 Minister of Home Affairs : The Hon. Egerton Lee Batchelor.  
 Minister of Trade and Customs : The Hon. Andrew Fisher.  
 Minister of Defence : The Hon. Anderson Dawson.  
 Postmaster-General : The Hon. Hugh Mahon.  
 Vice-President of the Executive Council : The Hon. Gregor McGregor.

On 18th August, Mr. Watson's Ministry resigned, and was succeeded by a Ministry with the Right Hon. G. H. Reid, P.C., K.C., as Prime Minister, constituted as follows:

Prime Minister and Minister of External Affairs: The Right Hon. George Houstoun Reid, P.C., K.C.  
 Minister of Trade and Customs: The Hon. Allan McLean.  
 Attorney-General: The Hon. Sir Josiah Henry Symon, K.C.M.G., K.C.  
 Treasurer: The Right Hon. Sir George Turner, P.C., K.C.M.G.  
 Minister of Home Affairs: The Hon. Dugald Thomson.  
 Minister of Defence: The Hon. James Whiteside McCay.  
 Postmaster-General: The Hon. Sydney Smith.  
 Vice-President of the Executive Council: The Hon. James George Drake.

On 4th July, 1905, Mr. Reid's Ministry resigned, and Mr. Deakin again became Prime Minister, with the following Ministers:—

Prime Minister and Minister of External Affairs: The Hon. Alfred Deakin.  
 Minister of Trade and Customs: The Hon. Sir W. J. Lyne, K.C.M.G.  
 Attorney-General: The Hon. I. A. Isaacs, K.C.  
 Treasurer: The Right Hon. Sir John Forrest, P.C., G.C.M.G.  
 Minister of Home Affairs: The Hon. L. E. Groom.  
 Minister of Defence: The Hon. T. Playford.  
 Postmaster-General: The Hon. Austin Chapman.  
 Vice-President of the Executive Council: The Hon. T. T. Ewing.  
 Honorary Minister: The Hon. J. H. Keating.

As a result of the elevation of the Hon. I. A. Isaacs, K.C., to the High Court Bench, and the defeat of the Hon. T. Playford at the elections, several changes in the Ministry were made; and at the beginning of the first session of the third Commonwealth Parliament Ministers and their offices were as follow:—

Prime Minister and Minister of External Affairs: Hon. Alfred Deakin.  
 Minister of Trade and Customs: The Hon. Sir W. J. Lyne, K.C.M.G.  
 Attorney-General: The Hon. L. E. Groom.  
 Treasurer: The Right Hon. Sir John Forrest, P.C., G.C.M.G.  
 Minister of Home Affairs: The Hon. J. H. Keating.  
 Minister of Defence: The Hon. T. T. Ewing.  
 Postmaster-General: The Hon. A. Chapman.  
 Vice-President of the Executive Council: The Hon. R. W. Best.  
 Honorary Minister: The Hon. S. Mauger.

## MEMBERS OF THE THIRD COMMONWEALTH PARLIAMENT, 1906.

### THE SENATE.

President: Lieut.-Colonel the Hon. Albert John Gould.

#### Victoria—

Best, Hon. R. W.  
 Findley, E.  
 Fraser, Hon. S.  
 McColl, Hon. J. H.  
 Russell, E. J.  
 Trenwith, Hon. W. A.

#### South Australia—

Guthrie, R. S.  
 McGregor, Hon. G.  
 Russell, W.  
 Story, W. H.  
 Symon, Hon. Sir J. H.  
 Vardon, Hon. J.

MEMBERS OF THE THIRD COMMONWEALTH PARLIAMENT—*continued.*

THE SENATE—*continued.*

New South Wales—	Western Australia—
Gould, Lieut.-Col. the Hon. A. J.	Croft, J. W.
Gray, J. P.	De Largie, Hon. H.
Millen, Hon. E. D.	Henderson, G.
Neild, Col. Hon. J. C.	Lynch, P. J.
Pulsford, Hon. E.	Needham, E.
Walker, Hon. J. T.	Pearce, Hon. G. F.
Queensland—	Tasmania—
Chataway, T. D.	Cameron, Lieut.-Col. the Hon. C.
Givens, T.	St. C.
St. Leger, A. J. J.	Clemons, Hon. J. S.
Sayers, R. J.	Dobson, Hon. H.
Stewart, Hon. J. C.	Keating, Hon. J. H.
Turley, H.	Macfarlane, Hon. J.
	Mulcahy, Hon. E.

THE HOUSE OF REPRESENTATIVES.

Speaker: The Hon. Sir Frederick William Holder, K.C.M.G.

*Victoria.*

Member.	District.	Member.	District.
Brown, J. T.	Indi	Mauger, Hon. S.	Maribyrnong
Cook, Hon. J. N. H.	Bourke	McDougall, J. K.	Wannon
Coon, J.	Batman	Palmer, A. C.	Echuca
Crouch, Hon. R. A.	Corio	Quick, Hon. Sir J.	Bendigo
Deakin, Hon. A.	Ballaarat	LL.D., K.B.	
Fairbairn, G.	Fawkner	Salmon, Hon. C. C.	Laanecoorie
Harper, Hon. R.	Mernda	Sampson, S.	Wimmera
Irvine, H. W. H.	Grampians	Tudor, Hon. F. G.	Yarra
Irvine, Hon. W. H.	Flinders	Wilson, J. G.	Corangamite
Knox, Hon. W.	Kooyong	Wise, G. H.	Gippsland
Maloney, W.	Melbourne	Wynne, Hon. A.	Balaclava
Mathews, J.	Melb. Ports		

*New South Wales.*

Bowden, E. K.	Nepean	Lyne, Hon. Sir W. J., Hume
Brown, Hon. T.	Calare	K.C.M.G.
Carr, E. S.	Macquarie	Reid, Right Hon. G. East Sydney
Catts, J. H.	Cook	H., P.C., K.C.
Chanter, Hon. J. M.	Riverina	Smith, Hon. Bruce, Parkes
Chapman, Hon. A.	Eden-Monaro	K.C.
Cook, Hon. Joseph	Parramatta	Spence, Hon. W. G.
Ewing, Hon. T. T.	Richmond	Thomas, Hon. J.
Foster, F. J.	New England	Thomson, Hon. Dugald
Fuller, Hon. G. W.	Illawarra	Thomson, John
Hall, D. R.	Werriwa	Watkins, Hon. D.
Hughes, Hon. W. M.	West Sydney	Watson, Hon. J. C.
Johnson, W. E.	Lang	Webster, W.
Kelly, W. H.	Wentworth	Wilks, Hon. W. H.
Liddell, F.	Hunter	Willis, Hon. H.
		Robertson

MEMBERS OF THE THIRD COMMONWEALTH PARLIAMENT—*continued*.THE HOUSE OF REPRESENTATIVES—*continued*.*Queensland.*

Member.	District.	Member.	District.
Archer, E. W.	Capricornia	Groom, Hon. L. E.	Darling Downs.
Bamford, Hon. F. W.	Herbert	McDonald, Hon. C.	Kennedy
Edwards, Hon. R.	Oxley	Page, Hon. J.	Maranoa
Fisher, Hon. A.	Wide Bay	Sinclair, H.	Moreton
Foxton, J. F. G.	Brisbane		

*South Australia.*

Batchelor, Hon. E. L.	Boothby	Kingston, Right Hon. Adelaide	
Glynn, Hon. P. McM.	Angas	C. C., P.C., K.C.	
Holder, Hon. Sir F.	Wakefield	Livingston, J.	Barker
W., K.C.M.G.		Poynton, Hon. A.	Grey
Hutchison, J.	Hindmarsh		

*Western Australia.*

Forrest, Right Hon. Sir Swan		Frazer, C. E.	Kalgoorlie
J., P.C., G.C.M.G.		Hedges, W. N.	Fremantle
Fowler, Hon. J. Mac-Perth		Mahon, Hon. H.	Coolgardie
kinnon			

*Tasmania.*

Atkinson, L.	Wilmot	McWilliams, W. J.	Franklin
Fysh, Hon. Sir P. O.,	Denison	O'Malley, Hon. K.	Darwin
K.C.M.G.		Storrer, D.	Bass

*Parliamentary Officers.*

Senate.—E. G. Blackmore, C.M.G., Clerk of the Parliaments; C. B. Boydell, Clerk Assistant; G. E. Upward, Usher of the Black Rod.

House of Representatives.—C. G. Duffy, C.M.G., Clerk of the House; W. A. Gale, Clerk Assistant; T. Woollard, Serjeant-at-Arms.

Reporting Staff.—B. H. Friend, Principal Parliamentary Reporter; D. F. Lumsden, Second Reporter.

## PRINCIPAL COMMONWEALTH OFFICERS.

## JUDICIARY—HIGH COURT OF AUSTRALIA.

Chief Justice	...	...	...	The Rt. Hon. Sir Samuel Walker Griffith, P.C., G.C.M.G.
Justice	...	...	...	The Rt. Hon. Sir Edmund Barton, P.C., G.C.M.G.
"	...	...	...	The Hon. Richard E. O'Connor.
"	...	...	...	The Hon. Isaac A. Isaacs.
"	...	...	...	The Hon. Henry B. Higgins.
Associate to Chief Justice	...	...	...	Edward P. T. Griffith.
" " Justice Barton	...	...	...	N. G. Pilcher.
" " Justice O'Connor	...	...	...	C. O'C. Murray.
" " Justice Isaacs	...	...	...	E. L. Best.
" " Justice Higgins	...	...	...	B. G. Duffy.
Principal Registrar	...	...	...	Gordon Harwood Castle.
Marshal	...	...	...	Walter David Bingle.

PRINCIPAL COMMONWEALTH OFFICERS—*continued.*

POSTMASTER-GENERAL'S DEPARTMENT.

*Central Administration.*

Secretary ...	...	...	R. T. Scott, I.S.O.
Chief Clerk ...	...	...	J. Oxenham.
Chief Electrical Engineer ...	...	...	J. Hesketh.
Meteorologist ...	...	...	H. A. Hunt.

*Deputy Postmasters-General.*

Victoria ...	...	...	Lt.-Col. F. L. Outtrim, I.S.O.
New South Wales ...	...	...	E. J. Young.
Queensland ...	...	...	C. E. Bright.
South Australia ...	...	...	R. W. M. Waddy.
Western Australia ...	...	...	R. Hardman.
Tasmania ...	...	...	H. L. D'Emden.

*Staff Officers, Victoria.*

Electrical Engineer ...	...	...	H. W. Jenvey.
Chief Clerk ...	...	...	W. B. Crosbie.
Accountant ...	...	...	E. Miller.
Superintendent Mail Branch ...	...	...	J. A. Springhall.
Manager Telegraph Branch ...	...	...	W. Blandford.
Chief Inspector, Post and Telegraph Services			H. J. T. Tymms.

DEPARTMENT OF TRADE AND CUSTOMS.

*Central Administration.*

Comptroller-General ...	...	...	H. N. P. Wollaston, LL.D., I.S.O.
Secretary ...	...	...	S. Mills.

*State Collectors.*

Victoria ...	...	...	A. W. Smart.
New South Wales ...	...	...	N. C. Lockyer.*
Queensland ...	...	...	W. H. Irving.
South Australia ...	...	...	T. N. Stephens.
Western Australia ...	...	...	C. T. Mason.
Tasmania ...	...	...	J. Barnard.

\* Mr. Lockyer is also Assistant Comptroller-General.

*Staff Officers, Victoria.*

Sub-Collector ...	...	...	J. F. Bradley.
Accountant ...	...	...	F. M. Wheatland.
Senior Inspector of Distilleries		...	D. Ferguson.

DEPARTMENT OF EXTERNAL AFFAIRS.

Secretary ...	...	...	A. Hunt.
Secretary to Prime Minister		...	M. L. Shepherd.
Secretary to Governor-General and Executive Council			Capt. G. C. T. Steward.

PRINCIPAL COMMONWEALTH OFFICERS—*continued.*

## ATTORNEY-GENERAL'S DEPARTMENT.

Secretary and Parliamentary Draftsman	R. R. Garran, C.M.G.
Chief Clerk and Assistant Parliamentary Draftsman	G. H. Castle.
Secretary to the Representative of the Government in the Senate	A. G. Brown, B.A., LL.B.
Crown Solicitor	... C. Powers.

## DEPARTMENT OF HOME AFFAIRS.

Secretary	... Lieut.-Col. D. Miller, I.S.O.
Chief Clerk	... W. D. Bingle.
Accountant	... H. L. Walters.
Inspector-General of Public Works	... Lt.-Col. G. T. Owen.
Works Director, Victoria	... J. Blackburn.
Commonwealth Statistician	... G. H. Knibbs, F.S.S., F.R.A.S.
Chief Electoral Officer	... R. C. Oldham.

## PUBLIC SERVICE COMMISSIONER'S OFFICE.

Public Service Commissioner	... D. C. McLachlan, I.S.O.
Inspector for Victoria	... R. Betheras.
Secretary	... F. Reddin.
Examiner	... F. J. Healy, M.A., LL.B.
Registrar	... W. J. Skewes.

## DEPARTMENT OF THE TREASURY.

Secretary	... G. T. Allen, I.S.O.
Accountant	... J. R. Collins.

## AUDIT OFFICE.

Auditor-General	... J. W. Israel.
Chief Clerk	... Percy Whitton.

## PATENTS OFFICE.

Commissioner of Patents	... G. Townsend.
-------------------------	------------------

## DEPARTMENT OF DEFENCE.

*Central Administration.*

Secretary for Defence	... Capt. R. H. M. Collins, R.N., C.M.G.
Chief Accountant	... J. A. Thompson.
Chief Clerk	... Com. S. A. Pethebridge.

## INSPECTOR-GENERAL AND DIRECTORS OF DEPARTMENTS.

Inspector-General	... Major-Gen. J. C. Hoad, C.M.G.
Deputy Adjutant-General	... Col. E. T. Wallack, C.B.
Chief of Intelligence	... Colonel W. T. Bridges, R.A.A.
Chief of Ordnance	... Colonel J. Stanley, R.A.A.
Director-General of Medical Services and of Cadets	... Surgeon-Gen. W. D. C. Williams, C.B.
Director of Engineer Services	... Lieut.-Col. J. W. Parnell, C. of A.E.
Director of Works	... Capt. P. N. Buckley, C. of A.E.
Director of Stores	... F. Savage.
Inspector of Ordnance and Ammunition	... Major A. H. Sandford, R.A.A.

PRINCIPAL COMMONWEALTH OFFICERS—*continued.*

NAVAL ADMINISTRATION.

Director of Naval Forces ...	...	Capt. W. R. Creswell, C.M.G.
Commandant ...	...	Com. W. J. Colquhoun, D.S.O.

DISTRICT STAFF, VICTORIA.

Military Commandant ...	...	Lieut.-Col. and Temp. Col. P. R. Ricardo.
Assistant Adjutant-General and Chief Staff Officer		Brevet Lieut.-Col. G. L. Lee, D.S.O.
Deputy Assistant Quartermaster-General		Major W. G. Patterson.
Deputy Assistant Adjutant-General for Instruction		Major J. H. Bruche.
Staff Officer for Engineer Services		Capt. G. F. Wilkinson, C. of A.E.
Principal Medical Officer ...	...	Col. C. S. Ryan, V.D., A.A.M.C.
Principal Veterinary Officer	...	Major E. A. Kendall.
Paymaster ...	...	T. J. Thomas.
Senior Ordnance Officer ...	...	J. J. Lahiff.

DISTRICT COMMANDANTS.

Military Commandant, N.S.W. ...	Brig.-Gen. J. M. Gordon, C.B.
Naval Commandant, N.S.W. ...	Lieut.-Com. Brownlow.
Military Commandant, Queensland	Col. J. S. Lyster.
Naval Commandant, Queensland ...	Capt. F. Tickell, C.M.G.
Military Commandant, South Australia	Lieut.-Col. J. H. A. Lee.
Naval Commandant, South Australia	Capt. C. Clare, C.M.G.
Military Commandant, Western Australia	Lieut.-Col. H. Le Mesurier.
Military Commandant, Tasmania ...	Col. H. Mackenzie.

COMMONWEALTH DEFENCE.

The three principal defence councils are as follow :—

COUNCIL OF DEFENCE.

*President.*

The Minister of State for Defence.

*Members.*

The Treasurer.  
The Inspector-General.  
The Director of Naval Forces.  
The Chief of Intelligence.

*Secretary.*

The Secretary for Defence.

And such other officers of the Citizen Forces and expert advisers as from time to time for any meeting of the Council, are summoned by the President to that meeting.

PRINCIPAL COMMONWEALTH OFFICERS—*continued.*COMMONWEALTH DEFENCE—*continued.*

## BOARD OF MILITARY ADMINISTRATION.

*Regular Members.**President.*

The Minister of State for Defence.

*Members.*

The Deputy Adjutant-General.

The Chief of Intelligence.

The Chief of Ordnance.

The Finance Member (Chief Accountant).

*Secretary.*

The Chief Clerk.

*Consultative Members.*

Col. J. Rowell, C.B., V.D., A.D.C. to H.E. the Gov.-Gen., Officer Commanding Field Force, South Australia, and Commanding 10th A.I.R.

Lieut.-Col. W. H. Hall, V.D., Officer Commanding Garrison Troops, Victoria.

Lieut.-Col. G. R. Campbell, V.D., Officer Commanding Garrison Troops, New South Wales.

Mr. A. Ferguson, Queensland Rifle Clubs.

## BOARD OF NAVAL ADMINISTRATION.

*President.*

The Minister of State for Defence.

*Members.*

The Director of Naval Forces.

The Finance Member (Chief Accountant).

*Secretary.*

The Chief Clerk.



## FINANCE.

There has been a marked improvement of late years in the finances <sup>State</sup> of the State of Victoria, and, in addition to the ordinary expenditure, large sums out of ordinary revenue have been devoted to paying off liabilities of former years, and to the formation of Sinking Funds to meet outstanding loans as follow. After these payments there were still substantial surpluses, applied specially to public works at the end of each of the last three financial years. <sup>finance.</sup>

## ORDINARY REVENUE APPROPRIATED.

Year ended 30th June.	In reduction of the accumulated revenue deficiency of former years.	In redemption of loan raised in anticipation of revenue (Act No. 1451.)	In formation of Redemption Funds to meet outstanding loans.*	Total
	£	£		£
1904 ... ..	175,000	25,000	57,500	257,500
1905 ... ..	172,000	25,000	97,962	294,962
1906 ... ..	550,000	25,000	97,936	672,936
Totals (3 years)	897,000	75,000	253,398	1,225,398

\* These Redemption Funds have sources of income beside these amounts. Full particulars of the funds will be found on pages 146 to 148 of this work.

The following table shows the receipts and expenditure from <sup>State</sup> general revenue during the year ended 30th June, 1906. On 1st July, <sup>revenue</sup> 1905, the total revenue deficiency was £2,009,119 12s. 5d.; and in <sup>and expen-</sup> the course of the year this amount was reduced by £550,000, leaving <sup>diture.</sup> the accumulated revenue deficiency at the end of the financial year 3633.

1905-6 £1,459,119 12s. 5d., the whole of this amount being covered by advances from the trust funds.

## REVENUE AND EXPENDITURE, 1905-6.

Revenue.	Amount.			Expenditure.	Amount.		
	£	s.	d.		£	s.	d.
Excise and Inland	784,007	10	0	Consolidated Revenue deficiency, 30/6/05	2,009,119	12	5
Territorial ...	289,002	7	0	Special Appropriations	2,797,828	1	11
Public Works ...	3,936,435	6	1	Chief Secretary ...	672,572	4	10
Ports and Harbors	80,845	9	7	Minister of Public Instruction	617,548	10	11
Fees ...	288,436	10	0	Attorney-General	75,483	14	7
Fines ...	8,943	13	2	Solicitor-General ...	59,685	2	0
Mallee Land Account	41,735	9	5	Treasurer	288,686	15	3
Miscellaneous ...	384,950	9	1	Commissioner of Crown Lands and Survey	97,006	8	7
Commonwealth balances returned	2,097,118	16	9	Commissioner of Public Works	189,215	16	8
Consolidated Revenue deficiency 30/6/06	1,459,119	12	5	Minister of Mines	64,175	7	2
				Minister of Water Supply	43,573	7	0
				Minister of Agriculture	79,288	12	5
				Minister of Health	21,001	18	10
				Minister of Railways	2,038,103	8	1
				Mallee Land Account	41,735	9	5
				Surplus Revenue transferred to Trust Fund for Works	175,570	13	5
Total ...	9,270,595	3	6	Total ..	9,270,595	3	6

The following is a return of the revenue and expenditure of Victoria for the seven years 1900-1906:—

STATE REVENUE AND EXPENDITURE: RETURN FOR SEVEN YEARS.

Year ended 30th June.	Revenue.	Expenditure.
	£	£
1900	7,453,355	7,285,636
1901	7,712,099	7,672,780
1902	6,997,792	7,398,832
1903	6,954,619	6,759,960
1904	7,319,949	7,339,608
1905	7,515,742	7,343,742
1906	7,811,475	7,261,475

NOTE.—The differences between the revenue and expenditure shown above and the revenue and expenditure given in the Treasurer's Finance Statement arise from the use of a different method of classification for statistical purposes. Those for 1905-6 are as follow:—

	Revenue.	Expenditure.
	£	£
Total according to Treasurer's Finance Statement ...	7,803,916	7,128,345
<i>Add—</i>		
Mallee Land Account—appropriated to Loan Redemption purposes ...	41,735	41,735
Surplus Revenue—set aside for Railway Works, State School Buildings, &c. ...	...	175,571
<i>Deduct—</i>		
Transfers from Loan proceeds ...	34,176	34,176
Redemption of Treasury Bonds in aid of Revenue, Act No. 1795 ...	...	50,000
Total ...	7,811,475	7,261,475

If the total Commonwealth revenue and expenditure credited or debited to Victoria be taken into account in connexion with the above figures, the revenue for 1906 would amount to £8,999,240, and the expenditure to £8,459,857, an increase over 1900, the year before federation, of £1,545,885 in the revenue, and £1,174,221 in the expenditure. The increase in revenue is due chiefly to Excise duties, £256,980; Posts and Telegraphs, £149,502; Probate duties, £202,150; Income tax, £103,064; and Railways, £770,632; that in expenditure to the introduction of Old-age pensions, £189,094, and the transfer of surplus revenue for public works, £175,571; Posts and Telegraphs, £152,683; Defences, £102,062; Commonwealth "New" expenditure, £153,032; Railways, £231,864; and redemption of loans, £87,619.

There was, on the transactions of the year, a surplus of £725,571, which was applied as follows:—£550,000 in reduction of the revenue deficiency of former years, and £175,571 for the purposes of the public works specified in the Surplus Revenue Act No. 2029.

Heads of  
State  
revenue.

The sources of revenue may be grouped under three headings—(1) taxation, (2) public works, and (3) other sources. Customs and Excise (under taxation), and Posts and Telegraphs (under public works) were transferred to the Federal Government in 1900-1, and the net revenues from these departments are now included under the head of "Federal Government." Land revenue, which averaged £376,000 yearly, is included under "other sources." The amounts received during the last five financial years were as follow:—

#### HEADS OF REVENUE: RETURN FOR FIVE YEARS.

Heads of Revenue.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
Federal Government...	1,920,974	2,105,450	2,002,804	2,017,378	2,097,119
State Taxation—					
Probate and Succession Duties	217,796	161,636	308,531	265,876	328,628
Income Tax ...	220,629	415,048	311,147	316,943	318,135
Other ...	379,849	373,499	392,441	396,210	429,172
Public Works and Services—					
Railways ...	3,362,030	3,033,596	3,400,243	3,609,120	3,779,153
Other ...	203,393	181,172	199,072	190,306	212,174
Other Sources ...	693,121	684,218	705,711	719,909	647,094
Total ...	6,997,792	6,954,619	7,319,949	7,515,742	7,811,475
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Per Head of Population	5 15 9	5 15 5	6 1 1	6 4 2	6 8 2

The amount returned to the State by the Federal Government—£1,920,974 for 1901-2, £2,105,450 for 1902-3, £2,002,804 for 1903-4, £2,017,378 for 1904-5, and £2,097,119 for 1905-6—is that collected by transferred departments, less the amount deducted by the Federal Government under Section 89 of the "Commonwealth of Australia Constitution Act." For 1905-6 the Federal Government received £2,537,070 from Customs and Excise; £735,563 from Posts and Telegraphs; and £12,251 from other sources; and paid over to the State Government £2,097,119.

The revenue of the Railway Department continues to display a considerable advance upon all previous years, that for 1905-6 exceeding the revenue of 1904-5 by £170,033 and of 1901-2 by £417,123.

#### INCOME TAX.

Income tax.

An income tax was first imposed in Victoria in 1895, for a period of three years, expiring in 1898, but it has been from time to time extended ever since. The Act is administered by a Commissioner, who, together with his officers, are bound by oath to secrecy. Incomes

assessed for tax in any year are those earned, derived, or received in Victoria in the preceding calendar year, and are divided into two classes, viz.: — Incomes (1) from personal exertion, and (2) from property. The former consists of earnings, salaries, wages, allowances, pensions, &c., or stipends earned in or derived from Victoria, and all incomes arising or accruing from any profession, business, trade, or occupation carried on in Victoria; and the latter of all other income. This is the gross income, and the net income is ascertained by making certain deductions, the principal of which are losses and outgoings incurred in the production of the income, all taxes other than Income tax payable under any Act of the Victorian Parliament, life assurance premiums not exceeding £50, and calls or contributions actually paid into any reconstructed company whose shares are of no marketable value. By the original Act, incomes of certain public, local, religious, provident, &c., bodies or societies are exempt from taxation, also the official salary of the Governor, and the incomes of mutual life offices with head offices in Australia, fire, fidelity, &c., insurance companies taking out licences under the "Stamps Act," limited to income from that class of business; and income of non-residents of Victoria from stock debentures or bonds of the Victorian Government or of any public or municipal trust or body. An exemption to the extent of £200 was allowed, except in the case of absentees. The rate of tax is fixed annually by an "Income Tax Rate Act," and from 1895 to 1902 both inclusive was 4d. in the £1 on the first £1,200 of the taxable amount (allowing for £200 exemption), 6d. on the next £1,000, and 8d. on all over £2,200 on income from personal exertion, and double these rates on income from property. The rate of tax for 1903, based on the incomes of the previous year, was fixed by Act No. 1819, as follows:—(a) Personal exertion—Net incomes up to £125 exempt; from £126 to £500, 4d. (with £100 exemption); over £500, 4d. on first £500 (no exemption), 1d. extra on every £500 or portion thereof up to £2,000; and 8d. on all over £2,000. (b) Property—Double these rates. This Amending Act also made companies taxable as persons, except mining companies, the shareholders of which included in their returns the dividends received. Special provision was also made for the assessment and taxation of life, fire, fidelity, and guarantee assurance and insurance companies. Life assurance companies paid a uniform rate of 1s. in the £1. The rates for the year 1904, based on the incomes of 1903, were altered by Act No. 1863, which did not alter the exemption, but raised the minimum taxable from £126 to £151. The following are the rates under this Act:—Incomes from personal exertion—3d. for every £1 of the taxable amount up to £300; thence up to £800, 4d.; thence to £1,300, 5d.; thence to £1,800, 6d.; and over £1,800, 7d. Life assurance companies, 1s. in the £1. Incomes from property—Double these rates. The rates for the year 1905, based on the incomes of 1904, were again altered by Act No. 1938, as follow:—Incomes from personal exertion are taxed 3d. for every £1 of the taxable amount up to £500; thence up to £1,000, 4d.; thence to

£1,500, 5d.; over £1,500, 6d. Taxes on income from property are double these rates. The minimum amount taxable is £157, the exemption being £100 on incomes from £157 to £500, no exemption being made for companies. The tax on the income of life assurance companies is 8d.; that for other companies liable to tax, 7d. for every £1 of the taxable amount. Interest on Government stock, bonds, and debentures held by residents was exempted as in the case of non-residents, and the exemption of mining companies repealed. The taxable amount of the income of a mining company is the total amount of the dividends declared during the year. The exemption of the profits from trade of provident societies and other associations was also repealed. The rates for 1906 are the same as those for 1905. The following is a statement of the assessments, taxpayers, taxable income, and tax payable from personal exertion and property during the last five years:—

## INCOME TAX: RETURN FOR FIVE YEARS.

—	1902.	1903.	1904.	1905.	1906.
Number of Assessments:					
Personal exertion ..	22,901	61,635	43,361	40,528	39,753
Property ... ..	17,577	12,757	8,916	8,237	8,348
Total ... ..	40,478	74,392	52,277	48,765	48,101
Distinct taxpayers ...	39,215	67,812	48,266	44,956	44,262
Taxable Income—	£	£	£	£	£
Personal exertion ...	6,261,800	10,006,700	11,724,100	13,072,600	12,709,857
Property ... ..	2,325,000	3,930,400	3,118,534	2,890,500	2,929,544
Total ... ..	8,586,800	13,937,100	14,842,634	15,963,100	15,639,401
Tax Payable—	£	£	£	£	£
Personal exertion ...	123,609	211,870	199,718	230,737	223,686
Property ... ..	91,494	194,850	112,930	89,890	90,618
Total ... ..	215,103	406,720	312,648	320,627	314,304
Per taxpayer ... ..	£ s. d. 5 9 8	£ s. d. 6 0 0	£ s. d. 6 9 11	£ s. d. 7 2 8	£ s. d. 7 2 0
Average Tax payable in the £ on Taxable In- comes derived from—	d.	d.	d.	d.	d.
Personal exertion ...	4·74	5·08	4·09	4·24	4·22
Property ... ..	9·45	11·90	8·69	7·46	7·42

The effect of the Acts passed each year was that during the five years under review the number of assessments was increased from 40,478 in 1902 to 48,101 in 1906, the latter figures including 1,045 assessments of companies. Of the total increase, 16,852 were from personal exertion; but there was a decrease of 9,229 from property. From 1898 to 1902, under the authority of the Income

Tax Act in operation during that period, there were between 6,000 and 7,000 non-resident persons assessed in small amounts in respect of dividends paid to them. The reduction in the number of assessments on property since 1902 is principally due to the fact that such small incomes were not taxable after that time. The taxpayers have increased by 5,047 since 1902; the number in 1906 being 44,262. The taxable income from personal exertion increased from £6,261,800 in 1902 to £12,709,857 in 1906; and that from property, in the years given, from £2,325,000 to £2,929,544. The total increase in the taxable income was £7,052,601. The exemptions allowed amounted to £6,485,000 in 1902, and to £3,947,000 in 1906. The amount of tax payable increased from £123,609 in 1902 to £223,686 in 1906 on incomes from personal exertion; but decreased from £91,494 to £90,618 in the case of incomes from property—a net increase of £99,201.

Notwithstanding the fact that by adopting a lower taxable income, a large number of smaller taxpayers were included in the figures for 1903, 1904, 1905, and 1906, yet by alteration of rates and exemptions and by the taxation of companies as individuals, the average amount per taxpayer in each of those years shows an increase over previous years, and in 1906 the amount reached £7 2s.

The average tax payable in the pound was highest in 1903, both on taxable incomes derived from personal exertion (5d.) and from property (nearly 1s.). The highest previous rates were under 5d. and 9½d., and in 1906 the rates were 4½d. and 7½d. The following return shows particulars of rates of taxation, assessments, taxable incomes, and taxes payable in the respective groups for which different rates of taxation are charged:—

#### INCOME TAX ASSESSMENTS, 1906—BASED ON INCOMES OF 1905.

Taxable Income.	Rate of Tax in £ on Incomes derived from		Number of Assessments.		Taxable Income from		Tax Payable on	
	Personal Exertion.	Property.	Personal Exertion.	Property.	Personal Exertion.	Property.	Personal Exertion.	Property.
Up to £500 ...	d. 3	d. 6	34,822	6,936	£ 5,086,688	£ 951,817	£ 64,666	£ 23,873
£500 to £1,000 ...	4	8	3,217	924	2,198,710	628,393	31,199	17,147
£1,000 to £1,500 ...	5	10	776	210	940,695	256,495	15,728	8,013
Over £1,500 ...	6	12	938	278	4,483,764	1,092,839	112,093	41,585
Total ...	...	...	39,753	8,348	12,709,857	2,929,544	223,686	90,618

It is here shown that the taxable income from personal exertion amounts to £12,709,857, and that from property to £2,929,544, after allowing for exemptions of £3,947,000. The total net incomes

of those who paid income tax, during 1905-6, amounted to over nineteen and a half millions sterling, or an average of £442 for each taxpayer. The averages of the three previous years were, 1902-3 £295, 1903-4 £394, and 1904-5 £444.

Occupations  
of Income  
Taxpayers.

In the succeeding tables the occupations of income taxpayers are exhibited, the summary table immediately following showing the percentage of each class paying the tax, and the proportion contributed thereto.

### OCCUPATIONS OF INCOME TAXPAYERS SUMMARIZED, 1906.

Occupations in Classes.	Number of Taxpayers.			Amount of Tax.					
	Total.	Percentage of Taxpayers.	Percentage of each class in Population.	Personal Exertion.	Property.	Total.	Percentage of Total.	Average to each Tax- payer.	
				£	£	£		£	s. d.
1. Professional	7,549	17.06	21.43	25,326	4,041	29,367	9.34	3	17 9
2. Domestic ...	1,446	3.27	2.16	4,215	705	4,920	1.57	3	8 0
3. Commercial	11,844	26.76	14.98	54,113	7,528	61,641	19.61	5	4 1
4. Transport ...	1,939	4.38	6.15	4,175	373	4,548	1.45	2	6 10
5. Industrial ...	7,066	15.96	4.83	26,553	2,716	29,269	9.31	4	2 10
6. Primary pro- ducers ...	8,211	18.55	4.97	35,852	8,830	44,682	14.22	5	8 10
7. Indefinite ...	5,256	11.87	52.22	5,420	52,038	57,458	18.28	10	18 7
8. Companies...	951	2.15	...	68,032	14,387	82,419	26.22	86	13 3
Total ...	44,262	100.00	...	223,686	90,618	314,304	100.00	7	2 0

An examination of this table reveals the relative wealth of the various classes. Thus the commercial class, which forms nearly 27 per cent. of the taxpayers, has the proportion of only 15 per cent. of the total bread-winners in the population, whilst primary producers, which include those following agricultural, pastoral, and mining pursuits, make up 18½ per cent. of the taxpayers, but 31 per cent. of the bread-winners; the next great class—the industrial—contributes 16 per cent. to the taxpayers, and forms 27 per cent. of the bread-winners; whilst the professional class, contributing 17 per cent. to the taxpayers, forms only 7 per cent. of the bread-winners. Of the definite classes, that contributing the highest percentage of taxpayers in proportion to its number in the population is the professional, with 21½ per cent.; the commercial coming next, with 15 per cent.; and those engaged in transport come third with 6 and the domestic last with 2½ per cent. Of the amount paid as tax, companies yielded 26 per cent. of the total; whilst the indefinite class, forming 12 per cent. of the taxpayers, yielded 18 per cent. of the tax. The commercial class, forming 27 per cent. of the taxpayers, gave 19½ per cent. of the tax; primary producers, forming 18½ per cent. of the taxpayers, gave 14 per cent. of the tax; the industrial and professional classes, forming 16 and 17 per cent. respectively of the taxpayers, each gave 9 per cent. of the tax.



In the succeeding table the sources of the incomes of taxpayers for all the principal occupations are dealt with under the heads of personal exertion and property.

SOURCES OF INCOMES AND OCCUPATIONS OF TAXPAYERS, 1906.

Occupations.	Number of Taxpayers.				Amount of Tax.			
	Personal Exertion.	Property.	Personal Exertion and Property combined.	Total.	Personal Exertion.	Property.	Total.	Average to each Taxpayer.
<i>1 Professional.</i>					£	£	£	£ s. d.
Civil Servants	1,210	...	63	1,273	3,543	230	3,773	2 19 3
Clergymen ...	699	1	34	734	1,626	72	1,698	2 6 3
Legal Practitioners	578	10	130	718	5,034	1,799	6,833	9 10 4
Medical Practitioners ...	494	8	134	636	4,878	687	5,565	8 14 11
Police ...	855	...	6	861	991	11	1,002	1 3 3
Teachers ...	1,430	...	25	1,455	2,861	60	2,921	2 0 1
Various ...	1,706	18	148	1,872	6,393	1,182	7,575	4 0 11
	6,972	37	540	7,549	25,326	4,041	29,367	3 17 9
<i>2. Domestic.</i>								
Hotelkeepers...	1,016	5	137	1,158	3,560	569	4,129	3 11 4
Various ...	258	2	28	288	655	136	791	2 14 10
	1,274	7	165	1,446	4,215	705	4,920	3 8 0
<i>3. Commercial.</i>								
Agents ...	611	7	122	740	4,209	699	4,908	6 12 8
Brokers ...	167	1	35	203	2,042	277	2,319	11 8 6
Butchers ...	454	2	38	494	1,282	96	1,378	2 15 9
Clerks ...	3,580	5	159	3,744	9,744	549	10,293	2 14 11
Drapers ...	434	2	45	481	2,547	165	2,712	5 12 9
Grocers ...	354	2	50	406	1,033	263	1,296	3 3 10
Merchants ...	956	9	281	1,246	16,119	3,255	19,374	15 11 0
Salesmen ...	1,920	2	55	1,977	4,369	390	4,759	2 8 2
Storekeepers...	525	4	96	625	2,299	431	2,730	4 7 4
Various ...	1,672	25	231	1,928	10,469	1,403	11,872	6 3 1
	10,673	59	1,112	11,844	54,113	7,528	61,641	5 4 1
<i>4. Transport.</i>								
Carriers ...	261	...	26	287	747	49	796	2 15 6
Engaged in Postal Service	181	...	5	186	379	13	392	2 2 1
Engaged in Railways ...	1,248	...	10	1,258	1,939	12	1,951	1 11 0
Engaged in Shipping ...	176	1	31	208	1,110	299	1,409	6 15 5
	1,866	1	72	1,939	4,175	373	4,548	2 6 10

SOURCES OF INCOMES AND OCCUPATIONS OF TAXPAYERS,  
1906—continued.

Occupations.	Number of Taxpayers.				Amount of Tax.			
	Personal Exertion.	Property.	Personal Exertion and Property combined.	Total.	Personal Exertion.	Property.	Total.	Average to each Taxpayer.
<b>5. Industrial.</b>					£	£	£	£ s. d.
Carpenters ...	500	12	74	586	1,943	302	2,245	3 16 7
Engine-drivers ...	237	...	2	239	269	2	271	1 2 8
Engineers ...	716	4	22	742	1,655	78	1,733	2 6 8
Managers ...	670	2	54	726	2,566	427	2,993	4 2 5
Manufacturers ...	520	3	114	637	6,725	806	7,531	11 16 5
Printers ...	620	...	23	643	3,573	45	3,618	5 12 6
Various ...	3,253	11	229	3,493	9,822	1,056	10,878	3 2 3
	6,516	32	518	7,066	26,553	2,716	29,269	4 2 10
<b>6. Primary Producers.</b>								
Engaged in Agriculture, &c.—								
Dairy Farmers ...	646	3	36	685	1,363	177	1,540	2 4 11
Farmers ...	4,490	59	359	4,908	14,149	1,915	16,064	3 5 5
Graziers ...	1,003	88	400	1,491	17,536	5,899	23,435	15 14 4
Various ...	488	14	67	569	1,444	493	1,937	3 8 1
	6,627	164	862	7,653	34,492	8,484	42,976	5 12 3
Engaged in Mining—								
Legal Managers ...	41	...	1	42	151	3	154	3 13 2
Miners ...	183	1	12	196	462	187	649	3 6 2
Mining Managers ...	226	1	8	235	458	109	567	2 8 3
Various ...	78	1	6	85	289	47	336	3 19 0
	528	3	27	558	1,360	346	1,706	3 1 1
	7,155	167	889	8,211	35,852	8,830	44,682	5 8 10
<b>7. Indefinite.</b>	720	4,087	449	5,256	5,420	52,038	57,458	10 18 7
<b>8. Companies.</b>								
Life Assurance ...	...	20	...	20	...	10,577	10,577	528 16 5
Mining ...	94	...	...	94	13,284	...	13,284	141 6 3
Other ...	644	99	94	837	54,748	3,810	58,558	69 19 2
	736	119	94	951	68,032	14,387	82,419	86 13 3
<b>Total ...</b>	<b>35,914</b>	<b>4,509</b>	<b>3,839</b>	<b>44,262</b>	<b>223,686</b>	<b>90,618</b>	<b>314,304</b>	<b>7 2 0</b>

Of the total taxpayers, 81 per cent. gained their incomes from personal exertion, 10 per cent. from property, and 9 per cent. from personal exertion combined with property, the proportion of taxpayers of definite occupations deriving incomes from personal exertion

ranging from 87 per cent. of primary producers to 96 per cent. of those engaged in transport; personal exertion combined with property ranging from 4 per cent. of those engaged in transport to 11 per cent. of primary producers and those engaged in boarding, lodging, &c. (domestic). The indefinite class, comprising persons of independent means, no occupation, and pensioners, has 14 per cent. gaining incomes from personal exertion, 78 per cent. from property, and 8 per cent. from personal exertion combined with property. Of companies 78 per cent. made their incomes from personal exertion, 12 per cent. from property, and 10 per cent. from personal exertion and property combined. Seventy-one per cent. of the total tax was yielded by incomes made from personal exertion, the range amongst the various classes being from 9 per cent. indefinite occupations to 80 per cent., primary producers, and 92 per cent. by those engaged in transport.

The taxable incomes of taxpayers in conjunction with occupations are shown in the following statement:—

### TAXABLE INCOMES AND OCCUPATIONS OF TAXPAYERS, 1906.

Occupations.	Number of Taxpayers.				Amount of Tax.			
	With taxable incomes between—			Total.	On taxable incomes between—			Total.
	£57 and £500.	£500 and £1,000.	£1,000 and over.		£57 and £500.	£500 and £1,000.	£1,000 and over.	
<b>1. Professional.</b>					£	£	£	£
Civil Servants ...	1,151	102	20	1,273	2,136	913	724	3,773
Clergymen ...	699	31	4	734	1,300	274	124	1,698
Legal Practitioners ...	471	158	89	718	1,104	1,664	4,065	6,833
Medical Practitioners	349	202	85	636	964	2,098	2,503	5,565
Police ...	855	6	...	861	951	51	...	1,002
Teachers ...	1,404	40	11	1,455	2,315	362	244	2,921
Various ...	1,629	189	54	1,872	3,308	1,807	2,460	7,575
	6,558	728	263	7,549	12,078	7,169	10,120	29,367
<b>2. Domestic.</b>								
Hotelkeepers ...	1,016	119	23	1,158	2,191	1,141	797	4,129
Various ...	267	14	7	288	472	149	170	791
	1,283	133	30	1,446	2,663	1,290	967	4,920
<b>3. Commercial.</b>								
Agents ...	549	128	63	740	1,188	1,311	2,409	4,908
Brokers ...	120	50	33	203	300	526	1,493	2,319
Butchers ...	453	34	7	494	899	324	155	1,378
Clerks ...	3,454	220	70	3,744	6,118	2,174	2,001	10,293
Drapers ...	396	49	36	81	760	464	1,488	2,712
Grocers ...	371	21	14	406	681	227	388	1,296
Merchants ...	757	240	249	1,246	1,559	2,438	15,377	19,374
Salesmen ...	1,894	65	18	1,977	3,325	610	824	4,759
Storekeepers ...	517	87	21	625	1,230	837	663	2,730
Various ...	1,557	208	163	1,928	3,165	2,101	6,606	11,872
	10,068	1,102	674	11,844	19,225	11,012	31,404	61,641

TAXABLE INCOMES AND OCCUPATIONS OF TAXPAYERS,  
1906—continued.

Occupations.	Number of Taxpayers.				Amount of Tax.			
	With taxable incomes between—			Total.	On taxable incomes between—			Total.
	£57 and £500.	£500 and £1,000.	£1,000 and over.		£57 and £500.	£500 and £1,000.	£1,000 and over.	
4. Transport.								
Carriers ...	253	28	6	287	£ 422	£ 263	£ 111	£ 796
Engaged in Postal Service	175	10	1	186	290	83	19	392
Engaged in Railways	1,241	14	3	1,258	1,707	120	124	1,951
Engaged in Shipping	149	43	16	208	268	451	690	1,409
	1,818	95	26	1,939	2,687	917	944	4,548
5. Industrial.								
Carpenters ...	525	38	23	586	947	342	956	2,245
Engine-drivers ...	239	...	...	239	271	...	...	271
Engineers ...	701	30	11	742	1,009	304	420	1,733
Managers ...	603	103	20	726	1,271	1,066	656	2,993
Manufacturers ...	432	110	95	637	1,008	1,071	5,452	7,531
Printers ...	594	34	15	643	971	298	2,349	3,618
Various ...	3,229	178	86	3,493	5,060	1,677	4,141	10,878
	6,323	493	250	7,066	10,537	4,758	13,974	29,269
6. Primary Producers.								
Engaged in Agriculture, &c.—								
Dairy Farmers ...	650	32	3	685	1,131	310	99	1,540
Farmers ...	4,331	480	97	4,908	8,561	4,530	2,973	16,064
Graziers ...	987	241	263	1,491	2,381	2,755	18,299	23,435
Various ...	516	33	20	569	973	357	607	1,937
	6,484	786	383	7,653	13,046	7,952	21,978	42,976
Engaged in Mining—								
Legal Managers ...	36	5	1	42	82	52	20	154
Miners ...	174	18	4	196	276	176	197	649
Mining Managers ...	226	8	1	235	419	67	81	567
Various ...	69	15	1	85	155	163	18	336
	505	46	7	558	932	458	316	1,706
	6,989	832	390	8,211	13,978	8,410	22,294	44,682
7. Indefinite.								
	4,128	745	383	5,256	15,537	12,732	29,189	57,458
8. Companies.								
Life Assurance ...	2	4	14	20	9	107	10,461	10,577
Mining ...	21	13	60	94	155	318	12,811	13,284
Other ...	470	112	255	837	1,997	2,269	54,292	58,558
	493	129	329	951	2,161	2,694	77,564	82,419
Total ...	37,660	4,257	2,345	44,262	78,866	48,982	186,456	314,304

Of the taxable incomes assessed, 85 per cent. were under £500, 10 per cent. between £500 and £1,000, and 5 per cent. over £1,000; but the tax levied on these incomes formed 25, 16, and 59 per cent. respectively of the total. Of the definite occupations the largest amount of tax was contributed by the commercial class, in which 1,246 merchants were responsible for £19,374, of which £15,377 came from 249 persons, whose incomes for the previous year exceeded £1,000. Clerks, who comprised nearly one-third of this class, came next to merchants, but as 92 per cent. of their number had taxable incomes under £500, their tax amounted to little more than half that of the merchants although they were three times as numerous. Next to the commercial class the largest amount of tax came from the primary producers, the principal of which were graziers, whose contribution amounted to £23,435 from 1,491 persons. Of these, 263 incomes exceeded £1,000 each during 1905, and were taxed to the extent of £18,299. Of the primary producers assessed, farmers represented two-thirds of the number, but contributed only little more than one-third of the tax.

#### LAND TAX.

A Land Tax was first imposed in Victoria in 1877, and has continued in force ever since without any amendment. All estates over 640 acres in extent, valued at upwards of £2,500, whether consisting of one block or several blocks of land not more than five miles apart, are taxed at the rate of one and a quarter per cent. upon their capital value after deducting an exemption of £2,500. If a proprietor holds more than one estate, only one exemption is allowed. The lands are valued on a purely pastoral basis, according to their sheep-carrying capacity, irrespective of whatever value may attach to such lands for dairying or agricultural purposes. The estates in question are divided into four classes, the value being estimated according to the number of sheep they are able to carry, as follow:—

		Value per Acre.
Class I.—	carrying 2 sheep or more per acre ...	£4
Class II.	„ 1½ sheep per acre ...	3
Class III.	„ 1 sheep per acre ...	2
Class IV.	„ under 1 sheep per acre ...	1

The following are particulars regarding the land tax for the half-year ended February, 1907:—

#### LAND TAX: RETURN FOR THE HALF-YEAR ENDED 27TH FEBRUARY, 1907.

Class.	Estates Assessed.			Exemptions.		Net Taxable Value.	Half-year's Tax Payable.
	Number.	Area.	Capital Value.	Number.	Value.		
		Acres.	£		£	£	£
I. ...	111	191,458	765,832	97	242,500	523,332	3,271
II. ...	181	467,351	1,402,053	167	417,500	984,553	6,153
III. ...	483	1,711,334	3,422,668	426	1,065,000	2,357,668	14,735
IV. ...	532	4,607,170	4,607,170	434	1,085,000	3,522,170	22,014
Total...	1,307	6,977,313	10,197,723	1,124	2,810,000	7,387,723	46,173

There are thus 1,307 landed estates assessed in Victoria, containing land to the extent of 6,977,313 acres, valued at £10,197,723, or an average of 5,338 acres to each estate; from which a tax of £46,173 has been levied for the half-year ended 27th February, 1907. The collections in 1899-1900 were £108,222; in 1900-1, £97,948; in 1901-2, £97,862; in 1902-3, £92,867; in 1903-4, £106,445; in 1904-5, £97,840; and in 1905-6, £103,536. In the following return a comparison is made of the number and size of the estates assessed for land tax in 1900, 1905, and 1906:—

#### LAND TAX: RETURN FOR 1900, 1905, AND 1906.

Year.	Number of Exemptions.	Estates.			Net Taxable Value.	Average Area to each Assessment.
		Assessed.	Area.	Capital Value.		
			Acres.	£	£	Acres.
1900	907	1,146	7,424,542	11,775,026	9,507,526	6,479
1905	1,081	1,262	7,039,132	10,356,984	7,654,484	5,577
1906	1,124	1,307	6,977,313	10,197,723	7,387,723	5,338

The total area of the State being 56,245,760 acres, there is thus slightly less than an eighth of the whole subjected to taxation. The area of land alienated and in process of alienation is 26,346,802 acres, of which the taxable land is only three-elevenths. It will be noticed that the average area to each assessment is gradually falling.

#### RAILWAY REVENUE AND EXPENDITURE.

Financial  
working  
of the  
Railways.

The following return shows the financial working of the Railways during the last five years, inclusive of the cost of pensions and gratuities. The figures have been taken from the Railway Report, and they represent the actual business done each year, and not simply the receipts and expenditure brought to account by the Treasury, within the year. Working expenses include expenditure on belated repairs, and expenditure on account of previous years, together amounting to £21,500 in 1901-2, £102,630 in 1902-3, £119,556 in 1903-4, £248,485 in 1904-5, and £117,542 in 1905-6.

#### RAILWAY BALANCES: RETURN FOR FIVE YEARS.

—	1901-2.	1902-3.	1903-4	1904-5.	1905-6.
	£	£	£	£	£
Gross Receipts ...	3,367,843	3,046,858	3,438,141	3,582,266	3,789,068
Working Expenses ...	2,072,374	1,938,580	1,921,867	2,119,623	2,117,706
Pensions, Gratuities, &c.	93,744	93,507	100,536	102,656	99,637
Net Receipts ..	1,201,725	1,014,771	1,415,738	1,359,987	1,571,725
Interest on Cost of Construction	1,492,695	1,473,532	1,515,755	1,461,994	1,472,397
Deficit (-) Surplus (+)	- 290,970	- 458,761	- 100,017	- 102,007	+ 99,328

Comparing 1905-6 with the first year appearing in the table the gross receipts have increased by £421,225 and working expenses and pensions by £51,225—the net receipts being £370,000 in excess of 1901-2. Interest is less by £20,298.

## RAILWAY ACCIDENT FUND.

A Railway Accident Fund was established by the *Railways Act* 1891, which is maintained by a payment into the Fund of 10s. for every £100 received by the Commissioners for fares for the conveyance of passengers and for charges for conveyance of animals, goods, and parcels. At the close of 1905-6 this Fund had a credit balance of £47,860, and the payments made in the year for damages, costs, &c., amounted to £24,060 3s. 6d.

## STATE EXPENDITURE.

The following table shows for the years 1901-2 to 1905-6 the principal heads of State expenditure:—

Heads of  
State  
expendi-  
ture.

## PRINCIPAL HEADS OF STATE EXPENDITURE: RETURN FOR FIVE YEARS.

Heads of Expenditure.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
General Administration	249,426	227,621	233,634	210,512	211,314
Retiring Allowances, Gratuities, &c.	319,280	337,226	341,297	343,694	339,508
Law, Order, and Protection	501,762	483,097	482,158	478,058	481,953
Education:—					
State ... ..	656,761	631,129	621,314	624,677	630,500
Secondary and Technical	33,976	29,895	30,028	37,617	38,722
Science, Medical, &c.	63,084	52,398	51,742	54,859	57,751
Charitable Institutions	313,735	300,821	292,914	294,483	292,454
Agriculture ... ..	169,351	110,867	150,380	157,307	160,238
Mining ... ..	59,502	53,961	45,975	56,355	56,178
Crown Lands ... ..	83,096	79,014	73,906	72,633	77,245
Public Works and Services:—					
Railways ... ..	2,052,264	1,849,989	1,896,359	2,004,601	2,033,818
Posts and Telegraphs	...	...	1,198*	...	...
Other ... ..	330,763	213,274	666,798	602,388	433,730

\* Arrears of salary to letter carriers.

**PRINCIPAL HEADS OF STATE EXPENDITURE : RETURN FOR FIVE YEARS—continued.**

Heads of Expenditure.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
Public Debt :—					
Interest and expenses	1,941,449	1,907,656	1,948,376	1,884,208	1,919,869
Redemption ...	94,414	68,155	95,060	114,260	125,566
Interest, Savings Banks	84,939	83,247	88,216	93,687	91,995
Old Age Pensions ...	292,432	215,973	205,183	200,465	189,094
Other Expenditure ...	152,598	115,637	115,070	113,938	121,540
Totals { Special Ap- propriations	2,996,333	2,810,955	3,338,413	3,214,812	3,049,310
{ Annual Votes	4,402,499	3,949,005	4,001,195	4,128,930	4,212,165
Grand Total ...	7,398,832	6,759,960	7,339,608	7,343,742	7,261,475
Per Head of Popula- tion	£ s. d. 6 2 5	£ s. d. 5 12 2	£ s. d. 6 1 5	£ s. d. 6 1 4	£ s. d. 5 19 2

As compared with the previous year, the figures for 1905-6 show a decrease of expenditure to the amount of £165,502 under special appropriations, but an increase of £83,235 under annual votes; a net decrease of £82,267. The principal items making up the decrease under special appropriations are surplus revenue transferred for public works, £204,161, and old-age pensions, £11,371. On the other hand, the expenditure on redemption of loans increased by £11,306; railways, £10,459; and land sales by auction fund, £11,421. Under annual votes, the chief increases are railway working expenses, £18,758; water supply, £8,968; State school buildings, £6,948; other public works, £13,107; and expenses connected with public debt, £30,871; whilst the expenditure on pensions and gratuities diminished by £7,225.

The causes of the reduction under old-age pension payments since 1901-2 were that under Act No. 1751 the maximum payments were reduced from 10s. to 8s. per week, and provision was made for enforcing contributions from relatives. It is proposed to raise the amount again to 10s.

**PENSIONS AND GRATUITIES.**

During the year 1905-6, 2,821 pensions were paid under special appropriations, amounting to £276,311; and 221 from annual votes, amounting to £12,214. The total number of pensions was 3,042, and the amount £288,525. Forty-eight compensations and gratuities were also paid, the amount being £8,983; and £42,000 were



paid as a subsidy to the Police Superannuation Fund. The following statement contains full particulars, showing various Acts under which these payments have been made:—

PENSIONS, SUPERANNUATION ALLOWANCES, AND GRATUITIES, &c.,  
PAID, 1905-6.

Division of Service.	Special Appropriations.		Annual Votes.		Total.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
		£		£		£
General Public Service—						
Under Civil Service Act	450	76,189	15	1,080	643	100,945
„ Public Service Act	166	18,641				
„ Other Acts ...	12	5,035				
„ Discipline Act ...	15	1,080				
„ Lunacy Act	61	4,891	...	...	15	1,080
Education Department ...	926	82,261	29	1,838	61	4,891
Railways ...	1,186	83,589	170	9,067	955	84,099
Miscellaneous—					1,356	92,656
Under Constitution Act	1	1,500	...	...	...	...
„ County Courts Act	4	3,125	...	...	1	1,500
Police ...	...	...	7	229	4	3,125
					7	229
Total Pensions and Superannuation Allowances	2,821	276,311	221	12,214	3,042	288,525
Compensations and Gratuities	15	3,255	33	5,728	48	8,983
Subsidy to Police Superannuation Fund	...	2,000	...	40,000	...	42,000
Total Amount Paid ...	...	281,566	...	57,942	...	339,508

The total amount of pensions paid in 1905-6—£288,525—was an advance of £4,323 on that of the previous year. In the Education Department the increase was £2,585, and in the Railway Department £3,504. In other departments there was a reduction of £1,766.

In 1905-6 the payments out of the Police Superannuation Fund were as follow:—345 pensions, amounting to £45,650, and 14 gratuities, amounting to £5,152. The Police Superannuation Fund is maintained by an annual subsidy of £2,000 from the consolidated revenue; by a moiety of the fines inflicted by the Courts of Petty Sessions; and by a deduction, not exceeding  $2\frac{1}{2}$  per cent., from the pay of the members of the force, and a further grant in aid from the consolidated revenue. The further grant in 1905-6 was £40,000.

In the year 1905-6, 26 pensions amounting to £1,177, and £12 sick allowances, were paid out of the Port Phillip Pilot Sick and Superannuation Fund, toward which, however, the Government does

not contribute, the fund being maintained by deductions from pilots' earnings and the annual income from investments belonging to the fund.

## EXPENDITURE ON EDUCATION.

Expenditure  
on educa-  
tion.

The expenditure during 1905-6 on State education amounted to £736,772, portion of which however (£21,444) was for technical schools. Pensions, gratuities, &c., are also included, but this expenditure may be considered as almost entirely belonging to the education of a past generation rather than as a portion of the cost of instruction of the children of the present day. The expenditure in detail for the five years 1901-2 to 1905-6, extracted from the report of the Education Department, is as follows:—

## EXPENDITURE ON EDUCATION: RETURN FOR FIVE YEARS.

Expenditure on—	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
Instruction ... ..	565,931	552,838	556,595	546,168	540,277
Training College ... ..	4,701	4,555	4,177	4,228	4,800
Continuation School ... ..	...	...	...	1,155	3,500
Administration ... ..	41,977	39,148	37,621	36,628	37,693
Technical Schools ... ..	22,958	16,430	16,278	17,117	21,444
Melbourne University ..	6,000	4,500	4,500	...	...
Pensions, Compensation, and Gratuities	76,352	77,535	78,732	82,414	84,637
Miscellaneous ... ..	338	4,622	4,269	4,421	5,238
Total (exclusive of Buildings)	718,257	699,628	702,172	692,129	697,589
Buildings—					
Expended by the Public Works Department:—					
From Loans ... ..	35,197	10,734	384	...	...
„ Annual Votes ... ..	39,231	20,886	12,167	24,946	32,087
Expended by Boards of Advice...	3,398	3,901	3,383	3,710	3,673
Rents ... ..	4,119	3,848	3,568	3,385	3,423
Total ... ..	800,202	738,997	721,674	724,170	736,772

The expenditure in 1901-2 was the highest for years past, but in 1902-3 there was a decrease to the extent of £61,205, and in 1903-4 a further decline of £17,323; but in 1904-5 an increase of £2,496 took place and in 1905-6 a further increase of £12,602. The increases in 1905-6, as compared with 1904-5, are under Training, £2,919; Administration, £1,065; Technical Schools, £4,327; Pensions, &c., £2,223; Buildings, £7,142; and Miscellaneous, £817. The expenditure on Instruction was reduced by £5,891 between the same years. Since the inception of the system of education by the State in 1872, up to the 30th June, 1906, the

expenditure on public instruction has amounted to £22,614,194, of which £16,800,142 has been spent on instruction, £1,250,625 on administration, £168,095 on training, £1,893,218 on miscellaneous items, principally pensions, technical schools, and the Melbourne University (excluding the annual endowment of £9,000 to that institution under Act 16 Vict., No. 34, since raised to £21,000 under Act No. 1926), £2,502,114 on buildings, of which £1,129,610 was paid out of loans, and £1,372,504 from revenue. For particulars of the progress of State instruction since its inception, see Part Social Condition of this work.

The foregoing statement deals with public instruction generally, and includes some items of expenditure on secondary and technical education; but in the following statement particulars are given of primary State school education only—that is, the cost to the State of the “free, compulsory, and secular” system, the subjects of which are set out in the schedule of Act. No. 1777, as follow:—Reading, writing, arithmetic, grammar, geography, history, drill, singing, drawing, elementary science, manual training, and, where practicable, gymnastics and swimming; also, for children over nine years of age, lessons in health and temperance from standard works; and, for girls, sewing, needlework, cookery, and domestic economy:—

Expenditure  
on primary  
education.

#### EXPENDITURE ON PRIMARY EDUCATION: RETURN FOR FIVE YEARS.

Items.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
<b>Instruction—</b>	£	£	£	£	£
Teachers' Salaries ...	511,846	499,559	502,562	494,546	493,415
Drawing, Kindergarten, Cookery, and Manual Training	4,681	5,955	5,334	4,841	2,126
Teachers' Travelling Expenses	2,060	2,540	2,562	2,519	2,125
Conveyance of Children to Schools	2,386	2,536	2,129	2,191	2,185
Printing, Stores, Cadets, Kindergarten, Manual Train- ing, and Cookery Expenses	9,140	10,034	10,559	8,345	7,855
Cleaning, Stationery, Fuel, &c.	31,459	31,532	32,781	33,206	32,128
Teaching Night Schools ...	804	682	668	520	443
Training Teachers ...	4,701	4,555	4,177	5,381	8,300
<b>Total Instruction</b> ...	<b>567,077</b>	<b>557,393</b>	<b>560,772</b>	<b>551,549</b>	<b>548,577</b>
<b>Administration—</b>					
Office and Inspectors ...	31,235	29,156	28,830	29,187	29,855
Truant Officers ...	7,569	6,046	5,046	4,941	4,475
Stores, Cleaning, &c. *	3,173	3,946	3,745	2,500	3,363
Buildings ...	81,946	39,369	19,502	32,041	39,183
Retiring Allowances, Compensa- tion, and Gratuities	76,352	77,535	78,732	82,414	84,637
Miscellaneous ...	...	...	...	...	460
<b>Total Expenditure</b> ...	<b>767,352</b>	<b>713,445</b>	<b>696,627</b>	<b>702,632</b>	<b>710,550</b>

\* Including Postage and Telegrams, £2,186 in 1902-3, £2,615 in 1903-4, £1,376 in 1904-5, and £1,591 in 1905-6.

Out of the total decrease (£63,430) which has taken place in the expenditure on Education since 1901-2, £56,802 has been effected on items comprising primary instruction. This has occurred principally in the items Teachers' Salaries and Buildings. Increases are shown in the expenditure on Training Teachers and Pensions.

The following return shows the cost per head of primary instruction:—

**COST OF PRIMARY INSTRUCTION IN VICTORIA: RETURN FOR SEVEN YEARS.**

Year.	Cost to the State.		Scholars in Average Attendance.	Per Head of Scholars in Average Attendance.	
	Including Buildings.	Excluding Buildings.		Including Buildings.	Excluding Buildings.
	£	£		£ s. d.	£ s. d.
1899-00 ...	673,174	628,489	145,868	4 12 4	4 6 2
1900-01 ...	699,418	663,378	147,818	4 14 8	4 9 9
1901-2 ...	767,352	685,406	150,939	5 1 8	4 10 10
1902-3 ...	713,445	674,076	150,268	4 14 11	4 9 8
1903-4 ...	696,627	677,125	145,500	4 15 8	4 13 1
1904-5 ...	702,632	670,591	143,362	4 18 0	4 13 7
1905-6 ...	710,550	671,367	142,216	4 19 11	4 14 5

Trust funds.

The following are the amounts to the credit of the trust funds, and the manner of their investment, at the end of each of the last five financial years:—

**TRUST FUNDS: RETURN FOR FIVE YEARS.**

Accounts.	Credit Balance on 30th June.				
	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Deposits in Savings Banks	3,603,187	3,595,418	3,495,418	3,445,418	2,617,310
Deposits in Savings Banks Security Account	2,500,327	1,543,952	1,625,812	2,036,262	2,451,549
Municipal Sinking Funds	652,951	634,141	633,464	627,914	628,497
Assurance Fund ...	176,683	184,685	194,773	204,301	213,790
Intestate Estates ...	89,288	88,698	100,511	103,557	106,677

TRUST FUNDS : RETURN FOR FIVE YEARS—*continued.*

Accounts.	Credit Balance on 30th June.				
	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Country Tramways* ...	137,872	137,872	137,872	94,164	46,732
Trustee and Assurance Companies ...	104,795	104,795	104,795	104,795	104,950
Police Superannuation Fund	1,665	3,253	5,579	7,312	7,718
Other Funds ...	1,409,414	988,832	821,061	1,010,804	1,346,423
Total ...	8,676,182	7,281,646	7,119,285	7,634,527	7,523,646
How Invested :—					
In State Debentures and Stock	1,574,050	1,595,544	1,534,464	1,586,470	1,796,652
In Bank Deposit Receipts, Cash, and Advances to Revenue, &c.	7,102,132	5,686,102	5,584,821	6,048,057	5,726,994

\* This Fund was made available for water supply and railway purposes by Act No. 1933 (8th November, 1904).

The revenue deficiency on 30th June, 1906, £1,459,119, and the debit balance of £226,376 in the Land Sales by Auction Fund are included in the last item in the above return.

In 1898 an Act was passed to relieve any municipality, which desired relief, from further contributions to its loan sinking fund. The amount already to the credit of the sinking fund of any municipality which took advantage of the Act is allowed to accumulate with interest, and at the maturity of the loan the Government will, by the sale of inscribed stock, pay the difference between the amount at credit of the fund and the amount of the loan to be redeemed, the municipality repaying to the Government, in half-yearly instalments, the amount so paid. Previous to 1905-6 it was the practice to include in the Trust Funds the amount of the unsold stock inscribed under this Act, but the figures given in the above table have been revised to bring them into accord with those of the current year. The amount at 30th June, 1906, was £1,099,304.

The amount of money to the credit of the municipal sinking funds has not materially altered during recent years. On 30th June, 1906, it was £628,497.

## COMMONWEALTH REVENUE AND EXPENDITURE.

The amount of revenue collected in this State to the 30th June, 1906, by the Federal Government since its inauguration is £17,209,665. Of this amount £5,877,250 was used to meet the Victorian portion of Commonwealth expenditure, and £11,321,465 was paid over to the State Government. A balance of £9,050 was overpaid to the State, as £20,000 is retained as "till-money," principally in the offices of the Post and Telegraph Department in the State.

Commonwealth finance.

A statement of the Commonwealth revenue and expenditure for Victoria is as follows:—

COMMONWEALTH REVENUE AND EXPENDITURE CREDITED OR DEBITED  
TO THE STATE OF VICTORIA: RETURN FOR FIVE YEARS.

—	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
<b>REVENUE.</b>	£	£	£	£	£
Customs Duties ...	1,976,245	2,096,318	2,040,128	1,907,063	1,950,713
Excise Duties ...	400,280	402,696	403,377	581,780	586,357
Posts and Telegraphs ...	591,470	622,700	650,583	683,480	735,563
Miscellaneous ...	8,505	5,407	8,364	9,575	12,251
<b>Total</b> ...	<b>2,976,500</b>	<b>3,127,121</b>	<b>3,102,452</b>	<b>3,181,898</b>	<b>3,284,884</b>
<b>EXPENDITURE.</b>					
Customs and Excise...	63,812	64,770	66,731	69,244	67,076
Posts and Telegraphs ...	588,888	597,008	631,313	665,161	674,601
Defences ...	316,876	258,852	258,471	291,577	303,673
New Expenditure ...	87,194	98,200	143,332	145,413	153,032
Paid over to the State	1,920,974	2,105,450	2,002,804	2,017,378	2,097,119
<b>Total</b> ..	<b>2,977,744</b>	<b>3,124,280</b>	<b>3,102,651</b>	<b>3,188,773</b>	<b>3,295,501</b>

COMMONWEALTH AND STATE REVENUE AND EXPENDITURE.

Common-  
wealth and  
State  
finance.

The total revenue and expenditure of the State of Victoria is shown by combining State and Commonwealth receipts and expenditure. The following are the main heads:—

REVENUE AND EXPENDITURE OF COMMONWEALTH AND STATE  
COMBINED: RETURN FOR FIVE YEARS.

Heads of Revenue and Expenditure.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
<b>REVENUE.</b>					
	£	£	£	£	£
Customs and Excise ...	2,376,525	2,499,014	2,443,505	2,488,843	2,537,070
Posts and Telegraphs ...	591,470	622,700	650,583	683,480	735,563
Railways ...	3,362,030	3,033,596	3,400,243	3,609,120	3,779,153
State Taxation ...	818,274	950,183	1,012,119	979,029	1,075,935
Other sources ...	905,019	870,797	913,147	919,790	871,519
<b>Total Revenue</b> ...	<b>8,053,318</b>	<b>7,976,290</b>	<b>8,419,597</b>	<b>8,680,262</b>	<b>8,999,240</b>
<b>EXPENDITURE.</b>					
Customs and Excise ...	63,812	64,770	66,731	69,244	67,076
Posts and Telegraphs ...	588,888	597,008	631,313	665,161	674,601
Railways ...	2,052,264	1,849,989	1,896,359	2,004,601	2,033,818
Public Instruction ...	690,737	661,024	651,342	662,294	669,222
Public Debt—					
Interest and Expenses	1,941,449	1,907,656	1,948,376	1,884,208	1,919,869
Redemption ...	94,414	68,155	95,060	114,260	125,566
Other Expenditure ...	3,024,038	2,630,188	3,150,274	3,115,369	2,969,705
<b>Total Expenditure</b>	<b>8,455,602</b>	<b>7,778,790</b>	<b>8,439,455</b>	<b>8,515,137</b>	<b>8,459,857</b>

In 1901-2 the Customs and Excise revenue was less by £181,765 than during the preceding year, when the State Tariff was in force, but exceeded that for the year 1899-1900 by £109,394. In 1902-3, 1903-4, 1904-5, and 1905-6 this source of revenue showed an increase of £122,489, £66,980, £112,318, and £160,545 respectively, over that of 1901-2.

#### COMMONWEALTH, STATE, AND LOCAL REVENUE AND EXPENDITURE.

A statement of the ordinary revenue and expenditure and also of the loan expenditure of the Federal and the State Governments and of municipal and local bodies during the last five years will be found in the following table. From the totals of revenue and expenditure, the amounts paid by one body to another have been deducted:—

Common-  
wealth,  
State, and  
local  
finance.

#### COMMONWEALTH, STATE, AND LOCAL REVENUE AND EXPENDITURE : RETURN FOR FIVE YEARS.

	Financial Year ended in—				
	1902.	1903.	1904.	1905.	1906.
<i>Revenue.</i>	£	£	£	£	£
Government—					
Federal ..	2,976,500	3,127,121	3,102,452	3,181,898	3,284,884
State ..	4,987,757	4,767,168	5,234,887	5,426,800	5,642,899
Municipal ..	1,201,230	1,180,453	1,229,609	1,254,649	1,293,202
Melbourne Harbor Trust ..	155,513	177,233	176,898	189,983	208,455
Melbourne and Metropolitan Board of Works ..	315,054	362,450	355,650	390,441	418,849
Fire Brigades Boards	20,278	21,639	19,797	20,557	20,610
<b>Total ..</b>	<b>9,656,332</b>	<b>9,636,064</b>	<b>10,119,293</b>	<b>10,464,328</b>	<b>10,868,899</b>
<i>Ordinary Expenditure.</i>					
Government—					
Federal ..	2,977,744	3,124,280	3,102,651	3,188,773	3,295,501
State ..	5,388,797	4,572,509	5,254,546	5,254,800	5,092,899
Municipal ..	1,196,422	1,099,620	1,209,967	1,253,171	1,282,559
Melbourne Harbor Trust ..	162,603	150,174	144,897	145,986	147,253
Melbourne and Metropolitan Board of Works ..	373,571	398,879	409,039	416,410	443,740
Fire Brigades Boards	17,887	20,455	19,607	21,041	22,867
<b>Total ..</b>	<b>10,117,024</b>	<b>9,365,917</b>	<b>10,140,707</b>	<b>10,280,181</b>	<b>10,284,819</b>

COMMONWEALTH, STATE, AND LOCAL REVENUE AND EXPENDITURE :  
RETURN FOR FIVE YEARS—*continued.*

	Financial Year ended in—				
	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
<i>Loan Expenditure.</i>					
Government*(State)	910,833	756,404	447,244	373,191	932,966
Municipal ..	135,251	132,044	84,339	84,845	84,081
Melbourne and Metropolitan Board of Works ..	346,884	358,387	1,053,526	386,511	404,907
Fire Brigades Boards ..	..	..	..	405	3,250
Total ..	1,392,968	1,246,835	1,585,109	844,952	1,425,204
<i>Expenditure—Grand Total ..</i>	11,509,992	10,612,752	11,725,816	11,125,133	11,710,023
<i>Per Head of Population—</i>					
Revenue ..	£ s. d. 7 19 9	£ s. d. 7 19 10	£ s. d. 8 7 5	£ s. d. 8 12 11	£ s. d. 8 18 5
— Ordinary Expenditure ..	8 7 5	7 15 5	8 7 9	8 9 11	8 8 10
Loan Expenditure ..	1 3 0	1 0 7	1 6 3	0 14 0	1 3 5

\* Revised since previous issue.

The total revenue of the Federal and State Governments, the municipalities and other corporations, is nearly 4 per cent. more than in the previous year, and amounts to nearly eleven millions sterling. The ordinary expenditure shows an increase in the twelve months of only £4,638, and this has occurred through the reduced State expenditure almost compensating for the increases which took place in the other divisions. The loan expenditure was more by £580,252 than in 1905. The revenue per head in 1905 was £8 12s. 11d., and in 1906, £8 18s. 5d. The ordinary expenditure was £8 9s. 11d. and £8 8s. 10d.; and the loan expenditure 14s. and £1 3s. 5d. in those years respectively.

LOANS FLOATED IN LONDON.

Loans.

Excluding London debentures for £388,100 taken over with the Melbourne and Hobson's Bay Railway and since paid off, the total amount of loans raised in London at varying rates of interest was £67,672,884, after conversion operations. The amount paid off by means of new loans was £23,668,800, and by means of payment derived from revenue, &c., £825,403, leaving a balance due on 30th June, 1906, of £43,178,681, consisting of debentures amounting to £1,055,200, and inscribed stock, £42,123,481. The



following statement gives particulars respecting the various loans which were raised in London since 1859, together with the average prices obtained after deducting flotation expenses as well as accrued interest, and the rates of interest to which such prices are equivalent:—

LOANS FLOATED IN LONDON, 1859 TO 1906.

When Raised.	Debentures or Stock.				Average Price Obtained per £100 Debenture or Bond.		Actual Rate of Interest per £100 Net.
	Currency.		Amount Sold.	Rate of Interest.	Ex Accrued Interest.	Ex Interest and Expenses. (Net proceeds.)	
	When Due.	No. of Years.					
			£	Per cent.	£ s. d.	£ s. d.	£ s. d.
1859	1883	24	Debentures. 1,000,000	6	105 1 11 <sup>3</sup> / <sub>4</sub>	103 18 11 <sup>3</sup> / <sub>4</sub>	5 14 0
"	"	"	750,000	6	107 17 7 <sup>1</sup> / <sub>2</sub>	106 14 7 <sup>1</sup> / <sub>2</sub>	5 9 10
1860	"	23	1,337,500	} 6	104 17 10 <sup>1</sup> / <sub>2</sub>	103 14 10 <sup>1</sup> / <sub>2</sub>	5 14 1
"	1884	"	812,500		103 14 10 <sup>1</sup> / <sub>2</sub>	5 14 1	
1861	1885	24	1,000,000	6	103 1 6 <sup>1</sup> / <sub>2</sub>	101 18 6 <sup>1</sup> / <sub>2</sub>	5 17 0
1862	"	"	1,600,000	6	102 19 7	101 16 7	5 17 2
1866	1891	25	850,000	6	100 8 11 <sup>3</sup> / <sub>4</sub>	99 5 11 <sup>3</sup> / <sub>4</sub>	6 1 1
1869	1894	"	588,600	5	98 4 2 <sup>3</sup> / <sub>4</sub>	97 1 2 <sup>3</sup> / <sub>4</sub>	5 4 3
1870	"	24	1,518,400	5	100 17 6 <sup>1</sup> / <sub>2</sub>	99 14 6 <sup>1</sup> / <sub>2</sub>	5 0 5
1874	1899	25	1,600,000	4	90 2 7	88 19 7	4 15 5
1876	1901	"	{ 590,000 2,500,000	} 4	94 16 10 <sup>3</sup> / <sub>4</sub>	93 18 11 <sup>3</sup> / <sub>4</sub>	4 8 1
1878	1904	26	457,000		4	"	"
1879	"	25	3,000,000	4 <sup>1</sup> / <sub>2</sub>	97 17 5 <sup>1</sup> / <sub>2</sub>	96 19 2 <sup>1</sup> / <sub>2</sub>	4 14 0
1880	"	24	2,000,000	4 <sup>1</sup> / <sub>2</sub>	103 3 8 <sup>1</sup> / <sub>2</sub>	102 5 11	4 6 11
			Stock.				
1883	1907	"	4,000,000	4	98 16 8 <sup>1</sup> / <sub>2</sub>	97 13 7 <sup>1</sup> / <sub>2</sub>	4 3 0
"	1908	"	2,000,000	4	97 14 1 <sup>1</sup> / <sub>2</sub>	96 10 11 <sup>1</sup> / <sub>2</sub>	4 4 6
1884	1913	29	{ 2,636,800 1,363,400	} 4	98 5 7	97 2 8 <sup>1</sup> / <sub>2</sub>	4 3 3
1885	1919	34	{ 3,180,620 819,380		4	98 18 6 <sup>1</sup> / <sub>2</sub>	97 15 9 <sup>1</sup> / <sub>2</sub>
1886	1920	"	1,500,000	4	105 12 3 <sup>1</sup> / <sub>2</sub>	104 9 0	3 15 5
1887	"	33	3,000,000	4	102 5 6 <sup>1</sup> / <sub>2</sub>	101 2 9	3 18 9
1888	"	32	1,500,000	4	108 1 1 <sup>1</sup> / <sub>2</sub>	106 18 0 <sup>1</sup> / <sub>2</sub>	3 12 9
1889	1923	34	3,000,000	3 <sup>1</sup> / <sub>2</sub>	102 14 10	101 11 11 <sup>1</sup> / <sub>2</sub>	3 8 5
1890	"	33	4,000,000	3 <sup>1</sup> / <sub>2</sub>	100 2 4	98 19 6	3 11 1
1891	1921-6	30-5	{ 850,000 2,150,000	} 3 <sup>1</sup> / <sub>2</sub>	96 3 7	95 0 10	3 15 0
1892	"	29-34	2,000,000		3 <sup>1</sup> / <sub>2</sub>	91 13 7	90 10 8
1893	1911-26	17-34	2,107,000	4	94 7 5	93 4 8	4 11 7
1899	1929-49	30-50	1,600,000	3	94 7 1	93 4 2	3 7 3
1901	"	28-48	2,995,000	3	92 2 1	89 14 5	3 11 10
1902	"	27-47	1,000,000	3	95 16 6 <sup>1</sup> / <sub>2</sub>	93 8 3 <sup>1</sup> / <sub>2</sub>	3 7 6
1903	"	26-46	3,148,176	} 3 <sup>1</sup> / <sub>2</sub>	{ 91 14 9 <sup>1</sup> / <sub>2</sub> ..	89 8 0	4 3 8
1906	"	23-43	587,808		"	"	"
			Treasury-bonds.				
1892	1893	1	1,000,000	4 <sup>1</sup> / <sub>2</sub>	99 3 11	99 1 5	5 0 0
1898	1900	2	500,000	3 <sup>1</sup> / <sub>2</sub>	100 0 0	100 0 0	3 15 0
1903	1906	3	2,254,800	4	99 10 8 <sup>1</sup> / <sub>2</sub>	96 18 10	5 2 7
Total	..	..	67,106,784				
Paid off	..	..	23,928,103				
Outstanding	..	..	43,178,681				

The figures in the last column represent the rates of interest payable by the State for the actual amount of money which was realized after the deduction of all expenses which had been incurred in connexion with the flotation, and with allowance for redemption at par on maturity.

The nominal rate of interest has varied from 6 per cent. for earlier loans to 3 per cent. for those of later date, and the actual rate paid by the Government varied from 6 per cent. in 1866 to  $3\frac{3}{8}$  per cent. in 1899 and 1902. The first six loans raised were obtained at about  $5\frac{1}{4}$  per cent., but money was obtained in 1870 at 5 per cent. In 1883 it was obtained at  $4\frac{1}{4}$  per cent., in 1885 at  $4\frac{1}{8}$ , in 1888 at  $3\frac{5}{8}$ , and in 1889 at less than  $3\frac{1}{2}$  per cent. In 1891 there was a reaction, when the money obtained cost  $3\frac{3}{4}$  per cent., and the rate was still increased to over  $4\frac{1}{2}$  in 1893, while 5 per cent. was paid on short-dated Treasury bonds obtained in 1892. Some later loans show a marked improvement, as in 1899 the actual rate of interest was less than  $3\frac{3}{8}$  per cent., this being the lowest rate of those loans which were raised in London, while for the two later loans, one of which was floated in 1901, the money was obtained at slightly over  $3\frac{1}{2}$  per cent., and the other in 1902, at  $3\frac{3}{8}$  per cent., but the interest on loans raised in 1903 was as high as  $5\frac{1}{8}$  per cent. on short-dated Treasury bonds, and  $4\frac{1}{8}$  on stock sold.

#### LOANS FLOATED IN MELBOURNE.

Excluding Victorian debentures for £63,000 taken over with the Melbourne and Hobson's Bay Railway, and of which £62,000 have since been paid off, the total amount of loans floated in Melbourne after conversion operations was £13,133,721. Of this amount, £1,729,343 was redeemed by loans, and £1,679,259 by revenue, &c., leaving due a balance of £9,725,119 on 30th June, 1906, consisting of debentures, £3,497,644; inscribed stock, £3,435,911; and Treasury bonds, £2,791,564. The outstanding balance of loans floated in Melbourne amounted to £2,994,088 on 30th June, 1898, but during the last eight years the local debt has been increased by about  $6\frac{3}{4}$  millions sterling. This increase has been brought about principally by the replacing of London loans as they fell due by local issues and by the raising of local loans to acquire estates for Closer Settlement purposes. The following is a statement of these loans, showing the amounts originally raised, the amounts converted or paid off, and the amounts outstanding on 30th June, 1906:—

#### LOANS FLOATED IN MELBOURNE.

Authorization.		Loans as originally raised.			Amounts.		Loans Outstanding on 30th June, 1906.
Act No.	Year.	Rate of Interest.	When due.	Amount.	Converted into Stock or Debentures.	Paid off.	
		Per cent.		£	£	£	
<i>Debentures.</i>							
13 & 23	1854	...	1855-75	735,000	...	735,000	...
40	1855	6	1857-72	299,100	...	299,100	...
15	1856	6	1872-4	2,900	...	2,900	...
36	1857	6	1883-5-8	1,000,000	52,780	947,220	...
150	1862	6	1889	300,000	23,900	276,100	...
332	1868	5	1894	610,000	297,100	312,900	...
371	1870	5	...	100,000	100,000	...	...

LOANS FLOATED IN MELBOURNE—*continued.*

Authorization.		Loans as originally raised.			Amounts.		Loans Outstanding on 30th June, 1906.
Act No.	Year.	Rate of Interest.	When due.	Amount.	Converted into Stock or Debentures.	Paid off.	
		Per cent.		£	£	£	£
<i>Debentures—continued.</i>							
1296	1893	4	1913-23	746,795	...	...	746,795
1440	1896	3	1912	63,000	...	...	63,000
1659	1900	3	1921-30	1,000,000	2,600	...	997,400
1753	1901	3	1923-32	393,000	3,200	40,000	349,800
1816	1903	2½	1904	93,869	...	45,000	48,869
1901	1903	3	1934-54	457,000	...	...	457,000
		3½	1926-40	28,900	...	...	28,900
		3¼	1925-40	60,000	...	...	60,000
1962	1904	4	1926-40	160,000	...	...	160,000
		4	1936	300,000	...	...	300,000
1990	1905	3½	1926-41	285,880	...	...	285,880
<i>Inscribed Stock.</i>							
428	1872	4	1897	1,113,000	2,659,613	...	...
439	1872	4	"	86,780			
			"	13,102			
741	1882	4	"	167,600			
963	1887	4	"	130,000			
1015	1889	4	"	750,000			
1341	1893	4	"	150,000	...	208,055	2,966,879
1369	1895	4	"	249,131			
1468	1896	3	1917	2,290,482			
1564	1898	3	"	500,000			
1623	1899	3	"	384,452			
1552	1898	3	"	17,304		17,304	...
1602	1898	3	"	211,135	...	24,947	186,188
1749				...		...	...
1659	1900	3	1921-30	2,600	...	34	2,566
1560	1901	3	1929-49	5,000	...	...	5,000
1753	1901	3	1923-32	3,200	...	42	3,158
1962	1904	3¼	1917	207,000	...	...	207,000
1990	1905	3½	"	65,120	...	...	65,120
<i>Treasury Bonds.</i>							
1574	1898	3½	1901	500,000	...	500,000	...
1800	1902	3½	1907	1,000,000	...	...	1,000,000
			1915	542,564	...	...	542,564
1982	1905	3½	1916	1,249,000	...	...	1,249,000
Overdue debentures ...				1,000	...	...	1,000
Total ...				16,273,914	3,139,193	3,408,602	9,726,119

Of the total loans raised in Victoria (exclusive of Melbourne and Hobson's Bay Railway debentures) £2,337,000, *i.e.*, the total of those authorized prior to 1863, was at 6 per cent.; £710,000, or those authorized from 1868 to 1870, at 5 per cent.; and the balance

(£13,225,914) at rates varying from 3 to 4 per cent. In February, 1906, there were issued in Melbourne debentures (£285,880), due 1926-41; inscribed stock (£65,120), due 1917; and Treasury bonds (£1,249,000), due 1916; each at  $3\frac{1}{2}$  per cent. The average proceeds obtained per £100 of these securities were £96 5s., £98 6s. 10d., and £97 5s. 1d. respectively. These local loans were for the purpose of redeeming bonds for £1,513,200 which fell due in London on 1st July, 1906. Of the total Melbourne loans outstanding on 30th June, 1906, £1,046,795 are bearing interest at 4 per cent., £220,000 at  $3\frac{3}{4}$  per cent., £3,427,333 at  $3\frac{1}{2}$  per cent., and £5,030,991 at 3 per cent.

## EXPENDITURE FROM LOANS.

In addition to the ordinary expenditure from revenue, certain sums are annually disbursed for various purposes from amounts raised by means of loans. The following table shows the details of such expenditure in each of the last five years:—

LOAN EXPENDITURE: RETURN FOR FIVE YEARS.  
(Including Loan in aid of Revenue, Act 1451.)

Works.	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
Railways .. ..	483,325	371,330	258,090	171,837	77,968
Water Supply .. ..	88,902	115,405	118,392	142,183	81,634
Defences .. ..	11,889	..	..	..	..
Schools and University ..	34,715	12,116	558	101	..
Agriculture .. ..	20,825	7,383	608	136	47
Closer Settlement, Purchase of Estates .. ..	55,462	1,189	3,666	754	754,983
Bush Fires—Advances to Far- mers .. ..	332	..	..	..	..
Loans to Farmers—Purchase of Seed and Fodder .. ..	..	82,059	11,067	..	..
Mining Development .. ..	39,287	33,231	7,518	552	83
Assistance to Municipalities— For Roads, &c. .. ..	47,104	44,770	17,267	14,945	1,919
For Drainage Works .. ..	23,504	8,951	249	..	..
Accommodation for Federal Parliament .. ..	17,132	226	..	..	..
Other Public Works .. ..	88,356	79,744	29,829	42,683	16,332
Total .. ..	910,833	756,404	447,244	373,191	932,966
Per Head of Population	s. d. 15 1	s. d. 12 6	s. d. 7 5	s. d. 6 2	s. d. 15 4

NOTE.—Figures revised since previous issue.

The loan expenditure of the State has for years past been upon a very much smaller scale than formerly, as the following particulars show:—

Average amount of loan expenditure per annum for the—		
10 years ended 30th June, 1895	...	£1,890,813
5 years ended 30th June, 1900	...	587,241
6 years ended 30th June, 1906	...	730,338

## PURPOSES FOR WHICH LOANS WERE RAISED.

The aggregate amount of the loans raised to 30th June, 1906, exclusive of temporary Treasury bonds in aid of revenue, but inclusive of Melbourne and Hobson's Bay Railway Debentures taken over, was £81,257,705; but a total of £28,352,905 (exclusive of conversion loans) having been repaid, viz., £2,504,662 out of the general revenue, and £25,848,243 out of the proceeds of redemption loans, the balance on 30th June, 1906, was reduced to £52,904,800. The purposes for which the amount outstanding was borrowed and the annual interest payable thereon are as follow:—

## PURPOSES FOR WHICH LOANS WERE RAISED.

Public Borrowings Contracted for—	Amount of Loans Outstanding on 30th June, 1906.	Annual Interest Payable.
<b>REVENUE-YIELDING WORKS.</b>		
	£	£
Railways and Tramways ... ..	39,676,724	1,453,979
Waterworks—Melbourne ... ..	1,848,863	67,439
Country ... ..	5,974,362	208,997
Harbors ... ..	190,000	7,600
Graving Dock ... ..	329,121	11,163
Agriculture and Advances to Farmers, &c. ...	170,278	5,367
Purchase of Land for Closer Settlement ...	942,088	34,093
Development of Mining ... ..	133,120	4,138
Total Revenue Yielding Works... ..	49,264,356	1,792,776
<b>OTHER WORKS OF A PERMANENT CHARACTER.</b>		
Public Offices, Law Courts, and Parliament Houses	670,248	23,840
Defence Works ... ..	151,469	5,044
State Schools, Technical Schools, and University	1,259,866	41,918
Other ... ..	1,009,692	32,719
Total other Permanent Works ... ..	3,091,275	103,521
Redemption of loan falling due in 1907 ...	542,564	18,990
Not allocated ... ..	6,605	212
Net Borrowings ... ..	52,904,800	1,915,499

Out of the proceeds of these loans outstanding on the 30th June, 1906, sums not yet expended amount in the aggregate to £92,140, of which £47,343 is for railways, and £35,675 for country water supply, £2,525 for different other services, and £6,597 not yet allocated. Of the total loans outstanding, 93 per cent. has been expended on revenue-yielding works, as detailed above.

## LOANS REDEEMABLE.

The total amount of loans outstanding on 30th June, 1906, exclusive of debentures for £1,000 overdue since 1897, and of Treasury bonds in aid of revenue, was £52,903,800, and of this

sum £4,552,844 were in the form of debentures; £42,123,481 of inscribed stock (London Register); £3,435,911 of stock (Melbourne Register); and £2,791,564 in the form of Treasury bonds. The following are the dates on which these loans are repayable, those repayable in Melbourne and London being indicated—

TOTAL LOANS OUTSTANDING, 30TH JUNE, 1906, AND DATES  
WHEN REPAYABLE.

Under Act No.	When Repayable.	Rate of Interest per cent.	Amount Repayable.		
			In Melbourne.	In London.	Total.
<i>Debentures.</i>					
			£	£	£
1296	1st April, 1913-23 ...	4	746,795	...	746,795
1440	" 1912-22 ...	3	63,000	...	63,000
1659	1st July, 1921-30 ...	3	997,400	...	997,400
1753	1st Jan., 1923-32 ...	3	349,800	...	349,800
1816	1st July, 1907-8 ...	3½	48,869	...	48,869
1901	1st Jan., 1934-54 ...	3	457,000	...	457,000
1962	2nd April 1926, to 29th Nov., 1940 ...	3½	28,900	...	28,900
	29th Nov., 1925-40 ...	3¾	60,000	...	60,000
	27th Feb., 1926, to 29th Nov., 1940 ...	3¾	160,000	...	160,000
	14th March, 1936 ...	4	300,000	...	300,000
1990	1st April, 1926-41 ...	3½	285,880	...	285,880
<i>Inscribed Stock (London).</i>					
717	1st July, 1907 ...	4	...	4,000,000	4,000,000*
739	1st April, 1908 ...	4	...	2,000,000	2,000,000*
760	1st Oct., 1913 ...	4	...	4,000,000	4,000,000*
805	" 1919 ...	4	...	4,000,000	4,000,000
845	" 1920 ...	4	...	6,000,000	6,000,000
989	" 1923 ...	3½	...	7,000,000	7,000,000
1032					
1196	1st Jan., 1921-26 ...	3½	...	5,000,000	5,000,000
1217					
1287	" 1911-26 ...	4	...	2,107,000	2,107,000
1560	" 1929-49 ...	3	...	4,459,713	4,459,713
1562	" 1929-49 ...	3½	...	3,611,968	3,611,968
		3	...	1,000,000	1,000,000
<i>Stock (Melbourne).</i>					
1468	29th Sept, 1917 or after	3	2,966,879	...	2,966,879
1564					
1623					
1602	" "	3	186,188	...	186,188
1749					
1962					
1990	" "	3½	207,000	...	207,000
1659	1st July, 1921-30 ...	3	65,120	...	65,120
1753	1st Jan., 1923-32 ...	3	2,566	...	2,566
1560	" 1929-49 ...	3	3,158	...	3,158
		3	5,000	...	5,000

\* Debentures convertible into inscribed stock at option of holder. The amount so converted to 30th June, 1906, was £3,944,800.

TOTAL LOANS OUTSTANDING 30TH JUNE, 1906, AND DATES  
WHEN REPAYABLE—*continued.*

Under Act No.	When Repayable.	Rate of Interest per cent.	Amount Repayable.		
			In Melbourne.	In London.	Total.
	<i>Treasury Bonds.</i>		£	£	£
1800 {	1st October, 1907 ...	3½	1,000,000	...	1,000,000
1982 {	1st July, 1915 ...	3½	542,564	...	542,564
	„ 1916 ...	3½	1,249,000	...	1,249,000
	<i>Melbourne and Hobson's Bay Railway Debentures.</i>				
617	(Overdue since 1897) ...	...	1,000	...	1,000
	Total ...	...	9,726,119	43,178,681	52,904,800
	<i>Treasury Bonds in aid of Revenue.</i>				
1451	1st Jan., 1907-13 ..	3¼	175,000	...	175,000
	Total (including loans in aid of Revenue)...	...	9,901,119	43,178,681	53,079,800

With regard to the loan of £4,000,000 falling due in London on 1st July, 1907, arrangements have been made for meeting the loan upon maturity, and by far the greater part of the debt will be transferred to Melbourne.

In connexion with the replacing of London loans as they fall due by local issues, and the practice of late years of borrowing money in the State instead of going to London for it, the following particulars are of interest:—

PUBLIC DEBT AND INTEREST PAYABLE THEREON IN LONDON AND  
MELBOURNE, 30TH JUNE, 1900 AND 1906.

(Including Treasury Bonds in aid of Revenue.)

On 30th June	Amount of Loans Payable in—		Annual Interest Payable in—	
	London.	Melbourne.	London.	Melbourne.
	£	£	£	£
1900	44,655,579	4,669,306	1,735,307	152,046
1906	43,178,681	9,901,119	1,594,490	326,696

An important point in relation to the London loans is that certain expenses occur each year in connexion with them which are not common to local loans. In the last financial year the amount was £12,272, and this sum was small compared with that of recent previous years, viz.:—£17,203 in 1902-3, £25,402 in 1903-4, and £15,297 in 1904-5. The details for 1905-6 are as follow:—

	£
To contracting banks, commission upon coupons ... ..	304
To London and Westminster Bank, commission for inscribing stock and paying interest thereon ... ..	10,513
Premiums on remittances ... ..	500
Stamps, advertising, &c. ... ..	955
Total ... ..	£12,272

The average rate of interest on the outstanding loans of the State is substantially less than it was a few years ago, and the following table, comparing the figures in 1900 (the year before Federation) with those in 1906, illustrates this fact.

AMOUNT OF OUTSTANDING LOANS AT EACH RATE OF INTEREST,  
1900 AND 1906.

(Including Treasury Bonds in aid of Revenue.)

Rates of Interest.	Nominal amount outstanding on 30th June—	
	1900.	1906.
	£	£
4½ ... ..	5,000,000	...
4 ... ..	27,060,795	23,153,7 5
3½ ... ..	...	220,000
3½ ... ..	12,250,000	19,039,301
3¼ ... ..	300,000	175,000
3 ... ..	4,714,090	10,490,704
Overdue (not bearing interest) ... ..	...	1,000
Total ... ..	49,324,885	53,079,800

The difference between the interest in 1900 and in 1906 represents a saving of nearly £110,000 on the debt of £53,079,800 at 30th June, 1906.

LOANS AUTHORIZED BUT NOT RAISED.

The loans authorized, but not raised, on the 30th June, 1906, amounted to £1,809,898, which sum now represents the unfloated balance of loans authorized in 1896, 1898, 1899, 1901, 1903, 1904,



and 1905. The following return gives the particulars of these loans:—

LOANS AUTHORIZED BUT NOT RAISED, 30TH JUNE, 1906.

Under Loan Act No.—	Total.		
	Authorized.	Raised to 30th June, 1906.	Balance not raised.
	£	£	£
1440 ... ..	100,000	63,000	37,000
1552 ... ..	1,116,608	17,304	1,099,304
1623 ... ..	500,000	384,452	115,548
1753 ... ..	500,000	393,000	107,000
1816 ... ..	100,000	93,869	6,131
1962 ... ..	1,000,000	755,900	244,100
1990 ... ..	551,815	351,000	200,815
Total ... ..	3,868,423	2,058,525	1,809,898

The rate of interest on the amount to be raised is 3 per cent. on £1,358,852, and 3½ per cent. on £451,046.

GROWTH OF FUNDED DEBT.

The following return shows the growth of the funded debt and interest since the date of the establishment of responsible government in 1855. The average rate of interest payable on the indebtedness has steadily declined from 6 per cent. in 1855 to 3.62 in 1906. In relation to population, however, the amount per head has substantially increased from 1855 to 1900, but since the latter year there has been no material alteration.

Growth of  
Funded  
Debt in  
Victoria.

GROWTH OF FUNDED DEBT AND INTEREST IN VICTORIA,  
1855 TO 1906.

End of Financial Year in—	Loans Outstanding.			Amount per head of population.	
	Amount.	Annual Interest Payable.		Debt.	Annual Interest.
		Total.	Average rate per cent.		
	£	£		£ s. d.	£ s. d.
1855	480,000	28,800	6.00	1 6 4	0 1 7
1860	5,118,100	306,405	5.99	9 10 4	0 11 5
1870	11,924,800	688,740	5.78	16 8 3	0 19 0
1880	20,056,600	1,004,436	5.01	23 11 9	1 3 7
1890	41,377,693	1,649,465	3.99	36 19 11	1 9 6
1900	48,774,885	1,867,604	3.83	40 17 4	1 11 3
1901	49,546,275	1,861,547	3.76	41 3 0	1 11 0
1902	50,408,957	1,887,877	3.74	41 15 5	1 11 4
1903	51,097,900	1,904,514	3.73	42 5 11	1 11 6
1904	51,519,962	1,876,011	3.64	42 13 4	1 11 1
1905	51,513,767	1,875,249	3.64	42 9 8	1 10 11
1906	52,904,800	1,915,499	3.62	43 2 3	1 11 3

Including money borrowed for temporary purposes (£175,000—Act 1451) in aid of revenue, the total amount of loans outstanding on the 30th June, 1906, was £53,079,800, upon which the amount of interest and expenses (paid in 1905-6) was £1,919,869, or an average of 3.62 per cent. on the total debt. The amount of interest and expenses paid was fully earned by £48,903,689, the amount of such interest and expenses being £1,768,821. There were also at 30th June, 1906, £395,447 at the credit of Redemption Funds and £542,564 of loan moneys available for the redemption of a loan falling due on 1st July, 1907, so that the net burden of the Public Debt at the close of the financial year was only £3,238,100, the interest on which is less than 2s. per head of the population. Over £3,000,000 of this amount have been spent on public works of a permanent character, including defences, State schools, public offices, &c.

## SINKING FUNDS.

Sinking  
Funds of  
Australian  
States.

On 30th June, 1906, the sinking funds in Australia were as follow:—

## SINKING FUNDS IN AUSTRALIAN STATES, 30TH JUNE, 1906.

State.	Sinking Funds in Connexion with—	
	State Funded Debts.	Municipal and Other Debts.*
	£	£
Victoria .. .. .	395,447	705,962
New South Wales .. .. .	556,484	169,444
Queensland .. .. .	..	..
South Australia .. .. .	251,349	..
Western Australia .. .. .	1,320,603	94,898
Tasmania .. .. .	236,297	102,133
Total .. .. .	2,760,180	1,072,437

\* Figures for 1905, except Tasmania, 1903.

The following table shows for Victoria the various funds having balances to their credit on 30th June, 1906, and in addition, £542,564 out of loan under Act No. 1982 is held to meet loans falling due in 1907:—

	Balance at Credit.
Mallee Land Account ... .. .	£63,052
Closer Settlement Fund ... .. .	1,777
Victorian Loans Redemption Fund ... .. .	127,467
Victorian Government Consolidated Inscribed Stock Redemption Fund ... .. .	188,453
Municipalities Contribution—Prince's Bridge ... .. .	14,698
Total ... .. .	£395,447

Mallee Land  
Account.

By Act No. 1428 of 1896, the moneys accruing from licensing, leasing, or selling of land in the Mallee country, or Mallee border, are to be paid into the Treasury and placed to the credit of a separate

account, to be called the "Mallee Land Account." The sums standing at credit to this account are available solely for the repurchase, redemption, or paying off of any Victorian stock or debentures.

By Act No. 1749 of 1901, it was provided that all moneys received by the Board of Land and Works, from lessees or purchasers of farm allotments, or purchasers of any land acquired by the Board, pursuant to the general provisions of the Act, should be paid into the Treasury, and placed to the credit of a separate account, to be called "The Farm Settlements Fund," which fund should be applied principally to the redemption of stock and debentures issued for Closer Settlement purposes, and the payment of interest thereon. Under the *Closer Settlement Act* of 1904, this fund was transferred to the Board appointed to administer that Act, and is now called the "Closer Settlement Fund."

Closer  
Settlement  
Fund.

By Act No. 1561 of 1898, it was enacted that a "Victorian Government Consolidated Inscribed Stock Redemption Fund" should be kept in the Treasury, and should be applied in purchasing or repurchasing, and ultimately in redeeming consolidated stock—that is, stock on the London Register—and in paying expenses and costs of such purchase or redemption. The fund is made up of money derived from special appropriations from revenue, from repayments by Water Trusts, and from the Mallee Land Account, &c. Transactions in this fund to the 30th June, 1906, are as follow:—

Consoli-  
dated  
Inscribed  
Stock Re-  
demption  
Fund.

THE VICTORIAN GOVERNMENT CONSOLIDATED INSCRIBED STOCK  
REDEMPTION FUND, 30TH JUNE, 1906.

Transactions.					To 30th June, 1906.
RECEIPTS.					£
From Waterworks Trusts	...	...	...	...	147,260
" Mallee Land Account	...	...	...	...	112,000
" Revenue	...	...	...	...	105,111
" Miscellaneous	...	...	...	...	66,993
Total receipts	...	...	...	...	431,364
EXPENDITURE.					
Purchase of stock	...	...	...	...	242,212
Commission, &c.	...	...	...	...	699
Total expenditure	...	...	...	...	242,911
Balance in the Fund	...	...	...	...	188,453
Amount of Stock repurchased and cancelled	...	...	...	...	259,303

The miscellaneous receipts include £62,827, surplus after redemption of loans, Acts 531 and 608.

By Act No. 1565 of 1898, it was enacted that a "Victorian Loans Redemption Fund" should be kept in the Treasury, and should be available for the purchase, repurchase, or redemption of any Victorian Government 3 per cent. stock and debentures payable at Melbourne, and in paying the expenses, costs, &c., incurred. This fund

Loans Re-  
demption  
Fund.

is derived from special appropriations from revenue, repayments on account of resumption of land in the Mallee district, and sundry loans made by the Government to municipalities, &c. Transactions in this fund to 30th June, 1906, are as follow:—

THE VICTORIAN LOANS REDEMPTION FUND, 30TH JUNE, 1906.

Transactions.					To 30th June, 1906.
RECEIPTS.					£
From Revenue	...	...	...	...	324,787
Resumption of land in Mallee Districts	...	...	...	...	5,575
Valuation of improvements	...	...	...	...	456
Payments by Municipalities	...	...	...	...	2,275
Repayment of Loans—					
Bush fires relief	...	...	...	...	18,419
Floods relief	...	...	...	...	1,150
Seed advances	...	...	...	...	74,940
New pilot steamer	...	...	...	...	2,918
Yarrowee Channel	...	...	...	...	1,768
Total receipts	...	...	...	...	432,288
EXPENDITURE.					
Purchase of stock	...	...	...	...	304,821
Balance in the fund	...	...	...	...	127,467
Amount of stock and debentures repurchased and cancelled					310,359

DEBTS IN AUSTRALIAN STATES AND NEW ZEALAND.

Funded  
debts of  
Australian  
States and  
New Zea-  
land.

The following is a summary of the funded debts of the Australian States and New Zealand on the 30th June, 1906, the amounts per head of population, and the total and average interest payable. The amounts are exclusive of Treasury bonds or bills issued for revenue purposes:—

FUNDED DEBTS OF AUSTRALIAN STATES AND NEW ZEALAND,  
30TH JUNE, 1906.

State.	Funded Debt.		Interest Payable.	
	Amount.	Per Head of Population.	Amount.	Average Rate Per Cent.
	£	£ s. d.	£	
Victoria .. .. .	52,904,800	43 2 3	1,915,499	3.62
New South Wales .. .. .	83,827,218	55 10 10	2,996,421	3.57
Queensland .. .. .	39,068,827	73 6 7	1,447,339	3.70
South Australia .. .. .	28,749,135	75 12 10	1,077,789	3.75
Western Australia .. .. .	18,058,553	69 10 0	619,752	3.43
Tasmania .. .. .	9,582,885	53 1 0	351,895	3.67
Total .. .. .	232,191,418	56 15 6	8,408,695	3.62
New Zealand (31.3.06) .. .. .	62,191,040	69 19 1	2,331,564	3.75

South Australia and New Zealand pay the highest average rate of interest on their loans, the reason being, not that their securities are considered of less value, but that a larger proportion of their loans was raised when the rates of interest were high.

In the following statement will be found the indebtedness per head of the various States of Australia and New Zealand at the close of the last five financial years:—

GOVERNMENT FUNDED DEBTS PER HEAD OF POPULATION IN  
AUSTRALIAN STATES AND NEW ZEALAND.

—	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Victoria .. ..	41 15 5	42 5 11	42 13 4	42 9 8	43 2 3
New South Wales ..	49 10 5	53 6 1	54 2 4	54 13 4	55 10 10
Queensland .. ..	74 8 6	74 14 10	77 17 8	74 17 10	73 6 7
South Australia ..	72 14 3	73 5 11	74 3 9	73 10 9	75 12 10
Western Australia ..	71 14 6	70 7 11	68 0 7	66 10 4	69 10 0
Tasmania .. ..	52 4 1	52 3 1	51 6 4	51 18 5	53 1 0
New Zealand ..	67 0 11	68 5 4	69 2 0	69 5 3	69 19 1

The following is a statement of the total indebtedness of the Australian States in 1906:—

Debts of  
Australian  
States.

FUNDED AND UNFUNDED DEBTS OF AUSTRALIAN STATES, 1906.

State.	State Debts.		Municipal and Corporation Debts (exclusive of Loans from Government.)	Grand Total.	
	Funded.	Unfunded.		Amount.	Per Head of Population.
	£	£	£	£	£ s. d.
Victoria.. ..	52,904,800	1,860,495*	13,570,827	68,336,122	55 13 10
New South Wales	83,827,218	1,814,516	3,032,439	88,674,173	58 15 1
Queensland† ..	39,068,827	1,130,000	772,197	40,971,024	76 18 0
South Australia ..	28,749,135	1,571,036	102,261	30,422,432	80 0 11
Western Australia	18,058,553	119,900	623,414	18,801,867	72 7 3
Tasmania .. ..	9,582,885	217,746	697,133	10,497,764	58 2 4
Total ..	232,191,418	6,713,693	18,798,271	257,703,382	63 0 3

\* Treasury Bonds have been issued for £175,000 of this amount, but it has been the practice to regard it as part of the Unfunded Debt, as the money was borrowed for temporary purposes in aid of revenue, and is being paid off in yearly instalments.

† Excluding Government Savings Bank Stock, £1,065,640.

The figures, £257,703,382, include loans raised by the State Governments, municipal bodies, corporations, and trusts. The Victorian figures exclude the amount of the tramways trust loan, viz.,

£1,650,000, which is treated as a loan to a private company, for although the money has been borrowed by the trust, which is composed of representatives of municipalities, on the security of municipal property, yet the interest is paid and a sinking fund provided by the tramway company, which renders the liability of the trust merely nominal.

The figures in the table show the full public indebtedness of the Commonwealth, including State, municipal, and corporation debts, to the date at which comparison can be made. Victoria has the smallest amount per head, Tasmania the next, and South Australia the largest. There are, of course, private debts to a considerable extent and private investments by British capitalists; but there is no reliable information as to the amount of this class of indebtedness.

The State debts are those for the year ended in 1906, the municipal and corporation debts are for the year ended in 1905, figures for 1906 for other States than Victoria not being available. The complete figures for Victoria on the 30th June, 1906, appear in the following statement:—

#### STATE AND LOCAL DEBTS, 30TH JUNE, 1906.

	£	£
State Debts (Funded)—		
London Register .. .. .	43,178,681	
Melbourne Register .. .. .	9,725,119	
State Debts (Unfunded) .. .. .	1,860,495	
Overdue Debentures, late Melbourne and Hobson's Bay		
Railway—unpresented .. .. .	1,000	
 Total State Debts .. .. .		54,765,295
Municipal .. .. .	4,139,417	
Harbor Trust .. .. .	2,000,000	
Fire Brigades Board .. .. .	130,000	
Melbourne and Metropolitan Board of Works .. .. .	7,791,000	
 Total Debts of Municipalities and Corporations .. .. .		14,060,417
 Total Debts .. .. .		68,825,712

This sum (£68,825,712) is equal to a debt of £56 1s. 9d. per head of the population on 30th June, 1906.

#### DEBTS IN VARIOUS COUNTRIES.

Debts of  
various  
countries.

In order that a comparison may be instituted between the States of Australia and other countries of the world in regard to indebtedness, the following table is furnished. The highest debt per head

of population here disclosed is that of France (£27 10s. 4d.), which is about three-fifths of that of Victoria. The next highest is that of the Cape of Good Hope (£19 14s. 5d.), and then the united liability of the Transvaal and Orange River Colonies (£19 11s. 9d.), the next Great Britain (£18 5s.), with Belgium following (£17 16s. 8d.). From this amount there is a gradual diminution of indebtedness to £1 per head in British India. It must be remembered, however, that the large indebtedness of the Australian States is the result of expenditure on railways, roads, irrigation and water supply works, harbors, public and other works, required for the speedy development of an entirely new country, whilst in the older countries of the world much of this class of work is left to private enterprise.

GOVERNMENT DEBTS PER HEAD OF POPULATION IN VARIOUS COUNTRIES.

Country.	Date.	Amount per Head.
		£ s. d.
United Kingdom .. .. .	31st March, 1906 ..	18 5 0
British India .. .. .	31st March, 1905 ..	1 0 0
Canada .. .. .	30th June, 1905 ..	13 13 2
Cape of Good Hope .. ..	1905 .. ..	19 14 5
Natal .. .. .	30th June, 1905 ..	15 15 9
Transvaal and Orange River ..	1905 .. ..	19 11 9
France .. .. .	31st December, 1904..	27 10 4
Italy .. .. .	30th June, 1905 ..	15 7 10
Austria .. .. .	1904 .. ..	14 3 9
Hungary .. .. .	1904 .. ..	11 5 1
German States .. .. .	1904-5 .. ..	10 2 7
German Empire (Imperial) ..	31st March, 1904 ..	2 14 4
Norway .. .. .	31st March, 1905 ..	7 7 4
United States of America (Federal) ..	30th June, 1905 ..	5 12 5
Russia .. .. .	1904 .. ..	5 5 10
Sweden .. .. .	1904 .. ..	4 1 1
Belgium .. .. .	1904 .. ..	17 16 8

## FINANCIAL RELATIONS OF THE COMMONWEALTH AND STATES.

Financial  
relations  
of the Com-  
monwealth  
and the  
States.

An Inter-State Conference was held in Melbourne in October, 1906, to consider the financial relations of the Commonwealth and the States. All States were represented with the exception of South Australia; but the Premier of that State forwarded a statement embodying the views of his Government upon the question.

The following is a summary of the resolutions agreed to by the Conference:—

## FINANCIAL PROBLEMS BETWEEN THE COMMONWEALTH AND THE STATES.

*Resolved*—That, before altering the Constitution so as to increase the powers of the Commonwealth in regard to the State debts, it is desirable that the Commonwealth and the States should agree to a scheme which will secure the settlement of the financial problems of the Commonwealth by providing for—

- (a) giving financial security to the States;
- (b) leaving the Commonwealth and the several States financially independent, each within its own sphere.

## THE COMMONWEALTH TREASURER'S PROPOSALS.

*Resolved*—That, during a period of ten years from the 31st December, 1910, and thereafter until the Constitution is altered, as provided by Section 128 of the Constitution, the amount to be paid by the Commonwealth to each State shall be on the following basis:—

- (1) To pay annually to each State for ten years after 31st December, 1910 (the date on which Section 87 (the Braddon clause) becomes alterable), a fixed sum equal to the average annual amount of three-fourths of the net revenue from Customs and Excise which that State has contributed during (say) the ten years preceding such 31st December, 1910 (not including the special revenue in the case of Western Australia).
- (2) If three-fourths of the total net revenue received by the Commonwealth from Customs and Excise in any year after 31st December, 1910, exceeds the aggregate amount of the annual fixed sum guaranteed to all the States, any such sum in excess to be distributed among the States *per capita*.
- (3) Provided that subject to the foregoing proposals being given effect to, the Commonwealth may impose additional Customs and Excise duties for specific purposes, and may specially appropriate and retain and "ear-mark" the whole of the revenue—
  - (a) Derived from any new items of duties on goods not at present subject to any duty, and imposed solely for specific purposes.

If any surplus remains in any year after providing for such specific purposes from the revenue derived from such special appropriations, three-fourths of such surplus to be annually returned to the States *per capita*.



- (4) Provided that if the above proposals be given legal effect to before the year 1910, the average annual amount of three-fourths of net revenue shall be ascertained and fixed on the basis of the whole period from the establishment of the Commonwealth until the end of the financial year then last past.

#### STATE DEBTS.

*Resolved*—That, subject to the adoption of previous resolutions, this Conference expresses a general approval of Sir John Forrest's scheme for the transfer of the State Debts to the Commonwealth, as set out in proposals 1, 2, 3, and 4, on page 103 of the 1906-7 Budget Papers, and that the matter stand over for consideration by a Special Conference to settle details and deal finally with the Debts question.

*Note*.—The Commonwealth Treasurer's proposals referred to in this resolution are as follow:—

The procedure and conditions of taking over the State Debts to be as follow:—

- (1) That a law be passed enabling the whole of the State Debts to be converted before maturity, or redeemed at maturity by the Commonwealth (subject in regard to debts incurred since 1st January, 1901, to the necessary amendment of the Constitution), by such successive operations as may be thought fit.
- (2) That until conversion or maturity of the State Debts, as the case may be, each State continue to pay its own annual interest and sinking fund (if any).
- (3) That on conversion or at maturity of the State Debts, as the case may be, the Commonwealth become solely liable for the annual payment of interest and sinking fund, as well as for the redemption of the stock.
- (4) That the Commonwealth deduct each year from the amount to be paid to each State the expenditure made on behalf of that State for interest and sinking fund, and if such amount is insufficient in any case, the deficiency be paid to the Commonwealth by that State.

The State Debts referred to above are those set out in the following table, which has been taken from the Commonwealth Budget Papers, 1906-7:—

#### PUBLIC DEBT OF AUSTRALIA AT 30TH JUNE, 1905.

(NOTE.—Sinking funds have not been deducted from the Debt. In the cases in which, since the date of Federation, loans have been redeemed out of the proceeds of new loans, it has been assumed that the Commonwealth may take over such portion of the new loans as realized the amount of the

redeemed loans. Treasury Bills covering Revenue Deficits are included. Revenue Deficits which are not covered by Treasury Bills and overdrafts on Loan Account are not included.)

	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£	£	£	£	£	£	£
Debt which can be taken over under the Constitution of the Commonwealth:—							
Redeemable in London .. ..	52,152,945	44,620,229	33,363,834	22,876,320	10,567,726	7,890,250	171,411,304
Redeemable in Australia .. ..	10,947,061	{ 4,983,896 4,757,704 <i>b</i> }	4,203,460	2,967,225	2,050,936	661,800	30,572,082
Total .. ..	63,100,006 <i>a</i>	{ 49,604,125 4,757,704 <i>b</i> }	37,567,294	25,843,545	12,618,662	8,492,050 <i>c</i>	201,983,386
Debt which cannot be taken over under the Constitution of the Commonwealth:—							
Redeemable in London .. ..	11,878,805	90,000	2,228,913	50,000	3,500,000	..	17,747,718
Redeemable in Australia .. ..	7,343,187	{ 2,069,641 294,002 <i>d</i> }	2,488,960	2,880,150	893,774	979,921	16,949,635
Total .. ..	19,221,992	{ 2,159,641 294,002 <i>d</i> }	4,717,873	2,930,150	4,393,774	979,921	34,697,353
Total of Public Debt .. ..	82,321,998	{ 51,763,766 4,757,704 <i>b</i> 294,002 <i>d</i> }	42,285,167	28,773,695	17,012,436	9,471,971	236,680,739

*a* In addition, the Commonwealth can apparently take over new loans to be raised by New South Wales for the redemption of certain loans, amounting to £1,174,100, which have been paid off since Federation, and charged to General Loan Account.

*b* Amount which may apparently be taken over by the Commonwealth being—

Amount of stock inscribed under the Victorian Municipalities

Loans Extension Act

Certificates given to the Victorian Trust Fund Trustees. (These

may be exchanged for Government Bonds, which could be sold) £1,108,338

3,649,366

£4,757,704

*c* An additional amount of £16,022, amount of loans paid off, and for which a redemption loan is to be raised, can apparently be taken over.

*d* Certificates given to the Victorian Trust Fund Trustees, £294,002. (These may be exchanged for Government Bonds, which could be sold.)

The interest payable on the above is as follows:—

On £201,983,386 (debt which can be taken over) ..	£7,282,005
34,697,353 (debt which cannot be taken over) ..	1,206,664
£236,680,739 (total debt) .. .. .	£8,488,669

In connexion with this subject the following extract from a paper presented to the Parliament of the Commonwealth of Australia on 20th September, 1906, is of interest:—

#### STATE PUBLIC DEBTS.

Statement showing amount of saving to the year 1952 (when the whole of the existing Public Debts will have matured), assuming that the Commonwealth can float loans at  $\frac{1}{4}$  per cent. less interest per annum than the States, and that the annual saving of such  $\frac{1}{4}$  per cent. be accumulated, at 3 per cent. per annum compound interest.

The total of such saving so accumulated from the several dates of maturity of existing loans up to 1952 would amount to—

					£
New South Wales ... ..	...	...	...	...	9,419,823
Victoria ... ..	...	...	...	...	6,106,725
Queensland ... ..	...	...	...	...	4,365,320
South Australia ... ..	...	...	...	...	3,572,993
Western Australia ... ..	...	...	...	...	1,966,940
Tasmania ... ..	...	...	...	...	1,335,472
Total ... ..	...	...	...	...	<u>£26,767,273</u>

### COMMONWEALTH, STATE, AND LOCAL TAXATION.

In the following table will be found a statement showing for the years 1901-2 to 1905-6 the amount of revenue collected under the various heads of taxation by the Commonwealth, the State, and the Local bodies:—

### COMMONWEALTH, STATE, AND LOCAL TAXATION: RETURN FOR FIVE YEARS.

Heads of Taxation.	Amount Received.				
	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
<b>Federal—</b>	£	£	£	£	£
Customs Duties... ..	1,976,245	2,096,318	2,040,128	1,907,065	1,950,713
Excise Duties ... ..	400,280	402,696	403,377	581,780	586,357
<b>Total Federal Taxation</b>	<b>2,376,525</b>	<b>2,499,014</b>	<b>2,443,505</b>	<b>2,488,843</b>	<b>2,537,070</b>
<b>State—</b>					
Wharfage Rates ... ..	41,760	43,976	45,216	50,213	52,771
Ports and Harbors ... ..	28,298	27,616	28,756	30,946	32,355
Business Licences ... ..	16,914	16,969	17,852	17,521	17,813
Probate & Succession Duties	217,796	161,636	308,531	265,876	328,628

COMMONWEALTH, STATE, AND LOCAL TAXATION: RETURN FOR  
FIVE YEARS—*continued*.

Heads of Taxation.	Amount Received.				
	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
State— <i>continued</i> .	£	£	£	£	£
Duties on Bank Notes ...	19,041	18,434	18,440	16,444	17,352
Land Tax ...	97,862	92,867	106,445	97,840	103,536
Income Tax ...	220,629	415,048	311,147	316,943	318,135
Stamp Duty ...	175,974	173,637	175,732	183,246	205,345
Total State Taxation ...	818,274	950,183	1,012,119	979,029	1,075,935
Municipal Taxation ...	964,240	940,351	981,412	986,009	1,015,841
Melbourne Harbor Trust Taxation ...	140,258	164,611	162,105	167,727	188,337
Total Taxation ...	4,299,297	4,554,159	4,599,141	4,621,608	4,817,183

In the return following will be found, for the purpose of comparison, particulars of taxation by Government and by local bodies throughout the States of Australia and in the United Kingdom:—

TAXATION BY GOVERNMENT AND LOCAL BODIES IN THE STATES OF  
AUSTRALIA AND THE UNITED KINGDOM.

—				Total Amount of Taxation.	Rate per Head of Population.
				£	£ s. d.
Victoria .. ..	..	..	..	4,766,741	3 18 3
New South Wales .. ..	..	..	..	5,154,160	3 9 1
Queensland .. ..	..	..	..	2,053,814	3 17 9
South Australia .. ..	..	..	..	1,234,032	3 5 3
Western Australia .. ..	..	..	..	1,432,905	5 12 6
Tasmania .. ..	..	..	..	636,301	3 10 3
Total .. ..	..	..	..	15,277,953	3 15 5
United Kingdom .. ..	..	..	..	190,918,000	4 7 11

In these figures the Commonwealth and the State taxation have been taken for the year 1905-6, and the Local taxation for the year 1904-5, and it appears that the total taxation for Australia is £15,277,953, or an average of £3 15s. 5d. per head per annum. The lowest rate, £3 5s. 3d. per head, prevails in South Australia; New South Wales is next with £3 9s. 1d.; then follow Tasmania,

Queensland, Victoria, and Western Australia, with £3 10s. 3d., £3 17s. 9d., £3 18s. 3d., and £5 12s. 6d. respectively. In United Kingdom, the taxation is 12s. 6d. per head above the average of Australia, and is higher than any of the Australian States except Western Australia.

## LICENCES.

The following is a statement showing, as far as practicable, the number of licences issued for various purposes in 1906, and the amount of annual and temporary fees, under each head, collected during the year. Municipal licences for slaughtering, dairies, noxious trades, the carriage of passengers and goods, &c., are not shown.

## LICENCES—NUMBER AND REVENUE, 1906.

Description of Licence.	Number of Licences Granted.			Amount of Fees Collected.					
	Annual.	Temporary.	Total.	Annual.		Temporary.		Total.	
<i>Excise.</i>				£	s. d.	£	s. d.	£	s. d.
The Distilling of Spirits—									
General ..	5	..	5	250	0 0	..	..	250	0 0
Wine ..	5	..	5	125	0 0	..	..	125	0 0
Vignerons ..	38	..	38	190	0 0	..	..	190	0 0
Test Still ..	42	..	42	4	2 11	..	..	4	2 11
The Manufacture of Tobacco, Cigars, Cigarettes, and Snuff	59	..	59	1,010	7 11	..	..	1,010	7 11
The making of Beer	41	..	41	1,025	0 0	..	..	1,025	0 0
Sugar Refining ..	1	..	1	5	0 0	..	..	5	0 0
Starch Manufacturing	3	..	3	15	0 0	..	..	15	0 0
<i>Licensing.</i>									
Victuallers ..	3,514	827	4,341	79,015	0 0	1,654	0 0	80,669	0 0
Packet ..	14	..	14	280	0 0	..	..	280	0 0
Grocers ..	312	..	312	3,120	0 0	..	..	3,120	0 0
Colonial Wine ..	322	..	322	1,610	0 0	..	..	1,610	0 0
Railway Refreshment Rooms ..	30	..	30	750	0 0	..	..	750	0 0
Billiard Tables ..	83	..	83	520	0 0	..	..	520	0 0
Spirit Merchants, &c.	442	..	442	11,020	17 2	..	..	11,020	17 2
Brewers ..	39	..	39	975	0 0	..	..	975	0 0
Auctioneers—General	517	158	675	13,052	2 3	158	0 0	13,210	2 3
Gold-buyers	359	..	359	171	11 11	..	..	171	11 11
<i>Customs.</i>									
Carriage ..	791	20	811	197	15 0	2	10 0	200	5 0
Lighter and Boat ..	63	..	63	15	15 0	..	..	15	15 0
Custom House Agents	57	7	64	285	0 0	17	10 0	302	10 0
Bond ..	37	3	40	3,919	2 6	102	10 0	4,021	12 6

LICENCES—NUMBER AND REVENUE, 1906—*continued.*

Description of Licence.	Number of Licences Granted.			Amount of Fees Collected.					
	Annual.	Temporary.	Total.	Annual.		Temporary.		Total.	
				£	s. d.	£	s. d.	£	s. d.
<i>Explosives.</i>									
Importation ..	143	..	143	424	10 0	..		424	10 0
Manufacture of Rack- arock ..	13	..	13	3	5 0	..		3	5 0
Manufacture of other Explosives ..	8	..	8	10	10 0	..		10	10 0
Magazine ..	210	..	210	152	10 0	..		152	10 0
Fireworks, Sale of ..	747	..	747	37	7 0	..		37	7 0
Other than Fire- works, Sale of ..	1,353	..	1,353	338	5 0	..		338	5 0

NOTE.—In addition to the above there are other licences, particulars of which cannot be obtained for the calendar year 1906, but the fees collected during the financial year 1905-6 are as follow:—

Description of Licence.	Amount of Fees Collected.		
	£	s.	d.
Insurance ..	12,162	0	0
Business (on the Gold-fields) ..	98	15	0
Sale of Tobacco, &c. ..	1,455	12	1
Servants' Registry Office ..	106	15	0
Pawnbrokers ..	1,020	0	0
Hawkers ..	1,477	16	8
Carriers ..	63	1	0
Stage Carriage ..	184	10	0
Marine Store ..	147	0	0
Forwarding Agents ..	160	0	0
Permits to Fish, &c. ..	12	15	0

## MUNICIPAL STATISTICS.

The total number of municipalities administering local government throughout the State at the end of the year 1906 was 206. Of these 11 ranked as cities, 12 as towns, 37 as boroughs, and the remainder (146) as shires. The whole of Victoria is now brought under control of municipalities, with the exception of about 600 square miles in the mountainous part of Wonnangatta, and 64 square miles in French Island.

The following is a summary of the estimated population, number of ratepayers, estimated number of dwellings (inhabited and uninhabited), total and annual value of rateable property, and annual revenue of cities, towns, boroughs, and shires in each of four years ended 1906-7:—

## MUNICIPALITIES: RETURN FOR FOUR YEARS.

Year.	Estimated Popula- tion.	Number of Rate- payers.	Estimated Number of Dwellings.		Estimated Value of Rateable Property.		Total Revenue.
			In- habited.	Unin- habited.	Total.	Annual.	
Cities, Towns, and Boroughs—							
1903-4 ..	652,658	158,691	137,394	4,958	£ 93,376,880	£ 5,366,477	£ 789,596
1904-5 ..	657,815	159,953	133,670	4,997	94,583,732	5,498,471	824,392
1905-6 ..	684,358	169,536	144,996	4,698	99,354,665	5,664,425	847,104
1906-7 ..	695,192	171,909	147,055	4,778	100,801,295	5,779,231	..
Shires—							
1903-4 ..	556,350	152,204	117,760	3,883	115,766,850	6,071,353	520,794
1904-5 ..	552,414	153,908	117,998	3,337	116,336,442	6,244,799	520,829
1905-6 ..	541,242	147,960	115,270	3,069	117,260,959	6,130,718	541,188
1906-7 ..	565,739	151,869	117,286	2,828	121,797,646	6,395,094	..
Total—							
1903-4 ..	1,209,008	310,895	255,154	8,841	209,143,730	11,437,830	1,310,390
1904-5 ..	1,210,229	313,861	256,663	8,334	210,920,174	11,743,270	1,345,221
1905-6 ..	1,225,600	317,496	260,266	7,767	216,615,624	11,795,143	1,388,292
1906-7 ..	1,260,931	323,778	264,341	7,606	222,598,941	12,174,325	..

Increase in  
value of  
rateable  
properties  
and muni-  
cipal  
revenue.

It will be observed from the following figures that there has been a very substantial increase in the estimated value of rateable property and in the revenue of municipalities during the period covered by the foregoing table:—

# INCREASE IN VALUE OF PROPERTIES AND IN MUNICIPAL REVENUE.

					Increase.	
					1906-7 over 1903-4.	1905-6 over 1903-4.
					Estimated Value of Rateable Property.	
					Total.	Annual.
					£	£
Cities, Towns, and Boroughs	...	...	...	...	7,424,415	412,754
Shires	...	...	...	...	6,030,796	323,741
Total	...	...	...	...	13,455,211	736,495
						£
						57,508
						20,394
						77,902

The number of ratepayers returned for 1906-7 was 323,778, and the total capital value of rateable property £222,598,941, which is equivalent to about 18 years' purchase on the annual value, £12,174,325.

Ratings in  
municipali-  
ties, 1906.

Of the 60 cities, towns, and boroughs, 9 levied rates of 1s. in the £1, 3 of 1s. 3d., 1 of 1s. 4d., 13 of 1s. 6d., 14 from 1s. 7d. to 1s. 10d., 12 of 2s., 1 of 2s. 2d., 3 of 2s. 3d., 2 of 2s. 4d., 1 of 2s. 6d., and 1 (Melbourne, with which are incorporated the former municipalities of Flemington and Kensington and North Melbourne) of 1s., 1s. 5d., and 1s. 8d. Of the 146 shires, 1 levied a rate of 9d. in the £1, 87 rates of 1s., 25 of 1s. 3d., 3 of 1s. 4d., 21 of 1s. 6d., 1 of 1s. 7d., 2 of 1s. 9d., 5 of 2s., and 1 of 2s. 6d. in the £1. These figures give an average rating of 1s. 8d. in the £1 in cities, towns, and boroughs, and 1s. 2d. in shires. The rating in the urban districts is thus shown to be 6d. in the £1 more than in the rural districts.



The number of properties rated and the annual assessment thereon in cities, towns, and boroughs, and shires, in 1905-6, were as follow :—

Classification of properties rated, 1905-6.

## NUMBER AND ASSESSMENT OF PROPERTIES RATED, 1905-6.

Rateable Values.	Number of Properties Rated.			Assessment of Properties.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.	In Cities, Towns, and Boroughs.	In Shires.	Total.
Under £25 ...	148,373	125,806	274,179	£	£	£
£25 to £50 ...	36,677	40,172	76,849	} 3,028,065	2,486,591	5,514,656
£50 " £75 ...	8,428	12,151	20,579			
£75 " £100 ...	3,585	6,745	10,330	} 766,858	1,231,471	1,998,329
£100 " £200 ...	4,078	7,028	11,106			
£200 " £300 ...	1,086	1,424	2,510	} 1,329,593	922,449	1,462,358
£300 " £400 ...	470	510	980			
£400 " £500 ...	242	288	530			
£500 & upwards	679	718	1,397			
Total ...	203,618	194,842	398,460	5,664,425	6,130,718	11,795,143

A similar return to the above was prepared for the year 1901-2, and is now reprinted for comparison with the figures for 1905-6.

Classification of properties rated, 1901-2.

## NUMBER AND ASSESSMENT OF PROPERTIES RATED, 1901-2.

Rateable Values.	Number of Properties Rated.			Assessment of Properties.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.	In Cities, Towns, and Boroughs.	In Shires.	Total.
Under £25 ...	138,191	119,146	257,337	£	£	£
£25 to £50 ...	34,848	44,225	79,073	} 2,713,023	2,426,477	5,139,500
£50 " £75 ...	8,002	10,681	18,683			
£75 " £100 ...	3,094	6,612	9,706	} 693,482	1,096,013	1,789,495
£100 " £200 ...	3,823	5,813	9,636			
£200 " £300 ...	1,013	1,112	2,125	} 517,663	762,504	1,280,167
£300 " £400 ...	435	406	841			
£400 " £500 ...	257	226	483			
£500 & upwards	627	707	1,334			
Total ...	190,290	188,928	379,218	5,223,282	5,661,805	10,885,087

Proportion of properties at different rateable values, 1901-2 and 1905-6.

The following return shows the proportion of properties at the different rateable values in the two years:—

PROPORTION OF PROPERTIES AT DIFFERENT RATEABLE VALUES,  
1901-2 AND 1905-6.

Rateable Values.	Number of Properties in every 100 Rated.					
	In Cities, Towns, and Boroughs.		In Shires.		In Victoria.	
	1901-2.	1905-6.	1901-2.	1905-6.	1901-2.	1905-6.
Under £25 ...	72·6	72·9	63·1	64·6	67·8	68·8
£25 to £50 ...	18·3	18·0	23·4	20·6	20·9	19·3
£50 " £75 ...	4·2	4·2	5·6	6·2	4·9	5·2
£75 " £100 ...	1·7	1·8	3·5	3·5	2·6	2·6
£100 " £200 ...	2·0	2·0	3·1	3·6	2·5	2·8
£200 " £300 ...	·6	·5	·6	·7	·6	·6
£300 " £400 ...	·2	·2	·2	·3	·2	·2
£400 " £500 ...	·1	·1	·1	·1	·1	·1
£500 and upwards ...	·3	·3	·4	·4	·4	·4

Municipal revenue and expenditure

The ordinary revenue and expenditure for the last three financial years were as follow:—

REVENUE AND EXPENDITURE OF MUNICIPALITIES, 1904 TO 1906.

Sources of Revenue.	1904.	1905.	1906.
Taxation —	£	£	£
Rates ...	808,082	802,253	836,024
Licences ...	105,123	112,475	106,621
Dog Fees ...	15,435	16,022	16,257
Market and Weighbridge Dues ...	52,772	55,259	56,939
Government Endowment and Grants ...	80,681	90,572	95,090
Contributions for Streets, Footpaths, &c. ...	20,485	22,755	18,597
Sanitary Charges ...	50,097	55,731	56,052
Rents ...	59,956	60,344	63,242
Other Sources ...	117,759	129,810	139,470
Total ...	1,310,390	1,345,221	1,388,292
Heads of Expenditure.			
Salaries, &c. ...	138,884	136,066	141,438
Sanitary Work, Street Cleansing, &c. ...	126,219	131,378	135,466
Lighting ...	69,877	69,915	72,571
Fire Brigades' Contributions ...	16,668	16,061	17,431
Public Works—			
Construction ...	167,919	198,275	217,346
Maintenance ...	360,831	378,859	403,791
Formation of Private Streets, &c. ...	19,504	23,676	19,627
Redemption of Loans ...	43,959	55,866	49,483
Interest on Loans ...	191,310	186,439	188,111
Charities ...	13,117	13,185	13,637
Other Expenditure ...	142,460	134,023	118,748
Total ...	1,290,748	1,343,743	1,377,649

As compared with 1905, the revenue of 1906 has increased by £43,071. The items showing advances are:—Rates, £33,771; Government endowment and grants, £4,518; rents, £2,898; market and weighbridge dues, £1,680; sanitary charges, £321; dog fees, £235; and "other sources" of revenue, £9,660. Licences have been reduced £5,854; and contributions for streets, £4,158. The expenditure shows an increase of £33,906. The items increased are—Salaries, £5,372; sanitary work and street cleaning, £4,088; lighting, £2,656; fire brigades' contributions, £1,370; public works, construction, £19,071; maintenance, £24,932; interest on loans, £1,672; and charities, £452. The reductions in expenditure are—Formation of private streets, &c., £4,049; redemption of loans, £6,383; and "other expenditure," £15,275.

Sixty per cent. of municipal revenue was derived from rates, 8 per cent. from licences of all kinds, 4 per cent. from market and weighbridge dues, 1 per cent. from dog fees, 7 per cent. from Government endowments and grants, 1 per cent. from contributions for streets, footpaths, &c., 4 per cent. from sanitary charges, 5 per cent. from rents, and 10 per cent. from all other sources.

Proportion of municipal revenue raised from different sources.

In 1906, the salaries of the municipal officers amounted to £141,438, or about 10 per cent. of the entire revenue.

A sum of £13,637, equivalent to about 1 per cent. of the revenue, was devoted to local charities—the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

Local charities.

The assets of the municipalities are shown under three heads—(1) Municipal Fund, (2) Loan Fund, (3) Property; the liabilities under two heads—(1) Municipal Fund, (2) Loan Fund.

Assets and liabilities of municipalities.

## MUNICIPAL ASSETS AND LIABILITIES, 1904 TO 1906.

Assets.	1904.	1905.	1906.
Municipal Fund—	£	£	£
Uncollected Rates ... ..	119,013	119,028	124,174
Other Assets ... ..	168,107	168,737	184,380
Loan Funds—			
Sinking Funds—			
Amount at Credit ... ..	680,989	701,503	740,382
Arrears Due ... ..	4,352	4,459	1,341
Unexpended Balances ... ..	160,321	112,643	302,400
Property—			
Halls, Buildings, Markets, &c. ...	2,495,101	2,530,858	2,573,017
Waterworks ... ..	226,084	234,461	221,548
Gasworks ... ..	68,744	65,760	60,510
Total Assets ... ..	3,922,711	3,937,449	4,207,752

## MUNICIPAL ASSETS AND LIABILITIES, 1904 TO 1906—continued.

Liabilities.		1904.	1905.	1906.
Municipal Fund—				
Arrears due to Sinking Funds ...	...	£ 4,352	£ 4,459	£ 1,341
Overdue Interest ...	...	17,875	16,637	16,951
Bank Overdrafts ...	...	89,825	90,660	89,370
Temporary Government Advances ...	...	8,098	4,018	694
Other Liabilities ...	...	132,098	139,717	175,964
Loan Funds—				
Loans Outstanding ...	...	4,205,886	4,186,602	4,375,116
Due on Loan Contracts ...	...	29,947	27,438	2,256
Total Liabilities ...	...	4,488,081	4,469,531	4,661,692

Municipal  
assets and  
liabilities  
compared.

The total assets of municipalities in 1906 amounted to £4,207,752, and the liabilities to £4,661,692. The aggregate of the current liabilities (Municipal Fund) was £284,320, against which there were assets amounting to £308,554. The gross liability on account of loan expenditure for works completed and in progress was £4,377,372, which, after deducting sinking funds and unexpended balances, was reduced to £3,333,249. If credit were taken for the value of municipal properties (£2,855,075) in markets, halls, buildings, gasworks, waterworks, &c., the net burden on account of loan moneys would be £478,174.

Endowment  
of muni-  
cipalities.

Under the *Local Government Act* 1891, £450,000 was provided as an annual endowment for the municipalities. This was the first statutory provision made since 1879, when an endowment of £310,000, authorized under the *Local Government Act* 1874, ceased to be payable. A subsidy, however, in lieu thereof, amounting to £310,000, was voted by Parliament annually, but this vote was gradually increased until £450,000 was reached in 1889-90 and 1890-91. This amount was reduced to £405,000 per annum from the 1st January, 1893; to £310,000 from 1st July, 1893; to £100,000 from 1st July, 1894; and to £50,000 from 1st July, 1902. Under Act No. 2025 it was increased to £75,000 for the year 1906-7. The endowment is payable in equal moieties in March and September in each year. The following table shows the method of distribution for the year 1905-6:—

## ENDOWMENTS TO MUNICIPALITIES, 1905-6.

Municipality.		Endowment.	
		£	s. d.
Boroughs ...	...	840	5 3
Shires—			
2nd Class ...	...	16,846	5 5
3rd „ ...	...	18,437	10 10
4th „ ...	...	1,670	12 11
5th „ ...	...	7,861	15 5
6th „ ...	...	2,983	10 2
Transferred to Trust Fund for Salaries, &c., of Inspectors of Municipal Accounts		1,360	0 0
Total ...	...	50,000	0 0

The amount of endowment paid is calculated on the amount of rates received during 1904, the following being the rates in the £1 received in 1905-6:—

				s.	d.
Boroughs	...	...	...	1	7.62
Shires—					
2nd Class	...	...	...	2	7.40
3rd „	...	...	...	3	0.63
4th „	...	...	...	4	4.33
5th „	...	...	...	5	2.14
6th „	...	...	...	5	11.96

In addition to the endowment of £50,000 the municipalities received from the Government a sum of £92,278 8s. 1d., under Act No. IIII, Section 201, the equivalent for (1) fees for licences; (2) fees for the registration of brewers and spirit merchants; (3) fines, penalties, and forfeitures incurred under *The Licensing Act 1876*. The particulars of this payment are as follow:—

## EQUIVALENT FOR LICENCE FEES, ETC., 1905-6.

			£	s.	d.
Paid to Cities	...	...	39,350	18	10
„ Towns	...	...	9,493	10	0
„ Boroughs	...	...	14,761	11	4
„ Shires—					
1st Class	...	...	250	0	0
2nd „	...	...	15,466	15	10
3rd „	...	...	9,508	18	9
4th „	...	...	831	15	0
5th „	...	...	1,839	18	10
6th „	...	...	741	19	6
Total amount due	...	...	92,245	8	1
Add payments on account of 1905	£96	0	0		
Deduct unpaid accounts of 1906	63	0	0		
			33	0	0
Amount paid in 1905-6	...		92,278	8	1

The following is a statement of the receipts and expenditure of the Licensing Act Fund for the year ended 30th June, 1906:—

## LICENSING ACT FUND.—RECEIPTS AND EXPENDITURE, 1905-6.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
Balance from last year	683	5 5	Expenses of Officers carrying out the Licensing Act	7,167	13 7
Licences	100,674	3 5	Cost of taking poll of electors	119	15 3
Fines	2,459	9 0	Equivalent to municipalities (see previous table)	92,278	8 1
Sale of confiscated liquor	35	8 9	Balance 30th June, 1906	4,286	9 8
	£103,852	6 7		£103,852	6 7

## MUNICIPAL LOANS.

In connexion with loans raised by municipalities, Section 375 of the *Local Government Act* 1903 provides that before any municipality incurs a loan and the debentures are payable in different years, the council shall obtain from the Auditor-General a certificate, in writing, that the amounts proposed to be provided in each year will be sufficient to pay all principal moneys and interest as they fall due. The repayments of principal have to be so provided for that each year of the currency of the loan shall bear its full share towards liquidation.

Municipal  
indebted-  
ness.

The total indebtedness of the municipalities at the end of their financial year was £4,375,116; £235,699 due to the Government, and £4,139,417 due to the public. The total indebtedness of the shires was £562,224; £98,630 due to the Government, and £463,594 other loans. The total indebtedness of the cities was £3,812,892, of which £137,069 was due to the Government and £3,675,823 to the public.

## MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1906.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year ... ..	251,600	18,679	270,279
Balance unexpended from previous year ... ..	97,374	18,853	116,227
Expenditure during the year ... ..	62,305	21,776	84,081
Balance unexpended at the end of 1906 ... ..	286,669	15,756	302,425

Municipal  
loan expen-  
diture, 1902  
to 1906.

The municipal expenditure of loan moneys during the year 1906 amounted to £84,081, of which £62,305 was spent by cities, towns, and boroughs, and £21,776 by shires. This is about the same as the preceding year but considerably less than in the years 1902 and 1903.

## MUNICIPAL LOAN RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year.	Receipts. £	Expenditure. £
1902 ... ..	29,628	135,251
1903 ... ..	81,585	132,044
1904 ... ..	22,118	84,339
1905 ... ..	33,313	84,845
1906 ... ..	270,279	84,081

Loans raised  
by muni-  
cipalities,  
1906.

The total loan receipts for the year amounted to £270,279, and consisted of loans raised from the public by the following districts. The loans—with the exception of that of the municipality of Queens-cliff, which was raised locally, and Fern Tree Gully, which was raised in Dandenong—were floated in Melbourne:—

## LOANS RECEIPTS BY MUNICIPALITIES, 1906.

Loans from the Public—		Amount.
Cities, Towns, and Boroughs—		£
Melbourne	...	250,000
Oakleigh	...	400
Queenscliff	...	1,200
Total	...	251,600
Shires—		
Benalla	...	2,700
Fern Tree Gully	...	1,973
Heidelberg	...	5,905
Lillydale	...	450
Moorabbin	...	1,212
Mornington	...	495
Narracan	...	1,416
Waranga	...	2,000
Yarrawonga	...	2,528
Total	...	18,679
Grand Total	...	270,279

At the end of the year 1905-6 the total amount of loan money in hand was £302,425—£286,669 to the credit of cities, towns, and boroughs, and £15,756 to the credit of shires. The following return shows the municipalities having such credits, and the amounts thereof:—

Loan  
moneys to  
the credit  
of municipa-  
lities,  
1906.

## LOANS UNEXPENDED IN MUNICIPALITIES, 1906.

CITIES, TOWNS, AND BOROUGHS—		SHIRES—	
	£		£
Ararat	239	Berwick	25
Ballarat	3,058	Dimboola	290
Ballarat East	31	Fern Tree Gully	870
Bendigo	2,416	Heidelberg	1,964
Brunswick	3,576	Kerang	1,746
Camberwell	241	Moorabbin	984
Caulfield	600	Mornington	395
Coburg	889	Mulgrave	74
Collingwood	530	Numurkah	1,276
Essendon	1,073	Nunawading	2,712
Fitzroy	88	Omeo	1,240
Footscray	15,413	Phillip Island and Woola-	
Geelong	81	mai	1,541
Hawthorn	1,077	Preston	106
Inglewood	900	Seymour	4
Kew	2,101	Springfield	21
Malvern	582	Swan Hill	852
Maryborough	414	Waranga	1,476
Melbourne	228,006	Yarrawonga	180
Northcote	1,370		
Port Melbourne	4,953	Total Shires	15,756
Prahran	5,603		
Queenscliff	132		
South Melbourne	4,654		
St. Kilda	7,692		
Wangaratta	792		
Williamstown	1,058		
Total Cities	286,669	Grand Total	302,425

RECEIPTS AND EXPENDITURE OF THE CITIES OF MELBOURNE,  
BALLARAT, AND BENDIGO.

Particulars of the receipts and expenditure for 1906 of the City of Melbourne and of the principal cities in the country—Ballarat and Bendigo—are given in the following statements:—

City of  
Melbourne  
revenue  
and expen-  
diture  
under  
various  
heads.

Of the total revenue of the City of Melbourne in 1906, about 38 per cent. was derived from rates, more than 19 per cent. from the sale of electric light, about 16 per cent. from the rental of city property—chiefly markets and shops—12 per cent. from market and weighbridge fees, 9 per cent. from licences, and 6 per cent. from other sources. On public works maintenance, such as roads and bridges, markets, abattoirs, &c., about 33 per cent. of the total expenditure was incurred; interest on loans and expenses, 24 per cent.; repayment of loans and payments to sinking funds, 14 per cent.; the electric light service, 9 per cent.; street cleansing, 8 per cent.; salaries, allowances, and commissions, 7 per cent.; and miscellaneous expenditure, 5 per cent.

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1906.

Heads of Revenue.							Amount.
Rates—							£
General	...	...	...	...	...	...	82,435
Lighting	...	...	...	...	...	...	26,784
Licences—							
Publicans'—Equivalent for—From Licensing Act	...	...	...	...	...	...	16,911
Abattoirs—Slaughtering fees	...	...	...	...	...	...	1,759
Drays, Hackney Carriages, and Trams	...	...	...	...	...	...	1,822
Other Licences	...	...	...	...	...	...	346
Fees under Dog Act	...	...	...	...	...	...	1,179
„ City Baths	...	...	...	...	...	...	2,977
Market and Weighbridge Fees	...	...	...	...	...	...	34,281
Lighting—Sale of Electric Current and Rent of	...	...	...	...	...	...	
Meters, &c.	...	...	...	...	...	...	56,274
Fines and Costs	...	...	...	...	...	...	1,324
Rents—							
Abattoirs	...	...	...	...	...	...	6,080
Markets and Shops	...	...	...	...	...	...	33,703
Boat Sites and Shops	...	...	...	...	...	...	108
Town Hall Premises and Rooms	...	...	...	...	...	...	4,945
Interest on Fixed Deposits, &c.	...	...	...	...	...	...	3,808
Miscellaneous—							
Desiccators and Meat Supervision	...	...	...	...	...	...	4,290
Public Conveniences, Cleansing	...	...	...	...	...	...	
Manure, &c.	...	...	...	...	...	...	2,621
Tree Planting	...	...	...	...	...	...	385
Other Receipts—							
Fees under Building Act	...	...	...	...	...	...	806
Sundries	...	...	...	...	...	...	5,169
Total	...	...	...	...	...	...	288,016



CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1906—  
*continued.*

Heads of Expenditure.	Amount.
Salaries (including clerical assistance, expenses of audit, collection of statistics, making valuation, and commissions paid in lieu of salaries, &c.) ...	£ 16,431
Allowance to Mayor ... ..	1,500
Closet Cleansing and Sanitary Works ... ..	645
Street Cleansing, &c. ... ..	22,261
Lighting—Electric—Maintenance ... ..	25,466
Fire Brigades Board—Contribution ... ..	4,437
Public Works—Maintenance—	
Roads and Bridges ... ..	45,539
Markets and Weighbridges ... ..	20,441
Public Buildings (including Abattoirs, Baths, &c.) ...	16,534
Parks and Planting Trees in Streets ... ..	7,081
Repayment of Loan ... ..	10,000
Interest on Loans from the Government ... ..	240
"    "    Public ... ..	63,465
Payment towards Redemption of Government Loan ...	210
Sinking Funds—Loans from the Public ... ..	10,718
Electric Supply—Sinking, Depreciation, and Renewals	
Fund ... ..	17,760
Expenses of paying Interest on Loans ... ..	425
Interest on Bank Overdrafts ... ..	523
Contributions to Charitable Institutions ... ..	1,250
Law Costs ... ..	430
Printing, Advertising, and Stationery ... ..	1,190
Miscellaneous—	
Rat Destruction ... ..	342
Compensation, Officers ... ..	675
Gas Conferences ... ..	241
Fees—Dog Act ... ..	524
Insurance and Guarantee Premiums ... ..	1,687
Elections ... ..	139
Analyst's salary ... ..	206
Sundries ... ..	2,568
Total ... ..	272,928

City of  
Ballarat  
revenue  
and expen-  
diture,  
1906.

Of each £100 of revenue received by the City of Ballarat in 1906, general rates amounted to £54; licences to £13; sanitary rates to £12; market and weighbridge dues to £9; rents to £4; and other receipts to £8. £26 per £100 of expenditure was on street cleaning, &c.; £28 on public works; £7 on interest on and redemption of loans; £11 on sanitary expenses; £7 on lighting; £7 on salaries and allowances; and £14 on all other items.

CITY OF BALLARAT: REVENUE AND EXPENDITURE FOR THE YEAR  
ENDED 30TH SEPTEMBER, 1906.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Special Grants—From Government ... ..	703	Salaries ... ..	1,716
General Rates ... ..	16,623	Allowance to Mayor ... ..	400
Licences—From Licensing Act Fund ... ..	3,626	Sanitary Expenses ... ..	3,435
„ Other ... ..	258	Street Cleaning, &c. ... ..	8,300
Market and Weighbridge Dues ... ..	2,876	Lighting ... ..	2,369
Dog Fees ... ..	272	Fire Brigades Board—Contribution ... ..	456
Pound Fees ... ..	85	Public Works—{ Construction ... ..	1,467
Closet Cleansing and Sanitary Rates and Fees ... ..	3,702	„ { Maintenance ... ..	7,705
Rents ... ..	1,150	Repayment of Loan—To the Government ... ..	318
Interest ... ..	209	Payment to Sinking Funds on Loans from the Public Interest—Government Loan ... ..	640
Botanic Gardens ... ..	253	„ „ Loans from the Public ... ..	228
Other Sources ... ..	789	Contributions to Charitable Institutions ... ..	1,127
		Printing, Advertising, and Stationery ... ..	715
		Filling Quarries ... ..	449
		Other Expenditure ... ..	846
			1,991
Total ... ..	30,546	Total ... ..	32,162

Revenue  
and expen-  
diture of  
City of  
Bendigo,  
1906.

In the City of Bendigo, in 1906, the following were the proportions of total revenue obtained under the different headings:—General rates, 45 per cent.; licences, 16 per cent.; sanitary rates and fees, 16 per cent.; market and weighbridge dues, 9 per cent.; rents, 8 per cent.; and other sources, 6 per cent. The proportions of the total expenditure on various services were:—Public works construction and maintenance, 42 per cent.; sanitary expenses, 14 per cent.; interest on loans and payments to sinking funds, 7 per cent.; salaries and allowances, 8 per cent.; lighting, 8 per cent.; street cleansing, 6 per cent.; and miscellaneous expenditure, 15 per cent.

CITY OF BENDIGO: REVENUE AND EXPENDITURE FOR THE YEAR  
ENDED 30TH SEPTEMBER, 1906.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Special Grants—From Government ... ..	115	Salaries ... ..	2,380
General Rates ... ..	15,036	Allowance to Mayor ... ..	410
Licences—From Licensing Act Fund ... ..	5,052	Sanitary Expenses ... ..	4,503
„ Other ... ..	237	Street Cleansing ... ..	1,967
Market and Weighbridge Dues ... ..	2,947	Lighting ... ..	2,710
Dog Fees ... ..	331	Fire Brigades Board—Contribution ... ..	515
Closet Cleansing and Sanitary Rates and Fees ... ..	5,421	Public Works—{ Construction ... ..	3,977
Rents ... ..	2,530	„ { Maintenance ... ..	10,071
Interest ... ..	309	Payments to Sinking Fund on Loans from the Public ... ..	1,100
Other Sources ... ..	1,221	Interest on Loans from the Public ... ..	1,113
		„ Bank Overdraft ... ..	156
		Contributions to Charitable Institutions ... ..	438
		Libraries ... ..	539
		Law Costs ... ..	531
		Other Expenditure ... ..	2,843
<hr/>		<hr/>	
Total ... ..	33,199	Total ... ..	33,253
<hr/>		<hr/>	

MELBOURNE HARBOR TRUST.

The Melbourne Harbor Trust is a corporate body established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent, for which purpose certain lands and properties are vested in seventeen Commissioners, two of whom are elected by the Melbourne City Council, one each by the ratepayers of the municipalities of South Melbourne, Port Melbourne, Williamstown, and Footscray, three by the owners of ships registered at Melbourne, three by merchants and traders paying wharfage rates, and five are appointed by the Governor in

Melbourne Harbor Trust—receipts and expenditure.

Council. The following are particulars of the receipts and expenditure during each of the last five years:—

MELBOURNE HARBOR TRUST.—ORDINARY RECEIPTS AND  
EXPENDITURE: RETURN FOR FIVE YEARS.

Receipts from—	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Wharfage Rates ...	140,258	164,611	162,105	167,727	188,337
Rents and Licence Fees ...	11,861	9,773	10,647	12,361	12,857
Other Receipts ...	3,394	2,849	4,146	9,895	7,261
Total ...	155,513	177,233	176,898	189,983	208,455
Expenditure on—					
Harbor Improvements and Maintenance ...	32,062	27,714	30,504	27,213	27,828
Wharfs, &c.—Construction and Maintenance ...	32,871	24,303	16,003	19,443	19,839
General Management, &c. ...	10,196	10,679	11,548	12,700	13,056
Interest on Loans and Expenses ...	87,474	87,478	86,842	86,630	86,530
Total ...	162,603	150,174	144,897	145,986	147,253

During the 29½ years the Trust has been in existence, the net receipts have amounted to £4,204,079, and the expenditure to £6,026,278, or £1,822,199 in excess of the receipts, to meet which loans amounting to £2,000,000 have been raised. Of this expenditure of over 6 millions, £1,936,093 has been expended on harbor improvements and maintenance, including dredging, landing, and depositing silt, £1,463,280 on wharfs and approaches, construction and maintenance; and £533,349 on plant.

THE MELBOURNE AND METROPOLITAN BOARD OF WORKS.

Area under  
control and  
value of  
property.

The district over which the Board exercises control consists of 20 cities, towns, and boroughs, and 4 shires, embracing a total area of 84,347 acres, and containing an estimated population on the 31st December, 1906, of 513,000. The annual value of rateable property in the district in 1906 was £4,726,016, which, at 1s. 1d. in the £1 for sewerage rate, would yield a revenue of £255,992 (exclusive of water rates), but as the whole of the district has not yet been sewered, the amount receivable is only £203,255. From 1st July, 1906, the Board is empowered to levy a sewerage rate not exceeding 1s. 2d. in the £1.

Liability on  
loans.

To carry out its work, the Board is authorized to borrow £7,750,000, exclusive of loans amounting to £2,389,934, which were originally contracted by the Government, but taken over by the Board. The liability on Government loans on 30th June, 1906, was £1,848,663, and for loans raised by the Board £7,791,000. The Board is still empowered to borrow £500,271 before the limit of its borrowing powers is reached.

The waterworks for the service of Melbourne and suburbs were originally constructed by the General Government. The cost to 30th June, 1906, was £3,768,270. At the present time, these works consist of nine storage reservoirs, as under:—

Situation.	Storage Capacity in gallons.	Situation.	Storage Capacity in gallons.
Yan Yean ...	6,400,000,000	Caulfield ...	10,000,000
Toorourrong ...	60,000,000	Kew ...	3,000,000
Preston ...	16,000,000	Surrey Hills ...	9,000,000
Essendon, No. 1 ...	1,000,000	Morang (Pipe Head) ...	3,000,000
„ No. 2 ...	6,000,000		
		Total	6,508,000,000

The transfer of these works to the control of the Melbourne and Metropolitan Board was made in 1891. The Board consists of 40 members, one of whom is a Chairman elected every four years by the other members, the retiring Chairman being eligible for re-election. Nine of the members are elected by the Melbourne City Council, four by the South Melbourne, three by the Prahran, two each by the Fitzroy, Richmond, St. Kilda, and Collingwood, and one each by the other suburban municipal councils. In 1891, the rateable property within the area to be served was valued at £6,866,313, of which about £1,000,000 was for vacant land. The collapse of the land boom was followed by a heavy shrinkage in the value of rateable property. A partial recovery in values has taken place, and the total assessments, inclusive of vacant land, now reach £4,726,016. The main source of supply is the Yan Yean Reservoir, in which are stored the waters of the eastern branch of the Plenty River and Jack's Creek, from the southern slopes of the Great Dividing Range, and those of Wallaby and Silver Creeks, brought over the range in an aqueduct from the northern slopes. These streams are collected in the Toorourrong Reservoir, and taken thence in a pitched channel to the Yan Yean Reservoir. A second supply is brought to Melbourne by means of the Maroondah Aqueduct, which conveys water from the Maroondah River, the Graceburn, and Donnelly's Creek, but without, at present, any provision for storing the surplus winter waters thereof, except the small service reservoirs in the suburbs at Preston, Essendon, Caulfield, and Kew. By means of these systems, Melbourne is provided with an ample supply of pure water at a high pressure. The total catchment areas for both systems aggregate 62,000 acres, the whole of which is under the control of the Board, and free from settlement or grazing. The Yan Yean is an artificial lake situated 22 miles from the city, 602 feet above sea level. It covers an area of 1,300 acres, or rather more than two square miles, and receives water from a catchment area of 35,000 acres. Up to 31st December, 1906, there were laid mains (12-in. to 48-in.) 187 miles, reticulation mains (below 12-in.), 992 miles, in addition to which there are 75 miles of aqueducts and syphons, or a total length of aqueducts, &c., mains, and pipes of 1,254 miles. The storage capacity of the main reservoir is 6,400 million gallons, and of the eight subsidiary reservoirs 108 million gallons. The population supplied with water is about 515,000, and the average daily consumption 65 gallons per head in 1906.

DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE AND  
SUBURBS, 1906.

Month.	Gallons.
January ... ..	41,511,742
February ... ..	42,613,964
March ... ..	34,354,387
April ... ..	30,372,133
May ... ..	29,898,387
June ... ..	29,118,233
July ... ..	30,370,372
August ... ..	30,395,839
September ... ..	29,845,366
October ... ..	32,235,097
November ... ..	33,173,000
December ... ..	38,386,129
Mean for the year ...	33,479,870

Revenue  
and expen-  
diture of  
Melbourne  
Water-  
works.

The total expenditure to the 30th June, 1906, on the construction of the Melbourne Waterworks, was £3,768,270. The gross revenue since the opening of the works at the end of 1857 up to the 30th June, 1906, amounted to £5,708,159; whilst the expenses of maintenance and management amounted to only £964,731, and interest to £2,557,577. During 1905-6 the revenue amounted to £182,926, as against £184,529 in the previous year; and the expenditure on maintenance and management to £28,016, and interest £102,548, as against £31,761 and £102,465 in the previous year. The net revenue in 1905-6 was thus £52,362, being equivalent to 1.38 per cent. of the mean capital cost, as compared with £50,303, or 1.34 per cent. in 1904-5. The loans outstanding (£2,635,663) for the construction of the waterworks now bear an average nominal rate of only 3.83 per cent. The aggregate net profit up to the end of 1905-6, after paying all interest and expenses, has amounted to £2,185,851.

Sewerage  
system.

Connected with the water service of Melbourne and suburbs, the Board also controls the sewage system of the metropolis. The particulars of the system are as follow:—The whole of the sewage of the metropolis is being gradually collected by means of two principal main sewers leading to the Pumping Station at Spotswood. On the 31st December, 1906, the sewerage system, including mains, branches, and reticulation, had been laid in the following districts, viz.:—Port Melbourne, South Melbourne, Melbourne, Richmond, and nearly the whole of Footscray, Prahran, St. Kilda, Fitzroy, Hawthorn, and Collingwood. A considerable portion of Essendon, Caulfield, Malvern, Kew, and Camberwell has been dealt with. Work has also been done in Brunswick, Williamstown, and Brighton,

and is now proceeding in these municipalities, and in Collingwood, Essendon, Caulfield, Kew, and Camberwell. In all, 840½ miles of reticulation, and 87 miles of main and branch sewers, have been completed, the system being so advanced that the sewage from 90,684 houses could be collected. On the 27th December, 1906, 83,885 houses had been connected, together with 14 public conveniences and 39 public urinals, 93,479 water-closets, 63,911 baths, 47,020 sinks, 38,584 sets of wash troughs, 18,927 lavatories, 8,611 stables, 6,096 urinals, 2,008 polluted areas and paved yards, 1,515 cellars, 804 slop hoppers, 180 latrines, and 139 dairies. There are also 1,175½ miles of house connexions laid (1,169½ miles of vitrified stoneware and 6 miles of cast-iron pipes), or a total of 2,103 miles of mains, sewers, and drains connected with the Pumping Station. When collected at Spotswood the sewage is raised about 125 feet, to the head of the outfall sewer, through 2¾ miles of 6-foot and 4-foot wrought-iron rising mains, from whence it gravitates to the farm in a partly-open and partly-closed channel 11 feet diameter, at a grade of 2 feet to the mile. It is spread over properly-prepared blocks of land by a series of main and lateral carriers. The effluent, after filtering through the land, is discharged into Port Phillip Bay in a clear and transparent condition. The prepared blocks on the farm are laid down with prairie grass and lucerne, on 2,399 acres of which, during the financial year ended 30th June, 1906, 40,848 sheep have been fattened and sold, and on 126 acres 126 bullocks have been fattened and sold, while on 575 acres cattle and horses have been grazed for agistment. The profit on sheep for the same period amounted to £9,895, and on cattle £344. Of the whole farm area of 8,847 acres, there remain 1,801 acres, comprising land in course of preparation, plantations, roads, drains, &c., and 3,946 acres not used in connexion with sewage distribution, but let on lease to farmers at an average rental of 15s. 5¾d. per acre.

The actual expenditure on sewerage works and house connexions up to 30th June, 1906, was £5,224,785, divided as follow:—

EXPENDITURE ON SEWERAGE CONSTRUCTION UP TO 30TH JUNE, 1906.			Sewerage works, receipts and expen- diture.
Farm purchase and preparation	...	£415,450	
Outfall sewer and rising main	...	368,849	
Pumping Station buildings and engines	...	176,928	
Main and branch sewers...	...	1,629,930	
Street reticulation	...	1,283,797	
Reticulation of rights-of-way	...	637,500	
House connexions branches	...	220,000	
Cost of house connexions	...	247,881	
Expenditure on sewerage system	...	£4,980,335	
Yarra River improvements	...	2,745	
Householders' debts for house connexions	...	241,705	
Total	...	£5,224,785	

The sewerage receipts for 1905-6 amounted to £258,381, of which £185,803 was collected in rates, £42,078 proceeds of sale of live stock, and £23,785 interest. The purchase of live stock amounted to £29,050, the expenditure on interest £257,059, and on maintenance of works £28,765.

Houses  
connected  
with the  
Sewerage  
System.

On the 31st December, 1906, 84,964 tenements had been connected, or were in progress of connexion, with the sewerage system, leaving 29,260 houses which had not been started. The maximum cost of the sewerage of a single building in work carried out by the Board was the Women's Hospital, which cost £1,208, and the minimum, £7 11s. 5d., for a house in South Melbourne. The average cost per tenement was £23 16s. 9d. The following statement shows the progress of house connexion to the 31st December, 1906:—

PROGRESS OF HOUSE CONNEXION WITH THE SEWERAGE SYSTEM IN  
MELBOURNE AND SUBURBS.

Municipality.	No. of Tenements on 31st December, 1906.		
	Connected and in Progress.	Not Started.	Total.
Melbourne City ... ..	23,929	599	24,528
Fitzroy City ... ..	6,606	511	7,117
Collingwood City ... ..	5,477	1,956	7,433
Richmond City ... ..	8,862	8	8,870
Brunswick Town ... ..	573	5,172	5,745
Northeast Town ... ..	Nil.	2,390	2,390
Prahran City ... ..	9,595	235	9,830
South Melbourne City ... ..	9,509	112	9,621
Port Melbourne Town ... ..	2,661	67	2,728
St. Kilda City ... ..	4,372	201	4,573
Brighton Town ... ..	4	2,201	2,205
Essendon Town ... ..	1,218	2,822	4,040
Hawthorn City ... ..	4,746	280	5,026
Kew Borough ... ..	1,130	608	1,738
Footscray City ... ..	3,448	667	4,115
Williamstown Town ... ..	23	3,166	3,189
Caulfield Town ... ..	749	1,513	2,262
Malvern Town ... ..	1,322	1,345	2,667
Camberwell Town ... ..	740	1,365	2,105
Preston Shire ... ..	Nil.	876	876
Coburg Borough ... ..	"	1,450	1,450
Moorabbin Shire ... ..	"	833	833
Nunawading Shire ... ..	"	193	193
Heidelberg Shire ... ..	"	690	690
Total ... ..	84,964	29,260	114,224



The following is a statement of receipts and expenditure during the five years 1901-2 to 1905-6, exclusive of refunds, deposits, &c., included in the figures quoted in preceding paragraphs:—

Total  
Receipts  
and Expen-  
diture.

MELBOURNE AND METROPOLITAN BOARD OF WORKS REVENUE AND  
EXPENDITURE: RETURN FOR FIVE YEARS.

----	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
<i>Ordinary Receipts.</i>	£	£	£	£	£
Water Supply ... ..	170,488	178,290	165,761	180,632	184,821
Sewerage ... ..	144,566	184,160	189,889	209,809	234,028
Total ..	315,054	362,450	355,650	390,441	418,849
<i>Ordinary Expenditure.</i>					
Management ... ..	50,253	59,542	55,796	55,012	60,085
Maintenance—					
Water Supply ... ..	20,808	21,480	20,767	18,846	18,742
Sewerage ... ..	24,336	26,555	26,557	26,680	28,625
Interest on Loans ... ..	278,174	291,302	305,919	315,872	336,288
Total ... ..	373,571	398,879	409,039	416,410	443,740
<i>Loan Receipts</i> ... ..	404,459	704,783	946,686	185,735	342,920
<i>Loan Expenditure.</i>					
Water Supply ... ..	16,042	10,771	8,653	7,479	14,249
Sewerage ... ..	325,111	324,190	309,480	377,801	331,453
Redemption of Loans ... ..	3,004	3,580	521,480	..	62,630
Loss on Sale of Deposit					
Receipts ... ..	..	..	193,948	..	..
Other ... ..	2,727	19,846	19,965	1,231	-3,425
Total ..	346,884	358,387	1,053,526	386,511	404,907

FIRE BRIGADES BOARDS.

Connected with the water service of the State generally, is the service of water required for fire extinction.

Under the *Fire Brigades Act* 1890, there are constituted a metropolitan fire district, controlled by the Metropolitan Fire Brigades Board, and nine country fire districts, controlled by the Country Fire Brigades Board. The supervisors are the chief officers of the respective boards, who are aided by deputies and other assistants.

The arrangements for fire extinction in the metropolis are closely allied to those for the Melbourne water supply, the service having been provided under the clauses of the *Fire Brigades Act* 1890, and its amendments.

Constitution  
of Fire  
Brigades  
Boards.

The metropolitan fire district embraces the area included in the various municipalities within a radius of ten miles from the General Post Office. The area vested in the Metropolitan Board of Works is included in this area, but the Metropolitan Fire Brigades Board has jurisdiction over portions of the shires of Wyndham, Braybrook, Keilor, Broadmeadows, Heidelberg, Templestowe, Nunawading, Mulgrave, and Moorabbin within the ten-mile radius, not vested in the Metropolitan Board of Works. The Metropolitan Fire District has been extended, and now includes the greater portion of the shire of Moorabbin, and extends in a southerly direction as far as and includes the township of Mordialloc.

The Metropolitan Fire Board is controlled by three members appointed by the Governor in Council, three by the municipal councils, and three by the insurance companies.

Powers of  
the Boards

For the purpose of extinguishing any fire, the chief officers of the fire brigades may in the areas under their respective control "cause water to be shut off from any main or pipe in order to obtain a greater pressure and supply of water for the purpose of extinguishing any fire, and no persons or body having the management of any water supply shall be liable to any penalty or claim by reason of any interruption of the supply of water occasioned by compliance with the provisions of this section."

Another section provides that "each board, its officers, and servants, any local committee, its officers and servants, and any brigade registered under this Act shall have the use of any water mains, water plugs, valves, pipes, vested in or belonging to the Board of Land and Works, or any public or municipal corporation, or local body whatsoever, and of all water therein, or in any well or tank, free of charge, for the purpose of extinguishing any fire, or for the purpose of drills, competitions, and practice, conducted under the authority of either board or any local committee."

Local councils have the right, in the interests of fire prevention, with the approval of the Governor in Council, of making, altering, or repealing by-laws for the purpose of regulating the height of all buildings erected in their own municipality, or in any part of it, and also for providing means of escape from such buildings during a fire.

The general duties of the Fire Brigades Boards are defined to be those "of taking, superintending, and enforcing all necessary steps for the extinguishment of fires, and for the protection of life and property in case of fire, and the general control of all stations and of all fire brigades shall be vested in the boards for the metropolis and country districts respectively. The boards may purchase or lease property for fire brigade stations, and control the formation of permanent and volunteer fire brigades, and schools of instruction, the maintenance of fire alarms, and the establishment of communication, telephonic and other."

The Metropolitan Board of Works under the *Water Act* 1890 must, upon the request of any municipal council within its boundaries, fix proper fire plugs, in the main and other pipes belonging to

the board at convenient distances, and at such places as the board may consider proper and convenient for the supply of water for extinguishing any fire which may break out within its limits. The cost of fixing fire plugs and notice boards, together with their maintenance, must be defrayed by the municipal council within whose limits the fire plug is fixed. The board may also fix fire plugs for private owners, provided they pay the cost and maintenance.

The Metropolitan Fire Brigades Board is bound to keep all its pipes, to which fire plugs are affixed, charged with water, unless prevented by unusual drought or other unavoidable cause, or during necessary repairs, and shall allow all persons at all times to take and use such water for extinguishing fires. On 31st December, 1906, it had fixed 681 pillar hydrants, 13,440 ball fire plugs, 165 "Tregear" hydrants, to its 187 miles of leading mains, and 992 miles of reticulation mains, and except in case of accident, repairs, or cleansing, these mains are kept constantly full of water under pressure.

The Metropolitan Fire Brigades Board on the same date had under its control the following:—49 stations, 174 permanent men, 7 men engaged at theatres, 160 auxiliary firemen, 10 steam fire engines, 2 gasoline engines, 1 chemical engine and hose waggon combined, 1 petrol motor fire engine, 1 motor chemical engine and hose waggon combined, 2 manual engines, 36 horse hose reels, 52 hand hose reels, 7 extension ladders and fire escapes, 6 Pompier ladders, 12 exercise and supply carts, 2 salvage vans, 1 brake, 68 horses, 95,128 feet of hose, 46 hand pumps, 2 smoke helmets and 2 smoke jackets, 125 telephones in stations, 114 fire alarm circuits, having 139 fire alarm points and 413 fire alarm and telephone points. The total length of wire in use outside stations for fire alarms and telephones is about 290 miles.

Outfit of the  
Metro-  
politan  
Fire  
Brigade.

During 1906 the cost of maintenance of the Metropolitan Fire Brigade amounted to £45,466, one-third being contributed by each of the contributing bodies, viz., Government of Victoria, municipalities within the Metropolitan Fire District, and the insurance companies carrying on business in that district. The municipalities' contribution is equal to .67d. in the £1, over an area wherein the property is valued at £4,784,392, and the insurance companies equal to £4 9s. 8d. for every £100 of premiums on insured property.

The Country Fire Brigades Board consists of nine members. Three are appointed by the Governor in Council, two are elected by the municipal councils of the districts where there are brigades registered under the Board, two are elected by the fire insurance companies carrying on business in such districts, and two by the registered fire brigades. The Board annually elects one of its members as president. The tenure of the Board members is two years. The Board's revenue in 1906 was £11,064, and this amount was contributed in equal portions by the Government, the municipal councils, and the insurance companies above mentioned. The expenditure for the year amounted to £11,359. There are 87 municipal councils and 52 insurance companies included in the operation of the Act. All brigades under the control of the Board are volunteer brigades, but

Country  
Fire  
Brigades  
Board.

in the large towns permanent stationkeepers and watchmen are employed. There are 97 registered brigades, and two more are about to be registered. The number of registered firemen is 1,995, but in many brigades there are, in addition to the registered firemen, a number of "reserve members." The chief officer of the Board frequently inspects the brigades, and also pays them "surprise visits." He reports monthly to the Board as to the efficiency of the service, and upon the equipment necessary to be supplied. In 1906 the chief items of the plant consisted of 5 steam engines, 60 manual engines, 10 horse brakes, 61 apparatus carriages, 3 fire escapes, about 250 hose reels, and approximately 140,000 feet of canvas hose.

Receipts  
and ex-  
penditure.

Particulars of receipts and expenditure of both boards during the five years ended 30th June, 1906, are as follow:—

REVENUE AND EXPENDITURE OF FIRE BRIGADES BOARDS:  
RETURN FOR FIVE YEARS.

—	1902.	1903.	1904.	1905.	1906.
<i>Ordinary Receipts.</i>	£	£	£	£	£
Contributions — Govern- ment, Municipal, and Insurance ...	49,280	49,002	48,874	49,083	50,937
Receipts for Services ...	2,062	727	692	754	551
Interest and Sundries ...	1,954	4,626	2,814	3,442	3,080
Total ...	53,296	54,355	52,380	53,279	54,568
<i>Ordinary Expenditure.</i>					
Salaries ...	22,865	23,112	23,103	24,793	25,316
Fire Expenses ...	3,027	2,873	2,936	2,990	3,041
Horses, Quarters, &c. ...	13,009	12,002	9,207	10,930	9,596
Plant—Purchase and Re- pairs ...	2,866	4,862	4,305	4,589	6,560
Interest ...	6,080	6,073	6,057	6,103	5,752
Sinking Fund ...	1,971	2,028	2,250	2,250	2,250
Miscellaneous ...	1,087	2,221	4,332	2,108	4,310
Total ...	50,905	53,171	52,190	53,763	56,825
<i>Loan Expenditure.</i>					
Sewerage Connexions ...	..	..	..	405	3,250

## ACCUMULATION.

## PRIVATE WEALTH.

The returns of the Probate Office provide a means whereby an approximate estimate may be made of the private wealth of the people. Of course the estimate must only be taken as a rough approximation, but it will be shown exactly how far the method can be relied on, and what are its defects. The property left by persons who died during the five years, 1898 to 1902, is the basis whereby the property owned by the people living, as shown by the census of 1901, is estimated. A period of five years is taken, because the returns for a single year may be unduly inflated by the falling in of one or several very large estates. The average amount left by each adult who died during the period named is assumed to be the average amount owned by each adult alive at the census of 1901. The accumulated wealth of an individual is believed to be greater at a more advanced than at a less advanced age, and is probably greatest at death. Whatever advantage there may be is probably counter-balanced by some items which cannot be brought into the computation. In Victoria, for instance, deposits in Savings Banks up to £100, and life insurance policies up to £200, may be divided amongst those entitled without taking out probate or administration. Notwithstanding the provisions of the Probate and Administration Act, making chargeable with probate duty settlements and deeds of gift intended to evade payment of the duty, it is probable that some of these escape detection, and would also be unaccounted for in the calculation. The following is a statement on the basis explained, of the private wealth in several Australian States and New Zealand:—

PRIVATE WEALTH: AVERAGE DURING 1898 TO 1902 IN VICTORIA,  
NEW SOUTH WALES, SOUTH AUSTRALIA, AND NEW ZEALAND.

State of—	Estates of Deceased Persons. Net Amount Sworn to.	Deaths of Adults.	Average Amount left by each Adult.	Adults at Census, 1901.†	Private Wealth.‡	
					Total.	Per Head.
	£		£		£	£
Victoria	25,633,200*	53,213	482	651,143	313,851,000	261
New South Wales	24,027,400	46,710	514	700,480	360,047,000	266
South Australia	6,383,000*	12,591	507	186,327	94,468,000	260
Colony of New Zealand	11,329,700	24,645†	459	437,208†	200,678,000	246†

\* Estimated.

† Including Maoris.

‡ It is only at the time of a census that the adult population is accurately known in the different States, consequently it is only at such a period that the amount of private wealth can be reasonably estimated on the basis adopted.

The values of estates returned by the Victorian and South Australian probate offices are the gross values, without deducting mortgages and debts, whilst the New Zealand figures refer to the net value, and in New South Wales both the gross and the net values are returned. Any estimate of wealth, founded on the probate returns must be based on the net values of estates left by deceased persons, for the reason that the debts of some people are the assets of others. If such debts were not deducted, the total amount of mortgages and debts would thus be counted twice over in the computation of the total wealth. The net values have, therefore, been estimated in the case of Victoria and South Australia by assuming that the gross bears the same ratio to the net as in New South Wales, and reducing the gross amount accordingly. Although the property left in Victoria by people dying during the five years amounted to twenty-five and two-third millions as against twenty-four millions in New South Wales, the Victorian property was left by a larger number of adults who died, which brings out the wealth per head slightly greater in New South Wales. It must be remembered, however, that the wealth represented by this estimate is the private wealth "in" the State, and not that "of" the State. Probates, &c., of persons dying out of the State leaving property in the State are included in the figures quoted; but on the other hand, many Victorians have large interests, pastoral, mining, and other, in the other States. Taking the net incomes from property of absentees in 1900, and capitalizing the same on a 4 per cent. basis, the income-returning property owned by outside investors in Victoria would appear to be about £26,340,000.

It has been found impossible to give a similar estimate of wealth for Queensland, Western Australia, and Tasmania, owing to the probate returns for those States being incomplete or apparently not accounting for anything like the whole of the property left by persons dying. In regard to New Zealand also it is probable that the wealth of that colony has been somewhat under-estimated, as it is stated in the New Zealand Official Year-Book that certain estates upon which no duty is payable are not included in their returns. The Registrar-General of New Zealand estimates the average wealth during 1898-1902 on a somewhat similar basis to that above adopted, to be £227,326,000 or £279 per head, which is slightly higher than in the three Australian States for which estimates are given.

Another method of estimating wealth is by dividing it into its principal component parts, and valuing each part separately. Thus, where there is a general land tax, with no exemption or a very small one, the value of the land is obtainable; or where, as in Victoria, municipal government is universal, the rateable values are taken. Live stock is valued at so much per head; coin and bullion are taken to be the amount in the banks, with an addition for the amount of coin in circulation; shipping is valued at so much per ton for steamers and so much for sailing vessels; whilst houses and furniture are approximately arrived at by formulating an estimate based

on the census returns. As regards mining properties, merchandise and produce, personal effects, and plant and machinery, several arbitrary methods are adopted which may or may not be near the mark; whilst such an important item of wealth as the goodwills of businesses appears to be entirely ignored in the computation. As this method cannot be relied upon, even approximately, it has been decided to adhere to the method of basing the wealth of the living on that of the dead as proved in the probate office, it being assumed, as previously pointed out, that any overstatement, due to the fact that the average age of an adult at death is greater than the average age of adults alive, is counterbalanced by the omission of the other property mentioned. Mr. Mulhall, in his *Industries and Wealth of Nations*, bases his estimate of the wealth of the United Kingdom on the probate returns. He recognises this as the better method of the two, for he states that the "probate returns enable us to determine the exact amount of wealth." While it can hardly be claimed that an estimate of wealth in the Australian States as at present based upon these returns can be exact, yet if it were possible to obtain for a number of recent years the ages of persons leaving property, with the amount left by persons of each age, it would be possible to arrive at the estimate with greater accuracy; and, if the number of probates or letters of administration granted elsewhere and sealed in Victoria in respect of Victorian assets could be separated from the probates or administrations granted in Victoria, it would be possible to distinguish between the wealth in Victoria owned by Victorians and that owned by non-residents. Owing to the time and cost which would be involved in obtaining this information nothing in that way has so far been done, and notwithstanding the fact that an estimate thus obtained would be more reliable than that just furnished it is questionable whether it would be worth the additional cost and labour involved.

Mr. Mulhall, in his *Dictionary of Statistics*, 4th edition, of 1898, gives an estimate of the private wealth of the principal nations of the world. For the purpose of his calculations he divided wealth under ten headings. Land was capitalized at thirty times the annual assessed value; cattle were taken from official estimates; farm implements were computed as 10 per cent. of the aggregate value of land and stock; houses were capitalized at  $16\frac{1}{2}$  times the rental; furniture was estimated at 50 per cent. of the value of the house in which it was situated, and included books, jewellery, clothing, carriages, &c.; railways were put down at cost of construction; factories were valued at one-third of their annual output; bullion estimates were official; merchandise was reckoned at 50 per cent. of the annual amount locally produced and imported; whilst sundries embraced all other components of wealth, and were estimated at 20 per cent. of the total. The returns relating to the United Kingdom were, however, based on the probate returns.

Wealth of  
various  
countries.

The following are the estimates of Mr. Mulhall, except in the case of Victoria, New South Wales, South Australia, and New Zealand, in respect of which the estimates, previously given, have been

substituted. The figures for these Australian States and New Zealand refer to the year 1901, and those for other countries to 1895:—

PRIVATE WEALTH OF PRINCIPAL COUNTRIES OF THE WORLD.

Country.	Wealth per Head. £	Country.	Wealth per Head. £
United Kingdom ...	302	Germany ...	156
New South Wales ...	266	Argentina ...	154
Victoria ...	261	Belgium ...	154
South Australia ...	260	Europe ...	139
France ...	252	Spain ...	135
New Zealand ...	246	Sweden and Norway ...	114
United States ...	234	Austria ...	104
Denmark ...	230	Greece ...	101
Canada ...	196	Danubian States ...	90
Holland ...	183	Portugal ...	87
Switzerland ...	164	Russia ...	61

It will be seen from these figures that three of the Australian States stand above all other countries, except the United Kingdom, and that New Zealand is only exceeded by the United Kingdom and France, in regard to private wealth per head.

Diffusion of  
wealth.

The diffusion of wealth appears to be far wider in Victoria and South Australia than in New South Wales or New Zealand, according to the proportion of adults who die leaving property in respect of which probate or administration is taken out. For the reason previously mentioned, the comparison must be restricted to these three States and New Zealand. The following are the number of persons who died leaving property, as shown by the probate returns, the number of adult deaths, and the proportion of the former to the latter during the five years, 1898-1902:—

DIFFUSION OF WEALTH IN SEVERAL AUSTRALIAN STATES AND NEW ZEALAND, 1898-1902.

—	Deaths of Adults.	Estates Proved.	
		Number.	Number per 1,000 Deaths of Adults.
Victoria ...	53,213	19,014	357
New South Wales ...	46,710	12,627	269
South Australia ...	12,591	4,422	351
New Zealand ...	24,645	6,855	278

It is thus shown that more than one-third of the adults who died in Victoria and South Australia during the five years, 1898-1902, were possessed of accumulated property in respect of which it was found necessary to obtain probate or letters of administration. An allowance should be made for the number of probates sealed of persons dying out of the State; but it is estimated that 5 per cent. would cover this.

Property  
left by  
deceased  
persons.

The following table shows for each of the last 29 years the number, value, and average value of estates of deceased persons leaving property in Victoria; the proportion of the number and value of estates left in the State to the total number of adults dying in



the State in the same year; and also the percentage of properties of persons dying intestate:—

ESTATES OF DECEASED PERSONS, 1878 TO 1906.

Year.	Estates of Deceased Persons dealt with in the Victorian Probate Office.			Per 100 Deaths of Persons over 21 Years.		Percentage of Intestates.
	Number.	Value Sworn under. (Debts not deducted.)	Average Value of each Estate.	Number of Estates.	Amount of Property Left.	
		£	£		£	
1878	1341	2,919,215	2,177	24.4	46,581	43.2
1879	1385	2,666,433	1,925	22.2	42,731	48.2
1880	1235	1,890,100	1,530	20.4	31,267	40.0
1881	1548	2,935,070	1,961	22.8	43,290	39.3
1882	1698	3,482,938	2,051	23.2	47,607	40.0
1883	1794	3,748,344	2,089	24.5	51,172	42.1
1884	1890	5,113,687	2,706	25.7	69,536	38.6
1885	1938	4,297,919	2,218	25.5	53,791	36.1
1886	2126	4,532,271	2,137	25.6	54,619	40.7
1887	2348	5,201,130	2,215	26.9	59,578	38.2
1888	2276	7,026,984	3,088	25.6	79,026	38.5
1889	2908	11,252,096	3,869	29.4	113,681	39.7
1890	3107	8,667,127	2,789	31.3	87,291	42.0
1891	2714	7,581,678	2,797	25.0	70,658	31.6
1892	3208	9,669,784	3,014	34.9	105,152	38.0
1893	2801	6,231,931	2,225	30.8	68,558	34.6
1894	2805	5,419,225	1,932	33.5	58,077	34.6
1895	3153	5,340,052	1,694	31.9	53,999	36.5
1896	3335	6,091,421	1,852	34.0	61,993	36.2
1897	3291	5,782,173	1,757	34.6	60,746	36.1
1898	3590	6,269,345	1,746	32.4	56,649	36.2
1899	3641	5,920,104	1,626	34.0	55,261	35.3
1900	3961	6,918,533	1,747	38.9	67,882	36.0
1901	3846	6,527,235	1,697	36.5	61,990	34.8
1902	3976	7,571,482	1,904	37.0	70,470	34.9
1903	3884	6,074,077	1,564	37.4	58,520	34.9
1904	3827	5,762,084	1,506	37.3	56,144	33.8
1905	3853	6,003,478	1,558	36.8	57,384	27.1
1906	3982	6,424,738	1,613	37.4	60,321	26.6

A glance at the above figures will show that the increase in the number of estates has been remarkable, as will also be evidenced by the following figures, which must be taken as proving that the economic conditions prevalent in Victoria during the period reviewed in the above table have led to a wide and growing diffusion of wealth amongst the people:—

Period.	Percentage of Adults who died leaving Estates which went through the Probate Office. Yearly Average.	
1879-83	...	22.6
1884-88	...	25.9
1889-93	...	30.3
1894-98	...	33.3
1899-1903	...	36.7
1904	...	37.3
1905	...	36.8
1906	...	37.4

The average value of each estate left has fallen off very considerably since 1893, as compared with the values during the previous decade, which is very natural, seeing that during that period values were much inflated, and were, as events afterwards proved, largely fictitious. The last column in the preceding table shows that the tendency to die without leaving a will is growing less, the percentage who died intestate having decreased from an average of 40.5 per cent. during 1878-90 to an average of 32.0 during 1901 to 1906.

#### RATEABLE PROPERTY: TOTAL AND GROUND VALUES.

Rateable  
property

The whole of Victoria, with the exception of about 664 square miles—600 in the county of Wonnangatta and the whole of French Island—or  $\frac{3}{4}$  per cent. of the area of the State, being divided into municipalities for the purposes of local government, the value of real property, based on the municipal valuations, can be given with some degree of accuracy. Returns are obtained annually from each city, town, borough, and shire; and the following figures show the net annual rateable value and the capital value estimated by the municipalities over a series of years:—

#### RATEABLE PROPERTY: ANNUAL AND CAPITAL VALUES, 1880 TO 1907.

Year ended 30th Sept.	Estimated Value of Rateable Property.		Year ended 30th Sept.	Estimated Value of Rateable Property.	
	Annual.	Capital.		Annual.	Capital.
	£	£		£	£
1880 ...	7,117,946	83,847,418	1894 ...	11,676,079	174,984,851
1881 ...	7,175,289	87,642,459	1895 ...	10,641,200	167,197,780
1882 ...	7,433,812	91,792,547	1896 ...	10,393,000	168,427,700
1883 ...	7,692,706	95,610,959	1897 ...	10,345,535	171,253,984
1884 ...	8,098,814	103,795,832	1898 ...	10,152,500	168,611,906
1885 ...	8,793,490	114,283,570	1899 ...	10,134,108	168,456,523
1886 ...	9,621,135	125,878,748	1900 ...	10,283,500	169,911,900
1887 ...	10,153,771	137,885,701	1901 ...	10,537,497	174,141,754
1888 ...	11,913,473	167,385,210	1902 ...	10,885,087	185,101,993
1889 ...	12,931,526	187,558,511	1903 ...	11,188,932	203,902,919
1890 ...	13,265,543	194,313,646	1904 ...	11,437,830	209,143,730
1891 ...	13,733,770	203,351,360	1905 ...	11,743,270	210,920,174
1892 ...	13,605,990	197,366,940	1906 ...	11,795,143	216,615,624
1893 ...	12,779,600	189,461,350	1907 ...	12,174,325	222,598,941

It will be observed from the table that there has been a steady increase each year since 1899 in the annual value of rateable property, as estimated by the municipalities. The capital values given are not to be relied upon for purposes of accurate comparison. Most municipalities capitalize the net annual value on a 5 per cent. basis; but many assume the capital value to be much less in proportion to the annual value, some estimating 19, 16, 15, 12, 10, down to as low as 8 years' purchase, whilst in one case 7 years' purchase is given as the capital value. Twenty years' purchase is adopted by most of the metropolitan municipalities, two adopting 17 and 13 years respectively, three 15 years, and three 12 years; whilst twenty-one country towns adopt from 8 to 12 years' purchase as the basis, one returning figures showing 7 years' purchase as the capital value. Most of the shires adopt 20 years' purchase; but others vary from 19 to 8 years.

The following is an estimate of the capital value of land with and without improvements, the latter of which is commonly called the unimproved value, but should more correctly be termed the ground value:—

Landed property, capital and ground values.

#### VALUE OF LAND WITH AND WITHOUT IMPROVEMENTS, 1906-7.

District.		Annual Rateable Value.	Capital Value with Improvements.	Unimproved or Ground Value.
		£	£	£
Urban ...	...	5,779,231	100,801,295	50,400,647
Rural ...	...	6,395,094	121,797,646	81,198,431
Total	...	12,174,325	222,598,941	131,599,078

Improvements are estimated at one-half in the case of urban properties, and one-third in the case of rural, which are about the proportions which are found to prevail in New Zealand, according to the valuations of the Valuer-General, revised to 1906. If the Victorian estimate were based upon the New Zealand proportion, without distinguishing the urban and rural, the ground value would be about £140,000,000, which is approximate to the above estimate. These proportions have also been checked by an examination of the census returns, which give the number of rooms in each house, and the materials of which same were built. In Melbourne city an average of £100, and in suburbs and country towns £70, per room for brick, &c., houses was allowed; whilst in urban districts £45 per room, and in rural £40 per room, were allowed for wooden houses. On this system the above estimates were verified as being remarkably close, allowing for other improvements, besides houses, in rural districts.

## ROYAL MINT.

Royal Mint  
returns.

The Melbourne branch of the Royal Mint was established in 1872, the date of opening being the 12th June. In the following table particulars are given, for the period 1872 to 1902 and for each of the last four years, showing the quantity of gold received at the Mint, where the same was raised, and its coinage value; also gold coin and bullion issued during the same periods:—

## ROYAL MINT RETURNS, 1872 TO 1906.

Gold Received.		1872 to 1902.	1903.	1904.	1905.	1906.
<i>Gross Weight.</i>						
Raised in Victoria ...	oz	18,670,392	812,823	817,262	783,761	848,298
„ New Zealand ..	„	2,472,534	166,513	161,488	127,174	132,529
„ Western Australia ..	„	2,676,045	51,306	28,801	21,453	18,700
„ elsewhere ..	„	1,943,552	66,859	66,999	94,685	54,764
Total ...	„	25,762,523	1,097,501	1,074,550	1,027,073	1,054,291
Coinage Value ...	£	101,742,228	4,313,140	4,212,792	3,984,132	4,100,195
Gold Issued.						
Coin—						
Sovereigns ...	No.	94,257,340	3,521,780	3,743,897	3,633,838	3,657,874
Half-Sovereigns ...	„	1,094,725	...	...	...	82,000
Bullion—Quantity ...	oz.	1,662,228	187,665	113,529	82,935	95,114
„ Value ...	£	6,923,429	792,594	479,132	349,768	400,820
Total value Coin and Bullion }	£	101,728,132	4,314,374	4,223,029	3,983,606	4,099,694

Since the opening of the Mint 30,015,938 ounces of gold have been received thereat, the coinage value, at £3 17s. 10½d. per ounce standard, being £118,352,487, thus averaging £3 18s. 10d. per ounce. Of the total quantity of gold received at the Mint 21,932,536 ounces were raised in Victoria, 3,060,238 ounces in New Zealand, and 2,796,305 ounces in Western Australia. The recorded production of Victorian gold in the same period is 29,591,349 ounces. The average value of Victorian gold received at the Mint during the year 1906 was £3 18s. 5½d. per ounce gross, £3 18s. 4d. being the value of the gold and 1½d. the value of the silver contained therein. The output of the Mint since its establishment comprises 108,814,729 sovereigns, 1,176,725 half-sovereigns, and 2,141,471 ounces of gold bullion; the total value of coin and bullion being £118,348,835.

Interchange  
of coin and  
bullion.

Since the establishment of the Melbourne Mint, the gold coin exported from Victoria, less that imported, has amounted to £92,246,830, or less by £17,156,261 than the total gold coin issued

from the Mint. The following particulars are given of the value of gold and silver coin and bullion imported and exported during each of the last five years:—

## INTERCHANGE OF COIN AND BULLION, 1902 TO 1906.

Imports of—	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Gold Coin ...	114,380	10,000	79,106	26,500	100,900
„ Bullion ...	1,245,806	1,057,803	896,528	894,237	818,007
Silver Coin ...	23,250	17,346	5,427	17,998	36,403
„ Bullion ...	1,418	1,656	1,356	676	968
Exports of—					
Gold Coin ...	4,109,661	4,704,740	3,949,911	1,620,520	4,416,808
„ Bullion ...	196,036	716,234	494,100	378,777	493,369
Silver Coin ...	13,963	7,660	7,228	9,550	17,089
„ Bullion ...	167	319	1,167	2,687	8,592

The imports and exports of gold and silver display considerable fluctuations. The net exports of gold coin and bullion in 1903 exceeded those of 1902 by £1,407,660, and also exceeded the total production of gold in Victoria during the same year by more than one million pounds sterling. In 1904 and 1905 there was a remarkable falling off in the net exports of gold, 1904 being less than 1903 by £884,788, and 1905 less than 1904 by £2,389,823. The net exports of gold were valued in 1905 at £1,078,560, but in 1906 rose to £3,991,270, thereby exceeding the Victorian production of gold for the same year by £710,792.

## BANKING.

During 1906 there were eleven banks of issue in Victoria, possessing 612 branches or agencies, being an increase of 5 on the previous year. The financial position of these banks, on 31st December in each of the last five years, is shown by the following return:—

## VICTORIAN BANK RETURNS, 1902 TO 1906.

In Victoria.	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
LIABILITIES.					
Deposits bearing interest*	18,981,740	19,148,880	20,896,017	23,055,743	24,232,979
Deposits not bearing interest	11,978,484	11,280,423	10,778,780	12,068,153	13,390,841
Notes in circulation ...	940,082	913,590	858,345	835,499	886,922
Other ...	325,324	210,441	220,201	463,449	366,950
Total ...	32,225,630	31,553,334	32,753,343	36,422,844	38,877,692

\* Including perpetual inscribed stocks which, in 1906, amounted to £963,306.

## VICTORIAN BANK RETURNS, 1902 TO 1906—continued.

In Victoria.	1902.	1903.	1904.	1905.	1906.
<b>ASSETS.</b>	£	£	£	£	£
Coin and Bullion ...	7,396,912	6,452,687	6,351,576	8,056,666	6,918,743
Debts due ...	29,861,071	30,401,807	29,293,210	29,918,226	31,493,558
Property ...	1,999,574	1,957,544	1,951,171	1,919,230	1,901,999
Other ...	538,236	479,087	531,635	617,213	633,184
<b>Total ...</b>	<b>39,795,793</b>	<b>39,291,125</b>	<b>38,127,592</b>	<b>40,511,335</b>	<b>40,949,484</b>
<b>CAPITAL AND PROFITS.</b>					
Capital stock paid up	14,760,316	14,392,320	14,412,175	13,961,695	12,965,593*
Reserved Profits (ex Dividend)	3,828,311	4,045,092	4,263,499	4,414,059	4,672,901
Last Dividend—					
Amount ...	418,555	396,488	437,251	469,218	482,883†
Average rate per cent. per annum	5·67	6·45	6·55	7·07	7·12

\* Excluding £1,000,000 guaranteed by the Government of New Zealand, and which was hitherto included.—† Half-yearly dividend in the case of nine banks.

It will be observed that the excess of assets over liabilities at the close of 1906 was less by £2,016,699 than it was at the corresponding date in 1905, and £5,498,371 less than in 1902.

It appears from the above table that the principal item of increase in the liabilities is the deposits—those not bearing interest having increased by £1,412,357, and those bearing interest by £5,251,239—between 1902 and 1906, whilst there has been a decrease of £53,160 in note circulation. On the other hand, the total assets have only increased by £1,153,691, and the conclusion therefore seems irresistible that the increased deposits have not been invested in Victorian securities, but elsewhere, where higher remuneration can be obtained. It must be borne in mind that the figures represent only the assets and liabilities *within* the State, of which sworn returns are rendered to the Government quarterly as required by law.

An indication of the recovery in banking business is revealed by the annual increase in dividends paid and reserved profits. Compared with 1902, the average rate of dividend had increased in 1906 by 25 per cent., and the amount of reserved profits by 22 per cent.

The amount of Government deposits with banks in Victoria during each of the last thirteen years was as follows:—

Government  
deposits in  
banks.

	£		£
1894 ...	2,303,450	1901 ...	2,557,811
1895 ...	2,405,285	1902 ...	2,455,773
1896 ...	2,338,970	1903 ...	2,201,989
1897 ...	2,260,566	1904 ...	3,117,683
1898 ...	1,796,075	1905 ...	3,576,895
1899 ...	2,705,243	1906 ...	3,903,702
1900 ...	2,840,102		

There are twenty-two banks in Australasia, many of which do business in several States. Eleven do business in Victoria and Queensland, thirteen in New South Wales, seven in South Australia, six in Western Australia, four in Tasmania, and five in New Zealand. The amounts of deposits, advances, notes in circulation, and coin and bullion for the quarter ended 31st December, 1906, are as follow :—

Banks in  
Australia  
and New  
Zealand.

AUSTRALASIAN BANKING BUSINESS, 31ST DECEMBER, 1906.

Name of State.	Deposits.*	Advances, &c.	Notes in Circulation.	Coin and Bullion.
	£	£	£	£
Victoria ... ..	36,660,514	31,495,557	886,922	6,918,743
New South Wales ... ..	38,737,562	34,415,597	1,567,950	7,507,364
Queensland ... ..	14,230,617	14,581,355	...	2,041,830
South Australia ... ..	7,485,246	5,427,655	418,072	1,770,816
Western Australia ... ..	5,473,775	5,061,012	352,664	2,451,679
Tasmania ... ..	3,671,038	2,711,325	155,468	758,569
Australia ... ..	106,258,752	93,692,501	3,381,076	21,449,001
New Zealand ... ..	22,202,640	19,959,143	1,611,220	4,696,758
Australasia ... ..	128,461,392	113,651,644	4,992,296	26,145,759

\* Excluding perpetual inscribed stocks, which amount to £963,306 in Victoria, £682,931 in New South Wales, £82,607 in Queensland, and £313,751 in South Australia.

These figures have been taken from the *Australasian Insurance and Banking Record*. In Queensland Treasury notes have taken the place of bank notes. In each State, except Queensland, and in New Zealand the deposits exceed the advances outstanding.

As compared with the previous year, deposits have increased by £8,223,958 in the whole of Australasia, and by £6,254,632 in the Commonwealth of Australia, the greatest increases being £2,478,552 in Victoria and £2,355,611 in New South Wales. Advances, compared with the previous year, show an increase in Australia of £5,929,682, each State showing an increase. Notes in circulation have increased by £231,363 in Australia; whilst in New Zealand there has been also an increase of £142,386. Coin and bullion decreased by £2,594,118 in Australia, but increased by £644,585 in New Zealand.

The two classes of Savings Banks which formerly existed in Victoria, viz., the Post Office and the Trustees, were, in 1897, merged into one institution controlled by the Savings Banks Commissioners, and guaranteed by the Government. The interest allowed to depositors is at the rate of 3 per cent. on sums up to £100; 2½ per cent. on excess over £100 up to £250; but no interest is allowed on

Savings  
Banks.

excess over £250. The following are the particulars of depositors and deposits for a number of years:—

SAVINGS BANKS: DEPOSITS AND DEPOSITORS, 1875 TO 1906.

On the 30th June.	Number of Depositors.		Amount remaining on Deposit.	
	Total.	Per 1,000 of Population.	Total.	Average to each Depositor.
			£	£ s. d.
1875 ...	65,837	81	1,469,849	22 6 6
1880 ...	92,115	108	1,661,409	18 0 9
1885 ...	170,014	174	3,337,018	19 12 7
1890 ...	281,509	252	5,262,105	18 13 10
1895 ...	338,480	286	7,316,129	21 12 3
1899 ...	356,074	300	8,517,006	23 18 5
1900 ...	375,070	314	9,110,793	24 5 9
1901 ...	393,026	327	9,662,006	24 11 8
1902 ...	410,126	340	10,131,604	24 14 1
1903 ...	418,511	347	10,341,857	24 14 3
1904 ...	432,867	358	10,582,808	24 9 0
1905 ...	447,382	369	10,896,741	24 7 2
1906 ...	466,752	380	11,764,179	25 4 1

The best evidence of the growing habit of thrift, as well as the wide diffusion of wealth amongst the middle and poorer classes in Victoria, is contained in the Savings Banks returns, the number of depositors, in proportion to population, having increased by 27 per cent. since 1899. On the 30th June, 1906, more than one person out of every three in the State (including children and infants, who themselves number more than one-third of the population) was a depositor with a credit balance, on the average, of over £25. Of the amount on deposit in 1906, 36 per cent. belonged to depositors with accounts up to £100 each, 41 per cent. with accounts over £100 and up to £250, and 23 per cent. with accounts over £250. The aggregate of the excess over £250—the money on deposit for which interest is not allowed—was, on 30th June, 1906, £576,367.

It should, however, be pointed out that about 129,000 of the accounts remaining open were small sums under £1 left by depositors who had ceased to operate their accounts, and the total amount at their credit was about £18,500. If these figures be withdrawn from those in the preceding table it would appear that there were 337,752 active accounts with £11,745,679 to credit—an average of about £34 15s. 6d. per depositor. The number of depositors per thousand of the population becomes reduced to 275.



The next statement shows the assets and liabilities of savings banks in Victoria, the former indicating the manner in which deposits are invested or held:—

## SAVINGS BANKS, ASSETS AND LIABILITIES, 30TH JUNE, 1906.

<i>Assets.</i>			
With Treasurer of Victoria—Certificate representing Post Office Savings Bank Deposits, taken over 30th September, 1897	...	...	£ 2,617,310
Government Debentures	...	...	3,040,560
Bank Fixed Deposit Receipts (in name of Treasurer of Victoria)	...	...	2,451,549
Savings Bank Mortgage Bonds and Debentures (Advance Dept.)	...	...	900,928
City of Melbourne Debentures	...	...	31,400
Melbourne and Metropolitan Board of Works Debentures	...	...	714,212
Mortgage Securities	...	...	1,386,742
Mortgage Properties foreclosed or in possession	...	...	172,592
Melbourne Trust Ltd. Debentures and Shares	...	...	6,639
Accrued Interest on Investments	...	...	140,018
Bank premises	...	...	140,000
Advances Department	...	...	573
Commercial Bank—			
Current Accounts at call	...	...	233,600
Deposit at short notice	...	...	50,000
Cash at various Savings Banks, Agencies, and Trustees' Bankers	...	...	155,708
Total	...	...	12,041,831
<i>Liabilities</i>			
Depositors' balances, with interest to date	...	...	£ 11,764,179
Other liabilities	...	...	1,425
Surplus Funds allotted as follow:—			
Reserve Fund	...	£200,000	
Depreciation Fund	...	47,933	
Profit and Loss Account	...	22,219	
Fidelity Guarantee Fund	...	6,075	
Total Surplus Funds	...	...	276,227
Total	...	...	12,041,831

For the purpose of making advances to farmers an advance department was established in 1896 by the Act amalgamating the Post Office and Commissioners' Savings Banks. Funds for this purpose are raised by sale of mortgage bonds for £25 each, and by debentures in denominations of £100 and over, redeemable at fixed dates not more than ten years from date of issue. The total issues up to 30th June, 1906, amounted to £2,083,600, of which mortgage bonds for £489,575 have been redeemed or repurchased, leaving £1,594,025 outstanding; of this amount £680,450 are held by the public, and the balance by the Commissioners themselves out of Savings Bank funds. The amount advanced during the year 1905-6 was £131,034, making, with the amounts previously advanced, a total of £2,021,333, of which £670,710 have been repaid, leaving the amount outstanding on 30th June, 1906, at £1,350,623, representing 3,175 loans, which thus averaged £425. As a measure of the

Savings  
Banks  
loans to  
farmers.

safety with which the advance department has been conducted, it may be mentioned that the instalments of principal in arrear amounted on 30th June, 1906, to only £33, and of interest to £30.

TRANSACTIONS UNDER CRÉDIT FONCIER SYSTEM TO 30TH JUNE, 1906.

		At 30th June, 1905.	During 1905-6.	At 30th June, 1906.
Loans raised	... .. £	1,983,600	100,000	2,083,600
„ repaid	... .. £	409,900	79,675	489,575
„ outstanding	... .. £	1,573,700	...	1,594,025
Applications received	... .. No.	8,967	788	9,755
„ „ amount	... .. £	4,353,965	319,650	4,673,615
Applications granted	... .. No.	5,699	431	6,130*
„ „ amount	... .. £	2,538,380	169,620	2,708,000*
Amounts advanced—				
To pay liabilities	... .. £	1,682,438	115,115	1,797,553
„ Crown rents	... .. £	74,629	2,967	77,596
For improvement and development of land	£	133,232	12,952	146,184
Total advanced	... .. £	1,890,299	131,034	2,021,333
Amounts repaid	... .. £	518,084	152,626	670,710
„ outstanding	... .. £	1,372,215	...	1,350,623

\*Including £491,600 offered to, but not accepted by, 963 applicants; also £144,680 granted to 351 applicants, whose applications were subsequently withdrawn.

Savings  
Banks in  
Australasia.

There are both Government and Trustee Banks in New South Wales, Tasmania, and New Zealand; Government Savings Banks only in Queensland and Western Australia; and Trustee Banks only in South Australia and Victoria—those in the latter State being guaranteed by, and under the supervision of, the Government.

The following were the number of depositors, the amount on deposit including interest, in each of the Australian States and New Zealand; on 30th June, 1906, in the case of Victoria, New South Wales, and Western Australia; 30th June, 1905, in the case of Queensland and South Australia; and 31st December, 1905, in the case of Tasmania and New Zealand:—

SAVINGS BANKS IN AUSTRALIA AND NEW ZEALAND.

State.	Number of Depositors.		Amount remaining on Deposit.	
	Total.	Per 1,000 of the Population.	Total.	Average to each Depositor.
			£	£ s. d.
Victoria	466,752	380	11,764,179	25 4 1
New South Wales	372,365	247	14,429,018	38 15 0
Queensland	84,165	160	3,875,197	46 0 10
South Australia	126,821	342	4,380,357	34 10 10
Western Australia	63,573	245	2,316,161	36 8 8
Tasmania	50,731	280	1,332,792	26 5 5
Australia	1,164,407	286	38,097,704	32 14 4
New Zealand	316,376	359	9,773,954	30 17 10
Australasia	1,480,783	299	47,871,658	32 6 7

The number of depositors in Victoria is greater than in the other States and New Zealand in proportion to population, although the average amount standing to the credit of each depositor is not so large. It has already been shown that the diffusion of wealth, as evidenced by the proportion of persons dying leaving property, is wider in Victoria, and this is corroborated by the above figures. More than one-third of the population of Victoria, South Australia, and New Zealand are depositors, more than one-fourth in Tasmania, nearly one-fourth in Western Australia and New South Wales, and nearly one-sixth in Queensland.

The following table shows the number of depositors, amount of deposits, and average to each depositor in Savings Banks in Great Britain, other European countries, and the United States and Canada. In some of these countries there are private Savings Banks, complete information regarding which cannot be ascertained. It has, therefore, not been considered advisable to calculate the ratio of depositors to the total population:—

Savings  
Banks  
in various  
countries.

#### SAVINGS BANKS IN GREAT BRITAIN AND FOREIGN COUNTRIES.

Country.	Year.	Number of Depositors.	Amount remaining on Deposit.	
			Total.	Average to each Depositor.
			£	£ s. d.
England and Wales ...	1905	10,165,621	167,690,248	16 9 11
Scotland ...	1905	991 317	24,418,237	24 12 8
Ireland ...	1905	537,980	12,726,091	23 13 1
United Kingdom ...	1905	11,694,918	204,834,576	17 10 4
Austria ...	1903	5,216,455	201,355,635	38 12 0
Belgium ...	1903	2,088,448	29,137,024	13 19 0
France ...	1904	11,845,250	181,566,077	15 6 7
Italy ...	1904	7,116,137	107,084,269	15 0 11
Holland ...	1903	1,412,881	16,125,000	11 8 3
Russia ...	1904	5,113 000	116,774,120	22 16 9
Sweden ...	1903	1,918,035	33 432 136	17 8 7
Norway ...	1904	766,375	20,285,413	26 9 5
Denmark ...	1904	1,291,569	42,645,862	33 0 4
United States ...	1905	7,696,229	635,585,607	82 11 8

#### PRICES, ETC., OF GOVERNMENT STOCKS.

Selecting one of the leading 4 per cent. and one of the leading  $3\frac{1}{2}$  per cent. Victorian stocks, and finding the highest prices quoted in 1885 and each subsequent year, an adequate idea may be formed of the general course of prices in London during the last twenty-two years. These are shown in the following table, together with the equivalent returns to the investor.

Compara-  
tive prices  
of Victorian  
stocks.

PRICES OF VICTORIAN REPRESENTATIVE STOCKS IN LONDON,  
1885 TO 1906.

Year.		Highest Prices quoted on Stock Exchange.		Minimum Return to Investor.	
		4 per cents. (due 1920).	3½ per cents. (due 1923).	4 per cents.	3½ per cents.
				£ s. d.	£ s. d.
1885	...	104½	...	3 15 10	...
1886	...	107¾	...	3 13 2	...
1887	...	108¾	...	3 13 1	...
1888	...	114½	...	3 6 5	...
1889	...	114¼	105	3 5 8	3 5 5
1890	...	111½	103½	3 8 0	3 7 0
1891	...	109½	100½	3 10 3	3 9 9
1892	...	106¾	98	3 13 9	3 13 5
1893	...	103¼	93½	3 18 6	4 3 4
1894	...	106¾	99½	3 15 2	3 10 2
1895	...	111¼	105¾	3 9 0	3 6 1
1896	...	116½	109½	3 2 7	3 1 6
1897	...	115	108¾	3 4 0	3 2 7
1898	...	113¾	107¾	3 5 1	3 3 6
1899	...	114	107¾	3 4 5	3 2 10
1900	...	111¾	105¾	3 6 8	3 5 0
1901	...	112½	106¾	3 5 3	3 4 1
1902	...	112½	104¾	3 5 3	3 6 0
1903	...	107¾	101¾	3 11 2	3 10 0
1904	...	107	98¾	3 11 10	3 14 5
1905	...	107	100¾	3 11 6	3 11 6
1906	...	105¾	101¾	3 13 4	3 10 7

The minimum return to the investor is calculated after allowing for accrued interest and redemption at par on maturity.

The following are the means between the highest and lowest prices of Australasian stocks in London during each of the last thirteen years. The stocks selected are the representative issues of 4 and  $3\frac{1}{2}$  per cents.:—

Prices of  
Austral-  
asian  
stocks.

MEAN PRICES OF AUSTRALASIAN STOCKS IN LONDON, 1894 TO 1906.

Year.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
FOUR PER CENTS. REDEEMABLE IN—							
	1920.	1933.	1915.	1917-36.	1934.	1920-40.	1929.
1894 ..	103 $\frac{1}{4}$	107 $\frac{3}{4}$	105 $\frac{3}{8}$	105 $\frac{3}{4}$	108 $\frac{1}{2}$	..	107 $\frac{3}{8}$
1895 ..	104 $\frac{1}{2}$	113 $\frac{1}{2}$	109 $\frac{3}{8}$	109 $\frac{1}{2}$	117 $\frac{1}{4}$	..	109 $\frac{3}{8}$
1896 ..	111 $\frac{1}{2}$	118 $\frac{1}{4}$	111 $\frac{1}{2}$	111 $\frac{1}{2}$	124 $\frac{1}{2}$	..	112 $\frac{3}{8}$
1897 ..	113	120 $\frac{3}{8}$	113 $\frac{1}{2}$	112 $\frac{7}{8}$	121 $\frac{7}{8}$	..	114 $\frac{5}{8}$
1898 ..	111 $\frac{1}{2}$	117 $\frac{1}{2}$	109 $\frac{3}{8}$	110	118 $\frac{1}{8}$	..	112 $\frac{1}{2}$
1899 ..	110	115 $\frac{1}{2}$	109	108 $\frac{1}{2}$	116 $\frac{1}{2}$	..	111
1900 ..	109 $\frac{1}{2}$	114 $\frac{3}{4}$	108 $\frac{1}{2}$	108 $\frac{7}{8}$	115 $\frac{1}{2}$	110 $\frac{1}{2}$	111 $\frac{1}{8}$
1901 ..	110 $\frac{3}{8}$	114 $\frac{3}{4}$	107 $\frac{1}{2}$	107 $\frac{3}{8}$	113	109 $\frac{1}{2}$	113
1902 ..	108 $\frac{3}{8}$	112 $\frac{3}{8}$	105 $\frac{1}{2}$	105 $\frac{7}{8}$	112 $\frac{3}{8}$	110	111 $\frac{1}{2}$
1903 ..	104 $\frac{1}{2}$	107 $\frac{3}{8}$	102 $\frac{3}{8}$	102 $\frac{3}{8}$	109 $\frac{1}{2}$	107 $\frac{5}{8}$	107 $\frac{3}{8}$
1904 ..	104 $\frac{1}{2}$	107 $\frac{1}{2}$	102 $\frac{3}{8}$	101 $\frac{1}{2}$	107 $\frac{1}{2}$	105 $\frac{1}{2}$	106
1905 ..	105 $\frac{1}{2}$	107 $\frac{3}{8}$	103 $\frac{1}{2}$	103 $\frac{1}{2}$	107 $\frac{1}{2}$	106 $\frac{1}{2}$	107 $\frac{3}{8}$
1906 ..	103 $\frac{1}{2}$	108 $\frac{3}{8}$	102 $\frac{7}{8}$	102 $\frac{3}{8}$	108 $\frac{3}{8}$	105 $\frac{3}{8}$	107 $\frac{3}{8}$
THREE AND A HALF PER CENTS. REDEEMABLE IN—							
	1923.	1924.	1924.	1939.	1915-35.	1920-40.	1940.
1894 ..	95 $\frac{3}{4}$	99 $\frac{1}{8}$	95 $\frac{1}{2}$	97 $\frac{3}{4}$	..	96 $\frac{5}{8}$	99 $\frac{7}{8}$
1895 ..	98 $\frac{3}{8}$	104 $\frac{1}{2}$	102 $\frac{1}{2}$	104 $\frac{5}{8}$	..	102 $\frac{3}{8}$	103 $\frac{3}{4}$
1896 ..	104 $\frac{1}{2}$	108	106 $\frac{1}{2}$	108 $\frac{3}{8}$	..	107 $\frac{3}{8}$	106
1897 ..	106 $\frac{1}{2}$	109 $\frac{3}{8}$	106 $\frac{3}{8}$	111 $\frac{1}{8}$	..	108 $\frac{1}{2}$	107 $\frac{5}{8}$
1898 ..	104 $\frac{1}{2}$	106 $\frac{1}{2}$	104 $\frac{1}{2}$	103	..	107 $\frac{3}{8}$	106 $\frac{1}{2}$
1899 ..	103	105 $\frac{1}{2}$	103 $\frac{7}{8}$	106 $\frac{3}{8}$	..	103 $\frac{7}{8}$	105 $\frac{1}{2}$
1900 ..	103 $\frac{3}{8}$	105	103 $\frac{1}{2}$	105 $\frac{3}{8}$	102 $\frac{1}{2}$	102 $\frac{7}{8}$	105
1901 ..	104	104 $\frac{3}{8}$	102 $\frac{5}{8}$	104 $\frac{7}{8}$	101 $\frac{3}{4}$	102 $\frac{5}{8}$	106 $\frac{7}{8}$
1902 ..	102 $\frac{1}{2}$	103 $\frac{3}{8}$	101 $\frac{1}{2}$	103 $\frac{1}{2}$	100 $\frac{3}{4}$	103	105 $\frac{1}{4}$
1903 ..	98	99 $\frac{1}{2}$	97 $\frac{1}{2}$	101 $\frac{1}{2}$	98 $\frac{1}{2}$	100 $\frac{3}{8}$	102 $\frac{1}{8}$
1904 ..	96 $\frac{3}{4}$	97 $\frac{1}{2}$	96 $\frac{1}{2}$	98 $\frac{3}{8}$	95 $\frac{5}{8}$	98	99 $\frac{1}{8}$
1905 ..	98 $\frac{1}{2}$	99 $\frac{3}{4}$	98 $\frac{1}{2}$	99	97 $\frac{1}{2}$	99 $\frac{3}{8}$	98 $\frac{3}{8}$
1906 ..	100	100 $\frac{3}{8}$	99 $\frac{3}{8}$	100 $\frac{7}{8}$	99	98 $\frac{7}{8}$	100 $\frac{1}{2}$

It will be noticed from these figures that immediately after 1894 there was a remarkable and rapid rise in the prices of all the above stocks; but in 1898 there was a sudden drop, which continued gradually until 1902. The decline was accentuated in 1903 and 1904, when there was another large fall, which reduced prices to something like the level ruling in 1894, but prices hardened again in 1905, and were generally sustained in 1906, the improvement in the  $3\frac{1}{2}$  per cents. being considerable. These figures, however, as they stand, do not afford an indication of the real values of the stocks concerned; the table simply shows the mean between the highest and lowest prices for the year.

Investors' return from Australasian stocks.

The best method of comparing the value of stocks over a series of years, or of comparing the different values placed upon the stocks of different States by investors, is to show the actual or effective rate of interest the investor is satisfied with, as evidenced by the mean between the highest and lowest quotations during the year. This is done in the following table, allowance being made for an average of three months' accrued interest, which is deducted from the market price before the computation is made. In computing the yield to the investor, the gain or loss incurred by redemption at par at maturity is taken into account:—

INVESTORS' INTEREST RETURN FROM AUSTRALASIAN STOCKS,  
1894, 1897, 1900, 1902, 1904, 1905, AND 1906.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
FOUR PER CENTS.							
	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.
1894	3 17 2	3 13 7	3 13 10	3 13 9	3 13 0	..	3 13 4
1897	3 5 1	3 2 2	3 2 2	3 4 1	3 1 3	..	3 6 2
1900	3 8 8	3 6 4	3 7 6	3 7 10	3 6 2	3 7 0	3 9 0
1902	3 8 4	3 8 2	3 11 10	3 11 8	3 8 0	3 6 9	3 8 5
1904	3 14 0	3 13 0	3 16 2	3 19 9	3 13 0	3 13 2	3 13 9
1905	3 12 11	3 12 5	3 13 5	3 15 4	3 12 8	3 11 1	3 11 6
1906	3 14 11	3 11 5	3 15 1	3 16 5	3 11 8	3 11 8	3 11 3
THREE AND A HALF PER CENTS.							
	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.
1894	3 15 11	3 11 11	3 16 4	3 12 10	..	3 15 2	3 11 0
1897	3 3 11	3 0 6	3 3 7	3 1 0	..	3 1 1	3 3 11
1900	3 6 10	3 5 0	3 6 10	3 5 9	3 7 7	3 7 3	3 6 4
1902	3 7 10	3 6 8	3 9 0	3 7 6	3 10 3	3 6 9	3 5 6
1904	3 16 0	3 14 10	3 16 10	3 12 7	4 2 2	3 14 11	3 11 9
1905	3 14 0	3 11 8	3 13 10	3 11 10	3 19 0	3 12 8	3 12 0
1906	3 11 5	3 10 5	3 12 3	3 10 0	3 15 0	3 13 8	3 10 4

NOTE.—Where the date of redemption is optional, the earliest date has been adopted for the calculation.

Taking the  $3\frac{1}{2}$  per cents. as being the representative stocks, it appears that, judging from the quotations in 1906, those of South Australia, New Zealand, and New South Wales yield least to the investor, being practically alike, and returning the nominal rate of interest, and that those of Western Australia yield most, the net return to the investor being  $3\frac{3}{4}$  per cent.

Representative British and Colonial stocks in London.

The following is a statement of the interest return to the investor in the principal issues of Colonial stocks and in British Consols, as indicated by the mean between the highest and lowest market prices quoted during the years 1900 and 1906:—

INTEREST ON MEAN PRICES OF BRITISH CONSOLS AND COLONIAL STOCKS, 1900 AND 1906.

Country.	Date of Maturity.	Rate of Interest on Stock.	Return to Investor Per Cent.		
			1900.	1906.	Increase.
		per cent.	£ s. d.	£ s. d.	£ s. d.
United Kingdom Consols	Inter-minable.	2½*	2 10 0	2 17 1	0 7 1
Canada .. ..	1947	2½	2 17 1	3 3 11	0 6 10
" .. ..	1938	3	3 0 0	3 2 6	0 2 6
Ceylon .. ..	1934	4	3 6 11	3 8 1	0 1 2
Newfoundland ..	1935	4	3 11 1	3 12 5	0 1 4
Natal .. ..	1937	4	3 10 1	3 12 1	0 2 0
Jamaica .. ..	1934	4	3 10 11	3 10 5	-0 0 6†
Tasmania .. ..	1920-40	4	3 7 0	3 11 8	0 4 8
Cape Colony ..	1923	4	3 10 4	3 12 6	0 2 2
New Zealand ..	1929	4	3 9 0	3 11 3	0 2 3
New South Wales ..	1924	3½	3 5 0	3 10 5	0 5 5
South Australia ..	1939	3½	3 5 9	3 10 0	0 4 3
New Zealand ..	1940	3½	3 6 4	3 10 4	0 4 0
New South Wales ..	1933	4	3 6 4	3 11 5	0 5 1
Hong Kong .. ..	1918-43	3½	3 7 5	3 12 4	0 4 11
New Zealand ..	1945	3	3 3 2	3 11 0	0 7 10
Western Australia ..	1934	4	3 6 2	3 11 8	0 5 6
Tasmania .. ..	1920-40	3½	3 7 3	3 13 8	0 6 5
Victoria .. ..	1920	4	3 8 8	3 14 11	0 6 3
Queensland .. ..	1915	4	3 7 6	3 15 1	0 7 7
British Guiana ..	1935	4	3 12 3	3 13 1	0 0 10
Queensland .. ..	1924	3½	3 6 10	3 12 3	0 5 5
Victoria .. ..	1923	3½	3 6 10	3 11 5	0 4 7
Natal .. ..	1914-39	3½	3 7 11	3 17 0	0 9 1
Quebec .. ..	1937	3	3 10 7	3 17 1	0 6 6
Cape Colony ..	1929-49	3½	3 5 3	3 14 5	0 9 2
New South Wales ..	1935	3	3 0 11	3 15 0	0 14 1
South Australia ..	1917-36	4	3 7 10	3 16 5	0 8 7
Natal .. ..	1929-49	3	3 4 9	4 1 4	0 16 7
Trinidad .. ..	1922-44	3	3 6 11	4 3 2	0 16 3
Victoria .. ..	1929-49	3	3 4 10	3 16 2	0 11 4
Trinidad .. ..	1917-42	4	3 7 8	3 18 10	0 11 2
Western Australia ..	1915-35	3½	3 7 7	3 15 0	0 7 5
British Guiana ..	1923-45	3	3 7 2	4 3 6	0 16 4
Queensland .. ..	1922-47	3	3 6 1	4 4 3	0 18 2
Western Australia ..	1916-36	3	3 12 0	4 13 9	1 1 9
South Australia ..	1916 or later	3	3 10 2	4 15 8	1 5 6

\* Consols carried 2½ per cent. interest until 1903; but the rate of interest to a permanent investor in 1900 is only reckoned at 2½, which is now the permanent rate.

† The minus sign denotes a decrease.

It would appear from this table as if the Australian and other Colonial 3 per cent. stocks were not viewed with approbation by the British investor; but as most of these stocks are payable at the option of the Governments between extremes of 20 or 25 years, and the computation of returns to investors has been made on the assumption of redemption of the loans at the earliest dates, such returns are higher than the probabilities warrant. Since the market rate of interest is about 3½ per cent., it is not at all likely that the Governments will

endeavour to redeem at the earliest date, unless under the unlikely condition of a fall in interest below 3 per cent. Therefore, in the case of these stocks, it would be a fairer comparison to calculate the return to the investor on the assumption of redemption at the latest optional date. Under these circumstances, the interest realized by the purchasers of the various 3 per cent. Australian and other Colonial stocks in 1906 would be as follows:—

Stocks.	Return to Investor. Per cent.		
	£	s.	d.
South Australia, 1916 or later	...	3	9 3
Victoria, 1929-49	...	3	11 0
Trinidad, 1922-44	...	3	12 10
Queensland, 1922-47	...	3	13 0
British Guiana, 1923-45	...	3	13 6
Natal, 1929-49	...	3	14 6
Western Australia, 1916-36	...	3	14 6

It is thus seen, on comparison with the yields of the  $3\frac{1}{2}$  and 4 per cents. shown in the previous tables, that there is no real preference exhibited in favour of any particular stock.

Price of  
debentures  
and stock  
in Mel-  
bourne.

The amount of Victorian Government stock and debentures, under three loans payable in Melbourne, outstanding on 30th June, the price in January, and the return to the investor per cent. for recent years, are as follow. The market prices are taken from the *Australasian Insurance and Banking Record*:—

Year.	Amount Out- standing on 30th June.	Price in January.	Return to Investor per cent.		
	£		£	s.	d.
3 % Stock, due 1917 or at any time thereafter.					
1899	2,790,482	100 $\frac{1}{2}$	2	19	8
1900	3,059,511	100-100 $\frac{1}{2}$	2	19	11
1901	3,146,000	98 $\frac{1}{2}$ -99 $\frac{1}{2}$	3	0	7
1902	3,195,619	99 $\frac{3}{4}$	3	0	4
1903	3,196,933	97	3	1	10
1904	3,120,492	92 $\frac{1}{2}$	3	4	10
1905	3,155,773	88 $\frac{1}{2}$	3	7	7
1906	3,153,067	93	3	4	6
1907	...	91 $\frac{1}{2}$	3	5	7
3 % Debentures, due 1921-30.					
1901	532,000	97 $\frac{1}{2}$ -97 $\frac{1}{2}$	3	2	9
1902	1,000,000	95-95 $\frac{3}{4}$	3	4	10
1903	1,000,000	93 $\frac{1}{2}$ -93 $\frac{1}{2}$	3	7	1
1904	1,000,000	88-90	3	13	2
1905	1,000,000	87 $\frac{1}{2}$ -88	3	15	3
1906	997,400	93	3	8	7
1907	...	90	3	12	10
4 % Debentures, due 1913-23.					
1899	746,795	111-112	3	1	2
1900	746,795	112	2	19	6
1901	746,795	105-107 $\frac{1}{2}$	3	8	2
1902	746,795	106	3	8	0
1903	746,795	104 $\frac{1}{2}$	3	10	9
1904	746,795	103	3	12	10
1905	746,795	103 $\frac{1}{2}$	3	10	3
1906	746,795	104 $\frac{1}{2}$ -105	3	6	5
1907	...	104	3	7	3



The prices quoted in this table do not include any allowance for accrued interest, the practice on the Melbourne Stock Exchange differing from that on the London Exchange, where accrued interest is included in prices quoted.

In computing the returns to investors, the 3 per cent. stock has been regarded as interminable, since it is at the option of the Government whether it be redeemed in 1917, or at any time thereafter; and, as before explained, with reference to other Colonial stock, it is extremely unlikely that redemption will take place at the earliest date. For the 3 per cent. debentures it has been assumed that redemption will be made at the latest optional date, viz., 1930. For the 4 per cent. debentures the earliest date has been assumed, since the nominal interest is in excess of the market rate. For the earlier years shown above the yield per cent. was about the same from the 3 and 4 per cents., in the middle period the 4 per cents. gave a better return than the 3 per cents., and in the latter years occupied an intermediate position between the 3 per cent. stock and debentures. It appears that the yields realized by the investor in Victoria from 3 per cent. stock and 4 per cent. debentures in January, 1907, were considerably lower than those realized by the investor in Colonial stocks on the British market during 1906.

## INSURANCE.

There are eighteen companies registered by the Registrar-General under the provisions of the Companies Act for the transaction of life assurance business in Victoria. The head offices of six of these companies are in Victoria, five in New South Wales, four in America, and three in the United Kingdom. The returns are not required to be lodged with the Registrar-General before the end of September, consequently returns for 1906 have been obtained direct from all the companies except one, for which the figures of the preceding year have been repeated. This does not affect the comparison of 1906 with previous years, as the number of policies of this office was inconsiderable in comparison with the total. The following are the number and amount of policies in force in Victoria in companies whose head offices are inside, and those whose head offices are outside Victoria during the years 1900 to 1906:—

## LIFE POLICIES IN FORCE IN VICTORIA, 1900 TO 1906.

Year.	Companies with Head Offices in—				Total.
	Victoria.	New South Wales.	United Kingdom.	America.	
	NUMBER.				
1900 ..	59,997	105,851	1,203	5,662	172,713
1901 ..	70,115	117,958	1,130	6,833	196,036
1902 ..	76,958	125,075	1,052	7,837	210,922
1903 ..	77,938	127,364	1,004	8,555	214,861
1904 ..	84,006	130,366	950	8,890	224,212
1905 ..	84,108	133,117	914	9,029	227,168
1906 ..	87,894	138,546	841	7,810	235,091

LIFE POLICIES IN FORCE IN VICTORIA, 1900 TO 1906—*continued.*

Year.	Companies with Head Offices in—				Total.
	Victoria.	New South Wales.	United Kingdom.	America.	
	AMOUNT.				
	£	£	£	£	£
1900 ..	8,268,635	14,917,162	554,124	2,575,941	26,315,862
1901 ..	9,267,205	15,952,982	523,560	2,821,142	28,564,889
1902 ..	9,610,224	16,798,243	477,934	2,991,761	29,878,162
1903 ..	9,458,538	17,175,972	458,820	3,137,237	30,230,567
1904 ..	9,692,186	17,646,043	434,030	3,208,084	30,980,343
1905 ..	9,702,730	18,242,212	426,840	3,214,742	31,586,524
1906 ..	10,010,359	18,973,956	393,765	2,868,727	32,246,807

The policies dealt with in the preceding table include ordinary life assurance, endowment assurance, and pure endowment. The companies are required to distinguish between assurance and endowment in their returns to the Registrar-General; but it would appear that some have included only pure endowment under the latter head, and others have included endowment assurance as well, thus rendering the distinction between the two impossible for comparative purposes.

The increase in the number and amount of policies during the last five years has been most satisfactory; and a further evidence of the thrift of the Victorian people is afforded by the fact that at the end of 1906 19 per cent. of the total population, including women and children, were insured for an average sum of £137. It will be seen that 96.3 per cent. of the policies, and 89.9 per cent. of the amount of insurance, are in Australian offices, of which there are eleven doing business in Victoria; 26.5 per cent. of the policies and 46.3 per cent. of the amount insured being in the Australian Mutual Provident Society, the head office of which is in Sydney.

Life policies:  
Growth of  
business,  
Australian  
and foreign  
companies.

The percentage of policies held in Australian and foreign offices in Victoria in 1906, and the percentage increase or decrease since 1900, are as follow:—

## LIFE ASSURANCE POLICIES: PERCENTAGE AND GROWTH OF VICTORIAN BUSINESS IN AUSTRALIAN AND FOREIGN OFFICES.

Companies with Head Offices in—	Percentage in 1906 of—		Increase per cent. in 1906 as compared with 1900.	
	Total Policies.	Total Amount Assured.	Number.	Amount.
Victoria .. ..	37.39	31.04	46.50	21.06
New South Wales ..	58.93	58.84	30.89	27.20
United Kingdom ..	.36	1.22	-30.09*	-28.94*
America .. ..	3.32	8.90	37.94	11.37
Total .. ..	100.00	100.00	36.12	22.54

\* The minus sign denotes a decrease.

Thus, while there has been a decided increase in the business of the Australian and American offices, there has been a large falling off in the business of the British companies, which, however, have for many years ceased to accept new business. Compared with 1905, the Australian companies exhibit an increase of 4.24 per cent. in the number and of 3.72 per cent. in the amount of policies in 1906, whilst the American companies show a loss of 13.50 and 10.76 per cent. respectively.

The average value of policies in the Australian companies is £128, in the English £468, and in the American £367. The comparative smallness of the first-named is due to the fact that nearly all the industrial business is done by four Australian companies, whilst only one outside company (American) engages in that business. The four Australian companies referred to had in force on 31st December, 1906, 101,196 industrial policies for £1,930,706, or an average of £19 per policy; whilst the American company had in force on 31st December, 1905—the latest date for which information is available—704 policies covering £107,600, or an average of £153 per policy. Excluding the industrial from the total business, it is found that the average value of ordinary policies in the Australian companies is £216.

The following are the number and amount of annuity policies in force in Victoria at the end of each of the last seven years, distinguishing between those in force in companies whose head offices are inside, and those whose head offices are outside, Victoria:—

#### ANNUITY POLICIES IN FORCE IN VICTORIA, 1900 TO 1906.

Year.	Head Offices in Victoria.		Head Offices outside Victoria.		Total.	
	Number.	Amount per Annum.	Number.	Amount per Annum.	Number.	Amount per Annum.
		£		£		£
1900 ..	65	3,877	189	12,307	254	16,184
1901 ..	81	4,221	229	15,150	310	19,371
1902 ..	85	4,958	269	15,990	354	20,948
1903 ..	91	4,850	294	13,971	385	18,821
1904 ..	101	7,275	308	14,108	409	21,383
1905 ..	117	7,253	308	14,179	425	21,432
1906 ..	137	8,146	320	14,270	457	22,416

There was an increase in both the number and amount of annuities at the end of each year except 1903. The annuities at the close of 1906 exceed those at the close of 1900 by 80 per cent. in the number and 39 per cent. in the amount.

Insurance—  
other than  
Life.

The following table shows the transactions of insurance companies—other than life—operating in Victoria in 1904 and 1905:—

—	Year.	Nature of Insurance.			
		Fire and Marine.	Accident and Guarantee.	Other.	Total.
RECEIPTS.		£	£	£	£
Premiums, less Re-assurance and Returns	{ 1904	559,518	47,110	7,655	614,283
	{ 1905	550,138	53,539	9,853	613,530
Other Receipts (Interest, Rent, Fees, &c.)	{ 1904	33,614	2,756	593	36,963
	{ 1905	36,874	4,072	658	41,604
Total Receipts ...	{ 1904	593,132	49,866	8,248	651,246
	{ 1905	587,012	57,611	10,511	655,134
EXPENDITURE.					
Losses ...	{ 1904	230,626	19,085	4,348	254,059
	{ 1905	248,947	23,508	4,477	276,932
Other Expenditure ...	{ 1904	220,029	21,649	2,175	243,853
	{ 1905	225,972	19,990	2,448	248,410
Total Expenditure ..	{ 1904	450,655	40,734	6,523	497,912
	{ 1905	474,919	43,498	6,925	525,342

The total amount at risk is not available, but it is obvious, from the extent of the premiums, that the amount covered must be very considerable. In 1905 in the fire and marine business the premiums received amounted to £550,138, and the losses to £248,947; in the accident and guarantee, £53,539 and £23,508 respectively; in the "other" insurance business, which includes plate glass and live stock insurance, the figures were £9,853 and £4,477 respectively. The total amount of premiums on all these classes of insurance for the two years 1904 and 1905 was £1,227,813, and the losses £530,991, or 43 per cent. of the premiums.

#### BUILDING SOCIETIES.

Building  
Societies.

Building societies in Victoria date from an early period in the history of the State, and up to 1892 their business was extensive. Since then it has been comparatively small, although the figures of recent years, and particularly those of 1906, show that an improvement has taken place in building society business. The following table gives particulars of the principal items of business during the last five years:—

#### BUILDING SOCIETIES: RETURN FOR FIVE YEARS.

—	1902.	1903.	1904.	1905.	1906.
Number of societies ...	31	32	32	28	31
" shareholders	6,160	6,365	6,970	5,881	6,920
" borrowers	6,167	6,105	6,275	6,351	7,418
During the year—	£	£	£	£	£
Advances ...	164,786	145,186	131,307	154,507	253,029
Repayments ...	275,720	267,193	243,492	237,898	316,005
Working expenses ...	28,832	22,025	20,959	20,084	24,060
At end of year—					
Deposits ...	737,405	735,017	721,548	716,601	712,186

A glance at the above figures will show the substantial improvement in building society business in the period 1902-6, and more particularly between 1904 and 1906. Although, compared with 1904, there was one society less in 1906, yet there has been an advance of  $92\frac{1}{2}$  per cent. in the advances made and 30 per cent. in the repayments, whilst the liabilities to depositors have been reduced by  $1\frac{1}{3}$  per cent. It will also be noticed that this form of liability has been continuously reduced since 1902. Under ordinary circumstances a reduction of deposits might be taken as an indication of want of confidence in the societies, but which in the present instance means the release of temporarily locked-up deposits. The total assets of the building societies on the 31st December, 1906, amounted to £2,683,782, of which £1,202,643 consisted of loans on mortgage, and £1,416,304 of properties in possession or surrendered. Of the total liabilities, viz., £2,520,479, £1,302,476 were due to shareholders, £334,425 to debenture holders, and £712,186 to depositors. The total reserved funds at the same date amounted to £187,615.

## MORTGAGES, LIENS, ETC.

A statement of the number and amount of registered mortgages and releases of land in each of the last five years is hereunder. Generally, in about 13 per cent. of the mortgages the amount of the loan is not stated, so that the amounts stated in the following table may be taken as understating the total by about that proportion. No account is taken of unregistered or equitable mortgages to banks and individuals, as there is no public record of these dealings; nor are building society mortgages over land held under the *Transfer of Land Act* included, they being registered as absolute transfers. Besides releases registered as such, some mortgages are released or lapse in other ways, e.g., by a transfer from mortgagor to mortgagee, by sale by mortgagee, or by foreclosure.

Land mort-  
gages and  
releases.

## LAND MORTGAGES AND RELEASES: RETURN FOR FIVE YEARS.

Registered During Year.	1902.	1903.	1904.	1905.	1906.
Mortgages—					
Number ..	8,951	9,199	8,562	8,675	8,964
Amount £	7,626,922	6,452,908	7,982,671	5,957,242	7,139,501
Releases—					
Number ..	5,985	4,241	7,081	7,175	8,318
Amount £	5,472,950	5,324,527	4,884,665	5,143,295	6,896,972

The number and amount of stock mortgages, liens on wool, and liens on crops registered during each of the last five years were as follow. Releases are not shown, as releases of liens are not required to be registered, being removed from the register after the expiration of twelve months; and very few of the mortgagors of stock trouble to secure themselves by a registered release.

Stock mort-  
gages, liens  
on wool  
and crops.

### STOCK MORTGAGES, LIENS ON WOOL AND CROPS: RETURN FOR FIVE YEARS.

Security.	1902.	1903.	1904.	1905.	1906.
Stock Mortgages—					
Number ..	717	742	821	900	747
Amount £	118,648	99,517	135,295	161,841	141,154
Liens on Wool—					
Number ..	278	229	156	154	152
Amount £	66,570	48,029	63,463	58,061	56,396
Liens on Crops—					
Number ..	565	3,835	1,867	1,673	1,086
Amount £	82,999	206,737	111,730	91,050	80,580
Total—					
Number ..	1,560	4,806	2,844	2,727	1,985
Amount £	268,217	354,283	310,488	310,952	278,130

The large increase of liens on crops in 1903, as compared with the preceding year, is due to the fact that 2,955 were liens to the Board of Land and Works, under the *Seed Advances Act* 1903. There were 1,286 such liens in 1904, 1,095 in 1905, and 624 in 1906.

Two forms of security are taken by lenders over personal chattels, viz., a bill of sale, and a contract of sale for letting and hiring. The former is a simple mortgage of the chattels, whilst the latter purports to be an absolute sale of the chattels to the lender, with an agreement by the lender to hire the goods back to the borrower at a certain rental, which takes the place of interest. The number and amounts of those filed in each of the last five years are as follow:—

### BILLS AND CONTRACTS OF SALE: RETURN FOR FIVE YEARS.

Security.	1902.	1903.	1904.	1905.	1906.
Bills of Sale—					
Number ..	1,958	1,967	2,725	2,200	1,998
Amount £	225,544	221,114	189,433	181,375	184,911
Contracts of Sale—					
Number ..	327	425	364	265	161
Amount £	9,277	12,505	11,715	7,860	5,184

Before filing a bill of sale, 14 days' notice of intention to file must be lodged with the Registrar-General, within which period any creditor may lodge a "caveat" to prevent the filing of the bill without the payment by the borrower of his claim. To circumvent this, the practice arose, in 1877, whereby the borrower purported to sell the chattels to the lender, who hired them back to the borrower, and this became the form of security more generally adopted until 1887,

when a decision was given that if there were any tacit understanding that the transaction should be considered as a loan, the security would be void unless registered as a bill of sale. In consequence of this, the number of contracts of sale has gradually decreased, until in 1906 the bills of sale were more than twelve times their number, and the amount secured thirty-six times as great.

A statement of the number and nature of trading companies floated and registered in Victoria during the eight years' period 1894-1901, and during each of the last five years, is appended:—

Trading  
companies  
registered

### TRADING COMPANIES REGISTERED IN VICTORIA, 1894 TO 1906.

Nature of Company.	1894 to 1901.	1902.	1903.	1904.	1905.	1906.
<b>FINANCE—</b>						
Land, property, investment ...	14	5	5	...	5	...
Finance, agency, &c. ...	9	1	2	...	3	2
Insurance ...	2	1	...	2	1	...
<b>TRADE—</b>						
Cycling ...	13	...	...	2	2	...
Export ...	2	3	...	1	...	...
Produce ...	14	1	1	4	3	...
Supply and trading ...	10	2	5	5	6	10
Merchants' imports ...	20	6	2	1	5	5
<b>TRANSPORT—</b>						
Carrying ...	8	1	1	...	...	1
Railways and rolling-stock ...	5	...	...	...	...	1
Tramways ...	4	...	...	...	...	...
Steamship ...	3	2	2	1	...	1
Others ...	9	...	...	2	1	2
<b>INDUSTRIAL—</b>						
Bacon curing ...	6	...	...	1	...	...
Brewing ...	4	1	...	2	1	...
Bricks, tiles ...	5	1	...	...	...	...
Electric ...	5	...	...	2	3	...
Engineering, machinery ...	9	...	...	1	11	10
Explosives, &c. ....	5	...	...	...	...	...
Freezing ...	5	...	...	...	1	1
Manufacturing (undefined) ...	9	2	2	...	9	7
Tobacco ...	4	1	1	1	...	...
Preserving ...	10	...	...	2	...	...
Printing ...	5	1	1	...	3	1
Wine-making ...	4	...	2	...	...	...
Others ...	118	26	17	10	5	6
<b>PRIMARY PRODUCTION—</b>						
Cultivation ...	2	...	...	2	...	2
Dairying, &c. ...	76	2	5	16	8	4
Mining, prospecting, &c. ...	32	3	1	1	2	9
Gold saving, extracting, &c. ...	5	4	...	1	3	...
Pastoral ...	4	1	...	...	1	1
<b>MISCELLANEOUS—</b>						
Newspaper, magazine ...	19	3	1	5	1	2
Public halls ...	15	1	...	...	1	2
Other ...	63	1	8	14	10	8
<b>Total ...</b>	<b>518</b>	<b>69</b>	<b>56</b>	<b>76</b>	<b>85</b>	<b>75</b>

The figures in the above table refer only to companies registered under Part I. of the *Companies Act* 1890, and are, therefore, exclusive of ordinary mining companies, of which 236 were registered during 1906 under Part II. of the Act. Insurance companies doing life business only, as well as building societies, are also excluded. From the above figures, it may be ascertained that of the 879 new companies registered during the last thirteen years, 321, or 36 per cent., were industrial; 185, or 21 per cent., were connected with primary production; 123, or 14 per cent., with trade; 52, or 6 per cent., with finance; 44, or 5 per cent., with transport; whilst 154, or 18 per cent., were of a miscellaneous character, including newspapers, magazines, public halls, and various societies and associations. Those industrial companies, included under the term "others," are principally companies registered for the manufacture of a particular patented article, but include a number of companies formed for the manufacture of various commodities and for the treatment of natural products.

Number of existing companies.

According to records in the Registrar-General's office, there were 1,305 trading companies in 1906 actively engaged in the operations for which they were formed, as against 1,131 in 1905, 1,115 in 1904, 1,143 in 1903, 1,073 in 1902, 1,074 in 1901, 989 in 1900, 953 in 1899, 924 in 1898, 781 in 1897, and 799 in 1896 prior to which year this information was not obtainable. In addition to the above there were 14 insurance companies doing life business only in 1906, and a large number of mining companies, but how many is not known.

Co-operative Societies of Victoria.

An effort has been made for the first time to obtain particulars concerning co-operative societies registered under "Provident Societies Acts," and 24 of these societies have furnished returns for the year 1906. The total number of shareholders is shown to be 16,583, holding 72,062 shares. Of those whose class of business could be determined from the returns eleven with 1,723 shareholders and 11,734 shares were Farmers', Fruit-growers', or Market Gardeners' Associations; three were general distributors with 11,986 shareholders and 50,449 shares; one each belonged to the coach-building, bakery, fruit preserving, fishery, and meat supply businesses, and one was a Co-operative Credit Bank. From the returns of four companies the nature of their businesses could not be determined. It may be mentioned that the Civil Service Co-operative Society is by far the largest in Victoria, having 9,385 shareholders holding 32,597 shares. Of these societies at the end of 1906 the total liabilities were £132,717—paid-up capital £61,518, bank overdraft £8,877, reserve funds £5,790, sundry creditors £24,908, and other liabilities £31,624. The total assets amounted to £140,671—stock and fittings £67,846, sundry debtors £26,773, cash in hand or in bank £5,032, and other assets £41,020. Working expenses in 1906 amounted to £51,920.



## SOCIAL CONDITION.

## MELBOURNE UNIVERSITY.

The University of Melbourne was incorporated and endowed by an Act of the Governor and Legislative Council of Victoria, to which the Royal assent was given on 22nd January, 1853. The University buildings, together with those of the affiliated colleges, are situated on 106 acres of ground, in the southern part of Carlton. The University consists of a Council and Senate, and is incorporated and made a body politic with perpetual succession. It has power to grant degrees, diplomas, certificates, and licences in all faculties except divinity. The Council consists of twenty members elected by the Senate for a term of five years, together with three members appointed by the Governor in Council. It elects two of its members to be Chancellor and Vice-Chancellor respectively. The Senate consists of all male persons who have graduated doctor or master in the University. It elects a Warden annually from its members. Control and management are in the hands of the Council. Council and Senate conjointly make statutes and regulations. There is no religious test for admission. By Royal letters patent of 14th March, 1859, it is declared that the degrees of the University of Melbourne shall be as fully recognised as those of any University in the United Kingdom. Scholarships, exhibitions, and prizes are provided in all the principal subjects, the cost being defrayed partly out of University funds and partly by private bequests. In the matter of endowment by private persons, the Melbourne University does not, however, compare favorably with others. The Act of 1853 provides for an endowment of £9,000 annually for maintenance and management. Additional grants have been voted annually by Parliament for maintenance, and from time to time for building purposes. Since 1853 the total amount received from the Government was £784,967—£168,467 for building and apparatus, £500,500 endowment under "Special Appropriation Act," 16 Vict. 34, and £116,000 additional endowment by annual votes of the Legislature. By Act No. 1926 of 1904 an additional endowment of £11,000 annually is provided for a period of ten years, conditionally on the University undertaking teaching in agriculture and mining, and granting a number of free scholarships to pupils from the primary schools; also £1,000 on condition that Evening Lectures are held at the University. In addition, the Council derives income from the fees paid by students for lectures, examinations, certificates, and diplomas. These are charged as follow:—

- For the degree of Bachelor of Arts, £12 12s. per annum.
- For the degree of Bachelor of Science, £21 per annum.
- For the degree of Bachelor of Laws, £12 12s. for each of the 1st and 2nd years; £25 4s. for each of the 3rd and 4th years.
- For the degree of Bachelor of Medicine and Surgery, £22 per annum.
- For the degree of Bachelor of Civil Engineering, Bachelor of Electrical Engineering, Bachelor of Mining Engineering, Bachelor of Mechanical Engineering, £18 18s. for the 1st year; £21 for the 2nd year; £25 4s. for each of the 3rd and 4th years.

For the degree of Bachelor of Music and Diploma in Music, £12 12s. per annum.

For the degree of Bachelor of Agriculture, £21 per annum.

For the degree of Bachelor of Dental Surgery, fees are paid to the Australian College of Dentistry.

For the course for Diploma of Education, £6 6s. per annum for Students of the Education Department, and Special Fees for other Students, according to subjects taken.

For the Diploma of Agriculture, £21 per annum.

For the Diplomas in Mining and in Metallurgy, £18 18s. for the 1st year, £21 for the 2nd year, and £25 4s. for the 3rd year.

For the Diploma in Architecture, £12 12s. per annum.

For single subjects, special fees are charged, ranging from £3 3s. each annually for Art subjects to £21 for Science subjects, in which laboratory work plays a great part.

For admission to degrees, £7 7s. is payable by bachelors, £10 10s. by masters, £5 5s. for any *ad eundem* degree.

For any diploma, £3 3s. is the fee.

For certificates of matriculation, attendance upon lectures, &c., special small fees are charged.

Matricula-  
tion and  
attendance  
at lectures.

The number of students who presented themselves for the matriculation examination, the number that passed, as well as those matriculated, who entered the Melbourne University as undergraduates, and the number attending lectures, in each of the five years 1902 to 1906 were:—

#### MATRICULATION AND ATTENDANCE AT LECTURES, 1902 TO 1906.

Year	Number Presented for—		Students who passed the Matriculation Examination.		Number Matriculated and Admitted as Under-graduates.	Number attending Lectures.
	Matriculation Examination.	Less than Required number of Subjects.	Number.	Percentage.		
1902	1,415	368	490	46·8	124	621
1903	1,566	367	478	39·9	111	628
1904	1,532	370	490	42·2	131	615
1905	1,671	433	493	39·8	195	802
1906*	746	262	224	44·6	197	860

\* May only.

In May, 1906, the last matriculation examination was held, and the new system of junior and senior public and commercial examinations was introduced in December, 1906. Under the regulations, the rights of all candidates who had passed any subject at any previous matriculation examination were reserved, and at the December, 1906, examination, 70 candidates passed that examination.

For the junior public, junior commercial, and matriculation examinations, 1,179 presented themselves; of these, 914 attempted to pass the respective examinations in the required number of subjects, and 356, or 39 per cent., were successful.

For the senior public examination, 196 presented themselves; of these, 66 attempted to pass, and 33, or 50 per cent., were successful.

Of the 860 students who attended lectures in 1906, 194 attended in Arts, 74 in Laws, 63 in Engineering, 284 in Medicine,

34 in Science, 92 in Music, 55 in Education, 61 in Dentistry, one in Mining, one in Metallurgy, and one in Agriculture.

The number of degrees taken in 1906 was 183, 166 of which were direct and 17 *ad eundem*, as against a total of 753 for the five preceding years, or an average of 150 per year. The direct graduates numbered 722, and the *ad eundem* degrees 31 in the five preceding years. Of the total number of 3,958 degrees conferred, 326 were conferred on women, 323 of which were direct and three *ad eundem*; and 160 of which were the degree of Bachelor of Arts, 74 Master of Arts, 38 Bachelor of Medicine, one Doctor of Medicine, 30 Bachelor of Surgery, two Bachelor of Laws, one Doctor of Science, eleven Bachelor of Science, eight Master of Science, and one Bachelor of Music. The following table shows the number of degrees conferred at the University between the date of its first opening and the end of 1906—the years 1905 and 1906 being shown separately:—

## DEGREES CONFERRED.

Degrees.	Prior to 1905.			During 1905.			During 1906.			Total.		
	Direct.	<i>Ad eundem</i> .	Total.	Direct.	<i>Ad eundem</i> .	Total.	Direct.	<i>Ad eundem</i> .	Total.	Direct.	<i>Ad eundem</i> .	Total.
Bachelor of Arts ...	823	107	930	18	...	18	26	3	29	867	110	977
Master of Arts ...	459	160	619	11	2	13	23	6	29	493	168	661
Bachelor of Medicine	635	14	649	27	1	28	38	...	38	700	15	715
Doctor of Medicine ...	99	100	199	9	...	9	11	7	18	119	107	226
Bachelor of Surgery	547	3	550	26	1	27	36	...	36	609	4	613
Master of Surgery ...	14	...	14	1	...	1	...	...	...	15	...	15
Bachelor of Laws ...	320	9	329	6	...	6	8	...	8	334	9	343
Master of Laws ...	60	3	63	2	...	2	4	...	4	66	3	69
Doctor of Laws ...	15	20	35	...	...	...	...	...	...	15	20	35
Bachelor of Engineering	127	2	129	5	...	5	6	...	6	138	2	140
Bachelor of Mining Engineering ...	3	...	3	...	...	...	4	...	4	7	...	7
Master of Engineering	67	...	67	...	...	...	1	...	1	68	...	68
Bachelor of Science ...	37	3	40	5	...	5	3	...	3	45	3	48
Master of Science ...	16	1	17	1	...	1	4	...	4	21	1	22
Doctor of Science ...	2	4	6	1	2	3	1	1	2	4	7	11
Bachelor of Music ...	3	2	5	...	...	...	...	...	...	3	2	5
Doctor of Music ...	...	2	2	...	...	...	...	...	...	...	2	2
Bachelor of Dental Surgery ...	...	...	...	...	...	...	1	...	1	1	...	1
Total ...	3227	430	3657	112	6	118	166	17	183	3505	453	3958

### AFFILIATED COLLEGES.

The  
affiliated  
colleges.

The permission accorded by the "University Act of Incorporation" for the establishment of affiliated colleges has been taken advantage of by the clergy and people of the Church of England, and of the Presbyterian and Methodist Churches of Victoria. Large residential colleges have been built upon the sites reserved for this purpose, which are situated in the northern portion of the University grounds, fronting Sydney-road and College-crescent, Carlton. These colleges, which admit students without regard to their religious beliefs, maintain efficient staffs of tutors and lecturers for the teaching of the principal subjects in each of the University courses. They also provide training for the ministers of their respective denominations. The Roman Catholic body has not yet erected a college upon its site in Madeline-street. In 1906, the Australian College of Dentistry was formally affiliated to the University, which obtained certain rights of supervision and control, and in return undertook to recognise the professional teaching of the College for the purpose of the newly-instituted Degree of Bachelor of Dental Surgery.

Trinity  
College.

The Anglican Church was the first to avail itself of the right. In 1869, Bishop Perry (then Lord Bishop of Melbourne), assisted by Professor Wilson and others, undertook to raise the funds required for the college buildings. Their efforts were crowned with success, and the building of Trinity was commenced in the following year. Its progress was remarkably rapid, and in 1877 it was found necessary to increase the accommodation for students. In 1883 the Clarke buildings were erected by Sir W. J. and Mr. Joseph Clarke, and additions have been repeatedly made since that time. In 1886, Trinity College Hostel, for resident women students of the college, was established by the present Warden, and was carried on until 1890 in houses rented by him. In 1890, mainly through the munificence of Janet Lady Clarke, the Hostel was supplied with permanent buildings erected within the College precincts, and named "The Janet Clarke Buildings." The Hostel forms an integral part of Trinity College, and the women students of the college consequently enjoy all its educational advantages on equal terms with the men students. The Hostel, like the College itself, is open to students of all religious denominations. The college buildings consist of a chapel, dining hall, chemical and biological laboratories, lecture-rooms, libraries, and students' common-room, in addition to apartments for the Warden, tutors, and students. Fresh additions are now contemplated in consequence of the great increase in the number of students seeking admission, many of whom it is necessary to refuse each year. The Warden of the college is Dr. A. Leeper, M.A., LL.D., late of Trinity College, Dublin, and of St. John's College, Oxford, who is assisted by a staff of ten tutors and lecturers. The college annually holds, in the month of November, an examination for open scholarships and exhibitions.

Ormond  
College.

In 1877, the General Assembly of the Presbyterian Church in Victoria appointed a committee to take charge of the site in its

interests. Shortly afterwards it was resolved to raise subscriptions, to obtain the Crown grant for the land, and to proceed with the erection of a college. When £6,000 was subscribed for the purpose, Mr. Francis Ormond offered £10,000, provided that the Church obtained £10,000 from other sources, and in less than a year the Council were in a position to receive Mr. Ormond's subscription. The buildings were at once commenced, and the college opened in March, 1881. It was then announced that Mr. Ormond would bear the whole expense of the structural part of the building, so that the remaining subscriptions could be entirely devoted to payments for fittings, improvements, repairs, &c. In 1883 the buildings were enlarged. In 1887 Mr. Ormond erected the Victoria wing, in honour of the late Queen's Jubilee. The buildings comprise lecture and reading-rooms, common-room, and masters', tutors', and students' quarters. They form a college of residence for students attending the University of Melbourne in Arts, Science, Law, Medicine, Engineering, Mining, and Agriculture. The college is open to members of all religious denominations. In it are delivered the lectures of the Theological Hall of the Presbyterian Church of Victoria for the training of ministers of that church. The theological course covers three years after a student has taken his B.A. degree in the University, and the lectures are given by a staff specially set apart for that purpose. Mr. Ormond's benefactions, amounting to £41,780 during his lifetime, were increased under his bequest to a sum which will ultimately amount to £100,000. The college bears the name of this generous donor. The master is Dr. J. H. MacFarland, M.A., LL.D.

The Conference of the Wesleyan Church in Victoria, in 1878, appointed a committee to arrange for the building of a college. A request for donations met with a generous response, the first donor being Sir William McArthur, who made a gift of £1,000. The work of erecting the college was not, however, commenced until 1887. It was formally opened in March, 1888. The strenuous efforts of the Rev. W. A. Quick, in the establishment of the college, entitle him to the honour of being practically its founder. In 1889 large additions were made to the buildings, which now comprise fully equipped lecture-rooms, laboratories, library, reading-rooms, and apartments for the master, tutors, and students. Further additions were made in 1905, and the college is now capable of holding about 50 students and tutors. The master is the Rev. E. H. Sugden, M.A., B.Sc.

Queen's  
College.

#### UNIVERSITY EXTENSION.

The system of local lectures and classes, known as University Extension, which has been in vogue in England for nearly 40 years, and has more lately been introduced into the countries of Europe and the United States, was organized in Victoria in 1891, under a board appointed by the Melbourne University. The system aims at bringing teaching of the scope and standard of that given at the University itself within the reach of the numerous and constantly growing class of people whose position in life prevents them from

University  
extension.

attending lectures there, but who wish to devote their leisure to systematic reading and study. To these, material assistance is given by formal lectures, illustrated, where the subject requires it, by demonstrations and experiments, informal classes and discussions, checking written essays, and examinations, by men of special training. By thus systematizing the knowledge of the extension students, guiding their reading, and suggesting new methods and new directions of inquiry, the higher education is imparted to them. The lectures are not of the ordinary popular kind. Their primary object is education, they seek to instruct and stimulate rather than to entertain; at the same time, they endeavour to avoid pedantry and dullness. The lectures are delivered in courses, and thus fairly wide subjects may be treated with some approach to thoroughness. The work is carried on by local committees, both in Melbourne and suburbs, and in urban centres, acting in conjunction with the Central Board. This body supplies a list of suitable courses of lectures by competent and approved lecturers, and the local committee chooses the lecturer and subject. In 1904 there were eight centres, eight courses of lectures, and 950 students enrolled. In 1905 and 1906 respectively only five centres were active, and five courses of lectures were delivered.

#### THE STATE EDUCATION SYSTEM.

The education system of Victoria.

The present system of "free, compulsory, and secular" education came into operation on the 1st January, 1873, the Act having been passed the previous year, being subsequently, with two Amending Acts passed in 1876 and 1889, consolidated in the *Education Act* 1890, which in turn has been amended by Act No. 1777, passed in December, 1901, and Act No. 2005 passed in December, 1905. Before the inception of the present system, several different systems were tried. Prior to 1848 education was left to private enterprise; but in that year a denominational system was introduced and administered by a Board, subsidy being granted by the State. Under that system, religious as well as secular instruction was imparted by the teachers—the former being given according to the principles of the denomination to which the school was attached, the clergy of which also exercised control over the instruction imparted. On the separation of Port Phillip district from New South Wales in 1851, a Board of National Education was established in the new Colony of Victoria "for the formation and management of schools to be conducted under Lord Stanley's National System of Education, and for administering the funds in connexion therewith." There were thus two systems of education under separate boards in operation at the same time, which duplicate system continued in force until 1862, when it was abolished as being cumbrous and costly. The *Common Schools Act* 1862 transferred the powers of both boards to a single Board of Education, provided a limit to the distance between which schools might be established, and fixed a minimum of scholars a school must have in order to entitle it to State aid; it prescribed, moreover, that four hours each day must be set apart for secular instruction, and that no child be refused admission to

any school on account of its religious persuasion. Although this Act caused some improvement, it was not designed to abolish denominationalism, nor did it reduce the number of small schools to any appreciable extent. It continued in force, however, for ten years, when it was repealed by the present Act in 1872. Under these systems, a fee ranging from 6d. to 2s. 6d. weekly was charged to all children except those whose parents were in destitute circumstances. Under the Act of 1872, education was made free to all willing to accept it; compulsory, in the sense that, whether accepted or not, evidence must be produced that all children are educated up to a certain standard; and secular, no teacher being allowed to give other than secular instruction in any State school building. Facilities are, however, afforded to the clergy of any denomination to assemble any of the children of the parents who desire it in a school-room and impart religious instruction.

In each school four hours at least are set apart during each school day for secular instruction, two hours of which are to be before, and two hours after, noon. Secular instruction, in the case of children over nine years of age, includes the teaching of some recognised lesson-books on the laws of health and lessons from some recognised temperance lesson-books.

Main details  
of the  
system.

Parents and custodians of children not less than six nor more than fourteen years of age (up to 31st December, 1905, the statutory age was from six to thirteen years), are required to cause such children to attend a State school for not less than eight half-days in any week, in which the school is open for ten (10) half-days. Non-attendance may be excused for any of the four following reasons:—(1) If the child is receiving efficient instruction in some other manner, and is complying with the prescribed conditions as to regularity of attendance; or (2) has been prevented from attending by sickness, fear of infection, temporary or permanent infirmity, or any unavoidable cause; or (3) is twelve years of age, and has been educated up to the standard, or has been excused by a general or particular order of the Minister; or (4) that there is no State school within one, two, two and a half, or three miles in the case of children under seven, between seven and nine, between nine and eleven, and over eleven years of age respectively. In regard to the latter cause, however, in cases where schools are closed through low average attendance, or where, though there is no school, the number of children would warrant the department in establishing a school, allowances are made by the department for the conveyance of children to the nearest school. The amount of the allowance is 3d. per day for children over six and under twelve who reside between two and a half and three miles from the nearest school, or 4d. per day for all children over six and under thirteen who reside three miles or over from the nearest school. Parents and custodians who fail to make a child attend as provided may be summoned and fined 5s. for the first, and between 5s. and £1 for each subsequent offence, or in default seven days' imprisonment; and truant officers are appointed to see that the compulsory provisions are carried out.

Compulsory  
clauses.

**Boards of Advice.**

There are at present 369 school districts, in each of which a Board of Advice is elected every three years by the ratepayers in the district, the members of such boards being seven or five according to the size or importance of the district. The main functions of a Board of Advice are :—To report on the condition of schools and premises, whether new ones are required, and as to books, furniture, gymnastic appliances or other requirements ; to suspend teachers for misconduct, and report cause to the Minister ; to visit schools, record the number present, and its opinion as to the general condition and the management of the schools in the district ; and to endeavour to induce parents to send their children regularly to school, to compare the attendance with the roll, and report names of parents who fail to comply with the compulsory clauses.

**Free subjects.**

The following are the subjects in which instruction is absolutely free :—Reading, writing, arithmetic, grammar, geography, history, drill, singing, drawing, elementary science, manual training, gymnastics, and swimming where practicable ; lessons on the laws of health and on temperance previously mentioned ; and needlework, and, where practicable, cookery, and domestic economy for girls. Pupils buy their own books and material. To cover the cost of the latter for paper work and cardboard modelling, 1d. per week is charged, and for woodwork 2d. per week. For instruction in other branches, fees are charged to the parents, and the teacher is entitled to such fees if the inspector is satisfied with the instruction imparted.

**New free subjects.**

In the latter half of 1902, a revised programme of free instruction was issued, the provisions of which are such as to secure a more realistic treatment than formerly of the essential subjects of school education, and a larger share of attention to the training of the hand and eye through manual instruction in various forms. The requirements from teachers of infants were also made such as to secure methods of teaching in accord with the principles enunciated by Froebel, the founder of the kindergarten system. Great activity has been displayed in the training of teachers for the new work. During the past few years hundreds of country teachers have been instructed, at the University and Training College, in such subjects as drawing, brush-work, paper-work, cardboard modelling, kindergarten, experimental science, and nature-study ; while, at centres throughout the State, Saturday classes have been held in several of these subjects.

**Drill, swimming, school gardens, &c.**

There were, on the 30th June, 1906, 18 Sloyd centres in operation, having accommodation for 3,740 boys ; and twelve cookery centres, having accommodation for 1,560 girls. Military drill receives a large share of attention, and the older boys of the larger schools are enrolled in corps and provided with light rifles. The teaching of swimming is organized when practicable, the children being formed into swimming clubs, which hold annual competitions at Melbourne and Geelong. The cultivation of school gardens and the study of the elements of agriculture are warmly encouraged by the Department's officers ; and every facility is made for the celebration of arbor days.

**Extra subjects.**

The following are the extra subjects and the fees chargeable :—Latin, French, German, and painting, for which the fee must not



exceed one shilling weekly; natural science (other than that provided in the course of free instruction) Euclid, algebra, trigonometry, fancy work, elocution, shorthand, and typewriting, fee not exceeding sixpence weekly; and bookkeeping and calisthenics, fee not exceeding threepence weekly; and such other subjects as may be approved by the Director. The instruction in extra subjects must be given so as not to interfere with the ordinary free instruction.

Yearly examinations are held to determine the quality of the work done by teachers, to award merit certificates, and to grant certificates of exemption from compulsory attendance to children who present themselves. The subjects of examination for the latter certificates are:—Reading, writing, spelling, composition, and arithmetic; and any child over 12 years of age who wishes exemption from further compulsory attendance may be so exempt on passing this test. Half-yearly examinations are also held for the examination of children not attending State schools who desire to prove that they are educated up to the standard.

Male teachers are divided into eight classes and female teachers into seven classes, there being no female teachers in the first class. The salaries for males, excluding junior teachers, range from £100 to £415, and those for females excluding junior teachers and sewing mistresses, from £80 to £200. The system of payments by way of results was finally abolished by Act No. 2006, which came into force on the 1st January, 1906. In addition to the head and assistant teachers, there are four classes of male and female junior teachers, with salaries ranging from £20 to £50 and from £16 to £40 respectively. Sewing mistresses receive £30 yearly.

The following statement shows the progress as regards State schools, teachers, and scholars since 1872. The figures relating to the number of schools and teachers refer to 30th June, and those relating to the number of scholars to the financial year ended 30th June, for the last five years, and to the years ended 31st December for all previous returns:—

STATE SCHOOLS, ENROLMENT AND ATTENDANCE, 1872 TO 1905-6.

Year.	Number of Schools.	Number of Instructors.	Number of Scholars.		
			Enrolled during the Year.	In Average Attendance.	Distinct Children (estimated).
1872 ...	1,049	2,416	136,055	68,456	113,197
1880 ...	1,810	4,215	229,723	119,520	195,736
1890 ...	2,170	4,708	250,097	133,768	213,886
1898 ...	1,877	4,618	238,357	134,976	212,164
1899 ...	1,892	4,808	239,732	143,844	214,522
1900 ...	1,948	4,977	243,667	147,020	218,240
1901-2 ..	2,041	5,066	257,355	150,939	228,241
1902-3 .	1,988	5,037	251,655	150,268	224,178
1903-4 ...	1,922	4,797	241,145	145,500	214,822
1904-5 ...	1,935	4,689	234,614	143,362	210,200
1905-6 ...	1,953	4,598*	229,179	142,216	203,119

In addition to these teachers, 166 were temporarily employed on the 30th June, 1906.

Fluctuations  
in the  
number of  
schools and  
scholars.

The decrease in the number of schools and of scholars has arisen from several causes. Between 1890 and 1898, and between 1902 and 1904, many very small schools were closed or worked on the part-time system. In cases where the schools were closed, an allowance of 3d. to 4d. per day was made to enable parents to have the children of school age conveyed, where practicable, to neighbouring schools. The fluctuations in the enrolment and average attendance were due to such causes as sickness or variation in the birth rate, with consequent variation in the number of children of school age in any given year. In the year 1905-6, a considerable increase took place in the number of children enrolled at private schools.

Ages of  
State  
school  
scholars.

The following are particulars of the number and percentage of distinct children attending State schools, below, at, and above the school age (6 and under 14), during the year 1905-6:—

#### AGES OF DISTINCT CHILDREN.

Ages.	Distinct Children Attending—					
	Day Schools.		Night Schools.		Total.	
	Number.	Per-centage.	Number.	Per-centage.	Number.	Per-centage.
Under 6 years ...	10,662	5·27	...	...	10,662	5·25
6 to 14 " ...	169,609	83·86	...	...	169,609	83·50
14 years and upwards ...	21,972	10·87	876	100	22,848	11·25
Total ...	202,243	100·00	876	100	203,119	100·00

Net  
enrolment  
in Australia  
and New  
Zealand.

In the following return will be found a comparative statement for the year 1905, showing, for the various States of the Commonwealth and for New Zealand, the mean population, the net enrolment of children in State and private schools, and the percentage of such enrolment to the population. The percentage in the Commonwealth is 19.69 (16.15 per cent. in State, and 3.54 in private schools), and in New Zealand 18.30 (15.92 per cent. in State, and 2.38 in private schools). The highest enrolment in State and private schools is in Victoria, 20.89 per cent., New South Wales coming next with 20.21.

#### NET ENROLMENT OF SCHOLARS IN STATE AND PRIVATE SCHOOLS IN AUSTRALIAN STATES AND NEW ZEALAND, 1905.

State.	Mean Popula- tion.	Net Enrolment of Scholars —all Ages.			Percentage of Population.		
		State Primary Schools.	Private Schools.	Total.	State Primary Schools.	Private Schools.	Total.
Victoria ..	1,212,517	210,200	43,014	253,214	17·34	3·55	20·89
New South Wales ..	1,474,313	238,629	59,275	297,904	16·19	4·02	20·21
Queensland ..	525,728	88,903	14,891	103,794	16·91	2·83	19·74
South Australia ..	374,742	59,135	9,357	68,492	15·78	2·50	18·28
Western Australia ..	250,207	27,978	7,353	35,331	11·18	2·94	14·12
Tasmania ..	179,259	24,082	8,323	32,405	13·43	4·64	18·07
Total Australia ..	4,016,766	648,927	142,213	791,140	16·15	3·54	19·69
New Zealand ..	870,000	138,471	20,699	159,170	15·92	2·38	18·30

The cost of primary instruction, including the expenditure on buildings, in the Commonwealth and in New Zealand for the year 1905, is set out below. The average cost per scholar in Australia is £4 19s. 10d., and in New Zealand £4 17s. 6d. The cost for 1904 was—Australia £4 18s. 2d.; New Zealand, £4 10s. 10d.

**COST OF PRIMARY INSTRUCTION IN AUSTRALIA AND NEW ZEALAND, 1905.**

State.	Scholars in Average Attendance.	Expenditure—			Per Head of Scholars in Average Attendance.	
		On Administration and Maintenance.	On Buildings.	Total.	Including Buildings.	Excluding Buildings.
					£ s. d.	£ s. d.
Victoria ..	143,362	£ 676,238	£ 28,656	£ 704,894	4 18 4	4 14 4
New South Wales ..	153,953	781,156	57,294	838,450	5 8 11	5 1 6
Queensland ..	68,780	281,575	11,584	293,159	4 5 3	4 1 11
South Australia ..	41,868	147,804	9,094	156,898	3 14 11	3 10 7
Western Australia ..	23,703	131,585	35,495	167,080	7 1 0	5 11 0
Tasmania ..	14,122	60,647	4,504	65,151	4 12 3	4 5 11
Total Australia	445,788	2,079,095	146,627	2,225,632	4 19 10	4 13 3
New Zealand ..	116,506	466,407	101,583	567,990	4 17 6	4 0 1

The items taken into consideration in compiling the expenditure are:—Instruction in day and night schools in primary subjects, as defined by Acts of Parliament, cost of training, cost of administration, cost of buildings, rent, and pensions and gratuities.

The number of private schools, instructors in same, and individual scholars in attendance in 1872, the year before the adoption of the present secular system, for a number of subsequent years, and for the latest year available, was:—

**PRIVATE SCHOOLS AND ATTENDANCE, 1872 TO 1905-6.**

Year. (4th Quarter.)	Number of Schools.	Number of Instructors.	Number of Individual Scholars.
1872	888	1,841	24,781
1880	643	1,516	28,134
1890	791	2,037	40,181
1898	945	2,440	43,926
1899	901	2,417	48,854
1900	884	2,348	48,483
1901-2	872	2,379	43,182
1902-3	798	2,369	42,695
1903-4	787	2,360	42,214
1904-5	771	2,289	43,014
1905-6	757	2,397	48,732

Primary instruction cost per scholar.

Private Schools 1872 to 1905-6.

Scholars  
attending  
State and  
private  
schools.

On comparing the number of scholars with the number attending schools, it is seen that 19 per cent. of the scholars attending school during 1905-6 attended private schools, and the balance, 81 per cent., attended State schools.

#### TRAINING COLLEGE.

College for  
training  
teachers.

A State College for the training of teachers is situated in the corner of the University grounds, Carlton. It provides courses for Kindergarten or Infant schools, Primary or State schools, and Secondary schools. In connexion with the first two courses special certificates are issued, and in connexion with the third the University of Melbourne grants a special diploma. The course for the diploma is purely a University one, but the work in education, both theoretical and practical, is done by the Training College principal, assisted by the lecturers. Each of the above-named courses extends over two years. Lectures and lessons are given in education, kindergarten principles, psychology, English language and literature, British history, Latin, mathematics, science, nature-study, music, drawing, manual training, gifts and occupations, domestic economy, and gymnastics. Criticism lessons in connexion with all the courses are held weekly, and full opportunity is given to every student either at the practising or associated schools of gaining experience in the practical work of his profession. The majority of the students attending the Training College belong to the State schools. These have been either classified teachers or pupil teachers, and they hold studentships gained by competitive examination, which entitle them to free instruction. If they reside at the college they must pay £12 per annum towards the expense of their board and residence, but on the other hand they receive a grant of the same amount from the State each year; if they reside at home they are entitled to an allowance of £18 per annum towards board and residence. Holders of State school exhibitions may be granted a studentship for any two years during the currency of their exhibition, but without allowance for board and residence (other than that payable to them as exhibitors). Studentships, not exceeding five in number in any one year, may be granted to persons who have passed the matriculation examination of the Melbourne University, or an approved equivalent, who are at least eighteen years of age, and who have been classed as meritorious in the competitive examination above mentioned. Such students will be entitled to tuition in the course of instruction at the College free of expense, but without any allowance for board and residence. Every student will be required to enter into an agreement, by himself and an approved surety, not to relinquish his course of training without the permission of the Minister, and for four years after the termination of his studentship to teach in any school to which he may be appointed. Visiting students other than above may, on payment of a fee of £10 per annum, be admitted to the course of instruction at the Training College; or, on payment of a fee of £4 4s. per annum, to the course of instruction in education only; or, on payment of a fee of £6 6s. per annum, to the course for the Kindergarten certificate. The fees for the Diploma of Education are payable to the University.

## SCHOLARSHIPS AND EXHIBITIONS.

Any person may collect, raise, or give a sum of money towards founding a scholarship or exhibition in connexion with any particular State school; and money or land, or both, may be bequeathed for that purpose. By an amended regulation of 13th December, 1904, the Minister of Public Instruction may annually award eighty scholarships, each tenable for three years. Of these, forty are open to State school pupils, for the purpose of facilitating their higher education in the general work of the University or the science work of the Technical school; and forty to pupils of State or other schools, to enable them to proceed to a diploma or degree in mining or agriculture at the University. The scholarship holders are to become students in a State continuation school, or an approved secondary school or college, and to obtain at the end of each year a satisfactory report of conduct and progress. Under specified conditions, cost of transit (not exceeding £5 per annum) may be allowed to a student who resides with his parents or guardians more than five miles from the school. Where it is impracticable for the student to reside with his parents or guardians, the Minister may make an allowance of £26 for board and residence, instead of the transit allowance. Scholars while attending approved secondary schools and colleges are granted an allowance of £8 per annum toward the expenses of their tuition. Holders of scholarships will be admitted free of cost as pupils in continuation schools, and receive instruction in such subjects as the Minister determines. The Minister may cancel any scholarship where the conditions are not observed, or where the scholar is guilty of disorderly or immoral conduct. Examinations were held in December last. Those candidates returned as meritorious will be permitted to make such arrangements as they please with the teachers of secondary schools, and with satisfactory progress reports and examinations, they will, in due course, be eligible to attend examination for an exhibition. The holders of scholarships whose age does not exceed seventeen years and six months who have attended regularly at an approved secondary school or college for the preceding two years, from the authorities of which good reports have been obtained, and who have passed the matriculation examination at the University, are eligible to compete for forty exhibitions annually awarded by the Department. The exhibitions are allotted on competitive examination conducted by the University authorities in four of the subjects prescribed for the Senior Public examination of the Melbourne University. Twenty of the exhibitions are of the annual value of £40, tenable for three years at technical schools, or for four years at the Melbourne University. The other twenty exhibitions entitle their holders to free tuition at the Melbourne University in the subjects prescribed for a degree or a diploma in Mining or in Agriculture. Such exhibitioners may also receive an allowance of £26 per annum, provided that the net income of their parents or guardians does not exceed £250 per annum.

Scholarships  
and exhibi-  
tions.

## DEFECTIVE CHILDREN.

Defective  
children.

At the present time, the question of the education and training of defective and imbecile children is receiving considerable attention, both from philanthropic bodies as well as from the State. It is, however, felt that some legislative amendments will be necessary before anything like efficient administration can be secured. It must be pointed out that imbecile children are at present dealt with under the Lunacy Act, which makes no provision for the inspection and management of the high grade imbecile, just as in the same way it makes no provision for the borderline mental case. In fact, the Lunacy Act recognises nothing but sane or insane, idiot or normal child.

In England and in other countries there are separate enactments for imbeciles, providing for certification or notification of a far less elaborate character than that provided for the insane. In this State, too, a curious anomaly exists: if an imbecile child has been admitted to the Industrial Schools, and it is found necessary to transfer such child to the Idiot Asylum at Kew, the change is effected by a warrant from the Chief Secretary. The imbecile child becomes a criminal lunatic, and cannot be discharged unless the medical officers certify that the child is no longer a lunatic.

But, apart from these defects, legal powers are very necessary in order that the State may be able to take, maintain, and educate any backward, defective, or imbecile child. It must be recognised that the imbecile is a menace to the establishment of a healthy nation if efficient means are not taken to prevent the imbecile from reproducing his or her kind. To do this, it will be necessary to provide training and industrial colonies for such defectives, and the only defectives' institution in Victoria—the Kew Idiot Asylum—can do this in only a limited way. It deals principally with the lower grade of cases, such as are not at all likely to reproduce their kind; the larger portion of its population consists of small children, with an admixture of older imbeciles who have never advanced beyond their childlike or infantile condition of mind. The majority of these cases go on to the Hospitals for the Insane, and are lost in the chronic wards, and but a very small proportion improve so greatly as to go out into the world and to earn their own living. A certain proportion, however, make some lesser degree of improvement, and are capable of being almost self-supporting, if protected, guided, and controlled. The higher grade cases are those most needing advanced legislation and some protective accommodation; for it should be recognised as a certain fact that the higher grade of these cases and the more closely allied to the normal are the very cases which offer the greatest menace to the health and sanity of the population. Young females of this class when at large are more likely than any others to become mothers of illegitimate children, who will reproduce, probably in an accentuated form, the defects of their parents. The dangers from the unrestricted freedom of imbecile young men and boys are equally well recognised. In fact, preventive legislation is necessary to safeguard the reproduction of their

species by all inherited cases of insanity, epileptics, chronic inebriates, and imbeciles, for, without doubt, from these degenerates will spring numbers of the criminal class, as well as degenerates worse than their parents.

It will therefore be necessary to provide some place for the segregation of these persons, and modern authorities are agreed on the practical utility of the industrial and educational colony. As exemplifying the necessity for such a colony, as well as pointing out the part that alcohol plays in race deterioration, it will be as well to quote the figures given by Dr. Branthwaite in his annual report on the English Inebriates Act, which he administers. Of 1,873 cases admitted, he classifies as follows:—

1. Insane: certified and sent to asylums	...	48
2. Very defective: imbeciles, degenerates, and defectives	... ..	271
3. Defective, but less than above: silly, dull, eccentric, senile, &c.	... ..	857
4. Of average mental capacity	... ..	697
Total	... ..	1,873

It will be seen therefore that 63 per cent. of the admissions to the various Inebriate Retreats in England were defective in some greater or lesser degree.

The formation of Inebriate Retreats and Epileptic Colonies will do much to alleviate the condition of the sufferers from these disorders, but for the younger children, and the markedly defective imbecile and idiotic, there can be no place but the Idiot Asylum. Nothing can be more certain than the unwisdom of sending these cases into the wards provided for the chronic insane; so that, overcrowded as its wards are at present, it cannot be but recognised that the Idiot Asylum at Kew is doing a good work in maintaining these children and in educating them as far as possible. The following statement contains particulars of the numbers under treatment in this institution during the past two years:—

#### IDIOT ASYLUM AT KEW.

At end of Year 1905.	Males.	Females.	Total.
Patients in the Asylum ... ..	165	143	308
„ on trial leave ... ..	7	5	12
„ boarded out ... ..	2	2	4
Patients on Asylum books ... ..	174	150	324
During 1905—Admitted ... ..	13	20	33
„ Relieved ... ..	4	...	4
„ Died ... ..	20	9	29

IDIOT ASYLUM AT KEW—*continued.*

At end of Year 1906.					Males.	Females.	Total.
Patients in Asylum	...	...	...	...	170	145	315
„ on trial leave	...	...	...	...	13	7	20
„ boarded out	...	...	...	...	2	...	2
Patients on Asylum books	...	...	...	...	185	152	337
During 1906—Admitted	...	...	...	...	16	18	34
„ Relieved	...	...	...	...	1	1	2
„ Died	...	...	...	...	1	6	7

## CENSUS RETURNS.

Education of  
the people,  
census  
1901.

The following statement, taken from the returns of the census of 1901, shows the number and percentage of persons (excluding Chinese and aborigines) in the State at different ages who could read and write, who could read only, or who were unable to read :—

## EDUCATION OF THE PEOPLE, 1901.

Ages.		Numbers in 1901.				Number in every 100 at each age in 1901.		
		Able to read and write.	Able to read only.	Unable to read.	Total.	Able to read and write.	Able to read only.	Unable to read.
Under 6 years	..	4,811	5,237	146,796	156,844	3·07	3·34	93·59
6 to 13	..	175,797	8,046	11,251	195,094	90·12	4·12	5·76
13 „ 15	..	50,547	65	220	50,832	99·44	·13	·43
15 „ 25	..	222,076	239	1,245	223,560	99·34	·10	·56
25 „ 35	..	187,879	288	1,512	189,679	99·05	·15	·80
35 „ 45	..	155,206	650	1,994	157,850	98·32	·41	1·27
45 „ 55	..	76,480	1,120	2,350	79,950	95·66	1·40	2·94
55 „ 65	..	52,808	1,986	2,994	57,788	91·38	3·44	5·18
65 years and upwards	..	54,809	3,776	4,865	63,450	86·38	5·95	7·67
Unspecified adults	..	1,647	27	45	1,719	95·81	1·57	2·62
All ages	..	982,060	21,434	173,272	1,176,766	83·46	1·82	14·72
15 years and upwards	..	750,905	8,086	15,005	773,996	97·02	1·04	1·94
21 „ „ „	..	613,018	7,936	14,335	635,289	96·49	1·25	2·26

The number of children from 6 to 13 years of age includes those children whose ages were not specified, the total figures exclude those whose educational attainments were not returned, and in the ages 15 years and upwards, and 21 years and upwards, are included the adults whose ages were unspecified.



The numbers of persons in every 10,000 of the population who could both read and write, and of those who were unable to read, at the last two enumerations, were as follow:—

			In 1891.		In 1901.	
At all ages	..	..	8,318	..	8,528	could read
"	..	..	8,029	..	8,346	could write
"	..	..	1,682	..	1,472	could not read
Between 6 and 13 (school age)	..	..	9,389	..	9,424	could read
"	"	"	8,769	..	9,012	could write
"	"	"	611	..	576	could not read
At 15 and upwards	..	..	9,771	..	9,806	could read
"	"	..	9,573	..	9,702	could write
"	"	..	229	..	194	could not read
At 21 and upwards	..	..	9,728	..	9,774	could read
"	"	..	9,491	..	9,649	could write
"	"	..	272	..	226	could not read

A marked improvement is noticeable at all ages, and in regard to children at school age the proportion entirely illiterate was only 576 per 10,000.

A comparison of the results of the censuses of 1891 and 1901 in every 10,000 children of school age, *i.e.*, between 6 and 13 years of age, indicates that the educational attainments of both boys and girls had materially improved, as there were proportionately more children able to read in 1901 than there were in 1891. This will be readily seen by an examination of the following figures:—

1891.			1901.		
Boys.	Girls.		Boys.	Girls.	
9,357	9,421	..	9,398	9,454	could read
8,686	8,852	..	8,971	9,056	could write
643	579	..	602	546	could not read.

It is always a noticeable fact that in Victoria girls are much more forward in regard to the rudiments of education than are boys. Whether this is owing to a closer application to lessons, to less distractions caused by sports and games, or to quicker natural abilities, it is hard to determine. This relative backwardness of boys is not a condition peculiar to Victoria, but is just as noticeable in the other States.

Education  
of children  
of different  
sects.

The degree of education of children differs somewhat according to religious denomination, as will be seen by the following figures taken at the census of 1901:—

### EDUCATION OF CHILDREN OF DIFFERENT DENOMINATIONS, 1901.

Religious Denominations.	Number aged 5 to 15 years.			Proportion per cent.		
	Able to read and write.	Able to read only.	Unable to read.	Able to read and write.	Able to read only.	Unable to read.
Church of England ..	84,406	4,797	9,914	85·16	4·84	10·00
Presbyterian ..	36,808	2,032	4,232	85·46	4·72	9·82
Methodist ..	40,769	2,036	4,102	86·92	4·34	8·74
Other Protestants ..	18,022	858	2,028	86·20	4·10	9·70
Total Protestants	180,005	9,723	20,276	85·72	4·63	9·65
Roman Catholics ..	46,468	2,849	6,253	83·62	5·13	11·25
Jews ..	1,026	56	79	88·37	4·82	6·81
Residue ..	3,657	198	497	84·03	4·55	11·42
Total ..	231,156	12,826	27,105	85·27	4·73	10·00

In addition to these, there were 5,770 children between the ages of five and fifteen whose education was unstated.

Education  
of children  
at census,  
1901.

At the census of 1901 the number of children at school age (over 6 and under 13 years) resident in Victoria was 197,704, and of these 184,200 were receiving instruction, whilst the balance, 13,504, were not under instruction nor receiving any education whatsoever. There were also 43,353 children either above or below the school age, making a total of 241,057 children under instruction. Of every 1,000 of these, 783 were educated at State schools, 33 at colleges and grammar schools, 72 at denominational schools, 63 at private schools, and 10 at unspecified schools, whilst the balance of 39 were educated at home. Of the 13,504 at school age who were returned as not receiving any instruction at all, 4,608 were in Melbourne and suburbs, 2,209 in country cities, towns, and boroughs, and 6,687 in rural districts. Of the children at school age resident in Melbourne and suburbs, 6·13 per cent., of those in the country towns, &c., 7·03 per cent., and of those in rural districts 7·34 per cent. were not receiving instruction.

Education  
of children.  
Progress  
and com-  
parison  
with other  
States.

As a measure of the progress of education under the free, compulsory, and secular system, it may be mentioned that 90·12 per cent. of children of school age (6 to 13 years) at the census of 1901 were able to read and write, as against 87·69 at that of 1891, 81·70 in 1881, and 65·60 in 1871, just before the introduction of the system. The percentage just mentioned as being able to read and write at the census of 1901 (viz., 90·12) is considerably higher than that in any other State in the Commonwealth, the percentage being, at the 1901 census, 84·42 in Queensland (Australian born children only), 82·05 in Western Australia, 82·00 in South Australia, 80·35 in New South Wales, and 78·77 in Tasmania.

## CADETS.

At a conference of the Premiers of the several States of the Commonwealth held in Hobart in February, 1905, the then Minister of State for Defence submitted a scheme which aimed at—

- (a) The formation of Classes of Instruction in all the Schools of the Commonwealth in "Physical Training," "Elementary Drill," "Handling of Arms," and "Musketry," at which attendance of boys over twelve years of age attending such schools shall be compulsory.
- (b) Compulsory training for all male teachers (physically fit) in State Schools and the compulsory provision of a teacher qualified to instruct in the subjects referred to in (a) in all private schools in the Commonwealth.

Before these principles could be established on a practical basis, however, legislative action by both the Commonwealth Parliament and the Parliaments of the several States would have been necessary. A change of Ministry in the Commonwealth having occurred, it was considered by the new Minister of State for Defence that something should be done at once to secure uniformity in and extend the existing Cadet movement in the respective States. Acting on his representations, a conference representative of the Education Departments of the States and of the Commonwealth Defence Department, was held in Sydney in November, 1905. The recommendations of this conference were acquiesced in by the State Governments and adopted in their entirety by the Commonwealth Government, and provided for a force of approximately 20,000 Cadets and 3,000 Senior Cadets. Of these numbers, 6,108 Cadets and 1,020 Senior Cadets were allotted to Victoria.

Instructional Staff Officers and Non-commissioned Officers were appointed after competitive examination. Uniforms of a separate pattern in each State have been approved by the Military Board. The proposal to arm the bigger boys with M.E. rifles, and the remainder with Westley-Richards and Francotte rifles, is being gradually carried out.

Senior Cadet Corps consist principally of boys who have left school but who are not old enough to join the Militia and Volunteer Forces, and enable the boys who have commenced their training in the school Cadet Corps to continue their military training until such time as they may be able to join the citizen forces. Cadets consist of boys over twelve years of age who are attending school.

A further conference has since been held, at which it was decided to recommend a considerable addition to the number of Cadets, viz. :—Senior Cadets, 1,212; Cadets, 2,545; thereby making a total of 4,062 Senior Cadets and 23,414 Cadets throughout the Commonwealth, and also provide for miniature rifle ranges as far as possible in each school where a Cadet Corps has been formed.

## STANDARD OF EDUCATION.

Signing with marks.

The proportion of either sex who showed their want of elementary education, by signing the marriage register with a mark instead of in writing, is given in the following table for each fifth year from 1875, and for the years 1898 to 1906:—

## SIGNING THE MARRIAGE REGISTER WITH MARKS, 1875 TO 1906.

Year.	Men.		Women.		Mean.
	Per cent.		Per cent.		
1875 ..	5.48	..	9.43	..	7.46
1880 ..	4.18	..	4.09	..	4.13
1885 ..	2.56	..	2.62	..	2.59
1890 ..	1.50	..	1.53	..	1.52
1895 ..	.89	..	.67	..	.78
1898 ..	.73	..	.62	..	.67
1899 ..	.85	..	.68	..	.76
1900 ..	.66	..	.85	..	.76
1901 ..	.56	..	.50	..	.53
1902 ..	.67	..	.54	..	.60
1903 ..	.69	..	.50	..	.59
1904 ..	.65	..	.40	..	.52
1905 ..	.50	..	.38	..	.44
1906 ..	.43	..	.44	..	.43

Increased numbers signing in writing.

It will be observed that in proportion to the total numbers married, a very satisfactory increase has taken place during the 20 years ended with 1895 in the numbers of both sexes signing the marriage register in writing, in that nearly every year, as compared with its predecessor, a smaller proportion of persons signed with their marks. From 1895 to 1900 this proportion remained at a somewhat uniform level, but since the latter year the improvement is marked. It is probable, however, that the irreducible minimum has almost now been reached, for a certain residuum of the proportion will remain illiterate even under the compulsory system of education which prevails in Victoria. This is confirmed by the results of the census of 1901, which show that the percentage of males aged 21 years and upwards (exclusive of Chinese and aborigines) who could not write was 3.18, and that of females aged 15 years and upwards, 3.23; whereas at the age groups fifteen to twenty, immediately following the school period, the percentage was .81 for males and .45 for females, so that the persons at all ages now marrying in Victoria are not only far better instructed than the general population, but are quite as well educated as those who have just completed their school life.

Compared with England and Wales, Scotland, and Ireland, where the proportions signing with marks were 1.84, 2.01, and 8.78 respectively, the elementary educational standard is very high in this State, which, in this respect, occupies the highest position in Australasia.

The following table shows the principal religions of the people as ascertained at the census of 1901:—

Religions of  
the people.

RELIGIONS OF THE PEOPLE OF VICTORIA AT THE CENSUS OF 1901.

Religion.	Number.	Per cent. of Population.
<b>Protestant Churches—</b>		
Church of England (including Protestant, so stated) .. .. .	432,704	36·52
Presbyterian Church of Victoria .. .. .	190,725	16·09
Free Presbyterian .. .. .	778	·07
Methodist .. .. .	180,272	15·21
Independent or Congregational .. .. .	17,141	1·45
Baptist .. .. .	32,648	2·75
Evangelical Lutheran .. .. .	13,935	1·18
Unitarian .. .. .	788	·07
Church of Christ .. .. .	10,682	·90
Welsh Calvinistic Methodist .. .. .	1,257	·11
Society of Friends .. .. .	251	·02
United Brethren or Moravian .. .. .	144	·01
Australian Church .. .. .	964	·08
Seventh Day Adventists .. .. .	1,086	·09
Free Christian Church .. .. .	71	·01
Other Protestant Churches .. .. .	12,658	1·06
<b>Total Protestant Churches .. .. .</b>	<b>896,104</b>	<b>75·62</b>
<b>Roman Catholic Church .. .. .</b>	<b>263,710</b>	<b>22·26</b>
<b>Other Denominations—</b>		
New Church (or Swedenborgian) .. .. .	146	·01
Catholic Apostolic Church .. .. .	460	·04
Christian Israelites .. .. .	258	·02
Spiritualists .. .. .	913	·08
Salvation Army .. .. .	8,830	·74
Greek Orthodox Church .. .. .	367	·03
Jews .. .. .	5,907	·50
Other Religions .. .. .	3,293	·28
<b>Sceptics .. .. .</b>	<b>4,969</b>	<b>·42</b>
<b>Total specified .. .. .</b>	<b>1,184,957</b>	<b>100·00</b>
<b>Unspecified .. .. .</b>	<b>16,384</b>	<b>..</b>
<b>Grand Total .. .. .</b>	<b>1,201,341</b>	<b>..</b>

The total number of Protestants of all denominations in 1901 was 896,104, as against 836,857 in 1891. In 1901 the Roman Catholics numbered 263,710; in 1891, 248,591. The rate of increase of each of these bodies in the ten years was, therefore, about the same as that of the population.

Protestants  
and Roman  
Catholics. 2

The Presbyterians, Methodists, and Baptists have improved their positions relatively to the total population since 1891. The proportion of members of the Church of England has remained almost stationary. The Independents have decreased from 22,100 to 17,141.

Protestant  
sects.

In 1891 the adherents of the Salvation Army were enumerated at 13,521, but they numbered only 8,830 in 1901.

Salvation  
Army.

Ministers  
and  
Churches.

At the end of 1906, there were 2,740 regular churches and chapels, and 1,865 other buildings, where religious services were held—a total of 4,605 places of public worship throughout the State—attended by 1,743 regular clergymen. The following statement contains particulars of the different denominations:—

## CHURCHES AND CHAPELS, 1906.

Denominations.	Number of Clergy, Ministers, &c.	Buildings used for Public Worship.		
		Churches and Chapels.	Other Buildings.	Total.
Protestant Churches—				
Church of England ...	321	589	587	1,176
Presbyterian Church of Victoria ...	211	478	398	876
Free Presbyterian ...	2	12	3	15
Methodist ...	218	809	463	1,272
Independent or Congrega- tional ...	51	60	30	90
Baptist ...	84	98	83	181
Other Protestant ...	70	132	66	198
Roman Catholic Church	236	475	126	601
New Church (or Swedenborgian)	1	2	...	2
Catholic Apostolic Church ...	3	1	...	1
Spiritualists ...	4	...	3	3
Salvation Army ...	523	74	100	174
Greek Orthodox Church ...	2	2	...	2
Jews ...	8	6	4	10
Re-organized Church of Latter Day Saints ...	9	2	2	4
Total ...	1,743	2,740	1,865	4,605

Sunday  
Schools.

The Sunday Schools of the various religious bodies numbered 2,917; the teachers, 20,439; and the number of scholars on the rolls, 209,790—93,139 males and 116,651 females.

## TECHNICAL EDUCATION.

Technical  
education,  
Royal Com-  
mission on.

In June, 1899, a Royal Commission was appointed to inquire into the mining, agricultural, trades, and art schools of the State, and to report as to the best methods of carrying on technical instruction in such schools; to consider the advisability of the affiliation of the mining schools with the University; to report as to the adoption in the State schools of elementary instruction in sciences pertaining to mining, agricultural, dairying, and manufacturing pursuits; and generally to recommend what means should be adopted for the better provision of a systematic course of technical instruction. The Commission was under the presidency of the Hon. Theodore Fink, M.L.A. Many sittings were held, and, after the issue of five progress reports, the final report was presented in August, 1901. This report dealt fully with the strides made in technical education in

Germany and the principal European countries, and contained a survey of the systems in force in those countries, in the United Kingdom, the United States, Canada, Japan, the Australian States, and New Zealand. A synopsis, historical and general, was also given of the system in vogue in Victoria. Some of the principal recommendations made by the Commission were: — The establishment of State continuation schools, in view of the need for some form of preparatory education bridging the gap between the State and technical schools, the abolition of the existing local councils of technical schools, and the substitution of committees representative of the best educational thought of the localities—such committees to be represented on a General Council of Education; the establishment in the suburbs of Melbourne of classes to afford working tradesmen a knowledge of drawing, geometry, and other subjects applied to their trades; a liberal provision for scholarships; the introduction of legislation for fixing the period of apprenticeship in different trades, and for affording facilities for attending technical classes during the earlier years of apprenticeship; the appointment of skilled tradesmen to supervise and report upon the instruction afforded in trade subjects; the establishment of a Central Technical Art School to afford instruction having the widest application to the various industries of the country, and of a Technical Art Museum in connexion therewith; the establishment of systematic courses in commercial education, and of a School of Domestic Economy at the Working Men's College, and the encouragement of science teaching by the secondary schools. With reference to the work of this Commission, the paragraphs dealing with the University and the State Education System, and the special article on Technical Schools by the late Mr. Dennant, Science Inspector, Technical Schools, show the progress made in the bringing into operation of its recommendations.

#### TECHNICAL SCHOOLS.

All the technical schools, under which name are included the Schools of Mines, Working Men's Colleges, and Schools of Art and Design, are managed by local councils elected by subscribers. The Education Department, however, retains the general direction of technical education, and decides when schools are to be opened. Regulations are issued defining the powers of the councils, allotting the Government grants, and providing for the instruction and examination of the students. In the schools of art and design, the subjects taught comprise practical geometry, mechanical and architectural drawing, perspective, model, and freehand drawing. The schools of mines, which have been established at the principal mining centres, provide both theoretical and practical instruction, not only in all the subjects in any way connected with mining pursuits, but also in the arts and sciences generally; whilst a wide range of subjects is taught at the working men's and other colleges. In 1905-6, there were altogether 17 technical schools in the State. Eight of these afforded instruction in science, art, and trade subjects; two

Technical schools.

in art and science; five in art and trade; while two schools confined their teaching to art. Five schools, viz., the Working Men's College, Melbourne, and the Schools of Mines at Ballarat, Bendigo, Bairnsdale, and Stawell, are classed as certified science schools, and are eligible to receive State school exhibitioners. The schools, as a whole had, during 1905-6, an average enrolment of 3,506 pupils for each term; whilst the fees per term ranged in the different schools from 3s. to £8 15s. The Government expenditure on all the institutions in 1905-6 amounted to £21,444. Of this, £7,536 was paid to the Working Men's College, Melbourne, £3,226 to the Ballarat School of Mines and £2,651 to the Bendigo School of Mines. The students paid in fees £11,753 during the year.

The following is a statement showing the Government expenditure on each technical school during the financial year 1905-6:—

GOVERNMENT EXPENDITURE ON TECHNICAL SCHOOLS, 1905-6.

Name.				Amount.
<i>Schools of Mines and Technical Schools.</i>				£
Bairnsdale	..	..	..	1,188
Ballarat	..	..	..	3,226
Bendigo	..	..	..	2,651
Castlemaine	..	..	..	579
Daylesford	..	..	..	425
Maryborough	..	..	..	781
Stawell	..	..	..	712
Kyneton	..	..	..	200
Sale	..	..	..	601
<i>Schools of Art.</i>				
Ballarat East	..	..	..	450
Echuca	..	..	..	360
Warrnambool	..	..	..	125
Nhill	..	..	..	198
Ballarat West	..	..	..	701
Gordon Technical College, Geelong	..			500
<i>Working Men's Colleges.</i>				
Melbourne	..	..	..	7,536
Horsham	..	..	..	300
Miscellaneous Expenditure	..			911
Total	..	..	..	21,444

SCHOOLS OF MINES AND TECHNICAL SCHOOLS.

The Bairnsdale District School of Mines was founded in 1890 for the purpose of giving instruction in such subjects as pertained to local industries. With this object in view, classes in Chemistry, the Principles of Agriculture, Metallurgical and Mining subjects, as well as drawing classes for artisans, were established. It was soon



found that the metallurgical industry needed the greatest attention. The ores in the neighbourhood of Omeo were complex, and yielded but little of their gold to ordinary methods of treatment. A well-equipped metallurgical plant was erected at the school. It soon justified its existence by the successful treatment of ore which was previously looked upon as valueless. One result has been that mines in North Gippsland, having refractory gold ores, are now profitably dealt with. In addition to this work, experimental work on parcels of from one ton to five ton samples of complex ore from various States have been dealt with in order to demonstrate particular methods of treatment.

Amongst the lots treated were sulphide ores containing oxide of tin, separation of heavy mineral sands, such as zircons from oxide of tin, separation of zinc, lead and copper from a complex sulphide ore, separation of zinc, and other sulphides, according to Potter's process.

The students do all the work, including battery treatment, amalgamation roasting, retorting, cyaniding, chlorinating, and smelting, and thus get an actual insight into their duties.

The courses for mining and metallurgy have been drawn up by the Education Department, and are the same for all approved Schools of Mines. The time taken is from three to four years. After passing the necessary examinations, and having had a year's practical experience, diplomas are granted by the Government of Victoria. Owing to the demand made for mining and metallurgical teaching, the classes in agriculture had to be temporarily discontinued, and although it is not possible to give the same courses as in mining subjects, yet on account of the local importance of the industry, the School Council has obtained the assistance of the Agricultural Department in providing for a winter course of lectures and demonstrations by the various experts in that Department. This course will be continuous for about three months. In addition to the regular courses, separate subjects may be taken up during day and evening, including engineering, drawing, and various science and art subjects of technical importance. The students from the school have been very successful in after life. Many are now engaged in professional work in Victoria, others in New South Wales, Western Australia, Tasmania, and South Africa.

This is the oldest established School of Mines in Australasia, Ballarat. having been founded in 1870 "to impart instruction in the various branches of science relating to mining." It was established on the initiative of the public spirited and enlightened mining men of Ballarat—the resolution of the Mining Board dating from 6th October, 1869. After consultation with Sir Roderick Murchison—at that time of the Royal School of Mines, London—and other educational and mining authorities, the plan was decided upon which the institution was to be modelled. With the old court-house rented from the Government as a building nucleus (to which laboratories were immediately afterwards added, supported by public subscription, and assisted by a modest Government grant), the first classes assembled on 23rd January, 1871, and the school was launched upon its

career. Since that date, its income, which has steadily increased, has been drawn from students' fees, public subscriptions and donations, private bequests, and an annual grant from the Government. The four-acre block which the school already possesses, centrally situated as it is, constitutes an ideal site for a mining institution. From west to east it has a fall of 60 feet, well adapted for the battery and concentration plants, whilst one corner of the ground is within a few yards of the creek, allowing of the easy disposal of tailings. The general efficiency and usefulness of the school have recently been greatly promoted by extensive additions to the buildings and plant, and numerous improvements in the chemical, metallurgical, engineering, and mining departments. In the chemical laboratories—of which there are four—provision is made for upwards of 200 students. The assay laboratory, to which four weighing rooms are attached, contains upwards of thirty furnaces. The engineering department is well supplied with theodolites, levels, and a quantity of other surveying apparatus, and the engineering laboratory has been fitted with an experimental steam-engine and boiler, and other apparatus of the most modern form. The extensive new buildings erected as a mining laboratory continue to prove of eminent value to the school, where the most advanced systems of treating free and refractory gold ores have been introduced. The primary object of this laboratory is for the instruction of students in the large scale treatment and for testing parcels of ore for the public. This department contains a furnace for roasting pyrites and provision for milling, concentrating, chlorinating, and cyaniding, and a model mine with ample equipment. There is also a model 40-head battery with pumping, driving, and hauling engines for class purposes. In the department of geology and mineralogy, the students have the advantage of a well supplied lecture and demonstration room, where the determination of minerals by blowpipe tests, and the examination of rocks and minerals by microscopical tests, are made. The school has always concentrated its resources and energies upon mining education, aiming to do this one thing well rather than to risk loss of efficiency through diffuseness of effort. The aim is to make the instruction eminently practical, and so to train up the young mine managers and metallurgists that by the time they leave the school they shall be prepared at all points to complete their education at the mine and metallurgical works, and thus become, with the least possible delay, capable and trusted metallurgists and mine managers. The school has, in addition, since its commencement, acted the part of an information bureau upon subjects connected with mining, and is at present freely consulted upon questions associated with mining engineering, metallurgy, mining, geology, electrical technology, and similar subjects. It is greatly aided in this work by its being situated not only in a thriving city, but in the centre of a large mining and agricultural district, and of an interesting geological area full of varied and instructive features. Many mining claims are within sight of the buildings, and the deep alluvial fields of Allendale and Loddon are near at hand. Quartz vein mining, shallow and deep alluvial—illustrating a wide range of

treatment from primitive methods up to the most approved processes—dredging plants, chlorination and cyanide works of latest patterns, besides foundries and engineering works, are all within easy reach. Regular visits of inspection are made to these and other objects of scientific interest by the school classes. These inspections are supplemented by holiday excursions much further afield. The directorates, mine managers, and works superintendents of the district greatly assist by affording ready facilities for the inspection of their works and mines, and by engaging students who are required to complete a prescribed course of practical work—one or two years as the case may be—before they can obtain their diplomas.

The entire mining district, with its mines and works, thus constitute one vast permanent object lesson for the school's use, and an ever active source of inspiration to the student. Practice in the laboratories and workshops of the school is made a special feature of the instruction, every candidate being required to pass an appointed time in one or more of these laboratories, according to the diploma or certificate he seeks.

The school draws its students from every Australian State, and from countries beyond the boundaries of the Commonwealth, whilst its associates and certificated students are to be found occupying important and lucrative positions in most of the mining fields of the world. A very pleasing feature is the readiness with which students obtain suitable employment in mines and metallurgical works, either as chemists, metallurgists, mining engineers, assayers, officers in charge of cyanide plants, or mining managers. The school offers instruction to all persons who shall have entered their names and paid the prescribed fees, and these persons are admitted to examination in any particular subject. The diploma of associate of the school is issued in mining engineering, metallurgy, geology, and electrical engineering, and for certificates as mine manager and as assayer. Classes are also organized for candidates preparing for the Victorian Government examinations just instituted for certificates as cyanide, chlorination, and battery managers, underground foremen, and mining manager. In the case of students taking single subjects, or such courses as that for certificate as mine manager, or for a certificate as assayer, no entrance examination is required. Students desirous of qualifying for one or more of the associated courses are expected to have a preliminary education up to matriculation standard, and to attend all the prescribed courses of instruction, unless they can produce to the satisfaction of the Board of Examiners evidence of having attained elsewhere the degree of proficiency required in any subject or subjects. In such cases students may be excused from attendance or examination, or from both, in such subject or subjects, on a certificate from the Board of Examiners. The number of associate students—those taking a three or four years' course of special training—has been well maintained. Besides these, there are a number who have taken the assayers' course, which includes chemistry, assaying, metallurgy, and mineralogy, and is usually taken by those who cannot afford the time necessary to compete for a full associateship, or who desire to specialize in assaying.

The total fees for lectures and practical work for an associate course is one hundred guineas, payable in yearly, half-yearly, or quarterly instalments.

Weekly lectures on electricity and magnetism are given gratuitously to the senior scholars of State schools. Members of these classes, on passing a satisfactory examination, are admitted to the ordinary lecture classes of the school at a much reduced fee. The Council have now adopted a scheme suggested by the Director of Education, to train 150 of the senior boys from the local State schools.

The museum, library, and reading rooms are necessary adjuncts, and are open daily to the public. The museum, rich as it is in geological and mineralogical specimens, is of great aid to the students and to those interested in these and cognate branches of science.

The Scientific and Literary Society holds regularly, at the school, their fortnightly meetings, when highly interesting and instructive papers are read and much information given. That such a society is needed is shown by the large attendance at meetings and the interest displayed.

The Ironworkers' Association continues to hold its meetings at the school. Lectures are delivered weekly to its members and the public, and its library, containing upwards of 2,000 books, all of a scientific and technical character, is recognised as being one of the best selected scientific libraries in the State.

Bendigo.

The school was established in 1873, as an adjunct of the local Mechanics' Institute, but in 1904 the council of the school took over the management of the parent institute. The aim of the school has been to improve those engaged in technical operations, and consequently the various branches of science and art are fundamentally taught. Special attention is paid to the conditions of mining which exist on the field. Mines are in active operation at great depths all around the school, and students are taken out and given oral demonstrations in mining surveying, mining, and such problems as will enable them to thoroughly grasp the theoretical part of their work. Attention is also paid to methods of ventilation on the field, and to problems relating to the economic handling of ores. With regard to metallurgy, efforts are being made to give the students the up-to-date methods employed in other places—and a testing plant has been erected which will be worked mainly by themselves. An assay plant has been established at the school, and minerals are identified, named, and information given to miners and prospectors as to their commercial value—free of charge. Analyses, assays, and metallurgical tests on a large scale are carried on according to the prospectus. The vital subject of applied electricity is also fully dealt with and provision made for a three years' course. The local Bendigo Electrical Supply Company takes "in pupils" for a three years' practical training, and stipulates that such pupils shall attend the School of Mines classes. Technical work, such as turning and fitting, mechanical and freehand drawing, architectural drawing and architecture is given full attention. Courses for two or three years are established in these subjects, and a certificate

is given for each. Diplomas are given for three and four year courses in mining engineering, metallurgy, and electrical engineering. Facilities are afforded to students by the mining companies to acquire the necessary practical work after they pass through the school.

In October 1887, a School of Mines was established in a building which was granted for the purpose by the Government of the day. Classes in art subjects, chemistry, assaying, telegraphy, carpentry, languages, mathematics, and botany, were at once commenced in a temporary school. In 1890 the permanent building was opened. Classes are now held in mining, metallurgy, surveying, chemistry, assaying, geology, mineralogy, electricity, engineering drawing, building construction, architecture and clay modelling, and the instruction in art subjects has been amplified and extended. Scholarships have been founded by local residents and institutions, and are of great aid to the students. A complete cyanide plant has been installed, and instruction in cyaniding has been added to the programme. A branch School of Mines has also been formed at Maldon, where, during the year 1906, a laboratory was erected, the funds being obtained by local subscriptions supplemented by a Government grant. Classes are held there in mining and metallurgical subjects, the instruction being given by the staff of the head school at Castlemaine.

The Daylesford Technical School was founded in 1889, with the object of providing facilities for students to continue their school education, and removing the difficulties experienced by young miners in getting technical instruction in the various branches of their occupation. The borough council gave a building for the institution, where a commencement was at once made, a substantial new building taking the place of the old one in the course of the following year. The objects are defined as follow:—To foster and develop a knowledge of handicrafts, arts, and sciences, and all subjects related directly and indirectly to scientific education, by the establishment of classes, workshops, laboratories, and museums. By this means the higher education is attainable in the district at a comparatively small cost.

The Maryborough Technical School was established in 1888. The present building was opened in 1891. The average number of students attending during 1906 was 94. On the science side, classes are open in all branches of chemistry, metallurgy, mathematics, geology, and kindred subjects, and students enter for special courses in assaying, metallurgy, and electrical engineering. The art curriculum deals mainly with the technical side of art, and includes freehand drawing in all its branches, wood carving, modelling, machine and architectural drawing, design, &c. The school is managed by a local council, elected by subscribers.

The Stawell School of Mines had its origin in 1882, when a School of Design was established by a number of citizens of Stawell enthusiastically working together and obtaining assistance from those anxious to have such an institution. The first classes were held in the Mechanics' Institute, and it was not until 1890 that the present buildings were occupied. During the interim the School of Design

had been superseded by the School of Mines, in consequence of a greater demand for instruction in things appertaining to mining. Since that time there have been great alterations both in the school itself and its constitution, its work, and its success. For a number of years following 1890 it was prosperous, but when the mining industry waned the school began to lose touch with the people. It is now, however, recovering from its long quiescence, and the efforts that have been made of late years to revive the interest of the people have at last had the effect, it is hoped, of placing the school on a sound basis. The school is primarily intended to give thorough training in mining engineering and metallurgical work.

During 1905, a large increase in numbers took place, and the school is gradually assuming the more active state which was looked for so earnestly. The total number attending on the science side for the year 1906 was upwards of 50, and on the art side there were a similar number of students.

As Stawell is essentially a mining town, this institution is of inestimable value to the people. Like other mining towns in Victoria, it is capable of much further development in regard to mining operations; and it is only by higher training in such subjects as are taught in schools of mines that hope for improvement in the direction of up-to-date methods of mining can be entertained. The Stawell School of Mines is one of the five certified schools of the State.

Kyneton.

This school was established in 1888 by a few of the principal townsmen, who were influenced by the then prevailing wave of feeling with regard to the useful influence of technical education, and who desired to offer the younger members of the community some of the advantages which had hitherto been one of the attractions of the metropolis. They more especially desired to encourage an appreciation and cultivation of the arts and crafts; but science, trade, and other classes have also received due attention. A large proportion of the youth of both sexes has passed through the school, and its influence has been marked in many ways. Some of the students have been enabled to occupy positions of importance where knowledge, art, and science are requisite. In the trade classes valuable work has been achieved, more especially in the engine-driving class, which has been very successful. The work of the school has always been as practical as possible, such subjects as the drawing and projection of plans of all kinds, modelling and casting, wood carving, and the necessary designing have been the most prominent in the art section. Mining men have been the principal science students, and, together with factory hands, have chiefly constituted the engine-driving class. Altogether over 100 pupils have passed through the various courses. In consequence of the report of the Education Department that the building occupied was unsuitable, the council took into consideration the advisability of erecting a new structure. For this purpose, £500 was locally raised by means of a bazaar, which was supplemented by £500 from the Government. With these funds in hand, a handsome building has been erected, which will meet all requirements.

A School of Design was in existence in 1885, but the institution <sup>Sale.</sup> was projected on its present basis in 1889 under the title of School of Mines, Art, and Technology, which four years ago was changed to "Technical School." From its inception the management has been in the hands of the Mechanics' Institute committee, and two-thirds of the present building is used by the school classes, the remaining third being the institute proper. The old Mechanics' Institute, in which instruction was first given, was quite unfitted for the purpose in view, and in 1889 the committee resolved that an effort should be made to erect a suitable building. At a public meeting held that year, an appeal for funds resulted in a collection of £100. Induced by the interest shown, and by the promise of a subsidy from the Government, the committee erected the present commodious buildings in York-street at an ultimate cost, including site, of £5,000. To meet this outlay, the Government has contributed a building grant of £2,634, and the public, by bazaars, donations, &c., the remainder, and the building is now free of debt. The object of the school is to facilitate the attainment of a knowledge of the various handicrafts, arts, and sciences, and especially to improve the education of craftsmen and craftswomen by the establishment of classes, workrooms, laboratories, libraries, and museums. The classes are open to all who pay the prescribed fees, and pledge themselves to obey the rules of the institution.

During the year, the Education Department announced that the science side of the school in its present form would definitely cease in December on account of low attendances, and proposed to establish an Agricultural High School in its place on certain conditions. The School Council on their part agreed to give the Department the free use of all the rooms of the building used for the Sale Technical School, together with plant, so long as the Department carries on a Technical or Agricultural High School in the building, while it was further enacted by the Department that £150 should be raised locally to defray half the cost of alterations necessary to the building; that 20 acres of land should be placed at the disposal of the school, and promises to attend the courses obtained from 50 pupils. The Art side of the school was not to be interfered with, as it had more than justified its existence.

The help of various outside bodies was sought to accomplish these objects, and by their means promises from 30 full-course students have been received. The local Agricultural Society gave a cheque for £68, and the Department has now agreed to open the new school at as early a date as possible.

The school, it appears, will generally be conducted on the same lines as the Continuation School in Melbourne, but with the teaching tending in the direction of agriculture. One-third of the students' time will be devoted to field work, one-third to the laboratory, and one-third to ordinary education. There will be cookery classes for girls, and single subjects can be taken up.

## SCHOOLS OF ART.

Ballarat  
East.

This school, which is governed by the Council of the Ballarat Public Library, has progressed satisfactorily. The school was represented at the State Schools' Exhibition held in Melbourne, where a fine display of students' work was made, which was of a very high standard and educational value. The total number of individual students for the year was 269.

Echuca.

This school was originated for the purpose of educating the working classes in the various handicrafts, and in art; no record of the successes of the school has been retained, but many of its pupils have been enabled, through the instruction which has been imparted, to obtain positions of trust and responsibility. The following subjects are taught:—Drawing, painting, geometry, building construction, architectural drawing, engineering drawing, sign writing, coach trimming, modelling, repousse work, and poker work. A drawing centre has been established in connexion with the school, which is open to all *bonâ fide* State school teachers free of charge. Mr. F. P. Vize is the director and instructor.

Warrnam-  
bool.

The Warrnambool School of Art was opened in 1883. The subjects taught are drawing, wood-carving, modelling, and life study. During the year, 85 students passed through the school, and their examination results were very satisfactory. The school is of value to the State school teachers of the district, who attend on Saturdays. Several of the students have been successful in the matriculation examination of the Melbourne University.

Nhill.

The Nhill School of Art and Technical College was formed, about twelve years ago, by leading residents of the district, to impart instruction in the art of drawing, painting, practical geometry, building and engineering, drawing and construction, and general designing, &c., to those far removed from centres where these very necessary subjects were taught. On an average 45 students have annually availed themselves of the benefits of the institution. In addition, the State school teachers of the district have, in recent years, been afforded special facilities of free instruction by an accredited art instructor in the subjects they are required to teach in the State schools. Amongst the local craftsmen in the building and iron-workers' trades, carriage builders, smithwrights, mill hands, signwriters, painters and decorators, &c., are many former students. Some of these are now in positions of responsibility and trust, and carrying out the practical work which they had been taught in the school. A few are in business for themselves, and are still attending the school.

The usefulness of the institution is now further enhanced by the introduction of carpentry, joiners' and cabinet-makers' work, detailing drawings, and mensuration of quantities, modelling and carving, decoration in all branches, and designing for practical purposes.

During 1905 the council of the school purchased the Masonic Buildings, formerly rented, and made such alterations, improvements, and general equipments as were necessary to bring the school up-to-date. The Government generously contributed one-half (£200) towards the purchase and a two-thirds grant towards the



improvements, &c. The technical classes particularly have been well attended this year, and have been forward in competitions, &c. The work exhibited at the State School and Technical Schools' Exhibition, held in September, 1906, was well reported upon, as also some designing executed by the students. Other students have advanced their interests in life owing to the information gained at the school.

In December, 1887, proposals were submitted for the establishment of a central art training school in connexion with the Public Art Gallery. Premises were secured by the council of the Art Gallery Association in 1891, and suitably equipped with funds provided by the Government. Mr. P. M. Carew-Smyth, who had received his training at South Kensington, was appointed director, a position which he retained till 1898, when he was appointed Government art inspector of Victoria. Under his supervision the school was opened in 1891, with an attendance of 19 students, which increased so rapidly that in 1893 larger premises had to be secured. Comprised in the school equipment is an extensive and costly collection of casts, both ornament and figure, including examples of the Elgin marbles, and many full-length antiques—works of the Italian Renaissance by Michael Angelo and Donatello; Gothic and French work, &c.; a good collection of still-life properties, weapons and draperies, the nucleus of a collection of costumes of various historic periods, and every requisite for the most elementary or advanced study. A special and—in Victoria—unique adjunct of the school is its art library and reading-room, containing the standard and latest works on architecture and technology, drawing and painting, sculpture and modelling, applied art and decoration, with the leading English and American monthly magazines devoted to these subjects. Many of these works being beyond the means of the average individual student, the facilities thus afforded for their perusal are invaluable. As showing their appreciation, it may be added that, except for some little outside assistance, the library is the result of the combined efforts of the students themselves.

Ballarat  
West.

Enrolments for the year in the State School Teachers' Drawing Centre numbered 298; the free instruction given them from 9.30 to 12.30 being supplemented, in numerous cases, by their attendance at the day or evening classes during the week as paying students.

#### THE WORKING MEN'S COLLEGE, MELBOURNE.

The Working Men's College is a technical institution and school of mines, founded in 1887. It is open to all classes and both sexes, and supplies high-class instruction. Its revenue is obtained from students' fees, supplemented by a Government grant. There are both day and evening courses.

Working  
Men's  
College,  
Melbourne.

All fees are payable in advance, and no refund is allowed. Students under 18 years of age, and those under 21 in receipt of less wages than 25s. per week, and indentured apprentices, are admitted at reduced fees to many of the evening classes. Examinations are

Fees.

held in July and December, and entrance to these examinations is free to students of the college attending the classes in which they present themselves for examination, provided they have made the necessary attendances.

### FEES PAYABLE.

	Full Day Course.	Fee.
Mechanical, Electrical, Municipal, Marine, and Mining Engineering—		
First year ...	...	£5 per term
Second year ...	...	£6 "
Third year ...	...	£8 "
Metallurgy—		
First year ...	...	£5 "
Second year ...	...	£6 "
Third year ...	...	£8 "
Applied Chemistry—		
First year ...	...	£5 "
Second year ...	...	£6 "
Third year ...	...	£7 "
Fourth year ...	...	£8 "
Building and Contracting—		
First year ...	...	£4 "
Second year ...	...	£5 "
Third year ...	...	£6 "

### EVENING CLASSES.

Arithmetic ...	...	...	...	} Various amounts ranging from 3s. upwards per term.
Algebra ...	...	...	...	
Practical Geometry ...	...	...	...	
Freehand Drawing ...	...	...	...	
Painting ...	...	...	...	
Modelling ...	...	...	...	
Applied Mechanics ...	...	...	...	
Applied Electricity ...	...	...	...	
Architecture ...	...	...	...	
Building Construction ...	...	...	...	
Woolsorting ...	...	...	...	
Chemistry ...	...	...	...	
Cookery ...	...	...	...	
Millinery ...	...	...	...	
Dressmaking ...	...	...	...	
Mechanical Drawing ...	...	...	...	
Photography ...	...	...	...	
Science, Art, Trade, Commercial, and Mining, and numerous other Subjects ...	...	...	...	

### Prizes.

Special prizes are awarded to students annually. The Magee prize is of the annual value of £3, and is awarded to the student who obtains highest marks at examination in the work of the senior mechanical drawing class. The Sir George Verdon prize is of an annual value equal to the interest on the amount of the donor's endowment of £210, and is awarded for excellence of design and workmanship in the technical or trade subject selected by the Council at the beginning of each year. The Turri prizes, awarded for original inventions of students, consist of one prize of £10 10s., two prizes of £5 5s., and five prizes of £1 1s. each. The Government grant in 1906 was £5,000, together with a sum of £64 towards inspection, examination, apparatus, &c.

*By F. A. Campbell, Esq., M.C.E., Director.*

Over 100 classes are held in the following departments:—Commercial, Elocution and Music, Mathematics, Engineering, Architecture, Chemistry, Mining and Metallurgy, Photography, Art and Applied Art, Rural Industries, Household Economy, and Trade Courses. The work is divided into—(1) day courses, and (2) evening courses and classes. In the day courses the lower technical school prepares for the higher technical school, and also gives boys after they have left school a course of practical training, fitting them to enter intelligently on any line of industrial work. The higher technical school prepares students for the higher positions of industrial life, and has the following complete courses:—(1) Mechanical Engineering, (2) Electrical Engineering, (3) Marine Engineering, (4) Mining Engineering, (5) Sanitary Engineering, (6) Municipal Engineering, (7) Building and Contracting, (8) Metallurgy, and (9) Applied Chemistry. To students who complete any of the above courses, pass the necessary examinations, and produce evidence of having obtained twelve months' approved practical experience, the Diploma of "Associateship" of the College is issued.

In the evening school, the following courses are in operation for Experts' Certificates:—(A) carpenters, (B) fitters and machinists, (BA) marine engineers, (C) cabinet-makers, (D) plumbers, (E) house decorators, (F) modellers and terra cotta workers, (G) lithographic artists and draughtsmen, (H) photographers, (I) electricians, (J) assayers, (K) geologists, (L) metallurgists, (M) municipal engineers, (N) commercial, (O) wool. The following figures indicate the comparative amount of work done at the college during the years 1902 to 1906:—

STUDENTS AT WORKING MEN'S COLLEGE, 1902 TO 1906.

—	1902.	1903.	1904.	1905.	1906.
Students enrolled—					
Average per term .. ..	2,364	2,182	2,239	2,313	2,276
Males over 21 .. ..	455	437	417	363	377
„ under 21—Apprentices ..	147	145	150	195	334
„ „ Others .. ..	1,164	1,135	1,198	1,325	1,184
Females .. ..	598	465	474	430	381
Fees received during the year £	7,485	7,105	7,296	7,475	7,528
Average fee per student ..	63s. 4d.	65s. 1d.	65s. 2d.	64s. 8d.	66s. 2d.
Number of classes .. ..	161	163	166	168	169
„ instructors .. ..	53	55	60	62	66
Salaries paid instructors £	7,413	7,223	7,533	8,163	8,528

HORSHAM WORKING MEN'S COLLEGE.

This college was founded in 1890, and met first in the State school, and afterwards in the hall at the Mechanics' Institute. In 1894 the present building—a roomy wooden structure—was erected at a cost of £820, £200 of which was raised locally. In addition to the main building, there is an outer building, containing the carpenter's workshop, a potters' kiln, gas generating plant and apparatus.

Horsham  
Working  
Men's  
College.

The late Dr. Young, who was for years president, was untiring in his efforts to promote the welfare of the college, which he liberally supported. From the time of its initiation until his death he conducted the chemistry classes. When the college was first inaugurated, classes were held in arithmetic, bookkeeping, botany, chemistry, French, German, music, pottery, shorthand and telegraphy, in addition to the science subjects. The latter were abandoned when the subsidy for science subjects was withdrawn by the Government. The present director is Mr. Ernest E. Barker.

There are now over 100 students on the rolls, and the subjects taught include geometry, perspective, freehand and model drawing, painting in oil and water colours, modelling, moulding, and casting, *repoussée* work, wood carving, architectural and mechanical drawing, and drawing in black and white for reproduction. In addition to these, there are classes in typewriting and shorthand, carpentry, dressmaking, cooking, bookkeeping, and wood-turning, all well attended. A photographic club is attached to the college, and demonstrations in printing, toning, and enlarging are given, and are well attended. A teachers' drawing class is held on Saturdays, which any teachers in the district may attend free of charge.

### TECHNICAL EDUCATION.

*By the late J. Denmant, Science Inspector, Technical Schools.*

Before describing the separate technical schools in the State, I propose to remark briefly upon the subjects included in their curriculum of work. At the Working Men's College, the whole of the Department's programme is practically covered, but in country schools classes are only established in subjects which are considered suitable to the particular locality. The syllabuses in force are drawn up at conferences held between the Departmental officers and representatives of the principal schools. This plan works well, and no difficulty is experienced in adapting the programme of work to the needs of the community.

The subjects of instruction are classified in four groups, viz., science, art, trade, commercial, and my observations will be conveniently arranged under those heads.

Science.

Since it is desired to make the science teaching in technical schools thoroughly practical, instructors are, as far as possible, selected from those who, in addition to teaching ability, have had considerable practical experience. To this end also a plentiful supply of fittings and apparatus is essential. In the country schools the principal development has been on the mining side, and the provision of the necessary laboratories has from the first been pressed upon the Department. In effect, these schools have been called upon to justify their existence by the success with which they prepared men for work on the mining fields. The high reputation enjoyed by the Ballarat school is certainly due to the pains taken by its managers to provide a thoroughly efficient mining education for the students. So also

the Stawell and Bairnsdale schools were early stamped by the public as successful institutions, because it was found that the students sent out annually from them obtained, as a rule, responsible and lucrative employment on the mines of Victoria and the adjoining States.

In addition to the furnaces and other appliances of the metallurgical laboratory, the three schools mentioned above are equipped with milling plants, consisting of battery, roasting furnace, chlorinating and cyaniding vats, &c. A special sum of £12,000 was granted by Parliament out of loan funds for these plants, the erection of which was intrusted to the Mining Department. A fourth plant has just been erected at Bendigo. The question has often been raised as to the necessity for milling plants at Schools of Mines. Those opposed to their erection say that the actual battery work can be learned on the mine itself after the student has finished his course. To a certain extent this is true, battery feeding, filling, and emptying cyanide or chlorination vats, &c., demanding only practice. The foreman, however, and he is really the man whom technical schools profess to train, has to mix the cyanide solutions and judge as to the proper roasting of pyritic ores. Moreover, he must be familiar with the machinery usual in battery rooms, and be able to direct the workmen. The mine manager will not care to employ a man who has only theoretical knowledge to offer, but wants some one who can go straight to work. The student who is trained on the school plant has thus an overwhelming advantage over his theoretically taught comrade, as he is capable of managing a battery directly he leaves the school, instead of waiting to master the mechanical difficulties in the best way he can. As cases in point, two lads of my acquaintance, educated at considerable expense by their parents for mining pursuits, but unfortunately where no opportunity of acquiring practical experience existed, found, on the completion of their course, that no one desired their services. As they were strong plucky young men, they engaged on the mines as ordinary unskilled workmen, and for some years had a rough time. Ultimately they succeeded in remedying the defects of their education, and both are now in very fair positions, one in South Africa, and the other in New South Wales. As a contrast to this state of affairs, two of the leading mining schools in this State constantly exercise their students on the milling plant provided, with the result that they are commonly sought after by employers before their term of study is complete.

The first school to erect a mining plant on the premises was Ballarat, and doubtless it owes much of its popularity to the practical training thus afforded to its students. The plants mentioned at Ballarat, Bairnsdale, and Stawell, are worked commercially, or, in other words, so that the receipts may at least equal the expenditure. Either a charge is made to mining companies for treating ore, or the school itself purchases, on assay, tailings or concentrates offered, and then disposes of the recovered gold, just as an ordinary company or private individual would do. The alternative course would be for the school to buy ore at the price placed on it by the proprietors,

simply for the sake of affording practice in its treatment to the students. Experience has shown that the price thus paid for ores, which is usually much above its market value, together with the expense of cartage, renders this a most unprofitable business, and the school has to be content with very small supplies. In fact, such a method of working a plant is little more than playing at ore treatment, whereas by making a strictly commercial affair of it, all concerned, that is, the council, the director, and the students, must do their best to get the last grain of gold out of the material. The plants referred to are all for the recovery of gold from quartz, pyrites, or tailings. In Victoria, mining is almost confined to gold, and though in the adjoining States, silver, lead, tin, copper are obtained, the metals are, for the most part, reduced at large continental works. Students are, of course, fully instructed in the methods of assaying for these and other metals, but metallurgical plants for the treatment on the large scale of ores containing them are wanting.

That there is a demand for mining education in Australia is shown by the increasing number of Schools of Mines in the different States. Within the past few years, schools on the lines of those in Victoria have been established at Perth and Kalgoorlie, in Western Australia, at Charters Towers, in Queensland, and at Zeehan, in Tasmania. In New South Wales and South Australia the existing schools have steadily improved in efficiency, as well as in the number of students on the rolls. In our own State the Melbourne University has at last taken up mining education in earnest, and commodious laboratories have been lately erected. Through the liberality of the Government free scholarships, tenable at the University for three years, are now provided annually for a number of boys from the primary schools of the State. An excellent feature in connexion with these scholarships is that the lads gaining them get a preliminary training in mathematics and elementary science at a Continuation school, so that they will be able to take full advantage of the University teaching. It is further proposed to bring the University into close touch with technical schools. Their lectures and laboratory work will be recognised, while those technical school students who desire to attend the examination for the University diploma or degree, will be allowed to do so by simply paying a moderate examination fee.

Amongst the sciences studied in technical schools, chemistry necessarily takes the first place. It is the preliminary subject for metallurgy and mining engineering, and is thus taken up by almost every science student at a School of Mines. To the agriculturist and manufacturer it is also important, but as the results are not so immediate as in the case of mining, fewer classes exist, and these even are but poorly attended. At the Working Men's College classes have been formed for purely technical chemistry, that is, as applied to tanning, brewing, dyeing, &c., but they are small; in other schools occasional students present themselves for examination in one of the nine groups into which the subject is divided. Though in the aggregate there are numerous manufactories in Melbourne, they

are all on a very small scale. There is no predominating one, with a large number of employes. The consequence is that men attend in twos or threes to study the chemistry of their own particular occupation. Then, again, a man must know a good deal of chemistry before he can apply it to the complex processes of the arts, and unless he is prepared to spend three or four years in the laboratory he will derive but scant benefit. Less time than this will suffice for the farmer, who can gain a sufficient knowledge of agricultural chemistry in two years, or if he is very diligent, perhaps in one. Certainly there is no need for him to become an analyst. To enable the farmer to analyze the soil of his farm, or the manures he buys, would necessitate a tedious course in analytical chemistry, extending over three or four years. Then, on leaving the college and commencing for himself, he would require a precision balance, a full supply of apparatus and chemicals, and also a laboratory in which to carry on his researches. The absurdity of such an equipment for the work of any ordinary farm is patent. As a fact, any analyses desired must be left to the specialist, and all that the farmer really needs is sufficient technical knowledge to enable him to understand the reports he receives.

Electricity and electrical engineering are very popular subjects in the schools, but it is found that though a large number of students join the elementary classes, comparatively few of them advance further. Two reasons may be assigned for this. The first is that grave difficulties are met with in making the work of the higher grades sufficiently practical. The applications of electricity are becoming so numerous that the apparatus necessary for teaching, expensive enough at the outset, has to be constantly added to, and the proper equipment of an electrical laboratory makes constant and serious demands upon the school funds. The student may, of course, be occasionally taken to see electrical works, but this is not enough; he must actually use the machinery himself, which must therefore be in the laboratory connected with the school. It is only, therefore, in large institutions which can afford to provide the elaborate machinery necessary that advanced work should be attempted. Secondly, the measurements and calculations in electricity have, with the advance of the science, attained a high degree of precision, and now demand more mathematics than the average technical school student possesses. The consequence is that he finds himself incapable of following the second year lectures, and perforce drops out of the classes.

The Department's syllabus in mathematics is, in reality, a very modest one, but, unfortunately, only a small proportion of even full course students persevere through it. Course students either start at matriculation standard in mathematics, or reach it by the end of their first year, but there many of them are content to stop. The Department has, to some extent, improved matters by requiring the completion of the second grade mathematics before a diploma in metallurgy or mining engineering is issued. Properly all the pure mathematics should be done in the first year, so that the student may derive full advantage from the lectures in applied science of the second and third years.

The elements of sound and light, of dynamics and heat, together with the first grade of electricity, complete the physics course. The second of these forms the introduction to applied mechanics, which, together with engineering drawing, is the leading subject of the engineering course. In addition to the ordinary lectures, students at the Working Men's College spend a certain amount of time in the fitting and turning workshop. At Ballarat, in addition to a number of lathes and other machines, a special steam engine for testing purposes has been erected in the engineering laboratory.

The next classes to be noticed are those for geology, mineralogy, and petrology. Of the two main branches of geology, viz., the petrological and the stratigraphical, it is the former which chiefly concerns technical school students. They have not the time to study the details of palæontology; nor, indeed, would they derive great practical benefit by doing so. Still, it is essential that they should have a general acquaintance with the sequence of Australian sedimentary rocks, and to secure this students in the elementary grade are required to recognise certain characteristic fossils present in Victorian strata. The advanced grade is termed mining geology, and deals with the occurrence of ores, faulting of lodes, and particularly of the dynamics of the auriferous quartz veins of Australia. For those whose inclinations lead them to study the historical side of geology, a special year's course in Australian palæontology is provided.

The number of students who present themselves for examination in mineralogy, is year by year increasing. The subject is taken up by some on account of its connexion with metallurgy, and by others as a preliminary to the study of petrology. A remarkable advance has been made of late years in the science of mineralogy, and this is mainly due to the precision with which the optical characters of minerals, as revealed by the microscope, have been worked out. Now, the interpretation of these characters demands an intimate knowledge of the symmetry or form of crystals, and the study of crystallography, as this division of mineralogy is called, becomes of primary importance. In the latest text books published, considerable stress is laid upon the accurate measurement of the angles of crystals as the basis of all subsequent calculations. Delicate instruments for this purpose have been devised, but the young student should first of all practice with the hand goniometer upon large crystals, or, in their absence, upon well constructed models. Having obtained the angles, he can then advance, just as far as his mathematical attainments permit.

Petrology is specially concerned with the optical characters of crystals, as these serve to elucidate the structure of massive rocks. The subject is provided for in the principal schools, and some work in it is almost invariably done. It is true that only a small proportion of the students advance as far as the highest grade, but the training given in the second or intermediate grade should be sufficient to equip a man for independent work. He is taught how to use the petrological microscope, and the method of preparing rock slides, and is also furnished with data for determining the leading rock forming minerals. With the aid of a petrological microscope he



can apply this knowledge to the solution of most of the problems that he is likely to meet with.

The remaining subjects of the science programme are—Land and mine surveying, mining, steam and gas engines, botany, and agriculture.

The Land Surveyors' Board has lately decided to recognise the work done in Technical Schools as a portion of the qualification for the surveying certificate, provided that there are competent instructors, and that the students pass an approved examination.

Mine surveying is a one year's course only, and is designed for mine managers, and also for students preparing for the diploma in mining engineering. The classes held at Ballarat and Bendigo are well attended by the mining managers of the respective districts.

Mining, as a special subject, deals with operations underground, as blasting, timbering, &c., and with ventilation, lighting of mines, winding, and other matters connected with the working of a mine. The theoretical instruction is given by the professional teacher, and the practical by an underground manager, or other intelligent miner.

The steam and gas engines syllabus is intended for engine drivers and others employed in the engine rooms of mines, factories, &c. It is framed so as to be well within the reach of the non-mathematical student.

The only students in botany are those preparing for the pharmacy examinations, and a few who are engaged in nurseries. Some years ago the subject was much more popular, and weekly botanical excursions were a feature in several of the schools. The reason for the present neglect of botany in our schools is not clear. The native flora is rich and varied in most localities, the love of gardening is general, while great interest is professedly taken in nature study, and yet with all these inducements, no technical school in the State can muster a decent class in botany.

Classes in Agricultural Chemistry, with practical work on experimental plots for the second year, have been commenced in earnest at the Working Men's College, the necessary land having been secured at Kew. A theoretical course in Agriculture, drawn up for the Technical Schools by Mr. Pearson, was for years a dead letter, but it is now covered in one or two of the schools, the students being chiefly State School teachers who wish to qualify for positions in the Agricultural High Schools. The establishment of such High Schools in agricultural centres is undoubtedly a step in the right direction. It must, in fact, be patent to all that a real live interest is now taken in all matters connected with agriculture, and more especially in agricultural education. A commencement is made in the State School, and in an essentially practical manner, by means of the school garden. Following this are the High Schools just mentioned, the agricultural and viticultural colleges at Dookie and Rutherglen, and finally the University, with its Chair of Agriculture. For the farmer who cannot spare time for a lengthened course, some provision is also made at the periodical classes in country districts, where lectures and demonstrations are given by the officers of the Agricultural Department.

Art.

Since this branch of technical school work does not come directly under my cognizance, the remarks made upon it will be very brief. Suffice it to say that applied art is the particular province of the technical school. Stress is laid upon geometry, plane and solid, mechanical drawing, building construction, house decoration, architecture, and the application of art to the affairs of every-day life. Students in trade classes, and also those in the science division of the school, are encouraged to learn freehand and model drawing, so that they may acquire the power of sketching the machines or structures they describe. Judging from the poor efforts made by students, when asked to illustrate by sketches their answers in geology, mineralogy, and other sciences, there is great need for set training in ordinary freehand drawing. In addition to the classes named, there are others for the study of art proper, but these are not discussed in the present article.

Trade.

Subjects coming under this head, form the principal feature of the work done at the Working Men's College, Melbourne. Trade classes exist also at Geelong, but they are on a much smaller scale.

The fitting and turning classes at the Working Men's College, though provided with large and commodious premises, are filled to overflowing, and the accommodation must soon be still further increased. The chief object aimed at by the council of the college is to give lads and young men in the trade the opportunity of supplementing the practice they get in the shops and also of acquiring a certain amount of theoretical knowledge. The students are also taught engineering drawing, though in a separate class. It must be understood that the college authorities do not profess to teach the trade, which, in the limited time available, would not, of course, be possible. In addition to the evening classes referred to there are others in the day time for students taking courses in engineering, &c. Their aims being different, they do not require the same extended practice as those actually in the trade.

Another important class at the college is that for blacksmithing. Here again there are both lecturing and practice. It is proposed later on to specialize in different branches of blacksmithing, under the heads of coach, engineering, and art blacksmithing. For the latter, the students will be required to go through a course of drawing side by side with the practice at the forge.

One of the busiest scenes at the college may be witnessed almost any evening in the plumbing workshop, where a host of young men and lads are at work under the superintendence of an experienced plumber and his assistants. The workshops, which have not been long completed, afford ample opportunity for practice in every department of the trade. The master plumbers of Victoria take an active interest in the class, and, at the request of the Government, annually nominate examiners from amongst their number.

Classes in woodwork, viz., manual training, carpentry, and coach-building are also held. Though there is a good attendance in the workshops, the number of entries for examination do not correspond. An effort has been made to interest the coachbuilding employers in the college classes, but so far without a satisfactory response. At

Geelong the carpentry class is successful, as is also a fair sized class in plumbing. Moreover, the entries for examination at this college include almost every student on the rolls.

The attendance in the wool classing rooms of the Working Men's College, and of Gordon College, Geelong, is steadily increasing, and extensions of the existing accommodation are required in both institutions. The standard of instruction has been still further raised by adding an expert grade to the two ordinary ones. The test applied is severe, but it is optional for men to submit to it, the certificate being still granted at the end of the second year's work. The Department's certificates in wool sorting are eagerly sought after by the students, who inform me that they obtain employment on the stations by presenting these documents. Wool sorting classes are practically self supporting, the fee paid per term being fairly high.

Efforts have been made, for some years past, to raise the standard of the photographic classes at the Working Men's College. A new syllabus, covering all the recent improvements in the art, was first issued, and then a year or two afterwards a studio, specially designed for photographic work, was included in the last addition to the college buildings. The results have scarcely realized expectations. Very little desire is shown to study photo-mechanical work, but on the other hand, retouching, amateur, and portrait classes, for which of course, the Department's syllabus does not provide, are popular enough.

The printing classes at the same institution are divided into composing and machine printing. Assistance is obtained from the Printers' Association in supervising these classes, and the examiners are nominated annually from amongst its members.

Though classes for girls, especially in needlework, dressmaking, and cookery are increasing rapidly in the State, there is a dearth of thoroughly qualified teachers. In England and America, colleges have been founded, mainly at least for the purpose of training teachers to give instruction in the various branches of domestic economy. The need for a similar institution certainly exists in Victoria. The managers of technical schools complain of the difficulty experienced in obtaining suitable teachers for either dressmaking or cookery, while young women, who would gladly fit themselves as teachers, know of no means of obtaining the necessary training. The Domestic Economy College, which was established in October, 1906, bids fair to overtake this want. The Cookery classes are filled, while a fair number of students seek instruction in Laundry and Household work. The classes in Dressmaking and Millinery commenced recently.

*Commercial.*—The State pays no subsidy for the teaching of commercial subjects in technical schools. Classes for writing, book-keeping, shorthand, typewriting, French, German, &c., &c., are held at the Working Men's College, but the Department insists that they shall be self-supporting and in no way a charge upon the subsidy paid for technical education. There are solid reasons for

this decision. Soon after the Education Department took the control of technical schools, in 1890, a report was obtained upon the work carried on at such schools. In one or two cases science, drawing, and trade classes were found in operation, but they were sometimes quite subsidiary, and the main business of the school consisted in teaching shorthand, bookkeeping, &c., or in preparing candidates for Public Service Examinations. In one school, which received £600 a year as maintenance, there was not a single technical subject taught, but a flourishing Public Service class existed, where the pupils worked at arithmetic, grammar, dictation, and composition. Moreover, applications were coming in freely for similar schools in various places, and certainly if one locality had this kind of teaching why should it not be made common all over the State? It was then decided that technical schools must confine themselves to the purpose for which they were founded, viz., to give instruction in strictly technical subjects, or in other words, in those arts and sciences which have a direct bearing upon the development of the natural resources of the country. A school, then, to be of any service, must seek to foster the industries special to the locality. In mining districts, for example, a real tangible industry exists, which is benefited by the attention given to metallurgy and chemistry in the local school. Trade schools, again, are necessary in industrial centres like Melbourne and Geelong.

The bulk of the commercial classes were discontinued, or where they remained open the teachers engaged received only the actual fees paid by the pupils, less, of course, an amount sufficient to cover the expense of lighting, cleaning, &c. This is the case at the Working Men's College, as well as with a few small classes elsewhere. From returns annually received, it is clearly shown that the purely commercial classes still held in certain technical schools are not in any way a charge upon the State.

*Examinations.*—An examination of the schools in every subject of the Department's curriculum is held in November and December of each year. A midwinter examination in wool sorting and dressmaking, and sometimes also in science subjects, is, in addition, held in June. The examiners are selected from persons having a practical acquaintance with their subject. At present 34 examiners are thus engaged. The objects of the examination are two-fold—first, to ascertain whether the grants to the schools are warranted by the character of the instruction given; and second, to test the proficiency of candidates, with a view to the award of diplomas or certificates to those who reach the prescribed standard. It is an encouraging circumstance that the percentage of passes tends to increase year by year, and this while the standard set is fully maintained. In 1906 an important alteration was made in the allotment of marks at these examinations. Acting on a resolution at a Conference between the Department's officers and representatives of the principal schools, it was decided to allow the schools to allot one-third of the total marks on the result of their first three term examinations, the remaining two-thirds being awarded by the outside

examiner. It is perhaps too early to say how the scheme will ultimately work out, but the results obtained at the close of 1906, the only examination yet held on the new basis, did not differ appreciably from those which in former years depended entirely on the outside examiners' awards.

*Constitution and Government.*—The schools are managed by local councils, the members of which are elected by the subscribers to the funds. A set of regulations is issued by the Department, dealing with the conduct of the schools under the heads of—(1) Conditions under which the government grants for maintenance, buildings, or apparatus, may be claimed; (2) the subjects of instruction prescribed, and the methods of holding examinations; (3) diplomas and certificates awarded; (4) mode of keeping rolls and the presentment of balance sheets; (5) general. The instructors are appointed by the councils, the Department reserving, however, the right of veto.

*Schools.*—Of the seventeen technical schools, five are termed certified science schools, viz., Ballarat, Bairnsdale, Bendigo, Stawell, and Melbourne. In these, day courses, extending over three years, are instituted for diplomas in metallurgy, mining engineering &c. In the same schools the usual evening classes for single subjects are also held. The following brief remarks are made upon the separate schools:—

*Ballarat.*—This is the oldest School of Mines in Australia, having been founded in 1870. It was commenced on a modest scale, but during the last sixteen years has made remarkable progress. It was the first to institute day courses, and these have been so successful that large numbers of its students are drawn from other States. It possesses some commodious class rooms, but for assaying, electrical, and chemical teaching better accommodation is wanted. A large milling plant is attached to the school, where students are practised in handling ore. The success of the school is due to the thoroughness of the teaching, and to the care taken to provide a sound training, both practical and theoretical, for its students. Undoubtedly the Ballarat School of Mines has made its influence felt throughout the Commonwealth, and its graduates may be found in responsible positions on every mining field of note.

*Bairnsdale.*—When a grant was first made in 1890 for a School of Mines at Bairnsdale, there was no building, and there appeared but slender prospects of obtaining students. Through the energy of the council and the director, Mr. Clark, the primary difficulties were surmounted, and a commodious building was erected. A few years later the Mines Department added to the school buildings a well equipped milling plant, with battery, roasting furnace, and chlorinating apparatus. Last year the lecture and demonstration rooms were enlarged for the second time since their erection, in order to accommodate the increased number of students. Bairnsdale is the centre of an extensive mining field, the resources of which are only partially developed, and certainly much of the pioneer work done in

it during past years is the outcome of the mining education given at the district school.

*Stawell.*—This school was opened in 1890 in the local market buildings, which were granted for the purpose by the Borough Council. Subsequently the Government added a large assaying laboratory and other rooms. A milling plant, capable of doing work for the public, was also placed on the school grounds by the Mines Department. The first instructor was Mr. W. E. Matthews, and under his energetic management the school prospered greatly. The various local mines sent their employes to the school, and though these young men had only a moderate preliminary education, they benefited in a remarkable degree by the school training in metallurgy. Of late years, chiefly owing to the decay of mining in the district, the school has suffered, and the number of students has considerably diminished. At the beginning of 1905 the art side of the school, which had been closed for many years, was re-opened.

*Bendigo.*—There are extensive and convenient buildings at this centre for science, art, and trade teaching. It is now provided with a reducing plant, and the number of mining students may be expected to increase. So far as the proficiency of examinees in the various science subjects is concerned, the Bendigo candidates give a good account of themselves.

*Working Men's College, Melbourne.*—There are as many students in this institution as in all the other schools put together. Like Ballarat, Bairnsdale, &c., courses are arranged for in metallurgy and mining engineering, as well as in applied chemistry and civil engineering. The college was at first open in the evenings only, but a few years ago, day classes were commenced in some subjects, and have been gradually extended to others. As might be expected in an industrial centre like Melbourne, the principal teaching is connected with the trades and manufactures of the city. Fine workshops for fitting and turning, plumbing, blacksmithing, and carpentry have been built, all of which are filled with students. A preparatory year for lads wishing to enter these classes has been lately arranged, where the elements of geometry, &c., are taught. The Railway Department also sends the lads in its employ to the college for certain hours per week, paying their fees, and offering also the inducement of extended tuition in engineering to the most deserving.

*Maryborough.*—This school is concerned with mining, and also with art subjects. Until lately it was in a depressed condition, but with a change of management has been worked up into an efficient and prosperous school.

*Castlemaine.*—In connexion with this school there is now a branch at Maldon. A large amount of cyaniding is there carried on, and the men engaged wish to study both the assaying and chemistry necessary for their operations. A Government grant, supplemented by money collected locally, has been spent in erecting laboratories and

purchasing apparatus. The instructors from Castlemaine visit Maldon once or twice a week, and some of the students attend as well the lectures at the principal school. In addition to the metallurgical work, there are at both places classes in mine surveying, which are well attended by mine managers and others. The classes on the art side are also highly successful.

*Sale.*—There is an excellent art school here, but on the science side the classes have been for years in such a languishing condition that it was finally decided to close them. The laboratories and lecture rooms were handed over to the Education Department to be used by the Sale Agricultural High School, which was opened in April last. Situated, as this school is, in the midst of a thriving farming community, there is every prospect of its becoming a successful institution.

*Daylesford.*—At its inauguration the Daylesford school promised well. After a lull in mining for a time, the re-opening of the North Cornish mine, and the breaking of fresh ground in the neighbourhood improved mining prospects, and the school ought soon to show signs of renewed vigour.

*Geelong.*—The work done at this centre includes science, art, and trade work. For plumbing, carpentry, and wool sorting, good accommodation is provided, and the classes are conducted in a thoroughly satisfactory manner. The school has a well appointed chemical laboratory, where instruction is given in agricultural chemistry and the chemistry of manufactures to a few students. Under the energetic rule of Mr. King, the registrar, this school has, during the last few years, made great progress.

At the remaining schools, art subjects are almost exclusively studied.

## LIBRARIES.

### PUBLIC LIBRARY OF VICTORIA.

The buildings of the Public Library, Museums, and National Gallery of Victoria cost £229,382. The funds were provided by the Government, as also were further moneys expended on maintenance, amounting, with the sum just named, to a total of £1,173,971. At the end of 1906 the Reference library contained 168,079 volumes. It is open to the public without payment on week days (Christmas Day and Good Friday excepted), between the hours of 10 a.m. and 10 p.m., and was visited during the year by 350,851 persons. The Library consists of three distinct sections, viz.:—The Reference Library, the Lending Library, and the Country Lending Library. The librarian reports that 4,108 volumes were purchased, 1,844 volumes presented, 172 volumes obtained under the "Copyright Act," and 42,487 newspapers were added to the Reference Library during the year. The Lending

Public  
Library of  
Victoria.

Branch, which is also free to the public, issued 166,828 volumes during 1906, and the number of persons to whom the books were lent was 8,424. Of these volumes 55.3 per cent. related to fiction, 15.2 to history, 7.7 to general literature, 11.4 to religion, philosophy, natural science and art, 6.9 to arts and trades, and 3.1 per cent. to social science. The number of volumes in the Lending Library at the end of 1906 was 23,514, of which 989 were added during the year.

Following on the establishment of the Melbourne Public Library, libraries were founded in many of the larger towns. The attention of the original trustees of the Melbourne Library was directed to these institutions, and to the vast number of people whom the distance prevented from reaching the building. They, therefore, established a scheme by which the larger country centres should have the benefit of the collection, and forwarded cases of books on loan for fixed periods. To the country towns of less importance cases were also sent, and in many instances the nucleus of a local library was thus formed. This travelling library system, as it is called, thus greatly stimulated the library movement in those places where it had begun, and inaugurated it in many places to which as yet it had not spread. At the present time loans are made up to 300 volumes at a time to the committees of free libraries and mechanics' institutes, and to the councils of municipalities, for a period of one year, with a further extension of time if required. The books are selected with a view to meeting the special requirements of the district to which they are to be forwarded, publications on mining being sent to mining centres, and those relating to agricultural and pastoral pursuits to those districts where these industries are carried on. Although this scheme is now in operation in many countries, research among library records does not reveal the existence of anything similar prior to its establishment in Melbourne, so that the credit of starting it seems to belong undoubtedly to the original trustees of our library. Many of the local libraries are now in a position to supply all the wants of their patrons without having recourse to these loans.

National  
Gallery.

The National Gallery at the end of 1906 contained 17,721 works of art, viz., 499 oil paintings, 3,511 objects of statuary, &c., and 13,711 water colour drawings, engravings, photographs, &c. It is open from 10 a.m. to 5 p.m. daily on week days (Christmas Day and Good Friday excepted), and on Sundays it is open from 2 p.m. to 5 p.m. The school of painting in connexion with this institution was attended in the year by 4 male and 18 female students, and the school of design by 43 male and 69 female students. The students are encouraged to paint original works, by which means it is hoped the foundation may be laid of a school of art of purely Australian subjects. Every three years a Travelling Scholarship is open for competition amongst the students of painting. Its money value is £150 per annum, and it is awarded with the object of enabling promising students to travel and complete their art studies in England and on the Continent. The Trustees also award a prize of £20 for the best painting from life shown at the annual exhibition of students'



work, and numerous other prizes for distinction in the different branches of the drawing and painting schools.

The Industrial and Technological Museum adjoins the National Gallery, and was opened on the 7th September, 1870. At the end of 1906 it contained 55,426 specimens. It is open from 10 a.m. to 5 p.m. daily on week days (Christmas Day and Good Friday excepted), and on Sundays from 2 p.m. to 5 p.m. Industrial Museum.

The collection in the National Museum, formerly kept in a building situated on the grounds of the Melbourne University, is now located in the Public Library Buildings. It comprises natural history, geology, and ethnology. The National Museum is open to the public free of charge on all week days throughout the year, except Thursdays, Christmas Day, and Good Friday, from 10 a.m. to 5 p.m., and on Sundays from 2 p.m. to 5 p.m. In 1906 the expenditure for specimens, furniture, materials, &c., was £1,352. The payments for salaries and wages during the year amounted to £2,188. National Museum.

#### SPECIAL LIBRARIES.

There is a free library attached to the Commonwealth Patent Office, Melbourne. This contains about 9,750 volumes, consisting of the printed patent records from Great Britain, Victoria, New South Wales, South Australia, Queensland, New Zealand, Canada, the United States, France, Italy, Germany, &c., technical periodicals, and other works relating to Science, Patents, and Trade Marks. The approximate value of the books is over £20,000, and additions of several hundred volumes are made annually. The library is open to the public on each week day, except Saturday, between the hours of 9 a.m. and 4.30 p.m., and on Saturday from 9 a.m. until noon. Patent records, &c., are also received from Austro-Hungary, Argentina, Belgium, Finland, Luxemburg, Japan, Portugal, Peru, Mexico, British India, and South Africa. Patent Office Library.

The Supreme Court Library at Melbourne has eighteen branches in the assize towns. It is free to members of the legal profession between the hours of 9 a.m. and 4 p.m., except on Saturdays, when it closes at noon. It is supported by fees paid under Acts of Parliament and rules of court for the admission of barristers and attorneys. Supreme Court Library.

#### FREE LIBRARIES.

Most of the suburban and country libraries receive Government aid—the amount granted in 1905-6 being £7,025. In addition to the Melbourne Public Library, 423 furnished returns in 1906, which show that they possessed 708,930 volumes, received £43,258 in revenue, and that 2,654,258 visits were paid to the 382 institutions which kept records of the attendances of visitors. As to the class of literature in general use, it appears, from particulars received from a number of institutions, that works of fiction are in much greater demand than any other class. Next come general literature, history, and travel, in that order. Free Libraries.

City of  
Ballarat  
Free  
Library.

This library was established in 1878, on a site situated at the corner of Sturt and Camp Streets, which was at the time occupied by the Mining Board, the District Mining Surveyor, and Registrar of Births and Deaths. These officials were, however, compensated by the founders of the library to the extent of £600. With the aid of donations from some of the citizens, gifts of books from others, and loans of books from the Melbourne Public Library, the Committee were enabled in course of time to thoroughly establish the institution. In 1901-2, a sum of £3,000 was expended on a new library and reading-rooms. The total cost of the buildings including repairs up to the 31st December, 1906, was £6,401. During the year 1906, the municipal grant was £50; and receipts from subscribers and rents, £758. The library now contains 9,678 volumes on science, history, travels, and other subjects, besides a supply of reviews, magazines, and newspapers of Great Britain and the Commonwealth. The number of visitors during the last twelve months was 201,906.

Ballarat  
Public  
Library.

The committee of this institution report having experienced a prosperous year. The revenue amounted to £451, and the expenditure to £409, leaving a credit balance of £42 to be carried forward. The subscriptions amounted to £103, and 59 new subscribers were enrolled during the year. No less than 9,964 visits were paid by the subscribers to change their books, to whom 15,843 volumes were issued. In all, 510 volumes were placed upon the shelves last year, making the total number of volumes now in the Library 17,753. The cost of books, magazines, and newspapers amounted to £117; 264 volumes were presented to the Meredith Mechanics' Institute; £65 has been expended in renovating the building, and only lately a modern book stack has been built, capable of holding 2,250 volumes, the shelves of which are all very accessible, and cover a minimum of space.

Sandhurst  
Mechanics'  
Institute  
and Free  
Library.

This institute was established in 1854. It consists of two sections—the public and lending libraries—which are open to the public daily from 10 a.m. to 9 p.m., and on Wednesdays and Saturdays to 10 p.m. There is connected with it a reading-room for members. The library contains about 15,000 volumes, and a liberal supply of periodical literature is kept up to date. The cost of building, &c., is £10,131. The institute is maintained by members' subscriptions, grants by the City Council, rents, and a subsidy from the Government. The institute was taken over by the Bendigo School of Mines in 1904, and the council is carrying on both the subscribing and the free libraries as heretofore.

Geelong  
Free  
Library  
and  
Museum.

The Geelong Free Library and Museum is located in a handsome building, originally built as the Chamber of Commerce at a cost of about £20,000. It was purchased in 1876 from that body for £3,200, for the purposes of the library and museum, which, as an institution, had been in existence since 1854. The total cost of buildings to date was £5,263. It has been mainly supported by residents of the town, and amply supplies all requirements. The average daily attendance is about 465. The library contains

5,790 books, comprising works of fiction, poetry and the drama, educational, scientific, geological, religious, biographical, classical, and other works, together with daily, weekly, and monthly publications. In addition, there is a library of 320 books in embossed type for the use of the blind. The museum contains an interesting collection of geological and mineralogical specimens, native weapons, and objects of natural history. In the art gallery are several excellent oil paintings, which add largely to the attraction of the institution. In 1906 the receipts were £186, and the expenditure £193.

This institute was established on a very small scale in 1855, but from that time onward it has continued to make steady and satisfactory progress. Up to the end of 1906 the buildings erected cost £5,022. The Hall, which is used for general entertainments and meetings, accommodates 600 persons. There are at the present time 250 subscribers to the institution, which contains suitable and commodious reading and other rooms for the use of the general public, well equipped with books on various subjects, numbering at the end of the year 10,387 volumes, also magazines, newspapers, and illustrated papers. There is also a billiard-room for the use of subscribers. The income for the year 1906 from all sources was £864; the expenditure £841. The total number of visits was 25,000.

Castlemaine  
Free  
Library  
and  
Mechanics'  
Institute.

This library dates its origin as far back as 1858, when the inhabitants of the Reef, Pleasant Creek, opened a building for the purpose of a mechanics' institute, circulating library, and reading room, which served the needs of the people until 1866, when it was destroyed by a fire. It was replaced by a two-story structure, which, in addition, provided space for lodge and lecture rooms. This building was burnt in 1875, and replaced by the structure now known as the Stawell Free Library and Mechanics' Institute, the cost of which was about £4,000, and at the present time there is upon it an outstanding debt of £500. The library contains 3,500 volumes of various classes of literature, and is well supplied with newspapers, magazines, journals, and illustrated papers. The institute is managed by a committee of sixteen, six members being elected each year by the public, and six by the subscribers for the same term; three being trustees or permanent members of the committee, and the Mayor of Stawell is, *ex officio*, its president. The receipts during 1906 were £335.

Stawell Free  
Library  
and  
Mechanics'  
Institute.

In October, 1853, a public meeting was held at Warrnambool for the purpose of petitioning the Government to reserve a block of land for the purposes of a mechanics' institute building site. The site then obtained was given up some years later, and that upon which the building now stands was obtained in its stead. It was not, however, until after the lapse of some years, in August, 1871, that the committee were in a position to erect buildings thereon. In this year a reading-room was erected, at a cost of £340, and in the September of the following year four additional rooms were added. In 1885, a large art gallery and museum was added, and opened free of all encumbrance, the total cost of the building to date being £3,331. Valuable works of art, curiosities, and historical relics

Warrnambool  
Mechanics'  
Institute  
and Free  
Library.

were gradually collected by the curator. In 1889, the museum was transferred to the town council, which body removed the collection to the old court-house building, thus leaving the hall free for works of art, many of which were purchased at the Melbourne Exhibition of 1888. Though not quite free from debt, the position of the institution is fairly satisfactory. It comprises a large reading-room furnished with the leading newspapers and magazines; a billiard room; a library, containing over 7,000 volumes; an art gallery, and school of art.

#### EXHIBITION BUILDINGS.

Exhibition  
Buildings,  
Aquarium  
and  
Museum.

The Exhibition Buildings, which are situated in the Carlton Gardens, Melbourne, when first opened, in October, 1880, occupied a total space of 907,400 square feet. The original cost of the permanent structure was £132,951, of the temporary annexes, £83,111; gardens, £18,481; machinery, £5,715; organ, £5,560; and miscellaneous expenditure, £547—making a total of £246,365. After the close of the exhibition, on the 30th April, 1881, the annexes were removed, and the permanent building was vested in trustees. Another exhibition was opened in the building on the 1st August, 1888, to commemorate the hundredth anniversary of the foundation of the first Australian Colony. On this occasion, a further sum of £125,178 was expended upon the re-erection of the annexes; £30,986 upon additions, alterations, and decorations to the permanent building; £4,854 upon the gardens; £16,471 upon machinery; £77,128 upon electric lighting; and £8,337 upon gas and gas fittings—making a total of £262,954. At the close of the exhibition, there was realized from the sale of various materials, including temporary annexes, a sum of £56,904. The property again reverted to the trustees, who report, for the year 1906, that all the buildings are in a good and substantial condition, the gardens well maintained, and the aquarium and insectarium museums extremely useful, both from educational and scientific points of view. It is intended during the year 1907 to install a new system of electric lighting right through the main building and other parts of the ground by means of the most approved type of arc lamp. The receipts for the year amounted to £5,000, consisting of an advance from the Treasury of £82; rents, £2,573; and aquarium and other receipts, £2,345. The expenditure totalled £4,897; viz., £2,033 for expenses of the Aquarium; and £2,864 for maintenance and improvement of the building and gardens, insurance, and sundry expenses. The deposits and balances in banks to the credit of the trust amount to £912.

#### THE MELBOURNE BOTANIC GARDEN.

Botanic  
Garden.

The Melbourne Botanic Garden is situated on the south side of the River Yarra, and is at a distance of about a mile and a half from the city. The area of the garden proper, including lawns, groups, &c., is 88 acres, whilst that of the lake, including the added elbow, or bend of the River Yarra, amounts to 12 acres in addition.

This now historic garden, together with the Government House grounds (62 acres), and the Domain (150 acres), comprises a total of 312 acres. The facts as to the commencement and progress of the establishment, having been compiled from the most reliable sources, are to be found in the illustrated "Guide Book," as published by the Government Printer in 1901-2, from which the accompanying quotation has been taken:—

"The first site chosen for a Botanic Garden was an area of 50 acres, near to where the Spencer-street railway station is situated, and was selected by Mr. Hoddle, Surveyor-General, in 1842. Afterwards various other localities were proposed, but finally, owing mainly to the discrimination and taste of the Hon. Charles Joseph La Trobe, first Government Superintendent (afterwards Lieutenant-Governor) of the province of Port Phillip, a portion of the present site was decided upon for the purpose. In September, 1845, Dr. Nicholson presented a petition, signed by three or four hundred of the citizens, headed by the Mayor, praying for the immediate establishment of the Botanic Garden, and the sum of £750 was thereupon voted—1845-6—for its maintenance. The first superintendent, or curator (Mr. John Arthur), was appointed 1st March, 1846, and he at once fenced in a 5-acre paddock, that portion of the gardens at present known as the Anderson-street Lawn, sloping towards the tea-house on the edge of Lake, in which he made good progress both as to cultivation and planting. Mr. Arthur, however, whose labours were much appreciated at the time, died in January, 1849. Mr. John Dallachy succeeded Mr. Arthur as curator, and insured such good results that, at the end of 1851, a progress report submitted to the Legislature showed that, in addition to an extension of cultivated ground, many kinds of exotic plants had been added to the collection, and also that the native vegetation has received attention. The various shows of the Horticultural Society were at that time held in the gardens. For several years prior to the retirement of Mr. Dallachy, a scientific arrangement of plants in a part of the gardens was undertaken by the then Government Botanist, Dr. Ferdinand Mueller (subsequently Baron Sir F. von Mueller), who had accompanied the Gregory Expedition in search of Leichhardt, the explorer. After the Baron had received the appointment as Director (1857), Mr. Dallachy was re-employed for several years as a collector of seeds and herbarium specimens for the gardens, and discovered many new and beautiful species in Queensland. The Baron held office as Director until 1873, when, with the view of enabling him to give undivided attention to his scientific labours as Government Botanist, he was relieved of control of the Botanic Gardens, and Mr. W. R. Guilfoyle was appointed to the position. Since 1873 the gardens have been entirely remodelled by him and their area extended by more than 30 acres.

The present features of the gardens are its extensive undulating lawn areas and broad sweeping paths with varied groupings and marginal beds of ornamental trees, flowering shrubs, and useful plants. Large specimens of Australian and exotic trees and other vegetation are effectively disposed about the grounds. At suitable spots, rockeries and mounds have been formed and planted. Along the western and southern boundary fence an interesting plantation of Australian vegetation has been made, which contains many hundreds of representative trees and shrubs of the Continent.

When the present Director took charge of the gardens, in 1873, about 2,500 species of plants were growing there, and these, having been constantly added to, now represent no less than 14,000 species. Many of the most valuable additions are large palms in great variety, arborescent and other ferns—as, for instance, those in the rather extensive "Gully," which has a thousand feet of winding pathway

running through its centre. There are, besides, hundreds of rare ornamental and utilitarian plants, and a large collection of medicinal herbs.

An extensive "System Pavilion", was also formed, the plants all in large pots, classified in their natural orders, and, like the various collections in the outer grounds, conservatory, &c., have labels attached—giving both their scientific and common names, their orders, native countries, &c.

The "Museum of Botany and Plant Products" established by Mr. Guilfoyle contains many thousands of fully-named herbarium specimens; seeds in their seed vessels (or pods), fibres, and woods; products of food, medicinal, and other plants. Both the system pavilion and museum are largely visited by students connected with botanical classes in colleges and schools.

The grounds are almost encircled by a much-used carriage way, which, having been inter-connected, comprises the Alexandra Avenue and the South Yarra Drive, and now makes one wide promenade of  $2\frac{3}{4}$  miles in length. Adjacent to the two entrances from the Alexandra Avenue, and on one of the highest points, close to Government House, has been erected a large domed structure with ten columns, which is known as the Temple of the Winds. This has been dedicated by the Director to the memory of the Hon. Charles Joseph La Trobe, the first Governor of Victoria, who selected the site for the Botanic Garden in 1845-6. The Temple is very attractive to visitors, as from it, very fine views of the Gardens, Yarra Improvements, City, Eastern Suburbs, and the Dandenong and Healesville Ranges are to be obtained.

An efficient water supply for the gardens is obtained from the River Yarra. A pumping station is located near Dight's Falls, at Studley Park, and the water is drawn by powerful pumps from the river and forced into a storage reservoir, situated on the highest point in the Park. The whole of the water required is conducted from this reservoir for a distance of over three miles directly into the gardens water mains. A service of Yan Yean water is provided for drinking purposes for visitors.

The gardens may be approached from the City by foot or vehicle along the interesting Alexandra Drive and Avenue from Prince's Bridge, by boat along the Yarra River, or by the South Yarra or Toorak trams, which pass close to one of the main entrances; while visitors from the northern, eastern, or southern suburbs can obtain access by gates on these boundaries of the gardens.

The gates of the gardens are daily opened from April to September (inclusive) at 7.30 a.m., and from October to March (inclusive) at 7 a.m., and closed at sunset.

It will be seen by the facts quoted that the Melbourne Botanic Garden has now had an existence of over 60 years, and as a favorite resort has become increasingly popular, being attended by many thousands of people on Sundays and holidays, whilst being on week days much used by citizens and others, including visitors from other States, Colonies, &c., Great Britain, and other countries.

The gardens of the Zoological and Acclimatisation Society of Victoria are situated in the centre of Royal Park, on the northern side of the city, distant nearly two miles from the Post Office, and can be reached by the tramcars starting every few minutes from the lower end of Elizabeth-street, or by rail. The ground enclosed contains 50 acres, rather more than half of which is laid out as a zoological garden and the rest in deer paddocks. The Patron of the Society is His Excellency the Governor-General, and the present director is Mr. D. Le Souëf.

Zoological  
and Accli-  
matisation  
Gardens.

#### ROYAL HORTICULTURAL SOCIETY OF VICTORIA.

The initiation and progress of the horticultural interests in this State may justly be considered as due to the efforts of this society, which, as the Horticultural Society of Victoria, was started in the year 1849. Its pioneer members have by this time all passed away, but there remain a few who were members of the society in the early fifties and whose interest in the work of popularizing the growth of plants, flowers, and fruits still manifests itself.

Some few years after its establishment, the society undertook the responsibility of forming and maintaining experimental gardens at Burnley—the park of which it formed a part being known as Survey Paddock—and Mr. Clarson was intrusted with the direction of the work, acting for many years as honorary director. Upon his resignation in 1882, Mr. George Neilson took charge as curator and remained in that position until his much lamented death a few years ago. During all this time, the society was rendering most valued assistance to growers, especially in the establishment of the most complete and reliable type collection of fruits ever seen in Australasia. Horticulturists from all parts of Australia and New Zealand readily availed themselves of this magnificent collection in order to settle disputed questions of nomenclature of fruits, as very great pains were taken to insure absolute correctness of name of every variety planted among the collection. In 1885, Her Majesty the late Queen Victoria issued the warrant for the society to use the name of "Royal," and it has since worked under the full title of Royal Horticultural Society of Victoria.

The years of depression following the crash of the land boom had their full effect on the society, many of the most liberal donors to its funds being compelled to relinquish the financial support they had in past years generously accorded the committee. In 1891, the Government of the day undertook the establishment of a School of Horticulture, and the balance due to debenture-holders on the handsome show pavilion erected in the gardens having been paid by the Government, the estate was handed over to the management of the Department of Agriculture, Mr. Neilson continuing as curator under the direction of a Board of Horticultural Advice to whose personnel the Government appointed three, the society three, with the Secretary of the Department of Agriculture as Chairman. This arrangement

worked with the utmost satisfaction until the death of the curator. Some years after that event, the Minister made a new departure by dissolving the board and placing the School of Horticulture under the sole auspices of the Department.

Since relinquishing the sole control of the Gardens, the society has set itself the task of giving instruction by means of lectures and exhibits at monthly meetings of members, and by imposing fruit and floral displays, all of which attract large attendances.

The President of the society is the Hon. T. H. Payne, M.L.C., who succeeded the Hon. William Anderson, of Southern Cross, in the Koroit District.

The membership subscription is low enough (10s. per annum) to be within the reach of all lovers of horticulture, and as a consequence the list of members is an encouraging evidence of the society's popularity.

The business of the society is vested in a committee, consisting of the president, two vice-presidents (one amateur and one professional), an honorary treasurer, and sixteen members (eight amateurs and eight professionals), the administrative work being conducted by the secretary, Mr. James R. A. Milligan, at the office, Broken Hill Chambers, 31 Queen-street, Melbourne.

Other  
Societies.

There are 27 other horticultural societies in the State, situated at Ballarat, Bendigo, Castlemaine, Kyneton, Mildura, Terang, Traralgon, and other centres. The Government provided £262 in aid of these associations during the year ended 30th June, 1906.

#### METROPOLITAN PUBLIC RESERVES.

Public  
reserves in  
Greater  
Melbourne.

Greater Melbourne is amply supplied with public reserves and parks, the total area devoted to such purposes being 5,421 acres in 1906. The following list of these reserves, together with a statement of their respective areas, has been supplied by the Lands Department :—

#### AREA OF RESERVES, PARKS, AND GARDENS IN MELBOURNE AND SUBURBS, 1906.

Municipality.		Name of Reserve.					Area.
							Acres.
Melbourne City	...	Royal Park	...	...	...	...	425
"	...	Yarra "	...	—	...	...	155
"	...	Prince's "	...	...	...	...	97
"	...	Fawkner "	...	...	...	...	102
"	...	Flinders "	...	...	...	...	17
"	...	Alexandra Park	...	...	...	...	46
"	...	Park (Model Farm)	...	...	...	...	28



AREA OF RESERVES, PARKS, AND GARDENS IN MELBOURNE AND  
SUBURBS, 1906—*continued.*

Municipality.	Name of Reserve.	Area.
		Acres.
Melbourne City	Botanic Garden and Domain	178
"	Queen Victoria Memorial Statue and Garden	8½
"	Zoological Garden	55
"	Carlton	63
"	Fitzroy	64
"	Spring	21
"	Flagstaff	18
"	Argyle Square	3½
"	Curtain	3½
"	Darling	2
"	Lincoln	3½
"	Macarthur	1
"	Murchison	1
"	University	3½
"	University Grounds	106
"	School Children's Recreation Reserve	25
"	Industrial Schools and Board of Health Depot	47
"	Melbourne Cricket Ground	9½
"	East Melbourne	7
"	Scotch College	7
"	Richmond Cricket Ground	6
"	Carlton (old)	5
"	Parliament Reserve	10
"	Ornamental Plantations	17
"	General Cemetery	101
"	Old Cemetery	8½
"	Military Parade Ground	5
"	Recreation (Brown's Hill)	7½
"	Recreation (North Melbourne)	9½
"	Racecourse (Flemington)	301
"	Recreation (Kensington)	5¾
Fitzroy City	Edinburgh Park	34
"	Recreation	7
Collingwood City	Mayor's Park	6
"	Recreation	7
"	Darling Gardens	16
"	Victoria Park	10
Richmond City	Richmond Park	158
"	Horticultural Gardens	33
"	Barkly Square	7
"	Municipal Reserve	7¾
Northcote Town	Jika Park	5¾
"	Recreation	7
South Melbourne City	Albert Park (part of)	464
"	St. Vincent Gardens	7½
"	Ornamental Plantations	2½
"	Cricket and Recreation (Warehousemen's)	8
Port Melbourne Town	Cricket Ground	7¼
"	Park and Garden	58
"	"	2
"	Ornamental Plantations	17
Prahran City	Toorak Park	7
"	Victoria Gardens	4
"	Gardens (Grattan-street)	2
St. Kilda City	St. Kilda Gardens	16

AREA OF RESERVES, PARKS, AND GARDENS IN MELBOURNE AND  
SUBURBS, 1906—continued.

Municipality.	Name of Reserve.	Area.
		Acres.
St. Kilda City	Albert Park (part of)	106
"	Recreation (Point Ormond)	54
"	"	1 $\frac{1}{2}$
"	"	11
"	(Beach Reserves)	47 $\frac{1}{2}$
"	Dandenong Road	22 $\frac{1}{2}$
"	Cemetery	20
Brighton Town	Elsternwick Park	90 $\frac{1}{2}$
"	Recreation (Elsternwick)	14 $\frac{1}{2}$
"	Beach Park	67
Essendon Town	Recreation	10 $\frac{1}{2}$
"	"	5 $\frac{1}{2}$
"	Agricultural Society's Yards	30
"	Queen's Park	22
"	Water Reserve	11 $\frac{1}{2}$
Hawthorn City	Recreation	15
Kew Borough	Studley Park	203
"	Lunatic Asylum	384
"	Cemetery	31
"	Recreation	16
Footscray City	Public Gardens and Recreation	10 $\frac{1}{2}$
"	"	2 $\frac{1}{2}$
"	Cricket Ground, &c.	5 $\frac{1}{2}$
"	Recreation (Yarraville)	5
"	(Footscray West)	15
Williamstown Town	Park (Newport)	25
"	"	2
"	"	20
"	Recreation	9 $\frac{1}{2}$
"	Beach Park	20
"	Cemetery	28
"	Rifle Range	332
"	Cricket Ground	6 $\frac{1}{2}$
"	Public Garden	3 $\frac{1}{2}$
"	Recreation (Newport)	13
Malvern Town	Park and Garden	8
"	Recreation	4 $\frac{1}{2}$
"	Park and Garden (Waverley-road)	16
Caulfield Town	Race-course	144
"	Park	62
"	Park (East Caulfield)	17
"	Recreation	13
"	Brighton Cemetery	29
Oakleigh Borough	Recreation	8
"	Park and Garden	21
"	Park and Recreation	5
"	Cemetery	10
Camberwell Town	Gardens	7
"	Norwood Recreation Reserve	4
Coburg Borough	Recreation	5
Outside urban muni- cipalities	Yarra Bend Asylum	350
	Williamstown Race-course	190
	Total	5,421 $\frac{1}{2}$

Most of the large towns throughout the State also possess public gardens, parks, and reserves for recreation purposes. The following table contains particulars respecting the most important of these:—

NUMBER AND AREA OF PARKS AND GARDENS OF COUNTRY TOWNS  
IN VICTORIA, 1906.

Town.					Number of Reserves.	Area. Acres.
Ararat	..	..	..	..	4	361 $\frac{1}{2}$
Bairnsdale	..	..	..	..	3	150
Ballarat	..	..	..	..	6	1,042
Ballarat East	..	..	..	..	11	175 $\frac{1}{4}$
Beechworth	..	..	..	..	5	161
Bendigo	..	..	..	..	10	168
Buninyong	..	..	..	..	4	114
Burrumbeet	..	..	..	..	1	100
Castlemaine	..	..	..	..	3	109
Clunes ...	..	..	..	..	5	78 $\frac{1}{2}$
Colac ...	..	..	..	..	1	38
Creswick	..	..	..	..	2	43
Daylesford	..	..	..	..	5	242
Dromana	..	..	..	..	3	274 $\frac{3}{4}$
Dunolly	..	..	..	..	5	312
Eaglehawk	..	..	..	..	4	42 $\frac{1}{2}$
Echuca	..	..	..	..	4	251
Flinders	..	..	..	..	1	14 $\frac{1}{4}$
Geelong	..	..	..	..	5	261
Hamilton	..	..	..	..	4	51
Horsham	..	..	..	..	3	142 $\frac{1}{4}$
Koroit	..	..	..	..	1	13
Kyneton	..	..	..	..	1	14
Korumburra	..	..	..	..	2	31 $\frac{1}{2}$
Learmonth	..	..	..	..	4	76
Majorca	..	..	..	..	2	185
Maldon	..	..	..	..	4	156
Maryborough	..	..	..	..	3	142
Mortlake	..	..	..	..	2	82
Portland	..	..	..	..	5	103
Port Fairy	..	..	..	..	1	26
Queenscliffe	..	..	..	..	2	46
Sale	..	..	..	..	1	40
Sebastopol	..	..	..	..	1	36
Shepparton	..	..	..	..	4	113
St. Arnaud	..	..	..	..	2	63
Stawell	..	..	..	..	3	71 $\frac{3}{4}$
Wangaratta	..	..	..	..	3	125
Warrnambool	..	..	..	..	9	449

FRIENDLY SOCIETIES.

Friendly societies are regulated under the *Friendly Societies Act* 1890 and amendments thereof in the Acts of 1891, 1896, 1900, 1905, and 1906, which, amongst other provisions, prescribe that each

Valuations  
of Friendly  
Societies.

society shall furnish returns annually to the Government Actuary for Friendly Societies, and once at least in every five years shall cause its assets and liabilities to be valued to the satisfaction of that officer. The fees for valuation have purposely been fixed low, and average no more than threepence per member, the result being that, although it is competent for the societies to employ outside valuers if they desire it, as a matter of fact they have rarely done so, and all the valuations are now made by the Government Actuary for Friendly Societies.

Friendly  
Societies.

The following is an epitome of the particulars furnished respecting friendly societies for the five years, 1901 to 1905:—

FRIENDLY SOCIETIES, 1901 TO 1905.  
(Including Female Societies.)

	1901.	1902.	1903.	1904.	1905.
Number of societies ...	31	29	26	26	26
Number of branches ...	1,176	1,209	1,236	1,266	1,306
Average number of members	101,045	104,416	105,784	107,213	110,063
Number of members sick	20,988	21,017	19,527	21,608	20,951
Weeks for which alimnt was allowed	170,166	170,460	173,676	184,799	180,986
Deaths of members ...	1,044	1,029	1,030	1,007	1,035
Deaths of registered wives	393	427	408	406	413
	£	£	£	£	£
Income of sick and funeral fund	203,896	204,301	212,607	223,460	225,790
Income of incidental fund	171,676	171,261	174,798	181,085	183,881
Total Income ...	375,572	375,562	387,405	404,545	409,671
Expenditure of sick and funeral fund	153,965	156,921	154,652	161,277	152,434
Expenditure of incidental fund	169,512	170,700	173,629	177,899	182,234
Total Expenditure...	323,477	327,621	328,281	339,176	334,668
Amount to credit of sick and funeral fund	1,269,872	1,317,252	1,375,207	1,437,390	1,510,746
Amount to credit of incidental fund	51,086	51,647	52,816	56,032	57,679
Amount invested—sick and funeral fund	1,207,193	1,252,861	1,315,904	1,378,151	1,451,359
Amount invested—incidental fund	40,029	42,314	43,903	47,395	48,549
Total invested ...	1,247,222	1,295,175	1,359,807	1,425,546	1,499,908

Growth of  
Friendly  
Societies.

During the quinquennium ended with 1905, the number of members in friendly societies increased by 12,572, or by slightly less than  $12\frac{3}{4}$  per cent., the amount to the credit of the sick and funeral fund by £290,805, or about  $23\frac{3}{4}$  per cent., and the total amount invested by £308,890, or over 27 per cent.

Registered friendly societies consisting solely of females at the end of 1905 numbered 8, and the branches 116. The average number of members during the year was 5,535, the total income £10,484, and the expenditure £8,262. The capital amounted to £10,578, of which £9,170 was invested. Female societies.

In proportion to the number of effective male members of Friendly Societies, the amount of sickness experienced in 1905 was about the average of recent years. The days per effective member for which aliment was allowed were equal to an average of 12.0 in each of the five years 1901-1905, but the average was only 10.8 during the eighteen years ended 1900. The death rate in 1905 was slightly below the average—the rate per 1,000 members being 9.75 in 1905, 9.64 in 1904, 10.02 in 1903, 10.09 in 1902, 10.45 in 1901, and 10.51 for the 28 years ended 1905. The female societies experienced a smaller amount of sickness than the male branches—the days per effective member for which aliment was allowed only averaging 5.4 yearly in the five years ended 1905. The death rate, too, was considerably lower, being 3.07 per 1,000 members in 1905, and not exceeding 5 per 1,000 members in any of the years of the quinquennium. Sickness and death rates.

#### OCCUPATIONS.—CENSUS RETURNS.

The occupations of the people in 1901 were ascertained at the census. The various divisions of employment, under 28 heads, were:— Occupations, 1901.

#### OCCUPATIONS OF THE PEOPLE, 1901.

—	Males.	Females.	Total.
Ministering to—			
Government, Defence, &c. ....	6,719	165	6,884
Religion, Charity, Science, Education, &c. ....	13,664	14,676	28,340
Board, Lodging, and Attendance ....	13,129	53,686	66,815
Dealing in—			
Money and Real Property ....	10,039	2,760	12,799
Art and Mechanic Productions ....	3,720	934	4,654
Textile Fabrics, Dress and Fibrous Materials	6,374	2,452	8,826
Foods, Drinks, Narcotics, and Stimulants	18,217	3,428	21,645
Animals, and Animal and Vegetable Substances	3,977	198	4,175
Metal or Minerals (other than those used for Fuel and Light)	2,044	162	2,206
Minerals, &c., mainly used for Fuel and Light	2,794	34	2,828
Engaged in—			
General Dealing and Mercantile Pursuits	16,091	4,446	20,537
Speculating on Chance Events ....	284	1	285
Storage ....	1,093	..	1,093
Transport and Communication ....	30,318	1,198	31,516

## OCCUPATIONS OF THE PEOPLE, 1901—continued.

—	Males.	Females.	Total.
Manufacturers of—			
Art and Mechanic Productions ...	20,676	1,748	22,424
Textile Fabrics, Dress and Fibrous Materials	10,664	28,450	39,114
Foods, Drinks, Narcotics, and Stimulants	10,251	1,402	11,653
Animal and Vegetable Substances ...	5,281	85	5,366
Metals and Minerals (other than those used for Fuel and Light)	14,315	88	14,403
Materials used for Heat, Light, or Energy	1,035	37	1,072
Constructors of Buildings, Roads, Railways, Earthworks, &c.	27,392	17	27,409
Engaged in Disposing of the Dead or Refuse	1,260	24	1,284
Ill-defined Industrial Workers (chiefly Labourers)	22,653	855	23,508
Engaged on Land or with Animals, and in Obtaining Raw Products from Natural Sources	140,149	24,998	165,147
Persons—			
Of Independent Means ...	7,242	2,824	10,066
Dependent upon Natural Guardians ...	203,279	444,931	648,210
Dependent upon the State or upon Public or Private Support	7,701	6,444	14,145
Occupation not stated (chiefly Breadwinners)	3,522	1,415	4,937
Total ... ..	603,883	597,458	1,201,341

The number of breadwinners and dependents were:—

## BREADWINNERS AND DEPENDENTS, 1901.

—	Males.	Females.	Total.	Percentage.		
				Males.	Females.	Total.
Breadwinners	389,381	144,668	534,049	65	24	45
Dependents ...	210,980	451,375	662,355	35	76	55
Total ..	600,361	596,043	1,196,404	100	100	100

Bread-  
winners  
and de-  
pendents,  
1901.

Proportion  
of bread-  
winners  
and de-  
pendents.

The proportion of breadwinners was 100 to every 124 dependents, which was almost the same as at the previous census, when 100 breadwinners supported 125 dependents. It will be seen, too, that nearly one-fourth of the females in Victoria were returned as earning their own living.

## FACTORIES AND SHOPS.

Factory  
legislation.

The Factories and Shops Acts were consolidated during the year 1905 by the *Factories and Shops Act* 1905, No. 1975. Beyond making the Act a permanent measure, no changes were effected in the law by Act 1975. The nine existing Acts were merely consolidated.

Shortly after the consolidation, the *Factories and Shops Act* 1905 (No. 2), No. 2008, was passed, and came into force on the 1st March, 1906. This measure removed a number of administrative difficulties, and the majority of its provisions do not call for special remark.

An important change was, however, made as regards the provisions governing the closing of shops in the Metropolitan District. Under the present law, the majority of shops should be closed at 7 p.m. ordinary nights, and 10 p.m. on Saturdays, unless a majority of the shopkeepers of any class in any district petitioned the Governor in Council to fix a later hour by Regulation. Shopkeepers could also petition for the closing of shops for a half-holiday.

The above provisions continue in force as regards places outside the Metropolitan District, but, as regards the latter, the amending Act fixes the hours for closing and for a half-holiday, and same cannot be altered except by Act of Parliament.

Shortly stated, the hours for closing butchers' shops are fixed at 5 p.m. on Monday, Tuesday, and Thursday, 6 p.m. on Friday, 1 p.m. on Wednesday or Saturday, whichever the shopkeeper may prefer. If Wednesday be chosen for half-holiday, the hour for closing on Saturday is 9 p.m., and if Saturday be chosen the hour for closing on Wednesday is 5 p.m. Bicycle shops, boot repairers' shops, dairy produce shops, flower shops, hairdressers' shops, and pawnbrokers' shops must be closed on Monday, Tuesday, Thursday, and Friday at 8 p.m.; on Wednesday or Saturday, at 1 p.m. If shop be closed on Saturday at 1 p.m., it must be closed on Wednesday at 8 p.m.; if it be closed at 1 p.m. on Wednesday, it can be kept open till 11 p.m. on Saturday.

All other shops (except Fourth Schedule Shops) must be closed at 6 p.m. on Monday, Tuesday, and Thursday. On Friday, at 6 p.m., if shop be closed on Wednesday at 1 p.m., but if closed on Wednesday at 6 p.m., and on Saturday at 1 p.m., the shop may be kept open till 10 p.m. on Friday. If closed on Wednesday at 1 p.m., shop may be kept open till 10 p.m. on Saturday. The shop must be closed for a half-holiday on Wednesday or Saturday at 1 p.m., whichever day the shopkeeper may elect, but having elected one day or the other he cannot change it for three months.

The Fourth Schedule shops, so far as Metropolitan District is concerned, are:—

- Chemists' shops.
- Coffee-houses.
- Confectioners.
- Cooked meat (other than tinned meat) shops.
- Eating-houses.
- Fish and oyster shops.
- Fruit and vegetable shops.
- Restaurants.
- Tobacconists' shops.
- Booksellers' and news agents' shops.

No hours for closing such shops are fixed by the Act.

A factory is defined to mean any place in which four or more persons other than a Chinese, or in which one

or more Chinese are employed in any handicraft, or in preparing articles for trade or sale; or any place in which one or more are employed, if motive power be used in the preparation of such articles, or where furniture is made, or where bread or pastry is made or baked for sale. The expression handicraft includes any work done in a laundry or dyeworks. Provision is made for the registration of factories; and inspectors are appointed to inspect and examine them in order to see that the health requirements and other provisions of the Acts are complied with. A record is to be kept in every factory of the names, work, and wages of all employés, and the ages of those under 21. The employment of persons under 13 is debarred, and a strict limitation is placed on the hours of employment for all females and for males under sixteen. There are special provisions to guard against accidents, and persons in charge of engines and boilers must hold certificates of competency or service. The working hours of Chinese are specially restricted, in order to try to prevent or lessen unfair competition. Every employé in a factory must be paid at least 2s. 6d. per week. This provision is, of course, intended as a protection for juvenile workers.

Wages  
Boards.

The most important provision contained in the Act of 1896, and extended by subsequent Acts, is in regard to the formation of Boards to fix the rates of wages and piece-work in various trades, for which purpose it is provided that, to determine the lowest prices or rates to be paid, the Governor-in-Council may appoint special Boards, if a resolution in favour of creating a Board for any process, trade, or business has been carried in both Houses of Parliament, consisting of from four to ten members (half elected by employers and half by employés), who are to nominate some outside person as chairman; or if no agreement can be arrived at as to such nomination, then the Governor-in-Council shall appoint the chairman. The Board so appointed may fix piece-work rates which may be paid, and also the lowest wages rates, and may also determine the number of improvers who may be employed. There are 49 Special Boards now in existence, affecting over 49,000 operatives.

Effect—  
Rise in  
earnings.

The Chief Inspector of Factories reports that determinations, made by thirty-eight Boards appointed under the Act, were in full operation during 1906, and furnishes figures showing the increase in average earnings consequent thereon. For instance, the average weekly wage for all employés (including boys) in the bread-making trade was £1 12s. 6d. in 1896, prior to the Wages Board being in operation, and £2 1s. 3d. in 1905, when its determination was in full force. Likewise, the average wage of persons employed in the clothing trade increased from £1 in 1896 to £1 0s. 6d. in 1905; the average wage in the boot trade from £1 3s. 2d. to £1 6s. 4d.; and in the furniture trade from £1 9s. 1d. to £1 15s. 10d. In 1900, the average wage of persons engaged in the engraving trade was 36s. 11d., and in 1905, when the determination was in force, it was £2 1s. 9d., or an increase of 4s. 10d. In the pottery trade the average wage was £1 8s. 1d. in 1900, before the Wages Board fixed



the rates, and in 1905, when the determination was in operation, it had risen to £1 12s. 7d., or an average increase of 4s. 6d. for each employé engaged in the trade.

Provision has been made in the law for appeals against the determination of any Special Board to a Court of Industrial Appeals. The Court consists of a Judge of the Supreme Court (Mr. Justice Hood was appointed as Judge of the Court of Industrial Appeals), who may be assisted by two assessors for technical purposes only. The assessors have no voice in the decisions of the Court. There have been three appeals against the determinations of Special Boards to this Court.

#### GOVERNMENT LABOUR BUREAU.

Prior to the 1st October, 1900, two labour bureaux were administered by the Railway Department. One registered men in search of work, and distributed all Government work, each Department paying the cost. The other was a Railway Staff Office, regulating and distributing all temporary and casual railway employment. Both these are now administered by a bureau under the control of the Public Works Department, where applicants are registered for temporary or casual employment principally as artisans and labourers on Government works, including railways. Men are supplied when work is available according to their order of registration, subject to fitness. This bureau also undertakes to supply workmen for private employment, and advances railway tickets to deserving applicants who may themselves have obtained employment in country districts, which they would be otherwise unable to reach, these advances being subject to orders for repayment out of earnings.

The following is a summary of the operations of the bureau in respect to registrations and applicants sent to employment for the year 1906 :—

#### GOVERNMENT LABOUR BUREAU.

Year and Month.	Number of Applicants for Work as Registered at the End of each Month.	Number of Men for whom Employment was Obtained.
1906—January .. .. . February .. .. . March .. .. . April .. .. . May .. .. . June .. .. . July .. .. . August .. .. . September .. .. . October .. .. . November .. .. . December .. .. .	1,453 1,811 1,407 966 1,454 1,751 2,601 1,859 1,319 * 1,031 *	2,896

\* Figures not available.

During the year 1906 the number of railway tickets advanced was 850, valued at £755, of which £505 was refunded. During the past six and a quarter years 4,775 railway tickets have been advanced, of the value of £4,003, of which £2,280 has been refunded.

### CHARITIES AND REFORMATORY INSTITUTIONS.

Charitable  
and Refor-  
matory  
Institu-  
tions, &c.

The total number of organizations administering charitable relief and of a reformatory character throughout the State which forwarded returns to the Government Statist for the year 1906 was 238. The number of these which received aid from the Government was 211. The amount received by all these institutions was £779,325, of which the Government contributed £521,964, and £257,361 was received from all other sources. The total expenditure amounted to £737,253. The daily average number under care indoors throughout the year was 13,874, and there were no less than 117,191 distinct cases of outdoor relief. With regard to the outdoor relief, it has been ascertained that in some institutions the "distinct cases treated" represent the actual number of persons treated; in others, they represent the actual cases of illness, accident, or disease; but in these latter cases, the books of the institutions do not furnish the necessary particulars as to the number of distinct persons. Again, it is considered probable that some obtained relief at more than one establishment, and that some, in the course of the year, became inmates of one or other of the institutions. There is no available information upon which an estimate of these duplications can be based.

In the following table will be found a summary containing full particulars of all these charitable and reformatory institutions, showing the number in each class, the daily average number of persons under care in institutions, the total number of distinct cases receiving outdoor relief, together with receipts and expenditure:—

#### CHARITABLE AND REFORMATORY INSTITUTIONS—INMATES, RECEIPTS, AND EXPENDITURE, 1905-6.

Name of Institution, &c.	Number of Institutions.	Daily Average Indoors.	Outdoor Relief Distinct Cases.	Receipts.			Expenditure (including Building Expenses for Year).
				From Government.	From Other Sources.	Total.	
HOSPITALS.							
General Hospitals .. ..	45	2,137	56,535	£ 50,990	£ 98,047	£ 149,037	£ 128,582
Women's Hospital .. ..	1	103	1,259	3,800	11,874	15,674	10,145
Children's Hospital .. ..	1	90	13,541	500	13,904	14,404	8,809
Queen Victoria Hospital for Women and Children	1	19	3,609	360	1,317	1,677	1,909
Greenvale Sanatorium for Consumptives	1	35	..	6,801	..	6,601	6,601

**CHARITABLE AND REFORMATORY INSTITUTIONS—INMATES, RECEIPTS,  
AND EXPENDITURE, 1905-6—continued.**

Name of Institution, &c.	Number of Institutions.	Daily Average Indoors.	Outdoor Relief Distinct Cases.	Receipts.			Expenditure (including Building Expenses for Year).
				From Government.	From Other Sources.	Total.	
<b>HOSPITALS—continued.</b>							
				£	£	£	£
Consumptive Sanatorium ..	1	60	..	300	3,581	3,881	5,979
Convalescent Homes ..	2	45	..	370	1,301	1,671	1,535
Deaf and Dumb, Blind, and Eye and Ear Institutions ..	3	218	5,748	3,400	16,323	19,723	10,841
Hospitals for Insane and Idiot Asylum ..	9	4,822	..	121,735	22,167	143,902	143,902
Foundling Hospitals ..	2	118	..	1,316	1,783	3,099	3,691
Infectious Diseases Hospital ..	1	25	..	1,464	2,204	3,668	3,723
Total .. .. .	67	7,672	80,692	190,836	172,501	363,337	325,717
<b>BENEVOLENT ASYLUMS AND SOCIETIES.</b>							
Benevolent Asylums ..	8	2,587	1,942	20,667	14,999	35,666	34,904
Old Colonists' Association ..	1	53	11	..	4,485	4,485	2,742
Freemasons' Home ..	1	16	1	..	948	948	635
Old Actors' Home ..	1	5	32	..	320	320	321
Benevolent Societies ..	93	..	13,266	5,033	16,348	21,381	20,384
Orphan Asylums ..	9	1,446	..	5,650	15,716	21,366	20,137
Total .. .. .	113	4,107	15,252	31,350	52,816	84,166	79,123
<b>REFORMATORY INSTITUTIONS.</b>							
Neglected Children and Reformatory Schools ..	20	264	4,823	59,800	1,643	61,443	61,443
Female Refugees ..	10	654	..	2,300	18,575	20,875	21,91
Salvation Army Rescue Homes ..	6	160	..	566	4,644	5,210	4,917
Discharged Prisoners' Aid Society ..	1	..	476	195	508	703	684
Gaols and Penal Establishments ..	16	1,017	..	51,222	..	51,222	51,222
Total .. .. .	53	2,095	5,299	114,083	25,370	139,453	140,179
<b>MISCELLANEOUS.</b>							
Old-Age Pensioners ..	..	..	10,990	185,515	3,612	189,127	189,127
Night Shelters (Dr. Singleton's) ..	2	..	..	40	16	56	72
Charity Organization Society ..	1	..	..	..	2,618	2,618	2,381
Free Dispensaries ..	2	..	4,958	140	423	568	654
Total .. .. .	5	..	15,948	185,695	6,674	192,369	192,234
Grand Total ..	238	13,874	117,191	521,964	257,361	779,325	737,253

Particulars relating to the most important of the various classes of charitable institutions in the State are as follow. The information relates to the year ended the 30th June, 1906, except for the Hospitals for the Insane, the Idiot Asylum, and the Neglected Children and Reformatory Schools, in which cases it relates to the calendar year 1906, and the Infectious Diseases Hospital, which is for the year ended 30th September, 1906. Of the general hospitals, six are in Melbourne, the remainder in country towns, nine of the latter

Charitable institutions  
—accommodation.

being also benevolent asylums. The accommodation available for indoor patients was as follows:—

AMOUNT OF ACCOMMODATION, 1905-6.

Description of Institution.	Number of Institutions.	Dormitories.		Number of Beds for Inmates.	Number of Cubic Feet to each Bed.
		Number.	Capacity in Cubic feet.		
General Hospitals ...	45	410	4,249,885	3,123	1,361
Women's Hospital ...	1	25	144,450	104	1,389
Children's Hospital ...	1	17	141,815	115	1,233
Eye and Ear Hospital ...	1	8	54,680	60	911
Queen Victoria Hospital for Women and Children	1	3	23,894	20	1,195
Infectious Diseases Hospital	1	6	96,304	50	1,926
Foundling Hospital (Broadmeadows)	1	8	...	70	...
The Foundling Hospital and Infants' Home	1	3	15,336	61	251
Greenvale Sanatorium for Consumptives	1	8	...	40	...
Consumptive Sanatorium...	1	32	56,000	114	491
Hospitals for the Insane ...	8	1,204	2,908,525	4,220	689
Idiot Asylum ...	1	20	114,288	308	371
Benevolent Asylums ...	8	215	1,743,466	2,710	643
Convalescent Homes ...	2	30	69,000	61	1,131
Blind Asylum ...	1	5	91,318	112	815
Deaf and Dumb Asylum ...	1	3	72,220	78	926
Orphan Asylums ...	9	70	675,427	1,399	483
Neglected Children and Reformatory Schools	20	95	330,864	723	458
Female Refuges ...	10	130	493,914	714	692
Salvation Army Rescue Homes	6	15	107,017	181	591
Total ...	120	2,307	11,388,403	14,263	798

The following statement shows the number of inmates and of Charitable deaths in these institutions:— institutions —inmates and deaths.

INMATES AND DEATHS, 1905-6.

Description of Institution	Number of Inmates.		Number of Deaths.	Proportion of Deaths to Total Number of Inmates.
	Total during the Year.	Daily Average.		
				Per cent.
General Hospitals ... ..	22,763	2,137	2,326	10·2
Women's Hospital ... ..	2,119	103	34	1·6
Children's Hospital ... ..	1,823	90	198	10·9
Eye and Ear Hospital ... ..	707	52	3	·4
Queen Victoria Hospital for Women and Children	289	19	17	5·9
Infectious Diseases Hospital ...	416	25	17	4·1
Foundling Hospital (Broadmeadows)	123	64	18	14·6
Foundling Hospital and Infants' Home	115	54	16	13·9
Greenvale Sanatorium for Consumptives	171	35	1	·6
Consumptive Sanatorium ... ..	234	60	6	2·6
Hospitals for the Insane ... ..	5,377	4,493	288	5·4
Idiot Asylum ... ..	359	329	7	1·9
Benevolent Asylums ... ..	3,855	2,587	453	11·8
Convalescent Homes ... ..	1,195	45	...	...
Blind Asylum ... ..	100	89	1	1·0
Deaf and Dumb Asylum ... ..	93	77	...	...
Orphan Asylums ... ..	1,857	1,446	11	·6
Neglected Children and Reformatory Schools	5,867	5,087	42	·7
Female Refuges .. ..	1,036	654	13	1·3
Salvation Army Rescue Homes ...	624	160	5	·8
Old Colonists' Association ... ..	59	53	3	5·1
Old Actors' Home ... ..	5	5	...	...
Freemasons' Home ... ..	17	16	2	11·8
Total ... ..	49,204	17,680	3,461	7·0

In addition to the inmates shown in the preceding table, there were 38 mothers of infants in the Foundling Hospital and Infants' Home, 96 infants in the Female Refuges, and 117 infants in Salvation Army Homes during the year.

Charitable  
institutions  
—receipts  
and ex-  
penditure.

The total receipts of all charitable institutions in the year 1905-6 amounted to £538,976, of which considerably more than one-half was contributed by Government, and the expenditure amounted to £496,904. Of the Government contribution, £188,136 was expended on the Hospitals for the Insane, the Idiot Asylum, the Neglected Children and Reformatory Schools, and the Greenvale Sanatorium for Consumptives, which are Government institutions. Compared with the previous year, the total receipts show a very satisfactory increase, viz., £43,700—£30,314 of this amount being from private sources, and £13,386 from the Government.

CHARITABLE INSTITUTIONS.—RECEIPTS AND EXPENDITURE, 1905-6.

Description of Institution.	Receipts.			Expenditure.
	From Government.	From other Sources.	Total.	
	£	£	£	£
General Hospitals ... ..	50,990	98,047	149,037	128,582
Women's Hospital ... ..	3,800	11,874	15,674	10,145
Children's Hospital ... ..	500	13,904	14,404	8,809
Eye and Ear Hospital ... ..	800	5,058	5,858	3,652
Queen Victoria Hospital for Women and Children	360	1,317	1,677	1,909
Infectious Diseases Hospital ...	1,464	2,204	3,668	3,723
Foundling Hospital (Broadmeadows)	315	588	904	837
The Foundling Hospital and Infants' Home	1,000	1,195	2,195	2,854
Greenvale Sanatorium for Consumptives	6,601	...	6,601	6,601
Consumptive Sanatorium ... ..	300	3,581	3,881	5,979
Hospitals for the Insane ... ..	121,735	22,167	143,902	143,902
Idiot Asylum ... ..	20,667	14,999	35,666	34,904
Benevolent Asylums ... ..	370	1,301	1,671	1,535
Convalescent Homes ... ..	1,700	7,395	9,095	3,704
Blind Asylum ... ..	900	3,870	4,770	3,485
Deaf and Dumb Asylum ... ..	5,650	15,716	21,366	20,137
Orphan Asylums ... ..	59,800	1,643	61,443	61,443
Neglected Children and Reformatory Schools	2,300	18,575	20,875	21,913
Female Refuges ... ..	566	4,644	5,210	4,917
Salvation Army Rescue Homes ...	...	4,485	4,485	2,742
Old Colonists' Association ... ..	...	320	320	321
Old Actors' Home ... ..	...	948	948	635
Freemasons' Home ... ..	195	508	703	684
Discharged Prisoners' Aid Society	...	2,618	2,618	2,381
Charity Organization Society ...	5,033	16,348	21,381	20,384
Benevolent Societies ... ..	140	428	568	654
Free Dispensaries ... ..	40	16	56	72
Dr. Singleton's Night Shelters ...	...	...	...	...
Total ... ..	285,227	253,749	538,976	496,904

The following statement shows the average number of inmates of the respective institutions, the total cost of their maintenance, and the average cost for the year of each inmate:—

Charitable institutions—average cost per inmate.

## COST OF MAINTENANCE, 1905-6.

Description of Institution.	Daily average Number of Inmates.	Total Cost of Maintenance.	Average cost of each Inmate.
		£	£ s. d.
General Hospitals ... ..	2,137	117,270	54 17 6
Women's Hospital ... ..	103	6,890	66 17 10
Children's Hospital ... ..	90	8,524	94 14 3
Eye and Ear Hospital ... ..	52	3,643	70 1 2
Queen Victoria Hospital for Women and Children	19	1,737	91 8 5
Infectious Diseases Hospital ...	25	3,593	143 14 5
Foundling Hospital (Broadmeadows) ...	64	647	10 2 2
The Foundling Hospital and Infants' Home	54	1,513	28 0 4
Greenvale Sanatorium for Consumptives	35	2,408	68 16 0
Consumptive Sanatorium ... ..	60	4,458	74 6 0
Hospitals for the Insane ... ..	4,822	134,237	27 16 9
Idiot Asylum ... ..			
Benevolent Asylums ... ..	2,587	33,128	12 16 1
Convalescent Homes ... ..	45	1,326	29 9 4
Blind Asylum ... ..	89	3,615	40 12 4
Deaf and Dumb Asylum ... ..	77	3,317	43 1 7
Orphan Asylums ... ..	1,446	18,370	12 14 1
Neglected Children and Reformatory Schools	5,087	61,443	12 1 7
Female Refuges ... ..	654	16,586	25 7 3
Salvation Army Rescue Homes ... ..	160	4,372	27 6 6
Old Colonists' Association ... ..	53	2,181	41 3 0
Old Actors' Home ... ..	5	321	64 4 0
Freemasons' Home ... ..	16	635	39 13 9
Total ... ..	17,680	430,214	24 6 8

In calculating the average cost of each inmate, the cost of treating out-patients is necessarily included, as there is no available information showing the cost of in-patients and out-patients separately.

The institutions showing the lowest average cost per inmate are the Foundling Hospital (Broadmeadows), Neglected Children and Reformatory Schools, the Orphan Asylums, and the Benevolent Asylums. As many of the children of the Industrial and Reformatory Schools cost the State nothing—maintaining themselves at service or being supported by relatives—the cost of maintenance per head shown above is somewhat misleading, the true cost per head of those supported by the State being about £17 6s. The average cost per inmate of the Foundling Hospital and Infants' Home, Female Refuges, and Salvation Army Homes would be reduced if allowance were made for mothers of infants in the first-named institution, and for infants in the two latter groups of institutions.

Melbourne  
Hospital.

The origin of this institution belongs to the very earliest days of Melbourne. Five years from the foundation of the city, the great desirability, and even necessity, of providing some establishment for the reception, nursing, and treatment of the sick poor, and for the relief of victims of accidents, was apparent. A public meeting, presided over by the Superintendent of the Province, Mr. Latrobe, and attended by the leading people of the settlement was held on 1st March, 1841, and resolutions were unanimously and enthusiastically adopted in favour of the foundation of a hospital in which the best medical advice and the most skilful surgical treatment available would be at the service of those who were in indigent circumstances, as well as of those who would be admitted as paying patients. The severity of the struggle for existence in those early days, and the poverty of the people of the settlement, retarded for a time the collection of subscriptions. In a year, only £300 had been received; but urgent requirements were met by the establishment of a dispensary in a small brick cottage in Little Collins-street rented for the purpose. The grant in aid, which had been fully expected, was refused by the Government in Sydney; but the charitable work was not thereby doomed, and private donations enabled larger premises, in Bourke-street west, to be engaged for hospital purposes. It was intimated that no more than £500 could in any event be expected from Sydney, and the indignation and disappointment in Melbourne culminated in a meeting of prominent colonists at the house of Dr. Palmer, afterwards President of the Legislative Council under responsible government. Strong representations were made to the Governor, Sir George Gipps, who promised the memorialists a site for the hospital, and a money grant by way of building fund and endowment. In February, 1845, two sites were offered, namely, the hay and corn market reserve, between Flinders-lane and Flinders-street, on the east side of Collins-street, and a block, in a then sequestered corner of the town, bounded by Lonsdale, Little Lonsdale, Swanston, and Russell streets. The latter was ultimately chosen, and upon it the building of the hospital was commenced.

As an intimation had been received from Sydney that the Government was prepared to advance £1,000 if a like amount was subscribed in Melbourne, immediate steps were taken to fulfil the condition. £265 was raised at the meeting, at which also a governing body was appointed. The first entertainment raised nearly £60, and was given by some gentlemen amateurs who had formed themselves into a philharmonic society. In January, 1846, tenders were called for. The foundation stone was laid on the same day as that of the original Prince's-bridge. Early in 1848, the building was ready for occupation, a staff was appointed, and in March of that year, two patients were admitted, and four out-patients treated. By July, 1848, all the beds, 21 in number, were occupied, and even at that early date, applications for admission exceeded the available accommodation, and additions had therefore to be made. The original building now forms the east wing of the main building. From that time up to the present day continual additions and alterations have



been made in order to meet the growing demands of an increasing population, and equip the institution for the position it has held as the principal general hospital of Victoria, and the chief medical training school for University students. The wards now contain over 300 beds, in which between 4,000 and 5,000 in-patients are treated annually. In the out-patients' department, 18,586 persons were treated last year, including 7,258 casualty cases. The aggregate number of attendances was 75,974.

As far as has been possible in an institution, the greater part of which was built over half a century ago, the hospital has been improved in accordance with the latest views of hospital construction, and the requirements of modern science. A fine new operating theatre was built a few years ago, and recently the old original theatre was reconstructed and brought thoroughly up-to-date. In these two theatres during 1906, no fewer than 2,025 operations were performed. There is a most effective system of steam supply and hot-water pipes installed at this hospital, whereby the operating theatres and some of the wards are heated, the sterilizers are supplied with steam at a high temperature, and the theatres are provided with absolutely sterilized water.

Some years ago an excellently-equipped mortuary was added to the hospital, and a fine large lecture-room for University students. Other important additions have been two new wards for septic cases. These are the most up-to-date wards in the hospital, and have proved highly satisfactory. Another department of the institution which has been excellently equipped is the X rays room. Generous donations from the trustees of the estate of the late Edward Wilson have provided for this highly useful department the latest and best equipment.

The usefulness of the Melbourne Hospital since its inauguration may be judged from the work carried out. The in-patients treated up to date number 190,014; the out-patients, 832,088.

In 1905-6 the Government granted £10,000 towards maintenance; the municipal grants were £761; private contributions amounted to £4,151; proceeds of entertainments, £308; legacies, bequests, £10,805; Hospital Sunday, £2,212; payments and contributions by in-door patients, £1,813; out-patients' fees, £1,236; and £3,191 was received from all other sources. The total receipts for the twelve months were £34,477, which includes £5,978, bequests, &c., to the endowment fund. The expenditure was £25,667—£831 for buildings and extraordinary repairs, £24,682 for maintenance, and £154 for miscellaneous items.

For many years before the establishment of this institution, the necessity for a second general hospital in Melbourne was recognised. It was not, however, until 1868, that it was finally resolved that a charitable institution should be erected as a memorial of the providential escape of H.R.H. Alfred, Duke of Edinburgh, from assassination during his visit to Sydney. A site of 13 acres within the municipality of Prahran was secured, and the foundation stone was laid in March, 1869, by His Royal Highness, after whom the hospital was

Alfred  
Hospital.

named. In May, 1871, the establishment was opened, and additions were made in 1885. In 1888, a fire occurred, which entirely destroyed a portion of the original buildings. During the year 1901-2, further additions were made. This hospital is recognised by the Melbourne University as a clinical school for medical students, and, in addition, a training school for nurses was established in 1880, the term of instruction decided upon being one year, but this was subsequently increased to three years. The pupils are of two grades—the first pay an entrance fee and a fixed sum monthly for maintenance, &c., whilst the second receive a small and progressive salary after six months. Since the opening in 1871, 49,032 in-patients were treated, and of these 5,365 died in the establishment. The out-patients numbered 97,323, and the casualty cases 55,324. For the year ended 30th June, 1906, the daily average number of in-patients was 157. The number of patients treated shows a continuous and steady increase. Thus, the total number of patients for year ended 30th June, 1896, was 6,560, while the figures for the year 1905-6 are 10,164. The total revenue from all sources was £13,520—£3,800 from the Government; £421 municipal grants; £1,914 private contributions; £85 proceeds of entertainments; £3,452 legacies, bequests, &c.; £905 Hospital Sunday; £1,564 contributions by in-door patients; £686 by out-door patients; and £693 all other receipts. The total expenditure was £11,652. A new operating theatre, on the most approved model, is in course of erection, which will involve an expenditure of about £1,800.

Homoeo-  
pathic  
Hospital.

This institution was first established in 1869 as a dispensary, in Spring-street, Melbourne. In 1876, the buildings were enlarged, and founded as a hospital for the treatment of both in and out-patients. In 1881, owing to annually increasing demands for the treatment of in-patients, it was decided to remove the institution to its present site on St. Kilda-road, and the northern wing and administration quarters were then erected. In 1890, the southern wing, which is reserved for surgical cases, was added, the cost being met by a gift of £9,000 made by Mr. James S. Hosie, of Melbourne. Since the institution was first opened, up to 30th June, 1906, 141,906 patients have received treatment. During the year ended on that date, 8,397 patients were treated. The visits of out-patients during the same period were 23,715. The average stay of in-patients was 19 days for males and 23 days for females, which is an exceedingly low average. 1,014 operations were performed by the visiting honorary surgeons, and 1,497 casualty cases were attended to. The establishment has attached to it a school for training nurses, who have to serve a period of three years, and pass prescribed examinations. Visitors are admitted on Sundays and Wednesdays, between the hours of 2 and 4 p.m. The income for the year was £6,104, made up of £1,750 Government grant; £247 municipal grants; £1,039 private contributions; £27 proceeds of entertainments; £1,446 legacies, bequests, &c., £332 Hospital Sunday; £603 contributions by in-door, and £500 by out-door patients; and £160 from all other sources. The expenditure was £4,344—£105 for buildings; £4,175 for maintenance; and miscellaneous items £64.

The institution has accommodation for 84 patients. On 30th June, 1906, there were remaining under care 28 men and 31 women. It is proposed by the board of management of the hospital very shortly to proceed with the erection of a children's wing, which will provide accommodation for over 30 children. Also a new building for nurses' accommodation, dispensary, and out-patients' waiting rooms.

This hospital for incurables, the only one of its kind in Victoria, is situated on a block of 17 acres at Heidelberg. Its origin belongs to the year 1880, when Mrs. Thomas Austin, of Barwon Park, Winchelsea, offered £6,000 for the purposes of the institution. Other donations quickly followed, and the Government of the day granted the present site. The hospital was opened in August, 1882, and provided accommodation for 66 patients. In 1884, a wing, containing sixteen beds for the reception of cancer patients, was opened, and in 1900 another wing was added for consumptives, containing 41 beds. Alterations in 1897 increased by eight the accommodation for cancer patients. The Nurses' Home, with accommodation for 30 nurses and women servants, was erected and furnished in 1897. This building was enlarged in 1906 so as to increase the accommodation for nurses and women servants to 45 beds. In 1901, the children's wing was erected, and a laundry has since been added. In 1905 an additional wing for consumptives, capable of containing 60 patients, was opened. £5,110 of the total cost (about £6,000) of the erection of the building was provided by Mr. Joseph Kronheimer, of Melbourne. The ground floor of the wing, holding 30 beds, has been furnished at a cost of about £480, of which amount quite two-thirds has been specially contributed, without solicitation, by friends of the institution. The whole (60 beds) of the accommodation for patients in the Kronheimer wing was rendered available in 1906. Up to 30th June, 1906, 2,310 patients were admitted; of this number 1,564 died in the institution, 554 were discharged, and 192 were occupying beds in the various wards. The patients treated have been all of the one class, *i.e.*, chronic or incurable, many of them reaching the hospital in a dying condition. Amongst the number set out as having been discharged, a fair percentage, say, 45 per cent., have benefited very considerably from the treatment received in the institution, the remaining 55 per cent. having left of their own accord, many of them preferring to die amongst their friends and relatives. Practically no cures have been effected at the establishment. The patients treated during the year 1905-6 numbered 349, of whom 205 were new admissions, and the daily average was 169. The institution is well supported by the public. Of the total expenditure for 1905-6, £8,007, £1,744 was spent on buildings, and £6,263 on maintenance and other expenses. The revenue was £15,016; made up of £1,000 Government grant; £217 municipal grants; £2,469 private contributions; £119 proceeds of entertainments; £9,129 legacies and bequests; £658 Hospital Sunday; £569 contributions from in-door patients; and £855 miscellaneous contributions. Of the surplus in hand, £3,600 was

Austin  
Hospital  
for  
Incurables.

credited to the Perpetual Endowment account, and £2,380 placed in reserve to provide for future building operations. The institution now contains 27 dormitories with 176 beds. There were 109 men and 83 women under care on 30th June, 1906.

St. Vincent's  
Hospital.

This hospital was founded in 1893, and is conducted by the Sisters of Charity; but, though associated with the Roman Catholic Church, the work of the institution is carried on upon entirely unsectarian lines. The site is in Victoria-parade, Fitzroy. The present building only forms the rear portion of the proposed completed structure, and contains 120 beds. During the year ended 30th June, 1906, 940 patients were admitted, which, with 20 remaining from the previous year, makes 960 treated. There were 740 discharged, cured or relieved; 58 discharged incurable; 72 died; leaving 90 remaining on 30th June, 1906. The number of out-patients who received treatment was 9,360. The total receipts were £4,321, made up of £1,000 Government grant; £91 from municipalities; £827 private contributions; £25 proceeds of entertainments; £1,068 legacies and bequests; £266 from Hospital Sunday; £714 payments by in-door, and £330 by out-door patients. The expenditure was £6,080—£639 on buildings, and £5,441 on maintenance and miscellaneous expenses.

Ballarat  
District  
Hospital.

The foundation stone of this hospital was laid on the 25th December, 1855, and on the 1st January following a memorial stone was laid to commemorate the completion of the main building. On the Queen's Birthday, 1869, the foundation stone of the Prince Alfred Memorial Ward was laid. This building provides accommodation for 75 beds. On 23rd March, 1897, a public meeting of the ladies of the district was held, when it was decided to collect funds for the purpose of building wards to accommodate 50 female patients, and on 21st June, 1897, was laid the foundation stone of the Queen Victoria Women's Ward, in commemoration of the Jubilee of Her Majesty, the late Queen Victoria, and this building was completed and opened on 26th October, 1900. The establishment is now fully equipped for the accommodation of 170 patients, and its work and usefulness are of a high character. The receipts for 1905-6 were £5,467, made up by £2,800 Government grant, £310 municipal grants, £882 private contributions, £226 proceeds of entertainments, £449 legacies, bequests, &c., £88 Hospital Sunday collections, £264 contributions by in-door patients, and £149 by out-door patients, and £299 miscellaneous receipts. The expenditure was £4,963—£20 on buildings and repairs, £4,943 on maintenance, &c. There are twelve dormitories, and in the 170 beds there were 97 persons under care on 30th June, 1906.

Bendigo  
Hospital.

This establishment was founded in 1853, upon a site of 10 acres, which was permanently reserved in 1856, when the main portion of the present building was erected to provide accommodation for 60 patients, the Bowen wing having been subsequently added. This hospital, through the munificence of the late Mr. George Lansell, has the right to six beds for patients from the Bendigo district in the Austin Hospital for Incurables, at Heidelberg. The hospital

now includes detention wards of six rooms, recently built on modern lines by the Government at a cost of over £2,500 for male and female insane patients, where they are kept under observation for limited periods prior to discharge or transfer to a public asylum. There is also a special cottage set apart for contagious diseases, which, however, is not adequate to meet the wants of the district, and local effort is now being made to raise the necessary funds, whereby this cottage may be enlarged, or a new ward on approved modern lines built. For this purpose, £1,004 has been collected locally. By a gift of £1,000, Miss Edith Lansell has endowed in perpetuity a cot in the children's ward as a thank offering for her recovery from a long and dangerous illness. The General Hospital provides accommodation for 172 patients, but during the last ten years the daily average has only been 112. The number of patients received during the year was 1,500, which, with 105 remaining at the close of the previous year, yields a total of 1,605 treated. The electric light has been installed throughout, and electric fans have been placed in the principal wards. The out-patients numbered 2,498, and their attendances 7,394. The receipts for 1905-6 were £6,535, comprising £2,600 Government grant; £137 municipal grant; £1,245 private contributions; £559 proceeds of entertainments; £355 legacies and bequests; £467 Hospital Sunday; £545 contributions by in-door patients; and £627 from all other sources. The expenditure was £6,646—£153 on buildings, and £6,493 on maintenance and miscellaneous expenses. The institution is endowed to the extent of nearly £13,500 (£2,500 of which is in real estate). It is managed by a committee of fifteen, two of whom are medical men; the staff comprises two resident medical officers, matron, night matron, three male and twenty-five female nurses, a resident secretary, and a working staff of five male and thirteen female servants. The institution contains 27 dormitories. There were 108 patients under care on 30th June, 1906.

There are no official records in existence dealing with the formation and early history of this hospital. Many attempts have been made by members of various committees in the past to obtain reliable data and original documents to enable them to do so, but unfortunately, without success. In 1903, however, some important private documents were discovered which threw some light upon the subject. From these it appears that a public meeting was convened at Castlemaine on the 17th February, 1853, when it was resolved that a hospital should be established for (1) the reception of sick persons who are totally destitute; (2) for accidents; and (3) for those who are able to pay to be attended by their own medical men if desired. On the 24th May, 1853, the hospital appears to have been opened in a good building, 30 feet long by 20 feet wide, with a detached surgery, kitchen, and men's room. The first resident surgeon was appointed to the institution about the middle of 1853. Cases of leprosy were treated early in the sixties, in a tent specially set apart for the purpose, but, in 1870, the patients were all removed to Melbourne, and there strictly isolated. To commemorate the Diamond

Castlemaine  
Hospital.

Jubilee of the late Queen Victoria in June, 1897, an up-to-date building was erected for the treatment of infectious diseases. It consists of two wards, each containing three beds, specially fitted up to receive patients suffering from contagious diseases. It is called the Queen Victoria Ward. In 1905-6, 277 patients were admitted, 237 were discharged, cured, or relieved, 41 died, and 36 remained at the close of the year. The institution contains 13 dormitories, with 75 beds. The average number of in-patients for the year was 37. The total receipts were £2,185, made up of £1,250 Government grant; £101 municipal grants; £414 private contributions; £81 proceeds of entertainments; £71 legacies and bequests; £41 Hospital Sunday; £172 contributed by in-door and £31 by out-door patients; and £24 miscellaneous receipts. The expenditure was £2,175.

Geelong  
Infirmary  
and  
Benevolent  
Asylum.

This institution was opened on the 23rd April, 1852, and during the remainder of that year 150 patients were treated in the Infirmary and seven inmates were admitted to the Benevolent Asylum. It is managed by a president, assisted by a committee of 22 persons, who meet once a month for the transaction of business. The staff consists of a resident surgeon and assistants, a matron, wardman, and women nurses and probationers. A nurses' training school is a special feature of this establishment, twelve nurses being constantly under tuition, the course of instruction extending over a term of three years. The buildings, being now 54 years old, are showing signs of age, but everything is done to keep the wards in an up-to-date condition. There is a handsome new out-patients' department which is kept quite apart from the general hospital. It contains an operating theatre, with all modern appliances. A thoroughly up-to-date X-ray apparatus has been imported from Germany at a cost of £100, and the institution is now perfectly equipped in this important branch of medical science. An infectious ward is in course of erection at rear of the present hospital. It is to accommodate 24 patients. During the year a plant to distil all water used at operations for surgical purposes has been installed, together with the latest basins in theatre, which are filled and emptied by valves operated by the surgeon's feet. The laundry is fitted up with the latest steam washing machines, everything being washed and sterilized on the premises. There is also a plant in use for the manufacture of aerated waters. The number of beds is 205, the average number occupied 155. During 1906, 1,783 cases—938 in-door and 845 out-door—received relief, and there were 131 under care in the institution at the close of the year. The total ordinary income from all sources for the twelve months ended 30th June, 1906, was £5,761 (including the grant in aid received from the Government, £2,440), and the total expenditure was £5,318.

Mary-  
borough  
Hospital.

Within spacious grounds, tastefully laid out, this hospital is an imposing structure, the grounds and buildings covering an area of 5 acres. The hospital was established in a modest way in the early days of gold-mining in the fifties, and came as a great boon to gold diggers. Since its establishment,

it has increased in importance and dimensions, and many thousands of people have regained health and strength under its auspices. There is a house surgeon, three honorary physicians, one honorary surgeon-dentist, a dispenser, a matron, and a capable staff of nurses. The main building now contains eight dormitories with 85 beds, and a detached contagious diseases ward (a fine brick building recently erected by the municipalities of the district, assisted by the Government) contains ten beds. On the 30th June, 1905, there were 61 patients under care, and during the year 583 were admitted, giving a daily average of 60. The number remaining in the hospital on 30th June, 1906, was 52. The number of out-patients was 854, and their attendance 3,039. The receipts during the year totalled £2,527—£1,170 Government grant; £91 municipal grant; £488 private contributions; £297 proceeds of entertainments; £44 Hospital Sunday; £269 contributed by in-patients, and £131 by out-patients; and £37 miscellaneous. The expenditure was £2,083—£145 for buildings, and £1,938 for maintenance, &c.

The Pleasant Creek Hospital was established in 1858, and a building of wood, canvas, and iron, capable of accommodating twenty patients, was constructed. In February, 1859, this temporary hospital was opened, and before the end of that year 67 patients had been admitted. In 1861, the permanent building was opened, on the admirable site of 19 acres, which the Government had granted. Numerous additional wards have from time to time been constructed, and in 1883 the scope of the operations of the charity was widened by the incorporation with the hospital of a benevolent asylum; its name also was altered to the Stawell Hospital and Benevolent Asylum. The buildings are now capable of accommodating 59 patients in the hospital and 13 inmates in the Benevolent Asylum. A new building has been constructed for the purpose of an Infectious Diseases Hospital, and provides for twelve patients. It is designated the W. H. Syme ward, its whole structure, furnishing, and equipment being generously provided as a free gift by the widow of the late Dr. W. H. Syme, who was for many years an honorary surgeon of the institution. The building was formally opened by the Right Honorable Sir John Forrest, P.C., &c., on the 20th November, 1904. The relief afforded during the year ended 30th June, 1906, was as follows:—In-patients, 308; out-patients, 300; number of attendances of out-patients, 1,135; daily average of in-patients, 38. The total revenue for the year was £2,121, made up of £1,010 Government grant; £134 municipal grant; £335 private contributions; £9 entertainments; £308 legacies, bequests, &c.; £66 Hospital Sunday; £139 payments by in-patients, and £11 by out-patients; and £109 miscellaneous. The expenditure was £1,976—£410 for buildings and repairs, and £1,566 for maintenance, &c.

This institution was incorporated in 1872. During the year ended 30th June, 1906, 396 cases have been treated in the institution, viz., 342 in the hospital and 54 in the Benevolent Asylum. Of the hospital cases, 291 were discharged, cured, or relieved, 19 died, and 32 remained in the hospital on 30th June, 1906. Of the

Stawell  
Hospital  
and  
Benevolent  
Asylum.

Warrnam-  
bool  
Hospital  
and  
Benevolent  
Asylum.

Asylum cases, 13 were discharged, 2 died, and 39 remained in the Asylum on 30th June, 1906. The total attendances of out-patients were 2,659. An isolated building in the hospital grounds has been set apart for the treatment of contagious cases. There are ten wards and dormitories, containing 96 beds. The receipts for the year amounted to £2,417, including Government grant, £1,030; municipal grants, £239; private contributions, £372; legacies, bequests, &c., £205; Hospital Sunday, £163; patients' contributions, £244; and other receipts, £164. The expenditure was £2,932. A septic tank for the sewerage of the institution has been installed.

**Women's  
Hospital.**

The necessity for establishing an institution of this kind forced itself upon the attention of the benevolent ladies of Melbourne fifty years ago. In 1856 it was definitely founded, its original title being the Melbourne Lying-in Hospital and Infirmary for Diseases of Women and Children, and it was the first institution of this special nature erected in Australia. The work was first carried on in Collins-street, Eastern Hill, but a permanent site was eventually granted by the Government in Madeline-street, Carlton, where the hospital was opened in 1858, its title being altered in 1868 to Women's Hospital, the name it now bears. Important and improved additions have since been made, including the Genevieve Ward Wing, constituting the largest portion of the midwifery department, nurses' quarters, and the infirmary and midwifery operating theatres. The institution, early in its career, attained a high reputation for the efficient help it afforded, and the accommodation had to be augmented from time to time to meet increasing demands. It is a special training school in gynaecology and midwifery for medical men and nurses, and the excellent work carried on is fully recognised. Up to 30th June, 1906, the number of patients admitted was 45,804, and the attendances of out-patients 186,665. During the year ended on that date, 2,043 patients were admitted, which, together with 76 remaining in at close of previous year, gives a total of 2,119 treated. There were also in the same period 3,575 attendances of 1,259 out-patients. There is now accommodation for 102 in-patients, each bed having the most liberal allowance of space. It is governed by a committee of 15 ladies and 6 gentlemen, on whom falls the responsibility of the effective working of the whole establishment. The professional work devolves chiefly on an honorary staff. The receipts were £15,674, made up of £3,800 Government grant; £306, municipal grant; £1,584, private contributions; £870, proceeds of entertainments; £7,117, legacies and bequests; £608, Hospital Sunday; £743, from patients; and £646, other receipts. The total expenditure was £10,145—£3,224 for buildings and £6,921 for maintenance and miscellaneous expenses. Every patient who passes through the wards is seen and spoken to by some lady or ladies of the committee—many of them before admission, but all before leaving. No patient is discharged without inquiries being made as to her home, &c., and, where possible, want in this matter is also supplied. To prevent abuse of the charitable trust, certain ladies each week give much of their time to interviewing applicants for admission to inquire into their circumstances.



In this establishment 18 patients remained under care on 30th June, 1905. During the year 271 were admitted, making a total of 289 treated—245 were cured or relieved, 17 died, 2 discharged as incurable, and 8 at their own request, leaving 17 in the hospital on 30th June, 1906. The total number of cases of out-patients treated was 3,609, the attendances numbering 14,534. The income for 1905-6 was £1,677, made up as follows:—Government grant, £360; municipal grant, £88; private contributions, £225; proceeds of entertainments, £26; legacies, bequests, &c., £200; Hospital Sunday fund, £192; out-patients' contributions, £433; in-patients' fees, £112; and miscellaneous receipts, £41. The expenditure was £1,909.

Queen  
Victoria  
Memorial  
Hospital.

The Children's Hospital, Melbourne, was established in 1870 for the purpose of treating the general and peculiar ailments of children. The patients treated come in from almost every part of the State, over 100 districts being tabulated as those whence the in-patients came, including places so widely apart as Swan Hill and Yarram, Camperdown and Rochester. Every infantile ailment is treated—febrile, constitutional, and developmental troubles being dealt with in large numbers. Numerous cases of accidents and casualties are also admitted. There are now 113 cots at the hospital, and owing to the great demands for admission only those cases which cannot be successfully treated as out-patients are taken in. Many of the cots have been endowed by the generosity of private donors or of public bodies. The hospital had 91 in-door patients at the commencement of the financial year. During the twelve months ended 30th June, 1906, there were 1,732 additional in-door patients admitted, of whom 1,536 were discharged relieved, 198 died, and 89 remained at the close of the year. The attendances of 13,541 out-door patients for the year were 79,727. The total attendances of 240,771 out-door patients since the foundation were 1,170,270, and of in-door patients treated 24,014. The hospital is situated in Rathdown, Pelham, and Drummond streets, Carlton, and connected with the institution is a convalescent home at Brighton Beach, containing 22 cots. The number of convalescent children passing through this establishment during the year 1905-6 was 369. Owing to the generosity of the late Mr. John Robertson, the committee are able to erect a much-needed Nurses' Home, at a cost of nearly £9,000. This magnificent bequest was made without condition, and the committee have decided to perpetuate the memory of Mr. Robertson by naming the new building the "Robertson Nurses' Home." The cost of maintenance was £8,583, which with £226 expended on buildings and repairs, gave a total expenditure of £8,809. The receipts were £14,404—made up of £500, Government grant; £350, municipal grant; £1,521, voluntary contributions; £807, proceeds of entertainments; £7,161, bequests; £2,319, Hospital Sunday; £492, contributions by out-patients; and £516, by in-patients; and £738, interest and miscellaneous revenue.

Children's  
Hospital,  
Melbourne.

The Victorian Eye and Ear Hospital deals not only with the diseases which, as the name of the institution implies, fall to be

Eye and Ear  
Hospital.

treated there, but also with diseases in parts adjacent to the eye and ear, viz., the nose, pharynx, naso-pharynx, and larynx. Thus classes of ailments are treated in this institution which not only are the cause of extreme suffering in themselves, but also, when unchecked, the means of producing much helplessness and poverty, arising from deafness, blindness, &c., and entailing a heavy burden on the community. It places within the reach of all persons, without distinction of creed or country, every attainable means for the relief or cure of diseases of the eye and ear. The patients treated are distributed throughout the whole of the Commonwealth; New Zealand also contributing its quota. The in-patients admitted during 1906 numbered 656, making, with 51 in the institution at the commencement of the year, a total of 707 treated. The patients discharged numbered 650, of whom 604 were stated to be cured or relieved, and 37 to be incurable. Six were discharged at their own request, and 3 died. Besides these, there were 5,748 out-patients treated, 104 of this number being from the other States and New Zealand. The total number of attendances was 27,102, and of operations, 908. The hospital buildings are situated on a fine site in Victoria-parade, East Melbourne, but the accommodation is quite insufficient. However, negotiations for the acquirement of the adjoining land belonging to the Melbourne and Metropolitan Board of Works, so long carried on, have, it may be said, at length been brought to a successful issue, and the hospital will shortly be in actual possession, and with room for the much-needed extension. The receipts for the year 1905-6 were £5,858—made up of £800 Government grant; £257, from municipalities; £833, private contributions; £1,897, legacies, bequests, &c.; £998, out-patients' fees; £260, in-patients' fees; and £813, other sources. The expenditure was £3,652.

#### ROYAL VICTORIAN INSTITUTE FOR THE BLIND.

*By J. Thurston Hogarth, Esq., Superintendent and Secretary.*

Institute for  
Blind.

The Royal Victorian Institute for the Blind occupies a site on the St. Kilda-road, Melbourne. The institution is strictly undenominational in its character, and its objects are to give a suitable scholastic and religious education to the young blind of the State, and to teach them trades or professions by means of which they may earn an independent livelihood. It is further intended, as far as the exigencies of trade will permit, to give employment in its industrial department to blind people, who, having completed their term of training, may be unable to get work elsewhere. This, however, is restricted to the demand for the goods made. The institute is not in any sense a benevolent asylum for the indigent blind, who can not only be maintained cheaper, but can be better cared for in the ordinary institutions for the care of the destitute. The scholastic education is similar to that in the State schools, varied only in the apparatus and means employed; and examinations are held annually by the

Education Department. Music is an important part of the education of the blind, and those who display exceptional talent are trained for the musical profession, and the skill of the pupils is utilized as a means of raising revenue for the institution by means of concerts and band performances in various parts of the State. In the industrial branch, pupils are trained in the trades of brush, basket, mat, and matting making, the period of training varying from two to five years. Wages are paid at somewhat higher rates than those ruling in the various trades of a similar character outside. Some less proficient workers have their wages supplemented by a bonus. Its outside workers are assisted in times of sickness by "The Blind Workers' Sick Benefit Society." Its funds are maintained by weekly contributions by its members, and it is subsidized by a grant from the board of management equal to the amount of the members' contributions. This society is managed by a committee of its members, assisted by the principal of the institution and the accountant, who acts as honorary treasurer. The institution contains 5 dormitories, with 112 beds. There were under care on the 1st July, 1905, 92 persons; 8 were admitted during the year; 8 were discharged at their own request; and one died; leaving 91 at the end of the financial year. The total amount received for goods manufactured was £5,727. There is now no debt on the institution. The board of management have decided to erect a new brush factory, so that they may be able to further extend the usefulness of the institution by giving employment to a larger number of blind people. The total receipts in 1905-6 were £9,095, comprising—£1,700, Government grant; £182, municipal grant; £1,478, private contributions; £4,836, legacies and bequests; and £899 from all other sources. The expenditure was £3,704.

#### VICTORIAN DEAF AND DUMB INSTITUTION.

*By John Adcock, Esq., Superintendent and Secretary.*

The Victorian Deaf and Dumb Institution occupies a site on the St. Kilda-road, and is a home and school combined for deaf children from all parts of the State, irrespective of creed or nationality. At the beginning of the year there were 76 pupils on the roll. During the year 17 new pupils were admitted, and 12 discharged, thus leaving 81 pupils on the roll on the 30th June, 1906, viz., 36 boys and 45 girls. Since the year 1862, when the institution was fairly launched, 465 deaf children have enjoyed its benefits. The combined oral and manual system of teaching, which is used in the majority of similar institutions throughout the world, is also used here, with satisfactory results. In addition to the ordinary school work, many of the boys are taught bootmaking and gardening, and the girls dress-making, plain and fancy needlework, and all kinds of domestic duties. The receipts for the year amounted to £4,770—made up of £900 Government grant; £209 municipal grant; £1,030 private contributions; and £2,631 from all other sources. The expenditure

Deaf and  
Dumb  
Institution

was £3,485—£156 for buildings and extraordinary repairs, and £3,329 for maintenance, &c. £1108 has been added to the endowment account, the total to the credit of which fund is now £13,534, most of which is invested in Government stock, the interest only being available for maintenance purposes.

#### BENEVOLENT ASYLUMS.

Benevolent  
asylums.

In addition to the nine Benevolent Asylums connected with general hospitals, there are eight other of these institutions in the State; two are situated at Ballarat, one each at Bendigo, Beechworth, and Castlemaine, the remaining three being in Melbourne. The number of inmates on the 1st July, 1905, was 2,495; the number admitted during the year 1,360; the total discharged cured, relieved, or otherwise, and died was 1,383; leaving under care on 30th June, 1906, in all the institutions 2,472. The Government grant in aid for the year 1905-6 was £20,667; from municipalities a sum of £1,089 was received; private contributions amounted to £3,649; proceeds of entertainments, £877; legacies, bequests, and special donations, £3,372; Hospital Sunday collections, £1,287; payments by patients, £1,685; from all other sources, £3,040 was received, making a total income of £35,666. The expenditure was £34,904.

Benevolent  
societies.

Ninety-three benevolent or philanthropic societies furnished returns for the year ended 30th June, 1906. These associations are for the relief of distressed or indigent persons, and are generally managed by ladies. The names of two of the societies indicate their connexion with the Jewish body, but no distinctive denomination is perceptible in the titles of any of the others, with the exception of the Central Methodist Mission and Scots' Church Mission. The distinct adult individuals relieved during the year numbered about 13,266; the receipts amounted to £21,381, of which £5,033 was from Government, £1,458 from municipalities, and £14,890 from private sources; the expenditure was £20,384.

Orphan  
asylums.

There are nine of these establishments in the State, situated at Ballarat, Geelong, and Melbourne. The number of children under care on the 1st July, 1905, was 1,428; the number admitted during the 12 months was 429; the total discharged and died, 388, leaving under care on 30th June, 1906, 1,469. This shows overcrowding to a slight extent, as the daily average in attendance was 1,446, and the number of beds only 1,399. In one of these establishments, the Nazareth Home at Ballarat, the particulars respecting cost of maintenance, &c., cannot be furnished, as the management, on the score of economy, keep no books of accounts. In the other eight institutions, the total receipts were £21,366—made up of £5,650, Government grant; £393, municipal grants; £4,279, private contributions; £692, proceeds of entertainments; £4,024, legacies and bequests; £187, Hospital Sunday contributions; £2,116, payments on account of orphans maintained; and £4,025, other receipts.

The total expenditure was £20,137—£1,250 for buildings, and £18,887 for maintenance and other expenses.

There are two consumptive sanatoriums, situated at Echuca and Macedon, with 114 beds. On 1st July, 1905, there were under care 36 males and 29 females, and 98 males and 71 females were admitted during the year; 71 males and 48 females were discharged cured or relieved; 14 males and 18 females were discharged incurable; and 8 males and 8 females were discharged at their own request; 6 males died, leaving under care on 30th June, 1906, 35 males and 26 females. The Government grant in aid was £300; municipal donations amounted to £122; private contributions to £922; proceeds of entertainments, £64; legacies, bequests, &c., £262; Hospital Sunday distribution, £441; relatives contributed £1,497; interest amounted to £265; and all other receipts £8, making a total of £3,881. The expenditure on buildings was £1,454; on maintenance and miscellaneous expenses, £4,525—a total of £5,979.

Sanatoriums  
for con-  
sumptives.

The Greenvale Consumption Sanatorium at Broadmeadows, established by the Government, was opened for the reception of patients on 10th May, 1905. This institution is under the control of the Department of Public Health. During the year ended 30th June, 1906, 171 patients have been treated in the institution. Of this number 81 have done very well, 28 have been classed as incurable, 21 have been discharged at their own desire or for special reasons, and one death has occurred. At the end of the period under review there were 40 patients under care. A most important function of the institution is the teaching of patients how to avoid communicating the disease to others. Immediately after the admission of a patient to the sanatorium, the house or rooms vacated is disinfected under the supervision of the municipal council of the district, a centre of infection being thus removed.

Greenvale  
Consump-  
tion Sana-  
torium.

In addition to the hospitals, there are two Convalescent Homes—one for men situated at Cheltenham, and the other for women at Clayton—with accommodation for 61 inmates. The number of inmates at the beginning of the year 1905-6 was 51; 1,144 were admitted, and 1,151 were discharged during the year, and 44 remained under care on the 30th June, 1906. The Government grant in aid of these institutions amounted to £370; municipal grants, £67; private contributions, £511; proceeds of entertainments, £2; legacies, bequests, &c., £322; Hospital Sunday, &c., £281; from relatives, £85; and from interest and other sources, £33—a total of £1,671. The expenditure was £163 on buildings, &c.; £1,372 on maintenance—a total of £1,535.

Convales-  
cent homes.

Two free dispensaries furnished returns for 1906—the Collingwood and Fitzroy Free Medical Dispensary, and the Richmond General Dispensary. The individuals treated during the year ended 30th June, 1906, numbered 4,958. The visits to or by these persons numbered 20,159. The total receipts amounted to £568, of which £140 was from Government and £428 from other sources. The total expenditure was £654.

Free dis-  
pensaries.

Broad-  
meadows  
Hospital.

This hospital was established on the 1st April, 1901. The original cost of the buildings was £2,200, and £1,832 has been expended since that time in additions and improvements. The total number of inmates on 30th June, 1905, was 58; 65 were admitted during the year, 18 died, 35 were discharged or adopted, and 70 were under care on 30th June, 1906. The institution contains 8 dormitories and 70 beds. It is supported chiefly by donations and collections. It is managed by the Sisters of St. Joseph, whose aim is to protect infant life, procure suitable homes for the children, and afford shelter to destitute mothers. The condition of the institution has been greatly improved, open-air accommodation for the infants having been recently provided.

The  
Foundling  
Hospital  
and Infants'  
Home.

The objects of the Foundling Hospital and Infants' Home are the prevention of infanticide, the saving of infant life from the many evils arising from baby-farming, and the rescuing of mothers of illegitimate children from further degradation. Every child admitted must be brought by the mother or some authorized person, who must enter the child's name and the date of birth in a register kept for the purpose, and must undertake to contribute something towards its support. During year ended 30th June, 1906, 115 children were in the care of the institution. Of these 18 were discharged to friends or relations, 6 discharged to hospital, 6 adopted, 25 boarded out, 16 died, and 44 remained in institution on 30th June, 1906. Two new day nurseries and foundling ward, with necessary nurses' duty rooms, &c., were opened in September, 1905, and the extra accommodation is already taxed to the uttermost. Ordinary and extraordinary receipts amounted to £2,195, of which £1,000 was from Government, and £1,195 from other sources. Expenditure was £2,854, of which £1,316 was spent on building and repairs, and £1,538 on maintenance, &c.

Refuges for  
women.

At the present time these refuges are ten in number, and are all situated in or near large centres of population. The women while under care in these institutions are expected to work to the best of their ability, a suitable share of labour being allotted to each. Laundry work is the chief means of providing employment, whilst sewing, art needlework, embroidery, &c., also provide occupation to a limited extent. During the year ended 30th June, 1906, the Government subsidized these establishments to the extent of £2,300; £15,723 was obtained as the result of the labour of inmates, and £2,852 from other sources, making the total receipts £20,875. The expenditure amounted to £21,913—made up of £4,586 spent

on buildings, and £17,327 on maintenance. The following statement contains particulars of the number of inmates in the separate institutions during the year 1905-6:—

## REFUGES FOR WOMEN, 1905-6.

Female Refuges.	Number admitted.		Born in the Home.	Number discharged.		Inmates on 30th June, 1906.	
	Women and Girls.	Infants.		Women and Girls.	Infants.	Women and Girls.	Infants.
Ballarat Home ...	9	...	10	11	10	9	8
Bendigo Rescue Home	7	2	...	9	5	5	3
Elizabeth Fry Retreat, South Yarra ...	52	...	...	51	...	28	...
Geelong ...	6	1	4	7	8	7	3
Magdalen Asylum, Abbotsford ...	120	...	...	119	...	361	...
Carlton Refuge ...	31	36	...	39	35	34	24
South Yarra Home ...	63	...	...	57	...	29	...
Temporary Home, Collingwood ...	47	11	...	48	10	12	4
House of Mercy, Cheltenham ...	9	...	...	9	...	9	...
Magdalen Asylum, South Melbourne	38	...	...	31	...	161	...
Total ...	382	50	14	381	68	655	42

There are six rescue homes controlled by the Salvation Army at Abbotsford, Ballarat, Bendigo, Brunswick, Fitzroy, and Geelong. The establishments contained 180 beds on 1st July, 1905, when there were under care 162 adults and 16 children. During the year 462 adults and 101 children were admitted; 222 were placed at service or restored to friends; 168 were discharged at their own request; 19 were sent to hospitals and other institutions; 5 women and 13 infants died; and there were 51 adults discharged for various reasons, with 82 children. The Army received £566 from the Government, in aid of these institutions; £209 from private contributions; and £4,435 from the proceeds of the labour of the inmates—a total of £5,210. The total expenditure was £4,917, made up of £528 for buildings and repairs, £4,372 for maintenance, and £17 for miscellaneous expenses.

At Dr. Singleton's Night Shelters, Collingwood, 15,518 cases were accommodated during the year 1905-6, viz., 7,138 men, 8,246 women, and 134 children. The expenses were £72, which were defrayed out of the "General Charity Fund," but there were also numerous contributions in the shape of food.

Since 1872 a society has been in existence for the purpose of affording assistance to discharged prisoners, and offering them inducements to return to the paths of honesty and industry. Relief is afforded by gifts of money, clothes, blankets, and other necessities,

Salvation  
Army  
Rescue  
Homes.

Night  
shelters.

Victorian  
Discharged  
Prisoners'  
Aid  
Society.

railway passes, and various kinds of tools of trade; and those who desire it are supplied for a time with board and lodging in Melbourne, or are provided with means to go into the interior, or to leave the State. The society also takes charge of and distributes the sums earned by the prisoners whilst under detention. The work is aided by honorary correspondents in country centres. Very valuable aid is given in connexion with the moral reformation of the young offender. The improvement of the hardened criminal is a matter of great difficulty, but the society is a valuable help to those who have not become confirmed in careers of crime and wrong-doing, and minimizes the tendencies of drifting into the criminal class of those who have formed vicious and evil habits. The number of individuals relieved in 1905-6 was 476. The receipts were £703, including grants from the Government and the Penal Department, and contributions from private sources; and the expenditure was £684.

St. John's  
Ambulance  
Associa-  
tion.

This association was established in Victoria in 1883. Its objects are to instruct all classes in the preliminary treatment of the sick and injured. Since the inception of the association its influence has been steadily increasing, and the number of people instructed is growing larger every day. The total number who have been instructed to date is 14,750; the number of persons who are fully qualified is 727; 2,098 railway employes and 553 members of the police force have been specially educated in the work; and 8,519 certificates and medallions have been issued. Four ambulance waggons are stationed at 25 Lang-lane (Tel. 3264), at the back of the Grand Hotel, Spring-street, which may be summoned when required. First aid is rendered by trained men when necessary. Ashford litters are also provided for the use of the public in cases of accident in the city.

#### CHARITY ORGANIZATION SOCIETY.

*By T. C. Mackley, Esq., Secretary.*

Charity Or-  
ganization  
Society.

The society has been established in Melbourne since 1887, its objects being:—(1) To encourage and organize charitable work and to promote co-operation therein; (2) To check imposture and professional mendicity, and to discourage indiscriminate alms-giving; (3) To inquire into all applications for assistance, with the view of ascertaining if and in what way each case can be helped; (4) To afford (where necessary) immediate relief during inquiry or pending arrangements with charitable institutions or aid from other sources; (5) To maintain a woodyard, or other labour test, so that the means of earning food or shelter shall be open to any applicant able and willing to work; (6) To establish a loan fund; (7) To keep records of all cases for the purpose of reference, and to maintain a Central Register of help given by all relieving agencies. The society is managed by an executive committee elected by a council empowered to make rules and regulations for the conduct of its business. This council consists of a nominee of each of the charities represented, and of twenty members elected at an annual meeting of subscribers of the society. The income of the year ended 30th June, 1906, was—Administration account (for payment of all general expenses of management as well as



all charges connected with the administration of the trust and relief funds)—Receipts, £1,080; expenditure, £871; Trust Account (being donations for special applicants and objects)—Receipts, £1,361; expenditure, £1,380. Emergency Relief Account—Receipts, £177; expenditure, £129. Woodyard—Receipts, £760; expenditure, £673. The number of cases dealt with during the year was 1,507, of which the new cases investigated were 972. The result of investigation shows that in 830 instances distress was due to misfortune, and in 74 to misconduct; in 21 cases the cause of distress was undetermined, and 47 cases come under other headings. Special efforts are made to deal with applicants for alms on street and doorstep. The society claims to have prevented a large amount of imposture, to have relieved subscribers of the annoying feeling that their benevolence was often wasted on unworthy objects, and to have stimulated and wisely directed the flow of charity. Especially good work has been done in cases where employment has been found for those who, without the society's aid, might have degenerated into permanent burdens on public or private charity, and in the large number of cases in which relatives of indigent persons have been induced to recognise natural claims in a community where no legal obligation is entailed by relationship other than that of husband to wife and of parent to infant. The woodyard is a very practical part of the society's work. It affords a test of the sincerity of men who ask help on the ground that they cannot get work; and it gives temporary work to those who really need it. This society has consistently advocated the establishment of labour colonies. That at Leongatha was founded by the advice, and with the assistance of the society thirteen years ago. The lack of suitable employment for the poor is partly met by the employment office of the society, through which a large number of persons have been given work, permanent in some cases, and temporary in others, which otherwise would not have reached them.

#### LABOUR COLONY, LEONGATHA.

The Labour Colony at Leongatha was established by a proclamation of 26th September, 1893, setting apart and appropriating, under the *Settlement on Lands Act* 1893, about 800 acres in the township. By a further proclamation of 24th April, 1903, the colony was abolished, and the land resumed by the Lands Department, although the colonists were still maintained on the land.

Labour  
Colony,  
Leongatha.

On the 14th June, 1904, 460 acres or thereabouts of the old Labour Colony lands, including the homestead, were proclaimed a Labour Colony, and Trustees were appointed to act from 1st July, 1904.

The object sought by its establishment was to afford temporary relief at sustenance wages to able-bodied destitute men. During the first year of its existence 1,013 men were sent to the colony, and up to the present, 6,547 men have been afforded relief. The colonists are instructed in the general work of farming, dairying, fruit and vegetable growing. Pig breeding is carried on extensively, and poultry are also raised. During the year ended 30th June, 1906,

201 men were admitted, a weekly average of 51 was maintained during the whole year—123 left looking for work, 70 left with engagements, 46 left without notice, 4 were discharged for various reasons, 8 sent to Melbourne for medical treatment, and 54 were at work on the 30th June, 1906. The cost of maintenance, including food, wages, and management, was 8s. 9d. per week per man.

After the trustees of the old colony had all retired the Minister of Lands instructed the Director of Agriculture, on 13th June, 1903, to take over the farm and manage it as a Labour Establishment, virtually as a Labour Colony for the relief of destitute men in Melbourne who desired to go there. No order was given that the number admitted to the Establishment was to be reduced, and the destitute were as freely admitted as formerly, but in many instances were not maintained there so long, orders being issued that when a man had earned £2 he should leave in search of work.

When the accounts were balanced for the financial year ended 30th June, 1906, it was found that there was a credit balance of £499 in trust accounts.

The total expense for the year was £2,022, which included £188 fares and freights; £258 plants and tools; and £32 live stock.

The receipts from sales amounted to £1,172, as follows:—

Dairy produce	...	...	£555
Farm produce and garden	...	...	143
Horses	...	...	15
Pigs	...	...	201
Dairy Herd	...	...	92
Hides, bones, &c.	...	...	46
Sheep	...	...	45
Poultry	...	...	23
Bees	...	...	5
Miscellaneous	...	...	47

The following is the amount of Government grants spent annually since the establishment of the Colony:—

1893-4	...	£4,213	15	2
1894-5	...	3,203	8	0
1895-6	...	2,473	13	1
1896-7	...	2,219	14	4
1897-8	...	2,729	13	2
1898-9	...	4,091	8	1
1899-1900	...	3,884	5	11
1900-1	...	3,000	0	0
1901-2	...	2,374	3	6
1902-3	...	3,627	7	10
1903-4	...	1,998	18	11
1904-5	...	999	19	7
1905-6	...	499	19	9

Total ... .. £35,316 7 4

It will be seen that the Government grant for 1905-6—£500 is the lowest that has ever been made, and is £500 less than that of the year 1904-5.

Although the profits from the farm will be reduced owing to the restricted area, there will still be work in clearing and cultivation to enable men to be sent to Leongatha for several years. By the continuation of this colony no man need starve in the city. Every week applications are made by destitute unemployed men to be sent to the Institution. A greater number apply in winter than in spring or summer, and without an asylum of this kind it is hard to conceive what would become of these destitute individuals. In every large community there is always a great number of human derelicts without criminal tendencies; and provision (other than gaols) where men can get work that is remunerative to the State, must of necessity be made; and this Institution, therefore, should come in time to acquire a national character. It is now almost self-supporting, and, in a few years' time, by the adoption of improved methods in management, should become entirely self-supporting.

#### AUSTRALIAN HEALTH SOCIETY.

*By J. G. Burrows, Esq., Secretary.*

The "Australian Health Society" was established in Melbourne in 1875. It consists of about 300 members, and is managed by a president, two vice-presidents, a treasurer, secretary, and fifteen members of council, five of whom are ladies. Its objects are:—(1) To create an educated public opinion with regard to sanitary matters in general, by the aid of the platform, the press, and other suitable means; (2) to induce and assist people, by personal influence, example, and encouragement, to live in accordance with recognised laws whereby health is maintained and disease is prevented; (3) to seek the removal of all noxious influences deleterious to the public health, and to influence and facilitate legislation in that direction. To effect these objects (its methods being distinctly benevolent), the society prints and distributes freely pamphlets, tracts, and wall sheets bearing upon the preservation of health; maintains a lending library of specially selected works for the use of members; and arranges courses of public health lectures. The ladies' committee of the council organise series of illustrated "Health Talks for Wives and Daughters" in thickly populated parts of the suburbs, thus reaching the classes most in need of sanitary enlightenment. Admission is in all cases free. In pursuance of the plan of testing the work done in the inculcation of health and temperance lessons in the State schools, an examination is held annually, with the concurrence of the Minister of Public Instruction, of pupils of thirteen years of age and upwards, in those subjects. At the last examination 43 candidates passed, and were awarded prizes and certificates, which were presented at the society's annual meeting by His Excellency the Health Society

Governor (Sir Reginald Talbot, K.C.B.), patron of the society. In the latter part of 1905 arrangements were completed by which the "Victorian Association for the Prevention and Cure of Tuberculosis" and the "Women's Health Society" were amalgamated with the Australian Health Society, the view being taken that the union would tend to further the spread of hygienic knowledge, and promote the cause of sanitary progress. The society receives no pecuniary aid from the Government; its work being carried on by voluntary subscriptions ranging from 5s. per annum upwards. The office is located in Empire Buildings, Flinders-street.

#### ROYAL HUMANE SOCIETY OF AUSTRALASIA.

*By R. W. E. Wilmot, Esq., Secretary.*

Humane  
Society.

The Royal Humane Society of Australasia was established in 1874 under the name of "The Victorian Humane Society." Its objects are as follow:—(1) To bestow awards on all who promptly risk their lives to save those of their fellow-creatures. (2) To provide assistance, as far as it is in the power of the society, in all cases of apparent death occurring in any part of Australasia. (3) To restore the apparently drowned or dead, and to distinguish by awards all who, through skill and perseverance, are successful. (4) To collect and circulate information regarding the most approved methods and the best apparatus to be used for such purposes. During the year ended 30th June, 1906, 122 applications for awards were investigated, with the result that 45 certificates, 29 bronze medals, 7 silver medals, and 1 gold medal were granted. The receipts during the year amounted to £536, and the expenditure to £552. The institution has placed and maintains 340 life-buoys at various places on the coast, rivers, lakes, and reservoirs, throughout all the Australian States and Fiji. Of the honorary awards distributed in 1905-6, 39 were for deeds of bravery performed in Victoria, 37 for similar acts in New South Wales, 2 in New Zealand, 2 in Western Australia, 1 in Tasmania, and 1 in South Australia. The society has 154 honorary correspondents, residing as follows, viz.:—52 in Victoria, 35 in New South Wales, 25 in New Zealand, 28 in Queensland, 8 in Tasmania, 3 in South Australia, and 3 in Western Australia. Owing to the appointment of these gentlemen and to the awards made by the society appearing to give complete satisfaction throughout the States, there is no urgency for forming local branches of the society in the other States.

Swimming competitions have been inaugurated in the schools of the Commonwealth, and awards of medals and certificates are made to those pupils who attain proficiency in exercises which have special reference to saving life from drowning. The society is making a special feature of the development of swimming and life saving proficiency.

The Victorian Society for the Protection of Animals has been established about 35 years. For the first 10½ years of its existence it was known as the Victorian Society for the Prevention of Cruelty to Animals. By the enforcement of the existing laws, and the procuring of such further legislation as may be deemed expedient, it seeks to prevent wanton and unnecessary cruelty. The creation of a wholesome and enlightened public opinion is also aimed at, since it is recognised that to excite and sustain such opinion regarding man's duty to the lower animals is even of greater importance than the enforcement of the law, particularly in those classes of cases where pain and suffering may actually be caused in ignorance, and where consequently a little more knowledge of animals would result in the diminution of the unconscious practice of cruelty. To this end, papers and leaflets dealing with the proper, humane, and considerate treatment of animals are widely distributed. Honorary agents of the society are appointed in more than 170 different centres, and these, by disinterested service under the supervision of and in co-operation with the secretary and inspector in Melbourne, forward the work of the institution in every portion of the State. During the year ended 30th June, 1906, 767 cases were dealt with by the society, of which 534 were connected with cruelty to horses. There were 114 prosecutions in cases of deliberate cruelty, in nearly all of which the law was vindicated by the punishment of the offenders. The receipts for the year amounted to £770, and the expenditure to £441.

### HOSPITAL SATURDAY AND SUNDAY.

In Melbourne and suburbs, the last Saturday and Sunday of October in each year are set apart for making collections in aid of the charitable institutions. The clergy of the various denominations take an active part in the movement, preaching sermons appropriate to the occasion, and otherwise helping it forward. The church collections on this Sunday are entirely devoted in aid of the fund. Sunday school superintendents, business firms, their employes, and others lend valuable assistance in making collections. The following are the amounts collected since the movement was inaugurated:—

Hospital  
Saturday  
and  
Sunday.

#### COLLECTIONS, 1873 TO 1905.

	£			£
1873 to 1898 ...	190,104	1903 ...	...	7,058
1899 ...	5,853	1904 ...	...	7,795
1900 ...	5,901	1905 ...	...	8,235
1901 ...	6,034			
1902 ...	6,669			
				£237,649

The returns for 1906 are not yet available.

Distribution  
of moneys  
collected  
on Hospital  
Saturday  
and  
Sunday.

The amounts distributed to the various charitable institutions, as well as the total sums collected, from the inception of the fund, and for the year 1905, were as under:—

### DISTRIBUTION, 1873 TO 1905.

Institution.	Amount Distributed.		
	1873 to 1904.	1905.	Total.
	£	£	£
Melbourne Hospital ... ..	66,806	2,187	68,993
Alfred Hospital ... ..	29,114	898	30,012
Benevolent Asylum ... ..	20,187	643	20,830
Women's Hospital ... ..	20,218	608	20,826
Children's Hospital ... ..	25,664	1,140	26,804
Eye and Ear Hospital ... ..	11,020	380	11,400
Homœopathic Hospital ... ..	10,895	332	11,227
Victorian Homes for Aged and Infirm ... ..	7,291	156	7,447
Richmond Dispensary ... ..	1,451	40	1,491
Collingwood Dispensary ... ..	1,900	...	1,900
Austin Hospital for Incurables ... ..	11,868	658	12,526
Convalescent Home for Women ... ..	2,215	140	2,355
"    "    Men ... ..	1,700	140	1,840
Melbourne District Nursing Society ... ..	782	150	932
St. Vincent's Hospital ... ..	3,170	265	3,435
Sanatorium for Consumptives, Echuca and Macedon ... ..	1,607	438	2,045
Queen Victoria Hospital for Women and Children ... ..	672	186	858
Melbourne Dental Hospital ... ..	94	30	124
The Foundling Hospital and Infants' Home ... ..	80	6	86
Total distributed ... ..	216,734	8,397	225,131
Total collected ... ..	229,414	8,235	237,649

### OLD-AGE PENSIONS.

Old-age  
pensions in  
Victoria.

An Act to provide for the payment of old-age pensions was passed in 1900. The minimum age of a pensioner is 65 years, but pensions may be granted to persons under that age if they have been permanently disabled through having been engaged in mining or any unhealthy or hazardous occupation. The period of residence in the State required to entitle a person to a pension is 20 years, five of which must be continuous and immediately preceding the application. A person who has deserted, without just cause, wife, husband, or children, for a period of 12 months in the preceding five years, is debarred from pension rights. The absence of serious criminal taint, to the extent of not having been imprisoned for periods amounting to five years during the whole qualifying period of residence, or to six months or upwards in the preceding five years, is insisted upon. Three convictions for drunkenness during the preceding two years is a disqualification. An applicant must be a British subject by birth, or a

naturalized subject of not less than six months' standing, but Chinese and Asiatics, whether naturalized or not, and Aborigines are excluded. Relatives may be summoned to show cause why they do not support applicants for pensions, and may be ordered to do so. Originally the maximum pension was 10s. per week, but in the Amending Act of 1901 it was reduced to 8s. per week. Under the Amending Act of 1903 pensions are only granted and the amount fixed by the Treasurer of the State, after recommendation of the Commissioners. The maximum rate of pension (8s. per week) was retained. The Government propose to increase the maximum pension to 10s. per week from the 1st July, 1907. 11,055 persons were entitled to receive pensions on 31st December, 1905. Between 1st January, 1906, and 31st December, 1906, 1,136 pensions were granted to new applicants, and 105 pensions were restored; 444 pensions were suspended, and 1,066 pensioners died, leaving 10,786 persons entitled to pensions on 31st December, 1906, of whom 10,587 received payment from last schedules prepared. (The remaining 199 pensioners are inmates of hospitals or have had their pensions temporarily withheld.) Of the persons entitled to pensions on 31st December, 1906, 4,713 were resident in Melbourne and suburbs; 734 in Ballarat and district; 509 in Bendigo and district; 317 in Geelong; 125 in Maryborough; 113 in Daylesford; 128 in Warrnambool; 105 in Creswick, and the remainder were scattered throughout the other districts of the State.

The following are the amounts paid since the inception of the system on 1st January, 1901, viz.:—

In 1900-01	...	...	£129,338
1901-02	...	...	292,432
1902-03	...	...	215,973
1903-04	...	...	205,150
1904-05	...	...	200,464
1905-06	...	...	189,127
From 1st July, 1906, to 31st December, 1906	...	...	94,243
Total	...	...	£1,326,727

The following statement shows the estimated number of persons aged 65 years and over in the two Australian States and New Zealand paying old-age pensions, the number of persons receiving old-age pensions in Australia and New Zealand.

pensions, the proportion of the latter to the former, and the annual amount payable:—

OLD-AGE PENSIONS IN AUSTRALIA AND NEW ZEALAND, 1906.

State or Colony.	Estimated Number of Persons Aged 65 Years and Upwards.	Number of Persons Receiving Old Age Pensions.	Proportion of those Eligible on an Age Basis Receiving Pensions.	Annual Amount Payable.
			Per cent.	£
Victoria ... ..	67,500	10,786	16	186,957
New South Wales ... ..	55,300	21,406	39	500,000
New Zealand ... ..	42,934	12,582	29	313,018
Total ... ..	165,734	44,774	27	999,975

It thus appears that New South Wales is paying pensions to nearly two-fifths of those eligible to receive them under the age qualification, New Zealand to nearly one-third, but in Victoria only about one-sixth of those so qualified are on the pension list. The number of pensioners in New Zealand includes 667 Maoris.

Besides Victoria, only New South Wales and New Zealand have, in Australasia, provided pensions for their aged people. In New South Wales, the scheme sanctioned by Parliament 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 the pensioner possesses. 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.

In New Zealand, every person 65 years of age and over, is eligible for a pension, provided he has resided continuously in the colony for 25 years, and does not receive income in excess of £60 a year, nor possess property exceeding £260 in value. The maximum pension is £26 a year with a deduction of £1 per annum for each £1 of income above £34 a year, and for each £10 of property above £50. Where any part of the property of an applicant is that on which he permanently resides, and which produces no income a deduction of £150 is allowed. In the case of a husband and wife the amount of joint income (including pension) is limited to £90.

The law of New South Wales and New Zealand, unlike that of Victoria, makes no provision for relatives of aged impecunious persons being compelled to support them.



## LUNATIC ASYLUMS.

The number of cases admitted to lunatic asylums during the year 1905 was 726, the number discharged recovered was 253, and relieved 36. The number of patients remaining in the asylums on the 31st December, 1905, was 4,768, or a proportion of 1 in every 255 of the population, as compared with 4,642, or 1 in every 261 of the population, in the preceding year. Of those discharged recovered in 1905, as many as 69 per cent. had been in the asylums for less than twelve months, 17 per cent. from 1 to 2 years, and 8 per cent. from 2 to 5 years. After this length of time in the asylums recoveries are not at all likely to take place. Of those who died, 30 per cent. had been resident under twelve months, 30 per cent. from 1 to 5 years, 10 per cent. from 5 to 10 years, 6 per cent. from 10 to 15 years, 6 per cent. from 15 to 20 years, 5 per cent. from 20 to 25 years, and about 13 per cent. were in longer than 25 years. These facts tend to show that mortality is heavy during the early stages of treatment, and that the death rate amongst those inmates who have a lengthened asylum residence is very light.

Since the opening of the first asylum in 1848 up to the end of 1905, 34,517 persons have been admitted, viz., 19,746 males, and 14,771 females. The proportion who recovered was 29 per cent. of males, and 33 per cent. of females, whilst 4 and 7 per cent. respectively were relieved, 21 and 21 per cent. (including transfers) were not improved, 33 and 23 per cent. died, and 12 and 15 per cent. respectively still remain under care in the institutions.

The number of patients in the Hospitals for the Insane in the different Australian States and New Zealand, and their proportion to the total population of each State on 31st December, 1905, were :—

## NUMBER OF LUNATICS IN STATES.

State or Colony.	Number of Lunatics on 31st December, 1905.	
	Total.	Per 100,000 of Population.
Victoria ... ..	4,768*	391
Queensland ... ..	1,942	368
New Zealand ... ..	3,112	353
New South Wales ... ..	5,252	352
South Australia ... ..	983	260
Tasmania (1904) ... ..	460	255
Western Australia (1904) ... ..	474	196

\* On 31st December, 1906, the number of patients in the Victorian Hospitals for the Insane had increased to 4,878.

Recoveries  
of lunatics  
in Australia,  
1905.

The recoveries of patients in the Victorian Hospitals for the Insane in 1905 were below the average of the fifteen years ended with 1905, the proportion in that year being 3,387 per 10,000 admitted, as compared with 3,729 in the period stated.

#### RECOVERIES.

	Recoveries per 10,000 Admissions.		Recoveries per 10,000 Admissions.
South Australia ...	5,261	Western Australia (1904) ...	3,944
Tasmania (1904) ...	4,634	Queensland ...	3,403
New South Wales ...	4,622	Victoria ...	3,387

Deaths of  
lunatics in  
Australia  
and New  
Zealand.

The mortality of patients was higher in South Australia in 1905 than in any of the other States. This will be seen by the following figures —

#### DEATHS.

	Deaths per 10,000 Resident Patients.		Deaths per 10,000 Resident Patients.
South Australia ...	949	New Zealand ...	703
Western Australia (1904) ...	921	Queensland ...	696
Tasmania (1904) ...	764	New South Wales ...	689
Victoria ...	718		

#### NEGLECTED AND REFORMATORY CHILDREN.

Neglected  
and  
Reformatory  
Children.

There were at the end of 1906 three industrial and eleven reformatory schools in the State. Two of them (one industrial and one reformatory school) are wholly maintained and managed by the Government, and are used merely as receiving and distributing depôts, the children being sent as soon as possible after admission thereto to foster homes, situations, or to other institutions for dealing with State wards. The other schools are under private management and receive a capitation allowance from the Government for those inmates who are wards of the Neglected Children's Department. Many of the inmates of the reformatories are either placed with friends or licensed out. The wards of the State on 31st December, 1906, numbered 5,126—comprising 4,920 neglected and 206 reformatory children—and in addition there were 32 others free from legal control, who, being incapacitated, were maintained by the State. The following

table shows the number of neglected and reformatory children under control at the end of each of the last five years:—

## NEGLECTED AND REFORMATORY CHILDREN, 1902 TO 1906.

Year.	NUMBER OF NEGLECTED CHILDREN AT THE END OF THE YEAR.					Total Neglected Children.
	Boarded Out.	Placed with friends on Probation.	Maintaining themselves at Service or Apprenticed	In Institutions (including Hospitals).	Visiting Relatives, &c.	
1902 ...	3,753	762	736	149	2	5,402
1903 ...	3,363	771	767	143	1	5,045
1904 ...	3,154	769	826	136	4	4,889
1905 ...	3,044	761	854	148	6	4,813
1906 ...	3,315	724	751	120	10	4,920

Year.	NUMBER OF REFORMATORY CHILDREN AT THE END OF THE YEAR.					Total Reformatory Children.
	In Reformatory Schools.	Placed with Relatives.	Maintaining themselves at Service.	In Institutions.	Visiting Relatives, &c.	
1902 ...	199	64	79	...	1	343
1903 ...	192	54	64	3	3	316
1904 ...	189	33	62	2	1	287
1905 ...	151	29	54	1	...	235
1906 ...	144	20	42	...	...	206

The welfare of the children boarded out is cared for by honorary committees, who send reports to the department as to their general condition. The rate paid by the Government to persons accepting charge of these children is five shillings per week for each child. Children from either industrial or reformatory schools may be placed with friends on probation, without wages, or at service.

Children boarded out, &c.

The circumstances leading to the commitment of children to the care of the Department in 1906 were as follow:—The total number of children placed under control during the year was 771, and in 267, or 35 per cent. of the whole, were the parents held to be blamable—the father in 184, the mother in 43, and both parents in 40 cases. There were 504 cases in which the parents were held to be blameless—in 337 the father was dead and the mother poor but of good character; in 14 both parents were dead; in 74 the parents were alive, but, though held to be of good character, were too poor to support their children; in 3 the father was an invalid and the mother dead; in 14 the father was poor and the mother dead; in 38 both parents were the victims of misfortune; in 6 the parents were unknown; in 5 the father was unknown and the mother dead; and in 13 the father was unknown and the mother unable through ill-health or poverty, to maintain her offspring.

Children committed to the care of the State, 1906.

Cost of maintenance of neglected and reformatory children.

The Government expenditure for the maintenance of neglected children amounted in 1906 to £52,771, and for reformatory school children to £4,355; the expenses of administration amounted to £4,140, making a total gross expenditure of £61,266. A sum of £1,593 was received from parents for maintenance, and £50 from other sources, making the net expenditure £59,623. The average number of neglected children under supervision during the year was 4,770; of this total, 3,135 were maintained in foster homes at an average annual cost per head to the State of £15 3s.; 94 were in Government receiving dépôts at £28 8s. 6d. per head, and 66 were in private industrial schools costing £14 19s. 1d. per head; 751 were at service earning their own living, and 724 were with relatives and others at no cost to the State. The average number of reformatory wards under supervision during the year was 211. Of this number, 149 were maintained in private schools at an average annual cost per head of £29 4s. 7d., 42 were at service earning their own living, and 20 were with relatives at no cost to the State. The average net cost per head of neglected and reformatory school children who were maintained by the State during the year was £17 6s. 2d.

Neglected children maintained by societies or private persons.

Part VIII. of the *Neglected Children's Act* 1890 deals with the committal of neglected children to the care of private persons or institutions approved by the Governor in Council, and also provides for the wardship of the children, and for their transference if found unfitted for such care, to the control of the Department for Neglected Children. The following return shows the societies and persons registered under the provisions of this part of the Act, and particulars respecting the children under their care during 1906:—

WORK OF SOCIETIES AND PERSONS REGISTERED UNDER PART VIII.  
OF THE "NEGLECTED CHILDREN'S ACT."

Name of Society or Person.	Number of Children under Supervision on 31.12.05.	Admissions during 1906.			Number of Children under Supervision on 31.12.06.
		Court Committals.	Transfer of Guardianship.	Voluntary Admissions.	
Presbyterian and Scots' Church Neglected Children's Aid Society	343	16	18	3	344
Victorian Neglected Children's Aid Society	855	3	..	119	839
Clifden Home, Wedderburn ..	103	..	..	..	103
Gordon Institute, Melbourne ..	153	2	19	11	132
Try Society, Surrey-road, Hawksburn (Mr. W. M. Forster)	41	1	..	37	35
Burwood Boys' Home ..	43	..	21	..	53
Geelong Try Boys' Brigade ..	95	..	..	89	127
Latrobe-street Ragged School Mission	106	..	..	26	89
Mission Rescue and Children's Home, Ballarat East	23	1	..	4	28
Church of England Neglected Children's Aid Society	77	1	..	23	97
Methodist Homes for Children ..	311	17	17	24	325
Methodist Boys' Training Farm, Burwood East	50	1	2	14	62
Mrs. Goldspink, 285 Rathdown-street, Carlton	201	15	14	22	252
Total .. .. .	2,406	57	91	372	2,486

The total number of children who were under the guardianship of the State or maintained in public institutions or by societies in 1906, reached the large number of 9,113, viz., 5,158 under the control of the Neglected Children's Department, 2,486 under the supervision of societies registered under Part VIII. of the Neglected Children's Act, and 1,469 in Orphan Asylums.

Total number of neglected and orphan children.

#### VICTORIAN MINING ACCIDENT RELIEF FUND.

In December, 1882, an inrush of water in the New Australasian Company's mine at Creswick caused the deaths of 22 miners. Consequent on the disaster 79 persons—comprising 18 widows and 61 children—were left in destitute circumstances. Public subscriptions to the amount of £21,602 were raised throughout Victoria for the relief of the widows and orphan children of those who lost their lives, and upon the Government promising to subsidize the fund to the extent of £5,000, it was decided to make it a permanent and national one. An executive committee of representative gentlemen was appointed to administer the fund, which was deposited in banks, averaging about 5 per cent. interest per annum. In July, 1884, the late Mr. E. L. Zox, M.P., one of the committee, introduced a Bill into the Legislative Assembly to enable the committee appointed to manage the fund to hand over their functions to a body of trustees proposed to be incorporated under the name of the "Victorian Mining Accident Relief Trustees." This was done in order to place the fund on a proper footing and so as to obtain a larger income from the investment of the capital, which was then hardly adequate to meet the demands on it. This Bill, which became law in December, 1884, provided for subsidizing the fund from time to time by Parliament, but this has never been carried out. The trustees appointed comprised the Minister of Mines, the Speaker of the Legislative Assembly, the Mayors of the cities of Melbourne, Ballarat, Bendigo, the Town of Ballarat East, the Borough of Creswick, and the President of the Miners' Association for the time being respectively. Permission was given to invest the moneys in Government debentures, stock, in incorporated banks—£5,000 being the limit in any one institution, or on first mortgages of freehold land and tenements in the city of Melbourne and suburbs.

Victorian Mining Accident Relief Fund.

In 1885 the sum of £20,000 was lent on the property known as "Our Lodgings," situated in Lonsdale-street, Melbourne, for three years at 6 per cent. per annum, precaution being taken to obtain the joint and several bond of the directors of the company for the due

payment of the interest and principal. At the expiration of the period stated the company having fulfilled the conditions attached to the mortgage, obtained a release.

In 1888 the sum of £20,000 was again invested for seven years at 5½ per cent. per annum on mortgage over the land and buildings in Queen-street occupied by Messrs. Jacobs, Hart, and Co. This investment did not, however, turn out to be a satisfactory one and the mortgagor finally asked the trustees to release him from his obligations on handing over the property, together with a sum of £1,000. This latter proposal was agreed to by the trustees.

In view of the importance of this action in relation to the investment of public trust moneys, a board was appointed by Parliament to investigate the affairs of the trust, and to ascertain whether such release should be granted on the conditions set out, or whether the Relief Fund would be benefited by the adoption of another course than that proposed by the trustees. After careful review of the evidence, the board made a full report as to the condition of the fund. The constitution of the trust was considered to be defective and the formation of a new body was recommended, such body to consist of five members to be appointed by the Governor in Council, and to hold office for five years. It was further advised that the future investment of the Relief Fund be strictly confined to Government stock or debentures, and that the Act should be amended accordingly; that the mortgagor be released from his mortgage on the conditions stipulated by him; and that effect should be given to the expressed intention of Parliament to subsidize the fund, and to establish its permanency.

These recommendations were acted upon except as regards subsidizing the fund, which has not yet been done; and on the 31st December, 1905, the amount to the credit of the fund was £14,013, of which £12,000 was the estimated value of freehold premises in Queen-street; £1,500 was in Government debentures, £467 bank deposit receipts, and £46 cash in hand. At the end of 1905 there were seven widows as a charge on the fund, receiving 15s. per week each.

#### BENDIGO MINERS' ASSOCIATION—THE WATSON FUND.

About the middle of the year 1889 the idea suggested itself to Mr. J. B. Watson of doing something for the permanently injured miners of the Bendigo District. It was immediately after the occurrence of

a severe mining accident that Mr. Watson sent a letter to the Miners' Association with an offer to contribute £1,500, at the rate of £100 per year unconditionally, or to give £150 per year for 10 years, if the Society would contribute a like amount. His proposal was brought under the notice of the Committee of Management with the result that a Select Committee was appointed to bring up a report, and at the same time to formulate a scheme. It was thought that the sum of money was not sufficient to meet the liability that would be likely to occur. It was ultimately decided to recommend the members to accept Mr. Watson's offer of £150 for 10 years, and at the same time to cover it with the sum of £200 per year, to be made by levy on all members. This scheme was laid before Mr. Watson and the members, and accepted by both parties, and it was arranged that all gifts and donations that could be procured should be credited to a fund to be known as the Watson Sustentation Fund. It was decided that the collections of 1890 should be reserved strictly for revenue purposes, and that the benefits should not come into full operation until 1891, so as to give the fund a good start, and place it on a sure foundation. Payments were accordingly first made in 1891, at the rate of 5s. per week, and this rate was maintained for about two years, when the sick pay was increased to 7s. 6d. per week. Further changes were afterwards made, as necessity arose.

The following return shows the receipts and expenditure, from the inception of the fund. In the column "Administration" the item £152 for 1903 includes £132 expenses in connexion with the sale of property:—

**PERSONS RELIEVED, RECEIPTS AND EXPENDITURE: WATSON  
SUSTENTATION FUND.**

Year.	Relieved during the Year.	On Funds at end of Year.	Deaths during the Year.	Receipts.		
				From the Founder, J. B. Watson.	Other Receipts.	Total Receipts.
				£	£	£
1890 ...	...	...	...	150	1,467	1,617
1891 ...	11	11	...	150	56	206
1892 ...	26	26	...	150	503	653
1893 ...	44	44	...	150	452	602
1894 ...	43	43	...	150	790	940
1895 ...	43	38	5	150	734	884
1896 ...	57	48	9	150	543	693
1897 ...	56	52	4	150	1,680	1,830
1898 ...	57	48	9	150	944	1,094
1899 ...	56	41	15	150	524	674
1900 ...	54	47	7	...	641	641
1901 ...	66	48	18	...	591	591
1902 ...	52	41	11	...	549	549
1903 ...	50	43	7	...	874	874
1904 ...	58	48	10	...	1,049	1,049
1905 ...	63	40	20	...	875	875
1906 ...	76	40	36	...	1,235	1,235
Total ...	...	...	151	1,500	13,507	15,007

PERSONS RELIEVED, RECEIPTS AND EXPENDITURE: WATSON  
SUSTENTATION FUND—*continued.*

Expenditure.

Year.	Sick Pay.	Donations to Members and Wives and Families of Deceased Members.	Administration.	Total Expenditure	Balance at End of Year.
	£	£	£	£	£
1890 ...	...	...	...	...	1,617
1891 ...	104	87	6	197	1,626
1892 ...	330	150	8	488	1,791
1893 ...	571	116	9	696	1,697
1894 ...	578	64	6	648	1,989
1895 ...	777	98	7	882	1,991
1896 ...	845	107	34	986	1,698
1897 ...	946	121	17	1,084	2,444
1898 ...	917	99	10	1,026	2,512
1899 ...	873	61	7	941	2,245
1900 ...	973	65	11	1,049	1,837
1901 ...	765	140	9	914	1,514
1902 ...	842	28	11	881	1,182
1903 ...	827	39	152	1,018	1,038
1904 ...	854	114	24	992	1,095
1905 ...	822	80	43	945	1,025
1906 ...	767	97	29	893	1,367
Total ...	11,791	1,466	383	13,640	—

QUEEN'S FUND.

Queen's  
Fund.

This fund was inaugurated in 1887 by Lady Loch to commemorate the Jubilee of the late Queen Victoria. It is for the relief of women in distress, and it is arranged that only the interest on the capital shall be expended yearly. The number of women relieved during 1906-7 was 85, to whom £490 was allotted either by way of grant or loan, and the cost of management was £64. The accumulated fund on the 20th June, 1907, amounted to £13,831.



## VITAL STATISTICS.

Marriages in Victoria can only be celebrated by a minister of religion whose name is registered in the office of the Government Statist, by the Government Statist, or by any duly appointed registrar of marriages. In order to guard against the celebration of marriages by undesirable persons, the present law provides that no person shall be registered as a minister of religion unless he ordinarily officiates as such in one of the officially recognised religious denominations, is supported by the recognised head of the denomination in Victoria, or, if there be no such head, then by at least two registered ministers; and satisfies the Government Statist that he is a fit and proper person to celebrate marriages. The Governor in Council may prohibit from celebrating marriages any minister who is proved guilty of any offence, misconduct, or impropriety unworthy of his calling; and the Government Statist may cancel the registration of any minister who ceases to officiate or otherwise loses his qualifications. Any clergyman or person officiating as such who celebrates a marriage without being duly registered, or any person who obtains registration by untruly representing himself as an officiating minister, or who personates a registrar, shall be guilty of a misdemeanour, punishable by a penalty not exceeding £500, or by imprisonment not exceeding five years, or by both; but if the omission were accidental, the penalty is reduced to a maximum of £20 on summary conviction. In the case of a minor (not being a widower or widow), wishing to marry, there must be obtained the written consent (a) of the father if he be within Victoria; if not (b) of a guardian appointed by him; if no such appointment (c) of the mother if within Victoria; if there be no such parent or guardian (d) of a police magistrate, or a justice appointed for the purpose by the Chief Justice or a Judge of the Supreme Court. If the mother has been deserted by the father, or obtained a protection order against him, or if, through divorce or judicial separation she has become the guardian *de facto*, her consent is sufficient authority for the marriage. If the minor is a ward of the Neglected Children's or Reformatory Schools' Department, the Departmental Secretary's consent is the authority. In all cases the consent must be indorsed on the marriage certificate. Marriages of Jews and Quakers are exempted from the above provisions, and are deemed legal and valid if celebrated according to their respective usages. To guard against the abuse of the system of matrimonial agencies, the Governor in Council is empowered, if deemed expedient, to prohibit ministers from celebrating marriages in any undesirable place or building. No marriage shall be invalid by reason of having been celebrated by an unqualified person if either of the

Law as to  
marriages  
in Victoria.

parties shall have believed at the time that such person was qualified, nor by reason of any formal defect or irregularity. Marriage with a deceased wife's sister has been legalized in Victoria since 1873; but there is no provision to validate a marriage of a woman with a deceased husband's brother.

Registra-  
tion.

The present official system of compulsory registration of births, deaths, and marriages in Victoria has been in force since 1853; and the registers—framed on the best models—are replete with all necessary information bearing on the family history of the people. The statutory duties under the Registration Acts are performed by the Government Statist, who has control over the local registrars of births and deaths, and (so far as regards their registration duties) of the officiating clergymen and lay registrars; and copies of all entries certified by him or by the Assistant Government Statist, are *primâ facie* evidence in the Courts of Australia of the facts to which they relate. At the head office in Melbourne there is kept for reference a complete collection of all registrations effected since 1st July, 1853, as well as certified copies or originals of all existing church records relating to earlier periods, as far back as 1837. For the registration of births and deaths, the State is divided into over 600 registration districts, for each of which a registrar is appointed, who (if not a public servant) is paid by fees at the rate of 2s. 6d. per entry, but is not prevented from following his or her own private business; whilst the marriages are recorded by the clergyman or lay registrar who performs the ceremony. Registrations of marriages are made in triplicate, and of births and deaths in duplicate—each copy bearing the original signatures of the parties married and witnesses (in case of marriage), or of the informant (in case of a birth or death), and of the registrar. One copy is retained by the registrar or clergyman; one forwarded to the Government Statist—to be kept as a permanent record; and the third (in case of marriage only) is given to one of the parties married. The parents of a legitimate child born in Victoria, or the occupier of a house wherein a birth or death occurs, is required under a penalty of £10 to give notice (either personally or by authorized agent) to the registrar of the district within 60 days after the birth, and within 7 days after the death. (As an alternative, the notice may be given by the attending doctor or nurse.) If an illegitimate child is born in any house or place of which the mother of the child is not the occupier, or if an illegitimate child, under five years of age, dies in, or its dead body is brought to, any house or place, the occupier must give notice to the deputy-registrar within three days if within any city, town, or borough, or to either the deputy-registrar or police officer in charge, if elsewhere. In the case of an illegitimate birth, if the mother is the occupier the notice must be given within three weeks. The penalty for breach of this is imprisonment for six months or a penalty of £25. No fee is charged for registration, except in the case of a birth registered after sixty days, when 5s. is charged if within twelve months, and 12s. 6d., if over one year. Applicants for searches or certificates of births, deaths, or marriages

should, in applying to the Government Statist, furnish particulars of the date and place of the event; also the names of the parties in the case of a marriage, or the name, age (if a death), and parentage in the case of a birth or death.

### MARRIAGES.

Marriages in 1906 numbered 8,930, which was the highest during the past sixteen years, and was 156 more than in the preceding year, 1,325 greater than 1903, and 531 above the average of the last five years. The marriages in Victoria in each of the last sixteen years are as follow :—

#### MARRIAGES IN EACH YEAR, 1891-1906.

Year.	No. of Marriages.	Year.	No. of Marriages.
1891	8,780	1899	8,140
1892	7,723	1900	8,308
1893	7,004	1901	8,406
1894	7,029	1902	8,477
1895	7,181	1903	7,605
1896	7,625	1904	8,210
1897	7,568	1905	8,774
1898	7,620	1906	8,930

Between 1891 and 1894, a period of commercial depression, a fall in the number of marriages amounting to 20 per cent. took place, but since 1894 an upward movement is shown in each year, excepting 1897 and 1903. As the tendency to marry is necessarily influenced by the view taken of present and future prospects, the large increase in the number of marriages in the past three years evidences a belief in the present and prospective prosperity in the State.

The ordinary marriage rate—per 1,000 of the total population—like birth and death rates similarly estimated, is somewhat unreliable in comparatively newly settled countries like Australia, especially in earlier years, but as it affords a ready and approximate comparison between years not widely separated, the figures relating to Victoria are shown in the following table for the last ten years.

#### MARRIAGE RATE, 1897 TO 1906.

Year.	Marriage Rate.	Year.	Marriage Rate.
1897	6.41	1902	7.00
1898	6.44	1903	6.29
1899	6.86	1904	6.80
1900	6.96	1905	7.24
1901	6.97	1906	7.28

With the exception of 1903 there was a perceptible yearly increase in the marriage rate since 1897, that for 1906 being the highest during the last fifteen years.

Factors in  
marriage  
rates.

It has been frequently shown that the marriage rate is not so dependent upon the number of marriageable women as upon the number of marriageable men the community contains, and, to demonstrate this the following table is designed, showing the proportion of marriages to the population, to the number of single men, and of single women in each census year 1854 to 1901:—

PROPORTION OF MARRIAGES PER 1,000 OF POPULATION AND OF  
SINGLE MEN AND WOMEN, 1854-1901.

Year of Census.	Exclusive of Chinese and Aborigines.						
	Enumerated Population.	Number Marriageable—		Marriages.	Proportion of Marriages per 1,000 of the—		
		Men.	Women.		Popula- tion.	Marriage- able Men.	Marriage- able Women.
1854 ..	234,361	70,865	15,083	3,696	15.77	52.16	245.04
1857 ..	383,668	95,427	26,317	4,465	11.64	46.79	169.66
1861 ..	513,896	106,940	37,006	4,528	8.81	42.34	122.36
1871 ..	712,263	89,921	65,386	4,715	6.62	52.43	72.11
1881 ..	849,438	99,824	119,360	5,732	6.75	57.42	48.02
1891 ..	1,130,463	163,048	173,138	9,007	7.97	55.24	52.02
1901 ..	1,193,340	154,334	211,087	8,468	7.08	54.87	40.12

NOTE.—The figures in this table relate to the twelve months of which the date of census is the middle.

Fluctua-  
tions in  
marriage  
rate.

It will thus be observed that, whilst the proportion of marriages to the population (marriage rate) and to the marriageable women has fluctuated considerably, the proportion to the marriageable men has been tolerably constant, the extremes being  $57\frac{1}{2}$  in 1881, and  $42\frac{1}{2}$  in 1861, and the usual range was between the narrow limits of 52 and 55. This proportion steadily diminished from  $57\frac{1}{2}$  in 1881 to 55 in 1901, although the latter was higher than at any period prior to 1881. The proportion of marriages per 1,000 marriageable women, on the other hand, has fallen off considerably. Even in the more settled times, after the gold rush, it fell from 72 in 1871 to a level of about 50 in 1881 and 1891, and still further to as low as 40 in 1901, owing to the generally increased proportion of marriageable women to men, which at the last period reached as high as 137 per 100 men. In other words, the chances of a woman marrying in Victoria are now very much smaller than at any earlier period, the proportions having fallen from about 1 in every 4 of the marriageable women in 1854, 1 in 8 in 1861, to 1 in 20 in 1891, and 1 in every 25 in 1901 marrying within a year.

To further investigate this subject, it will be interesting to ascertain the marriage rates amongst marriageable men and women at different periods of life, and, with this view, the rates have been computed for various age groups between 15 and 50 at each of the last three census periods, and are shown in the following table:—

Marriage  
rates in  
age groups.

PROPORTION OF MARRIAGES PER 1,000 MARRIAGEABLE MEN AND WOMEN AT EACH AGE.

Age Group (Years.)	Men.			Women.		
	1881.	1891.	1901.	1881.	1891.	1901.
15—21 .. ..	..	..	..	24.6	23.6	18.8
21—25* .. ..	57.8	44.3	44.6	118.8	106.0	87.2
25—30 .. ..	114.2	85.9	90.5	105.7	100.5	84.7
30—35 .. ..	82.9	75.2	82.1	73.1	66.4	57.9
35—40 .. ..	56.4	51.1	62.6	53.8	46.4	37.2
40—45 .. ..	30.5	33.4	39.9	32.5	27.7	22.3
45—50 .. ..	21.8	25.9	29.8	22.1	17.8	14.3
50 upwards ..	10.5	9.1	9.1	4.9	4.2	2.4
15—45 .. ..	..	..	..	55.9	58.7†	49.0

\* In the case of men 20-25.

† The apparent anomaly of the rate for women between 15 and 45 being higher in 1891 than in 1881, whilst the rate in each age group in 1881 is higher than that in the corresponding group in 1891, is due to the changes in the age constitution of women under 45 years of age.

In the last two periods, as compared with the first, there is every evidence of a tendency amongst men to defer marriage to a later period in life—the turning point being age group 30-35, for there has been a marked decrease in the rates below, but an increase in the rates above that age. In 1901, as compared with 1891, however, there was a considerable increase in the rate at every age period except 20-25 and over 50.

Tendency  
amongst  
men to  
defer  
marriage

In the case of marriageable women, there was, it will be observed, a fall between 1881 and 1891, and a still greater fall between 1891 and 1901 in the proportion marrying at each age group under 35; but a rapid fall from each census to the subsequent one in the proportions at ages over 35. The fall between 1891 and 1901 was almost uniformly distributed over the various age groups, and averaged about 18 per cent. In this connexion it may be noted that whilst the marriageable women between 15 and 45 increased by 25,300 during the intercensal period 1891-1901, the number of marriageable men between 20 and 50 decreased by 9,156—a decrease chiefly due to the efflux of single men to Western Australia and South Africa. Thus, there were resident in Western Australia, according to the last census returns of that State, 17,433 adult males of Victorian birth (besides 6,909 minors), of whom 6,701 were married, and 10,732 were single.

Fall in  
marriage  
rates of  
women at  
all ages.

Ages of  
bride-  
grooms and  
brides.

The ages of bridegrooms and brides who were married in 1906 are shown in combination for various groups in the following table:—

AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION IN VICTORIA,  
1906.

		Ages of Bridegrooms																Total Brides.	
Ages of Brides.		16.	17.	18.	19.	20.	21 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 and up-wards,	
14	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	2
15	...	...	...	1	...	...	2	3	...	1	...	...	...	...	...	...	...	...	8
16	...	1	...	3	...	2	...	11	2	3	2	...	...	...	...	...	...	...	49
17	...	...	1	1	10	7	59	23	10	2	...	1	...	...	...	...	...	...	114
18	...	...	7	10	26	124	59	22	9	3	1	...	...	...	...	...	...	...	261
19	...	2	4	11	28	210	110	32	17	3	3	...	...	1	1	...	...	...	422
20	...	...	4	11	36	228	150	55	16	6	2	...	...	...	...	...	...	...	508
21 to 25	...	1	6	14	39	1,314	1,254	456	178	64	19	5	2	1	1	...	2	...	3,356
25 to 30	...	...	...	...	1	4	265	1,051	582	308	92	39	6	3	2	2	...	...	2,355
30 to 35	...	...	...	...	...	...	45	211	288	238	114	54	16	5	10	2	...	...	983
35 to 40	...	...	...	...	...	...	5	33	82	133	105	53	15	10	4	4	1	1	446
40 to 45	...	...	...	...	...	...	1	10	24	26	67	39	31	15	10	5	4	...	232
45 to 50	...	...	...	...	...	...	...	1	2	10	27	21	17	9	7	4	3	6	107
50 to 55	...	...	...	...	...	...	...	1	1	1	7	5	10	11	5	6	1	3	51
55 to 60	...	...	...	...	...	...	...	...	1	...	1	1	...	4	1	2	4	1	15
60 to 65	...	...	...	...	...	...	...	...	...	1	...	1	1	3	...	1	...	2	9
65 to 70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	2	3	10
70 to 75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
75 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Total Bridegrooms ..		1	5	23	60	143	2,278	2,918	1,557	943	491	239	101	63	43	30	16	19	8,930

Some inequalities of age appear amongst the persons married, as for instance, a man between 35 and 40 was married to a girl of 15 years of age, 3 men between 35 and 40 to girls of 16, and 2 over 75 years of age to women between 21 and 25. About 33 per cent. of the contracting parties were about the same age, whilst 9 per cent. of the brides were older than their bridegrooms. Of the total bridegrooms and brides, 65 of the former and 12 of the latter were over 65 years of age.

Proportion  
of mar-  
riages at  
various  
ages.

The proportions of both sexes marrying in the various age groups are shown in the following table for the averages of the periods 1881-90, 1891-5, and for the year 1906:—

PROPORTION OF MALES AND FEMALES MARRYING AT DIFFERENT  
AGES, 1881-90, 1891-5, AND 1906.

Ages (Years).			Proportion per 1,000 of total.					
			Bridegrooms.			Brides.		
			1881-90.	1891-5.	1906.	1881-90.	1891-5.	1906.
Under 15	...	...	...	...	...	·15	·13	·22
15 to 16	...	...	...	...	...	1·17	1·31	·88
16 to 17	...	...	·03	·08	·11	6·53	5·70	5·49
17 to 18	...	...	·29	·16	·56	20·32	17·21	12·77
18 to 19	...	...	1·46	1·30	2·58	42·94	35·27	29·23
19 to 20	...	...	5·62	5·52	6·72	65·03	50·48	47·26
20 to 21	...	...	15·19	11·94	16·01	73·84	62·09	56·89
21 to 25	...	...	321·02	262·69	255·10	432·34	398·04	375·81
25 to 30	...	...	365·48	383·61	326·76	223·83	268·61	263·72
30 to 35	...	...	134·57	182·99	174·36	62·07	87·42	110·08
35 to 40	...	...	58·29	68·17	105·60	29·53	34·68	49·95
40 to 45	...	...	32·54	29·09	54·99	17·10	16·73	25·98
45 to 50	...	...	24·77	17·66	26·76	12·23	8·74	11·98
50 to 55	...	...	18·40	12·57	11·31	6·74	6·15	5·71
55 to 60	...	...	11·49	8·71	7·05	3·40	3·92	1·68
60 and over	...	...	10·85	15·51	12·09	2·78	3·52	2·35
Total	...	...	1,000·00	1,000·00	1,000·00	1,000·00	1,000·00	1,000·00

It will be observed that in later years the proportion of both sexes marrying between 21 and 30 shows a decline. This is more marked amongst the men than the women, the former having fallen from 69 per cent. in 1881-1890 to 58 in 1906—or 16 per cent.—as compared with a decline of only 3 per cent. amongst the women. On the other hand, a large increase occurred in later years in the proportions of bridegrooms and brides between 30 and 40, the former being 19 and the latter 9 per cent. in 1881-1890 as against 28 and 16 per cent. respectively in 1906.

There was a gradual increase in the mean ages at marriage of both brides and bridegrooms during the 26 years ended in 1905, and a further increase for the year 1906. The following statement gives, for certain five year periods, and for 1905 and 1906, the mean ages of brides under 45, and of bridegrooms marrying such brides:—

Increased  
age at  
marriage.

MEAN AGES AT MARRIAGE.

Period.			Average Age of—	
			Brides under 45.	Bridegrooms of Brides under 45.
			years.	years.
1870-4	...	...	24·13	29·93
1880-4	...	...	23·83	28·61
1890-4	...	...	24·66	28·66
1900-4	...	...	25·44	29·70
1905	...	...	25·77	29·76
1906	...	...	25·97	29·90

In the two earlier periods shown, the difference between the mean ages of brides under 45 and their bridegrooms was about 5, as compared with 4 years in the four later periods. The mean age of all bridegrooms during 1906 was 30.42, which was nearly .2 years higher than that of England and Wales—28.56—during the year 1905.

Marriage  
rates in  
Australian  
States and  
New  
Zealand.

In the following table are shown the marriage rates per 1,000 of the population in the Australian States and New Zealand for each of the last five years, and also the mean rates for the whole period:—

MARRIAGE RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND:  
RETURN FOR FIVE YEARS.

Year.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand
1902 ..	7.00	7.53	6.31	6.61	9.77	7.46	7.23	8.01
1903 ..	6.29	6.88	5.72	6.21	9.33	7.53	6.67	8.27
1904 ..	6.80	7.21	5.93	6.85	8.83	7.55	7.00	8.26
1905 ..	7.24	7.42	6.04	6.94	8.48	7.61	7.21	8.28
1906 ..	7.28	7.63	6.73	7.05	8.70	7.74	7.43	8.48
Mean	6.92	7.33	6.15	6.73	9.02	7.58	7.11	8.26

It will be observed that, according to the average of the five years, the lowest marriage rates prevailed in Queensland and South Australia, and by far the highest in Western Australia. In Victoria the rate was somewhat below, and in New South Wales slightly above, the average for Australia. For the year 1906, all the States showed an increase in the marriage rate as compared with the previous year, varying from over 11 per cent. in Queensland to  $\frac{1}{2}$  per cent. in Victoria. The rate in Australia increased by 3 per cent. in the same year.

Marriage  
rates in  
European  
countries.

The average marriage rate in Australia for the period 1902-6 was lower than in ten of the fifteen European countries shown in the following table during the years 1901-5:—

MARRIAGES PER 1,000 OF THE POPULATION IN EUROPEAN COUNTRIES,  
1901-5.

Hungary .. ..	8.6	Switzerland .. ..	7.5
Belgium (1900-4) ..	8.2	Italy .. ..	7.3
Spain .. ..	8.1	Denmark .. ..	7.1
German Empire (1900-4) ..	8.0	Scotland .. ..	6.9
Austria (1900-4) ..	7.9	Norway .. ..	6.2
England and Wales ..	7.8	Sweden .. ..	5.9
France .. ..	7.6	Ireland .. ..	5.2
Holland .. ..	7.5		



For reasons already explained, a better and more reliable index of the frequency of marriage in the different States is a comparison of the marriages with the number of marriageable male adults per 1,000, aged 21 and upwards, such as is contained in the following statement for the average of the three years, 1900 to 1902 :—

Marriages in proportion to marriageable males in Australian States and New Zealand.

MARRIAGES PER 1,000 MARRIAGEABLE MALES IN AUSTRALASIA.

Victoria	...	...	...	...	56.0
New South Wales	...	...	...	...	58.3
Queensland	...	...	...	...	41.6
South Australia	...	...	...	...	56.8
Western Australia	...	...	...	...	41.9
Tasmania	...	...	...	...	65.7
Total Australia	...	...	...	...	55.7
New Zealand	...	...	...	...	55.1

Although high marriages rates are generally regarded as evidence of prosperity in a community, low rates can hardly be regarded as showing the reverse in some of the Australian States, where the age and sex constitutions are not normal. Thus, in Queensland and Western Australia, the low rates amongst marriageable men cannot be said to be due to the absence of prosperity, as compared with the other States, or to greater disinclination on the part of the men to marry, but rather to the fact that the number of marriageable women to that of men is small in both those States.

Formerly the marriages which were celebrated in urban and rural districts were compared with the populations of those districts respectively, but as the place where a marriage is solemnized is no guide as to domicile, the method has been abandoned, and the classification according to the usual residence of the parties adopted instead. The following table gives the numbers and rates per 1,000 of the population of brides and of bridegrooms, whose usual place of residence (if in Victoria) was in Melbourne and suburbs, other urban districts, or rural districts respectively, or was outside the State—during the year 1906 :—

Marriage rates in urban and rural districts.

USUAL RESIDENCE OF BRIDES AND BRIDEGROOMS DURING 1906.

Usual Residence of Bridegroom.	Usual Residence of Bride.				Total Bridegrooms.	Proportion of Bridegrooms per 1,000 of Population.
	Metro-politan.	Other Urban.	Rural.	Outside Victoria.		
In Victoria—						
Metropolitan Dis-tricts	3,400	123	196	32	3,751	7.2
Other Urban Dis-tricts	137	1,171	205	13	1,526	7.4
Rural Districts	336	301	2,531	31	3,199	6.4
Outside Victoria ..	168	70	116	100	454	..
Total Brides	4,041	1,665	3,048	176	8,930	7.3
Proportion of Brides per 1,000 of Popu-lation ..	<div> <div>7.8</div> <div>8.1</div> <div>6.1</div> <div>..</div> </div>				7.3	..

It will be noticed that over 5 per cent. of the bridegrooms, and 2 per cent. of the brides, resided outside the State. Excluding non-residents, these figures show that the marriage rate—for both males and females—was higher in the metropolitan and other urban districts than in rural districts.

Compared with the average of the five years, 1900-4, the marriage rates of both sexes in 1906 showed a marked increase in the urban and the rural districts; but only a very small increase in the metropolitan district. The rates prevailing in each division of the State for the two periods are shown in the following statement:—

Period.				Marriage Rates in Victoria.		
				Metropolitan.	Urban.	Rural.
Males	{ 1900-4	...	...	6.9	6.8	5.8
	{ 1906	...	...	7.2	7.4	6.4
Females	{ 1900-4	...	...	7.5	7.4	5.5
	{ 1906	...	...	7.8	8.1	6.1

Marriages  
in quarters.

The Autumn quarter is the most frequently selected season for marrying. Of the 194,871 marriages recorded in the twenty-five years 1881-1905, 26.86 per cent. were celebrated in the Autumn, 25.74 in the Spring, 24.03 in the Summer, and 23.37 in the Winter quarter. For the corresponding periods of 1906 the percentages were 28.16, 25.26, 23.16 and 23.42 respectively.

Former con-  
dition of  
persons  
married.

The following statement shows the percentages of persons in each conjugal condition, who married at the periods specified:—

#### CONJUGAL CONDITIONS OF PERSONS MARRYING, 1871-1906.

Conjugal Conditions.	Percentage of total Marriages.				
	1871-80.	1881-90.	1891-1900.	1901-5.	1906.
Bachelors and Spinsters	80.59	85.84	87.22	88.06	88.18
Bachelors and Widows	7.10	4.72	4.23	3.73	3.56
Widowers and Spinsters	7.75	6.17	6.07	5.94	6.08
Widowers and Widows	4.56	3.27	2.48	2.27	2.18

That these percentages are now approaching somewhat those of a settled community might be inferred from the slight alteration which has taken place between the rates in 1901-5 and those of the preceding ten years. This is corroborated by the similar percentages for England and Wales during the year 1905, which were 88.27 for marriages contracted between bachelors and spinsters, 3.24 between bachelors and widows, 5.41 between widowers and spinsters, and 3.08 between widowers and widows.

The number of divorced persons re-married during 1906 was 100, which was above the average of the preceding four years, but below that of 1904 and 1905. Of the 83,992 persons married during the last five years, divorced persons numbered 478, or, 1 in every 176 persons as compared with 1 in every 946 in England and Wales in 1905. The following are the numbers of divorced persons re-marrying in Victoria since 1901:—

**DIVORCED PERSONS RE-MARRYING : RETURN FOR FIVE YEARS.**

Year.	Males.	Females.	Total.
1902 .. ..	34	59	93
1903 .. ..	33	37	70
1904 .. ..	45	68	113
1905 .. ..	38	64	102
1906 .. ..	42	58	100

In all civilized countries minors are not permitted to marry without the consent of their parents or guardians. In Victoria the number of bridegrooms under 21 years of age in the four years 1903-6 was equivalent to 2.45 per cent. of the total marriages, which was the highest proportion shown for the averaged periods of the past 25 years, but was only about half that of England and Wales in 1905. The following table shows the number of males and females who marry under 21 to every 100 marriages, for the periods, 1881-90, 1891-5, 1898-1902, and 1903-6, in Victoria, and for the year 1905 in England and Wales:—

**MARRIAGES OF PERSONS UNDER 21 YEARS IN VICTORIA AND ENGLAND AND WALES.**

	Number under 21 in every 100 Marriages in Victoria.				Number under 21 in every 100 Marriages in England and Wales.
	1881-90.	1891-5.	1898-1902.	1903-6.	1905.
Bridegroom .. ..	2.26	1.89	1.95	2.45	4.38
Bride .. ..	21.00	17.13	15.44	15.58	14.69
Mean .. ..	11.63	9.51	8.69	9.01	9.53

During the five years, 1902 to 1906, an annual average of 8,399 marriages was registered, of which only 110, or 1.3 per cent., were celebrated by lay registrars. This proportion was as high as 7 in

Divorced persons re-marrying.

Marriages of minors.

Marriages by principal denominations.

the ten years, 1881-90, but dropped to 3.7 in 1894, and has since declined to 1 in 1906, probably owing to the competition of matrimonial agencies, which sprang up about 1894. Of the annual average marriages in 1902-6, 1,724 were solemnized according to the rites of the Church of England, 1,384 of the Presbyterians, 1,449 of the Methodists, 413 of the Baptists, 652 of the Independents, 57 of the Lutherans, 1,257 of "other sects"—chiefly Protestants—1,330 of the Roman Catholic Church, and 23 according to those of the Jews.

Marriages  
at matri-  
monial  
or adver-  
tising  
agencies.

The number of marriages solemnized at matrimonial or advertising agencies gradually rose from 1,409 in 1898 to 1,701 in 1900, and fell to 1,188 in 1902, but increased again to 1,353 in 1903, 1,502 in 1904, 1,792 in 1905, and to 1,941 in 1906. About 20 per cent. of the total marriages were performed in such agencies in 1900, and 18 per cent. in 1903 and 1904, 20 per cent. in 1905, and nearly 22 per cent. in 1906. This accounts for the unduly large proportion of marriages celebrated by "other sects," whose clergymen acted for such agencies.

#### BIRTHS.

Number of  
births.

The number of births registered in Victoria during the year 1906 was 30,844—15,716 males and 15,128 females. This was 737 above the number recorded for the preceding year, but 2,785 fewer than the average of the ten years ended 1900. The figures for each year since 1890 were:—

#### NUMBER OF BIRTHS IN VICTORIA, 1891-1906.

1891	..	38,505	1897	..	31,310	1902	..	30,461
1892	..	37,831	1898	..	30,172	1903	..	29,569
1893	..	36,552	1899	..	31,008	1904	..	29,763
1894	..	34,258	1900	..	30,779	1905	..	30,107
1895	..	33,706	1901	..	31,008	1906	..	30,844
1896	..	32,178						

During the twenty years ended with 1883, the number of births remained almost stationary; but in 1884 a marked increase took place, which continued during the subsequent seven years; the number in 1891 being the highest. Since 1891, however, a rapid falling off has taken place down to the period embraced in the last nine years, when the number has fluctuated at a lower level than that which had prevailed at any other year since 1886. Since 1903, when the fewest births since 1884 were recorded, the numbers have shown a steady increase—the total for 1906 being 1,275 greater than in 1903.

In connexion with this decline in the number of births since 1891, it must be borne in mind that during the intervening period Victoria suffered serious loss of population by emigration.

The following table shows the birth rates in Victoria from 1860 Birth rates. to 1906 :—

**BIRTH RATES IN VICTORIA PER 1,000 OF POPULATION, 1860-1906.**

Year.	Birth Rate.	Year.	Birth Rate.	Year.	Birth Rate.
1860 ..	42·81	1891 ..	33·57	1899 ..	26·14
1865 ..	42·40	1892 ..	32·51	1900 ..	25·79
1870 ..	38·07	1893 ..	31·18	1901 ..	25·78
1875 ..	33·94	1894 ..	29·05	1902 ..	25·15
1880 ..	30·75	1895 ..	28·46	1903 ..	24·46
1885 ..	31·33	1896 ..	27·19	1904 ..	24·65
1890 ..	33·60	1897 ..	26·49	1905 ..	24·83
		1898 ..	25·51	1906 ..	26·14

From 1891 to 1903, there was a heavy decline in the crude birth rate, but, during the last three years a steady improvement has taken place, that for 1906 being the highest during the last four years.

In young communities, birth rates calculated per 1,000 of the population are to some extent unreliable and misleading. In the earlier years when, owing to immigration, the population consisted for the most part of men and women at the reproductive period of life, the rates are obviously high. As time proceeds, however, notwithstanding that immigration of reproductive adults may be maintained, the proportion of such to the total population must continuously diminish, and with it, of necessity, the birth rate.

A more correct rate is the ratio of the number of legitimate births to that of married women under 45, and the following table shows the rate computed in the ordinary manner, also the proportion of legitimate births per 1,000 of such women during the last four census years :—

**LEGITIMATE BIRTHS PER 1,000 OF THE POPULATION AND OF MARRIED WOMEN UNDER 45 YEARS OF AGE.**

Year.	Enumerated Population.	Married Women under 45 years of Age.	Legitimate Births.	Proportion of Legitimate Births.	
				Per 1,000 of the Population.	Per 1,000 Married Women under 45 years of Age.
1871 ..	731,528	88,561	26,805	36·64	302·67
1881 ..	862,346	84,831	25,675	29·77	302·66
1891 ..	1,140,405	120,700	35,853	31·44	297·04
1901 ..	1,201,341	127,858	29,279	24·37	229·00

Proportion of births to population and married women.

It will be observed that, although the proportion of legitimate births per 1,000 of the population fluctuated considerably during the four census periods, the proportions per 1,000 of married women remained fairly uniform during the first three census years, but showed a decline in 1901 from 297 to 229, being equivalent to nearly 23 per cent. A noticeable instance of the unreliability of the ordinary birth rate in a new country such as this, appears in the above table on comparing 1881 with 1891, for whereas the birth rate per 1,000 of the population was considerably higher (by nearly  $1\frac{3}{4}$ ) in the later than in the earlier year, yet the proportion of births per 1,000 married women was actually lower. The fluctuations in the ordinary birth rate from 1871 to 1891 are, therefore, found to have been mainly due to varying proportions of married women in the community at the fruitful period of life. The exceptional fall since 1891, however, cannot be so explained, as other factors must be involved which require further investigation, and which will be dealt with in the following paragraphs.

Percentage of married women in quinquennial groups under 45 years of age.

An analysis of the minor age groups, of which the whole age group, 15 to 45, is composed, will disclose the fact that there has been a considerable falling off in 1901, as compared with previous census periods, in the proportion of married women at the younger, and more fertile ages, but a counter-balancing increase in that at the higher ages—a result chiefly brought about by a decrease in the proportion of young men at marriageable ages, through emigration, and the consequent decline of the female marriage rates at the lower age groups. Thus, the number of married women under 30 years of age fell from 53,778 in 1891 to 39,230 in 1901, or by 27 per cent., whereas the number over 35, but under 45, increased during the same period from 37,460 to 57,161, or by  $52\frac{1}{2}$  per cent. Relatively to the whole number at child-bearing ages, the married women under 30 years of age fell from  $44\frac{1}{2}$  per cent. in 1891 to  $30\frac{1}{2}$  in 1901; whilst those at the higher ages, between 35 and 45, rose from 31 to  $44\frac{1}{2}$  per cent. This will be seen in the following statement:—

PERCENTAGE OF MARRIED WOMEN IN AGE GROUPS TO TOTAL UNDER 45 YEARS AT FOUR LAST CENSUS YEARS.

[Census Year.	Married Women Under 45 Years of Age—Percentage in each Age Group.					
	15—20.	20—25.	25—30.	30—35.	35—40.	40—45.
1871 ..	2·03	13·04	21·14	23·07	23·32	17·40
1881 ..	1·73	15·95	20·46	20·60	20·97	20·29
1891 ..	1·35	15·69	27·52	24·41	17·21	13·82
1901 ..	·81	9·90	19·83	24·96	24·92	19·58

Of the total married women under 45, the proportion under 25 years of age was slightly higher in Victoria than in England and Wales in 1881 and 1891, but was about 15 per cent. lower in 1901. According to the English Registrar-General's Report for 1905 the

percentage under 25 years of all married women under 45 was 15.2 in 1871, 14.8 in 1881, 13.7 in 1891, and 12.4 in 1901—a fall of 18 per cent. as compared with one of 29 in Victoria in 30 years.

The following table gives the birth rates, calculated in the ordinary way, per thousand of the population in the Australian States and New Zealand for 1891, and for each of the last five years:—

Birth rates  
in Aus-  
tralian  
States and  
New  
Zealand.

**BIRTH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND:  
RETURN FOR 1891 AND THE LAST FIVE YEARS.**

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1891 ..	33.57	34.50	36.35	33.92	* 34.85	33.37	34.23	29.01
1902 ..	25.15	27.17	27.68	24.60	30.09	28.92	26.63	25.89
1903 ..	24.46	25.35	24.62	23.24	30.27	28.47	25.21	26.61
1904 ..	24.65	26.73	27.12	24.70	30.34	29.59	26.30	26.94
1905 ..	24.83	26.72	25.92	23.66	30.30	29.32	26.10	27.21
1906 ..	25.14	27.04	26.31	23.54	30.02	29.52	26.35	27.08
Mean of 5 Years	24.85	26.60	26.33	23.95	30.20	29.16	26.12	26.75

Excepting South Australia and Western Australia all the States show slightly higher birth rates for 1906 than for the previous year. The rate for Australia—26.35—was the highest since 1902, and was nearly 1 per cent. greater than for the preceding year. The births in Australia in the year under review numbered 107,890, and the deaths 44,340, thus showing a natural increase of 63,550 persons, which was 6,664 above the average—56,886—of the preceding five years.

According to the average of the last five years, the highest birth rate prevailed in Western Australia and the lowest in South Australia. The comparison of these rates is not a reliable one, but it is useful for certain purposes. As already explained in the case of Victoria, it cannot be relied on as an index of the productiveness of married women, which can be more closely gauged by a comparison of the legitimate births with the number of married women at reproductive ages. Such a comparison is effected in the sub-joined return, which shows the results for each Australian State and for New Zealand at the two last census years:—

Decline in  
the number  
of legiti-  
mate  
births.

**PROPORTION OF LEGITIMATE BIRTHS PER 1,000 MARRIED WOMEN  
UNDER 45 YEARS OF AGE.**

State.	Proportion of Legitimate Births per 1,000 Married Women, aged 15 to 45.		Decrease per cent.
	1891.	1901.	
Victoria .. ..	302.1	227.9	24.6
New South Wales .. ..	298.9	235.6	21.2
Queensland .. ..	315.0	251.0	20.3
South Australia .. ..	311.1	235.0	24.5
Western Australia .. ..	352.8	244.0	31.1
Tasmania .. ..	315.9	254.6	19.4
New Zealand .. ..	279.1	246.1	11.8

It will be seen from these figures that between 1891 and 1901 there was a pronounced decline in the proportion of legitimate births to married women under 45 years of age in the different States, varying from 31 per cent. in Western Australia, and 24 in Victoria and South Australia, to about 20 in Queensland and Tasmania, and to nearly 12 per cent. in New Zealand.

Similar information regarding various European countries, the Australian States and New Zealand is given in a table published by the Registrar-General of England of which the following is a copy:—

## LEGITIMATE BIRTH RATES.

COUNTRY (Arranged in order of Rates in 1900-02.)	Proportion of Legitimate Births per 1,000 Wives aged 15-45 years.			Increase + or Decrease - per cent. in Fertility during 20 years.
	Approximate Periods.			
	1880-82.	1890-92.	1900-02.	
European Countries—				
The Netherlands	...	...	...	...
Norway	...	...	...	...
Prussia	...	...	...	...
Ireland	...	...	...	...
German Empire	...	...	...	...
Austria	...	...	...	...
Scotland	...	...	...	...
Italy	...	...	...	...
Sweden	...	...	...	...
Switzerland	...	...	...	...
Denmark	...	...	...	...
Spain	...	...	...	...
Belgium	...	...	...	...
England and Wales	...	...	...	...
France	...	...	...	...
Australian Commonwealth—				
Tasmania	...	...	...	...
Queensland	...	...	...	...
Western Australia	...	...	...	...
South Australia	...	...	...	...
New South Wales	...	...	...	...
Victoria	...	...	...	...
New Zealand	...	...	...	...

In commenting upon these figures the English Registrar-General says—"It appears that among European countries from which it has been possible to obtain returns, there were only two—Austria and Spain—in which the fertility of wives during the 20 years (1881-1901) showed a tendency to increase, and this also applied to Ireland. In all the remaining countries a decrease in human fertility had taken place in the period under review ranging from 2.5 to as much as 19.8 per cent."



The ordinary birth rate (per 1,000 of the total population) is only of value when comparing results of two or more countries where the proportions and ages of married women between 15 and 45 are alike, but as these conditions vary in each community any comparisons of rates computed on this basis are misleading. In expressing birth rates of different countries in proportion to population it is necessary that factors for correction of such rates should be used based upon the ages and proportion of married women between 15 and 45 by comparison with a standard proportion, in order to make the results comparable. This has been done by Drs. Newsholme and Stevenson in the *Journal of the Royal Statistical Society* for March, 1906, in a paper on the "Decline of Human Fertility in the United Kingdom and other countries as shown by a Corrected Birth Rate," and the results are given in the following table for the periods 1880 or 1881 and 1901-4.

## CORRECTED BIRTH RATES IN VARIOUS COUNTRIES AND CITIES.

Country or City.	Corrected Birth Rate per 1,000 of Population.		Percentage Decline in Corrected Birth Rate.
	1880 or 1881.	1901-4.	
Bavaria ... ..	45.49	40.37	11
Saxony ... ..	41.45	31.76	23
Belgium ... ..	40.76	31.01	24
German Empire ... ..	40.37	35.34	12
Norway ... ..	40.12	37.79	6
Prussia ... ..	39.87	35.72	10
Scotland ... ..	39.29	33.38	15
Austria ... ..	39.04	38.50	1
Denmark ... ..	38.92	33.12	15
New South Wales ... ..	38.80	26.47	32
Sweden ... ..	38.49	36.19	6
Italy ... ..	36.89	33.71	9
New Zealand ... ..	36.68	29.63	19
Victoria ... ..	36.02	27.04	25
Ireland ... ..	35.17	36.08	3 (increase)
Hamburg ... ..	34.98	25.40	27
Edinburgh ... ..	34.97	28.08	20
England and Wales ... ..	34.65	28.41	18
Berlin ... ..	33.11	21.89	34
Dublin ... ..	32.24	35.39	10 (increase)
London ... ..	32.21	26.83	17
France ... ..	25.06	21.63	14
Paris ... ..	23.27	16.65	28

The above method of calculating birth rates allows for the differing ages and proportions of married women at child-bearing years in the countries compared, and gives them higher statistical value than ordinary or crude ratios. A very striking illustration of the necessity for a method which takes into account these important factors in each population is shown in the case of Ireland, which has one of the highest corrected birth rates in Europe, but has nearly the lowest rate when no allowance is made for the unfavorable age distribution and proportion of married women of child-bearing years.

in the community. The corrected rates show that (with the exception of Ireland and Dublin, whose rates increased), all the countries and cities had a lower rate in 1901-4 than in 1880 or 1881. The greatest decline—34 per cent—occurred in Berlin, followed by 32 per cent. in New South Wales, 28 in Paris, 27 in Hamburg, 25 in Victoria, 24 in Belgium, 23 in Saxony, 20 in Edinburgh, 19 in New Zealand, 18 in England, 17 in London, 15 in Scotland and Denmark, 14 in France, and the least decline—1 per cent.—in Austria.

Birthplaces  
of parents  
of legiti-  
mate  
children,  
1903-5.

The birthplaces of parents whose children's births were registered during the three years, 1903-5, show that 77 out of every 100 children were born to Australian parents, and 96 of every 100 to one or both parents born in Australia. Of the total fathers 75.10 per cent. were born in Victoria, 82.25 within Australia, 1.24 in New Zealand, 8.36 in England and Wales, 2.08 in Scotland, 3.19 in Ireland, .46 in other British Possessions, and 2.42 in foreign countries. The corresponding percentages for mothers were: Victoria, 83.06; Australia, 91.31; New Zealand, 1.31; England and Wales 3.91; Scotland, .91; Ireland, 1.66; other British Possessions, .16; and in foreign countries .74.

Chinese and  
half-caste  
Chinese  
births,  
1903-6.

The births to Chinese parents numbered 46, and the Chinese half-caste births (fathers only Chinese) amounted to 123 during the four years 1903-6.

Ages of  
parents of  
legitimate  
children.

The average ages of fathers and mothers of legitimate children whose births were recorded in 1906 were 34.94 and 30.57 years respectively, which were 5.04 and 4.60 years above the average age of bridegrooms marrying brides under 45 years of age, and of such brides for the same period. The proportions of both parents in various age groups are shown in the following table for the latest year:—

PERCENTAGE OF PARENTS IN AGE GROUPS, 1906.

Father.		Mother.	
Age Group (Years).	Proportion per 100 Births.	Age Group (Years).	Proportion per 100 Births.
Under 21 ... ..	63	Under 21 ... ..	4.89
21 to 25 ... ..	8.05	21 to 25 ... ..	17.39
25 to 30 ... ..	20.60	25 to 30 ... ..	27.58
30 to 35 ... ..	23.22	30 to 35 ... ..	24.11
35 to 40 ... ..	22.59	35 to 40 ... ..	17.95
40 to 45 ... ..	15.13	40 to 45 ... ..	7.37
45 to 50 ... ..	7.05	45 and over ... ..	71
50 and over ... ..	2.73		
Total ... ..	100.00	Total ... ..	100.00

It will be seen that on the experience of 1906, 45 per cent. of the mothers were between 21 and 30, and 42 per cent. between 30 and 40. The proportions of fathers at corresponding ages were  $28\frac{2}{3}$  and  $45\frac{4}{5}$  per cent. Of every 1,000 legitimate births, about 49 were due to

mothers under 21 years, and only 7 to mothers aged 45 years and upwards.

The proportion of legitimate births recorded as first births was 21.87 per cent. in 1901 as compared with 24.78 in 1906, an increase of over 13 per cent. in the intervening period. The numbers and percentages of fathers and mothers of first births at various ages are shown in the subsequent table for the latest year:—

NUMBER AND PERCENTAGE OF PARENTS OF FIRST-BORN CHILDREN  
IN AGE GROUPS, 1906.

Ages.	Year, 1906.			
	Fathers.		Mothers.	
	Number.	Per cent.	Number.	Per cent.
Under 21 ... ..	160	2.2	1,092	15.2
21 to 25 ... ..	1,539	21.5	2,477	34.5
25 to 30 ... ..	2,451	34.2	2,198	30.6
30 to 35 ... ..	1,555	21.6	959	13.4
35 to 40 ... ..	886	12.3	376	5.3
40 to 45 ... ..	399	5.6	70	1.0
45 and over ... ..	185	2.6	3	...
Total ... ..	7,175	100.0	7,175	100.0

Ages of  
parents of  
first births  
1906.

The experience of the year 1906 shows that of every 100 mothers of first-born children, 15.2 were under 21 years of age, 49.7 were under 25, and 80.3 were under 30, and only 1 aged 40 to 45. These proportions are very similar to the ratios of brides in the same groups during 1906, which showed that 15.2 per cent. of the women marrying were under 21, 52.7 per cent. were under 25, 79 per cent. under 30, and only 2.6 per cent. were aged 40 to 45.

The following table shows the number of births per 1,000 of the population in the metropolitan, the other urban, and the rural districts, for 1875 and each subsequent fifth year, and the averages of the years 1901-5 and 1906:—

Birth rates  
in town and  
country.

BIRTH RATES IN METROPOLITAN, OTHER URBAN, AND RURAL  
DISTRICTS.

Year.	Births per 1,000 of the Population.			
	Metropolitan District.	Other Urban Districts.	Rural Districts.	Victoria.
1875 .. ..	33.63	38.63	31.54	33.94
1880 .. ..	31.19	34.21	28.72	30.75
1885 .. ..	34.94	31.87	28.12	31.33
1890 .. ..	37.71	34.43	28.93	33.60
1895 .. ..	29.46	34.03	25.49	28.46
1900 .. ..	24.54	32.29	24.26	25.79
1901-5 .. ..	24.10	32.11	23.36	24.97
1906 .. ..	23.75	32.87	23.38	25.14

It will be noticed that the birth rate in 1906 in the metropolitan district was slightly lower and in the urban and rural districts higher than the average rate of the previous five years.

Birth rates  
in seven  
principal  
country  
towns.

The birth rates in the seven principal country towns are shown in the following table for the years 1902-6:—

### BIRTH RATES IN THE SEVEN PRINCIPAL COUNTRY TOWNS.

Year.	Births, per 1,000 of the Population.						
	Ballarat and Suburbs.	Bendigo and Suburbs.	Geelong and Suburbs.	Castlemaine and Suburbs.	Maryborough.	Warrnambool.	Stawell.
1902 ...	26·28	34·48	27·32	26·46	33·22	29·10	32·26
1903 ...	24·12	30·18	28·29	28·62	29·04	25·61	29·04
1904 ...	24·96	31·95	27·12	28·55	29·74	29·02	25·58
1905 ...	24·45	32·52	26·51	28·66	32·50	29·40	31·35
1906 ...	26·25	33·55	25·35	32·52	36·61	34·29	30·96
Average 5 years	25·21	32·54	26·92	28·96	32·22	29·48	29·84

On the average of the five years 1902-6, the birth rate in all of the above towns exceeded that of Melbourne and suburbs and of the State. The highest rate prevailed in Bendigo and suburbs, followed by Maryborough and Stawell, and the lowest in Ballarat and suburbs.

Birth rates  
in sub-  
districts of  
Greater  
Melbourne.

The birth rates in the various sub-districts of Greater Melbourne (exclusive of those in Hospitals and public institutions) are shown in the following table for each of the five years, 1902-6:—

### BIRTH RATES IN SUB-DISTRICTS OF GREATER MELBOURNE, 1902-6.

Sub-Districts.		Births per 1,000 of the Population.				
		1902.	1903.	1904.	1905.	1906.
Melbourne City	...	22·07	20·48	20·30	19·45	19·54
Fitzroy City	...	21·60	20·34	18·97	21·20	19·29
Collingwood City	...	24·45	23·37	22·82	21·92	23·98
Richmond City	...	27·65	22·87	23·70	21·80	24·40
Brunswick Town	...	26·80	27·00	26·50	26·55	24·30
Northcote Town	...	30·12	27·89	27·84	29·73	26·16
Prahran City	...	22·56	20·55	21·25	21·52	21·85
South Melbourne City	...	22·51	21·80	21·05	21·38	21·66
Port Melbourne Town	...	29·44	27·64	24·21	24·48	26·94
St. Kilda City	...	18·70	17·93	17·61	19·34	18·78
Brighton Town	...	21·09	20·08	19·36	19·90	17·95
Essendon Town	...	23·42	22·28	22·29	21·96	20·84
Hawthorn City	...	19·37	20·22	18·66	18·68	19·67
Kew Borough	...	13·25	20·60	18·22	19·69	20·39
Footscray City	...	29·72	26·18	27·99	29·36	29·53
Williamstown Town	...	22·40	22·09	24·13	21·37	24·96
Oakleigh Borough	...	33·85	29·23	22·31	36·15	28·37
Caulfield Town	...	19·31	17·74	19·80	19·54	22·02
Malvern Town	...	21·07	23·64	19·15	19·09	22·52
Camberwell Town	...	17·79	17·73	15·77	18·56	17·30
Preston Shire	...	21·38	19·26	21·82	25·83	25·12
Coburg Borough	...	21·10	17·84	21·38	15·81	20·13
Remainder of District	...	23·04	24·32	22·36	19·97	18·01
Greater Melbourne (including Hospitals, &c.)		24·85	23·93	23·54	23·33	23·75

The births in Greater Melbourne in 1906 numbered 12,373 and corresponded to a rate of 23.75 per thousand of the population, which was higher than the two preceding years, but nearly 17 per cent. below that for the average of the period 1892-1901, when the proportion was 28.55. The smaller districts—Oakleigh, Preston, and Coburg—being more susceptible to slight influences, showed the greatest variation during the past five years. The highest average rates for this period prevailed in Oakleigh 29.98, followed by Footscray 28.56, Northcote 28.35, Port Melbourne 26.54, Brunswick 26.23, and the lowest in Camberwell 17.43, St. Kilda 18.47, Coburg 19.25, and Hawthorn 19.32.

The subsequent table shows the mean population, number of births, and birth rates in each Australasian capital city and suburbs during the year 1906, and the birth rates for 1905:—

Birth rates in capital cities and suburbs.

BIRTH RATES IN CAPITAL CITIES OF AUSTRALASIA.

Capital Cities and Suburbs.	Year 1906.			Births per 1,000 of the population, 1905.
	Mean Population.	Number of Births.	Births per 1,000 of the population.	
Melbourne ... ..	521,000	12,373	23.75	23.33
Sydney ... ..	534,200	13,984	26.18	26.27
Brisbane ... ..	131,102	3,211	24.50	25.64
Adelaide ... ..	174,438	3,815	21.87	22.39
Perth ... ..	53,300	2,011	37.73	38.17
Hobart ... ..	34,985	1,097	31.36	28.91
Wellington ... ..	64,302	1,753	27.26	29.38

With the exceptions of Perth, Hobart and Wellington, the Australasian capitals showed a lower birth rate than their respective States in the latest year.

Under a section of an Act passed in 1903, an illegitimate child, whose parents subsequently marry, may, provided there be no lawful impediment at the time of birth to the marriage of the parents, be legitimized if registered for that purpose within six months after marriage. Advantage was taken of this section to legitimate 110 children, of whom 14 were registered in 1903, 19 in 1904, 34 in 1905, and 43 in 1906. In addition, there were 247 children legitimated in 1903 under another section, which provides that if the parents were married before the passing of the Act, the child should be registered for that purpose within six months of the passing of the Act.

Children legitimized under Legitimation Act.

The number of illegitimate births registered in Victoria during the year 1906 was 1,721, which gives a proportion of 5.58 to every 100 births registered, being slightly below the average of the previous year. This proportion has been fairly constant during the last twelve years, when it was decidedly higher than at any earlier period within the last 30 years. The proportion in Victoria in 1906 was much

Illegitimate births and rates.

lower than in New South Wales and Queensland, slightly lower than in Tasmania, but much higher than in either of the other two Australian States or New Zealand; it was also lower than in Scotland, but much higher than in the other portions of the United Kingdom. The following are the proportions of illegitimate births to every 100 children born in the Australian States and New Zealand, for the year 1906, and in the United Kingdom for the latest available years:—

#### ILLEGITIMATE BIRTH RATES.

Queensland .. ..	7·68	Western Australia ..	4·78
New South Wales ..	7·04	New Zealand .. ..	4·67
Scotland (1903) ..	6·21	England and Wales (1905)	4·02
Tasmania .. ..	5·78	South Australia ..	4·00
Victoria .. ..	5·58	Ireland (1905) ..	2·63

Illegitimacy  
in town and  
country.

It will readily be supposed that a larger proportion of illegitimacy prevails in Melbourne and suburbs than in any other district of Victoria, and that the proportion in country districts is the smallest of all. During the five years 1900-4, in the metropolitan districts, about 1 birth in 11; in the other urban districts, about 1 in 18; and in the rural districts, only 1 birth in 38 was registered as illegitimate. The proportions in 1906 were 1 in 11·4, 1 in 20, and 1 in 40 respectively.

Fall in ille-  
gitimate  
birth rate.

Although the proportion of illegitimate births to the total births, as already stated, has varied so little for several years past, yet the proportion of such births to the number of unmarried women and widows, between the ages of 15 and 45, shows the same decline between 1891 and 1901 as has already been observed in the proportion of legitimate births to married women at similar ages. With the exception of altered age distribution, which in this instance is estimated to account for less than  $1\frac{1}{2}$  per cent. of the fall, the many causes, which have contributed so largely to the decline in the legitimate birth rate, have no doubt operated—but in a major degree—to bring about a reduction in the illegitimate birth rate per 1,000 single women, which will be seen on comparing the rate for 1901 with that of the previous census, 1891, as given in the subjoined statement:—

#### ILLEGITIMATE BIRTHS PER 1,000 SINGLE WOMEN.

Period.		Single Women Aged 15 to 45.	Illegitimate Births.	Illegitimate Births per 1,000 Single Women.
1891 .. ..		142,443	2,064	14·49
1901 .. ..		167,760	1,729	10·31

Rates in  
England  
and Wales  
and  
Victoria.

The proportion of illegitimate births per 1,000 unmarried and widowed women between the ages of 15 and 45, was 14·49 in 1891, and 10·31 in 1901. In England and Wales it was 14·1 in 1880-2, 10·5 in 1890-2, and 8·5 in 1900-2. The reduction, during the two latest census periods, was about 29 per cent. in Victoria, and 19 per cent. in England and Wales.

Birth and  
infantile  
death rates  
in various  
countries.

Infantile mortality is perhaps one of the most prominent determinants of the birth rate. A cursory glance at the next table, which shows the ordinary birth rate and the infantile mortality on the average of the latest five years for which these data are available, is

*prima facie* evidence of the intimate connexion existing between the two events:—

### BIRTH AND INFANTILE DEATH RATES IN VARIOUS COUNTRIES.

Country.	Birth Rate per 1,000 of the Population.		Deaths under 1 year per 100 Births.	
Russia (European)	...	48.9	...	26.1
Hungary	...	37.2	...	21.2
Austria	...	36.3	...	22.0
Spain	...	35.3	...	18.2
German Empire	...	34.9	...	19.7
Prussia	...	34.9	...	19.0
Italy	...	32.5	...	16.8
The Netherlands	...	31.6	...	13.6
Western Australia	...	30.2	...	12.2
Tasmania	...	29.2	...	9.0
Denmark	...	29.0	...	12.1
Scotland	...	28.9	...	12.2
Norway	...	28.6	...	8.3
Belgium	...	28.3	...	15.3
Switzerland	...	28.1	...	13.4
England and Wales	...	28.1	...	13.8
New Zealand	...	26.7	...	7.3
New South Wales	...	26.6	...	9.3
Queensland	...	26.3	...	8.9
Sweden	...	26.1	...	9.9
Victoria	...	24.8	...	9.4
South Australia	...	23.9	...	8.2

France and Ireland have been intentionally omitted from this table—the former because the low birth rate is due to special causes, the latter to the excessive withdrawal of reproductive adults by emigration.

### DEATHS.

The following return shows the number of deaths—males and females—also the quarters in which they were registered and proportion per 1,000 of the population, during the years 1902-6:—

#### DEATHS IN EACH QUARTER: RETURN FOR FIVE YEARS.

Year.	Total Deaths.	Sex.		Quarter of Registration.				Death Rate per 1,000 of the Population.
		Males.	Females.	March.	June.	September.	December.	
1902 ..	16,177	9,152	7,025	3,886	3,930	4,281	4,080	13.40
1903 ..	15,595	8,626	6,969	4,036	3,994	3,810	3,755	12.90
1904 ..	14,393	7,992	6,401	3,439	3,590	3,992	3,372	11.92
1905 ..	14,676	8,273	6,403	3,912	3,540	3,710	3,514	12.10
1906 ..	15,237	8,342	6,895	3,896	3,550	3,875	3,916	12.42
Average	15,216	8,477	6,739	3,834	3,721	3,934	3,727	12.55

The number of deaths during the year 1906 was 15,237—8,342 males and 6,895 females—a result equal to the average of the last five years, which was 15,216—the males 8,477, and the females 6,739. According to the experience of the five years, 1902-6, the quarter of the year ending 30th September is the most fatal, the next in order being the quarter ending 31st March. These positions, however, were not maintained in the year under review, when the greatest number of deaths occurred in the December quarter, and the next occurred in the March quarter.

Death rates  
in Aus-  
tralian  
States  
and New  
Zealand.

For purposes of comparison the death rates per 1,000 of the population for each of the Australian States and New Zealand are shown in the following statement, for a period of five years from 1902 to 1906:—

DEATH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND:  
RETURN FOR FIVE YEARS.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1902 ..	13·40	11·95	12·08	11·86	13·63	10·90	12·45	10·50
1903 ..	12·90	11·63	12·38	10·79	12·60	11·86	12·09	10·40
1904 ..	11·92	10·62	10·11	10·22	11·91	11·01	11·01	9·57
1905 ..	12·10	10·13	10·47	10·15	10·83	10·28	10·82	9·27
1906 ..	12·42	9·89	9·56	10·34	11·87	11·17	10·83	9·31
Average	12·55	10·84	10·92	10·67	12·17	11·04	11·44	9·81

Although the death rate of Victoria, according to the average of the five years, 1902-6, was higher than in any other State, this result is due to the larger proportion of elderly persons, amongst whom the death rate is very high. In any comparison of crude death rates of the different States or New Zealand, it is therefore necessary to bear in mind the proportion of persons aged (say) 60 years and upwards in each community. This was accurately known at the last census when Victoria had 798 persons aged 60 years and over, per 10,000 of the population, as compared with 558 in New South Wales, 482 in Queensland, 633 in South Australia, 326 in Western Australia, 608 in Tasmania, 623 in Australia, and 676 in New Zealand. Of the total deaths in 1906, 36·3 per cent. were 65 years and over in Victoria, 27·6 in New South Wales, 22·0 in Queensland, 33·1 in South Australia, 11·9 in Western Australia, 31·4 in Tasmania, 29·5 in Australia, and 31·8 in New Zealand. It will thus be seen that though Victoria had a higher crude death rate, it had concurrently a larger proportion of elderly persons in the population and a greater percentage of total deaths due to persons 65 years and upwards, than any other State or New Zealand. Although the death rates of the different States varied somewhat in 1906 by comparison with the previous year, that for Australia remained constant, and was 5·4 per cent. lower than the average of the years 1902-6.



The following were the maximum, minimum, and mean death rates per 1,000 of the population in the principal European countries during the five years ended with 1902, also the average of the 25 years ended 1901. In all, except Ireland, where the rate has remained stationary, there has been a noticeable decrease, and in Austria, Hungary, Switzerland, Germany, Holland, and Italy, a considerable decrease in the recent five-year period, as compared with the average of 25 years. The countries are arranged in order according to the average rate of mortality in the more recent period:—

Death rates  
in European  
countries.

## DEATH RATES IN EUROPEAN COUNTRIES.

Country.	Five Years, 1898-1902.			Average of 25 Years. 1877-1901.
	Max.	Min.	Mean.	
Norway .. ..	16·9	13·9	15·4	16·4
Denmark .. ..	17·3	14·7	16·0	18·1
Sweden .. ..	17·7	15·1	16·2	16·8
Holland .. ..	17·8	16·3	17·1	20·1
England and Wales ..	18·2	16·2	17·4	18·9
United Kingdom ..	18·4	16·5	17·6	18·8
Scotland .. ..	18·5	17·2	17·9	19·1
Belgium .. ..	19·3	17·2	18·0	19·9
Switzerland .. ..	19·3	17·2	18·1	20·3
Ireland .. ..	19·6	17·5	18·2	18·2
Prussia .. ..	21·8	19·2	20·6	23·5
France .. ..	21·9	19·5	20·7	21·8
Germany .. ..	22·1	19·4	20·8	23·9
Italy .. ..	23·8	21·9	22·5	26·2
Austria .. ..	25·4	24·2	24·9	28·4
Hungary .. ..	28·0	25·4	26·9	31·8
Spain .. ..	28·7	26·0	27·8	30·2

Comparing this statement with a previous one, it will be noticed that the death rate of Victoria—the highest in Australasia—is considerably lower than that in Norway—the lowest in Europe. And although, owing to the fact that emigration from the old to the newer countries tends to raise the death rate in the former, but to lower it in the latter, the death rates, calculated on the total population, would naturally be on a higher level in Europe than in Australasia, yet it may be safely affirmed that the true rate of mortality, allowing for differences in the age constitution of the people, is lighter in Australasia than in any country in Europe, except, perhaps, Norway, Sweden and Denmark.

Death rates  
of European  
and Austral-  
asian States  
compared.

In every country the death rate is higher in towns than it is in the country districts. This circumstance, although no doubt partly attributable to the superior healthfulness and immunity from contagion prevailing in the latter, is also to a great extent due to the fact that hospitals and charitable institutions, which are frequented by patients from the country as well as by town residents, are generally situated in the towns; and further, that outside of charitable institutions many

Death rates  
in town and  
country.

persons die who have come from the country on the approach of a serious illness for the sake of the superior nursing and medical attendance to be obtained in towns. In the ten years ended with 1890, the rate in the metropolitan district was higher than in the other urban districts, but in more recent years was much lower, in consequence of a marked decrease in the rate in the former district; whilst in the rural districts the rate has remained fairly constant, at between 8 and 9 per 1,000, or much less than half the rate in the extra-metropolitan towns. The following are the means for the periods, 1881-90 and 1891-1900, and the years 1901 to 1906:—

**DEATH RATES IN METROPOLITAN, OTHER URBAN, AND  
RURAL DISTRICTS.**

Period.				Metropolitan District.	Other Urban Districts.	Rural Districts.
1881-90	..	..	..	20·65	19·90	8·90
1891-1900	..	..	..	16·25	21·17	8·98
1901	..	..	..	15·09	19·54	8·73
1902	..	..	..	14·93	20·86	8·77
1903	..	..	..	14·37	20·17	8·41
1904	..	..	..	12·99	18·71	8·02
1905	..	..	..	12·88	19·62	8·19
1906	..	..	..	13·59	19·39	8·30

Death rates  
in principal  
country towns in  
Victoria.

The death rates in the principal country towns are shown in the following table for each year, and the average of the period 1902-6:—

**DEATH RATES IN PRINCIPAL COUNTRY TOWNS, 1902-6.**

Year.		Deaths per 1,000 of the Population.						
		Ballarat and Suburbs.	Bendigo and Suburbs.	Geelong and Suburbs.	Castlemaine and Suburbs.	Maryborough.	Warrnambool.	Stawell.
1902	...	19·36	21·70	15·69	21·34	20·36	15·15	20·38
1903	...	17·91	21·23	17·25	19·25	15·13	14·85	19·61
1904	...	16·34	18·59	15·41	18·45	17·09	14·13	18·27
1905	...	17·68	18·25	15·41	19·84	20·50	17·42	17·88
1906	...	17·48	19·46	14·26	19·46	17·61	13·23	16·15
Average of 5 years	...	17·75	19·85	15·60	19·67	18·14	14·96	18·46

On the average of the five years, 1902-6, the death rates in all of the above towns were higher than in Melbourne and suburbs, and, as might be expected, they were considerably higher than that for the State, on account of the hospitals situated in those centres. On the average of the five years under review, the lowest rate obtained in Warrnambool, followed by Geelong, Ballarat, Maryborough, Stawell, Castlemaine, and Bendigo in that order.

The deaths in Greater Melbourne in 1906 numbered 7,083, which was 490 more than the previous year, and represented a death rate of 13.59 per 1,000 of the population. Death rates in Melbourne and suburbs.

Excluding the deaths in hospitals and other public institutions, which numbered 2,140, the rate was 9.58 for the same period. The rates for each sub-district, exclusive of hospitals, &c., for the latest five years are shown in the following table:—

**DEATH RATES IN SUB-DISTRICTS OF MELBOURNE AND SUBURBS,  
EXCLUSIVE OF HOSPITALS, 1902-6.**

Sub-Districts.	Deaths per 1,000 of the Population.				
	1902.	1903.	1904.	1905.	1906.
Melbourne City ... ..	13.28	12.79	10.43	10.25	10.49
Fitzroy City ... ..	14.21	12.45	10.89	9.67	11.02
Collingwood City ... ..	12.27	10.82	9.55	9.31	8.72
Richmond City ... ..	11.11	11.45	9.40	8.68	8.83
Brunswick Town ... ..	13.40	11.24	9.96	10.41	10.28
Northcote Town ... ..	11.48	10.83	7.84	9.05	9.74
Prahran City ... ..	10.19	10.34	9.07	9.71	9.31
South Melbourne City ... ..	9.33	10.57	8.95	9.26	9.49
Port Melbourne Town ... ..	10.46	10.95	8.91	8.35	8.79
St. Kilda City ... ..	10.90	9.60	10.00	9.72	9.39
Brighton Town ... ..	10.89	10.73	10.21	8.95	10.23
Essendon Town ... ..	8.97	9.67	8.07	7.48	8.24
Hawthorn City ... ..	8.57	8.13	9.15	7.68	9.19
Kew Borough ... ..	7.35	9.40	7.46	8.73	7.49
Footscray City ... ..	12.09	11.35	9.71	8.74	11.84
Williamstown Town ... ..	12.16	14.68	12.75	10.39	10.41
Oakleigh Borough ... ..	13.84	13.84	12.31	9.23	11.35
Caulfield Town ... ..	8.64	8.22	7.09	7.18	8.16
Malvern Town ... ..	8.92	7.44	6.16	7.38	7.69
Camberwell Town ... ..	9.12	9.14	7.94	8.59	7.80
Preston Shire ... ..	12.53	14.10	7.79	11.90	10.84
Coburg Borough ... ..	9.28	8.11	9.56	8.30	9.28
Remainder of District ... ..	11.19	10.83	10.82	9.11	8.79
Greater Melbourne, including Hospitals ... ..	14.93	14.37	12.99	12.88	13.59

Much lighter mortality rates prevailed in the principal centres of population in Greater Melbourne on the average of the past three years, indicating that the effects of improved sanitation are being reflected in the general health of the community. This is strikingly evidenced in the reported cases of Typhoid Fever, Diphtheria and Scarlet Fever combined, which numbered 2,694 in 1905-6, as against 5,352 in 1902-3, or a decline of 50 per cent. between these periods. On the average of the five years 1902-6, the highest death rate—12.11—prevailed in Oakleigh, followed by 12.08 in Williamstown, 11.65 in Fitzroy, 11.43 in Preston Shire; and the lowest rates—7.52 in Malvern, 7.86 in Caulfield, 8.09 in Kew, and 8.52 in Camberwell.

Deaths in hospitals, &c., in Victoria and Greater Melbourne.

The deaths occurring in hospitals and other public institutions, in proportion to the total deaths, in Melbourne and Suburbs, are nearly twice as great as the ratio for the whole State. The returns from general hospitals in Victoria show that 2,360 deaths occurred in these institutions during the year ended June, 1906, which give a ratio of 1 in every 6.4 deaths, as compared with 1 in every 3.3 dying in hospitals or public institutions in Greater Melbourne in the year 1906. The following table shows the deaths in public institutions in Melbourne and Suburbs for the latest year:—

#### DEATHS IN PUBLIC INSTITUTIONS IN GREATER MELBOURNE, 1906.

Institution.	No. of Deaths.	Institution.	No. of Deaths.
Melbourne Hospital ...	725	Benevolent Asylum ...	133
Alfred Hospital ...	249	Old Colonists' Home ...	4
Homœopathic Hospital ...	43	Convent of the Little Sisters of the Poor ...	60
St. Vincent's Hospital ...	117	Girls' Depot, Royal Park ...	9
Williamstown Hospital ...	11	Metropolitan Lunatic Asylum ...	70
Austin Hospital ...	149	Yarra Bend Lunatic Asylum ...	65
Women's Hospital ...	90	Protestant Refuge ...	7
Children's Hospital ...	226	Melbourne Gaol ...	6
Infectious Diseases Hospital ...	18	Eye and Ear Hospital ...	5
Foundling Hospital, Broadmeadows ...	23	Queen Victoria Hospital ...	17
Foundling Hospital and Infants' Home ...	14		
Victorian Homes for Aged and Infirm ...	99	Total ...	2,140

The deaths in Public Institutions in Greater Melbourne steadily increased during the last four years, the number in 1906 being 246 greater than the preceding year and 324 more than in 1904.

Deaths and births in Australasian capitals.

The subsequent table shows the number of deaths and births, and the death rates in the Australasian Capital Cities; also the numerical and centesimal excess of births over deaths in each during 1906:—

#### DEATHS AND BIRTHS IN CAPITAL CITIES, 1906.

Capital City with Suburbs	Number of Deaths.	Deaths per 1,000 of population.	Number of Births.	Excess of Births over Deaths.	
				Numerical.	Centesimal.
Melbourne ...	7,083	13.59	12,373	5,290	75
Sydney ...	5,703	10.68	13,984	8,281	145
Brisbane ...	1,311	10.00	3,211	1,900	145
Adelaide ...	2,078	11.91	3,815	1,737	84
Perth ...	892	16.74	2,011	1,119	125
Hobart ...	604	17.26	1,097	493	82
Wellington ...	591	9.19	1,753	1,162	197

The deaths in the Capital Cities of the six States numbered 17,671, or nearly 40 per cent. of the deaths in Australia during the year 1906. The centesimal excess of births over deaths for each city shows that for every 100 deaths there were 297 births in Wellington, 245 in Sydney and Brisbane, 225 in Perth, 184 in Adelaide, 182 in Hobart, and 175 in Melbourne, and an average of 206 for the metropolitan cities of Australia.

In recent years, as compared with earlier periods, the death rate of Melbourne has been adversely affected by the increasing proportion of aged persons—75 years and upwards—in the population, which nearly doubled between the censuses of 1891 and 1901. During the past sixteen years, the deaths in this age group have shown an increasing proportion, which ranged from 5.94 per cent. of the total deaths in 1891, to 16.43 in 1906.

The average death rate of the Australasian Capitals, in 1906, was 12.07, which was considerably lower than the rates of the British and foreign cities given in the following list, which has been taken from *Whitaker's Almanac* :—

#### DEATH RATES IN BRITISH AND FOREIGN CITIES, 1902.

City or Town.	Deaths per 1,000 of the population.	City or Town.	Deaths per 1000 of the population.
Dublin ... ..	24.3	Calcutta ... ..	37.2
Liverpool ... ..	22.5	Cairo ... ..	35.4
Belfast ... ..	20.8	St. Petersburg ... ..	23.0
Manchester ... ..	20.0	Rio de Janeiro ... ..	20.8
Glasgow ... ..	20.0	Rome (1901) ... ..	20.0
Newcastle-on-Tyne ... ..	19.9	Vienna ... ..	19.4
Birmingham ... ..	18.6	Buda-Pesth ... ..	19.2
Edinburgh ... ..	17.8	Buenos Ayres (1901) ... ..	19.0
London ... ..	17.7	New York ... ..	18.7
Bristol ... ..	17.4	Paris ... ..	18.4
Hull ... ..	17.2	Berlin (1901) ... ..	18.0
Sheffield ... ..	17.1	Brussels ... ..	16.1

Proportion  
of deaths of  
elderly  
persons in  
Melbourne.

Death rates  
in Austral-  
asian  
capitals and  
other  
cities.

Unre-  
liability of  
ordinary  
death rate.

The misleading results arrived at by a comparison of the ordinary death rates of different countries, or of the same country at different periods, unless the age distribution is identical, have been pointed out in former editions of this work. This applies more especially to such a comparison of newly-settled communities—such as the Australian States—with one another, and with the old-established communities of (say) Europe. In the former the population is, on the average, younger than in the older countries, and is, moreover, constantly being strengthened by immigrants at the younger adult ages, at which the mortality is low; whereas, in the latter, not only is the age distribution more constant from year to year, but there is relatively a much larger proportion of elderly people, amongst whom the death rate is very high, concurrent with a smaller proportion of the younger and middle-aged adults, at the most vigorous period of life. Some idea of the differences of age distribution at present existing between European countries and the Australian States (as a whole)

will be obtained by the following comparison of the proportions of the population living at various age groups in Sweden—as representative of the former—and in Australia:—

PERCENTAGE OF POPULATION IN AGE GROUPS, SWEDEN AND AUSTRALIA.

Age Group. (Years.)	Percentage of Population Living at each Age Group.	
	Sweden in 1890.	Australia in 1901.
Under 1	2.55	2.47
1 to 5	9.25	9.05
5 to 15.	21.10	23.60
15 to 20	9.50	10.04
20 to 25	8.20	9.36
25 to 30	6.70	8.50
30 to 35	6.00	7.79
35 to 40	6.00	7.25
40 to 45	5.60	5.88
45 to 55	9.40	7.29
55 to 65*	7.70	4.76
65 to 75	5.40	3.01
75 to 85	2.34	.89
85 and over	.26	.11
Total	100.00	100.00

It will be observed that the most striking differences occur between the ages of 20 and 40—the migratory period—under which ranged 33 per cent. of the population in Australia, as against only 27 per cent. in Sweden; and at ages over 45, at which the preponderance was in favour of Sweden, where 25 per cent. of the people were over that age—as against only 16 in Australia.

Index of  
mortality.

In accordance with the decision of the Conference of Statisticians, held at Hobart in 1902, that “for computing the ‘Index of Mortality’ the table of age groups adopted by the Congress of International Statistics be followed, viz.:—Under 1 year, 1 to 20 years, 20 to 40 years, 40 to 60 years, and 60 years and over, and that the population of Sweden, as enumerated at the last census at those ages, be taken as a standard,” the method referred to has been adopted in Victoria. It consists of applying the ascertained death rates in the age group specified to a population whose age distribution corresponds with that of Sweden in 1890.

\* At age 55 to 60 the proportion in Sweden was 4.20, and in Australia 2.54 per cent.

The following was the result for Victoria in 1901, when the populations within the several age groups were accurately known, and the incidental death rates could be established:—

“INDEX OF MORTALITY,” VICTORIA, 1901.

Age.				Standard Population, per 1,000. (Sweden, 1890.)	Death Rate per 1,000 at each Age in Victoria, 1901.	Index of Mortality for Victoria, 1901.
0—1	..	..	..	25·5	112·55	2·88
1—20	..	..	..	398·0	4·19	1·67
20—40	..	..	..	269·6	6·21	1·68
40—60	..	..	..	192·3	13·19	2·54
60 and over	..	..	..	114·6	59·81	6·86
Total	..	..	..	1,000·0	13·22	15·63

In order to compare with the proportion in Sweden, as shown in the second column of the previous table, as well as to afford a basis for the computation of the “Index of Mortality,” the proportions per 10,000 living at the same five age groups in each Australian State and New Zealand, for the year 1901, are given in the following table for both sexes, and also for males. The great preponderance of population at the age groups between 1 and 40, and the large and increasing deficiency at age groups over 40, are the characteristic features of the Australian populations when compared with the Swedish. Amongst the Australian States, Victoria is conspicuous in having by far the largest proportion of persons aged 60 and over—an age group which has an important influence in determining the death rate. On the other hand, Victoria has, with one exception, the lowest proportion of both sexes between 1 and 20, and also, with one exception, the lowest proportion of males between 20 and 40—at which age groups the death rate is lightest:—

Proportions of population at five age groups in Australian States and New Zealand.

PROPORTIONS LIVING AT FIVE AGE GROUPS IN AUSTRALIAN STATES AND NEW ZEALAND, 1901.

State.	Proportion per 10,000 of Total Population Living at the Age Period—					Total.
	Under 1 Year.	1 to 20.	20 to 40.	40 to 60.	60 and over.	
<i>Both Sexes.</i>						
Victoria .. .. .	236	4,163	3,272	1,531	798	10,000
New South Wales .. .. .	253	4,382	3,210	1,597	558	10,000
Queensland .. .. .	260	4,348	3,309	1,601	482	10,000
South Australia .. .. .	227	4,445	3,054	1,641	633	10,000
Western Australia .. .. .	273	3,324	4,548	1,529	326	10,000
Tasmania .. .. .	267	4,519	3,118	1,488	608	10,000
Australia .. .. .	247	4,269	3,290	1,571	623	10,000
New Zealand .. .. .	238	4,195	3,295	1,596	676	10,000

PROPORTIONS LIVING AT FIVE AGE GROUPS IN AUSTRALIAN STATES  
AND NEW ZEALAND, 1901—*continued.*

State.	Proportion per 10,000 of Total Population Living at the Age Period—					Total.
	Under 1 year.	1 to 20.	20 to 40.	40 to 60.	60 and over.	
<i>Males only.</i>						
Victoria .. ..	120	2,093	1,585	795	434	5,027
New South Wales .. ..	127	2,210	1,664	915	324	5,240
Queensland .. ..	132	2,201	1,910	1,016	302	5,561
South Australia .. ..	116	2,234	1,527	897	312	5,086
Western Australia .. ..	140	1,704	2,994	1,073	219	6,130
Tasmania .. ..	135	2,297	1,639	802	323	5,196
Australia .. ..	125	2,154	1,723	890	350	5,242
New Zealand .. ..	124	2,117	1,692	906	415	5,254

Index of  
mortality in  
Australian  
States.

The "Index of Mortality" has been computed for each Australian State and New Zealand for the year 1901, with the following result, which is contrasted with the death rate per 1,000 of the total population for the same year:—

"INDEX OF MORTALITY" IN EACH AUSTRALIAN STATE AND  
NEW ZEALAND, 1901.

State.	Ordinary Death Rate.	"Index of Mortality."
Victoria .. ..	13·22	15·63
New South Wales .. ..	11·68	15·33
Queensland .. ..	11·88	15·24
South Australia .. ..	11·22	14·30
Western Australia .. ..	13·36	17·89
Tasmania .. ..	10·45	13·82
Australia .. ..	12·17	15·41
New Zealand .. ..	9·81	12·42

Although the order of the States is but slightly affected by the new method, Western Australia is shown to have really a far higher rate of mortality than that indicated by the ordinary method; but Victoria only a slightly higher rate than in the two other principal Australian States—New South Wales and Queensland—and probably



even this small difference in favour of the latter States would disappear if the old-age group, 60 and upwards, were subdivided. New Zealand enjoys the enviable position of supremacy—its death rate not only being the lowest Australasian, but probably the lowest of any country in the world for which statistics are available.

The "Index of Mortality" has not been computed for earlier years, but an equally fair comparison is available for Victoria, for three successive decades, and for the triennial period 1900-2, by means of the "adjusted"\* death rates, and these are embodied in the following table for each sex, together with the ordinary death rates, based on the total population of either sex, irrespective of age variations:—

ADJUSTED DEATH RATES IN VICTORIA, 1871-1902.

Period.	Ordinary Death Rate.†		Adjusted Death Rate.‡	
	Males.	Females.	Males.	Females.
1871 to 1880 ..	16·45	14·15	16·48	14·64
1881 to 1890 ..	16·65	13·56	15·97	13·85
1891 to 1900 ..	15·47	12·36	14·14	12·04
1900 to 1902 ..	14·80	11·43	13·05	10·75

The "adjusted" rates indicate that there has been a considerable falling off in the true rates of mortality at each successive decade, more especially the last, at which the rate per 1,000 was about  $2\frac{1}{2}$  lower than in the first decade, and over  $1\frac{3}{4}$  lower than in the second one. A further fall occurred during the three years, 1900-1902, when the mortality was exceptionally low, being more than 1 per 1,000 below that of the ten years, 1891-1900.

Diminishing  
rate of  
mortality  
in Victoria.

The following are the death rates at various age groups in Victoria, according to the average of the ten years, 1891-1900, and of the three years, 1900-2. The population on which the rates in the last column but one are based is the mean of the populations enumerated at the censuses of 1891 and 1901; and the population, according

Proportion  
of deaths at  
each age to  
population.

\* For the method of calculating the "Adjusted death rate" see *Victorian Year-Book*, 1892, Vol. I., paragraph 656 *et seq.*

† Per 1,000 of the actual population.

‡ Per 1,000 of the standard population. See *Year-Book*, 1892, paragraph 656.

to the census of 1901, taken at the end of March, was used for computing the rates in the last column:—

DEATH RATES AT VARIOUS AGE GROUPS IN VICTORIA, 1891-1900  
AND 1900-2.

Ages.	Deaths.		Deaths per 1,000 Living at each Age.	
	Average of Ten Years, 1891-1900.	Average of Three Years, 1900-2.	Average of Ten Years, 1891-1900.	Average of Three Years, 1900-2.
<i>Males.</i>				
Under 5 years ..	2,794	2,282	39·29	34·07
5-10 .. ..	231	195	3·36	2·70
10-15 .. ..	139	142	2·20	2·10
15-20 .. ..	191	184	3·28	3·11
20-25 .. ..	274	249	4·79	4·90
25-35 .. ..	672	579	6·60	6·25
35-45 .. ..	633	742	9·03	8·81
45-55 .. ..	671	655	15·32	15·34
55-65 .. ..	1,200	910	32·90	29·86
65-75 .. ..	1,460	1,724	62·99	61·57
75 and upwards ..	1,032	1,276	145·05	141·59
All ages ..	9,297	8,938	15·47	14·80
<i>Females.</i>				
Under 5 years ..	2,367	1,900	34·09	29·10
5-10 .. ..	209	186	3·12	2·63
10-15 .. ..	128	128	2·06	1·92
15-20 .. ..	202	175	3·43	2·92
20-25 .. ..	289	237	4·81	4·10
25-35 .. ..	676	608	6·89	6·00
35-45 .. ..	543	642	8·68	8·32
45-55 .. ..	476	454	12·12	11·48
55-65 .. ..	693	635	23·64	21·49
65-75 .. ..	785	994	45·87	45·07
75 and upwards ..	673	868	124·33	122·77
All ages ..	7,041	6,827	12·36	11·43

It will be observed that the rate of mortality in the three years, 1900-1902, was lower at every age group in the case of females, and at all age groups except two—20 to 25, and 45 to 55—in the case of males.

A still greater improvement is noticeable on comparing the rates for the decade, 1891-1900, with those for the previous one;\* for in the case of males, there was a much diminished rate of mortality at every age group below 55, and only a slight increase in the groups over that age, and, in the case of females, a considerable decrease at every age group except 55-65.

\* See *Victorian Year-Book*, 1895-8, page 685.

The proportion of deaths per 1,000 persons 60 years and upwards in the Commonwealth, is of special interest now, owing to its bearing on the question of a Commonwealth old-age pension, at present under consideration, and the following table has been constructed, showing, in age groups, such proportions for the Australian States and New Zealand on the average of the years 1900-2 :—

Deaths of sexagenarians.

DEATH RATES OF SEXAGENARIANS.

Ages at Death.	Deaths per 1,000 of the Population in Age Groups in							
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
60 to 65	30.1	29.8	29.8	25.3	32.1	25.2	29.3	24.3
65 to 70	43.9	45.4	47.7	41.1	51.4	41.0	44.5	39.9
70 to 75	69.5	71.7	72.1	58.9	67.8	66.2	68.9	64.4
75 to 80	104.5	105.8	124.4	88.8	127.4	106.0	101.8	97.8
80 & over	181.7	195.2		162.4	186.8	199.1	185.0	182.0
Total ..	62.2	58.9	52.1	54.5	56.6	65.1	58.4	49.2

The experience of the three years, 1900-2, shows that of every 1,000 persons aged 60 years and upwards in Australia, 58.4 died during the year, a lower rate than that of Tasmania, Victoria, or of New South Wales, but higher than that of the other States and New Zealand, the proportion of deaths for each State and New Zealand being:—Victoria, 62.2; New South Wales, 58.9; Queensland, 52.1; South Australia, 54.5; Western Australia, 56.6; Tasmania, 65.1; and New Zealand, 49.2. As the average age of persons over 60 years tends to increase in young countries, it may be expected that these rates will become higher, until the normal, or settled conditions of older countries are reached.

The mortality of children under one year in proportion to births was considerably less in recent than in earlier periods, but the necessity for reducing the risks to infant health and life, particularly amongst illegitimate children, is still apparent. Of every 100 infants born in the ten years 1891-1900 11.11 died within a year, as against 9.38 in 1902-6. The lower rate for the latter period represented a saving of 2,600 infant lives in the last five years. The deaths of infants in 1906 numbered 2,866, and, as the births were 30,844, it follows that 9.29 of every 100 infants born died within twelve months—a higher proportion than in the two preceding years, but slightly below the average of the period 1902-6.

Infantile mortality in 1906 and previous years.

The prejudicial effect of city surroundings on infant life is evidenced by the higher infantile mortality in the Metropolitan Area than in the remainder of the State, amounting to an excess of 43 per cent. in the year under review, which was above the average of the period 1901-5. That the difference in favour of infants in less densely populated centres is not confined to Victoria is indicated by

Infantile mortality in Melbourne and country.

the English Registrar-General's Report for 1905, which shows that the death rate of infants in Urban Areas was 30 per cent. higher than in Rural Counties of England and Wales.

The following table shows the infantile mortality rates in Melbourne and suburbs, and the remainder of the State, and the difference in favour of the latter during the years 1873-1906:—

INFANTILE DEATH RATES IN MELBOURNE AND SUBURBS, AND THE  
REMAINDER OF THE STATE, 1873-1906.

Period.	Melbourne and Suburbs—Deaths per 100 Births.	Remainder of State—Deaths per 100 Births.	Excess per cent. of Melbourne over Country Rate.
1873-80 .. .. .	16.85	10.16	66
1881-90 .. .. .	17.14	9.50	80
1891-1900 .. .. .	13.36	9.60	39
1901 .. .. .	12.41	8.89	39
1902 .. .. .	12.74	9.55	33
1903 .. .. .	12.43	9.42	32
1904 .. .. .	9.27	6.81	36
1905 .. .. .	9.48	7.57	25
1906 .. .. .	11.35	7.92	43

Legitimate  
and illegi-  
timate  
infantile  
causes of  
death  
compared.

On the average of the years 1903-6, the mortality rate of illegitimate infants was nearly three times as great as that of legitimate infants. In 1906, the illegitimate births numbered 1,721, and the deaths 411, which correspond to a rate of 23.88 deaths per 100 births, as compared with 8.43 for legitimate children under one year of age. To ascertain the reasons for the marked disproportion in the death rates between the two classes, the subsequent table has been constructed, showing the deaths from certain causes per 1,000 legitimate and illegitimate births on the average of the years 1903-6.

LEGITIMATE AND ILLEGITIMATE DEATH RATES FROM CERTAIN  
CAUSES, 1903-6.

Cause of Death.	Deaths, under 1 year, per 1,000 Births.	
	Legitimate.	Illegitimate.
Enteritis, Gastro-Enteritis, and Diarrhoeal Diseases ...	21.8	67.5
Artificial Feeding ... .. .	.5	12.2
Wasting Diseases ... .. .	32.0	61.8
Bronchitis, Broncho-Pneumonia, and Pneumonia ...	8.1	24.1
Violence { Accidental Suffocation ... .. .	.7	9.5
Murder... .. .	.2	5.6
Other Causes ... .. .	18.3	51.4
Total All Causes ... .. .	81.6	232.1

The rates for 1903-6 show that of every 1,000 children born out of wedlock 79.7 died from the chief digestive complaints in a year as compared with 22.3 deaths per 1,000 legitimate infants from the same cause. Owing to the larger proportion of illegitimate than legitimate infants deprived of breast food a somewhat higher mortality might be expected among the former than the latter, especially from digestive diseases, but the striking differences in the mortality rates from this cause and from respiratory diseases would indicate considerable neglect in the rearing of illegitimate infants.

In classifying the deaths of infants, those are distinguished which occur at under the age of one month, at from 1 to 3 months, at from 3 to 6 months, and at from 6 to 12 months. The annual numbers of these during the ten years ended with 1900, and the period, 1902 to 1906, are shown in the following table, together with the proportion of deaths at each of those periods of age and the number at each such period to every 100 births. It will be noticed that in the last five years the mortality of infants per 100 births at each age period, excepting under 1 month, was below the average of the ten years ended with 1900:—

Deaths of  
infants at  
different  
ages.

DEATHS OF INFANTS AT DIFFERENT AGES, 1891-1900 AND 1902-6.

Ages.	Average Annual Deaths at under 1 year of Age.					
	Ten Years—1891-1900.			Five Years—1902-6.		
	Number.	Percentage at each Age.	Number per 100 Births.	Number.	Percentage at each Age.	Number per 100 Births.
<i>Boys.</i>						
Under 1 month	650	31.7	3.79	582	37.3	3.77
1 to 3 months	355	17.3	2.07	283	18.2	1.83
3 to 6 "	445	21.7	2.59	316	20.3	2.05
6 to 12 "	600	29.3	3.50	378	24.2	2.45
Total ..	2,050	100.0	11.95	1,559	100.0	10.10
<i>Girls.</i>						
Under 1 month	488	28.7	2.98	447	35.2	3.04
1 to 3 months	301	17.7	1.84	213	16.8	1.45
3 to 6 "	385	22.6	2.35	268	21.1	1.82
6 to 12 "	528	31.0	3.23	343	26.9	2.33
Total ..	1,702	100.0	10.40	1,271	100.0	8.64

In the period 1902-6, the births of boys were in the proportion of 105 to every 100 girls, but as the mortality among the former was greater than among the latter at each age group, more especially under 1 month, the proportion alive at the end of the year was reduced to 103 boys to 100 girls. The death rate of infants under 1 month remained fairly constant in both periods, but a large decrease is shown for each of the three remaining age groups—that for 6 to 12 months amounting to 29 per cent.—in 1902-6 as compared with

1891-1900, and may be attributed chiefly to the improved milk supply and the consequent lighter mortality from digestive and diarrhoeal diseases.

Probable  
mortality  
of infants.

The experience of the years 1902-6 shows that of every 20,000 newly-born boys and girls in equal numbers, 1,010 boys and 864 girls died within twelve months, and 8,990 of the former and 9,136 of the latter, or 18,126 of mixed sexes were living at the end of the year. The proportions surviving the first year were 17,765 in the ten years 1891-1900 and 17,468 in 1881-1890. It is thus seen that of every 20,000 births of equal numbers of each sex there were 658 more survivors in 1902-6 than in 1881-1890, and 361 more than in 1891-1900.

Infantile  
mortality  
in Aus-  
tralian  
States and  
New  
Zealand.

The following table shows the proportion of deaths of infants under one year to the total births in each Australian State and in New Zealand for each of the last five years, and the average for the ten years ended with 1900:—

#### INFANTILE MORTALITY IN AUSTRALASIA.

Year.	Deaths under 1 Year per 100 Births.						
	Victoria.	New South Wales.	Queens-land.	South Australia.	Western Australia.	Tasmania.	New Zealand
1891-1900 ..	11.11	11.22	10.34	10.54	14.48	9.58	8.38
1902 ..	10.86	10.97	10.02	9.40	14.20	7.91	8.29
1903 ..	10.64	11.63	11.99	9.71	14.12	11.08	8.11
1904 ..	7.79	8.24	7.61	7.05	11.30	9.07	7.10
1905 ..	8.33	8.06	7.55	7.30	10.42	7.97	6.75
1906 ..	9.29	7.45	7.47	7.59	11.00	9.09	6.21
Average 1902-6..	9.38	9.27	8.93	8.21	12.21	9.02	7.29

Decrease in  
infantile  
mortality  
in Aus-  
tralasia.

It will be observed that the average rate for the ten years 1891-1900 was far higher in Western Australia, and much lower in New Zealand and Tasmania, than in any other Australasian State. A very pronounced improvement in infantile death rates has taken place in Australia and New Zealand in the latest three years, the decline in the rates for each State and New Zealand in 1906, as compared with the period 1891-1900, being equivalent to 16.4 per cent. in Victoria, 33.6 in New South Wales, 27.8 in Queensland, 28.0 in South Australia, 24.0 in Western Australia, 5.0 in Tasmania, and 25.9 in New Zealand, which has the lowest rate in Australasia, and, probably, in the world.

Infantile  
mortality  
in various  
countries.

Of all the countries respecting which information is available, infantile mortality is highest in Russia, where one out of every four infants born dies within twelve months. The following table shows the rates for various foreign countries for the average of the latest five years for which this information is available, and for the Australian States and New Zealand in 1902-6:—

## INFANTILE MORTALITY IN VARIOUS COUNTRIES.

	Deaths under 1 year per 100 births.		Deaths under 1 year per 100 births.
Russia (European) ...	26.1	Switzerland ...	13.4
Austria ...	22.0	Scotland ...	12.2
Hungary ...	21.2	Western Australia ...	12.2
German Empire ...	19.7	Denmark ...	12.1
Prussia ...	19.0	Sweden ...	9.9
Spain ...	18.2	Ireland ...	9.8
Italy ...	16.8	Victoria ...	9.4
Belgium ...	15.3	New South Wales ...	9.3
Japan ...	15.3	Tasmania ...	9.0
Servia ...	14.9	Queensland ...	8.9
Bulgaria ...	14.6	Norway ...	8.3
France ...	14.4	South Australia ...	8.2
England and Wales ...	13.8	New Zealand ...	7.3
The Netherlands ...	13.6		

In the year 1906 deaths of male children under 5 years of age numbered 1,970, and deaths of female children under that age numbered 1,700—the former being in the proportion of 23.62 per cent., and the latter of 24.65 per cent., to the total number of deaths at all ages. These proportions, although higher than the two previous years are much below the average of former years. Comparing the averages of the last three decades, a marked falling off took place, from period to period, in the mortality of children relatively to that of persons of all ages, and the following table shows the annual number of such deaths at each year of age, and their proportion to the deaths at all ages, in each of the last six years and during the three decennial periods ended with 1880, 1890, and 1900:—

## MORTALITY OF CHILDREN UNDER FIVE YEARS.

Period.	Years of Age at Death.					Total under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion Per 100 Deaths at all Ages.
<i>Males.</i>							
1871-80 ..	1,783	508	206	148	119	2,764	39.41
1881-90 ..	2,158	464	161	114	92	2,989	34.28
1891-1900 ..	2,050	432	143	93	76	2,794	30.05
1901 ..	1,788	317	90	77	58	2,330	25.79
1902 ..	1,793	345	106	67	37	2,348	25.65
1903 ..	1,694	271	100	76	47	2,188	25.36
1904 ..	1,299	192	85	55	50	1,681	21.03
1905 ..	1,446	210	73	69	39	1,837	22.20
1906 ..	1,563	255	82	38	32	1,970	23.62
<i>Females.</i>							
1871-1880 ..	1,482	482	198	139	106	2,407	46.06
1881-1890 ..	1,805	423	151	105	84	2,568	39.61
1891-1900 ..	1,702	385	129	82	68	2,366	33.61
1901 ..	1,404	308	100	61	48	1,921	28.11
1902 ..	1,515	285	110	52	51	2,013	28.65
1903 ..	1,452	267	103	67	51	1,940	27.84
1904 ..	1,020	169	79	49	56	1,373	21.45
1905 ..	1,062	183	79	52	40	1,416	22.11
1906 ..	1,303	235	80	51	31	1,700	24.65

Number of children under 5 and their deaths.

The average number of male and female children at each year of age under 5, living during the period of ten years ended with 1900, is compared in the next table with the average number of deaths of children of the same sexes at those ages which occurred annually during that period:—

DEATHS OF CHILDREN UNDER FIVE IN PROPORTION TO POPULATION.

Age last Birthday in years.	Males.				Females.			
	Mean Number Living, 1891 and 1901.	Annual Deaths, 1891 to 1900.		Deaths per 1,000 Children Living.	Mean Number Living, 1891 and 1901.	Annual Deaths, 1891 to 1900.		Deaths per 1,000 Children Living.
		Number.	Per-centage.			Number.	Per-centage.	
0	15,516	2,050	73·38	132·12	15,089	1,702	71·94	112·80
1	14,124	432	15·46	30·59	13,783	385	16·27	27·94
2	13,981	143	5·11	10·23	13,428	129	5·45	9·61
3	13,780	93	3·33	6·75	13,667	82	3·47	6·00
4	13,698	76	2·72	5·55	13,437	68	2·87	5·06
Total	71,099	2,794	100·00	39·29	69,404	2,366	100·00	34·09

Of every 1,000 boys under 1 year of age, 132, and of every 1,000 girls under 1 year of age, 113, died in the decade under notice; the corresponding proportions for the previous ten years being 152 and 130 respectively. These proportions are naturally higher than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 120 deaths of male infants and 104 deaths of female infants to every 1,000 births of infants of those sexes respectively during the recent decade, and 135 and 118 respectively during the previous one.

In proportion to their respective numbers in the population, more boys than girls died at every year of age, the difference per 1,000 living being as much as 19 at under 1 year, but only about 2·2·3 at from 1 to 2, and less than 1 at subsequent ages.

According to the figures, deaths of boys under 1 year of age furnish a larger proportion to the total deaths of boys under 5 than deaths of girls under 1 do to the total deaths of girls under 5, but the reverse is the case at each of the years of age after the first.

Of the whole number of children who died before they attained the age of 5, nearly three-fourths, viz., 73 per cent. of the boys, and 72 per cent. of the girls, were under 1 year of age; less than a sixth of the boys and about a sixth of the girls were between 1 and 2; about 1 in 19 of the boys and about 1 in 18 of the girls were between 2 and 3; 1 in 33 of the boys and 1 in 28 of the girls were between 3 and 4; 1 in 37 of the boys and 1 in 35 of the girls were between 4 and 5.

It results from actuarial calculations, based upon the figures for the decade 1891-00 in the last table, that of every 20,000 boys and girls in equal numbers born in Victoria, 1,195 boys and 1,040 girls



may be expected to die before they complete a year of life, 265 more boys and 247 more girls before they complete 2 years, 81 more boys and 84 more girls before they complete 3 years, 63 more boys and 52 more girls before they complete 4 years, and 47 more boys and 43 more girls before they complete 5 years. At the end of that period it is probable that 1,651 of the boys and 1,466 of the girls will have died; and 8,349 of the boys and 8,534 of the girls will be still living. The average result for both sexes is 8,441 per 10,000, which is more favorable than that deduced from the mortality of either of the two previous decades 1881-90, and 1871-80, which showed the number of survivors at the end of the first five years of life to be 8,211 and 8,103 respectively.

Out of every 10,000 infants born in Victoria, there will on the average be 5,120 boys and 4,880 girls—being in the ratio of 105 of the former to every 100 of the latter. These, according to the results just arrived at, will be reduced at the end of 5 years to 4,275 boys and 4,165 girls—or in the ratio of 103 of the former to every 100 of the latter. Thus, one-half of the excess of males over females at birth is neutralized in the first five years.

The number of survivors at the age of 5 out of every 1,000 children born has also been computed for New South Wales and New Zealand, and the results are compared with those given in *Mulhall's Dictionary of Statistics* for several European countries, as follow. It will be noticed that a larger number of infants survive the first five years in New Zealand, New South Wales, and Victoria than in any European country:—

#### CHILDREN SURVIVING THEIR FIFTH YEAR IN VARIOUS COUNTRIES.

No. of Survivors.		No. of Survivors.	
New Zealand ..	889	Denmark ..	755
New South Wales ..	850	France ..	751
Victoria ..	844	Switzerland ..	748
Norway ..	838	Prussia ..	684
Ireland ..	837	Italy ..	632
Sweden ..	783	Austria ..	614
Scotland ..	780	Hungary ..	598
England and Wales ..	762	Spain ..	571
Belgium ..	756		

It is remarkable that those countries (with the exception of France) in which the greatest infantile mortality occurs are those which possess a high birth rate, and on the contrary those countries which have a low birth rate have also the lightest mortality. It is evident, therefore, that there is an intimate association between the birth rate and the infantile mortality. So great indeed is the mortality per 1,000 births in the high birth rate countries that the ultimate gain to the population of those countries at the expiration of five years is in some cases below that of the low birth rate countries, and it is highly probable that could the mortality have been traced for a year or two beyond that period, it would be found that the supremacy rests with the low birth rate countries. The following statement shows for the latest five years the birth rate per 1,000 of

Connexion between infantile mortality and birth rate.

the population, and the number surviving their fifth year similarly estimated:—

### BIRTH RATES AND SURVIVORS IN VARIOUS COUNTRIES.

Country.	Birth rate.	Surviving age 5.
Hungary .. .. .	37·2	22·2
Austria .. .. .	36·3	22·3
Spain .. .. .	35·3	20·2
Prussia .. .. .	34·9	23·9
Italy .. .. .	32·5	20·5
Holland .. .. .	31·6	25·2
Denmark .. .. .	29·0	21·9
Norway .. .. .	28·6	24·0
Belgium .. .. .	28·3	21·4
England and Wales .. .. .	28·1	21·4
Switzerland .. .. .	28·1	21·0
New Zealand .. .. .	26·7	23·7
New South Wales .. .. .	26·6	22·6
Sweden .. .. .	26·1	20·5
Victoria .. .. .	24·8	20·9
France .. .. .	21·3	16·0

Thus it will be seen that the superiority of the birth rate of European States, so far as population is concerned, has for the most part disappeared at the end of five years.

A very favorable feature of Victorian mortality in recent years is the steadily diminishing number of both sexes dying between 5 and 25 years of age. Although fluctuations occurred in the general death rate, the deaths between these ages fell from 1,474 in 1902, 1,435 in 1903, 1,405 in 1904, 1,279 in 1905, to 1,215 in 1906.

Percentage  
of deaths  
in age  
groups.

The following table shows the number of deaths in various age groups in 1906, and the percentage of the total deaths in such groups in 1891-5, 1901, and 1906:—

### PERCENTAGE OF DEATHS IN AGE GROUPS, 1891-5, 1901, AND 1906.

Age Groups. (Years).	Number of Deaths in 1906.	Percentage of Deaths in Age Groups.		
		1891-5.	1901.	1906.
Under 5 ... ..	3,670	33·82	26·75	24·09
5 to 10 ... ..	257	2·59	2·51	1·69
10 to 15 ... ..	241	1·57	1·68	1·58
15 to 20 ... ..	343	2·38	2·38	2·25
20 to 25 ... ..	374	3·72	3·00	2·45
25 to 35 ... ..	965	8·48	7·46	6·33
35 to 45 ... ..	1,276	6·60	8·96	8·38
45 to 55 ... ..	1,242	7·39	7·11	8·15
55 to 65 ... ..	1,334	12·18	9·11	8·75
65 to 75 ... ..	2,543	12·26	17·30	16·69
75 and over ... ..	2,992	9·01	13·74	19·64
Total ... ..	15,237	100·00	100·00	100·00

In proportion to the total deaths, the deaths of persons aged 75 and upwards increased from 9.01 per cent. in 1891-5 to 19.64 in 1906, or by 118 per cent. in the intervening years, and the proportion in the earlier age group—65 to 75—increased by nearly 36 per cent. in the same period. The higher proportion of deaths of elderly people in the latest year accounts for a higher death rate per 1,000 of the population than would be otherwise shown. On the other hand, the proportion of deaths under 5 years diminished by nearly 29 per cent. between 1891-5 and 1906.

In accordance with the decision of the Conference of Statisticians held in Melbourne in 1906, the present methods of classifying diseases in the various States and New Zealand will be replaced by the Bertillon system of classification in 1907 and future years, when the mortalities from the different diseases will be tabulated on a uniform basis, and interstate and international comparisons of deaths from each cause thus rendered possible.

Altered classification of causes of death.

To compare the health of the community in the different years it is not sufficient to compare the ordinary death rates prevailing in each with one another, but it is necessary to know the diseases which proved more or less fatal in the years compared. To enable this to be done, the following table has been prepared showing the deaths from the principal causes, per million of the population, on the average of the years 1890-2, and for each of the five years 1902-6:—

Mortality rates from principal causes or diseases.

DEATHS FROM PRINCIPAL CAUSES PER MILLION OF THE POPULATION OF VICTORIA, 1890-2 AND 1902-6.

Cause of Death.	Deaths per million of the population.					
	Average of 1890-2.	1902.	1903.	1904.	1905.	1906.
Measles ...	2	41	17	...	65	6
Scarlet Fever ...	34	12	38	19	8	3
Influenza ...	381	259	107	213	110	198
Whooping Cough ...	129	154	91	38	16	201
Diphtheria ...	451	86	83	157	66	41
Typhoid Fever ...	369	163	210	157	100	132
Diarrhoeal Diseases ...	684	354	380	183	185	200
Syphilis ...	39	49	50	39	35	50
Hydatids ...	51	32	25	33	24	23
Alcoholism — Delirium Tremens	77	49	49	33	29	36
Rheumatic Fever ...	35	22	34	19	19	14
Rheumatism ...	54	56	57	54	40	28
Gout ...	23	12	18	14	20	14
Cancer ...	584	703	761	740	786	755
Phthisis ...	1,365	1,166	1,109	1,111	1,019	988
Other Tubercular Diseases	379	260	289	311	282	273
Anæmia, Chlorosis, Leucocythæmia	28	48	52	57	50	60
Diabetes Mellitus ...	38	54	58	82	82	85
Old Age ...	631	835	870	991	1,041	928

DEATHS FROM PRINCIPAL CAUSES PER MILLION OF THE POPULATION  
OF VICTORIA, 1890-2 AND 1902-6—*continued.*

Cause of Death.	Deaths per million of the population.					
	Average of 1890-2.	1902.	1903.	1904.	1905.	1906.
Inflammation of Brain or Membranes	113	123	127	102	119	145
Apoplexy	344	354	360	389	401	404
Softening of the Brain	57	40	43	40	40	35
Hemiplegia, Brain Para- lysis	39	76	70	93	80	90
Paralysis (undefined)	152	131	124	109	115	125
Insanity	130	139	108	106	90	45
Epilepsy	74	56	52	47	35	43
Convulsions	353	134	139	94	99	90
Paraplegia, Diseases of Spinal Cord	43	53	51	60	50	50
Endocarditis, Valvular Disease of Heart	255	335	380	340	370	432
Heart Disease, Syncope	824	771	707	694	731	809
Aneurism	63	78	93	78	87	72
Asthma	70	64	76	64	70	66
Bronchitis	691	445	412	320	425	477
Pneumonia	853	991	784	709	850	884
Congestion of the Lungs	140	63	66	46	45	50
Pleurisy	96	110	88	78	83	86
Diseases of the Stomach	175	82	97	103	100	108
Enteritis	658	944	886	178	223	269
Gastro Enteritis				400	405	474
Ulceration of Intestine				39	57	37
Appendicitis	33	111	111	71	72	96
Ileus, Obstruction of In- testine	70	73	80	51	55	73
Peritonitis	106	63	78	56	61	61
Cirrhosis of the Liver	132	118	92	83	88	88
Other Diseases of the Liver	197	125	110	90	94	87
Nephritis	85	92	107	102	84	89
Bright's Disease of the Kidneys	180	321	385	380	407	388
Uræmia	29	52	62	58	68	74
Diseases of Bladder and Prostate	76	90	89	97	99	121
Accidents	811	547	516	526	574	535
Murder and Manslaughter	34	22	12	19	33	16
Suicides	109	109	114	94	115	90

An examination of the foregoing table shows that on the average of the five years 1902-6, as compared with 1890-2, there was a very considerable reduction in the rates from Scarlet Fever, Influenza, Diphtheria, Typhoid Fever, Diarrhoeal Diseases, Hydatids, Intemperance, all Tubercular Diseases, Epilepsy, Bronchitis, Peritonitis, Cirrhosis and other diseases of the liver, and from accidents and negligence, which, together with other causes, are fully dealt with in the following paragraphs.

Although the death rates referring to miasmatic diseases, which include Measles, Scarlet Fever, Influenza, Whooping Cough, Diphtheria, and Typhoid Fever, show a marked variation during the last five years, they indicate an absence of any severe epidemic outbreak excepting Whooping Cough in 1906, in that period. Typhoid Fever, which is really a preventible disease that is most fatal between 15 and 50 years, declined from 369 per million of the population in 1890-2 to 132 in 1906. For Greater Melbourne also a rapidly diminishing death rate from this cause is shown in recent years, that for 1891-1900 being nearly three times as high as for the period 1902-6. The proportion of deaths from Whooping Cough, per million of the people, rose from 16 in 1905 to 201 in 1906. Of the total deaths in 1906 two-thirds were under 1 year, and 96 per cent. were under 5 years of age. The mortality from Whooping Cough was much heavier among female than male children, the deaths of the former being 140 as against 107 of the latter. The deaths from Diphtheria corresponded to a rate of 86 per million in 1902, 83 in 1903, 157 in 1904, 66 in 1905, and 41 in 1906. On the average of these years half of the deaths from this complaint were of children under 5 years. Measles showed its epidemic nature by being responsible for a death rate of 65 per million in 1905, and only 6 in the year under review.

Miasmatic diseases.

Deaths from Diarrhoeal Diseases, of which 61 per cent. were of children under 5 years of age, showed a striking reduction in 1902-6 as compared with the period 1890-2—the decline in the death rate amounting to 62 per cent. Comparing 1901-3 and 1904-6, it is found that the rate for the latter was only about half that of the former period.

Diarrhoeal diseases.

The death rate from Hydatids shows a large decrease in recent as compared with earlier years. In 1890-2, the deaths per million of the population were 51 as against 27 in 1902-6—a decline of 47 per cent. in the rate of the earlier period. Of the 166 deaths attributed to this cause in the last five years, 99 were males and 67 were females, and only 1 was under 5 years of age. In the same period 92 per cent. of the deaths from Parasitic Diseases were due to Hydatids. Hospital returns for the five years ended June, 1906, show that 671 Hydatid cases were treated therein, and that 1 in every 9 ended fatally.

Hydatids.

Death rates directly due to intemperance showed a diminution in recent years. The deaths referable to this cause in 1890-2 corresponded to a rate of 77 per million of the population, as against 49 in 1902 and 1903, 33 in 1904, 29 in 1905, and 36 in 1906. The average rate for 1902-6 was 39, which was 49 per cent. lower than that of 1890-2, and only slightly more than half that for England and Wales—70—in 1903-5. The diminishing rates from this cause, and from Cirrhosis and other diseases of the liver, which are frequently due to intemperance, indicate that excessive use of alcohol is considerably less in recent than in earlier years in Victoria.

Intemperance.

Rheumatic  
fever—  
Rheuma-  
tism, gout.

Deaths from rheumatic fever and rheumatism of the heart per million of the population, decreased from 35 in 1890-2 to 22—or by 37 per cent.—in the period 1902-6. Deaths from rheumatism also show a diminishing rate, that for the latest year being only about half of that prevailing in 1890-2. Mortality from gout varied considerably in the last five years, but the average rate of that period was 32 per cent. lower than for 1890-2.

Anæmia,  
&c., and  
Diabetes,  
Mellitus.

In 1906 the deaths attributed to Anæmia, Chlorosis, and Leucocythæmia numbered 74, and to Diabetes Mellitus 105, corresponding to rates of 60 and 85 respectively per million of the population. Mortality rates from both causes were about 90 per cent. higher in 1902-6 than in 1890-2, and are now steadily approximating the rates prevailing in England and Wales. The Victorian and English rates from these causes are shown in the following table:—

VICTORIAN AND ENGLISH RATES FROM ANÆMIA, ETC., AND DIABETES.

Cause of Death.	DEATHS PER MILLION OF THE POPULATION.							
	Victoria.							En gland and Wales
	1890-2.	1902.	1903.	1904.	1905.	1906.	Average of 1902-6.	1901-5.
Anæmia, Chlorosis, and Leucocythæmia	28	48	52	57	50	60	53	56
Diabetes Mellitus ...	38	54	58	82	82	85	72	89

The increasing mortality from Anæmia, Chlorosis, and Leucocythæmia, and from Diabetes Mellitus cannot be wholly explained by the difference in the age constitution of the population, although a greater proportion of middle-aged and elderly persons, amongst whom the heaviest mortality prevails, would account for a higher rate in later than in earlier years.

Cancer.

Deaths from cancer in 1906 numbered 926, and represented a death rate of 755 per million of the whole population as compared with rates of 786 in 1905, 740 in 1904, 761 in 1903, and 703 in 1902. Cancer rates, computed in proportion to the general population in earlier and later periods, are not fairly comparable, owing to the changed age distribution of the people. A more accurate mortality rate is obtained by comparing the deaths in proportion to the persons living in age groups, and this has been done for both sexes for the census periods 1880-2, 1890-2, and 1900-2, when the numbers of the people in age groups were accurately known.

DEATH RATE FROM CANCER IN AGE GROUPS DURING  
1880-2, 1890-2, 1900-2.

Age Group (Years).	Deaths from Cancer per 10,000 of population at each age.		
	1880-2.	1890-2.	1900-2.
<i>Males.</i>			
Under 5	·29	·18	·30
5 to 10	·24	·10	·42
10 " 15	·18	·11	·20
15 " 20	·07	·17	·22
20 " 25	·25	·32	·33
25 " 35	·80	·81	1·26
35 " 45	4·12	4·29	3·69
45 " 55	10·16	14·83	14·14
55 " 65	22·01	31·92	36·00
65 " 75	34·55	52·75	59·04
75 and over	45·12	58·55	74·04
All ages ...	4·29	6·16	7·52
<i>Females.</i>			
Under 5	·12	·09	·26
5 to 10	·12	·10	·04
10 " 15	·06	·06	...
15 " 20	·26	·12	·28
20 " 25	·39	·22	·23
25 " 35	2·65	1·68	1·61
35 " 45	7·32	7·43	6·05
45 " 55	15·07	18·00	18·13
55 " 65	29·35	31·79	33·05
65 " 75	32·68	53·96	51·18
75 and over	27·56	49·55	62·70
All ages ...	4·27	5·57	6·64

Deaths from cancer occurred at every age, but the rates in the foregoing table show that it is essentially a disease of later life, increasing rapidly in the groups past middle age, and reaching a maximum mortality rate in the oldest age group. A comparison of the rates for females under 25 years of age at the three census periods shows that there was no increase in mortality in the two later periods, whilst the rates for males and females aged 25 to 45 showed an appreciable decrease in 1900-2 as compared with 1890-2. In the age groups over 55 a marked increase was shown in the later periods, but, probably a superior diagnosis of this disease, and a higher average age of persons within these groups—particularly that of 75 and upwards—would account in a large measure for the higher rates in the years 1890-2 and 1900-2 as compared with 1880-2.

The experience of 1901-5 shows that amongst males deaths from cancer of the stomach were nearly twice as numerous as those from cancer of the liver, whilst for females the deaths resulting from a similar complaint of these organs were almost equal. Of the

Seat of  
cancer—  
Males and  
females.

2,365 male deaths due to cancer in the same period, 607 were ascribed to cancer of the stomach, 317 of the liver, 144 of the intestines, 142 of the tongue, and 92 of the jaw. Of the total female deaths—2,135—399 were due to cancer of the uterus, 333 of the liver, 326 of the stomach, 275 of the breast, 127 of the intestines, and only 15 to cancer of the tongue. Comparing the deaths from affections of similar organs of each sex it will be noticed that deaths from cancer of the stomach were about twice, and of the tongue  $9\frac{1}{2}$  times, as numerous among males as females; and that deaths from cancer of the liver were nearly equal for both sexes.

Cancer in  
various  
countries.

Deaths from cancer per 10,000 of the population in various countries are shown in the following table, the rates of which have been taken from the English Registrar-General's Report for 1905, for the average of the ten years 1895-1904.

DEATH RATES FROM CANCER IN VARIOUS COUNTRIES, 1895-1904.

Country.	Deaths from Cancer per 10,000 of the Population.	Country.	Deaths from Cancer per 10,000 of the Population.
Switzerland ...	12·8	Ireland ...	6·1
The Netherlands ...	9·3	Prussia ...	6·0
Norway ...	8·7	South Australia ...	5·9
England and Wales ...	8·2	New South Wales ...	5·7
Scotland ...	7·9	Ceylon ...	5·6
German Empire ...	7·3	Tasmania ...	5·5
Victoria ...	7·0	Italy ...	5·2
Austria (1893-1902) ...	6·9	Queensland ...	4·8
New Zealand ...	6·2	Western Australia ...	3·5

Victoria showed a lower death rate from cancer than six of the above European countries, but a higher one than the other Australian States. The higher rate in Victoria, as compared with the other States, is chiefly due to the larger proportion of elderly people in the community, amongst whom the mortality is greatest, whilst the high proportion of persons at less susceptible ages accounts for the very low rate in Western Australia.

Deaths of  
recent ar-  
rivals from  
tuberculous  
diseases.

The experience of the years 1902-6 shows that the death rates from all tuberculous diseases are but slightly affected by the arrival in Victoria of persons suffering from tubercular complaints. In that period less than 1 per cent. of those dying from tubercular diseases were born outside, and resident under one year in the State, and  $2\frac{1}{4}$  per cent. were born outside, and resident less than five years in Victoria.



The deaths from phthisis in 1906 numbered 1,213, which were Phthisis. equal to a rate of 988 per million of the population as compared with 1,019 in 1905, 1,111 in 1904, 1,109 in 1903, 1,166 in 1902, and 1,365 in 1890-2. The rates are more fully shown in the following table, which gives the mortality per 10,000 of the population of each sex, in age groups, during the last five census periods.

DEATH RATES IN VICTORIA FROM PHTHISIS IN AGE GROUPS AT FIVE CENSUS PERIODS, 1860-2, 1870-2, 1880-2, 1890-2, 1900-2.

Ages (Years).				Annual Mortality from Phthisis per 10,000 of the Population at each age.				
				1860-2.	1870-2.	1880-2.	1890-2.	1900-2.
<i>Males.</i>								
0 to 15	...	...	...	2·55	1·22	1·74	·90	·38
15 " 20	...	...	...	7·72	5·71	6·88	5·41	5·06
20 " 25	...	...	...	12·23	18·75	21·19	18·29	14·35
25 " 35	...	...	...	16·53	22·21	30·33	23·70	20·31
35 " 45	...	...	...	21·63	21·83	25·11	28·28	22·07
45 " 55	...	...	...	23·14	22·24	28·65	31·17	25·05
55 " 65	...	...	...	25·63	27·86	31·41	36·48	35·75
65 and upwards	...	...	...	23·20	19·56	18·08	25·40	31·07
All ages	...	...	...	13·33	12·89	15·33	15·73	13·51
<i>Females.</i>								
0 to 15	...	...	...	3·70	·98	1·76	1·43	·93
15 " 20	...	...	...	14·07	12·37	12·50	9·51	8·18
20 " 25	...	...	...	18·95	19·28	21·00	18·49	12·79
25 " 35	...	...	...	24·76	22·02	26·56	21·77	18·15
35 " 45	...	...	...	25·62	21·65	24·06	22·53	17·74
45 " 55	...	...	...	25·01	19·60	20·72	16·13	14·41
55 " 65	...	...	...	22·59	10·51	14·26	12·35	12·52
65 and upwards	...	...	...	18·03	12·61	13·12	8·25	8·18
All Ages	...	...	...	14·46	10·62	12·75	11·51	9·72

It will thus be seen that the male death rates per 10,000 of the population from phthisis were greater during the latest four census periods than those of females; but the proportion of deaths of females under 20 years of age, was nearly twice as great as that of males during each period, whilst the proportion of males, 45 years and upwards, was considerably greater than that of females in all but the first period. The figures for 1900-2, show that there was a decline in every age group (excepting 65 and upwards amongst males, and 55-65 amongst females) as compared with those for 1890-2.

Pulmonary tuberculosis in various countries.

Death rates from pulmonary tuberculosis per 10,000 of the population, in various countries are shown in the following table, the figures for which have been taken from the English Registrar-General's Report for 1905, for the average of the ten years 1895-1904:—

DEATH RATES FROM PULMONARY TUBERCULOSIS IN VARIOUS COUNTRIES, 1895-1904.

Country.	Deaths per 10,000 of the Population.	Country.	Deaths per 10,000 of the Population.
Ireland ...	21·5	England and Wales ...	12·9
German Empire ...	20·2	Victoria ...	11·8
Norway ...	19·9	South Australia ...	8·7
Switzerland ...	19·1	Queensland ...	8·6
Scotland ...	15·9	New South Wales ...	8·1
The Netherlands ...	15·4	New Zealand ...	7·7
Japan (1894-1903) ...	14·1	Western Australia ...	7·0
Belgium ...	13·5	Tasmania ...	6·7

Owing to the different age constitutions, and the possible variations in the classification of tubercular diseases in the various countries, the above figures show only approximately the mortality from pulmonary tuberculosis. It appears that the deaths attributable to this disease are greater, in proportion to population, in Victoria than in the other Australian States and New Zealand, but are less than in the other countries.

In 1906, there were 335 deaths from tubercular diseases (excluding phthisis), which corresponded to a rate of 273 per million, as compared with 282 in the previous year, 311 in 1904, 289 in 1903, 260 in 1902, and 379 in 1890-2. The death rates in various age groups are shown in the subsequent table for the latest four census periods:—

DEATH RATES FROM TUBERCULAR DISEASES (PHTHISIS EXCEPTED) IN AGE GROUPS DURING THE YEARS 1870-2, 1880-2, 1890-2, 1900-2.

Ages (Years).	Deaths per 10,000 persons at each age during—			
	1870-2.	1880-2.	1890-2.	1900-2.
<i>Males.</i>				
0-15 ...	7·53	7·98	10·36	5·64
15-20 ...	·64	·81	1·17	1·12
20-25 ...	1·80	1·23	·89	1·77
25-35 ...	·70	·66	·84	1·91
35-45 ...	·77	·88	·77	1·39
45-55 ...	·95	·85	·67	1·64
55-65 ...	·88	1·07	·78	2·40
65 and over ...	1·09	2·26	·56	1·17
All ages ...	3·46	3·55	4·02	2·99

DEATH RATES FROM TUBERCULAR DISEASES (PHTHISIS EXCEPTED) IN  
AGE GROUPS DURING THE YEARS 1870-2, 1880-2, 1890-2, 1900-2  
—continued.

Ages (Years).	Deaths per 10,000 persons at each age during—			
	1870-2.	1880-2.	1890-2.	1900-2.
<i>Females.</i>				
0—15 ... ..	5·89	7·28	8·43	5·33
15—20 ... ..	·82	1·30	1·27	1·95
20—25 ... ..	·52	·69	1·23	2·09
25—35 ... ..	·54	·41	·88	1·98
35—45 ... ..	1·04	·70	·42	1·77
45—55 ... ..	·17	·67	·34	1·01
55—65 ... ..	·39	·62	·69	·71
65 and over ...	1·69	1·19	·64	·71
All ages ... ..	3·10	3·39	3·58	2·91

It will be noticed that the proportion of persons under fifteen years of age dying from tubercular diseases (excluding phthisis), during 1900-2, as compared with 1890-2, showed a decline of 45 per cent. for males, and nearly 37 per cent. for females. As a reduction of 58 and 35 per cent. for males and females respectively occurred also in the proportion of deaths of persons of the same age from phthisis, it evidences a gratifying decrease in the mortality rates from all tubercular diseases amongst children during the last decennial period.

Diseases of the nervous system, which include meningitis, inflammation of brain or its membranes, softening of the brain, paralysis, insanity, epilepsy, convulsions, paraplegia, and other diseases of the nervous system, were responsible in 1906 for 777 deaths, which were equivalent to a rate of 633 per million, as against a rate of 1095 in 1890-2. The chief cause of the lower rate in the latest year was the fewer deaths attributed to convulsions, only 112 being recorded from this cause in 1906, as compared with 405 in 1890-2. As this affection is almost wholly confined to children under five years, and is most fatal to children under one year, the comparatively small number of deaths in recent years had a most favorable influence on the infantile death rate. Deaths from epilepsy, which were equal to a rate of 74 per million in 1890-2, fell to 47 on the average of the period 1902-6, as compared with a similarly computed rate of 88 in England and Wales in 1901-5. Death rates from insanity in Victoria show a steady decrease in the last four years, that for 1906 being the lowest. In 1890-2 the rate per million was 130, as compared with 98 in 1902-6. Paraplegia and diseases of the spinal cord increased slightly in recent years, the average rate for 1902-6 being 53, as against 43 in 1890-2.

Diseases of  
the  
nervous  
system.

Heart  
disease

Heart diseases include endocarditis, valvular disease of heart, pericarditis, hypertrophy of heart, angina pectoris, fatty degeneration of heart, syncope, and undefined "heart disease." The total deaths from all these causes in 1906 numbered 1,612, corresponding to a rate of 1,314 per million, as compared with 1,146 in 1890-2. A more definite description by medical practitioners of these causes of death is noticeable in recent years, proportionately fewer were certified as syncope and "heart disease," and a larger number as endocarditis and valvular diseases, 22 per cent. of all heart complaints was attributed to the latter in 1890-2, as against 30 per cent. in 1906.

Diseases of  
the blood  
vessels.

To diseases of the blood vessels (which include cerebral hæmorrhage and embolism, apoplexy, hemiplegia, aneurism, senile gangrene, embolism, thrombosis, phlebitis, and varicose veins) were ascribed 572 deaths, representing a rate of 497 per million of the population in 1890-2, as compared with 779, or a rate of 635, in 1906. The higher rate from diseases of the blood vessels in the later years is chiefly due to the increased proportion of elderly persons in the community. Cerebral hæmorrhage or its symptom—apoplexy—and hemiplegia, were responsible for 78 per cent. of the deaths from diseases of the blood vessels in 1906, and were chiefly fatal to persons over 40, showing an increasing mortality in advancing years, and attaining a maximum amongst persons of both sexes over 65 years. The fatality from varicose veins was light, only 8 deaths being due to this cause in the last five years.

Respiratory  
diseases.

In 1906 Respiratory Diseases were responsible for 1,990 deaths, which were equal to a rate of 1,622 per million of the people, as compared with rates of 1,552 in 1905, 1,297 in 1904, 1,482 in 1903, 1,745 in 1902, and 2,029 in 1890-2. On the average of the latest five years, 54.8 per cent. of the deaths from respiratory complaints were due to pneumonia, and 27 per cent. to bronchitis. In the same period, as compared with 1890-2, death rates from bronchitis declined by 40 per cent., whilst the rates from pneumonia remained fairly constant.

The next table shows the average yearly deaths (for males and females) per 10,000 of the population, in various age groups, from respiratory diseases, during the latest four census periods.

DEATH RATES IN VICTORIA FROM RESPIRATORY DISEASES.

Age Group (Years).	Males.				Females.			
	1870-2.	1880-2.	1890-2.	1900-2.	1870-2.	1880-2.	1890-2.	1900-2.
0-15 ...	22.65	29.02	28.52	16.53	18.50	24.18	24.13	13.85
15-20 ...	3.45	3.30	2.92	2.70	1.88	2.02	3.52	2.34
20-25 ...	5.70	5.34	4.88	4.85	3.54	4.23	3.05	3.34
25-35 ...	4.69	8.31	6.85	5.94	4.51	5.72	5.65	3.75
35-45 ...	10.28	15.80	13.55	9.49	7.94	12.53	11.55	7.68
45-55 ...	20.43	26.59	25.18	18.04	7.87	13.63	17.01	11.80
55-65 ...	41.79	51.65	56.51	38.37	22.97	29.15	32.10	27.42
65 and upwards	108.11	136.54	141.07	112.38	73.10	116.12	112.38	86.78
All ages ...	17.29	24.48	24.30	18.66	12.63	17.08	17.62	13.28

An examination of the above table shows that the proportion of males dying from diseases of the respiratory system exceeded that of females at each census period. The average mortality per 10,000 of the population for the four census years was 21.18 deaths for males, and 15.15 for females. In each age group (except 15-20 in 1890-2), the mortality rate for males was heavier than that for females, and not only was there a considerable decrease in the proportions for both sexes, but, in nearly every age group, a reduction is shown during 1900-2, as compared with 1890-2.

The average yearly proportion of deaths from influenza and respiratory diseases (combined) per 10,000 of the population living at different ages during the latest four census periods, is shown in the following table:—

**DEATH RATES FROM INFLUENZA AND RESPIRATORY DISEASES  
(COMBINED).**

Age Group (Years).				1870-2.	1880-2.	1890-2.	1900-2.
<i>Males.</i>							
0-15	...	...	...	23.34	29.36	31.02	17.63
15-20	...	...	...	3.05	3.37	3.56	3.04
20-25	...	...	...	5.70	5.34	6.08	5.44
25-35	...	...	...	5.74	8.38	8.35	6.73
35-45	...	...	...	10.33	15.80	16.59	10.80
45-55	...	...	...	20.52	26.83	30.30	21.24
55-65	...	...	...	42.46	51.89	69.16	43.62
65 and upwards	...	...	...	109.20	138.90	168.20	129.40
All ages	...	...	...	17.62	24.73	28.24	20.96
<i>Females.</i>							
0-15	...	...	...	19.02	24.52	25.99	15.00
15-20	...	...	...	1.88	2.02	4.44	3.17
20-25	...	...	...	3.54	4.23	4.33	4.03
25-35	...	...	...	4.58	5.79	8.00	4.64
35-45	...	...	...	7.94	12.61	15.66	9.54
45-55	...	...	...	8.04	13.63	22.40	13.82
55-65	...	...	...	23.36	29.77	43.56	32.95
65 and upwards	...	...	...	73.94	119.30	147.60	102.80
All ages	...	...	...	12.91	17.32	21.34	15.41

Excepting the age group 15-20 during 1890-2, and 1900-2, the proportion of deaths of males from influenza and respiratory diseases combined, was greater in every instance at each census period, than that for females. The mortality rates showed a considerable decrease

for both sexes during the last census period, as compared with the two previous ones, such decrease amounting to 26 per cent. in male, and 28 per cent. in female rates.

## Influenza.

The next table gives the average yearly proportion of deaths from influenza per 10,000 of the population in age groups, during the latest four census periods, and shows that during the latter two the proportion of deaths resulting from this disease was eleven times as great as in the two preceding periods:—

DEATHS FROM INFLUENZA IN VICTORIA PER 10,000 OF  
POPULATION AT EACH AGE.

Age-Group (Years).	Males.				Females.			
	1870-2.	1880-2.	1890-2.	1900-2.	1870-2.	1880-2.	1890-2.	1900-2.
0-15 ...	·69	·34	2·50	1·10	·52	·34	1·86	1·15
15-20 ...	...	·07	·64	·34	...	...	·92	·83
20-25 ...	...	...	1·20	·59	...	...	1·28	·69
25-35 ...	·05	·07	1·50	·79	·07	·07	2·35	·89
35-45 ...	·05	...	3·04	1·31	...	·08	4·11	1·86
45-55 ...	·09	·24	5·12	3·20	·17	...	5·39	2·02
55-65 ...	·67	·24	12·65	5·25	·39	·62	11·46	5·53
65 and upwards	1·09	2·36	27·13	17·02	·84	3·18	35·22	16·02
All ages ...	·33	·25	3·94	2·30	·28	·24	3·72	2·13

Since 1890, there were two epidemic outbreaks of influenza—in 1891, and 1899, resulting in 1,035 and 963 deaths respectively. The deaths due to this cause in 1903 numbered 129, which was the lowest during the past sixteen years.

Although influenza has varied in form at different periods, it has always proved more fatal at the extremes of life than at middle age. The mortality in 1906 was nearly twice as great as in the preceding year, but the deaths of children under 5 from this cause were about the same, the principal increase occurring in the age group 55 years and upwards, which contributed 63 per cent. of the deaths, as compared with 54 in 1905 and 50 per cent. in 1890-8.

A most satisfactory decrease in the rates referable to Diseases of the Digestive System occurred in the last three years; that for 1904 being specially favorable. The deaths from all digestive complaints in 1906 numbered 1,832, which equalled a rate of 1.493 per million, as against proportions of 1,324 in the previous year, 1,216 in 1904, 1,618 in 1903, 1,710 in 1902, and 1,647 in 1890-2. The rates from

the chief diseases under this heading are given in the following table for the period 1890-2, and each year, 1902-6:—

DEATH RATES FROM DIGESTIVE DISEASES, 1890-2 AND 1902-6.

Digestive Diseases.	Deaths per Million of the Population.					
	1890-2.	1902.	1903.	1904.	1905.	1906.
Gastro-Enteritis... ..	653	944	886	400	405	474
Enteritis ... ..				178	223	269
Cirrhosis and other Liver Diseases				173	182	175
Diseases of the Stomach ...	175	82	97	103	100	108
Appendicitis ... ..	33	111	111	71	72	96
Ulceration of Intestine ...				39	57	37
Peritonitis ... ..				56	61	61
Obstruction of Intestine ...	70	73	80	51	55	73
Gall stones ... ..	11	17	21	21	33	33
All other Digestive Diseases	265	177	143	124	136	167
Total ... ..	1,647	1,710	1,618	1,216	1,324	1,493

With the exception of the rates relating to diseases of the stomach, ulceration of the intestine, and gallstones, there was a very considerable reduction in 1904-6, as compared with previous years. Many deaths in earlier years, which were attributed to diarrhoeal diseases, would, under modern diagnosis, be classified as enteritis or gastro-enteritis. By combining the deaths from these causes, it is found that there was a remarkable decline in 1904, 1905, and 1906, when they fell to a ratio of 761, 813, and 943 per million, respectively, as compared with 1,266 in 1903, 1,298 in 1902, and 1,342 in 1890-2. As the heaviest mortality from these combined causes is amongst children under 1 year, the low rate in 1904, 1905, and 1906 accounts in a large measure for the light infantile mortality in the same years.

The experience of the years 1904-6 shows that appendicitis was more fatal to males than to females, and that the incidence of mortality was greatest between 15 and 35 years. The deaths in 1904, 1905, and 1906 represent rates of 71, 72, and 96 per million, respectively, as against 55 in England and Wales in 1903-5 from the same cause. An idea of the fatality of appendicitis may be obtained by comparing the number of deaths in general hospitals—130—with the total cases treated—1,467—which shows that 1 in every 11 cases ended fatally in hospitals in Victoria in the last three years.

A striking alteration in Victorian mortality rates from diseases of the urinary system occurred in recent years, the rate for the period 1902-6, was 67 per cent. higher than that for 1890-2. The rates for the principal diseases constituting this group showed a decided increase, and are now considerably heavier than those of England and Wales, where, with few exceptions, the mortalities of the various

groups of diseases are generally higher. As the age constitution of the population of Victoria (other influences being equal) would warrant a lower rate than in England, the marked disparity between their mortality rates from this cause would indicate a greater prevalence of urinary complaints in this State than in England. The following are the death rates for two periods in both countries:—

DEATH RATES FROM URINARY DISEASES IN VICTORIA AND ENGLAND AND WALES.

Urinary Diseases.	Deaths per million of the Population.			
	Victoria.		England and Wales.	
	1890-2.	1902-6.	1890-2.	1901-5.
Acute Nephritis, Uræmia ...	114	158	82	91
Bright's Disease ...	180	376	254	287
Calculus (not Biliary) ...	8	8	8	8
Diseases of Bladder and of Prostate	76	99	73	73
Other Diseases of the Urinary System	30	41	38	17
Total Urinary Diseases ...	408	682	455	476

Bright's Disease accounted for 55 per cent. of the deaths from complaints of the urinary system in 1902-6, and was responsible for a death rate of 376 per million in that period, as compared with 180 in 1890-2. As the fatality is greatest among elderly persons of both sexes, a higher rate might be expected in later than in earlier years owing to the increased proportion of persons 65 years and upwards in the population.

Accidents  
and negli-  
gence.

Deaths resulting from accident and negligence represented a proportion of 811 per million in 1890-2, 547 in 1902, 516 in 1903, 526 in 1904, 574 in 1905, and 535 in 1906. The greatest reduction occurred in deaths from drowning, which were equivalent to a rate of 200 in 1890-2, and only 119 in 1906. The proportion dying from accidental suffocation—a large number of whom were young children—fell from 89 to 56 in the same period. Deaths from fractures and contusions equalled a rate of 329 in 1890-2, but steadily declined in recent years to a rate of 222 per million in 1906.

Murder and  
man-  
slaughter.

Deaths from murder and manslaughter correspond to a rate of 34 per million in 1890-2, 22 in 1902, 12 in 1903, 19 in 1904, 33 in 1905, and 16 in 1906. Although the proportion in 1905 is higher than in the preceding three years, the average rate of the period 1902-6 is 41 per cent. below that of 1890-2. Of the total deaths referable to this cause, in the latest five years, about 58 per cent. were infants, of whom nearly all were born out of wedlock and were less than 1 month old.



Suicidal death rates remained fairly constant in the periods 1890-2 and 1902-6. The deaths ascribed to this cause in 1906 numbered 111, and represented a rate of 90 per million of the people, as against rates of 115 in the previous year, 94 in 1904, 114 in 1903, 109 in 1902, and 109 on the average of the period 1890-2. In the last two years 3 per cent. of the male and 4 per cent. of the female deaths from suicide were under 20 years of age. Hanging was the most frequently selected mode of death by males, and poisoning by females during the same period.

Old age is not recorded as a cause of death unless the deceased was 65 years of age or over. On the average of the three years 1890-2, 631 deaths, per million of the population, were ascribed to old age; 835 in 1902, 870 in 1903, 991 in 1904, 1,041 in 1905, and 928 in 1906. The higher rate in recent years is due to the larger proportion of elderly persons in the community. The experience of the three years, 1900-2, shows that of every 100 persons aged 65 to 70, 4.39 died from all causes within a year; of those between 70 and 75 years, 6.95; of those aged 75 to 80 years, 10.45; and of every 100 persons 80 years and upwards, 18.17 died from all causes within twelve months.

The chief causes of death among children under 1 year of age are wasting diseases (including prematurity and other congenital defects and atrophy, debility, and marasmus), enteritis and gastro-enteritis, pneumonia and bronchitis, diarrhoeal diseases, convulsions, and whooping cough. The deaths and death rates (per 1,000 births) from these causes are shown in the following table for the average of the period 1901-5 and for the year 1906:—

DEATHS UNDER 1 YEAR FROM CERTAIN CAUSES, PER 1,000 BIRTHS, 1901-5 AND 1906.

Causes of Death.	Deaths under 1 year—			
	Average of 1901-5.		Year, 1906.	
	Number.	Per 1,000 Births.	Number.	Per 1,000 Births.
Wasting Diseases ...	1,042	34.52	1,007	32.65
Enteritis and Gastro-enteritis ...	637	21.11	631	20.46
Pneumonia, Bronchitis ...	274	9.08	333	10.80
Diarrhoeal Diseases ...	168	5.57	122	3.96
Convulsions ...	112	3.71	89	2.89
Whooping Cough ...	66	2.18	165	5.35
Other Causes ...	596	19.65	519	16.81
All Causes ...	2,895	95.82	2,866	92.92

In 1906, lower rates prevailed from all the above causes (except pneumonia and bronchitis and whooping cough) than on the average of the preceding five years. The higher rates from respiratory

diseases—pneumonia and bronchitis—are probably due to after effects of whooping cough, which assumed a fairly severe form, and was responsible for the deaths of 165 infants in the year under review.

On the average of the five years, 1901-5, of every 1,000 children born 34.52 died within a year from wasting diseases; 21.11 from enteritis and gastro-enteritis; 9.08 from pneumonia and bronchitis; 5.57 from diarrhoeal diseases; 3.71 from convulsions; 2.18 from whooping cough; and 19.65 from other complaints. Prematurity death rates were higher in later than in earlier years; that for 1902-6 equalling 15.7 deaths per 1,000 births, as against 13.7 in the decade ended 1900.

Deaths of  
Married  
Women in  
Childbed.

The experience of the year 1906 shows that the death rate of women in childbed varies considerably at different ages, and is less between 20 and 25 years than at younger or older age periods. The number of married mothers, the deaths in child-bed, and the death rate for various age groups, are shown for the year under review in the following table:—

DEATH RATES OF MARRIED MOTHERS IN CHILDBED IN AGE GROUPS,  
1906.

Age Group.	Married Mothers.		
	Number.	Deaths.	Deaths per 1,000 Mothers.
Under 20 years	748	7	9.36
20 to 25	5,666	15	2.65
25 " 30	7,940	33	4.16
30 " 35	6,941	37	5.33
35 " 40	5,166	35	6.77
40 " 45	2,121	21	9.90

A rapidly increasing death rate is shown for each succeeding age group beyond 20-25, that for 40-45 being about  $3\frac{3}{4}$  times as high as for 20-25.

Deaths in  
Childbed.

The death rate of women in childbed is usually ascertained by comparing the number of deaths of parturient women with the total number of births. Such deaths are classified in two ways. If the death is supposed to occur merely from the consequences of child-bearing without specific disease, it is set down under the head of childbirth, but if it should arise from puerperal fever or puerperal septicæmia it is placed under puerperal fever. The proportion of deaths of child-bearing women has fallen decade by decade from 64 per 10,000 in 1871-80 to 56 in 1891-00. In the years 1901 and 1902, however, the rate was as high as in the decade 1871-80. This rise was no doubt partly attributable to the increased average age of mothers. The proportions which prevailed in the last six years, and the averages of previous periods back to 1864, are shown in the following table:—

## DEATHS OF MOTHERS TO EVERY 10,000 CHILDREN BORN ALIVE.

Period.	Number of Women who Died Annually of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Child Birth.	Puerperal Fever.	Total.	
1864-70 ..	108	20	128	49·06
1871-1880 ..	127	46	173	64·38
1881-1890 ..	121	64	185	59·19
1891-1900 ..	117	66	183	56·01
1901 ..	130	71	201	64·82
1902 ..	131	68	199	65·32
1903 ..	136	53	189	63·92
1904 ..	113	46	159	53·42
1905 ..	119	53	172	57·13
1906 ..	115	51	166	53·82

The proportion per 1,000 births of deaths in childbirth from septic diseases was 1.93 in 1901-5, and 1.65 in 1906. In England and Wales for 1905 the proportion was 1.75. These rates are considerably higher than those obtaining in the out-door departments of the large maternity hospitals in London, where, according to Dr. H. O. Cowen, in his paper on "Puerperal Sepsis," in the *Intercolonial Medical Journal* for August, 1904, the results of the Queen Charlotte and the British Lying-in Hospitals show that out of 34,628 out-door births attended by trained and skilled midwives attached to these institutions there were only six deaths, or the very small proportion of less than two deaths to every 10,000 births—one-tenth of the Victorian mortality rate from the same cause.

Deaths in  
childbed  
from septic  
diseases.

## NATURAL INCREASE.

The natural increase, *i.e.*, the excess of births over deaths, per 1,000 of the population, in the various Australian States and New Zealand for each of the years 1902 to 1906, and also for the mean of that period, is shown in the following table:—

Natural  
increase  
per 1,000  
of popula-  
tion in  
Australasia

## NATURAL INCREASE PER 1,000 OF THE POPULATION, AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1902	11·78	15·22	15·60	12·74	16·46	18·02	14·18	15·39
1903	11·56	13·72	12·24	12·45	17·67	16·61	13·12	16·21
1904	12·73	16·11	17·01	14·48	18·43	18·58	15·29	17·37
1905	12·73	16·59	15·45	13·51	19·47	19·04	15·30	17·95
1906	12·72	17·15	16·75	13·20	18·15	18·35	15·52	17·77
Mean	12·30	15·76	15·41	13·28	18·04	18·12	14·68	16·94

The mean natural increase of the Australian States for the period 1902-6, viz., 14.68, is probably not far from that which will be attained under ordinary circumstances when the age constitution of the population will have become normal, and when undisturbed by migration. At the present time, the birth rate and death rate are both below normal, owing to factors in operation which have already been discussed in dealing with the birth and death rates. This annual rate of increase, 14.68 per thousand, will enable a population to double itself in  $47\frac{1}{3}$  years. The rate for the last year was .84 above the average of the five years, and if this increased rate were maintained, the population would take  $45\frac{1}{3}$  years to double itself.

Natural  
increase  
per 1,000  
of popula-  
tion in  
various  
countries.

The rate of natural increase in Australia in 1902-6 is higher than in the United Kingdom and eleven European countries on the average of the latest five years for which this information is available.

#### NATURAL INCREASE PER 1,000 OF THE POPULATION OF VARIOUS COUNTRIES.

Country.	Natural Increase per 1,000 of Population.	Country.	Natural Increase per 1,000 of Population.
Tasmania ... ..	18.1	Victoria ... ..	12.3
Western Australia ...	18.0	England and Wales ...	12.1
Russia (European) ...	17.1	Scotland ... ..	12.0
New Zealand ... ..	16.9	Austria ... ..	12.0
New South Wales ...	15.8	United Kingdom ...	11.4
The Netherlands ...	15.5	Hungary ... ..	11.0
Queensland ... ..	15.4	Belgium ... ..	10.7
Prussia ... ..	15.2	Italy ... ..	10.7
Australia ... ..	14.7	Sweden ... ..	10.6
German Empire ...	14.5	Switzerland ... ..	10.4
Denmark ... ..	14.1	Spain ... ..	9.2
Norway ... ..	14.1	Ireland ... ..	5.6
South Australia ...	13.3	France ... ..	1.7

The rate of natural increase in Victoria is higher than in England and Wales, Scotland, Austria, Hungary, Belgium, Italy, Switzerland, and Spain, although higher birth rates obtained in those countries in the periods compared.

Actual rate  
of increase  
of popula-  
tion in  
European  
countries.

The actual rates of increase in various European countries have been computed and are set forth in the following table, which also shows the periods from which such rates were obtained, and also the periods in which the population would double itself at the computed rate of increase :—

**ACTUAL RATE OF INCREASE OF POPULATION IN VARIOUS  
EUROPEAN COUNTRIES.**

Country.	Annual Rate of Increase per cent.	Period of Experience.	Period required to double Population.
German Empire ...	1.12	1872-1901	62½
Prussia ...	1.11	1867-1901	62½
The Netherlands ...	1.05	1853-1901	66½
Denmark ...	1.03	1861-1901	67½
Hungary ...	.97	1876-1901	71½
Great Britain ...	.91	1864-1901	76½
Belgium ...	.84	1853-1901	83
Norway ...	.81	1871-1901	86
Sweden ...	.77	1852-1901	90½
Austria ...	.77	1853-1901	90½
Switzerland ...	.72	1868-1901	96½
Italy ...	.64	1872-1901	108½
Spain ...	.45	1861-1901	154½
France ...	.16	1853-1901	433½

Even at the present rate of natural increase in Australia, the period required to double its population, viz., 47½ years—and which is independent of immigration—is considerably less than that required by any of the European countries, based upon actual experience.

The following table shows the excess per cent. of births over deaths in each of the Australian States and New Zealand for each of the five years 1902 to 1906, together with the mean of the same period:—

Excess of births over deaths in Australasia

**EXCESS PER CENT. OF BIRTHS OVER DEATHS, AUSTRALIAN STATES  
AND NEW ZEALAND.**

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1902 ...	88	127	129	107	121	165	113	147
1903 ...	90	118	99	115	140	140	109	156
1904 ...	107	152	168	142	155	169	139	181
1905 ...	105	164	148	133	180	185	141	194
1906 ...	102	173	175	130	153	164	143	191
Mean...	98	147	144	125	150	165	129	174

From this it is seen that the least excess in Australasia is in Victoria and the greatest in New Zealand. To every hundred deaths that occur in Victoria there are 198 births, in New South Wales 247, in Queensland 244, in South Australia 225, in Western Australia 250, in Tasmania 265, whilst in New Zealand there are 274.

Excess of  
births over  
deaths in  
various  
countries.

Although the excess per cent. of births over deaths is lower in Victoria than in the other States and New Zealand, it is higher than in any of the European countries in the following table, on the average of the latest five years for which this information is available:—

EXCESS PER CENT. OF BIRTHS OVER DEATHS IN AUSTRALASIA AND EUROPEAN COUNTRIES.

Country.	Excess per cent. Births over Deaths.	Country.	Excess per cent. Births over Deaths.
New Zealand ...	174	Scotland ...	71
Tasmania ...	165	German Empire ...	71
Western Australia ...	150	United Kingdom ...	70
New South Wales ...	147	Sweden ...	69
Queensland ...	144	Belgium ...	61
Australia ...	129	Switzerland ...	59
South Australia ...	125	Russia (European) ...	54
Victoria ...	98	Austria ...	49
Norway ...	97	Italy ...	49
The Netherlands ...	97	Hungary ...	42
Denmark ...	95	Spain ...	35
Prussia ...	77	Ireland ...	32
England and Wales ...	76	France ...	9

The very favorable position of Australasia in respect of the excess of births over deaths is wholly due to its low death rate. Higher birth rates prevailed in the above European countries (except Ireland and France) than in Australia; but this advantage was more than counterbalanced by their higher death rates. On the average of five years, the loss caused by every 100 deaths was replaced by 229 births in Australia, as compared with 197 in Norway and The Netherlands, 195 in Denmark, 177 in Prussia, 176 in England and Wales, 171 in Scotland and the German Empire, and only 109 in France, which was the lowest in Europe.

## INTERCHANGE.

By the Commonwealth Constitution the collection of Customs and Excise duties was transferred to the Federal Government on the 1st January, 1901, and the departments of Posts and Telegraphs and Defence were transferred by proclamation on 1st March following. The Commonwealth Government collects the revenue of these departments, and after deducting the expenditure of the transferred departments incurred in the State, and the State's proportion of new expenditure on a population basis, returns the balance to the State.

Customs  
and Excise  
transferred  
to Com-  
monwealth.

A limit, however, to the amount which the Commonwealth may expend is fixed by Section 87 (known as the Braddon clause) of the Constitution, which provides that "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 ten years referred to will expire on 31st December, 1910, and the Commonwealth Treasurer has made certain proposals for a guaranteed annual payment to the States, particulars of which are set out on page 152 of this work. The Premiers of the several States have held Conferences, at which these proposals have been discussed, but no definite arrangements have yet been come to.

Another provision in the Constitution Act—Section 93—relating to duties of Customs and of Excise is, that these duties on goods imported into, or manufactured in, a State, and afterwards passing into another State for consumption, shall be taken to have been collected in the latter State. Monthly adjustments are accordingly made between the States by the Commonwealth Government, and under the provision referred to Victoria has refunded to the other States in the last five years the large sum of £1,557,685—a striking illustration of the important position Melbourne holds as a distributing and manufacturing centre for Australia.

The following table shows the net adjustments between the several States during the period mentioned. The credits represent the net amount received for duties collected in other States, and the debits represent the net refunds.

NET INTER-STATE ADJUSTMENTS OF CUSTOMS AND EXCISE DUTIES,  
FIVE YEARS ENDED 30TH JUNE, 1907.

State.	Debits.	Credits.
	£	£
Victoria ...	1,557,685	—
New South Wales ...	599,481	—
Queensland ...	—	911,316
South Australia ...	—	145,066
Western Australia ...	—	554,930
Tasmania ...	—	545,854
Total ...	2,157,166	2,157,166

Up to the end of 1902 each State published statistical information regarding its trade, showing countries from and to which articles were imported and exported. Under this arrangement there occurred material differences in the classification of the goods, making it practically impossible to institute accurate comparisons. Arrangements were accordingly made by the Federal Government for uniform tabulation of trade returns in each State, and the information so tabulated was issued for the first time in 1903. It is, however, very much to be regretted that this information as now compiled is incomplete in regard to matters of first importance to each State. The returns prepared for 1903 were ample for all purposes; but, inasmuch as they were not fully published by the Federal Government, the work was carried out by the States. The export returns for 1904, 1905, and 1906 are defective, as home produce exported to the other Australian States has not been recorded.

Imports and  
exports.

The total value of Victorian imports and exports and their value per head of the population for each of the last seven years are shown in the following table:—

VALUE OF IMPORTS AND EXPORTS, 1900 TO 1906.

Year.	Imports.		Exports.	
	Total.	Per Head of Population.	Total.	Per Head of Population.
	£	£ s. d.	£	£ s. d.
1900 ...	18,301,811	15 6 9	17,422,552	14 12 0
1901 ...	18,927,340	15 14 8	18,646,097	15 10 0
1902 ...	18,270,245	15 2 8	18,210,523	15 1 8
1903 ...	17,859,171	14 15 6	19,707,068	16 6 0
1904 ...	20,096,442	16 12 10	24,404,917	20 4 2
1905 ...	22,337,886	18 8 5	22,758,828	18 15 5
1906 ...	25,234,402	20 11 4	28,917,992	23 11 4

The trade of 1906 is considerably greater than that of any previous year, and the same remark applies to either imports or



exports if taken separately. Compared with 1905, there is an increase in imports equivalent to £2 2s. 11d. per head of the population, and in exports equivalent to £4 15s. 11d. Per head of population imports exceeded exports in 1900 by 14s. 9d., in 1901 by 4s. 8d., and in 1902 by 1s. only, but in 1903, 1904, 1905, and 1906 exports exceeded imports by £1 10s. 6d., £3 11s. 4d., 7s., and £3 per head respectively.

Trade with the other Australian States, New Zealand, the United Kingdom, other British possessions, and all foreign countries in each of the last five years was as follows:—

Imports and  
exports to  
principal  
countries.

IMPORTS FROM AND EXPORTS TO PRINCIPAL COUNTRIES,  
1902 TO 1906.

Countries.	1902.	1903.	1904.	1905.	1906.
Imports.					
From—	£	£	£	£	£
Other Australian States	5,412,520	5,519,556	7,353,067	9,350,031	10,379,239
New Zealand ...	1,151,179	1,043,509	873,304	843,264	942,339
United Kingdom ...	6,935,040	5,977,947	7,266,239	7,472,489	8,617,057
India and Ceylon ...	546,839	680,894	605,565	848,727	903,893
South Africa ...	2,459	2,239	2,206	5,581	6,163
Other British Possessions	579,736	423,599	376,880	347,307	378,151
Belgium ...	162,212	150,672	214,908	205,772	274,845
France ...	114,918	108,906	113,863	118,168	110,659
Germany ...	903,189	796,897	952,322	925,040	1,143,920
United States of America	1,494,486	1,976,015	1,538,623	1,480,809	1,604,916
Other Foreign Countries	967,667	1,178,937	799,465	710,698	873,220
Total ...	18,270,245	17,859,171	20,096,442	22,337,886	25,234,402
Exports.					
To—	£	£	£	£	£
Other Australian States	7,841,183	5,220,056	8,232,223	8,730,187	10,807,972
New Zealand ...	638,735	524,898	508,227	552,820	1,006,466
United Kingdom ...	3,433,310	3,280,134	7,953,077	7,472,462	8,926,300
India and Ceylon ...	1,321,633	3,549,910	2,847,755	849,450	1,546,890
South Africa ...	2,823,677	1,226,981	993,883	917,238	807,458
Other British Possessions	117,200	133,770	204,289	246,839	291,142
Belgium ...	397,356	431,979	627,674	697,885	793,649
France ...	817,280	967,770	1,301,371	1,529,438	1,640,182
Germany ...	464,144	568,985	857,113	534,121	739,052
United States of America	128,896	312,297	454,911	423,979	1,056,642
Other Foreign Countries	227,104	188,288	424,394	804,409	1,302,239
Total ...	18,210,523	19,707,068	24,404,917	22,758,828	28,917,992

A mere comparison of the figures of the last three years is somewhat misleading. Although the total exports in 1904 were £1,646,089 greater in value than those of 1905, it was on account of the large amount of gold coin and bullion—£4,444,011—exported in the former as against £1,999,297 in the latter year, while in 1906 the value of gold exported was £4,910,177. The value of the merchandise exported in 1905 exceeded that of the previous year by £798,625, and 1905 was exceeded by that of 1906 by £3,248,284.

The proportion of imports coming from Australian States formed 30 per cent. of the total in 1902, 31 in 1903, 36½ in 1904, 42 in 1905, and 41 per cent. in 1906, the percentage coming from the United Kingdom being 38 in 1902, 33 in 1903, 36 in 1904, 33 in 1905, and 34 in 1906. The average contributions for the five years to Victorian imports by other countries were—New Zealand 4½ per cent., India and Ceylon 3½, Belgium 1, Germany 4½, the United States of America 8, and all others 7 per cent. Of the total exports the proportion sent to Australian States was 43 per cent. in 1902 and 1903, 34 in 1904, 38 in 1905, and 37 per cent. in 1906, the proportion sent to the United Kingdom being 19 per cent. in 1902, 17 in 1903, 33 in 1904 and 1905, and 31 per cent. in 1906; India and Ceylon took 7 per cent. in 1902, 18 in 1903, 11½ in 1904, 4 in 1905, and 5½ per cent. in 1906; whilst South Africa took 15½ per cent. in 1902, 6 in 1903, 4 in 1904 and 1905, and 3 per cent. in 1906. On the average for the five years New Zealand took about 3 per cent. of Victorian exports, Belgium 2½, France 5½, Germany 3, the United States of America 2, and all other countries 3½ per cent. British countries contributed 80 per cent. of the total imports in 1902, 76 in 1903, 81½ in 1904, 85 in 1905, and 84 per cent. in 1906, and took 89 per cent. of the total exports in 1902, 87½ in 1903, 85 in 1904, 83 in 1905, and 81 per cent. in 1906. In each of the last five years exports were of greater value than imports in the trade with India and Ceylon, South Africa, Belgium, and France; but with Germany and the United States, the value of imports was greater than that of exports. There was an excess of exports in trade with the United Kingdom, in 1904 and 1906, and in 1906 in that with New Zealand; but in other years there was an excess of imports. In interchange with the other Australian States there was an excess of imports in 1905, but of exports in each of the other four years.

Trade with  
United  
Kingdom.

On the whole, during the five years under review, Victorian trade with the United Kingdom shows an increase from £10,368,350 to £17,543,357; and as compared with our total trade, an increase is shown from 28 to 32 per cent. The proportion of imports declined from 38 to 34 per cent., but that of exports increased from 19 to 31 per cent.

Trade with  
United  
States.

Leaving British countries out of consideration, our largest trade is with the United States, amounting in 1906 to £2,661,558, of which £1,604,916 represent imports. As compared with the year 1902, this trade has increased by £1,038,176, but its proportion

to the total trade has remained between 4 and 5 per cent. Exports to the United States in 1906 were 150 per cent. more than in 1905, the increase being due to exports of copper contained in matte to the value of over £350,000, of gold and silver bullion valued at £82,000, and an increase in exports of wool of nearly £200,000.

Germany next claims attention, with which country the total trade in 1902 was £1,367,333, and in 1906 £1,882,972, or about 3½ per cent. of the whole in each year. The imports and exports for 1906 were each £200,000 more than in the previous year. Trade with Germany.

With France, contrary to our experience with the United States and Germany, our principal trade is in exports, which in 1906 amounted to £1,640,182, as against imports £110,659; the increase in the total trade in the five years is £818,643, viz., exports £822,902, less a decline in imports of £4,259. The proportion to the total in 1902 was 2½, and in 1906 nearly 3½ per cent. Trade with France.

In the table which follows, the average annual value of imports from the United Kingdom, British possessions, and foreign countries for the years 1894, 1895, and 1896 is compared with similar information for the years 1903, 1904, and 1905. The various articles are grouped under seven classes, according to the classification adopted by a conference of statisticians at Hobart in 1902:— Articles imported from different countries.

VALUE OF ARTICLES IMPORTED INTO VICTORIA FROM COUNTRIES  
BEYOND AUSTRALIA, 1894-6 AND 1903-5.

Class of Articles.	Period.	Average Annual Imports from—					
		United Kingdom	British Possessions.	Foreign Countries.			
				Germany.	United States.	Others.	Total Foreign Countries.
		£	£	£	£	£	£
Foods, drinks, narcotics, and stimulants	1894-6	606,767	489,500	40,861	70,748	334,427	446,036
	1903-5	554,588	678,351	71,851	450,409	519,258	1,041,518
Animals and plants	1894-6	12,419	11,065	6,272	365	1,216	7,853
	1903-5	24,201	33,727	9,682	2,148	6,540	18,370
Textile fabrics, dress, and manufactured fibrous materials	1894-6	2,428,097	145,522	80,918	5,017	82,987	168,922
	1903-5	3,188,940	289,393	193,845	68,371	107,156	369,372
Products of arts and manufactures, not otherwise classified	1894-6	1,414,160	21,907	154,343	163,079	156,735	474,157
	1903-5	2,013,802	51,766	414,671	581,978	342,530	1,339,179
Staple animal and vegetable substances	1894-6	301,231	137,810	31,039	156,806	42,241	230,086
	1903-5	422,095	358,585	107,718	461,604	148,366	717,688
Staple minerals and metals	1894-6	360,064	210,699	47,891	2,604	29,091	79,586
	1903-5	613,708	602,977	89,646	95,750	74,098	259,494
Miscellaneous articles imperfectly defined	1894-6	48,568	6,227	4,618	4,872	3,032	12,522
	1903-5	88,274	2,893	4,006	4,889	2,515	11,410
Total of all articles	1894-6	5,171,306	1,022,730	365,942	403,491	649,729	1,419,162
	1903-5	6,905,558	2,017,692	891,419	1,665,149	1,200,463	3,757,031

This return shows that the average annual value of imports from countries beyond Australia had increased by 67 per cent. between the two periods, and that the increased value in articles from the United Kingdom was 33 per cent., from British Possessions 97 per

cent., and from foreign countries 165 per cent.; also, that of the total imports during each period, the proportion supplied by the United Kingdom and British Possessions decreased from 81 to 70 per cent., while that supplied by foreign countries increased from 19 to 30 per cent. The increased trade with foreign countries is most prominent under products of arts and manufactures, the principal articles of which, especially in the imports from Germany and the United States, are machines, tools, and implements. Staple vegetable substances from the United States also show a marked increase, chiefly through the larger trade in printing paper and timber. The advance shown in the value of food, &c., imported from the United States is not of a permanent character, as the average figures for 1903-5 are about doubled in consequence of the large and exceptional importations of wheat from there during 1903. Under imports from British Possessions the most noticeable increase is in staple minerals and metals, and this is wholly due to larger importations of gold bullion from New Zealand.

Trade with  
Australian  
States.

Trade with each of the other States of the Commonwealth in each of the last five years was as follows:—

#### IMPORTS FROM AND EXPORTS TO OTHER STATES, 1902 TO 1906.

State.	1902.	1903.	1904.	1905.	1906.
Imports.					
From—	£	£	£	£	£
New South Wales...	3,669,446	3,297,545	4,752,895	5,477,163	6,640,333
Queensland ...	499,595	400,766	875,415	1,172,771	904,678
South Australia ...	524,952	904,962	693,600	770,778	812,454
Western Australia	291,004	221,989	166,759	207,623	212,000
Tasmania ...	427,523	694,294	1,264,398	1,751,696	1,809,774
Total Inter-State	5,412,520	5,519,556	7,353,067	9,380,031	10,379,239
Exports					
To—	£	£	£	£	£
New South Wales...	3,747,504	4,430,742	,973,818	3,932,531	5,265,169
Queensland ...	1,024,894	738,498	592,529	717,399	844,291
South Australia ...	702,157	857,498	1,111,964	1,392,222	1,380,820
Western Australia	1,122,500	1,243,833	1,250,355	1,331,877	1,569,340
Tasmani ...	1,244,133	1,251,485	1,303,557	1,356,158	1,748,352
Total Inter-State	7,841,188	8,522,056	8,232,223	8,730,187	10,807,972

This statement, which includes for 1906 under the head of exports, £3,239,530 worth of goods other than those of Victorian origin, serves to illustrate the growing importance of Melbourne as a distributing and manufacturing centre for the neighbouring States. This is more apparent in the classes of articles imported and exported. The imports chiefly comprise raw materials for manufacture, or for transfer to oversea markets, and in 1906 the nine articles of

highest value accounted for 77 per cent. of the total as follow:—Wool, £3,571,703; live stock (horses, cattle, sheep, and pigs), £1,829,221; sugar, £530,838; coal, £471,897; tin ingots, £487,963; gold and silver (bullion and specie), £375,345; copper in matte, £352,265; hides and skins, £325,425; and wheat, £180,985. On the other hand, the exports are mainly in a manufactured form, and are for consumption in the States. They are also more varied than in the case of imports; the nine leading items account for 52 per cent. of the total, and are as follow:—Bullion and specie, £1,446,193; live stock, £1,204,252; apparel and attire, £663,271; machines, tools, and implements, £535,010; butter, £434,323; piece goods, £433,843; boots and shoes, £376,533; metal manufactures, £306,453; and tobacco, £270,146. Since the abolition of Inter-State duties towards the end of 1901, exports to the other States have increased considerably notwithstanding that in 1904, as compared with 1903, they declined by £289,833. In 1902, 1903, and 1904 the exports exceeded the imports, but in the next year the reverse was the case, and in 1906 the exports, which show an increase of £2,077,785 over the previous year, were again in excess, though the imports had increased by £999,208. The average yearly figures for the five years show an excess of about £1,218,000 in exports, made up of an excess in exports to Queensland, South Australia, Western Australia, and Tasmania, amounting to £1,635,000, less an excess of imports from New South Wales amounting to about £417,000. In 1906, as compared with 1902, imports from New South Wales increased by £2,970,887, from Queensland by £405,083, from South Australia by £287,502, and from Tasmania by £1,382,251—the latter being an increase of no less than 323 per cent.; but imports from Western Australia decreased by £79,004. Comparing the same years, viz.:—1906 with 1902, exports to New South Wales increased by £1,517,665, or 40 per cent.; to South Australia by £678,663, or 96 per cent.; to Western Australia by £446,840, or 40 per cent.; and to Tasmania by £504,219, or 40 per cent.; but to Queensland decreased by £180,603, or by 18 per cent.

In 1902, the total trade of Victoria with the other States was valued at £13,253,708, of which the imports formed 41 per cent., and the exports 59 per cent. In 1906 this trade had increased to £21,187,211, or by 60 per cent., the imports representing 49 per cent., and the exports 51 per cent. of the total.

No record of Victorian produce exported to other States since 1903 has been kept by the Customs Department; but information has been supplied by which a reliable estimate can be made. The years 1903 and 1904 show a considerable increase in the value of Victorian produce exported, the increase per head of population over 1902 being 18s. 8d. in 1903 and £2 19s. 2d. in 1904; in 1905, consequent on the small exports of gold, the total per head was very little more than in 1902, and was £4 8s. 7d. lower than in 1906. The exports of merchandise in the last year show a con-

Victorian  
produce  
exported.

siderable increase since 1902. The proportion of domestic produce to the total exports was 76 per cent. in each of the first two years, 71 per cent. in 1904, only 63 per cent. in 1905, and 69 per cent. in 1906. The principal articles of domestic produce exported are wool, wheat, butter and cheese, and meat.

The values of the *principal* articles of export the produce or manufactures of Victoria during each of the last five years were as follow:—

PRINCIPAL ARTICLES OF VICTORIAN PRODUCE EXPORTED, 1902 TO 1906.

Principal Articles.	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Animals—Cattle ...	66,733	315,399	167,141	293,241	512,569
Horses ...	214,354	182,996	228,209	278,033	275,445
Sheep ...	163,206	704,622	340,199	326,526	429,775
Apparel and Attire	248,891	345,868	352,664	437,672	468,960
Boots and Shoes ...	186,224	237,434	281,739	294,913	337,056
Butter and Cheese	796,789	1,303,422	1,593,377	1,576,189	2,038,900
Fruit—Dried ...	44,249	56,768	70,492	56,808	56,776
Jams and					
Jellies ...	111,178	82,755	71,941	73,233	75,254
Grain—Oats ...	149,535	45,818	163,121	165,585	111,859
Wheat ...	500,436	33,052	2,581,276	1,835,204	2,277,533
Other ...	102,768	53,961	50,075	68,553	35,239
Grain prepared—					
Flour ...	179,293	74,479	364,705	590,297	582,494
Hay and Chaff ...	1,242,186	339,660	65,420	97,471	127,722
Fodder ...	90,142	69,306	121,375	63,260	41,065
Meat—Bacon and					
Ham ...	129,817	137,971	108,750	89,943	125,338
Frozen Beef	10,135	24,724	25,555	22,697	16,882
„ Mutton	185,539	191,647	233,154	275,195	373,757
„ Rabbits					
& Hares	160,445	167,914	126,432	220,940	221,516
Potatoes ...	129,746	74,754	27,104	102,184	189,224
Skins and Hides ...	365,659	323,245	414,677	535,086	682,783
Leather ...	237,391	225,858	232,690	252,569	300,106
Tallow ...	82,478	53,165	89,908	135,489	203,471
Wool ...	1,602,177	1,848,925	3,443,153	2,501,990	2,602,088
Other Articles ...	2,518,871	3,693,110	2,748,069	2,905,323	3,833,904
Total Merchandise	9,518,242	10,586,853	13,901,226	13,198,401	15,889,953
Gold (Bullion and Specie) ...	4,305,697	4,353,171	3,468,383	1,078,560	3,991,280
Total ...	13,823,939	14,940,024	17,369,609	14,276,961	19,881,233
Per head of Population ...	£ s. d. 11 8 6	£ s. d. 12 7 2	£ s. d. 14 7 8	£ s. d. 11 15 6	£ s. d. 16 4 1
Percentage of Total Exports ...	75.912	75.810	71.173	62.731	68.750

The following table shows the destination of Victorian produce under four principal heads for the past five years:—

Distribution  
of Victorian  
produce.

EXPORTS OF VICTORIAN PRODUCE, 1902 TO 1906.

Destination.	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Australian States ...	6,120,850	6,093,933	5,478,995	5,901,347	7,568,442
United Kingdom ...	2,137,768	2,298,484	6,178,666	4,454,510	6,800,243
Other British Possessions	4,512,570	5,154,382	3,530,530	1,551,420	2,884,042
Foreign Countries ...	1,052,751	1,393,225	2,181,418	2,369,684	2,628,506
Total ...	13,823,939	14,940,024	17,369,609	14,276,961	19,881,233

Of the Victorian produce exported,  $44\frac{1}{2}$  per cent. was sent to the sister States in 1902,  $41$  in 1903,  $31\frac{1}{2}$  in 1904,  $41$  in 1905, and  $38$  per cent. in 1906. Fifteen and a half per cent. was sent to the United Kingdom in 1902 and 1903,  $35\frac{1}{2}$  in 1904,  $31$  in 1905, and  $34$  per cent. in 1906. Thirty-two and a half per cent. was sent to other British Possessions in 1902,  $34\frac{1}{2}$  in 1903,  $20\frac{1}{2}$  in 1904,  $11$  in 1905, and  $14\frac{1}{2}$  per cent. in 1906. Seven and a half per cent. was sent to foreign countries in 1902,  $9$  in 1903,  $12\frac{1}{2}$  in 1904,  $17$  in 1905, and  $13\frac{1}{2}$  per cent. in 1906. Compared with 1902, the total value of domestic produce exported in 1906 shows an increase of £6,057,294, or  $44$  per cent. During this period a substantial increase occurred in the exports to the other States, United Kingdom, and foreign countries; but to British Possessions a decline of £1,628,528 took place, as although there was an increase of £749,300 in exports to India and New Zealand there was a decline in those to Cape Colony, Natal, and Ceylon amounting to £2,474,952.

Victoria imports a considerable quantity of timber, including large quantities of American oregon and Baltic deal. The following is a statement of the imports and exports during the five years 1902 to 1906:—

Imports and  
exports of  
timber.

VALUE OF TIMBER IMPORTED AND EXPORTED, 1902 TO 1906.

—	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£
Total Imports ...	640,392	380,158	597,210	598,486	681,075
Imports from Australian States and New Zealand...	144,699	114,943	152,203	195,217	238,897
Imports of Australasian Timber ...	141,214	111,675	151,114	193,116	237,185
Total Exports ...	42,800	57,441	46,884	42,724	46,776
Exports to Australian States and New Zealand ...	41,712	55,908	45,975	41,611	45,504
Exports of Victorian Timber	14,597	11,682	15,342	11,788	13,046
Victorian Timber exported to Australian States and New Zealand ...	14,398	11,058	15,105	11,456	12,903

By deducting from the total imports the value of timber which had been imported and then exported, the value of foreign timber (*i.e.*, timber produced outside Victoria) required for use within the State is obtained. Such net imports were valued at £612,189 in 1902, £334,399 in 1903, £565,668 in 1904, £567,550 in 1905, and £647,345 in 1906.

Of the Australasian timber (*i.e.*, timber produced or treated in Australasia) imported into Victoria in 1906, New Zealand contributed £121,238 worth. The Australasian timber imported in that year was valued at £237,185, whilst the Victorian timber exported to Australasia was only worth £12,903. The export trade in Victorian timber has been done almost wholly with the adjoining States, very little going to foreign markets.

Net revenue  
of Customs  
Depart-  
ment.

The following are the net amounts of Customs and Excise duty collected in each of the last four years, the principal items being separately distinguished:—

REVENUE OF CUSTOMS DEPARTMENT, 1902-3 TO 1905-6.

Heads of Revenue.	1902-3.	1903-4.	1904-5.	1905-6.
Import Duty—	£	£	£	£
Alcoholic Liquors ..	489,195	515,584	525,932	541,462
Narcotics ... ..	204,457	234,026	241,047	251,402
Sugar ... ..	283,991	269,590	112,217	76,353
All Other Articles ...	1,103,822	1,008,312	1,016,490	1,070,452
Total ... ..	2,081,465	2,027,812	1,895,686	1,939,669
Excise Duty—				
Spirits ... ..	75,578	86,019	88,926	94,186
Beer ... ..	174,618	168,155	169,115	170,919
Tobacco ... ..	131,003	140,979	149,187	160,091
Sugar ... ..	10,715	Dr. 2,307	163,247	149,119
Starch ... ..	8,036	7,935	8,662	9,447
Total ... ..	399,950	400,781	579,137	583,762
Miscellaneous ... ..	17,599	14,912	14,019	13,639
Grand Total ... ..	2,499,014	2,443,505	2,488,842	2,537,070

The net revenue collected by the Department of Trade and Customs in Victoria from all sources, after deduction of drawbacks and repayments, and making Inter-State adjustments, amounted to £2,537,070 in 1905-6, being £48,228 in excess of that of the previous year, and £93,565 above that of 1903-4. The revenue from Customs duties in 1905-6 was £88,143 less than that of 1903-4, but Excise duties returned £182,981 more.

Drawbacks.

Imported goods, other than stimulants and narcotics, on which duty has been paid are allowed drawback, or refund of the duty paid, if subsequently exported. Drawback is allowed not only on goods exported in the same condition as when imported, but also upon



imported goods which have been subjected to some process of manufacture in Victoria. Drawbacks are included in the general exports. The following are the figures for the last six years:—

#### REPAYMENT OF DUTY ON EXPORTS, DRAWBACK 1901 TO 1906.

Year.							Amount Paid as Drawback.
							£
1901	...	...	...	...	...	...	115,283
1902	...	...	...	...	...	...	45,022
1903	...	...	...	...	...	...	34,096
1904	...	...	...	...	...	...	18,840
1905	...	...	...	...	...	...	20,275
1906	...	...	...	...	...	...	15,952

From 1872, when the system of allowing drawback was first introduced, to the end of 1906, the total amount of duty repaid as drawback was £2,939,861. The withdrawals were heavy in 1901, but very light in the last three years.

Victorian shipping has grown considerably in volume during the last five years; the number of vessels (excluding those engaged in the Victorian coastal trade) entered and cleared, their gross tonnage, and the number of men forming their crews, were as follow:—

Vessels entered and cleared.

#### SHIPPING INWARD AND OUTWARD, 1902 TO 1906.

	1902.	1903.	1904.	1905.	1906.
Vessels Entered—					
Number ... ..	2,278	2,204	2,495	2,376	2,332
Tons ... ..	3,366,485	3,409,288	3,928,849	3,989,903	4,066,442
Average tonnage ...	1,478	1,547	1,575	1,679	1,744
Men ... ..	110,134	112,064	120,710	121,415	126,218
Vessels Cleared—					
Number ... ..	2,286	2,263	2,503	2,274	2,343
Tons ... ..	3,372,555	3,448,566	3,906,692	3,859,098	4,070,549
Average tonnage ...	1,475	1,524	1,561	1,697	1,737
Men ... ..	110,293	113,376	120,331	118,458	125,298

Although the number of vessels arriving at Victorian ports during 1906 is slightly less than in 1905, and, both in arrivals and departures, considerably less than in 1904, yet the total tonnage has advanced year by year, 1906 exceeding all previous years. The excess of 1906 over 1902 in the tonnage of arrivals amounts to 699,957, and in that of departures to 697,994.

Nationality  
of vessels.

The nationality of vessels entered and cleared at Victorian ports in each of the years 1902 to 1906 was as shown hereunder:—

## NATIONALITY OF VESSELS ENTERED AND CLEARED, 1902 TO 1906.

Year.	Number of Vessels.				Tonnage of Vessels.			
	Australian.	British.	Foreign.	Total.	Australian.	British.	Foreign.	Total.
Entered.								
1902...	1,613*	497†	168	2,278	1,492,055*	1,448,953‡	425,477	3,366,485
1903...	1,579†	466	159	2,204	1,604,129†	1,383,879	421,280	3,409,288
1904...	1,636	657	202	2,495	1,685,200	1,789,881	453,768	3,928,849
1905...	1,518	659	199	2,376	1,641,555	1,851,868	496,480	3,989,903
1906...	1,492	640	200	2,332	1,684,442	1,839,013	542,987	4,066,442
Cleared.								
1902...	1,602*	517†	167	2,286	1,473,640*	1,472,463‡	426,452	3,372,555
1903...	1,644†	460	159	2,263	1,632,632†	1,390,225	425,709	3,448,566
1904...	1,641	663	199	2,503	1,654,386	1,809,579	442,727	3,906,692
1905...	1,469	619	186	2,274	1,626,601	1,753,274	479,223	3,859,098
1906...	1,492	645	206	2,343	1,663,025	1,853,334	554,190	4,070,549

\* Colonia

† Australasian.

‡ United Kingdom.

In the year 1902 British owned shipping was tabulated under two divisions, viz., United Kingdom and Colonial; in 1903 under British and Australasian; and for the remaining years it is summarized above under Australian and all other British. The proportions to the total of each nationality, as tabulated, for the respective years in their proper sequence, from 1902 to 1906, are, Australian vessels, 71, 72, 66, 64, 64 per cent.; Australian tonnage, 44, 47, 43, 42, 41 per cent.; British vessels, 22, 21, 26, 28, 27 per cent.; British tonnage, 43, 41, 46, 46, 45 per cent.; foreign vessels, 7, 7, 8, 8, 9 per cent.; and foreign tonnage, 13, 12, 11, 12, 14 per cent. German owned shipping is more than responsible for the growth in foreign shipping, the percentage to the total of ships rising from 2.7 in 1902 to 4.9 in 1906, and of tonnage from 7.2 to 8.8 in the same period.

The vessels on the Victorian register were as follow on the 31st December, 1906, the ports of registration and net tonnage being distinguished:—

Vessels on  
Victorian  
register.

## VESSELS ON THE VICTORIAN REGISTER, 1906.

Port of Registration.	Steamers.		Sailing Vessels.		Total.	
	Number.	Net Tonnage.	Number	Net Tonnage.	Number.	Net Tonnage.
Melbourne ... ..	169	86,861	203	32,682	372	119,543
Geelong ... ..	...	...	3	337	3	337
Total ... ..	169	86,861	206	33,019	375	119,880

During 1906 there were added to the register 12 steamers with net tonnage of 10,517, and 2 sailing vessels, net tonnage 670; whilst 3 steamers, net tonnage 2,258, and 2 sailing vessels, net tonnage 78, were deducted therefrom.

The following is a statement, compiled from figures supplied by the Marine Underwriters' Association of Victoria, of the number and net tonnage of vessels on the registers of all the Australian States and New Zealand on the 30th June, 1906. It will be seen that the tonnage on the Victorian, New South Wales, and New Zealand registers each exceeded 100,000 tons:—

Vessels on  
Austral-  
asian  
registers.

## VESSELS OWNED IN AUSTRALIAN STATES AND NEW ZEALAND, 1906.

State.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Victoria ... ..	161	87,080	206	32,920	367	120,000
New South Wales ... ..	532	71,890	545	50,622	1,077	122,512
Queensland ... ..	97	15,556	216	8,804	313	24,360
South Australia ... ..	98	36,925	125	19,963	223	56,888
Western Australia ... ..	39	11,822	339	7,724	378	19,546
Tasmania ... ..	62	9,608	160	9,603	222	19,211
Total Australia ... ..	989	232,881	1,591	129,636	2,580	362,517
New Guinea ... ..	...	...	2	25	2	25
New Zealand ... ..	248	75,683	361	41,391	609	117,074
Total ... ..	1,237	308,564	1,954	171,052	3,191	479,616

Compared with 1905, steamers owned in Australia and New Zealand have increased by 39 in number and 33,297 in tonnage, but sailing ships have decreased by 161 in number and 3,350 in tonnage.

The following returns contains particulars of the lighthouses and lights on the Victorian coast:—

Where situated.				Description.	Nature.	Power in Lighthouse. (Units of 1,000 Candles.)			Colour.	Distance Visible.	No. of Hands.	Ordinary Expenditure during the Financial Year 1905-6.	Capital Cost.
						White.	Red.	Green.		Miles.		£	£
Cape Nelson				Dioptric	Fixed	4½	3½	..	White*	19	} 3	505	16,178
" Auxiliary				Dioptric	"	..	..	..	Red	3		326	2,573
Portland				Dioptric	Fixed and Flashing	..	..	½	Green	12		2	350
Port Fairy				"		..	{ 1½ fl. }	..	Red	9	2		
Warrnambool (upper light)				"	Fixed	½	..	..	White	14	} 2	330	7,917
" (lower light)				"	"	..	..	..	Red	5		515	10,367
Cape Otway				"	Triple Flashing	24	..	..	White	24	} 3	525	11,838
" Auxiliary				Dioptric	Fixed	7½	5½	..	Red	4 to 8		3	
Split Point				"	"	..	..	..	Red†	18	} 3		
" Auxiliary				"	"	..	..	..	White	3			
Port Phillip—													
Point Lonsdale				Dioptric	Occulting	22	13	..	White and Red	17	3	622	4,113
Queenscliff (high)				Catadioptric	Fixed	2½	..	..	White	17	} 8	1,261	19,071
" (low)				Dioptric	"	2	½	..	Red and White	10 & 14			
West Channel Pile Light				"	"	2	1	..	"	11	} 4	644	9,456
South Channel (Eastern Light)				"	"	2½	2½	..	"	13			
" (pile)				"	"	½	1½	..	"	10	3	45	5,005
Schnapper Point				Dioptric	Occulting	2½	1½	..	White	10	3	432	5,005
Gellibrand Point (Pile Light)				Catadioptric	Fixed and Flashing	{ 4½ fl. }	..	..	Red and White	12	} 3	528	10,278
Cape Schanck				"	"	{ 48½ fl. }	..	..	White	23			
" Auxiliary				"	Fixed	..	..	..	Red	3	3	775	24,433
Wilson's Promontory				Catoptric	"	2½	..	..	White	24	3	443	13,225
Cliffy Island				Dioptric	Flashing	4½	..	..	White	15	3	607	21,785
Cape Everard				Holophotal	Double Flashing	30	12	..	White*	21	} 3	767	22,631
" Auxiliary				"	Fixed	..	..	..	Red	2			
Gabo Island				Catadioptric	"	4½	..	..	White	20	} 3		
" Auxiliary				"	"	..	..	..	Red	3			
Total .. ..												8,675	191,727

\* Red sectors between the limits of white light and shore at either side.

† White sectors between the limits of red light and shore at either side.

The port of Melbourne is under the control of the Melbourne Harbor Trust, and has 8.20 miles of wharfs, piers, and jetties in the River Yarra, Victoria Dock, and Hobson's Bay. The area of these wharfs is 45.74 acres, of which 12.33 acres are under sheds. The floating plant of the Trust in commission includes 3 dredges, 1 steam tug, 4 steam hopper barges, 10 iron hopper barges, 2 steam launches, &c., &c. The total quantity of dredgings by the Harbor Trust actually raised in 1906 amounted to 1,218,370 cubic yards, viz., 230,875 cubic yards from Hobson's Bay, and 987,495 cubic yards from the River Yarra and Victoria Dock. Since the establishment of the Trust, the river dredgings have amounted to 22,639,866 cubic yards, and the bay dredgings to 12,994,685 cubic yards, making a total of 35,634,551 cubic yards. Of the dredgings, 25,906,483 cubic yards were deposited at sea, and 9,728,068 cubic yards were landed for roads and reclamation work. The average cost of dredging, towing, and depositing in 1906 was 5.29d. per cubic yard.

Melbourne  
Harbor  
Trust.

The following table shows the number of post-offices and the letters, &c., handled each year since 1901:—

Postal  
returns.

POSTAL RETURNS, 1902 TO 1906.

	1902.	1903.	1904.	1905.	1906.
Number of Post Offices	1,645	1,646	1,	1,655	1,659
Despatched and Received—					
Letters and Post-cards ...	98,342,507	105,922,527	110,445,804	119,689,073	126,349,003
Newspapers ...	33,638,532	41,101,056	58,995,233	58,555,037	60,244,603
Packets ...	16,966,644	13,653,569			
Parcels ...	365,898	429,084	424,507	469,106	510,846
Total ...	149,313,581	161,106,230	169,865,514	178,713,216	187,104,452

The business done by the Post Office has grown considerably in the five years under review, that for 1906 being 25 per cent. more than that for 1902. The number of letters and post-cards have increased by 28,006,496 since 1902, newspapers and packets by 9,639,427, and parcels by 144,948.

Money  
orders and  
postal  
notes.

Money order offices are established at 486 places in connexion with the Post Office, and orders are issued for payment throughout the Commonwealth and all the principal British and foreign countries. The charges range from 1 1-5d. in the £1 on orders issued for payment within Victoria to 6d. in the £1 for orders payable beyond Australia, New Zealand, and Fiji. Postal notes, ranging from 1s. to £1 in value, are issued and paid throughout the Commonwealth, the commission ranging from ½d. to 3d. The following is a comparative statement of the business done since 1901:—

MONEY ORDERS AND POSTAL NOTES, 1902 TO 1906.

—	1902.	1903.	1904.	1905.	1906.
Money Orders Issued—					
Number ... ..	217,634	215,694	221,578	221,732	230,253
Amount ... ..	£706,791	£721,017	£747,875	£759,763	£814,564
Money Orders Paid—					
Number ... ..	306,510	318,766	319,886	312,244	310,382
Amount ... ..	£1,053,313	£1,121,807	£1,125,557	£1,102,652	£1,122,551
Postal Notes—					
Victorian—Paid in					
Victoria ... ..	£498,174	£514,464	£559,325	£585,548	£619,523
Victorian—Paid in					
Other States ...	£30,207	£44,512	£58,061	£67,156	£70,615
Of Other States—					
Paid in Victoria ...	£46,805	£77,341	£96,532	£110,027	£121,159

The value of money orders issued has increased year by year, the issues of 1906 exceeding those of 1902 by £107,773, and those of 1905 by £54,801. Of orders paid those of 1906 exceeded 1902 by £69,238, but were less than those of 1905 by £19,899.

The business in postal notes has increased considerably, the amount of Victorian notes paid within the State being £121,349 more in 1906 than in 1902. The business with the other States shows great improvement during the period embraced in the table, attributable to the removal of Inter-State charges existing prior to the federation of the States; Victorian notes paid in other States during 1906 showing an increase of £40,408 over 1902, and notes of other States paid in Victoria compared for the same years an increase of £74,354.

Telegraphs  
and tele-  
grams.

Telegraphic communication exists between 1,055 stations within the State. Victorian lines are connected with those of New South Wales, and by means of them with Queensland and the submarine cable to New Zealand, also with the lines in South Australia, and through them with those of Western Australia, the Eastern Archipelago, Asia, Europe, Africa, and America; also with the submarine cable to Tasmania; the length of lines and wire open, and the

number of telegrams sent from Victorian stations in the last five years were as follow:—

## TELEGRAPHS AND TELEGRAMS, 1902 TO 1906.

	1902.	1903.	1904.	1905.	1906.
Number of Stations ...	875	878	881	969	1,055
Miles open—					
Line (poles) ...	6,589	6,596	6,494	6,338	6,954
Wire ...	15,611	15,883	16,240	16,082	14,950
Number of Telegrams sent—					
Paid—Inland ...	1,524,236	1,706,497	1,644,522	1,689,145	1,785,046
Inter-State ...	434,807	476,881	501,038	508,058	633,358
International ...	41,822	50,320	55,750	59,279	70,315
Unpaid—O.H.M.S. ...	93,892	...	...	...	...
Total ...	2,094,757	2,233,698	2,201,310	2,256,482	2,488,719

In 1906 there were 180 telegraph stations, and 365 miles of telegraph lines more than in 1902. The mileage of lines has been increased since 1905 as telephone lines used for transmitting telegrams are now classed as telegraph, but the mileage of wire has been reduced considerably, as signalling wire on the railways is now classed as telephone. Compared with 1905 the total telegrams despatched in 1906 show an increase of 232,237, inland telegrams having increased to the extent of 95,901, whilst inter-state and international increased by 125,300 and 11,036 respectively. Compared with 1902 the telegrams of 1906 show an increase of 393,962. Unpaid telegrams O.H.M.S. were discontinued in 1902. New Zealand telegrams are included with international.

The telephone exchanges were worked by a private company until September, 1887, in which month the business, buildings, and plant were purchased by the Government. The annual flat rate for business telephones in Melbourne and suburbs is £9, in country towns, £7; for private residence telephones in Melbourne, suburbs, and country the rental is £5. The toll or measured rate is variable according to conditions. The following statement shows for

the past five years the length of lines and wire open, the number of exchanges, subscribers, bureaux, and private lines:—

TELEPHONES, 1902 TO 1906.

	1902.	1903.	1904.	1905.	1906.
Miles Open—					
Lines (Poles and under-ground Cables) ...	1,275	1,310	1,368	1,659	1,121
Wire ...	21,308	22,995	25,501	29,312	32,956
Exchanges—					
Number ...	20	20	22	24	31
Subscribers ...	6,847	7,610	8,429	9,259	10,424
Bureaux ...	74	90	126	135	128
Private Lines ...	388	392	395	416	417

The reduced mileage of lines in 1906 is accounted for by the fact that in the Railway Department these lines are all on poles carrying other wires, and are already included in the mileage of telegraph lines.

The length of wire has increased 55 per cent., and the number of subscribers 52 per cent., since 1902.

The subscribers given in the table are direct connexions, the actual number of telephones in use being 14,134 in 1905, and 15,460 in 1906.

Railways,  
length and  
cost.

All railways in Victoria are the property of the State. The gauge is 5ft. 3in. for all double lines, and for 3,052.43 miles of the single lines, the balance—81.60 miles of single lines—being 2ft. 6in. gauge. The following table shows the length of double and single lines, the cost of construction, and average cost per mile for the last five years:—

RAILWAYS, LENGTH AND COST OF CONSTRUCTION, 30TH JUNE, 1902, TO 1906.

	1902.	1903.	1904.	1905.	1906.
Length of Lines on 30th June—					
Double Lines (miles)	297	297	315.46	312.01	311.82
Single Lines (miles)	3,006	3,104	3,113.09	3,129.72	3,134.03
Total ...	3,303	3,401	3,428.55	3,441.73	3,445.85
	£	£	£	£	£
Cost of Construction	31,716,408	32,052,954	32,156,868	32,231,083	32,338,352
Average Cost per mile	9,602	9,425	9,379	9,365	9,385

During the years 1903-4 to 1905-6 all railways and tracks were re-measured by the Railway Department, and the mileage is now correctly given. Since the 30th June, 1901, 194.59 miles of railway (including 32.89 narrow gauge) have been constructed and opened for traffic, and the average cost per mile of all lines constructed has been reduced from £9,645 to £9,385, or by £260 per mile.



During the year 1905-6 4.07 miles were opened for traffic, and on the 30th June, 1906, one line was in progress of construction, viz., that from Moe to Walhalla.

The mileage and the traffic of the railways since 30th June, 1901, are given in the following table:—

## RAILWAYS—MILEAGE AND TRAFFIC, 1901-2 TO 1905-6.

	Year ended 30th June.				
	1902.	1903.	1904.	1905.	1906.
Miles Constructed ...	3,303	3,401	3,428.55	3,441.73	3,445.85
„ Dismantled ...	16	16	16.07	16.07	16.07
„ Closed to Traffic	9	9	31.77	31.81	31.81
„ Open for Traffic	3,278	3,376	3,380.70	3,393.85	3,397.97
Train Mileage ...	11,284,944	10,286,272	9,172,644	9,023,365	9,392,069
Passengers carried ...	57,465,077	54,798,073	54,282,003	59,702,050	65,088,394
Goods and Live Stock Carried (Tons) ...	3,433,627	3,093,997	3,439,203	3,628,237	3,676,017

The traffic of 1905-6 is the heaviest experienced by the railways, passenger journeys exceeding those of the next heaviest year—1904-5—by 5,386,344, and those of 1889-1890, the next in volume, by 6,136,598. The tonnage of goods and live stock exceeded that of 1904-5, the next in volume, by 47,780, and that of 1903-4, which follows in importance, by 236,814. Comparing 1905-6 with 1901-2, the passenger traffic has increased by 7,623,317 passengers, or 13 per cent., and the goods and live stock carried by 242,390 tons, or 7 per cent.; but the number of train miles run has been reduced by 1,892,875 miles, or 17 per cent.

The receipts and working expenses of the railways during the last five financial years were as follow:—

## RAILWAY RECEIPTS AND EXPENDITURE, 1901-2 TO 1905-6.

	Year ended 30th June.				
	1902.	1903.	1904.	1905.	1906.
Receipts -	£	£	£	£	£
Passenger Fares ...	1,378,746	1,325,565	1,360,484	1,382,308	1,503,046
Freight on Goods and Live Stock	1,732,786	1,467,609	1,806,337	1,932,381	2,015,121
Sundries ...	256,311	253,684	271,320	267,577	270,901
Total ...	3,367,843	3,046,858	3,438,141	3,582,266	3,789,068

Railway receipts and expenditure.

## RAILWAY RECEIPTS AND EXPENDITURE, 1901-2 TO 1905-6—continued.

	Year ended 30th June.				
	1902.	1903.	1904.	1905.	1906.
Working Expenses—	£	£	£	£	£
Maintenance ...	501,938	528,253	545,013	571,149	587,91 4
Rolling-stock ...	855,464	774,933	743,032	942,529	891,391
Traffic Charges ...	640,442	582,167	577,799	562,370	588,123
Compensation ...	31,145	10,729	8,216		
General Charges...	137,129	136,005	148,343	146,231	149,915
Total ...	2,166,118	2,032,087	2,022,403	2,222,279	2,217,343
Net Receipts ...	1,201,725	1,014,771	1,415,738	1,359,987	1,571,725
Percentage of Ex- penses to Receipts	64·32	66·69	58·82	62·04	58·52

The receipts for 1905-6 are the largest yet earned, being £206,802, or 6 per cent., in excess of the receipts for 1904-5, the next best year, and £421,225, or 12½ per cent., in excess of those for 1901-2. Working expenses, which include pensions and gratuities under the head of general charges, have been reduced by £4,936 since 1904-5, but are £51,225, or about 2 per cent., in excess of the expenses of 1901-2. The net receipts of 1905-6 exceed those of the previous year by £211,738, or 16 per cent., and those of 1901-2 by £370,000, or 31 per cent. The porportion of expenses to receipts is lower for 1905-6 than for any other year in the table, being 6 per cent. below the proportion of 1904-5. It must be remembered that working expenses include expenditure on belated repairs, and expenditure on account of previous years, together amounting to £21,500 in 1901-2, £102,630 in 1902-3, £119,556 in 1903-4, £248,485 in 1904-5, and £117,542 in 1905-6.

The earnings, expenses, and net profits per mile of railway open for the years ended 30th June, 1902 to 1906 were as follow:—

## RAILWAY RECEIPTS AND EXPENDITURE PER TRAIN MILE, 1901-2 TO 1905-6.

	1902.	1903.	1904.	1905.	1906.
Average Number of Miles Open ...	3,266½	3,328	3,371	3,384	3,394
Gross Earnings per Mile ...	£ 1,031	£ 916	£ 1,020	£ 1,059	£ 1,116
Expenses per Mile ..	663	611	600	657	653
Net Profits per Mile	368	305	420	402	463

Railway  
earnings  
and ex-  
penses per  
mile.

The receipts per mile of open railway for 1905-6 are £57 better than for the preceding year, and £85 better than 1901-2, whilst the expenses per mile show decreases of £4 and £10 over the same respective years. Net profits per mile are £61 above the profits of 1904-5 and £95 above those of 1901-2.

This table excludes all consideration of interest payable on railway loans and expenses of paying the same, which amounted to £1,472,397 in 1905-6—equal to a charge of £434 per mile of railway open for traffic.

Victorian coal has been largely used by the Railway Department for steaming purposes. In 1902, 120,854 tons were consumed; in 1903, 23,694 tons; in 1904, 51,572 tons; in 1905, 76,289 tons; and in 1906, 63,694 tons. The quantity carried for the general public was 98,781 tons in 1902, 46,599 tons in 1903, 70,341 tons in 1904, 67,239 tons in 1905, and 87,144 tons in 1906. The rate of carriage from the mines to Melbourne is  $\frac{3}{4}$ d. per ton per mile, of which  $\frac{1}{4}$ d. per ton per mile was paid by the Government; beyond Melbourne the charge is 1d. per ton per mile.

Victorian  
coal carried  
on rail-  
ways.

#### MELBOURNE TRAMWAYS TRUST.

By the "Melbourne Tramway and Omnibus Company's Act 1883" (47 Vict. No. 765), passed on the 12th October, 1883, the company was authorized to construct tramways in the streets of Melbourne and suburbs, unless the municipalities interested, who had the prior right, elected to do so. All the municipalities, however, decided to exercise the powers conferred upon them, and the necessary notice to the company having been given, a Tramways Trust was formed, as provided by the Act. This body, which consists of delegates from municipalities concerned, received full power to construct tramways, and to borrow money for that purpose, secured on the municipal properties and revenues and on the tramways themselves. The Trust was required by the above-mentioned Act, as modified by the amending Acts (51 Vict. No. 952 and 56 Vict. No. 1278), to complete the tramways by the 31st December, 1893, and to grant a 32 years' lease of the tramways to the company, dating from the 1st July, 1884 (when the liability for interest commenced), and expiring on the 1st July, 1916. The company, on its part, is required to find all the rolling-stock, to keep the tramways and adjoining road, a total width of 17 feet, in complete repair; to hand back the lines in good working condition to the Trust at the expiration of the lease, and to pay to the Trust the annual interest on the moneys borrowed; also to contribute annually a certain varying

Tramways.

percentage on the sums borrowed, so as to form a sinking fund towards the ultimate extinction of the loans. The expenses of the Trust to the 31st December, 1893, were defrayed out of the loan; after that period by the company to an amount not exceeding £1,000 per annum, and the remainder by the municipalities; and the liability on account of loans is by Act 48 Vict. No. 788 made a joint and several charge on the properties and revenues of the several municipalities. The total amount the Trust is empowered to borrow is £1,650,000, which has been raised in London by means of debentures bearing interest at  $4\frac{1}{2}$  per cent. The premiums received amounted to £55,794, making a total of £1,705,794. The whole of this was expended by the 31st December, 1893, when all outlay from loan moneys ceased in accordance with Act No. 1278. The sinking fund on the 3rd January, 1907, amounted to £919,981. The following particulars have been furnished by the secretary to the Tramways Trust:—

“The total length of tramways authorized and constructed amounts to 47 miles 4 furlongs, of which 43 miles 6 furlongs are worked by cables and stationary steam-engines, and the remaining 3 miles 6 furlongs by horses.

“The cable lines form one of the largest systems of this description of tramway in the world, and the method of construction adopted combined all the best features and latest improvements of lines constructed both in America and Europe.

“A uniform fare of 3d. is authorized to be charged on the tramway lines, except on the section between the Spencer-street and Prince's-bridge Railway Stations, *via* Flinders-street, on which the fare is 1d. But the company is required to run, upon all lines open for traffic, every morning between the hours of 6 and 7, and every evening between the hours of 5.30 and 6.30 (Sundays and public holidays excepted), two or more carriages for workmen at a fare of  $1\frac{1}{2}$ d. per journey. All fares will be, by Act No. 765, section 26, subject to revision by Parliament after the lapse of ten years from the date of the first 20 miles of tramway being opened for traffic, viz., on the 31st December, 1897.”

The lengths of the several lines and the dates on which they were opened for traffic were given in previous issues of this work.

The succeeding table has been compiled from information furnished by the secretary of the Melbourne Tramway and Omnibus Company :—

Melbourne  
tramways.

### MELBOURNE TRAMWAYS, 1900-1 TO 1905-6.

Year ended 30th June.	Length of Lines Open.	Tram Mileage.	Passengers Carried.	Traffic Receipts.
				£
1901 ... ..	48	8,964,734	47,195,647	465,427
1902 ... ..	48	9,226,883	47,261,572	454,683
1903 ... ..	48	9,044,282	46,832,910	432,505
1904 ... ..	48	8,968,928	49,183,742	444,495
1905 ... ..	48	8,932,073	50,297,357	448,740
1906 ... ..	48	9,032,523	52,925,654	469,079

The traffic of the Melbourne tramways for 1905-6 is the heaviest recorded, exceeding that of 1904-5 (the next in volume) by 2,628,297, and 1903-4 (third in volume) by 3,741,912 passengers. The number of tram miles run shows an increase of 100,450 over 1904-5, and of 63,595 over 1903-4.

Besides the lines of the Melbourne Tramway and Omnibus Company, there is a cable tramway,  $2\frac{1}{4}$  miles in length, between Clifton Hill and Preston; a horse tramway, 7 miles in length, between Sandringham and Cheltenham (Beaumaris); and a horse tramway,  $1\frac{1}{2}$  miles in length, between Brunswick and Coburg. There are also electric tramways at Ballarat and Bendigo. The cost of the Beaumaris tramway to 30th June, 1905, was £21,821. The following were the traffic receipts, &c., on this line during the last six years :—

Other sub-  
urban and  
country  
tramways.

### BEAUMARIS TRAMWAY, 1900-1 TO 1905-6.

Year ended 30th June.	Miles run.	Receipts.	Working Expenses.
		£	£
1901 ... ..	38,723	1,323	1,281
1902 ... ..	39,500	1,528	1,622
1903 ... ..	39,150	1,410	1,644
1904 ... ..	39,700	1,489	1,312
1905 ... ..	42,300	1,669	1,560
1906 ... ..	44,900	1,770	1,795

The number of vehicles licensed for the conveyance of passengers in Melbourne, and for a distance of 8 miles beyond the corporate limits, in 1906, was 1,596, of which 801 were cabs. The number

Licensed  
vehicles in  
Melbourne.

of drivers licensed for the conveyance of goods was 1,119. The following are the particulars for the last five years:—

LICENSED VEHICLES IN MELBOURNE, 1902 TO 1906.

	1902.	1903.	1904.	1905.	1906.
<i>For Passenger Traffic.</i>					
Cabs (4 wheels) ... ..	637	613	607	591	582
" (Hansoms) ... ..	210	200	210	215	219
Omnibuses ... ..	57	37	29	33	40
Tram Cars ... ..	372	11	10	382	426
" Dummies ... ..	344	5	5	336	329
Total ... ..	1,620	866	861	1,557	1,596
<i>For Conveyance of Goods.</i>					
Drivers licensed ... ..	1,339	1,299	1,138	1,638	1,119

The reason for the small number of tram cars and dummies licensed in 1903 and 1904 is that their liability to be licensed was under dispute. The matter has since been settled, the decision being, as the figures show, in favour of licensing.

## LAW, CRIME, ETC.

## THE HIGH COURT OF AUSTRALIA.

The Commonwealth Constitution (section 71) provides that the judicial power of the Commonwealth shall be vested in a Federal Supreme Court, to be called the High Court of Australia, and to consist of a Chief Justice, and at least two other Justices. Power is also given to the Federal Parliament to create other Federal courts, or to invest other courts with Federal jurisdiction. Section 72 provides that the Justices shall be appointed by the Governor-General in Council, shall not be removed, except on an address from both Houses of Parliament in the same session, on the ground of proved misbehaviour or incapacity; and that the Parliament shall fix the remuneration, which shall not be diminished during their continuance in office. The High Court is invested by the Constitution with both original and appellate jurisdiction. Section 73 provides that the High Court shall have jurisdiction to hear and determine appeals from all judgments, decrees, orders, and sentences of any Justice exercising the original jurisdiction of the court, of any other Federal court, or of the Supreme, or any other court of a State, from which there was on 1st January, 1901, an appeal to the Privy Council; or on questions of law of the Inter-State Commission (when appointed). The Parliament may regulate the mode in which the jurisdiction may be exercised, and may limit the jurisdiction by excluding specified cases, or classes of cases from it; but no such regulation or exception shall prevent the High Court from hearing and determining any appeal which could on 1st January, 1901, be heard by the Privy Council. Section 74 provides that there shall be no appeal to the Privy 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 His Majesty in Council." It is, however, provided that except as above-mentioned the "Constitution shall not impair any right which the King may be pleased to exercise by virtue of His Royal prerogative to grant special leave of appeal from the High Court to His Majesty in Council"; but the Parliament may limit the matters in respect of which leave may be asked, and a Bill containing any such limitation shall be reserved by the Governor-General for the Royal pleasure. Section 73 provides that the judgment of the High Court, in its appellate jurisdiction, shall be final and conclusive; but this (except as regards the particular class of constitutional questions mentioned above) is qualified by the above provision,

preserving the prerogative right of the King in Council to grant special leave of appeal from such a judgment. By section 75, the High Court is invested with original jurisdiction in all matters arising under any treaty; affecting consuls or other representatives of other countries; in which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party; between States, or between residents of different States, or between a State and a resident of another State; or in which a mandamus prohibition or injunction is sought against an officer of the Commonwealth. By sections 76, 77, and 78, the Parliament is empowered to confer additional original jurisdiction on the High Court in any matter arising under the Constitution, or involving its interpretation, or under any laws made by the Parliament; of admiralty and maritime jurisdiction; or relating to the same subject-matter claimed under the laws of different States; to define the jurisdiction of any Federal court other than the High Court, and the extent to which such jurisdiction shall be exclusive of that which belongs to or is invested in the courts of the States; to invest any court of a State with Federal jurisdiction; and to confer "rights to proceed against the Commonwealth or a State in respect of matters within the limits of the judicial power." By section 79 the Parliament may prescribe the number of Judges by whom the Federal jurisdiction of any court may be exercised; and section 80 provides for trial by jury of any offence against any law of the Commonwealth, and for the venue of the trial.

Common-  
wealth  
Judiciary  
Acts  
1903-06.

In pursuance of the powers conferred upon it by the Constitution, and within the limits thereof specified therein, the Commonwealth Parliament passed a Judiciary Act, which was assented to on 25th August, 1903, and has been amended by an Act of 1906. The High Court consists of a Chief Justice and four other Justices; and its principal seat is at the seat of Government, where there shall be the principal registry of the court. District registries in each other State are also provided for, and peripatetic sittings are to be held when required. Chamber business may be dealt with by a single Justice of the High Court, or (except in matters within the exclusive jurisdiction of the High Court) by a single Judge in Chambers of the Supreme Court of a State. A Full Court, consisting of any two or more Justices of the High Court, sitting together, may hear and determine any case or question referred by, and appeals from judgments of, any such single Justice or Judge; appeals from judgments of any other court exercising Federal jurisdiction, or of the Inter-State Commission; applications for a new trial; and applications for leave or special leave to appeal to the High Court from a judgment of the Supreme Court of a State, or of any other court of a State from which, at the establishment of the Commonwealth, an appeal lay to the Privy Council. The jurisdiction of the High Court to hear and determine these appeals and applications for a certificate that a question, decided by the High Court, as to the constitutional powers of the Commonwealth and a State, is one which ought to be determined by the



Privy Council, shall be exercised by a Full Court consisting of the three Justices.

Appeals on matters in respect of which an appeal lay to the Privy Council at the establishment of the Commonwealth, are to be heard before a Full Court, consisting of three Justices; and also applications for a certificate that a question, decided by the High Court, as to the constitutional powers of the Commonwealth and a State is one which ought to be determined by the Privy Council. The following matters are to be heard before a Full Court, consisting of two or more Justices:—Applications for leave, or special leave of appeal; cases or questions referred by a single Judge; appeals from a single Judge, or from other courts exercising Federal jurisdiction; appeals on questions of law from the Inter-State Commission; and applications for a new trial.

In addition to the original jurisdiction conferred by section 75 of the Constitution, previously mentioned, the High Court is, by section 30 of the Judiciary Act, invested with original jurisdiction in all matters arising under the Constitution, or involving its interpretation; and by section 33 is empowered to make orders or issue writs of mandamus and prohibition in certain cases. Part V. of the Act limits and defines the appellate jurisdiction; Part VI. defines the matters in which the jurisdiction of the High Court is exclusive; Part VII. deals with the removal of causes arising under the Constitution, and pending in any State court on appeal, to the High Court; Part VIII. treats of the members and officers of the High Court; Part IX. of suits by and against the Commonwealth and the States; Part X. of criminal jurisdiction, and Part XI. contains supplementary provisions, dealing with appearance of parties, application of laws, venue, and rules of court.

#### THE LEGAL SYSTEM IN VICTORIA.

The law of Victoria, in its basic principles and main provisions, is founded on the law of England. All laws in force in England in 1828 were, so far as they should be held to apply to the circumstances of Australia, by Imperial Statute made law in New South Wales (which then included Victoria); and in case of any doubt as to the applicability, the Colonial Legislature was empowered to declare whether or not they did apply, or to establish any modification or limitation of them within the colony. The same Statute established a Legislature within New South Wales with power to make laws for that colony; and Supreme and other courts were established. On the separation of Port Phillip from New South Wales in 1851, the new colony of Victoria was invested with similar powers, which were widened on the establishment of responsible government in 1855. In order, therefore, to ascertain the law of Victoria as to any particular matter or point, considerable research is often involved. The first step is a search of the Victorian Statutes; and if the matter is fully dealt with there, the labour is concluded; but, if it has never been dealt with by any Victorian Act, recourse must be had to the Statutes of New South Wales, and the Imperial Statutes

specially applicable to New South Wales passed between 1828 and 1851. If no law on the point is obtainable from these sources, the law of England in 1828 must be ascertained, which in most cases is found in the English text-books. Having found the apparent law from either of these sources, it is still necessary to search through series of law reports for decisions which may either modify or interpret the same.

#### LITIGATION AND LEGAL BUSINESS.

Supreme  
Court civil  
business.

The Supreme Court of Victoria was first established in 1852, and its constitution and powers remain substantially unaltered by recent legislation, although the procedure has been entirely remoulded by the "Judicature Act of 1883." There were in 1906, five judges, viz., a Chief Justice and four Puisne Judges.

The following is a statement of Supreme Court business during 1891, 1895, and the last five years:—

#### SUPREME COURT CIVIL CASES, 1891 TO 1906.

Year.	Writs of Summons.		Causes Entered for Trial.	Causes Tried.	Verdicts for—		Amount Awarded.
	Number Issued.	Amount Claimed.			Plaintiff.	Defendant.	
		£					£
1891 ..	5,744	304,377	479	247	119	64	57,713
1895 ..	2,115	140,292	254	187	101	33	41,487
1902 ..	844	109,012	191	101	52	16	6,717
1903 ..	770	148,516	172	122	54	40	11,135
1904 ..	767	129,361	159	98	36	19	5,513
1905 ..	623	88,079	117	96	21	9	3,986
1906 ..	533	56,867	128	64	22	19	7,358

Decline in  
litigation.

The decline in litigation in the Supreme Court since 1891, to which attention was directed in previous issues of this work, still continues. In 1906, the writs issued were about one-eleventh; the amount sued for was less than one-fifth; and the causes which actually came to trial were only about one-fourth of the number in 1891. Notwithstanding the decrease in litigation, the census of 1901 showed the number of barristers and solicitors as 820, an increase of 90 over the number as shown at the previous census of 1891. The figures show that a very small proportion of writs result in actual trials, whilst a large number of trials are either abandoned before a verdict is given, postponed to the following year, or settled.

County  
Courts  
business.

County Courts have a jurisdiction both in equity and common law cases, limited to £500; and to try cases remitted by the Supreme Court. The cause of action must have arisen within 100 miles of the court in which proceedings are taken, which court must not be more than ten miles further away from defendant's residence than some other County Court in which the plaintiff might have sued. In 1906, there were 105 sessions lasting 338 days held in 41 places. Particulars of litigation in 1891, 1895, and the last five years are as follow:—

COUNTY COURT CASES, 1891 TO 1906.

Year.	Number of Cases tried.	Amount sued for.	Amount awarded.	Costs awarded to—	
				Plaintiff.	Defendant.
		£	£	£	£
1891	9,947	293,073	115,199	14,006	7,263
1895	1,361	219,285	73,091	7,256	5,514
1902	622	169,968	52,202	5,662	2,331
1903	584	126,670	42,004	3,923	2,923
1904	553	144,405	52,059	4,612	2,644
1905	582	145,884	47,481	4,096	2,383
1906	556	135,580	42,836	5,473	2,856

The number of cases tried continues below the average of ten years ago. The number in 1906 was less than in any preceding year, except 1904, and only one-eighteenth of that in 1891; but the amount sued for and awarded, and costs awarded, have not fallen off to anything like the same extent. This would seem to indicate that the public is less inclined than formerly to institute legal proceedings for the settlement of disputes; and that the County Court is not resorted to for the recovery of petty and trade debts to the same extent as in former years.

Courts of Petty Sessions were held at 234 places in Victoria in 1906 by stipendiary magistrates and honorary justices. Clerks of courts of ten years' standing, who have passed the prescribed examination, and barristers of five years' standing are eligible for appointment as police magistrates; but there is no legal training or knowledge of the law required as a condition precedent to the appointment of a person as an honorary justice of the peace. The jurisdiction is limited to what may be called ordinary debts, damages for assault, or restitution of goods, where the amount in dispute does not exceed £50. Particulars of such cases heard during a series of years are as follow:—

Petty Sessions civil business

COURTS OF PETTY SESSIONS: CIVIL CASES, 1891 TO 1906.

Year.			Cases heard.	Amount claimed.	Amount awarded.
				£	£
1891	..	..	33,030	210,255	144,158
1895	..	..	30,609	168,143	138,722
1902	..	..	20,421	116,936	96,166
1903	..	..	22,012	126,051	107,502
1904	..	..	22,046	133,560	116,757
1905	..	..	26,393	142,673	121,525
1906	..	..	25,320	145,847	123,625

In addition to the ordinary civil cases above mentioned, and to the criminal jurisdiction hereinafter mentioned, Courts of Petty Sessions deal with other business of a civil and quasi-criminal nature. During the year 1906, 683 appeals against municipal ratings, 782 maintenance cases, 493 fraud summonses against debtors, 7,261 electoral revision cases, 5,822 licences and certificates, and 1,461

miscellaneous cases were heard, and 471 persons alleged to be lunatics were examined. There has been a large decrease in the civil cases heard before magistrates and in the aggregate amount claimed and awarded since 1891; but since 1900 there has been an increase under each of the three headings.

Probates  
and letters  
of adminis-  
tration.

As compared with 1905, there has been a moderate increase in the number of probates and letters of administration issued, and in the value of property devised and bequeathed. There must, however, naturally be large differences in the aggregate value of property left in different years on account of the falling in of one or several very large estates during certain years. This matter is dealt with more fully over a long series of years in part "Accumulation" of this work. The following information is furnished for the last five years:—

PROBATES AND LETTERS OF ADMINISTRATION: RETURN FOR FIVE YEARS.

Year.	Probates.		Letters of Administration.		Both.	
	Number.	Property sworn under—	Number.	Property sworn under—	Number.	Property sworn under—
		£		£		£
1902 ...	2,590	6,483,077	1,386	1,088,405	3,976	7,571,482
1903 ...	2,527	5,239,913	1,357	834,164	3,884	6,074,077
1904 ...	2,533	5,224,103	1,294	537,981	3,827	5,762,084
1905 ...	2,810	5,444,796	1,043	558,682	3,853	6,003,478
1906 ...	2,923	5,787,296	1,059	637,412	3,982	6,424,738

INSOLVENCIES.

The number of failures and the declared assets and liabilities during the last five years were:—

Insolven-  
cies, &c.

INSOLVENCIES AND PRIVATE ARRANGEMENTS: RETURN FOR FIVE YEARS.

Year.	Insolvencies.			Private Arrangements.		
	Number.	Declared Liabilities.	Declared Assets.	Number.	Declared Liabilities.	Declared Assets.
		£	£		£	£
1902 ..	406	364,630	270,061	206	200,128	178,337
1903 ..	505	210,086	84,611	194	202,475	164,481
1904 ..	462	387,882	138,301	164	158,267	124,266
1905 ..	570	235,773	74,673	174	179,310	98,673
1906 ..	517	231,828	81,144	175	126,499	102,323

The number of insolvencies was greater in 1906 than in any of the four preceding years, except 1905, but the declared liabilities were smaller than in any year except 1903. Insolvencies are still much below the average of some years ago. Thus the average number during the last five years was 492, and the declared liabilities £286,040, whereas during the ten years, 1879 to 1888, the average yearly number was 612, with declared liabilities,

£661,720. During the eleven years, 1889 to 1899, when the failures resulting from the financial crisis swelled the returns, the yearly average number was 790, with declared liabilities, £2,037,292.

Insolvencies are of two kinds, voluntary and compulsory, and the following table contains the number of petitions of each kind in the last five years:—

Year.	Voluntary.	Compulsory.	Total.
1902 ... ..	... 374	32	406
1903 ... ..	... 476	29	505
1904 ... ..	... 436	26	462
1905 ... ..	... 536	34	570
1906 ... ..	... 485	32	517

In the following return will be found the occupations, in six classes, of those who became insolvent and compromised with their creditors during the last five years, also the number of breadwinners in each class at the census of 1901, and the proportion of the former to the latter. The total number of insolvents does not include 169 whose occupations were not returned:—

Occupations  
of insol-  
vents.

OCCUPATIONS OF INSOLVENTS, 1902 TO 1906.

Occupation Groups.	Number of Breadwinners, Census, 1901.	Number of Insolvents, 1902 to 1906.	Proportion of Insolvents to every 1,000 Breadwinners.
Professional .. ..	35,224	190	5.39
Domestic .. ..	66,815	141	2.11
Commercial .. ..	79,048	897	11.35
Transport and Communication	31,516	320	10.15
Industrial .. ..	146,233	1,085	7.42
Primary Producers ..	165,147	571	3.46
Total .. ..	523,983*	3,204	6.11

\* Exclusive of 10,066 persons of independent means.

As might be expected, fewer breadwinners of the domestic and primary producing classes become insolvent than those of other classes, in proportion to their numbers in the community, whilst a greater proportion of the commercial than any other class find it necessary to file their schedules or compound with their creditors.

The following figures show the results for each of the five years, 1902 to 1906:—

Occupation Groups.	Number of Insolvents during—				
	1902.	1903.	1904.	1905.	1906.
Professional .. ..	43	35	29	43	40
Domestic .. ..	40	26	24	30	21
Commercial .. ..	176	186	175	172	188
Transport and Communication	69	71	44	55	81
Industrial .. ..	172	201	210	272	230
Primary Producers ..	87	134	114	131	105
Indefinite .. ..	25	46	30	41	27
Total .. ..	612	699	626	744	692

## DIVORCE.

Divorce, &amp;c.

Under the Divorce and Matrimonial Causes Act, passed in 1861, a petition might be presented to the Supreme Court (a) by a husband praying that his marriage might be dissolved, on the ground that his wife had, since the celebration thereof, been guilty of adultery; (b) by a wife praying that her marriage might be dissolved on the ground that since the celebration thereof, her husband had been guilty of incestuous adultery, or of bigamy with adultery, or of rape, or of sodomy, or bestiality, or of adultery, coupled with cruelty, or of adultery, coupled with desertion without reasonable excuse for two years.

Judicial separation was obtainable either by husband or wife on the ground of adultery, or cruelty, or of desertion, without cause for a period of two years.

*The Divorce Act 1889* extended the grounds upon which divorces might be granted, those added being as follow:—

- (a) That the respondent has, without just cause or excuse, wilfully deserted the petitioner, and, without any such cause or excuse, left him or her continuously so deserted during three years and upwards.
- (b) That the respondent has, during three years and upwards, been an habitual drunkard, and either habitually left his wife without the means of support, or habitually been guilty of cruelty towards her, or, being the petitioner's wife, has for a like period been an habitual drunkard and habitually neglected her domestic duties or rendered herself unfit to discharge them.
- (c) That at the time of the presentation of the petition the respondent has been imprisoned for a period of not less than three years and is still in prison under a commuted sentence for a capital crime, or under sentence to penal servitude for seven years or upwards, or, being a husband, has within five years undergone frequent convictions, and been sentenced in the aggregate to imprisonment for three years or upwards and left his wife habitually without means of support.
- (d) That within one year previously the respondent has been convicted of having attempted to murder the petitioner, or of having assaulted him or her with intent to inflict grievous bodily harm, or on the ground that the respondent has repeatedly during that period assaulted and cruelly beaten the petitioner.
- (e) That the respondent, being a husband, has since the celebration of his marriage and the date of this Act been guilty of adultery in the conjugal residence, or coupled with circumstances or conduct of aggravation or of a repeated act of adultery.

The Act further provides for simplifying and cheapening the mode of procedure, for the hearing and trying of suits in private at the discretion of the court, for prohibiting the publication of evidence, for the intervention of the Attorney-General where collusion is suspected, and for the abolition of applications or decrees for the restoration

of conjugal rights. The Act can only be taken advantage of by persons domiciled in the State for at least two years. The number of petitions and decrees for dissolution of marriage and judicial separation during the last five years were as follow :—

**DIVORCES AND JUDICIAL SEPARATIONS: RETURN FOR FIVE YEARS.**

Year.			Petitions for—		Decrees for—	
			Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.
1902	...	...	157	...	109	...
1903	...	...	199	1	101	...
1904	...	...	175	3	140	1
1905	...	...	180	3	128	1
1906	...	...	165	4	119	2

Since jurisdiction was first conferred upon the Supreme Court of Victoria in matters matrimonial in 1861, 1,977 decrees for dissolution of marriage, and 89 decrees for judicial separation have been granted. Of these, 1,629 and 18 respectively were granted since 1890; that is, during the 30 years ended 1890 only 348 decrees for dissolution of marriage were issued, and 71 for judicial separation, or an average per annum of about twelve of the former and two of the latter; whereas, since the Divorce Act of 1889 received the Royal Assent in 1890 no less than 102 decrees per annum for dissolution of marriage were granted, but the decrees for judicial separation have decreased to about one per annum.

The following were the petitions and decrees for divorce in the Australian States and New Zealand during 1905, also the divorces per 10,000 married couples living :—

Divorce in Australia and New Zealand.

**DIVORCES IN AUSTRALIAN STATES AND NEW ZEALAND, 1905.**

State.			Petitions for—		Decrees for—		Divorces per 10,000 Married Couples.
			Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.	
Victoria	...	...	180	3	128	1	7.15
New South Wales	...	...	298	38	170	15	9.03
Queensland	...	...	12	3	4	1	.69
South Australia	...	...	11	...	6	...	1.09
Western Australia	...	...	33	2	11	1	4.05
Tasmania	...	...	9	...	2	...	.78
New Zealand	...	...	182	1	126	...	10.63

The grounds of divorce are now substantially the same in Victoria and New South Wales, and were extended in New Zealand in 1898. The extension of the grounds upon which divorce may be obtained has had in New South Wales and New Zealand, as in Victoria, the effect of greatly increasing the number of petitions and decrees.

## LOTTERIES, GAMING AND BETTING ACT.

*Lotteries,  
Gaming,  
and Betting  
Act 1906.*

Abuses having sprung up with regard to totalizators, betting clubs, and street betting, which the existing law had proved inadequate to effectively deal with, an amending Act was passed in the last session of the State Parliament. This measure, Act No. 2,055, which also regulates the procedure of racing clubs, has already had a good effect, and its principal provisions are as follow :—

### LOTTERIES.

It is unlawful to print, publish, or exhibit in any newspaper or on any placard any information relating to an illegal lottery, managed in Victoria or elsewhere, or to print any ticket, chance, or share in any illegal lottery, or to sell, circulate, or exhibit any newspaper containing any information concerning such. To buy or sell an illegal lottery ticket is an offence, and placards and notices referring thereto are prohibited. Parcels must not be forwarded to promoters of illegal lotteries.

It is not necessary in order to secure a conviction to prove that Chinese lottery tickets referred to any particular lottery, or that any lottery has been or will be drawn. All lottery houses are declared to be common gaming houses.

### GAMING.

A "place" for gaming is defined to be any place whether within a building or not, either upon land or water, and whether private property or otherwise. The police may arrest without warrant any person found gaming in the street or in a public place. "Two-up," or any similar game, and hazard, are declared unlawful games, and all betting houses or rooms used principally for the purpose of enabling persons to bet are deemed common gaming houses.

Betting on a licensed racecourse during the holding of a race meeting is not a contravention of the Act.

Every person found in a common gaming house without lawful excuse is liable on conviction to a penalty of £5, and every person who acts or behaves as master or mistress of any house or office used for gaming is considered to be the occupier thereof, whether he or she is or is not the real owner or occupier. The maximum penalty on persons exhibiting placards or advertising betting houses is increased from £30 to £100, and in cases where imprisonment may be awarded the maximum term is increased from two to six months.

Newspapers are not allowed to publish information regarding betting prior to any intended horse race, or any advertisement from any club or association containing such particulars. Advertising by tipsters and selling tips are offences, but a newspaper may publish a forecast of the probable result of any race provided it is not by way of advertisement or for valuable consideration. Betting placards and notices are not to be posted anywhere.

Section 57 of the *Police Offences Act* 1890 is amended, so that all persons found in a common gaming house may be arrested, searched, and brought before the court, together with all money found upon their persons or in the premises.



The penalty on an owner or keeper of a gaming house for a first offence is £100 or not more than three months' imprisonment; for a second offence, £200 or not more than six months' imprisonment; and for any subsequent offence imprisonment for not more than twelve months.

*Lotteries,  
Gaming,  
and Betting  
Act 1906.*

#### TOTALIZATORS.

Any house or place where a totalizator is used or conducted is declared to be a common gaming house, and no person is allowed to act as agent for a totalizator. Laying totalizator odds or dealing in these tickets is unlawful. Hiring or lending any contrivance or premises for the purposes of gaming, and the wearing of disguises in or about gaming houses are offences.

#### COMMON GAMING HOUSES.

Any building or place where any unlawful game is carried on is to be deemed a common gaming house, notwithstanding that it is open only for the use of subscribers or members. Every owner and occupier of such house is guilty of an offence, unless proved ignorant of the use to which the premises were being put. The proprietor or occupier of any building or land used as a means of access or exit is also guilty of an offence.

Power is given to the owner of any premises or land who suspects that such are being used as a common gaming house (or as a means of access to or exit from) to take proceedings to determine the tenancy, the same as if it had expired by effluxion of time. The notice may be served personally on the occupier, but if he cannot be found, service may be effected by posting a copy of the notice on a conspicuous part of the premises. This notice may be cancelled by the Supreme Court on application by the occupier, and on proof that he has not allowed the house or place to be used for the purpose stated.

On the affidavit of an officer of police, showing reasonable grounds for suspecting that gambling is being carried on in any house or place, the Supreme Court may declare that it is a common gaming house. This declaration may be rescinded by the Supreme Court subject to restrictions, including the giving of security that it will not be used again for this purpose, on application by the owner, occupier, or by an officer of police. Publication of notice of declaration, and of rescission, must be made in the *Government Gazette*. On the notice of declaration being made, an officer of police must notify the same on two days in a newspaper circulating in the neighbourhood, and also cause the notice to be served on the owner or occupier either personally, or if this cannot be done promptly, by affixing a copy of it at or near the entrance to the premises. Any person covering, removing, defacing, or destroying this notice may on conviction be fined £200, or be sentenced to six months' imprisonment; but the fact that it has been so dealt with will be no answer to any proceedings that may be taken.

*Lotteries,  
Gaming,  
and Betting  
Act 1906.*

After publication of this notice any person found in, entering, or leaving these premises may without warrant be arrested by any member of the police force, and unless he can prove that he was ignorant of the declaration or had some lawful purpose in view, shall be deemed guilty of an offence. No business of any kind is allowed to be carried on in respect to any place against which the declaration is in force. In the case of convicted persons frequenting declared gaming houses the penalty is not less than £5 nor more than £25, or imprisonment for any term not less than fourteen days or more than twelve months. Penalties are provided against both owner and occupier if the premises are used in contravention of the Act.

Whilst the declaration is in force, the police may at any time enter any land or building, break open doors and windows, seize any instruments of gaming or betting, money, or securities found therein, and arrest, search, and bring before a Court of Petty Sessions all persons found on the premises. Any person obstructing the police, or soliciting others to do so, is liable to a penalty of not less than £5 nor more than £50, or to imprisonment for a term of not less than seven days or more than three months.

#### PREMISES ADJOINING GAMING HOUSES.

Section 49 of the Act provides a penalty for permitting premises to be used as a means of access to or exit from any common gaming house. If there is reason to suspect that any person permits his premises to be so used, a special warrant may be obtained, authorizing any constable or peace officer to enter (whether by breaking open doors or otherwise), or to pass through, from, over and along such suspected place, seize all tables and instruments of gaming, and all money and securities, and arrest all persons found in, entering or leaving the premises, who may be fined not less than £1 or more than £5.

#### STREET BETTING.

The penalties for offences under the *Street Betting Suppression Act 1896* are altered by this Act, and are now as follow:—For a first offence, a fine of not less than £20 nor more than £100, or imprisonment for not less than fourteen days or more than three months; for a second offence, not less than £100 nor more than £200 or imprisonment for not less than three months or more than six months; and for any subsequent offence, imprisonment for not less than six months or more than twelve months.

The word "thoroughfare" is to be taken to include any land, house, building, or premises along which the public pass from one street to another, whether by the permission or sufferance of the owner or occupier, and whether such passage is or is not at all times open or available to the public.

The fact that an infant making a wager or bet does so on behalf of another person, does not exempt the person making the wager with the infant from punishment.

## RESTRICTIONS ON RACE MEETINGS.

All race-courses must be licensed, and no race meeting may be held except on a licensed race-course between the hours of ten o'clock before noon and seven o'clock in the evening. *Lotteries, Gaming, and Betting Act 1906.*

No race meeting for horse races is to be held on any race-course within 20 miles from the General Post Office, Melbourne, on more days than that allowed in the licence, but not to exceed sixteen days in any one year, and on any other race-course on more than twelve days in a year.

No race meeting for pony races is to be held on any race-course within 20 miles from the General Post Office, Melbourne, on more than sixteen days in any one year, or if there are more than three such race-courses, the number of days for each race-course is not to exceed the quotient (omitting fractional parts) obtained by dividing the number 48 by the number of race-courses. If the race-course is outside the 20 miles Metropolitan radius, the number of days in any one year for pony race meetings is not to exceed four.

A limit of twenty meetings is imposed for trotting races held on any race-course within 20 miles of the General Post Office.

At any race meeting for horses, there may also be held on each day not more than two pony races or two trotting races, or more than one pony race and one trotting race.

At any race meeting for ponies there may also be held on each day not more than two horse races or two trotting races, or more than one horse race and one trotting race.

A pony race is defined to mean a race held under conditions limiting the height of any horse eligible to compete at 14 hands 2 inches, and a trotting race one in which each horse or pony competing moves at a gait generally known as pacing or trotting.

The number of days allowed in any licence for horse racing on any race-course must not exceed the number of days on which race meetings were held during the year ended 31st July, 1906, or if no races were run on a race-course during such year, the number of days allowed is not to exceed two.

With each application for a first licence for a race-course, the applicant must furnish the Chief Secretary with a map or plan showing the running course and the length thereof, and with any information regarding the accommodation afforded to the public required by the Regulations.

If any race meeting is held in contravention of the Act, the owner or trustees of the race-course, and the club, association, or person holding the meeting, and any person acting as steward, starter, or judge, are liable to a penalty not exceeding £500.

The Chief Secretary may give permission to hold a race meeting not within 30 miles of the General Post Office notwithstanding anything contained in the Act, or a point-to-point steeplechase, on any land whatsoever, or a meeting for any charitable or special purpose, on any race-course, the number of these latter meetings not to exceed three for all race-courses in any one year.

*Lotteries,  
Gaming,  
and Betting  
Act 1906.*

The race-course licences, which are to be issued by the Chief Secretary, are to be drawn up in such form and on such terms and conditions as the Governor in Council may approve, and are to remain in force for twelve months from the date of issue. For each licence a fee of £1 is chargeable, and also an annual sum equal to 3 per cent. of the gross revenue from all sources received or derived from such race-course during the year ended the last day of July immediately preceding the year for which a licence is required. Where the gross revenue is less than £1,500, but more than £600, the annual sum payable is 2 per cent. thereof, and where the gross revenue is £600 or less, no percentage is to be charged. If the gross revenue is not ascertainable, or does not in the opinion of the Chief Secretary appear to be correctly stated, he is empowered to declare the annual sum to be paid for the licence.

Where it is found impossible or impracticable to hold any appointed meeting on any particular course, or where a racing, polo, or hunt club in existence on 1st August, 1906, which held race meetings for horses during the twelve months preceding this date, has no race-course in its own control, the Governor in Council may authorize the holding of race meetings on any specified race-course irrespective of the number of days on which in the licence race meetings are allowed to be held thereon.

The number of licences for race-courses situate within 40 miles of the General Post Office is not to exceed the number of race-courses so situate and in use for race meetings for the twelve months ended 1st August, 1906.

The number of licences for race-courses situate within 20 miles of the principal post office at Ballarat or Bendigo is not to exceed the number of race-courses so situate and in use for race meetings within the same twelve months.

#### MISCELLANEOUS.

Power is given to the committee or managing body of any racing club, with the approval of the Governor-in Council, to make, alter, or rescind rules and regulations for—

- (a) The permitting of persons to carry on any business or vocation on any part of the race-course, and prescribing the terms and conditions under which they may do so. Provided that if the business be that of a bookmaker it must be carried on in a place specially set apart for that purpose, and provided also that if such approved person bet with youths apparently under the age of 21 years, or with females, he is guilty of an offence.
- (b) The preventing of persons not so approved, or of persons offending against the rules or regulations, from carrying on business on the race-course and the removing of such persons therefrom.

No member of the police force or person acting under instructions from any police officer, is to be deemed an offender or accomplice in the commission of any offence against the Act.

When any premises or place is entered, the discovery therein or upon the person of any of those entering or leaving the same, of any instrument of gaming is *prima facie* evidence that the place is used unlawfully. *Lotteries, Gaming, and Betting Act 1906.*

A married woman guilty of a contravention of any of the provisions of the Act is liable to punishment in all respects as if she were a *feme sole*.

If any person who has laid any information or complaint declines or neglects to prosecute, the court may authorize some other person to do so, or to take fresh proceedings in respect to the offence.

All prosecutions for offences under the Act are to be heard and determined by a Court of Petty Sessions, consisting of one or more Justices, one of whom must be a Police Magistrate. All tables and instruments of gaming, and all money and securities for money lawfully seized, may be forfeited to the Crown.

Every person who contravenes any of the provisions of this Act is guilty of an offence, and if no punishment is expressly provided, such person shall be liable for a first offence to a penalty of not less than £5 or more than £100, or to imprisonment for not less than seven days or more than three months; for a second offence, to a penalty of not less than £25 or more than £200, or to imprisonment for not less than one month or more than six months; and for any subsequent offence to imprisonment for any term not less than three months or more than twelve months.

## CRIME.

### ADMINISTRATION OF THE CRIMINAL LAW.

In nearly all cases where the criminal law has been broken, the alleged offender is brought at the very first opportunity before a Court of Petty Sessions, before two honorary justices or a police magistrate, or both, or in some cases a single magistrate, who, if the matter is one which comes within their summary jurisdiction, dispose of the case summarily. If the offence is an indictable one, the magistrates hold a preliminary investigation and, if satisfied that a *prima facie* case is made out by the prosecution, the accused is committed for trial to a superior court. There are two superior courts with criminal jurisdiction, viz., the Supreme Court, and a Court of General Sessions, which are held at various places throughout the State. The latter court may deal with all cases of an indictable nature except such as are expressly excluded from its jurisdiction, viz., ten of the most serious crimes. A person may be brought before magistrates by three modes of procedure, viz., by an arrest by a police officer on warrant issued on a sworn information, or in a limited number of cases without warrant if the offence is witnessed by the arresting constable; and by a summons. If at a coroner's inquest a verdict is returned for murder or manslaughter, the accused person is sent for trial to the Supreme Court without any

investigation before magistrates. The Attorney-General or Solicitor-General has also the power of presenting any person for trial before a superior court without the necessity of any preliminary magisterial hearing; and upon the application of any person, properly supported by affidavit, a grand jury may be summoned, on the order of the Full Court, if the affidavit discloses that an indictable offence has been committed by a corporate body; or that such an offence has been committed by any person, and that some justice has refused to commit such person for trial; or in the case of a committal that no presentment has been made at the court at which the trial would in due course have taken place. The grand jury consists of 23 men, who investigate the charge, and if they are of opinion that a *prima facie* case has been made out, the case is sent for trial. The cases which are presented under these latter forms of procedure are, however, very rare.

#### POLICE PROTECTION.

Strength of  
police force  
in Australia  
and New  
Zealand.

The following figures denote the numerical strength of the police force in Australia and New Zealand, and the proportion of same to population on the 31st December, 1906:—

#### POLICE IN AUSTRALIAN STATES AND NEW ZEALAND, 1906.

State.	Number.			Proportion per 10,000 of Population.
	Metropolitan.	Country.	Total.	
Victoria .. ..	847	671	1,518	12·26
New South Wales .. ..	1,035	1,307	2,342	15·34
Queensland .. ..	276	676	952	17·79
South Australia .. ..	227	149	376	9·80
Western Australia .. ..	131	373	504	19·26
Tasmania .. ..	72	157	229	12·71
Total Australia .. ..	2,588	3,333	5,921	14·35
New Zealand .. ..	85	614	699	7·69

It will be seen that Western Australia has the greatest police protection in proportion to population, Queensland and New South Wales next, New Zealand having by far the lowest. Of course, where the population is scattered, it is natural that more police in proportion to population will be required than in a densely populated centre where the area requiring protection is comparatively small.

#### CHARGES BEFORE MAGISTRATES.

Offences  
reported  
and unde-  
tected  
crimes.

Of the offenders who are reported as having committed offences, generally about 50 per cent. are arrested, 40 per cent. are summoned, whilst about 10 per cent. have not been arrested at the end of the year in which the offence was reported, but in 1906 the rates were

46, 46, and 8 per cent. respectively. The following are particulars for the last five years:—

SUMMONSES, ARRESTS, AND UNDETECTED CRIMES: RETURN FOR FIVE YEARS.

Offences in respect to which persons were—	1902	1903.	1904.	1905.	1906.
Brought before magistrates on summons ...	20,478	24,207	23 614	22,290	25 430
Arrested by the police ...	26,402	24,268	26,036	26,055	25,400
Not arrested ...	6,153	6,593	5,533	5,144	4,540
Total ...	53,033	55,068	55,183	53,489	55,370

In this table each separate charge against a person is considered as a separate offence; for instance, a charge of drunk and disorderly, of resisting the police, of riotous conduct, and of tearing uniform would appear as four separate offences, although the occasion is the same. Of the offences in respect of which persons were not arrested, 90 per cent. were offences against property, 7 per cent. were offences against the person, and the balance, 3 per cent., were of a miscellaneous character.

The following are particulars of cases brought before magistrates, from which it will be seen that about 75 per cent. are generally summarily convicted, 24 per cent. discharged, whilst 1 per cent. are sent for trial by superior courts:—

Offences dealt with by magistrates.

ARRESTS AND SUMMONSES DEALT WITH BY MAGISTRATES: RETURN FOR FIVE YEARS.

Number of Persons.	1902.	1903.	1904.	1905.	1906.
Arrested or summoned ...	45,198	46 682	47,736	46,069	49,061
Discharged by magistrates ...	11,096	10,020	11,318	11,283	10,737
Summarily convicted or dealt with ...	33,461	36,031	35,854	34 134	37,740
Committed for trial ...	641	631	564	652	584

In regard to persons arrested included in these figures, minor charges are excluded, and only that charge which throughout the hearing of the case has been most prominent is taken account of; but in regard to summons cases, the unit is each separate charge or case.

The sexes of persons brought up on summons are not recorded; but about 20 per cent. of the arrests are generally found to be

Males and females arrested.

females. The males and females arrested, and the disposal of the cases, in 1906, were as follow:—

#### MALES AND FEMALES ARRESTED, 1906.

Disposal.	Arrests.		
	Males.	Females.	Total.
Summarily Convicted .. ..	12,836	3,627	16,463
Discharged by Magistrates .. ..	5,514	1,126	6,640
Committed for Trial .. ..	463	65	528
Total .. ..	18,813	4,818	23,631

The arrests during the previous five years numbered 29,039 in 1901, 24,720 in 1902, 22,475 in 1903, 24,122 in 1904, and 23,779 in 1905.

Drunken-  
ness, 1902  
to 1906.

The following are the number, and proportion per 1,000 of the population, of persons arrested and summoned for drunkenness during the last five years:—

#### PERSONS ARRESTED AND SUMMONED FOR DRUNKENNESS: RETURN FOR FIVE YEARS.

Year.	Number.	Proportion per 1,000 of Population.
1902 .. ..	14,540	12·00
1903 .. ..	12,630	10·45
1904 .. ..	13,881	11·50
1905 .. ..	14,458	11·92
1906 .. ..	14,029	11·43

Drunken-  
ness—Com-  
parison  
with pre-  
vious years.

The amount of drunkenness, as evidenced by arrests, being taken as 100 in 1874-8, the numbers for the subsequent periods will show the increase or decrease by comparison:—

Period.	Index Number.
1874-8	100
Average 5 years	
1879-85 .. 7 ..	88
1886-92 .. 7 ..	106
1893-97 .. 5 ..	65
1898-1902 .. 5 ..	83
1903 ... ..	73
1904 ... ..	79
1905 ... ..	81
1906 ... ..	78

A very considerable decrease in drunkenness is shown during the five years 1893-7, which was a period of general depression. Since 1897, however, the arrests for drunkenness have assumed something nearer their normal proportions.



DECREASE IN CRIME.

It is difficult to make a proper comparison of crime in recent years with former periods on account of the differences in the sex and age constitution of the people at different periods. The bulk of arrests consists of males from 20 to 50 years of age. The proportion of women and children arrested is comparatively very small; so that it is natural that, at a period like the present, when the percentage of males at those ages is much less than ten years ago, the proportion of arrests per 10,000 of the population is not a true index of crime, and makes the decrease appear greater than it really is. It is therefore necessary to divide the sexes of arrested persons, and each sex into age groups, and to show the number of charges laid against males and females at various ages between 10 and 60 per 10,000 alive at each age, as shown by the census. The following are the particulars on this basis at the last four census years:—

Decrease of  
crime in  
Victoria

CHARGES PER 10,000 OF THE POPULATION AT EACH AGE AGAINST PERSONS ARRESTED, 1871, 1881, 1891, AND 1901.

Ages.				1871.	1881.	1891.	1901.
				Males.			
10 to 15 years	..	..	..	104	111	96	51
15 to 20 years	..	..	..	338	335	305	209
20 to 25 years	..	..	..	773	720	688	570
25 to 30 years	..	..	..	834	823	777	712
30 to 40 years	..	..	..	771	865	869	700
40 to 50 years	..	..	..	726	721	1,053	873
50 to 60 years	..	..	..	830	623	760	804
60 years and over	..	..	..	756	661	586	443
				Females.			
10 to 15 years	..	..	..	37	26	15	15
15 to 20 years	..	..	..	80	90	50	28
20 to 25 years	..	..	..	141	178	139	116
25 to 30 years	..	..	..	232	219	171	172
30 to 40 years	..	..	..	303	290	189	168
40 to 50 years	..	..	..	272	322	238	166
50 to 60 years	..	..	..	245	223	215	116
60 years and over	..	..	..	186	166	144	110

During the years 1871, 1881, and 1891, the tabulations were based on each separate charge against arrested persons, and in 1901 on each separate arrest, only the most prominent charge being counted in the latter year. The percentage by which the total charges exceeded the arrests during 1901, has, however, been added on to the figures for each age group for the purpose of comparison. A study of the figures shows that the proportion of offences has on the whole fallen off in 1901 as compared with the three previous periods. In regard to males, there has been a falling off in 1901 as compared with the three previous periods at all ages except 40 to 50, in which

the proportions were higher than in 1881 and 1871, and 50 to 60, in which group the proportion of charges was in excess of that in 1891 and 1881. The falling off is more marked amongst the very old people (60 years and over) and the young people under 20, than at other ages. The ages at which the largest proportion of charges was made were 40 to 50 years in 1901 and 1891, 30 to 40 years in 1881, and 25 to 30 and 50 to 60 years in 1871. In regard to females there has been a very decided falling off at all ages, the ages at which the largest proportion of charges were made being 25 to 50 in 1901, 40 to 60 in 1891, and 30 to 50 in 1881 and 1871.

#### CRIME AND DRUNKENNESS IN AUSTRALASIA.

Offences and drunkenness in Australia and New Zealand.

A proper comparison of crime cannot be made between different States or countries unless several considerations are taken into account. The first point necessary is that the criminal law, in the places compared, should be substantially the same; the second, that it should be administered with equal strictness; and the third, that proper allowances are made for differences in the age and sex constitution of the population. As previously pointed out, the latter consideration is one that must also be taken into account in comparing crime in recent years with previous periods when the population was very differently constituted in regard to sex and age. The returns of the States and New Zealand do not afford sufficient data to allow for these differences; but in regard to the first two points above mentioned the basis and main provisions of the criminal law are the same in each State; and it must be presumed, in the absence of any evidence to the contrary, that the law is administered with equal strictness in each State. The following table shows, for a series of years, the number of charges against persons arrested or summoned for the only classes of offences for which complete comparisons can be made:—

#### CRIME IN AUSTRALIAN STATES AND NEW ZEALAND, 1890, 1895, AND 1901 TO 1905.

State.	Year.	Number of Charges against Persons Arrested or Summoned for—				
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences	Total.
Victoria	1890	4,091	5,036	18,501	37,156	64,784
	1895	2,500	4,068	11,143	22,616	40,327
	1901	2,152	3,521	17,360	29,054	52,087
	1902	2,121	3,882	14,540	26,337	46,880
	1903	1,936	3,968	12,630	29,941	48,475
	1904	1,846	3,257	13,881	30,666	49,650
	1905	1,932	4,032	14,458	27,923	48,345
New South Wales	1890	8,729	7,616	18,654	31,088	66,087
	1895	4,459	6,153	18,379	35,987	64,978
	1901	4,336	6,437	21,123	32,729	64,625
	1902	4,223	7,292	21,577	33,608	66,700
	1903	3,869	7,368	21,837	35,032	68,106
	1904	3,658	6,829	20,440	35,110	66,037
	1905	3,684	6,553	24,154	32,975	67,366

CRIME IN AUSTRALIAN STATES AND NEW ZEALAND, 1890, 1895,  
AND 1901 TO 1905—*continued.*

State.	Year.	Number of Charges against Persons Arrested or Summoned for—				
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.	Total.
Queensland	1890	2,713	2,487	6,332	7,464	18,996
	1895	2,073	2,085	4,993	8,522	17,673
	1901	1,846	2,547	9,791	9,736	23,920
	1902	1,908	2,375	8,123	8,709	21,115
	1903	1,504	2,206	7,190	8,112	19,012
	1904	1,641	1,989	6,854	7,649	18,133
	1905	1,737	2,101	6,638	7,467	17,943
South Australia	1890	520	501	2,382	3,596	6,999
	1895	411	677	1,763	2,128	4,979
	1901	260	528	2,047	3,392	6,227
	1902	252	509	2,431	3,416	6,608
	1903	338	664	2,340	3,088	6,430
	1904	269	480	2,387	2,879	6,015
	1905	248	463	2,362	2,911	5,984
Western Australia	1890	371	536	1,181	2,602	4,690
	1895	654	1,080	2,154	4,489	8,377
	1901	1,040	1,593	3,348	9,352	15,333
	1902	845	1,889	3,311	10,398	16,443
	1903	797	2,146	3,572	10,690	17,205
	1904	729	1,423	3,597	9,191	14,940
	1905	644	1,466	3,509	9,033	14,646
Tasmania	1890	483	619	1,151	4,158	6,411
	1895	353	710	463	3,240	4,766
	1901	341	647	743	3,768	5,499
	1902	248	618	636	4,669	6,171
	1903	284	553	526	4,612	5,975
	1904	245	659	580	4,095	5,579
	1905	229	754	539	5,568	7,090
Total Australian States	1890	16,907	16,795	48,201	86,064	167,967
	1895	10,450	14,773	38,895	76,982	141,100
	1901	9,975	15,273	54,412	88,031	167,691
	1902	9,597	16,565	50,618	87,137	163,917
	1903	8,728	16,905	48,095	91,475	165,203
	1904	8,388	14,637	47,739	89,590	160,354
	1905	8,474	15,363	51,660	85,877	161,374
New Zealand	1890	1,516	2,297	5,830	8,604	18,247
	1895	1,281	2,557	5,104	8,639	17,581
	1901	1,586	3,048	8,086	13,105	25,825
	1902	1,114	3,083	8,311	15,568	28,076
	1903	1,303	3,138	8,872	17,440	30,753
	1904	1,504	2,884	9,626	16,920	30,934
	1905	1,509	2,943	8,790	17,499	30,741

The following table shows the number of charges laid against persons arrested or summoned per 1,000 of the population in the Australian States and New Zealand during a series of years:—

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1890, 1895, AND 1901 TO 1905.

State.	Year.	Charges against Persons Arrested or Summoned per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.
Victoria	1890	3·66	4·50	16·54	33·22
	1895	2·12	3·45	9·44	19·17
	1901	1·79	2·93	14·43	24·15
	1902	1·75	3·21	12·00	21·75
	1903	1·60	3·28	10·45	24·77
	1904	1·53	2·70	11·50	25·40
	1905	1·59	3·33	11·92	23·03
New South Wales	1890	7·92	6·91	16·93	28·21
	1895	3·53	4·87	14·53	28·46
	1901	3·16	4·69	15·39	23·85
	1902	3·03	5·23	15·49	24·12
	1903	2·72	5·19	15·39	24·70
	1904	2·54	4·74	14·17	24·35
	1905	2·50	4·44	16·39	22·37
Queensland	1890	7·03	6·45	16·41	19·35
	1895	4·58	4·60	11·03	18·82
	1901	3·65	5·04	19·36	19·25
	1902	3·71	4·62	15·82	16·96
	1903	2·93	4·30	14·02	15·82
	1904	3·16	3·83	13·20	14·73
	1905	3·30	4·60	12·63	14·20
South Australia	1890	1·64	1·60	7·53	11·35
	1895	1·18	1·94	5·06	6·11
	1901	·72	1·46	5·65	9·37
	1902	·69	1·40	6·68	9·39
	1903	·92	1·81	6·39	8·42
	1904	·73	1·30	6·57	7·79
	1905	·66	1·24	6·30	7·77
Western Australia	1890	8·28	11·97	26·37	58·09
	1895	7·06	11·66	23·25	48·45
	1901	5·51	8·45	17·75	49·59
	1902	4·08	9·12	15·98	50·20
	1903	3·60	9·70	16·14	48·31
	1904	3·08	6·02	15·21	38·86
	1905	2·57	5·84	14·02	36·10
Tasmania	1890	3·36	4·31	8·01	28·93
	1895	2·22	4·46	2·91	20·36
	1901	1·96	3·73	4·28	21·70
	1902	1·41	3·52	3·48	26·72
	1903	1·60	3·11	2·96	25·98
	1904	1·37	3·69	3·24	22·90
	1905	1·28	4·20	3·01	31·06

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1890, 1895, AND 1901 TO 1905—*continued*.

State.	Year.	Charges against Persons Arrested or Summoned per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.
Australian States	1890	5·43	5·39	15·48	27·64
	1895	2·98	4·22	11·11	21·99
	1901	2·62	4·01	14·30	23·13
	1902	2·49	4·29	13·10	22·57
	1903	2·23	4·33	12·31	23·42
	1904	2·12	3·70	12·07	22·66
	1905	2·11	3·82	12·86	21·38
New Zealand	1890	2·44	3·70	9·39	13·86
	1895	1·85	3·71	7·37	12·48
	1901	2·04	3·92	10·39	16·85
	1902	1·40	3·86	10·42	19·51
	1903	1·59	3·83	10·82	21·26
	1904	1·78	3·41	11·39	20·02
	1905	1·73	3·38	10·10	20·11

Almost all serious crimes are either offences against the person or offences against property, the only serious crimes included under "Other Offences" being forgery, counterfeiting, and perjury, which are very few in number, being in Victoria in 1905, only 62 out of a total of 27,923 included under that category. A large proportion of these cases are merely breaches of various Acts of Parliament, by-laws, &c., which indicate no degree of criminal instinct or intent on the part of the person charged. They also include a large number of offences against good order, including insulting behaviour, vagrancy, &c. Comparison between the States of "Other Offences" is not of much value, on account of the differences in the laws of the States in these matters, and on account of the large proportion of these offences which are not crimes, but mere breaches of various Acts and by-laws.

Offences against the person set out in the first column of the preceding table, consists mainly of assault, but include murder, manslaughter, shooting, wounding, and all crimes of lust. A glance at the figures shows that since 1890 there has been a very large decline in these crimes in every State in proportion to population. South Australia easily holds the pride of place, then comes Tasmania, closely followed by Victoria and New Zealand, then New South Wales, Western Australia, and Queensland in that order.

Offences  
against the  
person.

Offences  
against  
property.

A decrease, as compared with 1890, will also be noticed in the proportion of offences against property in all the Australian States and New Zealand. The decrease in respect of these offences is, however, not nearly so marked as that in respect of offences against the person. Offences against property are far less rife in South Australia than in any other State or New Zealand, Victoria coming next, followed by New Zealand, Queensland, Tasmania, and New South Wales, in that order. These crimes are far more rife in Western Australia than in any other State, although the proportion in excess would be considerably reduced if allowance were made for the large proportion of adult males in the population of that State. Offences against property consist principally of larceny and similar offences; but include burglary, robbery, &c., cattle stealing, and wilful damage to property.

Drunken-  
ness.

In every Australian State there was a decrease in drunkenness cases before magistrates in 1905, as compared with 1890; but there was an increase in New Zealand. This offence is much less frequent in Tasmania than in any other State, South Australia coming next, and then follow New Zealand, Victoria, Queensland, Western Australia, and New South Wales, in that order. If allowance were made for the large proportion of adult males in Western Australia that State would now occupy a better position than Queensland, and would be about equal to Victoria. In the latter State summons cases for drunkenness were not included previous to 1902, but the number of such cases was so small that the comparison is not appreciably affected by their omission.

Consump-  
tion of  
intoxicat-  
ing liquors.

The following table shows during five years the average yearly consumption of intoxicating liquors in the principal countries of the world, the information for foreign countries having been compiled principally from a return prepared to the order of the British House of Commons, dated 21st December, 1906:—

AVERAGE CONSUMPTION OF SPIRITS, BEER, AND WINE IN AUSTRALIA AND NEW ZEALAND AND THE PRINCIPAL BRITISH POSSESSIONS AND FOREIGN COUNTRIES.

Countries.	Yearly Average Quantity Consumed, 1901 to 1905.			Proportion per Head.		
	Spirits.	Beer.	Wine.	Spirits.	Beer.	Wine.
	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
British—						
Victoria ..	846,030	14,561,000	1,033,270	·70	12·04	·85
New South Wales ..	1,152,000	13,885,960	805,590	·81	9·76	·57
Queensland ..	419,830	5,323,890	146,320	·82	10·38	·29
South Australia ..	149,170	3,015,520	934,660	·40	8·17	2·53
Western Australia ..	325,010	5,409,620	235,320	1·49	24·74	1·08
Tasmania ..	94,470	1,623,730	29,870	·53	9·15	·17
Australia ..	2,986,510	43,818,720	3,185,030	·76	11·21	·81
New Zealand ..	619,950	7,693,590	121,170	·71	8·87	·14

**AVERAGE CONSUMPTION OF SPIRITS, BEER, AND WINE IN AUSTRALIA AND NEW ZEALAND AND THE PRINCIPAL BRITISH POSSESSIONS AND FOREIGN COUNTRIES—continued.**

Countries.	Yearly Average Quantity Consumed, 1901 to 1905.			Proportion per Head.		
	Spirits.	Beer.	Wine.	Spirits.	Beer.	Wine.
	gallons.	gallons.	gallons.	gallons.	gallons.	gallons.
<b>British—</b>						
United Kingdom	42,247,600	1,248,271,800	13,636,000	1·00	29·5	·32
Dominion of Canada	4,743,400	27,726,400	522,900	·86	5·0	·09
Cape of Good Hope	1,696,500	3,661,000	5,491,400	·69	1·5	2·3
Natal ..	380,900	1,275,000	96,480	·37	1·13	·09
Newfoundland ..	77,000	77,000	8,140	·34	·34	·03
<b>Foreign—</b>						
Russian Empire ..	131,408,000	134,534,500	..	·95	·97	..
Norway ..	1,386,000	7,796,800	..	·60	3·46	..
Sweden ..	7,638,000	65,150,800	..	1·46	12·5	..
Denmark ..	6,404,000	51,823,500	..	2·54	20·6	..
German Empire ..	90,805,000	1,538,917,600	85,360,000	1·55	26·1	1·45
Holland ..	8,083,000	..	2,006,400	1·50	..	·37
Belgium ..	9,425,000	333,449,600	7,106,000	1·35	48·0	1·02
France ..	52,980,000	309,821,600	1,199,950,000	1·36	7·9	30·7
Switzerland ..	3,322,000	47,260,400	50,872,800	·99	14·1	15·1
Portugal ..	..	..	95,704,400	..	..	18·3
Spain ..	..	..	340,445,600	..	..	18·5
Italy ..	8,558,000	5,918,000	828,696,000	·28	·18	25·1
Austria ..	55,823,000	407,189,000	107,118,000	2·07	15·2	4·0
Hungary ..	37,435,000	33,392,000	79,499,000	1·89	1·67	3·9
Bulgaria ..	506,000	1,285,000	50,463,600	·13	·33	13·2
Servia ..	..	1,628,000	6,463,600	..	·62	2·46
Roumania ..	5,795,000	1,465,000	28,124,800	·97	·24	4·5
United States ..	99,155,000	1,260,982,000	32,448,500	1·21	15·4	·40

NOTE.—Where blanks occur the information is not available.

By comparing the figures for Australia in the foregoing table with those of several other countries it will be seen that the consumption of intoxicants was proportionately less in Australia. As regards spirits, whilst the consumption in Australia was three-fourths of a gallon per head per year, in Denmark it amounted to  $2\frac{1}{2}$  gallons; in Austria to 2 gallons; in Hungary to nearly 2 gallons; in Germany, Holland, and Sweden to  $1\frac{1}{2}$  gallons; in France, Belgium, and the United States to more than a gallon; in the United Kingdom to 1 gallon; and in the Russian Empire to nearly a gallon. The greatest beer-producing countries of the world are the German Empire, the United Kingdom, and the United States, in that order; but in consumption per head of the population Belgium, with 48 gallons; United Kingdom,  $29\frac{1}{2}$  gallons; Germany, 26 gallons; and Denmark,  $20\frac{1}{2}$  gallons, are the foremost. The particulars in this table would indicate that Belgium consumes more beer than any other country in the world, but the statistics of the States composing the German Empire show that Bavaria is entitled to that distinction, with a consumption of  $54\frac{1}{2}$  gallons per head. The consumption in Würtemberg was also high, reaching 42 gallons, and in Baden about 38 gallons per head. The Australian consumption of 11 gallons does not appear to be large by comparison with these figures, Western Australia, with nearly 25 gallons per head, being the only State

Consumption of drink in various countries compared.

which approaches these countries. The chief wine-producing countries of the world—France and Italy—are also the greatest consumers, the former consuming nearly 31 gallons, and the latter 25 gallons per head. Spain, 18½ gallons; Portugal, 18 gallons; Switzerland, 15 gallons; and Bulgaria, 13 gallons, are also large consumers. The inhabitants of the British Empire are small wine-drinkers. At the Cape of Good Hope the consumption is highest, with 2½ gallons per head; Australia consumes four-fifths of a gallon per head; the United Kingdom about one-third of a gallon; and Canada one-eleventh of a gallon.

Expenditure  
by the  
people on  
intoxicat-  
ing liquor.

With the assistance of the figures in the preceding table, it is possible to estimate for Australia, with some degree of accuracy, the approximate expenditure in a year of the people on intoxicating liquors, and this is done in the following table, taking as a basis the yearly average consumption over a period of five years:—

AUSTRALASIAN DRINK BILL.—YEARLY AVERAGE, 1901 TO 1905.

State of—	Expenditure by the People on—					
	Spirits.	Beer.	Wine.	Total.		
				Amount.	Per Head.	Per Adult Individual
	£	£	£	£	£ s. d.	£ s. d.
Victoria .. ..	1,480,550	2,184,150	516,630	4,181,330	3 9 2	6 6 5
New South Wales ..	2,016,000	2,082,900	402,800	4,501,700	3 3 4	6 5 2
Queensland .. ..	734,700	798,580	73,160	1,606,440	3 2 8	6 0 6
South Australia ..	261,050	452,330	467,330	1,180,710	3 4 0	6 4 7
Western Australia ..	568,770	810,990	117,660	1,497,420	6 17 1	11 10 3
Tasmania .. ..	165,320	243,860	14,930	424,110	2 7 9	4 16 1
Australia .. ..	5,226,390	6,572,810	1,592,510	13,391,710	3 8 6	6 10 4
Colony of New Zealand	1,084,910	1,154,040	60,580	2,299,530	2 13 0	4 18 1

These figures show that the average yearly expenditure on drink in Australia during the quinquennium, 1901 to 1905, amounted to over 13 millions sterling, and including New Zealand, to over 15½ millions. In Victoria over 4 millions were spent, or £320,370 less than in New South Wales. Western Australia, according to population, stands at the head of the list with £6 17s., and this is accounted for by the large adult population resident there. Victoria and South Australia are next with £3 9s. and £3 4s. respectively per head. Tasmania is the most temperate of the Australian States, the consumption of alcoholic liquors only entailing a yearly expense of £2 7s. per head of the population, as against an average for the Commonwealth of £3 8s. In New Zealand also the expenditure is comparatively low, amounting to £2 13s. per head.

Leniency of  
magis-  
trates in  
drunken-  
ness cases  
in Victoria.

The following is a statement of the number of charges of drunkenness made against persons in each State and in New Zealand during 1905, also the number of convictions and the percentage of the latter to the former:—



PERCENTAGE OF CONVICTIONS FOR DRUNKENNESS IN AUSTRALIAN STATES AND NEW ZEALAND, 1905.

State.	Charges of Drunkenness.	Convictions.	
		Total.	Percentage of Charges.
Victoria .. ..	14,458	9,360	64·74
New South Wales .. ..	24,154	24,003	99·37
Queensland .. ..	6,638	6,592	99·31
South Australia .. ..	2,362	2,332	98·73
Western Australia .. ..	3,509	3,425	97·61
Tasmania .. ..	539	528	97·96
Australia .. ..	51,660	46,240	89·51
New Zealand .. ..	8,790	8,725	99·26
Australasia .. ..	60,450	54,965	90·93

It will be seen from the last column in the above table that the percentage of convictions in Victoria was much less than in the other States and New Zealand, nearly every case resulting in a conviction in the latter, and about two out of every three cases in the former. These figures seem to denote a comparative leniency on the part of magistrates in drunkenness cases in Victoria, but investigations show that in Victoria an offender on his first appearance is generally discharged, and also that those who have been arrested on a Saturday and detained in custody until Monday, are similarly dealt with. In some cases also, when an offender has been admitted to bail after arrest, he is discharged on putting a donation in the poor-box. In all these cases no conviction is recorded in Victoria, but in the other States a conviction is entered on the records in nearly every case, whether any punishment is inflicted or not.

A large proportion of the offences dealt with by magistrates cannot be classed as crimes properly so called, but are mere breaches of Acts of Parliament, by-laws, &c., and show no degree of criminality in the person charged. A still larger proportion consists of drunkenness and offences against good order, including vagrancy, insulting behaviour, &c. The number of arrests for serious crimes preliminarily investigated by magistrates in Victoria and New South Wales during 1905 was—

Serious crimes in Victoria and New South Wales.

SERIOUS CRIMES IN VICTORIA AND NEW SOUTH WALES DURING 1905.

Class of Crime.	Victoria.	New South Wales.
Murder and attempts, manslaughter, shooting, wounding, &c. .. ..	68	160
Robbery, burglary, &c. .. ..	190	358
Crimes of lust .. ..	85	114
Horse, sheep, and cattle stealing .. ..	48	96
Total .. ..	391	728

The total per 10,000 of the population was 4.94 in New South Wales, and 3.22 in Victoria. Multiple charges are excluded from the above figures, each separate arrest only being counted.

#### BIRTHPLACES OF ARRESTED PERSONS.

Birthplaces  
of persons  
arrested.

The following is a statement of the principal countries in which persons arrested during 1906 were born, and the proportion per 1,000 of the persons of such nationalities living in the State at the census of 1901:—

#### BIRTHPLACES OF PERSONS ARRESTED, 1906.

Birthplace.	Number.	Proportion per 1,000 of the population.
Victoria .. .. .	12,441	14.20
Other Australian States .. .. .	1,993	30.62
New Zealand .. .. .	351	38.91
England and Wales .. .. .	3,195	27.28
Scotland .. .. .	1,174	32.84
Ireland .. .. .	2,781	45.21
China .. .. .	158	25.36
Other Countries .. .. .	1,538	50.22
Total .. .. .	23,631	19.67

The proportion of Victorian arrests does not afford a proper comparison with the proportions indicated for other Australian States, Great Britain, and foreign countries. The Victorian born population includes a large proportion of women and children, whereas there is so small a number of children in the State born in places outside Victoria, that the arrests of persons born outside the State may be regarded almost entirely as those of adults, and mostly of adult males. If the proportion of adult males arrested in Victoria be taken, it would in all probability approximate to those of the other Australian States.

#### EDUCATION OF ARRESTED PERSONS.

Age and  
degree of  
instruction.

The ages of those arrested in 1906, and the degree of instruction possessed by them, are shown in the following table:—

#### AGE AND DEGREE OF INSTRUCTION OF PERSONS ARRESTED, 1906.

Ages.	Superior Education.	Read and Write Well.	Read Only, or Read and Write Imperfectly.	Unable to Read.	Total.
Under 10 years ..	..	..	79	540	619
10 to 15 ..	..	..	335	41	376
15 to 20 ..	..	23	1,003	38	1,064
20 to 25 ..	..	66	2,433	61	2,560
25 to 30 ..	2	88	2,888	90	3,068
30 to 40 ..	7	171	5,668	158	6,004
40 to 50 ..	14	165	5,048	200	5,427
50 to 60 ..	23	73	2,506	156	2,758
60 and upwards ..	1	47	1,557	150	1,755
Total ..	47	633	21,517	1,434	23,631

Three per cent. of persons arrested during 1906 were possessed of superior education, or could read and write well, as against 4 per cent. in 1900, 10 per cent. in 1890, and 26 per cent. in 1880. The returns of those under fifteen years of age arrested by the police consist mainly of neglected and deserted children. Of the 995 children under fifteen arrested during 1906, not one could read and write well; and 581, or 58 per cent., were unable to read.

Education  
of persons  
arrested.

#### OFFENCES HEARD BY MAGISTRATES.

Prior to 1902, information relating to various offences has been incomplete on account of there being no returns as to summons cases other than "against the person," "against property," and "other offences." As will be seen below, there is a large proportion of assaults and offences against good order initiated by summons, and the following are particulars of the different classes of offences in 1906, distinguishing between arrests and summons cases, multiple charges against the same individual being each counted as an offence:—

Arrests and  
summons  
for various  
offences.

#### ARRESTS AND SUMMONSES FOR VARIOUS OFFENCES, 1906.

Nature of Offence.	Number of Offences for which—		Total Offences Heard.
	Arrests were made.	Summonses were issued.	
Against the Person—			
Murder and attempts, manslaughter, shooting at, &c.	67	..	67
Assaults .. .. .	689	813	1,502
Others .. .. .	169	73	242
Against Property—			
Robbery, burglary, &c. ..	222	..	222
Larceny and similar offences ..	2,039	432	2,471
Wilful damage to property ..	350	266	616
Others .. .. .	124	372	496
Against Good Order—			
Drunkenness .. .. .	13,943	86	14,029
Others .. .. .	6,263	5,770	12,033
Breaches of Licensing Act .. ..	..	778	778
Other Offences .. .. .	1,534	16,840	18,374
Total .. .. .	25,400	25,430	50,830

Of the 25,400 offences for which arrests were made, 1,769 were multiple charges, leaving the number of separate arrests, 23,631, of which 16,463 were summarily convicted, 6,640 were discharged, and 528 were committed for trial. Of the 25,430 summons cases, 21,277 were summarily convicted, 4,097 were discharged, and 56 were committed for trial. Of the total persons dealt with (49,061), the number summarily convicted was 37,740, 10,737 were discharged, and 584 were committed for trial.

## SENTENCES PASSED.

Sentences  
by Magis-  
trates.

The results of summary disposal of cases by magistrates during 1906 were as follow :—

## SUMMARY DISPOSAL BY MAGISTRATES OF PERSONS ARRESTED, 1906.

Sentence.	Males.	Females.	Total.
Fines paid ... ..	5,034	1,056	6,090
Imprisonment for—			
Under 1 month ... ..	5,390	1 839	7,229
1 and under 6 months ... ..	905	242	1,147
6 and under 12 months ... ..	156	49	205
1 year and over ... ..	83	3	86
Ordered to find bail or sentence suspended on entering surety ... ..	136	24	160
Admonished ... ..	673	78	751
Sent to Industrial Schools or Reformatory ... ..	393	311	704
Otherwise dealt with ... ..	66	25	91
Total sentenced ... ..	12,836	3,627	16,463
Discharged ... ..	5,514	1,126	6,640
Total summarily disposed of ... ..	18,350	4,753	23,103

In addition to the sentences of imprisonment, one prisoner was ordered a whipping with the birch, and two were ordered to be kept in solitary confinement during various portions of their terms of imprisonment.

Sentences in  
Superior  
Courts.

The following are the sentences of the prisoners tried and convicted in superior courts during 1906 :—

## SENTENCES OF PRISONERS TRIED AND CONVICTED, 1906.

Sentence	Males.	Females.	Total.
Fines paid ... ..	1	...	1
Imprisonment for—			
Under 1 month ... ..	11	3	14
1 and under 6 months ... ..	38	6	44
6 „ 12 months ... ..	99	12	111
1 „ 4 years ... ..	89	3	92
4 „ 7 „ ... ..	19	...	19
7 „ 10 „ ... ..	7	...	7
10 years ... ..	1	...	1
Death ... ..	1	...	1
Ordered to find bail or sentence suspended on entering surety ... ..	36	10	46
Sent to Reformatory ... ..	1	...	1
Sent to Lunatic Asylum ... ..	2	...	2
Total convicted ... ..	305	34	339
Acquitted ... ..	159	21	160
Not prosecuted ... ..	24	4	28

In addition to the term of imprisonment, nine persons were ordered to be kept in solitary confinement during various portions of their terms of imprisonment. Prisoners remaining for trial from the previous year are included, but those awaiting trial at the end of the year are excluded.

## THE LIQUOR LICENSING LAWS.

During the last session of the State Parliament a comprehensive measure, Act No. 2068, was passed, amending the Licensing laws of the State. A digest of the main features of this enactment, and the principal measure, is given hereunder:—

Licensing  
Acts 1890  
and 1906.

## CLUBS.

A registration fee of £2 is to be charged, as well as a percentage of 2 per cent. on the gross value of the liquor purchased during the twelve months ended on the last day of September preceding the date of the application.

Section 7 of the Act defines the conditions for the registration of clubs, amongst which it is provided that each club must be a *bonâ fide* association or company of not less than 50 persons, if within 15 miles from the General Post Office, Melbourne, and of not less than 30 persons if outside that radius; that accommodation must be provided for the members and their guests; that no person shall be entitled to derive any profit from the club, which is not shared equally by every other member; and that no payment to any officer shall be made by way of commission from the receipts from alcoholic drink. Provision must be made in the rules for the proper management of the affairs of the institution—subscriptions to which are to be not less than 5s. per annum, payable in advance. Visitors must not be supplied with liquor unless accompanied by, and at the expense of, a member. Persons under 21 years of age are not eligible for membership (except in clubs primarily devoted to athletic purposes), and are not to be supplied with liquor. Notice of application for registration is to be given by the secretary to the clerk of the Licensing Court, who, in turn, must notify the inspector of the Licensing District. The latter if authorized in writing by a police magistrate, must inspect the premises, and the register of members, and satisfy himself that the particulars contained in the application are correct. Objections can be taken to the grant or renewal of a certificate of registration by the inspector of the Licensing District, the council of the municipality in which the club is situated, or any ratepayer, freeholder or leaseholder of property situate within one mile from such premises. The frequent occurrence of drunkenness in the club premises, or that persons in a state of intoxication are frequently seen to leave the club premises, illegal sales of liquor, or that the club is mainly used for the supply of liquor, are grounds upon which such objections may be lodged. The duration of the certificate of registration extends from the date granted until the 31st December following.

If any liquor be sold or supplied on the premises of an unregistered club, the person so offending is liable to a penalty not exceeding £50, and for a second or subsequent offence, to imprisonment for any period not exceeding two months, or to a penalty not exceeding £100, or both. Every officer and member of a committee is also liable to a penalty not exceeding £10 unless he proves that the liquor was kept without his knowledge, or against his orders.

Licensing  
Acts 1890  
and 1906.

No liquor is to be sold or disposed of in any club on Sunday except to lodgers or *bonâ fide* travellers, or to members of the club being served with a meal between the hours of 12 and 2 in the afternoon, and 6 and 8 in the evening, and no liquor shall, without express authority from a Licensing Court, for any specified occasion, be sold or disposed of in any club during the hours when liquor may not be obtained in licensed victuallers' premises.

A search warrant may be issued by a police magistrate authorizing a police officer to enter a registered or unregistered club at any time of the day or night, on any week day or Sunday to inspect the premises of the club, take the names and addresses of any persons found therein, and to seize any liquor kept for sale or supply, and the vessels containing the same, and any books or papers relating to the business of the club. If any obstruction be offered, the officer may break into the premises with such assistance as may be deemed requisite, and any person who wilfully delays admittance is liable to a penalty of £10. If any person found on the premises refuses to give his name and address, or gives false particulars, he may be fined to the extent of £5.

The secretary of a registered club must keep on the club premises a register of members, setting forth the names in full, occupations, and addresses of all members, and the date of the latest payment by each member of his subscription. This register is to be open to the inspection of any authorized member of the police force. A penalty not exceeding £50 is provided for neglect to keep the register, for false entries therein, or for obstructing an inspection thereof.

The Licensing Court has power to exempt any registered club from the provision of the Act entitling the police to demand entrance by day or night. The section relating to persons found drinking liquor on premises during prohibited hours may also be included in the exemption order, which must be published in the *Government Gazette*.

#### LICENCES.

The fees payable per annum (except for temporary licences) for different licences are as follow:—

For a Victualler's Licence—	
In respect of premises assessed at an annual value of £50 and under	£15
In respect of premises assessed at an annual value between £51 and £200	25
In respect of premises assessed at an annual value of £201 and over	50
For a Packet Licence	20
" Grocer's Licence	10
" Australian Wine Licence	5
" Temporary Licence	2
" Special Permit	10
" Railway Refreshment Room Licence	25
" Brewer's Licence	1
" Spirit Merchant's Licence	25
" Vignerons's Licence	5
" Billiard Table Licence—£5 per table per annum for any number not greater than four on any licensed premises, and for any number of tables greater than four—£20 per annum for the whole of such tables.	

A victualler's licence authorizes the holder to sell liquor in any quantity on the licensed premises between 6 a.m. and 11.30 p.m.

For every special permit to sell and dispose of liquor at an earlier hour than 6 in the morning, or at a later hour than 11.30 at night, a fee of £10 per annum is payable. This provision is made so that houses in the neighbourhood of railway stations, wharfs, and markets may be able to supply the wants of the public.

Vignerons' licences may be issued to vignerons to sell at their own vineyards wine made from grapes of their own growing, or purchased by them, in quantities of not less than one pint, and which must not be drunk on the premises.

A grocer's licence authorizes the licensee, being also a licensed spirit merchant, to sell liquor in bottles containing not less than a reputed pint, but the liquor must not be drunk on the premises where sold, nor may any bottle be supplied for the reception of any ale or stout by, or on behalf of, the purchaser. A grocer selling liquor and charging for it under a fictitious description is liable to a penalty of not less than £10.

The word "Australian" has been substituted for "colonial" before the words "wine licence" in the principal Act, and the holder of such licence is not to keep liquor, other than wine, cider, or perry on the premises, which, to obtain a licence, must be assessed at an annual value of not less than £50 in any city or town, and £20 elsewhere.

A temporary licence authorizes the licensee, being also the holder of a victualler's licence, or a railway refreshment room licence, to sell liquor between the hours of 10 in the morning and 7 in the evening, at any public sports or amusement for any specified period not exceeding seven days, but no such licence shall be issued to sell liquor on any land or premises wholly or partly controlled by any municipal council, without the permission in writing of the council. If the sports or amusement be postponed for a period not exceeding 28 days the licence holds good without the payment of an extra fee.

A temporary packet licence may be granted for any period not exceeding ten days, authorizing the master of a vessel to dispose of liquor on board, but the extreme points from and to which the vessel habitually makes voyages must be at least 10 miles apart. Where a boat has been substituted for another licensed vessel, a temporary licence may be granted for a period not exceeding six months to the former.

The fee for a brewer's licence is reduced from £25 to £1, as a licence fee of £25 is charged to brewers under the Commonwealth Beer Excise Act 1901, No. 7.

Roadside victuallers' licences in excess of the statutory number may be granted in mountainous localities if not within five miles of any village or township, and not within eight miles by public road from the nearest licensed victualler's house. If situated in a holiday resort not mountainous, a licence may be granted if the house be not within 10 miles of any proclaimed township, or the nearest licensed victualler's house.

Licensing  
Acts 1890  
and 1906.

Every owner of premises for which a licensed victualler's or an Australian wine licence has been issued, must register his name and address with the clerk of the Licensing Court at which the certificate authorizing the issue of the licence was granted, and must notify any change in his place of abode.

#### DEPRIVATION OF VICTUALLERS' LICENCES.

If the Licences Reduction Board (referred to further on) determine that any licensed victualler's premises, licensed before the 1st February, 1886, be deprived of its licence within ten years from the 31st December, 1906, the compensation must be provided out of the Compensation Fund, and not from the Consolidated Revenue, and no hotel is to be closed unless compensation is tendered.

Where after the 31st December, 1916, any licence existing before 1st February, 1886, is cancelled, as the result of a local option vote, the owner and occupier have each a claim to be paid out of the Compensation Fund, but only to the extent that such fund is from time to time available. The date when the various premises are deprived of their licences is to be taken as the order of priority in payment of claims, and where several such claims arise on the same date the order of precedence is to be decided by lot.

#### LICENCES REDUCTION BOARD.

For the purposes of this Act, a Board called the Licences Reduction Board, is constituted consisting of three members at a salary of £800 per annum each, who are not to engage in any business or employment other than the duties of their office as members of the Board. Their salaries and all the expenses of the Board are to be paid out of the Compensation Fund. The duties of the Board are, in every year, until the 31st December, 1916, to reduce the number of victuallers' licences in Victoria, and to allot compensation to such an extent as the moneys to the credit of the fund will allow. In carrying out the reduction of licensed premises, regard shall be paid to the convenience of the public, and the requirements of the several localities in the district.

Subject to this consideration the Board shall deal in the first place with the licences of premises against the same or different licensees of which, within the three years next preceding the determination, there have been either two convictions for one of the following offences, or one conviction for two of such offences, viz. :—

- (1) Supplying liquor to persons under the age of 18 years, or to prohibited persons.
- (2) Supplying liquor to persons in a state of intoxication.
- (3) Permitting any unlawful game or sport to be carried on on the premises.
- (4) Permitting prostitutes or thieves to assemble upon any part of the premises.
- (5) Permitting drunkenness on the premises.
- (6) Letting or sub-letting any bar, or the right to sell liquor on the premises.
- (7) Selling or permitting liquor to be sold in prohibited hours.



- (8) Betting either by the licensee himself or by means of an agent in his licensed premises.
- (9) Placarding or permitting to be posted up on his licensed premises any information or notice relating to betting, lotteries, sweepstakes, raffles, or totalizators.

Licensing  
Acts 1890  
and 1906.

In the second place the Board shall deal with the licences of premises if there has been a conviction within the said three years, of any licensee of the premises for any one of the foregoing offences; and in the third place, if it is proved that the business in the premises is so badly conducted as to be a serious inconvenience to persons requiring accommodation, or a nuisance to neighbours, or that the premises are insufficiently provided with proper sanitary conveniences.

As soon as practicable after the appointment of the Licences Reduction Board, it will be their duty to make a valuation on a fair and equitable basis of the maximum amount of compensation payable to the owner of every licensed victuallers' premises (licensed before the 1st February, 1886), by reason of the value thereof being diminished owing to its being deprived of a licence by a determination of the Board, and also to the occupier by reason of his lease or agreement being annulled, and for the loss of his licence and business. Such compensation shall, so far as regards the owner, be based on the difference between the average net yearly rent (provided it is a fair one), for three years preceding the 31st December, 1906, or if the owner be also licensee, what would be a fair rent, and the average net yearly rent which would be probably obtainable for the premises if unlicensed. As regards the licensee, the compensation shall be based for each year of the unexpired term of his tenancy (not exceeding two years), on the average net profit accrued to the licensee for the three years ended the 31st December, 1905. In determining the profit the Board can compel the licensee to furnish a duplicate copy of any income tax return, verified by statutory declaration, as to the truth of such copy. Any licensee, on applying to the Income Tax Commissioner, may inspect his own returns, and make a copy thereof. If the licensee be also the owner, he is entitled to compensation as owner and also as occupier, as if he were a tenant of three years, but in ascertaining the net profit a fair sum is to be deducted as rent. The compensation payable at any time thereafter is in no case to exceed such valuation. The determination of the amount of the compensation is to be final, and not to be questioned by any court.

The Board is empowered to examine witnesses on oath, and any person who refuses to appear before it, or wilfully misbehaves, or prevaricates, may be prosecuted before a Court of Petty Sessions, and, on conviction, be fined up to £20.

For the purposes of this Act admittance to licensed premises may be demanded by the Board, or any person authorized by it, at any time of the day or night.

No reduction of any licensed premises is allowed in any Licensing District in which the number of licensed premises is below the statutory number, but new licences may, until 1916, be granted in such districts provided that a majority of the electors vote in favour of the increase, and that one-third of the electors on the roll record their votes.

Licensing  
Acts 1890  
and 1906.

The local option provisions of the *Licensing Act* 1890 are repealed.

No male person or his wife is allowed to have a beneficial interest in more than one licence, and no woman is to be granted, or to hold a victualler's, or an Australian wine licence, unless she is over 25 years of age, or unless the business has devolved upon her as owner or trustee.

After the 31st December, 1907, no licence is to be granted to the wife of any public servant (if such wife is living with her husband), but this section does not apply to the renewal of a licence to any such wife, who, at the time of the passing of the Act, was the holder of a licence.

#### LICENSING COURTS AND INSPECTORS.

A member of a Licensing Court may grant, revoke, or vary any special permit to sell liquor at an earlier hour than 6 in the morning, or at a later hour than 11.30 at night; approve or disapprove of the fitness of an owner or mortgagee, or the nominee of the said owner or mortgagee to hold a licence; or when a licensed person becomes a lunatic patient, authorize an agent to carry on the business until the end of the year. If a licence be lost or destroyed he may grant a certificate in lieu thereof; give permission in writing to have more than one bar in a licensed house, or authorize an agent to carry on the business on the premises of a licensed victualler, who, having been convicted of any offence, has become personally disqualified, or has had his licence forfeited. The court may authorize the removal of a grocer's licence from the premises specified to any other premises within the licensing district, assess and determine the annual value of premises for which a victualler's licence is required, and hear and determine any matter of complaint in reference to a club, and cancel or suspend its certificate.

When a licence is surrendered or taken away from any licensed premises in consequence of the determination of the electors, six weeks' notice of the compensation (if any) to be paid to the owner shall be given by the clerk of the Licensing Court, by advertisement in the *Government Gazette*, and in some newspaper circulating in the Licensing District where the premises are situated, before the same is payable. Every mortgagee shall have a lien on the amount payable to the owner for the amount of his mortgage upon giving notice to the clerk of the Licensing Court within one month from the date of the advertisement, and thereupon the same shall be a first charge on the compensation money, which shall not be paid to the owner unless with the consent in writing of such mortgagee. Payment to the mortgagee is to be deemed payment to the owner.

Power is given to the Governor in Council to make rules as to fees, costs, and charges for summonses, subpoenas, warrants, searches, &c. The authority of inspectors of Licensing Districts is extended to Australian wine premises. The Licensing Court may alter or vary the assessment of any licensed premises, and in the case of an application for a new licence, or the renewal of an old one, a statement is to be furnished showing the last municipal valuation. Power is given to receive a licence fee ten days after the expiration of 28 days from the granting of the certificate, but a fine of 25 per

cent. must be paid by the applicant. The owner or mortgagee, not being the occupier, may pay the fee within a week after the expiration of the said ten days. Licensing  
Acts 1890  
and 1906.

Where any person other than the licensee supplies liquor in contravention of the Licensing Acts, he is liable to a penalty not exceeding £10, and any person who procures, or attempts to procure, any liquor for a drunkard, is liable to a penalty of £2.

Persons not being *bonâ fide* travellers, lodgers, or servants found on licensed premises during prohibited hours, or drinking liquor therein, may be fined up to £2.

A person is not to be considered a *bonâ fide* traveller unless he resides ten miles in a direct line from where he is supplied with liquor, and must have travelled at least that distance on the day when he is so supplied. If a person falsely represents himself to be a *bonâ fide* traveller, proceedings may be taken against him, and he may be fined any sum from £2 to £20. If a licensed victualler believed the purchaser to be a *bonâ fide* traveller the Bench may dismiss the case. A licensed victualler is not bound to supply liquor to a *bonâ fide* traveller during prohibited hours, but if he elects to do so then the person requiring the same shall, on demand, give his true name and address, and place of lodging during the preceding night. If a person gives a false or fictitious name and address, or refuses to give either, he may be fined £5. The presence on the licensed premises of two or more persons is *primâ facie* evidence of a sale of liquor having taken place.

Penalties are provided for the offence of carrying away liquor from licensed premises on Sundays, or during prohibited hours, and the police may seize such liquor. In any prosecution any liquid shall be deemed to be intoxicating liquor unless the contrary be proved.

A fee of £20 annually must be paid for every additional bar besides the fee payable for a new licence or renewal.

No licensed victualler is allowed to let or sub-let any bar, or the right to sell liquor on his premises. An inside bar door must be opened at the request of the police.

No female under the age of 21 years (other than the licensee's wife or daughter), is permitted to serve liquor on a licensed premises, but this does not apply to persons employed as barmaids before the 1st December, 1906.

Sly grog-selling is punishable by a minimum fine of £25, or imprisonment for not less than a month for a first offence, and for a second or subsequent offence, imprisonment for not less than three months, with disqualification for one year, and all liquor in the possession of the offender to be forfeited.

Holders of seaside victuallers' licences within three miles of the coast, but not within twenty miles of the General Post Office at Melbourne, may obtain permission to close their hotels from May to September inclusive.

During the reconstruction or repairing of a licensed victualler's premises, with the consent of the Licensing Court, the licensee may close any bar or bars. The police may demand the name and address of any person found on the premises during prohibited hours, and both the licensee and such person are liable to penalties

Licensing  
Acts 1890  
and 1906.

unless it can be proved that the latter was there for some lawful purpose. Entrance by day or night may be demanded by police officers, and if admittance be refused or delayed the police may break into the premises.

It is the duty of the licensee to provide proper sanitary accommodation for lodgers and inmates, and also one closet and one urinal open and available to the public.

Betting in licensed premises is a serious offence, punishable by a minimum fine of £20 for a first conviction, and £100 for a second or subsequent conviction. If within three years after a conviction under this section a licensed person again offends he *ipso facto* forfeits his licence. Betting and sporting placards relating to sweepstakes, raffles, or totalizators are not to be posted on licensed premises. Permitting any person to play an unlawful game on licensed premises is prohibited.

No licensed person is allowed to use any part of his premises as a dancing saloon, unless on special occasions, with the consent of the Licensing Court.

Aboriginals must not be served with liquor at any time, nor persons against whom a prohibition order has been made, nor persons who are under the age of eighteen years. If liquor be delivered to an infant under sixteen years of age for consumption off the premises, it must be in a corked and sealed vessel.

Every licensed victualler who fails or refuses, except for some valid reason, to supply lodging, meals, or accommodation to persons demanding the same, is liable to a penalty of £2.

Every applicant for a club certificate or a victualler's licence must supply a statutory declaration with regard to the twelve months ended the preceding 30th September, of the quantity of each kind of liquor purchased for the club or licensed victuallers' premises, and the total amount paid or payable therefor, including any duties thereon, and the names and addresses of the persons or firms who sold the liquor. The percentage fee for a club, or compensation fee for a licensed victualler's premises, must be paid within 21 days after the applicant has been notified by the clerk of the Licensing Court.

The Treasurer is empowered to require any wine or spirit merchant, or brewer, or firm, to furnish the names and addresses of every club or licensed victualler to which or to whom liquor was sold during the twelve months ended 30th September, 1906, or during any subsequent twelve months; such statement to show the quantity and nature of liquor, and the price paid or payable therefor. Failure to comply with this provision may entail a penalty not exceeding £100.

#### "LICENSING FUND" AND "COMPENSATION FUND."

The moneys in the "Licensing Act 1885 Fund" are transferred to a trust fund to be called "The Licensing Fund," and all fees (other than compensation fees), for licences, &c., are to be paid to the credit of this fund. Each municipality is to be paid a sum of money set out in the schedule of the Act, in March each year, and all other moneys remaining in the fund are to be paid into the Police

Superannuation Fund to such extent as may be necessary to meet all claims chargeable under Part III. of the *Police Regulation Act* 1890, and any balance remaining is to be transferred to the Consolidated Revenue.

Licensing  
Acts 1890  
and 1906.

A special trust fund, to be called the "Licensing Act 1906 Compensation Fund," is to be established in the Treasury.\* Every person to whom a licence is granted or renewed shall, in addition to his licence fee, pay a further sum or compensation fee of 3 per cent. on the gross amount paid or payable for all liquor purchased by him during the preceding twelve months ended on the 30th September. The amount of the compensation fee is to be determined by the Licensing Court, and in the event of insufficient information being at their disposal, they are empowered to fix the fee at such sum as they may consider fair and reasonable. The owner of the premises is chargeable with two-thirds, and the tenant with one-third, of the fee.

When any reduction of licensed premises has been made the remaining hotels, who will be benefited, are to bear a *pro rata* assessment to make up the amount of licence fees annually lost to the Licensing Fund. A reduction of payments to municipalities is to be made in districts where licences are reduced in number to the extent of 80 per cent. of the loss arising from the closing of the hotels, but the municipalities will not participate in the *pro rata* assessment of the remaining houses.

Provision is made for re-building licensed victuallers' premises on another site, in the event of it not being practicable, without unusually great expenditure, to build on the old site. This authority is not to be granted if, in the same village or township, there are any other licensed victuallers' premises.

#### LOCAL OPTION.

The last division of the Act relates to local option, which, however, is not to commence until the 1st January, 1917. A vote of the electors is to be taken in every district at the date of each general election next following the 1st January, 1917. The resolutions to be submitted to the electors are as follow:—

- (a) That the number of licences existing in the electoral district continue.
- (b) That the number of licences existing in the electoral district be reduced.
- (c) That no licences be granted in the electoral district.

Where resolution C has been previously carried, and is in force in the district, the resolution submitted shall be:—

- (d) That licences be restored in the electoral district.

Resolution A or B is carried if a majority of votes is in favour of such resolution. Resolution C is carried if three-fifths of the votes given is in favour of the resolution, provided that where less than such number is so given the votes given in favour of C shall be added to the votes given for B. Thirty per cent., at least, of the electors on the roll must vote in favour of them to carry resolutions C or D.

\* The amount paid into this fund for the year ended 30th September, 1906, was £48,243.

Licensing  
Acts 1890  
and 1906.

The effect of carrying the resolutions is as follow:—

If A is carried, the number of licences is not to exceed the number at the time of the taking of the vote.

If B is carried, the number of licences may be reduced to three-fourths the number at the time of voting.

If C is carried, no licences shall be granted, renewed, or transferred.

If D is carried, licences may be granted, renewed, and transferred, but not to number more than when the resolution C was carried, nor less than half such number.

Other sections deal with the method of closing the hotels when the residents have passed resolutions declaring that such is their wish. When resolution B or C is carried, the Licensing Court is to inform the Treasury what amounts are required for compensation, and on receiving such notification, the Treasurer is to set apart out of the Compensation Fund an amount sufficient to meet all claims. If it appears that there is not enough money in the fund to meet the claims, he may, in writing, require every holder of a victualler's licence in Victoria to pay within three months such additional compensation fee as, in his opinion, will be required to satisfy the claims. The additional compensation fee is to bear the same *pro rata* proportion to the compensation fee paid by each licensee under the Act, and if the fee be not paid within three months the licence becomes void.

#### GAOLS AND PRISONERS.

Gaols and  
Prisoners.

There are nine gaols in Victoria, including the Pentridge Penal Establishment—Ararat, Portland, and Maryborough gaols having been closed several years ago—and the figures below show that there is still accommodation in the gaols for more than twice the average number of prisoners in confinement. The following statement gives for the year 1906 the accommodation, daily average in confinement, number received during the year, and the number in confinement at the end of the year:—

#### GAOL ACCOMMODATION AND PRISONERS, 1906.

Name of Institution.	Number of Prisoners.							
	For whom there is Accommodation.		Daily Average.		Total Received.		In Confinement, 31.12.06.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Pentridge ..	800	..	499·00	..	388	..	471	..
Ballarat ..	62	18	27·30	1·51	400	33	17	1
Beechworth ..	66	15	36·22	·24	221	8	38	..
Bendigo ..	116	28	20·87	2·79	386	78	12	..
Castlemaine ..	99	..	4·54	·09	76	7	1	..
Coburg Female Prison ..	..	324	..	70·05	..	143	..	52
Geelong ..	187	29	94·11	·21	321	18	91	..
Melbourne ..	485	114	201·53	40·17	3,747	1,275	186	33
Sale ..	30	5	8·76	·14	109	9	11	..
Total ..	1,845	533	892·33	115·20	5,648	1,571	827	86

There are also seven police gaols which are used as receiving stations, but the daily average number of prisoners detained therein during 1906 was only ten.

The following is a statement of the average number of prisoners in detention in the gaols of the State at the end of decennial periods from 1871, and during the past five years, from which it will be seen that the decrease in later years is very considerable. The rate per 10,000 of population, fifteen years and over, in 1906, being 68 per cent. less than in 1871, 53 per cent. less than in 1881, and 50 per cent. less than in 1891.

Prisoners in confinement, 1871 to 1906—decrease.

PRISONERS IN CONFINEMENT, 1871 TO 1906.

Year.	Average number of Prisoners in confinement.			Per 10,000 of population, 15 years and over.
	Males.	Females.	Total.	
1871 ...	1,345	274	1,619	38·30
1881 ...	1,294	304	1,598	26·65
1891 ...	1,550	350	1,900	25·47
1901 ...	951	200	1,151	14·53
1902 ...	943	170	1,113	14·05
1903 ...	907	141	1,048	13·23
1904 ...	890	137	1,027	12·97
1905 ...	922	121	1,043	13·17
1906 ...	902	115	1,017	12·42

EXPENDITURE ON POLICE AND GAOLS.

In the 41½ years ended 30th June, 1906, the total amount expended in connexion with the police, and penal establishments and gaols of Victoria was £11,865,755, viz., £9,483,903 on the former, and £2,381,852 on the latter. The following table shows the amounts and the amount per head of population expended in connexion with the police, and penal establishments and gaols of Victoria during each of the five years ended with 1905-6:—

Expenditure on police, gaols, &c.

EXPENDITURE ON POLICE AND GAOLS, 1901-2 TO 1905-6.

Year.	Amount Expended (exclusive of the Cost of Buildings) on—			Amount per Head of Population.
	Police.	Gaols and Penal Establishments.	Total.	
	£	£	£	s. d.
1901-2 .. ..	271,561	51,948	323,509	5 4
1902-3 .. ..	264,422	51 919	316,341	5 3
1903-4 .. ..	269,647	49,226	318,873	5 3
1904-5 .. ..	269,339	48,529	317,868	5 3
1905-6 .. ..	270,661	49,175	319,836	5 3

The expenditure is exclusive of pensions.

Expenditure  
on police  
and gaols  
in Austral-  
asia.

The following are the amounts expended on police and gaols in the Australian States and New Zealand during the year 1905-6:—

EXPENDITURE ON POLICE AND GAOLS IN AUSTRALIAN STATES AND NEW ZEALAND, 1905-6.

State.	Amount Expended (exclusive of the Cost of Buildings) on—			Amount per Head of Population.
	Police.	Gaols.	Total.	
	£	£	£	s. d.
Victoria .. ..	270,661	49,175	319,836	5 3
New South Wales .. ..	434,189	85,788	519,977	7 0
Queensland .. ..	155,384	23,617	179,001	6 9
South Australia .. ..	76,288	15,065	91,353	4 10
Western Australia .. ..	124,023	32,659	156,682	12 4
Tasmania .. ..	33,522	5,714	39,236	4 4
Australia .. ..	1,094,067	212,018	1,306,085	6 5
New Zealand .. ..	133,829	43,083	176,912	4 0

Executions.

No execution took place in 1906, nor in the previous year, but there was one in 1904, two in 1902, one in 1900, one in 1898, one in 1897, one in 1896, two in 1895, and five in 1894. Since the first settlement of Port Phillip, 168 criminals have been executed within the State, of whom only three were females.

Coroners'  
inquests.

In 1906 the number of coroner's inquiries into the causes of deaths of individuals was 1,414, which was below the average number of the five preceding years. In 807 cases death was found to be due to disease or natural causes, in 398 cases to accident, in 89 to suicide, in 103 to external causes which could not be ascertained, in 7 to homicide, in 2 to intemperance, in 5 a verdict of "still born" was returned, whilst in 3 cases the cause of death was doubtful. Of those due to violence, 67 per cent. were due to accidental causes, 1 per cent. to homicide, 15 per cent. to suicide, while in 17 per cent. of the cases the cause or motive of the violence which caused death was doubtful. The number of inquests during the last five years was 6,998, of which 4,032 deaths were found to be due to disease or natural causes, 2,922 to violence, and 44 to other causes.



## POPULATION.

The estimated population of Victoria at the end of 1906 was as follows:— Population, 1906.

ESTIMATED POPULATION OF VICTORIA, 31ST DECEMBER, 1906. 44.63

	Males.	Females.	Males.	Females.	Total.
Estimated Population, 31st December, 1905 .. ..	..	..	609,674	608,897	1,218,571
Births, 1906 .. ..	15,716	15,128			
Deaths „ .. ..	8,342	6,895			
Natural increase .. ..	..	..	7,374	8,233	15,607
Migration by Sea, 1906 .. ..					
Arrivals (as recorded) .. ..	42,274	27,008			
Departures „ .. ..	40,383	26,965			
Gain Seawards .. ..	..	..	1,891	43	1,934
Migration by Land, 1906 .. ..					
(plus 10 per cent.)—					
Arrivals .. ..	14,112	8,882			
Departures .. ..	12,671	8,437			
Gain Overland .. ..	..	..	1,441	445	1,886
Estimated Population, 31st December, 1906 .. ..	..	..	620,380	617,618	1,237,998
Increase from Census, 31st March, 1901, to 31st December, 1906 .. ..	..	..	16,660	20,268	36,928
Full-blooded aborigines at the date of the Census not included in the estimate .. ..	..	..	163	108	271

During the period—1st April, 1901, to 31st December, 1905—it was the practice, in estimating the population of Victoria, to make an allowance of 9 per cent. of the recorded departures by sea, to provide for unrecorded departures. But early in 1906 an investigation was made of the method of recording arrivals and departures by sea, and the question generally of estimating the population, with the result that the continuance of the allowance was found to be unnecessary, and it has accordingly been abandoned from 1st January, 1906. In the period mentioned— $4\frac{3}{4}$  years—the allowance made for unrecorded departures by sea has amounted to 32,346 persons, a number which is considered to be more than sufficient for the present.

Population,  
1891-1906.

The population of Victoria on 5th April, 1891, when the census of that year was taken was 1,140,405. The following table shows the increase of population by excess of births over deaths, and the loss by emigration since that date:—

INCREASE OF POPULATION BY EXCESS OF BIRTHS OVER DEATHS,  
AND LOSS BY EMIGRATION, 1891 TO 1906.

Year.	Natural Increase (i.e., Excess of Births over Deaths.)	Loss by Emigration.	Net Increase.
1891 (From 5th April, Census) ..	15,859	+1,414	17,273
1892 .. .. .	21,980	11,058	10,922
1893 .. .. .	20,044	12,484	7,560
1894 .. .. .	18,828	12,698	6,130
1895 .. .. .	18,070	14,410	3,660
1896 .. .. .	16,464	22,134	-5,670
1897 .. .. .	16,184	13,754	2,430
1898 .. .. .	11,477	11,127	350
1899 .. .. .	14,430	8,020	6,410
1900 .. .. .	15,564	7,828	7,736
1901 (To 31st March, Census) ..	3,613	+522	4,135
Total Intercensal period (10 years)	172,513	111,577	60,936
1901 (from 1st April) .. ..	11,491	1,679	9,812
1902 .. .. .	14,284	13,716	568
1903 .. .. .	13,974	16,570	-2,596
1904 .. .. .	15,370	13,920	1,450
1905 .. .. .	15,431	7,164	8,267
1906 .. .. .	15,607	+3,820	19,427
Total since 1901 Census (5½ years)	86,157	49,229	36,928
Total (15½ years) ..	258,670	160,806	97,864

Emigration  
to Western  
Australia.

It will be seen from the above table that Victoria has since 1901 suffered a serious loss by emigration. Naturally, Western Australia was by far the greatest gainer. The following table shows to what a large extent that State has gained from Victoria from 1891 (the year when gold was first discovered there in large quantities), to the close of 1906. The total recorded is 90,096.

RECORDED MIGRATION TO AND FROM WESTERN AUSTRALIA,  
1891 TO 1906.

Year.	Arrivals from.	Departures to.	Excess of Departures.
1891 .. .. .	344	2,304	1,960
1892 .. .. .	632	2,346	1,714
1893 .. .. .	1,922	4,177	2,255
1894 .. .. .	6,545	16,690	10,145
1895 .. .. .	6,344	17,471	11,127
1896 .. .. .	12,951	37,448	24,497
1897 .. .. .	20,580	31,775	11,195
1898 .. .. .	21,687	22,504	817
1899 .. .. .	12,403	12,299	-104

RECORDED MIGRATION TO AND FROM WESTERN AUSTRALIA, 1891 TO 1906—*continued.*

Year.				Arrivals from.	Departures to.	Excess of Departures.
1900	..	..	..	10,638	13,576	2,938
1901	..	..	..	11,371	16,704	5,333
1902	..	..	..	10,550	18,608	8,058
1903	..	..	..	7,986	12,854	4,868
1904	..	..	..	7,882	12,819	4,937
1905	..	..	..	8,936	10,737	1,801
1906	..	..	..	10,159	8,714	- 1,445
Total	..	..	..	150,930	241,026	90,096

The arrivals and departures cannot all be taken to represent Victorians, as passengers from the Eastern States calling at Victorian ports on the way to the Western State were, up to 31st December, 1902, included. A very large number of Victorians must, however, have emigrated to Western Australia, as the census returns of that State on 31st March, 1901, disclosed the fact that there were then no fewer than 39,491 natives of Victoria living there. Victoria had a greater gold-mining population to draw upon than any of the other States, and it so happened that the mining industry here was dull at the very time when that of Western Australia was flourishing. There was some compensation to Victoria for this exodus to Western Australia, as the fathers and sons who went there, and earned good wages, remitted considerable sums of money for the support of their dependents in Victoria. The following table of money orders, issued in Western Australia, and paid in Victoria, gives some idea of the extent to which remittances were made. Read in conjunction with the previous table, and in the light of the fact that the money order is a favorite means of remitting among the working classes, the information it affords is of especial interest—

## MONEY ORDERS FROM WESTERN AUSTRALIA PAID IN VICTORIA.

Year.				Number.	Value.
					£
1894	..	..	..	9,475	37,233
1895	..	..	..	22,582	92,809
1896	..	..	..	75,018	338,348
1897	..	..	..	101,213	422,949
1898	..	..	..	73,449	304,193
1899	..	..	..	45,479	181,208
1900	..	..	..	49,955	193,473
1901	..	..	..	51,385	201,479
Total	..	..	..	428,556	1,771,692

Emigration  
to South  
Africa.

There was a large migration to and from South Africa and Victoria going on for some years, which, during the period 1895-1903, resulted in a loss to Victoria of 10,002 of her population. However, in 1904 Victoria gained 200, in 1905 118, and in 1906 504 persons. From these figures, the loss by emigration of Victorians to South Africa appears to have stopped. The following table gives the movement since 1895, the first year in which a separate record to South Africa was kept:—

RECORDED MIGRATION TO AND FROM SOUTH AFRICA, 1895 TO 1906.

Year.				Arrivals from.	Departures to.	Excess of Departures.
1895	..	..	..	136	1,524	1,388
1896	..	..	..	333	3,214	2,881
1897	..	..	..	824	1,570	746
1898	..	..	..	740	870	130
1899	..	..	..	994	1,192	198
1900	..	..	..	1,878	3,645	1,767
1901	..	..	..	4,785	3,715	- 1,070
1902	..	..	..	4,215	5,460	1,245
1903	..	..	..	794	3,511	2,717
1904	..	..	..	1,325	1,125	- 200
1905	..	..	..	1,186	1,068	- 118
1906	..	..	..	1,382	878	- 504
Total	..	..	..	18,592	27,772	9,180

The other places to gain by Victoria's loss by emigration were New South Wales, Queensland, and New Zealand.

The following table shows the total migration by sea to and from Victoria during the five years 1902 to 1906:—

Immigra-  
tion and  
Emigra-  
tion, 1902  
to 1906.

RECORDED IMMIGRATION AND EMIGRATION BY SEA, 1902 TO 1906.

Year.				Immigrants.	Emigrants.	Excess of Emigrants.
1902	..	..	..	87,557	97,933	10,376
1903	..	..	..	52,756	66,159	13,403
1904	..	..	..	55,049	65,831	10,782
1905	..	..	..	62,798	65,404	2,606
1906	..	..	..	69,282	67,348	- 1,934

The small numbers of migrants in the last four years, as compared with 1902, is accounted for by the fact that passengers calling at the ports of the State on their way to other places have been excluded from the records since the beginning of 1903, but were included in all previous years.

The departures exceeded the arrivals in each of the years stated, with the exception of 1906, when there was an excess of immigrants numbering 1,934.

As the Inter-State railway passenger traffic is now taken into account in framing estimates of population at the end of each year, the effect of this traffic since the date of the census is shown in the following return:—

Arrivals and departures by rail, 1st April, 1901, to 31st Dec., 1906.

## RECORDED MIGRATION BY RAIL, 1901 TO 1906.

Year.	Arrivals.			Departures.			Excess of Arrivals.		
	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.
1901 (from 1st April)	9,564	4,834	14,398	7,172	3,982	11,154	2,392	852	3,244
1902 ..	14,121	7,576	21,697	10,750	5,971	16,721	3,371	1,605	4,976
1903 ..	11,463	6,645	18,108	9,611	5,959	15,570	1,852	686	2,538
1904 ..	11,500	6,869	18,369	9,717	6,118	15,835	1,783	751	2,534
1905 ..	11,758	7,156	18,914	10,630	7,076	17,706	1,128	80	1,208
1906 ..	12,829	8,075	20,904	11,519	7,670	19,189	1,310	405	1,715
Total ..	71,235	41,155	112,390	59,399	36,776	96,175	11,836	4,379	16,215

In 1906 Victoria gained by rail 1,290 from New South Wales, and 450 from South Australia, but lost 25 to Queensland.

The net result of the recorded immigration and emigration by sea between Victoria and the neighbouring States, the United Kingdom, and foreign countries during each of the five years ended 1906 is shown in the following table. Where a minus sign ( — ) appears, it indicates that the immigrants exceeded the emigrants by the number against which it is placed:—

Loss by emigration to various countries and vice versa.

## RECORDED NET EMIGRATION FROM VICTORIA BY SEA, 1902 TO 1906.

Year.	Excess of Emigration over Immigration between Victoria and—									Net Emigration.
	New South Wales and Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand and South Seas.	South Africa.	United Kingdom.	Other British Dominions.	Foreign Ports.	
1902 ..	939	- 888	8,058	- 407	2,595	1,245	253	- 125	- 1,294	10,376
1903 ..	3,205	411	4,868	- 663	2,830	2,717	178	187	- 330	13,403
1904 ..	2,972	516	4,937	- 122	2,314	- 200	432	85	- 152	10,782
1905 ..	- 145	587	1,801	- 1,052	1,581	- 118	- 15	31	- 64	2,606
1906 ..	- 211	- 302	- 1,445	- 1,766	2,332	- 504	- 26	62	- 74	- 1,934
Total	6,760	324	18,219	- 4,010	11,652	3,140	822	240	- 1,914	35,233

It will be seen from the above table that emigration from Victoria to South Africa ceased in 1904, and it appears, from last year's figures, as if it had ceased to Western Australia also.

Encouraging  
immigra-  
tion.

There is at the present time a very general demand throughout Australia for increased population, and the question of attracting immigrants is now receiving considerable attention. In Victoria a commencement has been made by a provision in the Closer Settlement Act 1906, enabling portions of estates to be reserved exclusively for applicants in or from Great Britain and Ireland, or any other country, and arrangements have been made for applications to be lodged with the Agent-General.

Ages of the  
people.

The following tables show the ages of the people and their conjugal condition, at the three census years 1881, 1891, and 1901, and also their occupations for the two latter years. Particulars of the kind are only collected in census years, but as there has only been an increase in the population of 36,928 since 1901, 19,427 of which was in 1906, the position cannot have sufficiently changed to render the 1901 figures uninteresting now:—

#### AGES OF THE PEOPLE AT CENSUSES, 1881, 1891, AND 1901.

Age Group (Years.)	1881.		1891.		1901.	
	Males.	Females.	Males.	Females.	Males.	Females.
0-5 ..	57,542	56,141	75,229	73,505	66,807	65,179
5-10 ..	54,555	54,250	64,989	63,251	72,052	70,493
10-15 ..	54,043	53,715	58,536	57,528	67,389	66,640
15-20 ..	49,192	51,020	56,889	57,560	58,896	59,717
20-25 ..	40,385	43,178	63,356	62,185	50,593	57,632
25-30 ..	27,341	26,902	62,910	54,999	45,469	52,832
30-35 ..	22,517	21,880	47,632	39,667	46,635	48,156
35-40 ..	23,314	21,499	31,672	26,398	46,723	43,390
40-45 ..	25,815	21,174	23,924	21,332	37,118	33,551
45-50 ..	28,209	19,374	22,007	19,567	24,137	21,810
50-55 ..	26,303	15,245	22,676	19,290	18,348	17,601
55-60 ..	15,885	9,087	22,135	16,132	15,351	15,157
60-65 ..	11,984	6,985	20,091	12,847	14,979	14,292
65-70 ..	6,123	3,788	11,075	7,140	16,080	13,843
70-75 ..	3,667	2,516	7,194	4,775	11,781	8,360
75-80 ..	1,773	1,211	3,191	2,253	5,733	4,231
80-85 ..	847	619	1,378	1,006	2,453	2,065
85-90 ..	178	154	459	356	603	587
90-100 ..	58	66	168	124	160	152
100 and over ..	11	..	5	5	12	11
Unspecified ..	2,341	1,459	2,898	2,071	2,564	1,759
Total ..	452,083	410,263	598,414	541,991	603,883	597,458

AGES OF THE PEOPLE AT CENSUSES, 1881, 1891, AND 1901—  
*continued.*

Age Group (Years.)	PROPORTIONS PER CENT.					
	1881.		1891.		1901.	
	Males.	Females.	Males.	Females.	Males.	Females.
0-5 ..	12.79	13.73	12.63	13.61	11.11	10.94
5-10 ..	12.13	13.27	10.91	11.72	11.98	11.83
10-15 ..	12.02	13.14	9.83	10.65	11.21	11.19
15-20 ..	10.94	12.48	9.55	10.66	9.80	10.03
20-25 ..	8.98	10.56	10.64	11.52	8.41	9.68
25-30 ..	6.08	6.58	10.56	10.19	7.56	8.87
30-35 ..	5.01	5.35	8.00	7.35	7.76	8.08
35-40 ..	5.18	5.26	5.32	4.89	7.77	7.28
40-45 ..	5.74	5.18	4.02	3.95	6.17	5.63
45-50 ..	6.27	4.74	3.70	3.62	4.02	3.66
50-55 ..	5.85	3.73	3.81	3.57	3.05	2.96
55-60 ..	3.53	2.22	3.72	2.99	2.55	2.54
60-65 ..	2.66	1.71	3.37	2.38	2.49	2.40
65-70 ..	1.36	.93	1.86	1.32	2.67	2.32
70-75 ..	.82	.62	1.21	.88	1.96	.40
75-80 ..	.39	.30	.53	.42	.95	.71
80-85 ..	.19	.15	.23	.19	.41	.35
85-90 ..	.04	.04	.08	.07	.10	.10
90 and over ..	.02	.01	.03	.02	.03	.03
Specified Ages	100.00	100.00	100.00	100.00	100.00	100.00

The noticeable features in the above table are the decrease in the number of young women in 1901, as compared with 1891, in the age groups of 15-20, 20-25, 25-30, and the increase in the number of the women in the groups 30-35, 35-40, 40-45, the later reproductive ages. The same features are apparent in regard to the young and middle-aged men. In 1901, those in the groups 20-25, 25-30, 30-35, were less in number than in 1891, and greater in the groups 35-40, 40-45, 45-50. There is also a marked increase in the proportionate number of old people, 65 and upwards, both male and female, more old people in 1891 than in 1881, and still more in 1901 than in 1891.

OCCUPATIONS OF THE PEOPLE OF VICTORIA AS RETURNED AT THE CENSUSES OF 1891 AND 1901.

Occupation.	1891.	1901.
<b>Breadwinners—</b>		
Professional .. .. .	29,734	35,224
Domestic .. .. .	57,571	66,815
Commercial .. .. .	68,076	79,048
Transport and Communication .. .. .	31,476	31,516
Industrial .. .. .	168,534	146,233
Primary Producers .. .. .	128,983	165,147
Indefinite .. .. .	17,776	10,066
Total Breadwinners <i>44.63.</i> ..	502,150	534,049
Dependents .. .. <i>1.196.40.4</i> ..	631,308	662,355
Occupation not stated .. .. .	6,947	4,937
Total Population .. .. .	1,140,405	1,201,341

With an increase in the population between 1891 and 1901 of 60,936, it is satisfactory to find that the number of primary producers had improved by over 36,000.

Conjugal  
condition  
1881, 1891,  
1901.

CONJUGAL CONDITION OF THE PEOPLE, 1881, 1891, AND 1901.  
(Exclusive of Chinese and Aborigines).

Ages.	MALES.					
	Total Number.			Never Married.		
	1881.	1891.	1901.	1881.	1891.	1901.
Under 15 years ..	166,686	199,109	206,305	166,686	199,108	206,305
15 to 20 years ..	49,316	56,981	58,990	49,263	56,878	58,899
20 „ 30 „ ..	67,130	125,700	95,498	50,769	94,357	75,951
30 „ 40 „ ..	44,238	78,447	92,393	13,525	26,066	32,193
40 „ 50 „ ..	49,251	44,721	60,544	10,360	9,246	12,444
50 „ 60 „ ..	39,487	42,422	33,047	7,760	7,692	5,397
60 years and upwards	23,646	41,937	49,999	4,657	7,206	8,305
All ages ..	439,754	589,317	596,776	303,020	400,553	399,494
Under 21 years ..	224,805	268,156	275,636	224,519	267,875	275,387
21 years and upwards	214,949	321,161	321,140	78,501	132,678	124,107
15 „ „ ..	273,068	390,208	390,471	136,334	201,445	193,189
20 „ „ ..	223,752	333,227	331,481	87,071	144,567	134,290



CONJUGAL CONDITION OF THE PEOPLE, 1881, 1891, AND 1901—  
continued.

(Exclusive of Chinese and Aborigines.)

Ages.	MALES.					
	Husbands.			Widowers.		
	1881.	1891.	1901.	1881.	1891.	1901.
Under 15 years ..	..	1	..	..	..	..
15 to 20 years ..	53	97	89	..	6	2
20 „ 30 „ ..	16,072	30,765	19,294	289	578	253
30 „ 40 „ ..	29,702	50,631	58,408	1,011	1,750	1,792
40 „ 50 „ ..	36,398	32,917	45,334	2,493	2,558	2,766
50 „ 60 „ ..	27,983	30,345	24,418	3,744	4,385	3,232
60 years and upwards	13,730	25,527	29,695	5,259	9,204	11,999
All ages ..	123,938	170,283	177,238	12,796	18,481	20,044
Under 21 years ..	280	274	245	6	7	4
21 years and upwards	123,658	170,009	176,993	12,790	18,474	20,040
15 „ „	123,938	170,282	177,238	12,796	18,481	20,044
20 „ „	123,885	170,185	177,149	12,796	18,475	20,042

Ages.	FEMALES.					
	Total Number.			Never Married.		
	1881.	1891.	1901.	1881.	1891.	1901.
Under 15 years ..	164,437	194,365	202,235	164,432	194,362	202,235
15 to 20 years ..	51,140	57,603	59,789	49,657	55,964	58,748
20 „ 30 „ ..	70,223	117,527	110,676	38,304	64,345	71,832
30 „ 40 „ ..	43,471	66,314	91,813	5,501	12,870	24,212
40 „ 50 „ ..	40,641	41,069	55,516	2,425	3,701	8,331
50 „ 60 „ ..	24,397	35,603	32,851	1,062	1,877	2,679
60 years and upwards	15,375	28,665	43,684	718	1,483	2,142
All ages ..	409,684	541,146	596,564	262,099	334,602	370,179
Under 21 years ..	225,264	264,239	273,634	222,220	260,768	271,394
21 years and upwards	184,420	276,907	322,930	39,879	73,834	98,785
15 „ „	245,247	346,781	394,329	97,667	140,240	167,944
20 „ „	194,107	289,178	334,540	48,010	84,276	109,196

# CONJUGAL CONDITION OF THE PEOPLE, 1881, 1891, AND 1901— *continued.*

(Exclusive of Chinese and Aborigines.)

Ages.	FEMALES.					
	Wives.			Widows.		
	1881.	1891.	1901.	1881.	1891.	1901.
Under 15 years ..	5	3	..	..	..	..
15 to 20 years ..	1,463	1,620	1,039	20	19	2
20 „ 30 „ ..	30,824	52,072	38,098	1,095	1,110	746
30 „ 40 „ ..	35,205	50,172	64,029	2,765	3,272	3,572
40 „ 50 „ ..	32,817	31,474	40,892	5,399	5,894	6,293
50 „ 60 „ ..	17,994	24,272	21,011	5,341	9,454	9,161
60 years and upwards	7,566	14,033	18,173	7,091	13,149	23,369
All ages ..	125,874	173,646	183,242	21,711	32,898	43,143
Under 21 years ..	2,997	3,434	2,233	47	37	7
21 years and upwards	122,877	170,212	181,009	21,664	32,861	43,136
15 „ „	125,869	173,643	183,242	21,711	32,898	43,143
20 „ „	124,406	172,023	182,203	21,691	32,879	43,141

## MALES—PROPORTION PER 100 LIVING AT EACH AGE.

Ages.	Never Married.			Husbands.			Widowers.		
	1881.	1891.	1901.	1881.	1891.	1901.	1881.	1891.	1901.
Under 15 years ..	100.0	100.0	100.0	..	..	..	..	..	..
15 to 20 years ..	99.9	99.8	99.8	.1	.2	.2	..	..	..
20 „ 30 „ ..	75.6	75.1	79.5	24.0	24.5	20.2	.4	.4	.3
30 „ 40 „ ..	30.6	33.2	34.9	67.1	64.6	63.2	2.3	2.2	1.9
40 „ 50 „ ..	21.0	20.7	20.6	73.9	73.6	74.9	5.1	5.7	4.5
50 „ 60 „ ..	19.7	18.2	16.3	70.8	71.5	73.9	9.5	10.3	9.8
60 years and upwards	19.7	17.2	16.6	58.1	60.9	59.4	22.2	21.9	24.0
All Ages ..	68.9	68.0	66.9	28.2	28.9	29.7	2.9	3.1	3.4
Under 21 years ..	99.9	99.9	99.9	.1	.1	.1	..	..	..
21 years and upwards	36.5	41.3	38.7	57.5	53.0	55.1	6.0	5.7	6.2
15 „ „	49.9	51.6	49.5	45.4	43.7	45.4	4.7	4.7	5.1
20 „ „	38.9	43.4	40.5	55.4	51.1	53.5	5.7	5.5	6.0

CONJUGAL CONDITION OF THE PEOPLE, 1881, 1891 AND 1901—  
*continued.*

(Exclusive of Chinese and Aborigines.)

Ages.	FEMALES—PROPORTION PER 100 LIVING AT EACH AGE.								
	Never Married.			Wives.			Widows.		
	1881.	1891.	1901.	1881.	1891.	1901.	1881.	1891.	1901.
Under 15 years ..	100.0	100.0	100.0	..	..	..	..	..	..
15 to 20 years ..	97.1	97.2	98.3	2.9	2.8	1.7	..	..	..
20 „ 30 „ ..	54.6	54.8	64.9	43.9	44.3	34.4	1.5	..	..
30 „ 40 „ ..	12.7	19.4	26.4	81.0	75.7	69.7	6.3	4.9	3.9
40 „ 50 „ ..	6.0	9.0	15.0	80.7	76.6	73.7	13.3	14.4	11.3
50 „ 60 „ ..	4.3	5.3	8.2	73.8	68.2	63.9	21.9	26.5	27.9
60 years and upwards	4.7	5.2	4.9	49.2	48.9	41.6	46.1	45.9	53.5
All Ages ..	64.0	61.8	62.1	30.7	32.1	30.7	5.3	6.1	7.2
Under 21 years ..	98.7	98.7	99.2	1.3	1.3	.8	..	..	..
21 years and upwards	21.6	26.7	30.6	66.6	61.5	56.0	11.8	11.8	13.4
15 „ ..	39.8	40.4	42.6	51.3	50.1	46.5	8.9	9.5	10.9
20 „ ..	24.7	29.2	32.6	64.1	59.5	54.5	11.2	11.3	12.9

The table shows that the proportionate number “never married” in the age groups of the males 20-30, and 30-40, materially increased from 1881 to 1901. In the group 40-50 the position remained about the same, while the number of men “never married” over 50 decreased considerably. As regards the females, there is a very noticeable increase in the number of spinsters from 20 years of age right up to 60. In the age groups 20-30, 30-40, and 40-50, the increase is very marked, and in the last two groups mentioned, the number has more than doubled between 1881 and 1901.

In the following return the persons and dwellings to the square mile, persons and rooms to a dwelling, and persons to a room, are shown for the five census years 1861-1901:—

Density of  
population,  
&c.

DENSITY OF POPULATION.—RETURN FOR FIVE CENSUS YEARS.

Year of Census.	Persons to the Square Mile (exclusive of Persons in Ships).	Inhabited Dwellings to the Square Mile.	Persons to the Inhabited Dwelling (exclusive of Persons in Ships).	Rooms to a Dwelling (Inhabited and Uninhabited).	Persons to a Room.
1861 ..	6.126	1.470	4.16	2.96	1.35
1871 ..	8.298	1.714	4.84	3.89	1.18
1881 ..	9.791	1.935	5.06	4.44	1.08
1891 ..	12.948	2.549	5.08	5.10	.92
1901 ..	13.643	2.747	4.97	5.25	.90

The population returned at the census of 1901 furnishes a proportion of 13.6 persons to the square mile. In 1891 the proportion was 12.9; in 1881, 9.8; in 1871, 8.3; and in 1861, 6.1. There were 497 persons to every 100 inhabited dwellings in 1901, a smaller number than in 1891 and 1881, when the numbers were 508 and 506 respectively, but greater than in 1871 and 1861, when the numbers were 484 and 416.

Victorians in  
each Aus-  
tralian  
State and  
New  
Zealand.

Persons of Victorian birth living in other Australian States and New Zealand numbered 136,638 at the census of 1901, as compared with 69,021 at the previous census in 1891, thus showing an increase of 67,617.

#### VICTORIANS LIVING IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1901.

State in which living.	Numbers born in Victoria.		
	Males.	Females.	Total.
Victoria ... ..	428,823	447,180	876,003
New South Wales ... ..	30,358	25,661	56,019
Queensland ... ..	6,721	3,551	10,272
South Australia ... ..	5,134	5,190	10,324
Western Australia... ..	24,342	15,149	39,491
Tasmania ... ..	4,502	3,447	7,949
Australia ... ..	499,880	500,178	1,000,058
New Zealand ... ..	6,530	6,053	12,583
Total ... ..	506,410	506,231	1,012,641

Natives  
of other  
States and  
New Zea-  
land living  
in Victoria.

The following table gives the number of Australians other than Victorians who were resident in this State at the census:—

#### NATIVES OF OTHER STATES AND NEW ZEALAND LIVING IN VICTORIA, 1901.

State.	Males.	Females.	Total.
New South Wales .. ..	10,631	11,786	22,417
Queensland .. ..	1,363	1,669	3,032
South Australia .. ..	10,720	11,209	21,929
Western Australia .. ..	673	795	1,468
Tasmania .. ..	6,871	8,492	15,363
New Zealand .. ..	4,404	4,616	9,020
Australasia (state not given) .. ..	414	471	885
Total .. ..	35,076	39,038	74,114

Comparing these two tables, it is seen that the number of persons of Victorian birth in the other States and New Zealand exceeded the number of persons born in these places living in Victoria in 1901, by 62,524.

The exodus to Western Australia was the principal factor contributing to this result, for whereas in 1891 there were only 1,036 Victorians resident there, in 1901 the number had increased to 39,491.

The enumerated population at the five census years, the estimated population in 1906, and the increases, numerical and centesimal, are as under:—

Increase of population at five decades and in 1906.

POPULATION OF VICTORIA (INCLUDING ABORIGINES) AT FIVE CENSUS PERIODS, AND IN 1906.

Year of Census or Estimate.	Both Sexes.			Males.			Females.		
	Population.	Increase since last Census.		Population.	Increase since last Census.		Population.	Increase since last Census.	
		Numerical.	Centesimal.		Numerical.	Centesimal.		Numerical.	Centesimal.
1861	540,322	129,556	31·54	328,651	64,317	24·33	211,671	65,239	44·55
1871	731,528	191,206	35·39	401,050	72,399	22·03	330,478	118,807	56·13
1881	862,346	130,818	17·88	452,083	51,033	12·72	410,263	79,785	24·14
1891	1,140,405	278,059	32·24	598,414	146,331	32·37	541,991	131,728	32·11
1901	1,201,341	60,936	5·34	603,883	5,469	·91	597,458	55,467	10·23
1906	1,238,269	36,928	3·07	620,543	16,660	2·76	617,726	20,268	3·39

The increase between 1891 and 1901 was the smallest since 1861, being only 60,936 persons, as against 278,059 between 1881 and 1891, and 130,818 and 191,206 respectively in the two decennial periods prior to 1881. Small as was the increment to the population in the ten years, 1891 to 1901, it was larger on the average than in the four and three-quarter years from 1st April, 1901, to 31st December, 1905, when it amounted to only 17,501 persons. However, 1906 was much better, the increase for the year being 19,427. As regards the proportion of males to females, on 31st December, 1904, the females outnumbered the males, but since 1905 the latter have been slightly in excess.

The proportion of sexes at the five census enumerations, and during the past four years was:—

Proportion of sexes.

Year.	Females to 100 Males.					
1861	...	...	...	...	...	64·41
1871	...	...	...	...	...	82·40
1881	...	...	...	...	...	90·75
1891	...	...	...	...	...	90·57
1901	...	...	...	...	...	98·94
1903	...	...	...	...	...	99·68
1904	...	...	...	...	...	100·04
1905	...	...	...	...	...	99·87
1906	...	...	...	...	...	99·55

The following table shows for Greater Melbourne its area in acres, its estimated population, the number of persons to the acre at

Population of Greater Melbourne 1906.

the end of 1906, also the estimated mean population during that year in the various municipalities:—

POPULATION, &C., OF GREATER MELBOURNE, 1906.

Sub-District.	Area in Acres.	At End of 1906.		Mean Population, 1906.
		Estimated Population.	Persons to the acre.	
Melbourne City ... ..	7,658	100,840	13·2	100,380
Fitzroy City ... ..	923	32,770	35·5	32,590
Collingwood City ... ..	1,139	34,330	30·1	34,070
Richmond City ... ..	1,430	38,480	26·9	38,400
Brunswick Town ... ..	2,722	26,150	9·6	25,680
Northcote Town ... ..	2,850	12,610	4·4	12,040
Prahran City ... ..	2,320	42,550	18·3	42,430
South Melbourne City ... ..	2,311	41,160	17·8	40,960
Port Melbourne Town ... ..	2,366	12,550	5·3	12,510
St. Kilda City ... ..	2,046	21,640	10·6	21,300
Brighton Town ... ..	3,288	10,900	3·3	10,750
Essendon Town ... ..	4,000	18,970	4·7	18,810
Hawthorn City ... ..	2,400	23,250	9·7	23,080
Kew Borough ... ..	3,553	10,030	2·8	9,860
Footscray City ... ..	2,577	18,780	7·3	18,490
Williamstown Town ... ..	2,775	13,800	5·0	13,750
Oakleigh Borough ... ..	1,858	1,520	·8	1,410
Caulfield Town ... ..	6,080	11,120	1·8	10,900
Malvern Town ... ..	3,989	13,200	3·3	12,880
Camberwell Town ... ..	8,320	10,360	1·2	10,000
Preston Shire ... ..	8,800	4,120	·5	4,060
Coburg Borough ... ..	4,800	7,670	1·6	7,650
Remainder of District ... ..	85,275	17,870	·2	17,270
Shipping in Hobson's Bay and River ... ..	...	1,730	...	1,730
Total, including Shipping ... ..	163,480	526,400	3·2	521,000

Density of  
metropolitan popula-  
tion.

Fitzroy is the most thickly populated municipality, with about 35 persons to the acre; Collingwood has 30; Richmond 27; Prahran and South Melbourne about 18; and Melbourne City 13. There are large areas devoted to parks, gardens, and other reserves in many of the municipalities, so that the population is really living closer together than these figures indicate. Melbourne City contains 1,973 acres of such reserves, Kew 634, South Melbourne 482, Williamstown 460, St. Kilda 278, Caulfield 265, Richmond 206, and Brighton 172 acres. There are smaller areas in other districts, but they do not appreciably affect the question of density of population. The total area of all the reserves is 5,421 acres, and if these be excluded, the number of persons to the acre in the places named would be as follows:—Richmond 31, South Melbourne 23, Melbourne City 18, St. Kilda 12, Williamstown 6, and Kew 3; but in Brighton and Caulfield the proportion would remain about the same.

The following return has been prepared, showing the population of Greater Melbourne in 1891, 1901, and 1906, the totals of these three years being respectively 490,896, 496,079, and 526,400. There was a falling off in the cities of Melbourne, Fitzroy, Collingwood, Richmond, Footscray, and South Melbourne from 1891 to 1901, but a slight recovery from the latter year to 1906. North Melbourne and Flemington and Kensington were annexed by Melbourne during 1905, and the figures for that city in 1891 and 1901 have been adjusted to include these districts. In Prahran, St. Kilda, and Hawthorn alone of the cities there has been a continued increase. Of the towns, Port Melbourne fell away up to 1901, and slightly recovered to 1906. There was a continued increase in Brunswick, Essendon, Northcote, Brighton, Malvern, Caulfield, and Camberwell, and a continued decrease in Williamstown. In the boroughs of Kew and Oakleigh the increase has been continuous. The same remark applies to Coburg, which was a shire in 1891 and 1901, but became a borough in 1905. In the shire of Preston there was a small increase. In the parts of shires included in the Greater Melbourne area, the population was 14,217 in 1891; 15,445 in 1901; and 17,870 in 1906.

Greater  
Melbourne  
— Increase  
of popula-  
tion.

RETURN SHOWING THE POPULATION OF GREATER MELBOURNE IN  
1891, 1901, AND 1906.

Municipal Districts.	Population.		
	1891 (Census).	1901 (Census).	1906 (31st Dec.)
<b>Cities—</b>			
Melbourne .. .. .	104,316	97,440	100,840
Fitzroy .. .. .	32,453	31,687	32,770
Collingwood .. .. .	35,070	32,749	34,330
Richmond .. .. .	38,797	37,824	38,480
Prahran .. .. .	39,703	40,441	42,550
South Melbourne .. .. .	41,724	40,619	41,160
St. Kilda .. .. .	19,838	20,542	21,640
Hawthorn .. .. .	19,585	21,430	23,250
Footscray .. .. .	19,149	18,318	18,780
<b>Towns—</b>			
Brunswick .. .. .	21,961	24,141	26,150
Essendon .. .. .	14,411	17,426	18,970
Northcote .. .. .	7,458	9,677	12,610
Williamstown .. .. .	15,960	14,052	13,800
Port Melbourne (Borough 1891) .. .. .	13,067	12,176	12,550
Brighton .. .. .	9,858	10,047	10,900
Malvern (Shire 1891) .. .. .	8,136	10,619	13,200
Caulfield (Shire 1891) .. .. .	8,005	9,541	11,120
Camberwell (Shire 1891 and 1901) .. .. .	6,204	8,602	10,360
<b>Boroughs—</b>			
Kew .. .. .	8,462	9,469	10,030
Oakleigh .. .. .	1,236	1,273	1,520
Coburg (Shire 1891 and 1901) .. .. .	5,752	6,772	7,670
<b>Shires—</b>			
Preston .. .. .	3,569	4,059	4,120
Parts of Shires, forming remainder of District .. .. .	14,217	15,445	17,870
Shipping in Hobson's Bay and River .. .. .	1,965	1,730	1,730
<b>Total .. .. .</b>	<b>490,896</b>	<b>496,079</b>	<b>526,400</b>

Urban and  
rural popu-  
lation, 1906.

In the following return, Victoria is divided into three districts, the first being the metropolitan (Greater Melbourne), extending in all directions for a distance of 10 miles from the centre of the city; the second, the other urban districts, including the total space embraced in cities, towns, and boroughs (present or former) outside the limits of Greater Melbourne; and the third, rural districts, including the remaining portions of the State. The population at the end of the year 1906, the average population during the year, the ratio of the population of each district to that of the whole State, and the number of persons to the square mile were as follow:—

#### URBAN AND RURAL POPULATION, 1906.

Districts.	Estimated Area in Square Miles.	Estimated Population at end of 1906.			Mean Population, 1906.
		Total.	Proportion per Cent.	Persons to the Sq. Mile.	
Metropolitan ... ..	255	526,400	42.52	2,064	521,000
Other Urban ... ..	376	208,405	16.83	554	206,785
Total Urban ... ..	631	734,805	59.35	1,165	727,785
Rural ... ..	87,253	503,193	40.65	5.8	499,287
Total State ... ..	87,884	1,237,998	100.00	14.1	1,227,072

The rural population—that is, exclusive of the population in country towns—is 41 per cent. of the total population of the State, and it has remained at about that proportion during the last five years.

Proportion of metro-  
politan  
population.

The urban is greater than the rural population, and the population of the metropolis alone is equal to 42½ per cent. of the whole State.

#### PROPORTION OF POPULATION OF GREATER MELBOURNE TO THE WHOLE OF VICTORIA.

Year.						Per cent.
1901	...	...	...	...	...	41.5
1902	...	...	...	...	...	41.7
1903	...	...	...	...	...	41.5
1904	...	...	...	...	...	42.0
1905	...	...	...	...	...	42.3
1906	...	...	...	...	...	42.5

Population of chief  
extra  
metropoli-  
tan towns

Outside Melbourne and suburbs, the most important towns in Victoria are Ballarat, comprising three municipalities; Bendigo, two; Geelong, three; Castlemaine, two; Warrnambool, Maryborough, and Stawell, one each. The enumerated populations of these, with their immediate suburbs, according to the census of 1901, and an estimate for 1906, were as follow:—



POPULATION OF CHIEF TOWNS IN VICTORIA, 1901 AND 1906.

Name of Town.	1901 (Census).	1906 (Estimated).
Ballarat ... ..	49,414	48,565
Bendigo ... ..	42,701	44,140
Geelong ... ..	25,017	27,416
Castlemaine ... ..	7,912	8,580
Warrnambool ... ..	6,404	6,650
Maryborough ... ..	5,622	5,791
Stawell ... ..	5,318	5,200

The following table shows the population of each Australian State and New Zealand at each census from 1851 to 1901:—

Population of Australia and New Zealand, 1851-1901.

POPULATION OF THE SIX STATES OF AUSTRALIA AND NEW ZEALAND, 1851-1901.

State.	1851.	1861.	1871.	1881.	1891.	1901.
Victoria ..	77,345	540,322	731,528	862,346	1,140,405	1,201,070
New South Wales ..	191,099	350,860	503,981	751,468	1,132,234	1,354,846
Queensland ..		30,059	117,960	213,525	393,718	498,129
South Australia ..	63,700	126,830	185,626	279,865	320,431	363,157
Western Australia ..	5,886	15,100	25,270	29,708	49,782	184,124
Tasmania ..	70,130	89,977	101,020	115,705	146,667	172,475
Australia ..	408,160	1,153,148	1,665,385	2,252,617	3,183,237	3,773,801
New Zealand ..	22,108	84,536	257,810	489,933	626,658	772,719

In the next table is shown the estimated population of each Australian State (excluding Aborigines) and New Zealand at the end of 1906, also the increase of population since the last census, and the number of persons to the square mile:—

Population of Australian States and New Zealand, 1906.

POPULATION OF EACH AUSTRALIAN STATE AND NEW ZEALAND, 31ST DECEMBER, 1906.

State.	Estimated Population, 31st December, 1906.			Increase since Census, 1901.			Persons to the Square Mile.
	Males.	Females.	Total.	Males.	Females.	Total.	
Victoria ..	620,380	617,618	1,237,998	16,660	20,268	36,928	14·09
New South Wales ..	814,139	712,560	1,526,699	104,134	67,719	171,853	4·92
Queensland ..	292,609	242,501	535,110	15,606	21,375	36,981	·80
South Australia ..	200,451	179,794	380,245	..	..	21,899	1·00
Proper Territory ..	3,051	535	3,586	..	..	-1,225	·01
Western Australia ..	153,652	108,094	261,746	40,777	36,845	77,622	·27
Tasmania ..	92,932	87,231	180,163	3,308	4,380	7,688	6·87
New Zealand ..	481,651	427,075	908,726	75,659	60,348	136,007	8·68

The number of persons to the square mile in Australia is 1.39.  
3633.

Australian  
States—  
Increase of  
population  
since 1851.

The following table contains particulars as to the movement of population by immigration and emigration, and the natural increase by excess of births over deaths in each of the Australian States since 1851:—

TABLE SHOWING INCREASE OF POPULATION IN AUSTRALIAN STATES SINCE 1851.

Period.	Increase by Excess of Immigration over Emigration.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
<b>PART I.</b>							
1851-61 (Census period)	400,045	126,314		35,750	6,510	7,709	576,328
1861-71 ..	41,789	48,247	68,581	17,060	6,386	- 5,183	176,880
1871-81 ..	- 15,322	107,536	58,904	45,032	- 135	- 770	195,245
1881-91 ..	116,950	164,424	114,835	- 28,275	12,973	5,993	386,900
1891-01 ..	- 111,577	223	16,693	- 16,121	118,441	- 2,179	5,480
1901 (from April 1)	- 1,879	4,058	1,278	- 1,299	7,585	- 451	9,492
1902 .. ..	- 13,716	6,903	- 3,103	- 3,706	15,809	- 93	2,094
1903 .. ..	- 16,570	4,539	- 1,598	- 2,394	9,716	- 942	- 7,249
1904 .. ..	- 13,920	6,597	- 2,707	- 1,496	10,976	- 2,605	- 3,155
1905 .. ..	- 7,164	9,994	- 1,730	462	7,617	- 2,507	6,872
1906 .. ..	3,820	9,005	- 1,864	608	2,251	- 4,264	9,556
Total ..	382,656	487,840	249,289	45,621	198,129	- 5,292	1,358,243
	Natural Increase (i.e., Excess of Births over Deaths).						
<b>PART II.</b>							
1851-61 (Census period)	62,932	63,506		27,380	2,704	12,138	168,660
1861-71 ..	149,417	104,874	19,320	41,736	3,784	16,226	335,357
1871-81 ..	146,140	139,951	36,661	49,207	4,573	15,455	391,987
1881-91 ..	161,109	209,705	65,358	68,841	7,101	24,969	537,083
1891-01 ..	172,513	226,676	87,718	58,294	15,901	27,987	589,089
1901 (from April 1)	11,491	16,338	6,537	3,875	2,400	2,353	42,994
1902 .. ..	14,284	21,189	8,012	4,633	3,409	3,181	54,708
1903 .. ..	13,974	19,469	6,275	4,557	3,911	2,964	51,150
1904 .. ..	15,370	23,307	8,832	5,355	4,359	3,318	60,541
1905 .. ..	15,431	24,523	8,123	5,064	4,873	3,412	61,426
1906 .. ..	15,607	25,973	8,924	5,015	4,716	3,322	63,557
Total ..	778,268	875,511	255,760	273,957	57,731	115,325	2,356,555
	Total Increase.						
<b>PART III.</b>							
1851-61 (Census period)	462,977	189,820		63,130	9,214	19,847	744,988
1861-71 ..	191,206	153,121	87,901	58,796	10,170	11,043	512,237
1871-81 ..	130,818	247,487	95,565	94,239	4,438	14,685	587,232
1881-91 ..	278,059	374,129	180,193	40,566	20,074	30,962	923,983
1891-01 ..	60,936	226,899	104,411	42,173	134,342	25,808	594,569
1901 (from April 1)	9,812	20,396	7,815	2,576	9,985	1,902	52,486
1902 .. ..	568	28,092	4,909	927	19,218	3,088	56,802
1903 .. ..	- 2,596	24,008	4,677	2,163	13,627	2,022	43,901
1904 .. ..	1,450	29,904	6,125	3,859	15,335	713	57,386
1905 .. ..	8,267	34,517	6,393	5,526	12,490	905	68,098
1906 .. ..	19,427	34,978	7,060	5,623	6,967	- 942	73,113
Total ..	1,160,924	1,363,351	505,049	319,578	255,860	110,033	3,714,795

The subjoined tabulation shows, according to the census of 1901, the number of persons at the supporting and dependent ages, in each of the Australian States and in New Zealand, in every 10,000 of the population:—

Effective strength of population in Australasia.

## STRENGTH OF AUSTRALASIAN POPULATION, 1901.

State or Colony.	Numbers in every 10,000 Persons living.		
	At Supporting Ages (15 to 65 Years).	At Dependent Ages.	
		Under 15 Years.	65 Years and upwards.
1. Western Australia ...	6,920	2,899	181
2. New Zealand ...	6,255	3,339	406
3. New South Wales ...	6,055	3,601	344
4. Queensland ...	6,048	3,693	259
5. Victoria ...	6,030	3,418	552
6. South Australia ...	6,024	3,564	412
7. Tasmania ...	5,877	3,716	407

Western Australia stands, as might be expected, far ahead of all the States in the relative strength of its population, and this is undoubtedly due to the development of gold mining there and the consequent large immigration of adult males from all the adjoining States. New Zealand occupies second position, and Victoria, which ten years before was second only to Western Australia in this respect, has fallen to fifth place on the list. Tasmania has relatively the weakest population of any of the States.

Relative strength of population of Australasia.

Victoria has the largest proportion of old people in its population, viz., 552 per 10,000, and is followed in this respect by South Australia with 412, Tasmania with 407, and New Zealand with 406. In New South Wales, Queensland, and Western Australia the proportion is much lower.

Old persons in Australasia.

The enumerated population of Australasian capital cities during the past 46 years is shown in the following table. Melbourne during that time has made good progress, more especially in the decennial period, 1881-91, when the increase was 73 per cent. Between 1891 and 1901 the population remained almost stationary, but in the 5½ years since 1901 there has been an increase of over 30,000. Sydney, which since 1902 has been the most populous city in Australasia, in 1906 had 538,800 inhabitants. These two cities contain about 26 per cent. of the population of the Commonwealth. Perth has made a remarkable advance since 1891, when the enumerated population was about 8,500, which had increased to 53,800 in 1906.

Population of Australasian Capital Cities, 1861-1906.

## POPULATION OF AUSTRALASIAN CAPITAL CITIES, 1861 TO 1906.

Capital City (with Suburbs).	Enumerated Population at the Census of—					Estimated Popula- tion, 31st De- cember, 1906.	Persons to the Acre, 1906.
	1861.	1871.	1881.	1891.	1901.		
Melbourne ..	139,916	206,780	282,947	490,896	496,079	526,400	3.22
Sydney ..	95,789	137,776	224,939	383,283	481,830	538,800	5.91
Brisbane ..	6,051	15,029	31,109	101,554	119,428	132,468	.68
Adelaide ..	18,303	42,744	103,864	133,252	162,094	175,641	1.05
Perth ..	3,507	5,445	5,822	8,447	36,274	53,800	3.36
Hobart ..	24,773	26,004	27,248	33,450	34,604	34,985	.61
Wellington ..	4,176	7,908	20,563	34,190	49,344	67,535	5.04

Density of  
population  
in capital  
cities.

It will be noticed that the inhabitants of Sydney dwell in greater contiguity than those of any of the other metropolitan cities, and in both that city and Wellington the people are nearer each other than they are in Melbourne. Perth has about the same density of population as Melbourne, but in Adelaide there is only about one person and in Brisbane and Hobart less than one person to the acre.

Population  
of Principal  
Towns in  
Australia  
and New  
Zealand.

The population of the principal towns in Australia and New Zealand is given in the following statement. In most cases the immediate suburbs are included. The figures for all the States relate to the year 1906, except for Queensland, where, for the towns outside Brisbane, the census results of 1901 are given:—

POPULATION OF PRINCIPAL TOWNS IN AUSTRALIA AND  
NEW ZEALAND.

VICTORIA.			QUEENSLAND—continued.		
		Population.			Population.
Melbourne ...	...	526,400	Ipswich ...	...	15,246
Ballarat ...	...	48,565	Gympie ...	...	14,431
Bendigo ...	...	44,140	Toowoomba ...	...	14,087
Geelong ...	...	27,416	Maryborough ...	...	12,900
Castlemaine ...	...	8,580	Bundaberg ...	...	9,666
Warrnambool ...	...	6,650	Mount Morgan ...	...	8,486
Maryborough ...	...	5,791			
Stawell ...	...	5,200			
NEW SOUTH WALES.			SOUTH AUSTRALIA.		
Sydney ...	...	538,800	Adelaide ...	...	175,641
Newcastle ...	...	61,400	Port Pirie ...	...	10,272
Broken Hill ...	...	28,800	Walleroo ...	...	3,632
Parramatta ...	...	13,000	Mount Gambier ...	...	3,455
Maitland ...	...	10,700			
Goulburn ...	...	10,600	WESTERN AUSTRALIA.		
Bathurst ...	...	9,400	Perth ...	...	53,800
Orange ...	...	6,800	Kalgoorlie (including Boul- der, 6,844) ...	...	33,401
Albury ...	...	6,800	Fremantle ...	...	27,826
Tamworth ...	...	6,300	Coolgardie ...	...	4,630
Lithgow ...	...	6,000	Albany ...	...	4,171
Wagga Wagga ...	...	5,600			
Grafton ...	...	5,400	TASMANIA.		
QUEENSLAND.			Hobart ...	...	34,985
Brisbane ...	...	132,468	Launceston ...	...	21,602
Charters Towers ...	...	20,976	Queenstown ...	...	6,005
Rockhampton ...	...	19,691	Zeehan ...	...	6,000
Townsville ...	...	15,506	Devonport ...	...	3,390
			Beaconsfield ...	...	3,141

POPULATION OF PRINCIPAL TOWNS IN AUSTRALIA AND  
NEW ZEALAND—*continued.*

NEW ZEALAND.			NEW ZEALAND— <i>continued.</i>		
	...	Population.		...	Population.
Auckland	...	82,101	Palmerston North	...	10,239
Christchurch	...	67,878	Napier	...	9,454
Wellington	...	*63,807	Wanganui	...	8,175
Dunedin	...	56,020	Nelson	...	8,164
Invercargill	...	12,507	Timaru	...	7,615

The following table gives the distribution of population throughout the whole of the British Empire, and includes all protectorates except Egypt, the Soudan, and Johore:—

Population  
of British  
Dominions.

## BRITISH DOMINIONS.—AREA AND POPULATION.

Territory.	Estimated Area, Square Miles.	Year of Census (c) or Estimate.	Ascertained or Estimated Population.	Population per Square Mile.
<b>EUROPEAN.</b>				
England and Wales ..	58,324	1906	34,547,016	592
Scotland ..	29,796	"	4,726,070	159
Ireland ..	32,605	"	4,386,035	135
Isle of Man and Channel Islands ..	302	1901 (c)	156,599	519
Total United Kingdom	121,027	..	43,815,720	362
Gibraltar ..	2	1905	18,645	9,323
Malta ..	117	"	205,059	1,753
Total ..	121,146	..	44,039,424	364
<b>ASIATIC.</b>				
British India ..	1,087,204	1901 (c)	231,855,533	213
Feudatory Native States	679,393	1901 (c)	62,461,549	92
Ceylon ..	25,332	1905	3,950,123	156
Straits Settlements ..	1,600	"	603,460	377
Federated Malay States ..	26,380	"	871,974	33
British North Borneo ..	31,106	"	160,000	5
Brunei ..	4,000	"	10,000	3
Sarawak ..	42,000	1905	500,000	12
Labuan ..	30	"	9,000	300
Hong Kong ..	48	"	386,801	8,058
Weihaiwei ..	285	1904	150,000	526
Cyprus ..	3,584	1905	248,114	69
Other British Possessions	1,807	..	151,000	84
Total ..	1,902,769	..	301,357,554	158
<b>AFRICAN.</b>				
Mauritius and Dependencies	835	1905	382,972	459
Cape Colony ..	276,995	"	2,470,289	9
Natal ..	35,371	"	1,141,406	32
Orange River Colony ..	50,392	1904 (c)	387,315	8
Transvaal Colony ..	117,732	1905	1,399,528	12
Basutoland ..	10,293	"	348,000	34

\* Census Population, 29th April, 1906, which had increased to 67,535 on the 31st December, 1906.

BRITISH DOMINIONS.—AREA AND POPULATION—*continued.*

Territory.	Estimated Area, Square Miles.	Year of Census (c) or Estimate.	Ascertained or Estimated Population.	Population per Square Mile.
<b>AFRICAN—continued.</b>				
Bechuanaland Protectorate	275,000	1905	125,040	.45
British Central Africa Protectorate .. ..	40,980	..	977,252	24
British East Africa Protectorate .. ..	177,101	..	4,038,250	23
Uganda Protectorate .. ..	223,500	..	4,000,000	18
Zanzibar .. ..	1,020	1904	200,000	196
Somaliland .. ..	68,000	1905	300,000	4
Rhodesia .. ..	431,265	..	1,378,000	3
Nigeria .. ..	333,660	1901 (c)	13,606,093	41
West African Colonies (including Protectorates)	156,739	1901	3,153,492	20
Islands .. ..	1,089	1901-4	405,933	373
Total .. ..	2,199,972	..	34,313,570	16
<b>AMERICAN.</b>				
Canada .. ..	3,745,574	1905	5,683,396	1.5
Newfoundland .. ..	42,734	..	225,533	5
Labrador .. ..	120,000	..	3,994	.03
Bermudas .. ..	19	..	20,209	1,064
Honduras .. ..	7,562	..	40,372	5
West Indies .. ..	12,021	..	1,717,613	143
British Guiana .. ..	90,277	..	296,565	3
Falkland Islands .. ..	6,500	..	2,016	.31
Total .. ..	4,024,687	..	7,989,698	2
<b>AUSTRALASIAN.</b>				
Australia .. ..	2,972,578	31.12.06	4,125,547	1.4
New Guinea .. ..	90,540	..	350,000	3.9
New Zealand .. ..	104,751	31.12.06	908,726	8.7
Total .. ..	3,167,869	..	5,384,273	1.7
<b>OCEANIC.</b>				
Fiji .. ..	7,740	1905	121,872	15.7
Tonga .. ..	390	1905 (c)	21,763	55.8
Total .. ..	8,130	..	143,635	17.7
GRAND TOTAL of British Dominions	11,424,573	..	393,228,154	34.4

The estimated population of the world is given below. Arctic regions are included in the continents to which they belong; Antarctic regions are too ill-defined to enable an approximate calculation of the distribution of land and water to be made:—

THE WORLD.—ESTIMATES OF AREA AND POPULATION.

Divisions.	Area in Square Miles (000's omitted).	Estimated Population (000's omitted).	Population per Square Mile.
Europe .. ..	3,696,	386,930,	104.7
Asia .. ..	16,030,	914,561,	57.1
Africa .. ..	11,500,	140,000,	12.2
North America .. ..	8,123,	96,000,	11.8
South America .. ..	6,752,	42,000,	6.2
Australasia and Polynesia ..	3,279,	6,000,	1.8
Total .. ..	49,380,	1,585,491,	32.1

The following list contains the latest estimated population of some of the principal cities of the world. In most cases capital cities have been selected, but when their importance warranted it, others have been included.

POPULATION OF THE PRINCIPAL CITIES OF THE WORLD.

City.	Country.	Year of Enumeration or Estimate.	Population.
Greater London ..	England ..	1906	7,113,561
New York .. ..	United States ..	1906	4,113,043
Paris .....	France .. ..	1906	2,763,393
Chicago .. ..	United States ..	1906	2,049,185
Berlin .. ..	Prussia .. ..	1905	2,040,148
Tokio .. ..	Japan .. ..	1903	1,818,655
Vienna .. ..	Austria .. ..	1900	1,674,957
Philadelphia .. ..	United States ..	1906	1,441,735
St. Petersburg ..	Russia .. ..	1905	1,429,000
Constantinople ..	Turkey .. ..	1904	1,203,000
Moscow .. ..	Russia .. ..	1902	1,092,360
Calcutta .. ..	India .. ..	1901	1,026,987
Buenos Aires ..	Argentine Republic ..	1905	1,025,653
Osaka .. ..	Japan .. ..	1903	995,945
Canton .. ..	China .. ..	1905	900,000
Tient-sin .. ..	China .. ..	1905	900,000
Manchester (with Salford)	England .. ..	1906	871,203
Glasgow .. ..	Scotland .. ..	1906	835,625
Rio de Janeiro ..	Brazil .. ..	1906	811,265
Warsaw .. ..	Russia .. ..	1901	756,426
Liverpool .. ..	England .. ..	1906	739,180
Pekin .. ..	China .. ..	1905	700,000
Brussels .. ..	Belgium .. ..	1905	612,401
Cairo .. ..	Egypt .. ..	1897	570,062
Amsterdam .. ..	Holland .. ..	1905	557,614

POPULATION OF THE PRINCIPAL CITIES OF THE WORLD—*continued.*

City.	Country.	Year of Enumeration of Estimate.	Population.
Birmingham .. ..	England .. ..	1906	548,022
Madrid .. ..	Spain .. ..	1900	539,835
Sydney .. ..	New South Wales ..	1906	538,800
Melbourne .. ..	Victoria .. ..	1906	526,400
Rome .. ..	Italy .. ..	1901	462,783
Copenhagen .. ..	Denmark .. ..	1906	426,540
Bangkok .. ..	Siam .. ..	1901	400,000
Lisbon .. ..	Portugal .. ..	1900	356,009
Belfast .. ..	Ireland .. ..	1901	349,180
Mexico .. ..	Mexico .. ..	1900	344,721
Edinburgh .. ..	Scotland .. ..	1906	341,035
Stockholm .. ..	Sweden .. ..	1905	324,488
Washington .. ..	United States .. ..	1906	307,716
Dublin .. ..	Ireland .. ..	1901	290,638
Montreal .. ..	Canada .. ..	1901	267,730
The Hague .. ..	Holland .. ..	1905	242,054
Johannesburg .. ..	Transvaal .. ..	1904	158,580
Venice .. ..	Italy .. ..	1901	151,840

Chinese and  
Aborigines  
in Victoria.

The population of Victoria, distinguishing Chinese and Aborigines, was at the five census enumerations as follows:—

POPULATION OF VICTORIA DISTINGUISHING CHINESE AND ABORIGINES  
AT FIVE CENSUS PERIODS.

Year of Census.	Total Population—including Chinese and Aborigines.			Chinese.			Aborigines.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
1861	540,322	328,651	211,671	24,732	24,724	8	1,694	1,046	648
1871	731,528	401,050	330,478	17,935	17,899	36	1,330	784	546
1881	862,346	452,083	410,263	12,128	11,869	259	780	460	320
1891	1,140,405	598,414	541,991	9,377	8,772	605	565	325	240
1901	1,201,341	603,883	597,458	7,349	6,740	609	652	367	285

Decrease of  
both races.

Since 1861 there has been a gradual decrease of Chinese. In that year they numbered 24,732; in 1901 they totalled only 7,349—a falling off which is due mainly to Acts of the Legislature imposing severe restrictions on Chinese immigration. At the 1901 census there were enumerated 652 Aborigines, consisting of 271 of pure blood and 381 half-castes. These figures indicate that the race is gradually but surely dying out, for, although the half-castes have increased by 133 since 1891, the pure race shows a decrease of 46 in the ten years. From the report of the Aborigines Board, dated 27th



September, 1906, it would appear that a fair proportion of the pure race and half-castes are under the care of that body, in the following mission stations:—

NUMBER OF ABORIGINES UNDER CARE AT MISSION STATIONS IN  
VICTORIA, 1905-6.

Station.	Area of Reserves.	Total Number under care.
	Acres.	
Coranderrk .. .. .	2,400	58
Condah .. .. .	2,000	51
Ramahyuck .. .. .	750	41
Lake Tyers .. .. .	4,000	52
Framlingham .. .. .	548	21
Colac and Lake Moodemere .. .. .	48	..
Industrial Schools and Orphanage .. .. .	..	..
Depôts .. .. .	..	52
Total .. .. .	9,746	275

During the year 1905-6 twenty deaths occurred, five at Coranderrk, one at Condah, five at Ramahyuck, one at Lake Tyers, and eight at Framlingham and the Depôts. There were seven births—five at Coranderrk and two at Ramahyuck. Two marriages took place—one at Condah and one at Ramahyuck. The total amount expended in the maintenance of these institutions during the year was £4,325—£1,128 at Coranderrk; £259 at Framlingham; £542 at Condah; £745 at Tyers; £550 at Ramahyuck; £807 for administration; and £293 at the Depôts. The value of the produce raised was £356 at Coranderrk and £4 at Framlingham, which was paid into the Treasury.

Of the 377 Aborigines not enumerated in the table, some are residing elsewhere than at the mission stations, but they receive supplies of food and clothing when they call; some prefer to lead a wandering life, and but rarely come under the notice of the Board.

During the last four years a greater number of Chinese left than entered Victoria, but in the year 1902 the reverse was the case. The net decrease in the Chinese population in the five years mentioned in the table by excess of emigration over immigration was 137. The figures for each year are:—

Arrivals and  
departures  
of Chinese.

CHINESE IMMIGRATION AND EMIGRATION, 1902 TO 1906.

Year.	Immigrants.	Emigrants.	Excess of— Arrivals (+). Departures (-).
1902 ... ..	614	434	+ 180
1903 ... ..	408	503	- 95
1904 ... ..	372	441	- 69
1905 ... ..	506	509	- 3
1906 ... ..	376	526	- 150
Total ... ..	2,276	2,413	- 137

Immigration  
and emi-  
gration of  
coloured  
persons,  
1901 to 1906.

With a view of restricting the immigration of Asiatics and other coloured persons, the Commonwealth Parliament passed the Immigration Restriction Act in 1901, which provides that any person, who, when asked to do so by a public officer, fails to write out from dictation and sign in the presence of the officer, a passage of fifty words in any prescribed language, is prohibited from landing in Australia. Certificates of exemption are granted in certain cases, and members of the military and naval forces, as well as the master and crew of any public vessel of any government, are excepted. The Act appears to have achieved its purpose, judging by the coloured persons who have been admitted to the Commonwealth since its adoption. The following are the numbers of coloured persons, other than Chinese, who entered or left Victoria since the 1st April, 1901:—

IMMIGRATION AND EMISSION OF COLOURED PERSONS (OTHER THAN CHINESE) FROM THE 1ST APRIL, 1901, TO 31ST DECEMBER, 1906.

Year.	Immigrants.	Emigrants.	Excess of— Arrivals (+) Departures (-)
From 1st April, 1901, to 31st Dec., 1901	609	483	+ 126
1902 .. .. .	307	525	- 218
1903 .. .. .	96	92	+ 4
1904 .. .. .	48	75	- 27
1905 .. .. .	58	136	- 78
1906 .. .. .	71	129	- 58
Total .. .. .	1,189	1,440	- 251

Coloured  
persons in  
Victoria,  
1901 and  
1906

The number of coloured persons in Victoria was ascertained at the census of 1901, and the information then collected gave a total of 7,349 Chinese and 1,273 other coloured persons at that time. It is believed that these numbers decreased by the end of 1906, the Chinese being then estimated at about 6,600, and other coloured persons at 1,024.

NUMBER OF PERSONS OF COLOURED RACES (EXCLUSIVE OF ABORIGINES) IN VICTORIA AT THE CENSUS OF 1901.

Birthplace.	Persons.	Birthplace.	Persons.
Chinese—		Other Asiatic countries—	
Born in China ..	6,160	British India .. ..	772
„ Hong Kong .. ..	49	Syria .. .. .	344
„ Singapore .. ..	8	Japan .. .. .	55
„ Victoria .. ..	1,091	Others .. .. .	81
„ other British colonies	39	Total other Asiatic countries	1,252
„ at Sea .. ..	1		
Unspecified .. ..	1	Polynesia .. .. .	2
Total Chinese ..	7,349	Africa .. .. .	19
		Grand Total Coloured Persons	8,622

Under the "Commonwealth Naturalization Act No. 11 of 1903," the right to issue certificates of naturalization was taken from the States, and vested in the Commonwealth. This Act came into force on 1st January, 1904. All persons who, prior to that date, had been granted letters or certificates of naturalization in the various States are to be deemed naturalized. To obtain a certificate a person, not being an aboriginal native of Asia, Africa, or any of the islands of the Pacific (excepting New Zealand), must have resided in Australia continuously for the two years immediately preceding the application, and must produce, in support of his application, a statutory declaration stating his name, age, birthplace, occupation, and residence, the length of his residence in Australia, and that he intends to settle in the Commonwealth, in addition to a certificate of good character signed by a justice of the peace, postmaster, State school teacher, or police officer. If a person has been naturalized in the United Kingdom, he must produce the certificate, and also a declaration that he is the person named in it, that he obtained it without any fraud or misstatement, and that he intends to settle in the Commonwealth. An alien woman who marries a British subject becomes naturalized thereby. Children of naturalized parents, who have at any time resided in Australia with their father or mother, have all the rights, powers, and privileges of naturalized persons, and this provision also applies to the children of an alien mother married to a natural-born British subject, or to a person who has obtained a certificate of naturalization. Under the State Act Chinese were allowed to take out letters of naturalization, but owing to the large increase in such applications, 1,178 of which were granted in 1885, it was decided in 1886 to issue no more "unless a sufficient reason was assigned," with the result that only 173 were issued in 1886, 16 in 1887, and none since then. The following are the native countries of those naturalized in Victoria from 1871 to 1906, from which it will be seen that about 30 per cent. of the total were Germans, and 29 per cent. Chinese:—

## NATURALIZATION, 1871 TO 1906.

Native Places.	Numbers Naturalized in Each Year.					Total Naturalized, 1871 to 1906.
	1902.	1903.	1904.	1905.	1906.	
France ... ..	17	11	9	4	11	235
Belgium ... ..	2	...	...	1	3	37
Austria ... ..	10	11	8	10	11	232
Germany ... ..	194	149	132	81	115	3,127
Russia ... ..	19	25	9	16	10	395
Norway and Sweden ...	75	57	53	40	48	2,955
Other European Countries	146	121	101	57	87	
United States ... ..	16	14	6	4	12	134
China ... ..	...	...	...	...	...	2,969
Other Countries ... ..	21	9	1	...	4	151
Total ... ..	500	397	319	213	301	10,235

Decrease of  
aliens in  
Australia.

With regard to Australia as a whole, it may here be mentioned that, according to the Commonwealth Statistics prepared in connexion with the Immigration Restriction Act, the number of persons of coloured races who arrived in Australia in 1906 was 2,810, and those who departed 6,167, giving a departure balance of no fewer than 3,357.

Chinese and  
Aborigines  
in Aus-  
tralia.

The following is a statement of the number of Chinese and Aborigines in each Australian State at the census of 1901 and in New Zealand at the census of 1906:—

CHINESE AND ABORIGINES IN AUSTRALIA, 1901, AND NEW ZEALAND, 1906.

State.	Chinese.		Aborigines.			
	Males.	Females.	Full Blood.		Half-caste.	
			Males.	Females.	Males.	Females.
Victoria .. ..	6,740	609	163	108	204	177
New South Wales ..	10,590	673	2,451	1,836	2,108	1,885
Queensland .. ..	8,783	530	13,000	12,137	773	760
South Australia ..	3,280	175	14,076	12,357	349	341
Western Australia ..	1,526	43	2,933	2,328	492	459
Tasmania .. ..	536	72	..	..	79	78
Australia .. ..	31,455	2,102	32,623	28,766	4,005	3,700
New Zealand .. ..	2,515	55	23,387	20,406	2,151	1,787

Decrease of  
Chinese in  
Australia.

There are more Chinese in New South Wales and Queensland than in the other States, but they appear to be steadily diminishing in Australia as a whole. With the exception of Queensland and Western Australia, the number enumerated in 1901 was smaller than in 1891—the total decrease in Australasia in the decade amounting to about 6,100 persons. In Western Australia they increased from 917 to 1,569, and in Queensland from 8,574 to 9,313 in the same period.

Aborigines  
in  
Australia

The enumeration of Aborigines, owing to their nomadic habits, was incomplete. In Victoria the number returned is believed to be correct, but in some of the other States—for example, Queensland—the figures given are only a rough approximation. The aboriginal race is extinct in Tasmania—the last male having died in 1869, and the last female in 1876. The Maoris enumerated at the census of 1906 in New Zealand show an increase of 4,588 over those returned in 1901, but this increase the authorities in New Zealand state may in part be attributable to more favorable circumstances permitting a closer enumeration to be made on this than on former occasions.

## PRODUCTION.

## LAND SETTLEMENT, ETC.

The return for 1906 received from the Lands Department shows the total area of the State to be 56,245,760 acres, of which 26,836,043 acres are private lands, 22,964,929 acres being alienated in fee simple, and 3,871,114 acres in process of alienation. Crown lands total 29,409,717 acres, and comprise roads in connexion with lands alienated and in process of alienation, 1,643,436 acres; agricultural college and water reserves, 445,391 acres; State forests and timber reserves, 4,655,499 acres; permanently reserved for public purposes, 1,592,400 acres; other reserves, 601,017 acres; unsold land in towns, &c., 1,795,641 acres; in occupation under grazing area leases, 3,533,792 acres; Mallee pastoral leases, 1,731,217 acres; all other licences and leases, 653,284 acres.

Private and  
Crown  
lands.

The present system of disposing of the Crown land of Victoria dates from the passing of the *Land Act* 1884 and the *Mallee Pastoral Leases Act* 1883, which, with subsequent amendments, were consolidated by the *Land Act* 1890. This Act was in turn amended by the Land Acts 1891, 1898, 1900, and 1900 (No. 2); and by the *Settlement on Lands Act* 1893, and the *Mallee Lands Act* 1896. These Acts were all consolidated into the *Land Act* 1901, which, again, has been amended by the Land Acts of 1903, 1904, and 1905.

Land Acts.

For the purposes of administration, the State is divided into seventeen districts, in each of which there is a land office under the management of a land officer. These offices are situated at Melbourne, Ararat, Alexandra, Bairnsdale, Ballarat, Beechworth, Benalla, Bendigo, Geelong, Hamilton, Horsham, Omeo, Sale, Seymour St. Arnaud, Stawell and Warracknabeal, and the officers stationed at these centres are in a position to point out the exact localities of available lands to intending selectors. The whole of the unalienated

Lands  
available  
for  
occupation.

lands of the Crown which are now available for selection, excluding available Mallee lands, are divided into the following classes:—

LANDS AVAILABLE FOR OCCUPATION 31ST DECEMBER, 1906.

County.	Classification.				
	First.	Second.	Third.	Auri-ferous.	Pastoral.
	acres.	acres.	acres.	acres.	acres.
Buln Buln .. .. .	11,786	23,121	46,285	376	..
Croajingolong .. .. .	..	..	489,500	14,150	593,200
Dargo .. .. .	..	..	72,500	97,500	239,100
Tambo .. .. .	..	..	179,830	3,800	366,950
Tanjil .. .. .	..	..	27,450	49,500	360,000
Wonnangatta .. .. .	..	319	113,042	..	944,070
Bogong .. .. .	1,439	7,311	156,315	143,844	216,100
Benambra .. .. .	..	..	134,050	90,320	421,580
Delatite .. .. .	638	27,183	181,769	71,189	178,800
Molra .. .. .	132	..	6,503	..	..
Anglesey .. .. .	..	4,031	28,240	8,192	..
Bourke .. .. .	..	3,261	..	..	..
Dalhousie .. .. .	20	794	3,537	8,652	..
Evelyn .. .. .	252	26,545	..	10,913	..
Mornington .. .. .	..	2,622	30,783	..	..
Bendigo .. .. .	..	363	1,556	20,373	..
Rodney .. .. .	..	165	1,766	3,809	..
Borong .. .. .	20	1,256	43,943	27,715	5,147
Gladstone .. .. .	20	2,122	6,800	83,821	490
Lowan .. .. .	..	177	52,819	..	11,880
Kara Kara .. .. .	39	3,062	2,193	30,059	..
Talbot .. .. .	1,605	551	440	81,579	287
Tatchera .. .. .	..	86	..	..	..
Heytesbury .. .. .	..	960	172,274	..	..
Polwarth .. .. .	1,370	11,790	37,432	..	..
Grant .. .. .	..	..	28,109	23,070	..
Grenville .. .. .	..	40	..	29,310	..
Ripon .. .. .	..	100	11,775	9,540	..
Normanby .. .. .	..	212	77,651	..	..
Dundas .. .. .	425	40	26,685	..	11,150
Follett .. .. .	..	147	15,236	..	..
Total .. .. .	17,746	116,258	1,948,533	808,212	3,348,754

NOTE.—The figures in this table are exclusive of 3,292 acres of swamp or reclaimed lands, and 18,245 acres of lands that may be sold by auction.

In addition there are 6,497,000 acres of Mallee land. The leases of these lands expired in 1903, and since that time the areas are held principally on grazing licences renewable annually—the Government being entitled to resume possession at any time, and thus they are classed amongst those lands available for occupation. The total area of land available is, therefore, 12,758,040 acres.

The *Land Act* 1903 introduced important amendments in regard to the classification of unalienated Crown lands. It is provided that any such land may, before or after being classified, be made available for selection. Before being made available a plan of the projected subdivision shall be prepared, and a provisional valuation and classification indicated thereon, specifying the rates of licence-fee, rent or purchase money payable therefor. On the completion of a permanent survey of an allotment the value may be determined either before or after an application to select it has been

granted by a Classification Board, and the licence-fee, rent, and purchase money shall be fixed to accord with the value so determined, and shall be substituted for the rates which would otherwise have been payable under the provisions of the Land Act of 1901. It is also provided that the Governor in Council may, if at any time it appears that the value of any unalienated land is greater than the value as fixed by the provisions of the Land Act of 1901, increase the rates of the licence-fees, rent or purchase-money payable in respect thereof. The Land Act 1904 deals principally with procedure.

The Land Act of 1905 has for its principal enactment the conditions upon which bee range areas may be declared and bee farm site licences granted. Three bee farm licences, and an area of ten acres in the whole, is the limit allowed to any one person or company. All licences are issued for one year, but are renewable up to seven years.

Crown lands of the first-class, of which there are now 17,746 acres available for selection, are situated principally in the counties of Buln Buln, Bogong, Talbot, and Polwarth, and consist for the most part of good chocolate soil of volcanic origin, and the grey soil of the coal-bearing country. These areas are heavily timbered. The second-class land is fairly distributed throughout the State, and comprises silurian and granite ranges, and lower lands of tertiary formation. A large portion of this land has chiefly a grazing value, though parts, comprising creek flats and gullies, are suitable for cultivation; but a large proportion is specially suitable for vineyards and orchards. The area of this class available is 116,258 acres. The area of third-class lands, which, like the second-class lands, are to be found in almost every county in the State, is very extensive, amounting to 1,948,533 acres available for selection. Agricultural and grazing lands.

Any person of the age of 18 years is eligible to take up or select under the Land Acts the area prescribed in accordance with the classification of the land—less the area of previous selections.

A grazing lease may be obtained of an area not exceeding 200, 640, or 1,280 acres of first, second, or third class lands respectively, for any term expiring not later than the 29th December, 1920, when the land, together with all improvements—to be allowed for at a valuation limited to 10s., 7s. 6d., or 5s. per acre for the three classes respectively—reverts to the Crown. The annual rent of a grazing area is not less than 3d., 2d., or 1d. per acre according to the value of land. The lessee of a grazing area may select thereout an agricultural or grazing allotment.

Persons desirous of selecting and obtaining the freehold may do so by either taking up a grazing area lease and selecting thereout, as just described, or by obtaining direct, without first obtaining a grazing area lease, an agricultural or grazing allotment. The purchase money is fixed at not less than 20s., 15s., or 10s., per acre, according to the value of the land; and is payable by even annual instalments, extending, in the case of a residential selector, over a period of 20 or Agricultural and grazing allotments.

40 years, at his option; but, in the case of a non-residential selector over a period of 20 years only. The land is occupied during the first six years under *licence*, and during the remainder of the term under lease. During the period of the licence the land must be kept free from vermin, enclosed with a fence, and certain improvements made. After the expiration of the six years' licence, the selector, if all conditions have been complied with, can either purchase his holding by paying up the balance of the purchase money, the six years' instalments (licence-fees) already paid being credited as part payment, or obtain a lease extending over 14 or 34 years, as the case may be, at the same annual rental, which is also credited to the selector as part payment of the fee-simple.

Perpetual  
leases.

Instead of selecting by way of licence and lease, by which system the freehold is obtained, a person may acquire a similar area of agricultural and grazing lands under perpetual lease. The annual rental is 4 per cent. of the unimproved value of the land, which is fixed at £1, 15s., or 10s. per acre for first, second, or third class lands respectively till 1909. The rent is subject to revision every ten years, but must not exceed 4 per cent. of the unimproved value of the land. Residence on or within five miles of the land for six months during the first year, and eight months during each of the four following years, is necessary; but if one-fourth of the allotment be cultivated during the first two years, and one-half before the end of the fourth year, the residence covenant will not be enforced.

Pastoral  
lands.

The total area of the pastoral lands now available for occupation is 3,348,754 acres, situated in the counties of Wonnangatta, Croajingolong, Benambra, Tambo, Tanjil, Dargo, Bogong, Delatite, Lowan, Borung, and Dundas. A large portion is difficult of access, being in high altitudes, where cultivation is impossible and grazing impracticable except during the summer months.

Swamp or  
reclaimed  
lands.

The total area of swamp or reclaimed lands amounts to 3,292 acres. The most important of these are situated at Koo-wee-rup, Moe, and Condah, which have been reclaimed at considerable cost to the Crown. These lands are divided into allotments not exceeding 160 acres. When the value of an allotment has been determined, it may be disposed of in one of four ways, viz., under a 21 years' lease at public auction; under perpetual lease, at a rental of 4 per cent. on the value of the land; under a conditional purchase lease, payment extending over 31½ years by 63 half-yearly instalments, including 4½ per cent. interest on the balance of the unpaid purchase-money; or by public auction, on terms similar to those explained in the following paragraph:—

Lands for  
sale by  
auction.

Country lands which may be sold by auction (not including swamp or reclaimed lands) comprise 18,245 acres. One-eighth of the purchase money must be paid as a deposit, the balance being payable in not more than twenty half-yearly instalments with interest at 4 per cent. per annum. Isolated portions of Crown lands not exceeding 50 acres, or any portion not exceeding 3 acres required as a site for a church or for any charitable purpose, may



be sold at auction. There are stringent provisions prohibiting agreements which would prevent fair competition.

The "auriferous lands" comprise 808,212 acres, and are distributed over twenty counties in various parts of the State. Any portion of these lands which is found to be non-auriferous, or which can be alienated without injury to mining interests, may be transferred to a class or classes under which it may be selected. This class of land is, for the most part, suitable for fruit culture and grazing. Annual licences are issued for areas not exceeding 20 acres, on payment of a yearly licence-fee of 5s. for areas of 3 acres or under, 10s. for areas from 3 to 10 acres, and 1s. per acre for areas over 10 acres. The licensee has the right to use the surface of the land only; cannot assign or sublet without permission; must either reside on or fence the land within four months, and cultivate one-fifth of the area. He must post notices on the land, indicating that it is auriferous; and miners have free access to any part of the land not occupied by buildings. Holders of miners' rights, issued under the Mines Acts 1890 and 1897, are entitled to occupy for the purpose of residence or business a maximum area of one acre or a lesser area fixed by local mining by-laws. The fee is £5 per annum for a business licence, and 2s. 6d. for a miner's right, and a habitable dwelling must be erected on the area within four months. After being in possession for two and a half years, and having erected buildings or other improvements, the holder may apply to purchase his allotment at a price to be determined by the Board of Land and Works.

Auriferous lands.

Grazing licences to enter with cattle or sheep upon reserves or other Crown lands may be issued annually for any period up to seven years, subject to cancellation at any time during the period. Any fencing erected by a licensee may be removed by him.

Annual grazing licences.

Leases up to 21 years at an annual rental of not less than £5, and annual licences at various rates are issued for different purposes, such as sites for residences, gardens, inns, stores, smithies, butter factories, creameries, brickmaking, &c. Licensees of sites for residences, gardens, inns, stores, smithies, or similar buildings, who have been in possession of land for five years (if the land is outside the boundaries of a city), may purchase at a price to be determined by an appraiser, in which case any rents previously paid will be credited towards purchase money.

Other leases, purchases, &c.

The "mallee country"—so named from the scrub found growing there—occupies about 11,000,000 acres of the north-west portion of the State. The soil is light chocolate and sandy loam, and, in its virgin state, is covered with mallee scrub, interspersed with plains lightly timbered with box, she-oak, and pines. Since the introduction of the "mallee roller" and the "stump-jump" plough, the scrub can be cleared off at a moderate cost. With the extension of railway facilities and by the utilization of some of the surplus waters of the Murray for irrigating, there will be great scope for successful settlement in this country. There are now 6,497,000 acres included in the general list of unalienated lands available for occupation.

Mallee lands.

The terms of purchase by licence and lease are now very similar to those in respect of agricultural and grazing allotments previously described, viz., for 1st, 2nd, and 3rd class land, not less than £1, 15s. and 10s. respectively, payable during either 20 or 40 years. Larger areas may be held, however, the maximum being 640 acres, 1,000 acres and 1,280 acres respectively. In the case of Mallee Perpetual Leases the rental must not exceed  $1\frac{1}{4}$  per cent. of the unimproved value, and if one-fourth of the area be cultivated within four years and half by end of sixth year, or improvements effected to the extent of 10s., 7s. 6d. or 5s. per acre, according to the classification, the residence is unnecessary.

Alienation  
of land,  
1900 to 1906.

During the year 1900, 494,752 acres were alienated in fee simple, including land selected in previous years; 406,145 acres in 1901; 523,574 acres in 1902; 510,080 acres in 1903; 584,010 acres in 1904; 907,339 acres in 1905; and 344,519 acres in 1906; the purchase money being £526,650 in 1900; £438,363 in 1901; £555,538 in 1902; £542,011 in 1903; £613,511 in 1904; £934,386 in 1905; and £375,296 in 1906. The Crown lands absolutely or conditionally sold during the last seven years were 232,783 acres in 1900; 523,464 in 1901; 306,806 in 1902; 347,813 in 1903; 263,180 in 1904; 226,197 in 1905; and 179,755 in 1906.

Pastoral  
occupation  
of Crown  
Lands.

The pastoral occupation of Crown lands on 31st December, 1906, was as follows:—

Number of Licences and Leases	...	...	24,392
Area (acres)	...	...	16,683,992
Annual Rental	...	...	£58,085

"Transfer of  
Land Act."

The "Torrens System," whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system was originated previously in South Australia by the late Sir R. R. Torrens, and has been the means of simplifying procedure in connexion with the transferring of land; gives a title to the transferee free of any latent defect; and cheapens the cost of dealing in real estate by reason of the simplicity of the procedure. All land parted with by the Crown since 1862 is under the operation of the Transfer of Land Act, and the Crown grant issues through the Titles Office; but to bring under the Act land that was parted with prior to that year, application must be made accompanied by strict proofs of the applicant's interest in the property. During 1906 there were 603 applications to bring under the Act land amounting to 70,775 acres in extent, and to £1,071,861 in value, whilst the land brought under the Act during the year by application amounted to 93,397 acres in extent, and to £1,049,676 in value. Up to the end of 1906, there had been brought under the Act 2,374,491 acres valued at £49,075,227. The number of certificates of title issued in 1906 was 9,954, and the fees received under the Act amounted to £40,852.

Assurance  
fund.

When application is made to bring land under the Transfer of Land Act, a contribution of  $\frac{1}{2}$ d. in the £1 on the value of land is levied on the applicant to assure and indemnify the Government in

granting a clear title against all the world, as there may be a latent interest of some other person in the property, whom the Government must recompense out of this fund for the loss of such interest. Since 1884-5 the assurance fund has been reduced by £75,073 which amount was advanced towards the purchase of land adjoining the Titles Office, and on which the fund receives 4 per cent. per annum from the general revenue. Since its first formation, 30 claims have been made, and sums amounting to only £6,457 (including costs) have been paid to claimants.

From the period of the first settlement of the State to the end of 1906, the amount realized by the sale of Crown lands was £31,936,735, or at the rate of £1 7s. 11d. per acre. It must, however, be remembered that payment of a considerable portion of this amount extended over a series of years without interest, and upon very easy terms.

Total amount realized by sale of lands.

Chiefly with a view to providing an outlet for the unemployed labour of the colony, an Act (the *Settlement on Lands Act* 1893, No. 1311) was passed on the 31st August, 1893, providing for the establishment of three descriptions of rural settlements, viz.:—Village Communities, Homestead Associations, and Labour Colonies. For the Village Communities certain lands were set apart and divided into allotments of from 1 acre to 20 acres in extent, to occupy which for periods of three years permits are granted to approved applicants. An applicant must not be under the age of eighteen, nor the owner in fee simple of 2 acres or upwards, nor the lessee of a pastoral allotment of grazing area, nor a licensee under sections 42 or 49 of the *Land Act* 1890. During the period over which the permit extends the occupant pays a rental of 3d. per acre per annum, or if he occupy Mallee land, 1d. per acre per annum, and on the expiration of that period he is granted a lease for twenty years, during the currency of which he is required to pay half-yearly, in advance, a sum equal to the fortieth part of the price set upon the allotment, which is generally £1 per acre, except in special cases when the price is considerably higher; he has also to repay, in equal yearly instalments extending over the currency of his lease, any moneys which have been advanced to him, and to pay the cost of surveying his allotment in ten half-yearly instalments extending over the first five years thereof. The lessee is bound to bring one-tenth of his land under cultivation within two years of the date of his lease, and one-fifth within four years of such date; and is, moreover, to put on the land permanent improvements to the value of £1 per acre within six years of such date. All conditions having been complied with, the lessee is entitled to receive a grant in fee of the land he occupies, at any time after six years from the date of lease.

Village settlement.

The Homestead Associations were originally combinations of not less than six persons who desired to settle near each other. These Associations, however, proving unsuccessful, the part of the Act relating to them was repealed in 1904.

Homestead Associations and Village Communities.

The area originally made available for Village Communities and Homestead Associations was 156,020 acres in 85 different localities in the State. A large portion of this area was, however, found to be unsuitable for Village Settlement purposes, and has been withdrawn from the operation of the Act. After the Act had been in operation for some time, it was generally recognised that the area which a settler could acquire under Part I. of the Settlement on Lands Act, viz., 20 acres, was too small, in many cases, to make a living on, and it was decided to allow settlers to acquire additional area under Conditional Purchase Leases, the value of which, together with original holding, should not exceed £200. This was provided for in the *Land Act* 1901 (Secs. 344-346), and settlers have largely availed themselves of the privilege. The area now occupied is 54,404 acres, and this is divided among 1,752 settlers, giving an average of 30 acres each. At the time of the last report (July, 1906), there were 1,576 settlers actually residing, and there were 176 not residing, but improving, making a total of 1,752 in occupation. Including wives and families, the total souls numbered 7,497. On 30th June, the stock numbered 10,557 bullocks, cows, and calves, 2,387 horses, 27,348 fowls, 2,545 pigs, which, together with other stock (goats, sheep, &c.) were valued at £89,580. The area under cultivation was 25,214 acres, and the total value of improvements effected was £265,202.

The numbers specified above do not include a considerable number of settlers who have surrendered their Village Settlement leases and obtained licences in lieu thereof, under Section 47 of the *Land Act* 1901.

The total amount of monetary aid advanced to settlers was £67,379, and no advances have been made since 1903. At 30th June, 1906, £26,860 of the amount advanced had been repaid by the settlers.

*Closer  
Settlement  
Act 1898.*

A system by which the Government was enabled to purchase private lands for closer settlement from persons willing to part with them at a fair price, was introduced in 1898, by Part III. of the *Land Act* of that year. That part, with several subsequent amendments of minor importance, became Part IV. of the Consolidated Act of 1901, since superseded by the *Closer Settlement Act* of 1904. After favorable report and valuation being obtained, the Minister was empowered to enter into a provisional contract for the purchase of land, copies of which contract and report were to be laid before Parliament; and if the Legislative Assembly, by resolution, declared it expedient to acquire such land, a Bill for the purchase thereof was introduced. The price to be paid by settlers of the land so acquired was so fixed as to cover cost of purchase, survey, and subdivision, value of land absorbed by roads and reserves, cost of constructing roads, cost of clearing, draining, fencing, and other improvements which the Board of Land and Works might effect prior to disposal as farm allotments, and any other incidental expenses. Any person aged 21 (not holder of rural land valued at £1,250, or who would not thereby become holder of land exceeding such value)

could be granted one farm allotment under conditional purchase lease. The purchase money, with interest at  $4\frac{1}{2}$  per cent., had to be paid by 63, or a lesser number of, half-yearly instalments, two of which were required to accompany the application. The conditional purchase lease issued was for a term not exceeding  $31\frac{1}{2}$  years, and contained, so far as consistent, the usual conditions of perpetual leases, and also the following:—(a) Improvements to the value of 10s. per acre; or, if Board so determined, to value of 10 per cent. of the purchase money, before end of third year; and to the same extent, in addition, before the end of the sixth year; (b) Personal residence or by wife or child over eighteen years of age for eight months during each of first six years; (c) Not to transfer, assign, mortgage, or sublet within first six years; and any other conditions prescribed by the regulations. The fee-simple could be acquired after the first six years, if conditions complied with, on payment of balance of principal. Forfeiture for non-payment of an instalment, could be prevented by payment thereof, with a penalty of 5 per cent., within three months, or of 10 per cent. within six months. Any tenant of land acquired by the Crown from his landlord could be granted a prior right to conditional purchase of any area not exceeding £1,250 in value, or £2,000 if there were a homestead. Power was given to close unused roads, and portions of the land acquired could be used for experimental farms.

Under the authority of the Act of 1898, the following purchases were made:—

Estates purchased under Act of 1898.

- (1) The Wando Vale Estate, containing 10,446 acres, situated in the County of Dundas, was purchased on the 23rd March, 1900, for £63,984.
- (2) The Walmer Estate, 13,769 acres, in the County of Borung, on the 23rd October, 1900, for £44,750.
- (3) Brunswick Lands—91 acres, in the County of Bourke, on the 7th November, 1900, for £2,644.
- (4) The Whitfield Estate—4,246 acres, in the County of Delatite, on the 1st November, 1900, for £36,095.
- (5) The Eurack Estate—5,108 acres, in the County of Grenville, on the 13th November, 1901, for £53,640.

The total of the purchase money and the incidental expenses, amounting to £211,095, represents part of a loan of £400,000 authorized by Acts No. 1602 and No. 1749 for the purposes of closer settlement. The vendors of the Whitfield and Eurack estates accepted £56,095 in Government 3 per cent. stock, and the balance in cash, the total cash payment over the five estates being £153,245.

On 30th November, 1904, an important Act was passed further providing for the acquisition and disposal of land for closer settlement—this Act, the Land Act of 1901, and other Acts amending the same being now treated as the land legislation of the State. The Act of 1904 is administered by a Board consisting of three persons appointed by the Governor in Council, intrusted with power to

Closer Settlement Act 1904.

acquire, either by agreement or compulsorily, blocks of private land in any part of the State for the purposes of closer settlement. Such land as may be acquired by the Board is to be purchased by money the proceeds of the sale of debentures or stock under this Act; or, with the consent of the Treasurer, of Victorian Government Stock. The Governor in Council during the first five years of the operation of the Act may for the purposes of the Act increase the amount of the Victorian Government Stock by a sum not exceeding £500,000 in any one financial year; or, instead of increasing the Victorian Government Stock, may issue debentures for the whole or any portion of such sum. The principal and interest on all stock and debentures issued is to be a charge on the Closer Settlement Fund created from all moneys received by the Board, and the fund heretofore known as the Farm Settlements Fund transferred to the Board.

Acquisition  
and  
Adminis-  
tration.

The Minister administering the Act may authorize the inspection of private land, and the Board shall affix its value when deemed suitable. If the Minister agrees with the Board's valuation the land may be acquired either by auction or other sale of the estate, or by purchase or exchange of land equivalent at a price not exceeding the Board's valuation, or by compulsory acquisition by resolution passed by both Houses of Parliament. Where money has been lent on land, unless with the consent of the mortgagee, no less sum shall be paid as purchase money for such land than the amount of money so lent with interest up to time of purchase. Difference of opinion as to the value of any land desired by the Board is to be referred to a compensation Court for determination.

The Board may dispose of all lands thus acquired on conditional purchase lease as farm allotments, or as allotments for workmen's homes, or as allotments for agricultural labourers at fixed prices. The farm allotments to consist of an area of land not exceeding £1,500 in value (except in cases of homestead allotments when the value of land held may be increased to £4,000), the workmen's homes, £100, and the agricultural labourers £200. No lease of an allotment shall be granted to any person who is already the holder of land of the value of £1,500 (township land excepted), or who would thereby become the holder of land exceeding the value of £1,500, and not more than one allotment is to be held by one lessee. Conditional purchase leases are to be issued for such a term of years as may be agreed upon by the lessee and the Board, and provision is made for payment of the value of the allotment, and interest at a rate of not less than £4 10s. per cent. per annum, by not more than 73 half-yearly instalments. The leases provide for the destruction of vermin, the eradication of noxious weeds, for fencing and its maintenance, and other improvements of a permanent character; residence of eight months each year; and that the lessee shall not transfer, assign, mortgage, sublet, or part with possession of the whole or any part of the allotment within the first six years of the lease, special provision being made in cases of death or insolvency. A Crown grant may be acquired

at any time after twelve years on payment of the balance of purchase money. In the case of workmen's home allotments, the lessee must, within four months, be in actual residential occupation of the allotment and within one year from the date of the lease, fence the allotment and erect a dwelling house, and no more than one dwelling house and one place of business shall be erected upon any one allotment. The condition regarding improvements to be done on agricultural labourers' allotments is that the lessee must within one year erect a dwelling house upon the allotment, and within two years fence the allotment. Advances out of the fund up to £50 may be made by the Board to lessees of workmen's homes and agricultural labourers' allotments. Such advances, with interest at 5 per cent., are made repayable by equal half-yearly instalments extending over a period not exceeding sixteen years. In lieu of such advance, and subject to similar conditions, the Board may cause cottages to be erected at a cost not exceeding £100 each.

The passing of *The Closer Settlement Act* 1906 has gone a long way towards helping the farmer with only limited capital on to a holding, and provision has been made for the extension of a lease, or the suspension of payments other than that provided for in the principal Act. *Closer Settlement Act 1906.*

The clause defining deferred payments now reads:—

“Sec. 49, sub-sec. II.—A condition that when a lessee is unable at the end of any half-year to pay his instalments, the Board may, if the lessee has complied with the conditions of his lease, suspend the payments of such instalments as will not exceed 60 per centum of the value of the improvements effected thereon over and above any encumbrance thereon, and allow him to pay the arrears of instalments and interest thereon in one amount or spread over a definite time, or may extend the lease for a corresponding time.”

Provision has also been made to enable those lessees under the original sections of the *Land Act* 1898 to transfer their leases to the present Act and obtain the benefits and privileges which the new legislation allows.

The Board is empowered to assist lessees to effect permanent improvements, such as dwelling houses and outhouses, up to a maximum amount of £250. These advances must be repaid in equal half-yearly instalments, extending over a period not exceeding twenty years, and bear interest at the rate of 5 per cent.

The Board may also set aside and reserve portions of any estate for special application by persons resident in Great Britain or Ireland, or any other country.

Estates  
purchased  
under Act  
of 1904.

Up to the end of the year 1904, no land had been acquired under the authority of the Act of that year; but up to date (June, 1907) the following purchases have been made:—

Estate.	Area.	Situation.	Amount Paid.	No. of Allotments.
	acres.		£	
Wyuna ...	23,016	In the Goulburn Valley ...	120,834	141
Springvale ...	3,396	In Kiewa River Valley ...	25,895	20
Memsie ...	10,028	On River Loddon ...	57,158	43
Overnewton ...	11,336	Keilor Plains ...	70,540	75
Richmondvale ...	1,280	Near Traralgon ...	11,000	12
Restdown ...	17,894	On River Campaspe ...	60,391	55
Strathkellar ...	10,227	Near Hamilton ...	72,084	63
Bona Vista ...	2,060	Near Warragul ...	28,832	39
Werribee Park	23,214	Near Werribee ...	301,782	being subdivided
Lara ...	8,329	Near Lara ...	45,000	34
Willows ...	400	Near Traralgon ...	5,131	4
Greenvale ...	304	Near Geelong ...	7,298	6
Ercildoune ...	1,200	Near Burrumbeet ...	12,199	11
Tandarra ...	4,558	Near Bendigo ...	21,082	20
Dura ...	367	Near Port Fairy ...	3,200	8
Exford ...	8,054	Near Melton ...	64,160	54
Colbinahbin ...	19,171	Near Rushworth ...	110,198	68
Pirron Yaloak	1,050	Near Colac ...	23,686	being subdivided
Numarkah ...	2,360	Adjoining Numurkah ...	18,900	18
Allambee ...	5,006	Near Warragul ...	31,744	32
Keayang ...	1,494	Near Terang ...	14,965	12
Staughton Vale	9,830	Near Bacchus Marsh ...	66,465	being subdivided
Werneth ...	6,450	Near Cressy ...	30,637	being subdivided

Four of the properties, viz., The Willows, Greenvale, Ercildoune, and Dura, embracing an area of 2,271 acres, were acquired under the provisions of section 6 of the Act, which enables the Board, with the approval of the Governor in Council, to ratify and adopt any provisional agreement made between several intending purchasers and the owner of an estate, if satisfied that the agreement is a *bonâ fide* one, and the terms fair and reasonable.

Altogether, the Board has forty properties, with an area of 207,789 acres, subdivided into 920 farm allotments and 432 workmen's homes allotments, of which only ten of the former and eleven of the latter remain unsold. Then there are the three properties recently acquired, embracing an area of 17,330 acres, which are now being subdivided, and will probably be made available early next year.

The sum of £163,203 has been repaid to the Closer Settlement Fund up to 30th June, 1907, and of this amount £71,440 has been transferred from that fund to revenue to meet interest due to stockholders; £59,727 has been drawn from the same fund for redemption and cancellation of stock, and for capital expenditure, the balance to the credit of the fund on 30th June, 1907, being £17,009. The balance of unredeemed stock is now £1,269,508.



The following statement summarizes what has been done by the Government of Victoria in acquiring and subdividing land for the purposes of closer settlement and in putting cultivators thereon up to the close of 1906, with corresponding information for the year 1903.

Closer Settlement at 1903 and 1906

CLOSER SETTLEMENT, 1903 AND 1906.

	At end of—	
	1903.	1906.
<b>Estates Acquired—</b>		
Number ... ..		36
Area ... .. acres	33,77	190,036
Cost ... .. £	214,064	1,359,590
<b>Made Available and Occupied—</b>		
Number of Holdings ... ..	289	1,014
Area ... .. acres	33,774	119,876
Resident Population ... ..	887	3,265
Area in course of preparation or occupation acres	...	70,160

The cost per acre of the estates acquired averaged £6 6s. 9d. at the close of 1903, and £7 3s. 1d. at the close of 1906.

The increase in the land made available and occupied between the years shown in the table represents provision for 725 families, the area of the allotments averaging 117 acres at the close of 1903, and 118 acres at the close of 1906.

The next table summarizes the extent of production by estates in working order:—

Production on Closer Settlement Estates.

PRODUCTION ON CLOSER SETTLEMENT ESTATES: 1904-5 AND 1906-7.

	1904-5.	1906-7.
	4 Estates.	18 Estates.
Area of Estates .. .. acres	33,571	117,482
Area under crop .. .. "	8,238	19,085
Area in fallow and sown grasses .. .. "	2,773	13,585
Hands employed, male .. .. No.	270	728
Hands employed, female .. .. "	160	388
Area under cereals .. .. acres	7,567	14,120
Area under root crops .. .. "	132	423
<b>Produce—</b>		
Grain .. .. bushels	139,300	227,040
Hay .. .. tons	2,298	5,511
<b>Stock—</b>		
Horses .. .. No.	885	2,593
Cattle .. .. "	4,212	10,245
Sheep .. .. "	11,511	35,686
Pigs .. .. "	1,692	1,585
Cream separators .. .. "	27	145
Butter .. .. lbs.	7,402	27,158
Hams and bacon .. .. "	14,966	28,418
Wool .. .. "	61,949	152,474
Stock slaughtered .. .. No.	1,701	2,216

Workmen's  
homes and  
agricultural  
labourers'  
allotments.

At Brunswick, 4 miles from the city, 91 acres of land were purchased on 17th October, 1900, for £2,644, where workmen might devote their spare time and labour to create for themselves comfortable homes under healthy and cheerful conditions. After providing for roads and public reserves, it was subdivided into 56 workmen's homes allotments, and made available for application on 4th February, 1901, under certain conditions, amongst which residence is compulsory for the first six years and improvements of a stated value have to be effected. All these allotments have been disposed of and the general appearance of the district has been quite changed. Two bridges have been erected by the Department, and the Metropolitan Board of Works has laid down water mains along the principal streets. A public hall and also a fire brigade station have been erected on the estate.

At Warrnambool 46 acres of Crown land were subdivided and made available, 17th June, 1903, in 28 workmen's home allotments. At Bacchus Marsh, the old police paddock, of 13 acres, was subdivided into 1-acre allotments, and disposed of to local workingmen, 5th November, 1903. At Leongatha, 53 acres of the southern portion of the labour colony were subdivided into five small farm allotments, and made available, 27th November, 1903. Since then the Government has secured the Dal-Campbell and Cadman's Estates, of 45 and 18 acres respectively, adjoining the Brunswick subdivision, and made them available for settlement; also 30 acres in the city of Footscray, which have been cut up into  $\frac{1}{4}$ -acre allotments and disposed of. At Mortlake, 2,349 acres of Crown lands were subdivided into thirteen farm allotments and fifteen agricultural labourers' allotments; and disposed of on 18th April, 1905.

#### WATER SUPPLY AND IRRIGATION.

Victorian  
Water-  
works.

The Victorian Waterworks are of two classes, one being designed chiefly for domestic supply, the other for irrigation and stock purposes. The most important of the former group are the Yan Yean Waterworks, supplying Melbourne and suburbs, which were transferred from Government control to the Melbourne and Metropolitan Board of Works in 1891. The Coliban, Geelong, Broken River, Kerang Lakes, and Mallee Supply Works, also engaged in domestic supply, were vested in the States Rivers and Water Supply Commission in 1906. Other works concerned with domestic supply are controlled by Waterworks Trusts and municipal corporations. The

irrigation works are, with one exception, viz., the First Mildura Irrigation and Water Supply Trust, controlled by the State Rivers and Water Supply Commission. The following table contains a summary of all waterworks controlled by the State Rivers and Water Supply Commission, Trusts, Corporations, and the Metropolitan Boards of Works, and the reservoirs for the supply of water on gold-fields:—

WATERWORKS—COST, STORAGE CAPACITY, ETC., AT 30TH JUNE, 1906.

Controlling Bodies.	Purposes of Supply.	Storage Capacity of Reservoirs.	Capital Expenditure on Works.
State Rivers and Water Supply Commission—		Gallons.	£
Coliban System ... ..	Domestic and Mining	8,825,037,000	1,171,941
Geelong ... ..	Domestic ... ..	570,780,000	442,322
Broken River ... ..	Stock, Domestic, &c. ...	...	14,853
Kerang Lakes ... ..	" " ...	Cubic feet. 4,000,000,000	9,587
Mallee Supply ... ..	" " ...	2,106,000,000	153,647
Goulburn River ... ..	Irrigation, &c. ...	9,500,000,000	701,190
Loddon River ... ..	" " ...	610,000,000	153,674
Kow Swamp ... ..	" " ...	1,780,000,000	180,400
Irrigation and Water Supply Districts (19) ...	" " ...	...	803,722
Loddon United Waterworks Trust ... ..	Stock, Domestic, &c. ...	...	25,893
First Mildura Irrigation and Water Supply Trust ...	Irrigation, &c. ...	...	58,700
Waterworks Trusts (81) ...	Stock, Domestic, &c. ...	Gallons. 1,914,987,500	1,367,565
Municipal Corporations (25) ...	Domestic ... ..	1,645,591,000	669,684
Melbourne and Metropolitan Board of Works * ... ..	" ...	6,508,000,000	3,768,270
Municipal and other control—on Goldfields ... ..	Mining and Domestic	438,100,000	55,860
Abolished Irrigation and Water Supply Trusts (8) ... ..	Irrigation, &c. ...	...	31,952
Miscellaneous Expenditure ...	...	...	102,720
Total ... ..	...	...	9,711,980

\* For further particulars relating to the Melbourne and Metropolitan Board of Works, see p. 172, Part III. of this work.

The capital expenditure given above is the actual expenditure on the works, and excludes cost of floating loans, whilst the expenditure on the Mallee Supply and Goulburn River Works includes expenditure additional to that on free head-works shown in the following table.

Advances  
and ex-  
penditure  
for water-  
works.

The succeeding table summarizes the amounts disbursed and loaned to local bodies by the State on account of waterworks. In addition to free grants large sums have been written off the liabilities of the local bodies.

### CAPITAL EXPENDITURE AND LOANS FOR WATERWORKS.

	Loan Advances by State.	Interest Capi- talized.	Free State Grants.	Capital Written Off.	Payments to Re- demption.	Capital Sum Standing at Debit, 30th June, 1906.
	£	£	£	£	£	£
<i>Irrigation.</i>						
State Works .. ..	..	..	2,799*	..	..	1,027,909
Irrigation and Water Supply Districts (19) .. ..	788,318	..	15,404	540,404	5,480	242,434
First Mildura Irrigation and Water Supply Trust ..	58,700	..	..	..	..	58,700
Abolished Trusts (8) ..	31,709	..	243	31,679	30	..
Total .. ..	878,727	..	18,446	572,083	5,510	1,329,043
<i>Domestic, Mining, and Stock.</i>						
State Works .. ..	..	..	..	..	..	1,837,814
Loddon United Waterworks Trust .. ..	21,771	..	4,122	1,717	..	20,054
Waterworks Trusts (81) ..	1,289,204	6,870	78,361	333,947	56,791	905,336
Municipal Corporations (25)	669,684	43,633	..	166,870	81,052	466,395
Melbourne and Metropolitan Board of Works .. ..	2,389,934	..	..	..	541,271	1,848,663
Gold-fields' Reservoirs ..	..	..	..	..	..	55,860
Miscellaneous .. ..	..	..	..	..	..	102,720
Total .. ..	4,370,593	50,503	82,483	501,534	679,114	5,236,852
Grand Total .. ..	5,249,320	50,503	100,929	1,073,617	684,624	6,565,885

\* Originally grants to Waterworks Trusts, the works on which spent having been taken over by the State.

In addition to the capital written off, as shown above, arrears of interest amounting to £342,773 have also been written off the liabilities to the State of what were originally Irrigation and Water Supply Trusts. Of these trusts, nineteen, which are now Irrigation and Water Supply Districts, vested in the State Rivers and Water Supply Commission, were relieved to the extent of £261,363 in their arrears of interest, four, which are now Waterworks Trusts, were relieved of £66,617, and eight abolished trusts of £14,793. Thus the total amount actually written off the liabilities of the Trusts (Irrigation and Waterworks) and Corporations is £1,416,390. Interest outstanding at 30th June, 1906, amounted to £45,897, viz., £7,000 against irrigation Districts, £15,881 against the First Mildura Trust, £3,401 against the Loddon United Trust, £17,029 against Waterworks Trusts, and £2,586 against Municipal Corporations.

### STATE RIVERS AND WATER SUPPLY COMMISSION.

The *Water Act* 1905, which came into operation on the 1st May, 1906, promises to inaugurate a new era in the history of water supply and conservation in Victoria. The centralization of effort

and systematization of policy and management, the want of which is regarded as the retarding influence of past years, are secured under the new legislation, which provides a Board of three Commissioners to administer the new policy. The irrigation trusts (except First Mildura) are abolished, their works and duties being transferred to the new body. Many of the duties of the Water Supply Department also go over. The Commission has power to ultimately impose rates and charges upon the land sufficient to cover the cost of maintenance and management, and interest on the capital outlay. It controls the Coliban, Geelong, Kow Swamp, Goulburn, Loddon, Lake Lonsdale Reservoir, the Mallee water supply, the Long Lake scheme, and other smaller works of the State. All rights in natural waters are vested in the Crown, and the Commission is empowered to take proceedings against persons or corporations who divert water from water-courses, except as provided by the Act, the presumption of grant to do so by length of use being annulled. Pollution and obstruction of water in water-courses are offences, but rights under the Mines Acts are not interfered with. The Board of Land and Works is to construct waterworks, and, on completion, transfer them to the Commission as State works of water supply. The districts of the abolished irrigation and water supply trusts have become districts under the jurisdiction of the Commission; and new districts may be constituted, or the boundaries of old ones altered, by the Governor in Council. A register of all lands within each such district, to be open for public inspection, is to be drawn up, arranging the lands (other than swamp lands) in classes not more than three in number. Occupiers of all lands on the register for any district are entitled to a supply of water for the domestic and ordinary use of persons dwelling thereon, and for watering cattle and other stock on a scale of quantities to be fixed by the Commission. After such provision is made, the remainder of the available water may be appropriated by the Commission for irrigation. Not less than one-half nor more than three-fourths of such available remainder may be apportioned as water rights, *pro ratâ* on the basis of area, to all lands other than swamp lands within the district commanded by gravitation with water from the works. The occupiers of lands to which such water rights are apportioned are to be liable to an annual charge for the water for irrigation. In addition to such *pro ratâ* rates, applications may be made by orchardists and vignerons, and extra water rights granted to them of such water as will reasonably irrigate their trees at the same rate as that charged for the *pro ratâ* rights. These extra water rights lapse one year after the lands have ceased to be used for orchards or vineyards. Thereafter, further water supply may be granted to other lands by agreement with the occupiers, the rate per unit of volume being as in the cases of the *pro ratâ* and extra water rights. Sale of water by agreement may be made to persons or corporations. A general water rate is leviable upon all lands, for which purpose they may be arranged in not more than three divisions, regard being had to the benefits received—

lands commanded by gravitation being in the first or highest division. Water may also be supplied, upon charge, outside district, but no supply of water is permitted until the requirements of all persons within the district entitled to a supply for domestic and ordinary use, and for watering stock, have been met according to their valuation. The Commission or other authority has power to determine the times and manner of the supply for domestic and stock purposes of an owner or occupier who refuses to make proper provision, as required by the Commission or trust, for the reception of his water. Where the available supply is insufficient, a proportionate supply will be arranged. Lands taken for water purposes may be compensated for under the provisions of the *Lands Compensation Act 1890*.

By the *Water Act 1905*, in addition to other powers and duties imposed, the control and management of the Works, Irrigation and Water Supply Districts, Waterworks Districts, and the property of the Waterworks Trust, with the amount of capital cost and other details set out in the following tables were vested in the State Rivers and Water Supply Commission.

**WATERWORKS VESTED IN THE STATE RIVERS AND WATER SUPPLY COMMISSION.**

					Capital Cost at 30th June, 1906.
(1) STATE WORKS.					
(a) <i>Free Head-works.</i>					£
Broken River Works	..	..	..	..	14,853
Goulburn River Works and Waranga Reservoir	..	..	..	..	693,835
Kow Swamp Works	..	..	..	..	180,400
Loddon River Works	..	..	..	..	153,674
Lake Lonsdale Reservoir	..	..	..	..	48,639
Lower Wimmera Compensation Works	..	..	..	..	8,558
Long Lake Pumping Works	..	..	..	..	27,347
Kerang North-west Lakes Works	..	..	..	..	9,587
Total	..	..	..	..	1,136,893
(b) <i>Other State Works.</i>					Capital Sum standing at Debit 30th June, 1906.
					£
Coliban System of Waterworks	..	..	..	..	1,219,735
Geelong Water Supply Works	..	..	..	..	456,450
Mallee Distribution Works	..	..	..	..	For capital sum see Sea Lake Waterworks District below
Mallee Local Storage Works	..	..	..	..	
Total	..	..	..	..	1,676,185

WATERWORKS VESTED IN THE STATE RIVERS AND WATER  
SUPPLY COMMISSION—*continued.*

(2) IRRIGATION AND WATER SUPPLY DISTRICTS.	Total Advances.	Capital written off by Acts Nos. 1625 and 1651.	Paid in Redemption to Treasury.	Capital Sum Standing at Debit 1st May, 1906.]
	£	£	£	£
Bacchus Marsh ..	14,406	8,906	213	5,287
Benjeroop and Murrabit ..	12,936	7,200	64	5,672
Boort East ..	21,566	14,866	142	6,558
Boort North ..	6,978	4,867	53	2,058
Campaspe ..	61,700	52,685	305	8,710
Cohuna ..	151,213	93,968	512	56,733
Dry Lake ..	1,704	686	297	721
Gunbower West ..	5,889	..	..	5,889
Kerang East ..	14,025	6,984	18	7,023
Kerang South ..	633	..	15	618
Koondrook and Myall ..	15,469	12,080	53	3,336
Leaghur and Meering ..	5,043	2,543	78	2,422
Macorna North ..	18,558	8,082	81	10,395
Marquis Hill ..	14,477	9,076	2	5,399
Rodney ..	223,269	149,949	2,901	70,419
Swan Hill ..	24,800	19,799	163	4,838
Tragowel Plains ..	159,848	124,534	444	34,870
Twelve-Mile ..	5,050	3,250	28	1,772
Wandella ..	30,754	20,929	111	9,714
Total ..	788,318	540,404	5,480	242,434

(3) WATERWORKS DISTRICTS.

Long Lake .. .. .	£
Sea Lake .. .. .	33,549*
	46,443

(4) WATERWORKS TRUST.

	Total Advances.	Capital written of by Act No. 1625.	Capital Sum standing at Debit 30th June, 1906.
	£	£	£
Loddon United .. ..	21,771	1,717	20,054

NOTE.—In this table the figures given as capital sum standing at debit contain in the cases of Coliban and Geelong an allowance for cost of floating loans; but in all other cases no such allowance has been made.

\* Including £27,347 for Free Head-works for which see page 486.

A statement of the moneys received and disbursed in respect of State Works for the year ended 30th June, 1906, as to the first ten months by the Victorian Water Supply Department, and as to the last two by the Commission, and in respect of Irrigation and Water Supply Districts for the two months ended 30th June, 1906, follows.

## STATEMENT OF RECEIPTS AND EXPENDITURE, 1905-6.

	Receipts.	Expenditure.			Excess.	
		Annual Votes, including Proportion of Head Office Expenses.	Deduct Expenditure on Capital Works.	Net Expenditure on Management and Maintenance.	Revenue ver Expenditure as per Column 4.	Expenditure over Revenue.
	1.	2.	3.	4.	5.	6.
	£	£	£	£	£	£
Coliban Works ..	34,045	14,832	4,394	10,438	23,607	..
Geelong Works ..	13,470	5,081	1,696	3,385	10,085	..
Goulburn Works ..	204	2,352	..	2,352	..	2,148
Loddon River Works	28	325	..	325	..	297
Kow Swamp Works ..	215	1,880	..	1,880	..	1,665
Broken River Works ..	7	212	..	212	..	205
North-West Lakes ..	110	211	..	211	..	101
Mallee—						
Lake, Lonsdale ..	134	304	..	304	..	170
Distributing Channels	..	2,471	..	2,471	..	2,471
Long Lake ..	1,241	2,451	..	2,451	..	1,210
Lower Wimmera ..	..	153	..	153	..	153
Irrigation and Water Supply Districts* ..	5,990	3,777	..	3,777	2,213	..
Totals ..	55,444	34,049	6,090	27,959	35,905	8,420

\* For two months only.

The following is a statement of receipts and expenditure, &c., in respect of the Geelong and Coliban systems for the year ended 30th June, 1906. It is compiled, as to the first ten months, from the records of the Victorian Water Supply Department, as to the last two, from the records of the Commission:—

## GEELONG AND COLIBAN—RECEIPTS AND EXPENDITURE, ETC., 1905-6.

Service.	Total Cost at 30th June, 1906, including Cost of Loan Flotation.*	Expenditure from Consolidated Revenue.		Receipts paid into Treasury to Credit of Consolidated Revenue, Year ended 30th June, 1906.	Receipts over Expenditure on Maintenance and Management equal to % on Total Cost.
		Interest on Loans, and Expenses of paying same.	Maintenance and Management, including Proportion of Head Office Expenses.		
	£	£	£	£	£
Geelong Works ..	456,450	15,540	3,385	13,470	10,085 =
Coliban Works ..	1,219,734	40,600	10,438	34,045	23,607 =
					2½ %
					1⅞ %

\* Subject to addition by proportion of expenses of recent Loan Conversion. Figures not yet available.



As the Commission came into existence after rates for 1906 had been made for the several Irrigation and Water Supply Districts, such rates were collected as general rates for the period ended 31st December, 1906. Meanwhile, valuers have been appointed to value the properties in these and in certain Waterworks Districts subject to the jurisdiction of the Commission, preparatory to the levying of future general rates for the supply of water for domestic and ordinary use, and for watering cattle or other stock. The valuers, in making these valuations, are also preparing a return setting out the number of persons dwelling on the lands valued. In the case of the Waterworks Districts subject to the jurisdiction of the Commission, rates for the like purpose will be made immediately on the completion of the valuations.

The following is a return of the annual value (municipal) of lands and tenements and of the rates made and levied thereon for the year 1906 by the late controlling bodies in the districts named:—

## VALUATION AND RATING, 1906.

Name of District.	Annual Value (Municipal) of Lands and Tenements.		Rate in the £1.
	£		s. d.
Cohuna .. ..	11,642	.. .. .	7 0
Koondrook and Myall ..	1,471	.. .. .	4 6
Benjeroop and Murrabit ..	2,649	.. .. .	2 0
Swan Hill .. ..	2,038	.. .. .	7 0
Gunbower West .. ..	1,138	.. .. .	5 0
Kerang East .. ..	1,905	.. .. .	4 6
Macorna North .. ..	3,113	{ Division 1 .. .. .	2 6
Dry Lake .. ..	.. ..	{ Division 2 .. .. .	5 0
South Kerang .. ..	344	.. .. .	Nil
Marquis Hill .. ..	1,236	.. .. .	3 0
Rodney .. ..	59,565	.. .. .	5 0
Campaspe .. ..	7,062	.. .. .	1 6
Bacchus Marsh .. ..	7,221	{ Werribee Division .. .. .	1 6
		{ Urban Division .. .. .	0 1
		{ Parwan Division .. .. .	0 1
		{ Lower Parwan Division .. .. .	0 9
Tragowel Plains .. ..	19,276	{ Division 1 .. .. .	1 6
		{ Division 2 .. .. .	2 4
		{ Division 3 .. .. .	2 6
		{ Division 4 .. .. .	1 6
North*Boort .. ..	1,344	.. .. .	2 0
East Boort .. ..	3,122	.. .. .	1 6
Leaghour and Meering ..	1,185	.. .. .	2 0
Wandella .. ..	2,682	.. .. .	1 9
Twelve Mile .. ..	1,004	.. .. .	2d. per acre
Long Lake .. ..	.. ..	.. .. .	Nil
Sea Lake .. ..	.. ..	.. .. .	0 6
		{ Marong Shire Division .. .. .	0 6
		{ East Loddon Shire Division .. .. .	1 6
		{ No. 1 East Division .. .. .	1 0
		{ No. 2 East Division .. .. .	0 9
		{ No. 3 East Division .. .. .	2 0
		{ No. 1 West Division .. .. .	1 6
		{ No. 2 West Division .. .. .	0 9
		{ No. 3 West Division .. .. .	1 4
		{ Korong (No. 1 Division .. .. .	0 9
		{ Shire (No. 2 Division .. .. .	0 6
		{ Charlton Division .. .. .	
Loddon United Waterworks Trust* .. ..	61,615	.. .. .	

\* Taken over by the Auditor-General and transferred to Commission by Section 278, Water Act 1905.

For the Geelong Water Supply area and the Coliban Waterworks District, revised and amended by-laws have been made for the imposition of rates and charges and for the administration of the works. These by-laws have been published in the *Government Gazette*, and in newspapers circulating in the districts affected.

Areas  
irrigated.

The following return, showing lands under irrigated culture has been compiled from information obtained from the Victorian Water Supply Department, and from that collected by the State Rivers and Water Supply Commission:—

### LANDS UNDER IRRIGATED CULTURE, 1905-6.

Name of District.	Areas Irrigated (Acres).							Net Area of District (Acres).
	Cereals.	Permanent Fodder Crops.	Annual Fodder Crops.	Grass.	Orchards and Gardens.	Miscellaneous.	Total.	
<i>Supplied from Goulburn State Works.</i>								
Rodney ..	357	17,982	159	5,279	6,424	1,420	31,621	269,000
Echuca and Waranga ..	1,272	10,805	213	5,083	283	522	18,178	300,000
• Total ..	1,629	28,787	372	10,362	6,707	1,942	49,799	569,000
<i>Supplied from Kow Swamp State Works.</i>								
Dry Lake ..	..	..	60	895	10	10	975	1,510
Gunbower West ..	489	1,106	496	1,188	86	..	3,365	9,790
Kerang East ..	1,880	432	2,058	4,263	44	34	8,711	18,100
Macorna North ..	1,797	151	2,152	8,183	..	..	12,283	27,300
Marquis Hill ..	427	111	554	2,634	..	..	3,776	10,930
South Kerang ..	38	353	70	541	..	..	1,002	2,630
Wandella (portion) ..	1,109	560	649	2,979	..	..	5,297	11,600
Total ..	5,740	2,713	6,039	20,733	140	44	35,409	81,860
<i>Supplied from Loddon State Works.</i>								
Wandella (portion) ..	1,108	559	649	2,978	2	..	5,296	11,600
East Boort ..	2,028	..	329	922	861	..	4,140	30,000
Leaghur and Meering ..	556	..	115	1,389	6	..	2,066	10,300
North Boort ..	1,172	..	1,182	811	..	..	1,783	10,000
Tragowel Plains ..	14,117	850	13,157	13,157	36	..	29,342	180,900
Twelve Mile ..	914	60	307	1,335	..	..	2,616	9,030
Total ..	19,695	1,469	2,582	20,592	905	..	45,243	251,830
<i>Not supplied from State Works.</i>								
Bacchus Marsh ..	..	243	5	..	4	2	254	910
Benjeroop and Murrabit ..	1,981	369	253	3,588	68	4	6,263	19,740
Campaspe ..	160	148	..	493	26	..	827	44,590
Cohuna ..	7,746	6,437	5,349	14,644	441	169	34,786	94,230
Koondrook and Myall ..	1,187	591	509	2,934	18	..	5,239	12,590
Swan Hill ..	3,057	3,662	54	2,650	137	..	9,560	14,400
Western Wimmera ..	4	126	46	122	1,268	104	1,670	1,578,030
Total ..	14,135	11,576	6,216	24,431	1,962	279	58,599	1,764,490
First Mildura ..	1,000	1,962	..	..	24,383	538	27,883	35,000
Grand Total ..	42,199	46,507	15,209	76,118	34,097	2,803	216,933	2,702,180

NOTE.—Areas watered more than once are counted once for each watering.

\* The areas shown are the areas watered in 1904-5, the information for 1905-6 not being available..

Of the total area irrigated, 19.45 per cent. was devoted to cereals, 21.44 per cent. to permanent fodder crops, 7.01 to annual fodder crops, 35.09 per cent. to grass, 15.72 per cent. to orchards and gardens, and the remainder, 1.29 per cent., was mostly in fallow for ploughing.

The extent of Government assistance, and the financial position of the Waterworks Trusts which are not under the control of the State Rivers and Water Supply Commission, are exhibited below :—

Waterworks Trusts.

WATERWORKS TRUSTS—CAPITAL INDEBTEDNESS AND INTEREST OUTSTANDING, 30TH JUNE, 1906.

Waterworks Trusts.	Cost of Works at 30th June, 1906, defrayed from—		Capital Indebtedness.				Interest Out- standing at 30th June, 1906.
	Free State Grant.	Loan Advances made by State.	In- creased by Interest Capital- ized.	Reduced by—		At 30th June, 1906.	
				Amounts Written Off.	Payments to Re- demption.		
	£	£	£	£	£	£	£
Alexandra .. .. .	..	3,359	..	..	93	3,266	65
Avenel .. .. .	..	1,684	..	..	141	1,543	31
Avoca .. .. .	2,662	9,569	..	2,494	303	6,772	160
Bairnsdale .. .. .	..	35,919	..	23,439	260	12,220	169
Ballan .. .. .	..	1,100	..	..	223	877	17
Benalla .. .. .	..	15,579	..	..	2,628	12,951	257
Bet Bet Shire .. .. .	1,384	5,694	..	..	1,067	4,627	92
Birchip .. .. .	819	5,235	..	..	160	5,075	101
Boort .. .. .	28	1,150	..	150	32	968	19
Bright .. .. .	..	2,990	..	..	258	2,732	54
Carisbrook .. .. .	..	8,400	..	2,400	195	5,805	115
Carrum .. .. .	..	25,732	..	7,732	50	17,950	2,619
Charlton .. .. .	2,769	7,877	..	887	22	6,968	247
Cobram .. .. .	..	4,156	..	..	..	4,156	57
Dandenong .. .. .	..	19,129	..	5,128	344	13,657	201
Daylesford Borough .. .. .	..	24,207	2,793	3,139	1,164	22,697	450
Donald .. .. .	3,058	8,166	..	1,166	219	6,781	135
Echuca Borough .. .. .	..	13,150	..	..	1,231	11,919	480
Elmore .. .. .	..	4,000	..	..	301	3,699	73
Euroa .. .. .	..	17,242	..	..	1,050	16,192	11
Gisborne .. .. .	..	4,663	..	..	817	3,851	76
Hamilton .. .. .	..	36,900	..	..	981	35,919	713
Healesville .. .. .	..	4,661	..	..	432	4,229	84
Heathcote .. .. .	..	7,394	..	..	322	7,072	140
Horsham Borough .. .. .	..	17,713	..	7,712	396	9,605	192
Kara Kara Shire .. .. .	1,522	7,343	..	..	237	7,106	142
Kerang .. .. .	88	4,000	..	..	76	3,924	158
Kerang Shire .. .. .	213	1,200	..	..	28	1,172	47
Kilmore .. .. .	..	14,148	..	..	1,704	12,444	248
Koroit .. .. .	..	5,502	..	2,047	143	3,312	66
Korumburra .. .. .	..	11,492	..	..	474	11,018	..
Kowree .. .. .	292	2,707	..	..	88	2,619	52
Kyabram .. .. .	..	507	..	..	96	411	8
Kyneton Shire .. .. .	..	26,680	..	..	9,204	17,476	347
Lancefield .. .. .	..	7,083	..	..	344	6,739	134
Lawloit .. .. .	1,302	12,095	..	..	393	11,702	232
Leongatha .. .. .	..	4,783	..	..	..	4,783	45
Lilydale .. .. .	..	5,785	..	..	30	5,755	114
Loddon United* .. .. .	..	..	..	..	..	..	..
Longwood .. .. .	..	2,400	..	550	60	1,790	36
Lowan Shire .. .. .	1,258	11,680	..	..	382	11,298	224
Macedon .. .. .	..	2,600	..	..	148	2,452	49
Mansfield .. .. .	..	7,931	..	..	671	7,260	144
Maryborough .. .. .	..	76,257	..	9,200	2,282	64,775	..
Mooroopna .. .. .	..	3,053	..	1,400	67	1,586	31

\* See State Rivers and Water Supply Commission Statement, page 487 ante.

WATERWORKS TRUSTS—CAPITAL INDEBTEDNESS AND INTEREST  
OUTSTANDING, 30TH JUNE, 1906—*continued.*

Waterworks Trusts.	Cost of Works at 30th June, 1906, defrayed from—		Capital Indebtedness.				Interest Out- standing at 30th June, 1906.
			In- creased by Interest Capital- ized.	Reduced by—		At 30th June, 1906.	
	Free State Grant.	Loan Advances made by State.		Amounts Written Off.	Payments to Re- demption.		
	£	£	£	£	£	£	£
Murchison .. .. .	..	2,800	..	..	12	2,788	56
Nagambie .. .. .	..	2,775	..	..	324	2,451	49
Nhill .. .. .	799	10,068	..	2,482	245	7,341	146
Numurkah Shire ..	1,278	23,029	..	1,376	2,301	19,352	381
Omeo .. .. .	..	3,982	..	..	316	3,666	73
Riddell's Creek ..	..	3,500	..	497	95	2,908	58
Rochester .. .. .	..	1,300	..	..	114	1,186	24
Romsey .. .. .	..	4,700	..	..	822	3,878	77
Rushworth .. .. .	..	4,500	..	..	50	4,450	88
Rutherglen .. .. .	..	16,485	..	..	466	16,019	318
Seymour .. .. .	..	27,959	..	..	1,314	26,645	529
Shepparton Urban ..	24	19,105	..	2,416	1,380	15,309	306
Shepparton Shire ..	110	17,548	..	1,376	962	15,210	302
St. Arnaud Borough ..	57	44,800	..	15,077	843	28,880	574
St. Arnaud Shire ..	1,691	3,409	4,077	..	1,055	6,431	128
Stawell Shire .. ..	545	1,370	..	250	1,120	..	..
Sunbury .. .. .	..	14,925	..	..	..	14,925	362
Swan Hill .. .. .	231	3,988	..	..	77	3,911	78
Swan Hill Shire ..	6,421	36,043	..	36,043	..	..	..
Tatura .. .. .	..	2,847	..	650	249	1,948	39
Tungamah Shire ..	4,130	12,241	..	..	425	11,816	234
United Echuca and Waranga .. .. .	14,968	70,369	..	34,748	1,708	33,913	1,091
Upper Macedon .. ..	..	1,842	..	..	276	1,566	24
Violet Town .. .. .	..	4,224	..	..	120	4,104	67
Wangaratta .. .. .	..	9,888	..	..	58	9,830	195
Warracknabeal .. ..	262	4,116	..	..	398	3,718	74
Warrnambool .. .. .	..	38,500	..	..	1,214	37,286	749
Western Wimmera ..	9,335	213,943	..	132,835	3,425	77,683	1,545
Wimmera United ..	19,818	146,420	..	36,392	3,635	106,393	..
Winchelsea Shire ..	..	4,420	..	..	129	4,291	85
Wodonga .. .. .	..	7,722	..	..	250	7,472	149
Woodend .. .. .	..	7,663	..	..	2,052	5,611	112
Wycheproof .. .. .	1,400	9,612	..	700	781	8,131	152
Yarram .. .. .	..	1,313	..	..	..	1,313	16
Yarrowonga Urban ..	1,897	8,800	..	..	1,254	7,546	150
Yatchaw .. .. .	..	6,262	..	1,661	150	4,451	88
Yea .. .. .	..	3,816	..	..	55	3,761	75
Total .. .. .	78,361	1,289,204	6,870	333,947	56,791	905,336	17,029

The free State grant to Waterworks Trusts for the construction of headworks was originally £100,000, but owing to the transfer of works, portion of the grant now appears against Irrigation districts and other State works.

The Trusts set out above have been relieved of 26 per cent. of their original liabilities to the State, and in addition, of £66,617 arrears of interest. The amount of interest outstanding represents about six months' interest on the capital outstanding.

The following return furnishes full particulars of the receipts and expenditure of the Waterworks Trusts during the year ended 31st December, 1906:—

## WATERWORKS TRUSTS—RECEIPTS AND EXPENDITURE, 1906.

Waterworks Trusts.	Receipts from—				Expenditure on—					
	Water Rates.	Sale of Water.	Other Sources.	Total.	Maintenance and Management.	Salaries and Wages.	Interest and Redemption.	Other Services.	Total.	
	£	£	£	£	£	£	£	£	£	
Alexandra .. .. .	438	3	6	447	134	197	149	..	480	
Avenel .. .. .	239	..	3	242	46	54	70	15	185	
Avoca* .. .. .	..	..	..	..	..	..	..	..	..	
Bairnsdale .. .. .	969	233	346	1,548	860	358	367	8	1,593	
Ballan .. .. .	270	..	1	271	167	32	41	6	246	
Benalla .. .. .	1,088	..	3	1,091	236	452	597	..	1,285	
Bet Bet Shire .. ..	262	68	..	330	34	9	216	2	261	
Birchip .. .. .	617	..	5	622	202	57	110	41	410	
Boort .. .. .	333	..	17	350	200	17	44	5	266	
Bright .. .. .	194	123	3	320	261	61	125	1	448	
Carisbrook .. .. .	346	..	6	352	23	83	263	7	376	
Carrum .. .. .	2,081	..	3	2,084	1,182	73	808	13	2,076	
Charlton .. .. .	508	25	..	533	117	113	300	28	558	
Cobram .. .. .	226	..	..	226	..	79	64	1	144	
Dandenong .. .. .	685	27	18	730	40	145	460	4	649	
Daylesford Borough ..	1,198	531	227	1,956	932	98	1,023	..	2,058	
Donald .. .. .	496	134	14	644	102	169	307	2	580	
Echuca Borough .. ..	1,446	1	5	1,452	743	118	667	10	1,538	
Elmore .. .. .	221	75	30	326	76	123	169	3	371	
Euroa .. .. .	789	159	2	950	93	82	1,055	6	1,236	
Gisborne .. .. .	336	..	10	346	344	57	178	..	579	
Hamilton .. .. .	2,075	322	33	2,430	82	341	1,624	50	2,097	
Healesville .. .. .	204	100	15	319	120	36	193	5	354	
Heatcote .. .. .	407	186	13	606	67	88	320	5	480	
Horsham Borough .. ..	1,466	..	128	1,594	639	428	217	14	1,298	
Kara Kara Shire .. ..	257	..	..	257	32	12	177	2	223	
Kerang .. .. .	829	..	6	835	552	181	177	4	914	
Kerang Shire* .. .. .	..	..	..	..	..	..	..	..	..	
Kilmore .. .. .	541	350	2	893	84	233	592	9	918	
Koroit .. .. .	489	157	..	646	226	144	193	10	573	
Korumburra .. .. .	591	246	71	908	62	139	598	22	821	
Kowree .. .. .	44	..	151†	195	26	41	118	1	186	
Kyabram .. .. .	258	103	1	362	280	56	24	11	371	
Kyneton Shire .. .. .	1,777	789	28	2,594	181	250	1,549	3	1,983	
Lancefield .. .. .	285	104	..	389	20	42	306	..	368	
Lawloit .. .. .	1,191	..	8	1,199	435	310	531	8	1,284	
Leongatha .. .. .	..	..	2	2	..	..	..	133	133	
Lilydale .. .. .	311	11	3	325	89	108	190	4	391	
Loddon United .. .. .	1,044	103	313†	1,460	87	180	960	78	1,255	
Longwood .. .. .	181	..	..	181	106	25	81	3	215	
Lowan Shire .. .. .	938	..	1	939	310	297	511	33	1,151	
Macedon .. .. .	183	..	5	188	15	33	111	2	161	
Mansfield .. .. .	427	182	6	615	61	133	332	1	527	
Maryborough .. .. .	2,231	1,206	23	3,460	643	5	2,924	..	3,567	
Mooroopna .. .. .	320	44	..	364	136	165	56	3	360	
Murchison .. .. .	278	107	6	391	77	133	141	5	356	
Nagambie .. .. .	283	58	13	354	81	105	169	10	365	
Nhill .. .. .	776	33	2	811	441	73	170	..	684	
Numurkah Shire .. ..	2,019	249	71	2,339	809	516	944	33	2,302	
Omeo .. .. .	284	..	1	285	98	29	167	2	296	

WATERWORKS TRUSTS—RECEIPTS AND EXPENDITURE, 1906—  
*continued.*

Waterworks Trusts.	Receipts from—				Expenditure on—				
	Water Rates.	Sale of Water.	Other Sources.	Total.	Maintenance and Management.	Salaries and Wages.	Interest and Redemption.	Other Services.	Total.
	£	£	£	£	£	£	£	£	£
Riddell's Creek ..	169	..	..	169	15	26	132	7	180
Rochester ..	441	14	..	455	164	173	54	26	417
Romsey ..	182	57	..	239	75	45	179	2	301
Rushworth ..	553	1	54	608	313	145	201	7	666
Rutherglen ..	1,479	67	14	1,560	344	225	733	2	1,304
Seymour ..	546	1,068	26	1,640	109	200	1,209	6	1,524
Shepparton Urban ..	1,358	368	14	1,740	467	405	697	6	1,575
Shepparton Shire ..	1,372	15	..	1,387	161	266	690	14	1,131
St. Arnaud Borough ..	1,658	159	27	1,844	178	120	1,308	4	1,610
St. Arnaud Shire ..	536	..	..	536	86	70	274	3	433
Stawell Shire* ..	..	..	..	..	..	..	..	..	..
Sunbury ..	4	95	61	160	82	31	..	6	119
Swan Hill ..	620	3	9	632	245	226	265	4	740
Swan Hill Shire† ..	..	..	..	..	..	..	..	..	..
Tatura ..	319	108	10	437	130	128	89	1	348
Tungamah Shire ..	1,604	26	..	1,630	447	413	536	53	1,449
United Echuca and Waranga ..	2,870	945	6	3,821	1,117	363	2,539	49	4,068
Upper Macedon ..	181	..	..	181	43	19	52	1	115
Violet Town ..	229	..	5	234	16	51	138	4	209
Wangaratta ..	1,055	254	57	1,366	672	301	455	23	1,451
Warracknabeal ..	780	94	16	870	596	138	170	8	912
Warrnambool ..	2,153	329	1,172	3,654	1,964	536	1,550	..	4,050
Western Wimmera ..	5,952	3,107	69	9,128	3,978	620	3,522	..	8,120
Wimmera United ..	9,901	991	2,122	13,014	5,377	£	7,769	88	13,234
Winchelsea Shire ..	358	..	..	358	28	73	193	2	296
Wodonga ..	360	190	2	552	23	127	338	2	490
Woodend ..	346	263	23	637	71	185	260	5	521
Wycheproof ..	598	45	11	654	111	85	372	2	570
Yarram ..	120	12	1	133	187	179	81	21	468
Yarrawonga Urban ..	624	195	59	878	147	256	347	..	750
Yatchaw ..	317	..	..	317	11	23	201	8	248
Yea ..	286	195	7	488	149	174	170	..	493
Total	69,382	14,330	5,371	89,083	28,857	12,033	44,917	957	86,764

\* These Trusts are inoperative.

† Abolished under the provisions of the *Water Act* 1905.

‡ Principally contributions from municipal councils towards maintenance and interest on and redemption of loans.

§ Included in maintenance and management.

Municipal  
Water-  
works.

Of the waterworks controlled by Municipalities, the most important are those at Ballarat, vested in the Ballarat Water Commission, and having reservoirs with a storage capacity of nearly 842 million gallons. Other important reservoirs in this group are those supplying Beechworth, Clunes, and Talbot, the respective storage capacities being 191, 225, and 200 million gallons. The following

return shows the financial position existing between the State and corporations on account of these Waterworks:—

WATERWORKS OF MUNICIPAL CORPORATIONS—CAPITAL INDEBTEDNESS AND INTEREST OUTSTANDING, 30TH JUNE, 1906.

Local Bodies.	Cost of Works to 30th June, 1906, defrayed from Loan Advances made by State.	Capital Indebtedness.				Interest out-standing at 30th June, 1906.
		Increased by Interest capitalized	Reduced by—		At 30th June, 1906.	
			Amounts written off.	Payments to Redemption.		
	£	£	£	£	£	£
Arapiles Shire ..	3,600	..	..	857	2,743	56
Ararat Borough ..	45,500	..	18,266	1,111	26,123	518
Ballarat Water Com- mission ..	309,300	41,869	2,111	34,254	314,804	..
Beechworth Shire ..	28,926	1,256	5,958	3,761	20,463	..
Bet Bet Shire ..	1,000	..	985	15	..	..
Birchip Shire ..	2,669	..	..	239	2,430	..
Borong Shire ..	9,059	..	..	880	8,179	123
Castle Donnington Shire ..	4,114	..	..	418	3,696	..
Chiltern Shire ..	4,500	508	508	668	3,832	76
Clunes Borough Water Commission ..	70,195	..	62,395	253	7,547	149
Creswick Borough ..	3,500	..	..	3,500	..	98
Dimboola Shire ..	2,566	..	..	236	2,330	35
Dunolly Borough ..	2,190	..	..	791	1,399	28
Inglewood Borough ..	5,149	..	..	1,525	3,624	217
Karkaroc Shire ..	14,898	..	..	856	14,042	211
Kerang Shire ..	2,313	..	..	147	2,166	33
Korong Shire ..	1,564	..	..	387	1,177	23
Ripon Shire ..	3,000	..	..	1,277	1,723	34
Stawell Borough ..	108,506	..	61,661	3,311	43,534	865
Talbot Borough ..	15,000	..	13,986	46	968	19
Tarnagulla Borough ..	800	..	..	137	663	13
Wimmera Shire ..	28,890	..	..	26,182	2,708	54
Wycheproof Shire ..	2,445	..	..	201	2,244	34
Total ..	669,684	43,633	165,870	81,052	466,395	2,586

The corporations of Ballan and Melton Shires also have waterworks, but constructed out of Shire funds, hence they do not appear in the above table.

It will be seen that the municipalities specified in the table have been relieved of one-fourth of their loan liabilities.

The irrigation and water supply trusts specified below were abolished, and the liabilities in respect of amounts due and owing to the Crown by such trusts on account of principal sums advanced by

Abolished  
Trusts.

way of loan, and accrued unpaid interest thereon, cancelled by provision in the *Water Act 1905*.

### IRRIGATION AND WATER SUPPLY TRUSTS ABOLISHED.

Name of Trust.	Cost of Works.			Written off.		
	Advances.	Grants.	Total.	Capital.	Interest.	Total.
	£	£	£	£	£	£
Dookie .. ..	630	..	630	630	171	801
Emu Valley .. ..	8,166	..	8,166	8,166	2,907	11,073
Harcourt .. ..	1,142	..	1,142	1,112*	335	1,447
Lerderberg .. ..	447	..	447	447	169	616
Millewa .. ..	973	..	973	973	582	1,555
Pine Hills .. ..	2,051	243	2,294	2,051	1,065	3,116
Torrumberry North	12,300	..	12,300	12,300	5,812	18,112
Werribee .. ..	6,000	..	6,000	6,000	3,752	9,752
Total .. ..	31,709	243	31,952	31,679	14,793	46,472

\* £30 paid to Redemption Fund by Trust.

The Dookie works are now used solely for the supply of water to the Dookie Agricultural College, and the Emu Valley and Harcourt Works have been attached to the Coliban scheme.

Mildura  
irrigation  
scheme.

A full account of the history of the Mildura Settlement from its inception will be found in the *Victorian Year Book*, 1904. A short account of the scheme is as follows:—

In 1884, a Royal Commission was appointed to consider the question of the Conservation of Water in Victoria, and Mildura was chosen as the site for an irrigation colony, and in 1887, 250,000 acres of land there were set apart for the experiment.

Two blocks of about 25,000 acres each were made available, upon the ordinary conditions for resumption and entry for mining, to the Messrs. Chaffey Bros. Irrigation works and improvements gave rights to grants in fee simple, in these blocks, as well as in the remaining 200,000 acres, which, after three years, the licensees would be entitled to occupy, and sell, or dispose of, in parcels of not more than 80 acres for fruit-growing, or 160 acres for growing other products. No person was to have more than one block, and the licensees were not themselves to retain more than 5,000 acres of cultivated and irrigated land out of that granted to them in fee



simple. Every parcel should have a sufficient water-right to run with the title as a perpetual easement, and a licence to divert water from the Murray, sufficient for the purposes of the Settlement, was granted for 25 years. In return, the licensees covenanted to expend £300,000 in irrigation works within twenty years, in accordance with general plans approved by the Government.

— On 30th September, 1887, the licensees assigned all their interests and rights to the Chaffey Brothers Company Limited. In the December following, the Mildura Irrigation Company was formed.

By extensive advertising in Great Britain, many of the very best class of settlers were induced to emigrate and invest their capital. In 1892, the settlers complained of the non-performance by the licensees of their covenants. In March, 1893, the Chief Engineer of Water Supply visited the Settlement, and made extensive inquiries into these complaints, and into the state of affairs generally. His report revealing an unsatisfactory state of affairs, the First Mildura Irrigation Trust, consisting of six Commissioners and two Auditors, to be elected by the occupiers and owners of rateable land, was constituted, by Act of Parliament, in 1895. All the irrigation lands, works, and approaches were vested in them, and the terms of holding were revised in favour generally of the settlers.

In 1896, a Royal Commission was appointed to inquire into and report upon the condition and prospects of the Settlement. It found that the principal causes of failure were the grave errors made in laying out the Settlement, and in making provision for the supply of water for irrigation; the non-fulfilment of the obligations undertaken in the agreement, whereby the reasonable expectations of the settlers were disappointed; and the hopeless financial mismanagement of the company. It was decided to raise a loan to meet pressing necessities, and an overdraft was guaranteed by the Treasurer, the Chief Engineer of the Water Supply Department deciding what works required to be carried out. From time to time the Government has granted further assistance, until on 30th June, 1906, the total amount advanced was £58,700, which, together with interest accumulated to that date, £15,881, represents the total indebtedness of the Trust to the Government.

A railway line has also been constructed, connecting Mildura with the Metropolis, and was opened for traffic towards the close of 1903.

The success of the Settlement is now assured, and healthy progress is visible everywhere. Its products are consumed in Victoria in large quantities, and the other States of the Commonwealth are good customers for the canned and dried fruits. The following

Exports of  
canned and  
dried  
fruits.

tables show that Victoria is building up an export trade in canned and dried fruits, most of which are raised at Mildura:—

**EXPORTS OF CANNED AND DRIED FRUITS PRODUCED IN VICTORIA,  
1896 TO 1906.**

Year.				Canned Fruits.	Dried Fruits.	
					Raisins.	Other.
				£	£	£
1896	..	..	..	3,904	835	1,777
1897	..	..	..	6,849	1,147	4,510
1898	..	..	..	5,823	7,388	6,674
1899	..	..	..	9,672	7,524	8,286
1900	..	..	..	20,396	10,150	5,121
1901	..	..	..	31,015	15,095	4,963
1902	..	..	..	30,223	23,730	20,519
1903	..	..	..	30,799	48,137	8,631
1904	..	..	..	31,666	59,276	11,216
1905	..	..	..	36,427	47,131	9,677
1906	..	..	..	39,804	47,114	9,662

**DETAILS OF EXPORTS DURING 1906 OF CANNED AND DRIED FRUITS  
PRODUCED IN VICTORIA.**

Country to which Exported.	Canned Fruits— Value.	Dried Fruits.			
		Raisins.		Other.	
		Quantity.	Value.	Quantity.	Value.
	£	lbs.	£	lbs.	£
New South Wales ..	12,562	1,523,318	27,689	121,033	2,666
Queensland ..	6,468	474,126	10,328	226,654	4,831
South Australia ..	3,327	33,341	744	36,951	693
Western Australia ..	10,233	134,342	3,225	14,124	420
Tasmania ..	2,010	209,192	5,101	40,115	880
Other Countries ..	5,204	1,290	27	8,983	172
Total ..	39,804	2,375,609	47,114	447,860	9,662

The trade with the other States is growing, the value of the exports amounting to £91,177 in 1906, as against £77,383 in 1903, £85,049 in 1904, and £87,391 in 1905.

The following figures, showing the population of the settlement since 1891, are a fair indication of its prosperity.

**POPULATION OF MILDURA, 1891 TO 1906.**

1891 Census	...	2,321	1903 September	...	4,050
1896 September	...	2,000	1904 "	...	4,100
1901 Census	...	3,325	1905 "	...	4,150
1902 September	...	3,625	1906 "	...	4,350

Population  
of Mildura.

The following is a statement of the revenue and expenditure of the Mildura Irrigation Trust during the year ended 30th June, 1906:—

## REVENUE AND EXPENDITURE OF THE TRUST, 1905-6.

Revenue.		Expenditure.	
	£		£
Arrears, Horticultural Assessment .. ..	5,343	Expenditure on Pumping Stations .. ..	9,337
Current Rates, Horticultural Assessment .. ..	8,772	Expenditure on Town Supply .. ..	752
Arrears, Town Assessment .. ..	150	Distribution of Water .. ..	2,673
Current Rates, Town Assessment .. ..	641	Interest .. ..	2,345
Miscellaneous .. ..	621	Other Expenditure .. ..	842
Total .. ..	15,527	Total .. ..	15,949

Revenue and expenditure of Mildura Irrigation Trust.

The following table shows the average yearly amount of rainfall deduced from all available records to December, 1905, and the rainfall during 1904, 1905, and 1906, in each of the 26 basins or regions constituting the State of Victoria:—

Meteorology.

## RAINFALL—YEARLY RECORDS AND AVERAGES.

Name of Basin.	Rainfall.			
	Yearly Average, to Dec., 1905.	During 1904.	During 1905.	During 1906.
	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers .. ..	27·10	24·27	27·76	32·33
Fitzroy, Eumerella, and Merrie Rivers .. ..	29·82	27·02	32·12	32·69
Hopkins River and Mt. Emu Creek .. ..	26·17	26·22	25·84	29·45
Mt. Elephant and Lake Corangamite .. ..	24·84	26·85	23·06	29·15
Otway Forest .. ..	40·56	37·69	36·62	40·24
Moorabool and Barwon Rivers .. ..	25·53	25·99	24·03	28·97
Werribee and Saltwater Rivers .. ..	26·80	23·17	25·76	24·99
Yarra River and Dandenong Creek .. ..	35·18	40·92	38·53	35·65
Koo-wee-rup Swamp .. ..	34·69	37·64	35·49	35·18
South Gippsland .. ..	39·14	35·81	41·00	40·82
Latrobe and Thomson Rivers .. ..	36·20	35·40	36·58	37·15
Macallister and Avon Rivers .. ..	26·90	17·45	26·58	25·47
Mitchell River .. ..	30·48	22·09	34·48	27·65
Tambo and Nicholson Rivers .. ..	29·13	21·29	33·13	28·49
Snowy River .. ..	38·13	31·17	42·83	28·64
Murray River .. ..	22·11	20·54	18·86	28·24
Mitta Mitta and Kiewa Rivers .. ..	34·70	35·70	35·42	46·94
Ovens River .. ..	41·33	36·65	35·94	49·73
Goulburn River .. ..	26·26	26·36	25·62	33·40
Campaspe River .. ..	25·50	25·37	22·43	31·65
Loddon River .. ..	19·01	18·30	17·43	23·48
Avon and Richardson Rivers .. ..	15·87	14·77	16·01	19·58
Avoca River .. ..	17·47	15·22	15·77	20·22
Western Wimmera .. ..	19·73	17·45	19·32	25·15
Eastern Wimmera .. ..	22·45	20·16	20·88	27·55
Mallee Country .. ..	13·83	12·17	13·25	16·03
Weighted Averages .. ..	25·22	23·28	24·97	28·26

The rainfall recorded for each quarter in 1906, and the quarterly averages up to 1905, deduced from all available records, are as follow:—

### RAINFALL—QUARTERLY RECORDS AND AVERAGES.

Name of Basin.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.	
	Amount, 1906.	Average to 1905.	Amount, 1906.	Average to 1905.	Amount, 1906.	Average to 1905.	Amount, 1906.	Average to 1905.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
Glenelg and Wannon Rivers ..	3.36	3.83	9.97	8.53	11.48	8.72	7.52	6.02
Fitzroy, Eumerella, and Merrie Rivers ..	3.55	4.35	9.58	9.51	11.45	9.63	8.11	6.32
Hopkins River and Mt. Emu Creek ..	4.05	4.61	8.01	8.05	8.94	7.27	8.45	6.24
Mt. Elephant and Lake Corangamite ..	3.78	4.81	7.98	7.47	9.00	6.63	8.39	5.93
Otway Forest ..	4.21	8.17	12.11	13.24	13.93	11.21	9.99	7.94
Moorabool and Barwon Rivers ..	4.35	4.34	6.78	7.75	9.61	7.29	8.23	6.15
Werribee and Saltwater Rivers ..	4.50	5.25	5.24	8.02	8.48	6.98	6.77	6.55
Yarra River and Dandenong Creek ..	5.73	6.93	8.87	10.15	10.04	9.42	11.01	8.68
Koo-wee-rup Swamp ..	5.05	6.31	9.17	10.95	9.98	9.14	10.98	8.29
South Gippsland ..	6.75	7.36	9.28	11.88	12.47	11.02	12.32	8.88
Latrobe and Thomson Rivers ..	7.04	7.30	8.48	10.42	9.63	9.60	12.00	8.88
Macallister and Avon Rivers ..	7.67	6.00	3.02	7.42	5.79	6.06	8.99	7.42
Mitchell River ..	8.57	7.22	2.68	9.09	6.30	6.89	10.10	7.28
Tambo and Nicholson Rivers ..	10.08	6.87	2.70	8.42	5.44	6.96	10.27	6.88
Snowy River ..	10.13	8.12	2.65	11.63	5.55	9.77	10.31	8.61
Murray River ..	5.51	4.36	6.78	6.95	7.85	5.95	8.10	4.85
Mitta Mitta and Kiewa Rivers ..	8.82	6.94	13.00	10.80	12.13	9.49	12.99	9.17
Ovens River ..	10.01	7.06	13.72	12.93	13.14	12.17	12.86	9.17
Goulburn River ..	4.94	4.43	8.89	8.46	10.39	7.48	9.18	5.89
Campaspe River ..	3.89	4.31	9.39	8.47	11.47	7.11	6.90	5.62
Loddon River ..	3.65	3.31	7.15	6.38	7.03	4.94	5.65	4.38
Avon and Richardson Rivers ..	2.38	2.57	7.38	5.36	5.44	4.29	4.38	3.65
Avoca River ..	2.79	2.75	7.06	6.10	5.87	4.51	4.50	4.11
Western Wimmera ..	2.27	2.45	8.13	6.50	9.15	6.25	5.60	4.47
Eastern Wimmera ..	3.66	3.09	8.91	7.54	8.04	6.41	6.94	5.41
Mallee country ..	2.51	2.51	5.80	4.86	4.57	3.58	3.15	2.88
State ..	4.82	4.57	7.56	8.00	8.27	6.93	7.61	5.72

### RAINFALL IN REGIONS, DURING EACH QUARTER, 1904, 1905, AND 1906.

Percentage above the average, + (plus); below the average, — (minus).

Regions.	First Quarter.			Second Quarter.			Third Quarter.		
	1904.	1905.	1906.	1904.	1905.	1906.	1904.	1905.	1906.
Western Districts ..	+ 71	-38	-16	-15	+ 8	+ 6	-18	+ 20	+26
Cape Otway Forest ..	+104	-50	-48	-23	-14	- 9	-17	+ 20	+ 24
Counties surrounding Port Phillip Bay ..	+122	-28	-14	-14	- 7	-18	-12	+ 21	+16
South Gippsland ..	+ 66	-26	- 8	-31	- 9	-22	-20	+ 22	+13
Basins of the Latrobe, Macallister, and Mitchell Rivers ..	+ 31	-15	+13	-41	-16	-47	-17	+ 4	- 4
Basins of the Tambo and Snowy Rivers ..	+ 13	+ 1	+35	-23	-29	-73	- 6	- 4	-34
All Northern Areas between the Ranges and the Murray, East of the Campaspe River ..	+ 17	-41	+22	-26	- 3	+ 9	- 4	+ 21	+30
All Northern Areas between the Ranges and the Murray, West of the Campaspe River ..	+ 51	-35	+ 3	-29	+11	+21	-18	+ 2	+34

# RAINFALL IN REGIONS, DURING EACH QUARTER, 1904, 1905, AND 1906—continued.

Percentage above the average, + (plus); below the average, - (minus).

Regions.	Fourth Quarter.			Year.		
	1904.	1905.	1906.	1904.	1905.	1906.
Western Districts . . . . .	-23	- 8	+32	- 6	*	+15
Cape Otway Forest . . . . .	-27	- 3	+26	- 7	-10	†
Counties surrounding Port Phillip Bay . . . . .	-36	+12	+25	+ 2	+ 1	+ 2
South Gippsland . . . . .	-23	+26	+39	-11	+ 5	+ 4
Basins of the Latrobe, Macallister, and Mitchell Rivers . . . . .	-45	+45	+32	-22	+ 4	- 4
Basins of the Tambo and Snowy Rivers . . . . .	-58	+97	+33	-22	+13	-15
All Northern Areas between the Ranges and the Murray, East of the Campaspe River . . . . .	-14	-19	+52	-10	- 8	+27
All Northern Areas between the Ranges and the Murray, West of the Campaspe River . . . . .	-36	-18	+21	-18	- 5	+22

\* Very slightly above average. † Very slightly below average.

## AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS FOR THE SEASONS AND FOR THE METEOROLOGICAL YEAR DEDUCED FROM ALL RECORDS OBTAINED IN PAST YEARS AT THE MELBOURNE OBSERVATORY.

Meteorological Elements.	Spring.	Summer.	Autumn.	Winter	Year.	
<i>Averages.</i>						
Mean pressure of air in inches	29·891	29·839	30·001	30·000	29·933	
Monthly range of pressure of air—Inches .. .. .	0·895	0·800	0·807	0·984	0·871	
Mean temperature of air in shade—°Fahr. .. .. .	56·6	64·9	58·5	49·2	57·3	
Mean daily range of temperature of air in shade—°Fahr. ..	18·8	21·4	17·7	14·2	18·0	
Mean percentage of humidity. Saturation = 100 .. .. .	70	65	73	78	71	
Mean rainfall in inches .. .. .	7·32	5·90	6·70	5·72	25·64	
Mean number of days of rain .. .. .	37	23	30	41	131	
Mean amount of spontaneous evaporation in inches .. .. .	9·99	17·03	7·06	3·70	37·78	
Mean daily amount of cloudiness—Scale 0 to 10 .. .. .	6·0	5·3	5·9	6·1	5·8	
	h. m.	h. m.	h. m.	h. m.	h. m.	
Mean daily duration of sunshine	5 56	7 52	4 37	3 27	5 28	
Mean total of hours of sunshine	539 55	709 3	425 10	317 37	1,991 45	
Percentage number of hours during which the wind blew from the various points of the compass	North ..	16·0	7·7	16·1	28·5	..
	North-West ..	9·4	4·1	7·6	13·0	..
	West ..	15·2	9·5	12·2	14·9	..
	South-West ..	16·8	20·4	12·6	10·8	..
	South ..	16·5	24·1	14·9	6·3	..
	South-East ..	9·8	19·2	14·1	5·0	..
	East ..	3·7	5·6	5·6	2·7	..
	North-East ..	11·2	8·1	15·2	17·3	..
	Calm ..	1·4	1·3	1·7	1·5	..
Mean number of days of fog	1·2	0·7	5·1	9·6	16·6	

AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS, ETC—*continued.*

Pressure of air.		<i>Extremes.</i>		Temperature of air in shade. ° Fahr.	
	Inches.				
Greatest monthly range	... 1·503	Greatest monthly range	... 69·1		
Smallest " "	... 0·489	Smallest " "	... 23·4		
Greatest yearly range	... 1·719	Greatest yearly range	... 82·6		
Smallest " "	... 1·169	Smallest " "	... 66·0		
Highest air pressure on record	30·678	Greatest mean daily range	... 27·8		
Lowest " "	28·868	Smallest " "	... 7·7		
		Highest temperature on record	111·2		
		Lowest " "	27·0		

Solar radiation—highest on record	.. ..	178·5 ° Fahr.
Terrestrial radiation—lowest on record	.. ..	20·4
Greatest rainfall on record	.. ..	44·25 Inches.
Smallest rainfall on record	.. ..	15·61
Horizontal motion in miles	.. ..	92,221
Mean hourly velocity of wind	.. ..	10·5

The table below contains the values of the principal Meteorological elements for the whole year 1906, with the corresponding averages and extremes, based on the Observatory Records of 50 years:—

## METEOROLOGY, 1857 TO 1906.

Meteorological Elements.	Yearly Averages and Extremes.			
	Year 1906.	Average for 50 Years.	Extreme between which the Yearly Average Values have oscillated in 50 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ...	29·915	29·935	...	...
Highest " " " ...	30·620	30·522	30·678	30·003
Lowest " " " ...	29·237	29·171	29·902	28·868
Range (inches) ...	1·383	1·359	1·719	1·169
Mean temperature of air, in shade (° Fahr.)	57·5	57·4	58·7	56·3
Mean daily maximum ...	67·4	67·3	69·0	65·8
Mean daily minimum ...	50·2	49·3	51·2	47·2
Absolute maximum ...	109·6	105·4	111·2	96·6
Absolute minimum ...	31·1	30·7	33·9	27·0
Mean daily range ...	17·3	18·0	20·3	14·6
Absolute annual range ...	78·5	74·4	82·6	66·0
Solar Radiation (maximum) ...	165·8	161·4	178·5	108·6
Terrestrial Radiation (minimum) ...	24·8	24·9	46·2	20·4
Rainfall (in inches) ...	22·29	25·62	44·25	15·61
Number of wet days ...	114	131	165	102
Year's amount of free evaporation (in inches) ...	36·346	38·111	45·65	31·59
Percentage of humidity (saturation = 100) ...	72	72	...	...
Cloudiness (scale 10 = overcast, 0 = clear)	6·3	5·8	...	...
Duration of sunshine (number of hours)	1,992	1,954	...	...
Number of days of fog ...	8	16·6	...	...

## AGRICULTURAL EDUCATION.

An Act for the establishment of Agricultural Colleges was passed towards the close of 1884, and five areas were reserved as sites for colleges and experimental farms—at Dookie, Longerenong, Gunyah Gunyah, Olangolah, and Bullarto. Subsequently further reservations were made—at Rutherglen, Edi, and Whitfield. The total areas of these reserves amount to 14,437 acres. Particulars are as follow:—

Agricultural education.

## AREAS OF AGRICULTURAL COLLEGE AND EXPERIMENTAL FARM LANDS, 1906.

Name.	Area.			How Used.
	A.	R.	P.	
Dookie and Currawa ... ..	4,889	0	0	College and Experimental Farm
Longerenong (Jung Jung) ... ..	2,386	0	0	" "
Edi and Whitfield ... ..	131	3	25	Tobacco Farms
Rutherglen ... ..	913	0	24	Viticultural Station, Model Orchard, and Experimental Farm work
Gunyah Gunyah and Jumbuk ... ..	2,500	0	0	Let for grazing and cultivation
Olangolah ... ..	2,800	0	0	Not in use
Bullarto ... ..	817	0	0	Let for grazing
Total ... ..	14,437	0	9	

In order to carry out experiments, devised for the purpose of ascertaining the suitability of the Victorian climate and soil for various kinds of useful products and of obtaining data respecting the rotation of crops, but more especially for the instruction of students in agriculture, a block of 4,806 acres, subsequently increased by 40 acres, was reserved in 1874, at Dookie, situated in Moira, a county in the North-Eastern District of Victoria, on which to found, under the direction of the Council of Agricultural Education, a State Experimental Farm. The following account of the present state of the farm has been furnished for this work by Mr. E. G. Duffus, Acting Secretary for Agriculture:—

Experimental farm, Dookie.

The farm has, under the provisions of the *Agricultural Colleges Act 1884*, been vested in trustees, and all moneys received from the sale of stock and produce since June, 1885, have been paid into the Agricultural College fund.

A new dairy has been erected, at a cost of £1,069, on the most scientific plans, and is fitted with a complete dairying plant of latest pattern, including a pasteurizer, refrigerator, &c. The cow byres are thoroughly modern, and are fitted with milking machines and all necessary appliances.

A wine cellar and fermenting house has been erected at a cost of about £1,100, and students are instructed in the art of wine-making. There are 34½ acres under vines, consisting of 4 acres table

grapes, planted in 1887; 5 acres Gordo, Blanco, and Zante currants, planted in 1888; 11 acres Red Hermitage, 7 acres planted in 1889 and 4 acres in 1895; 10 acres Carbenet, planted in 1894; 2 acres Baxter Sherry, planted in 1895; and  $2\frac{1}{2}$  acres of Red Hermitage, planted in 1903. There are 20 acres under fruit trees of all the approved varieties.

A new implement and grain shed, 174 feet long, and several other new buildings have been erected, and other improvements are being carried out. A new chemical and biological laboratory has been built. This is one of the best fitted up laboratories in the State, and gives ample opportunities for the scientific teaching.

During the year the rainfall recorded was 27.34 inches.

Considerable attention is paid to experimental work in connexion with the cereals. The rearing of new varieties of wheat, suitable for the different parts of this country, has special attention paid to it.

Manurial tests are carried out each year, and the results are published for the benefit of the farmers.

There is a good and growing demand for seed wheat, oats, and barley from the college farm; whilst, for the commercial training of the students, a good deal of grain is marketed. The threshing and the harvesting in general are carried out by the students under competent instructors. The cropping also is mainly carried out by the students, who are taught how to use the ploughs, cultivators, seed-drills, and all other farming implements.

Experiments with new fodder plants and with others of economic importance are carried out, whilst attention is also paid to the indigenous grasses. A variety of medicinal and other plants is also grown on the farm for educational purposes. There is a  $4\frac{3}{4}$  acre plantation of fifteen-year-old olives, of six varieties.

Accommodation has been provided for 70 students, and provision will shortly be made to accommodate 30 more. The charge per head per annum is £25 for maintenance, £1 5s. for medical attendance and medicines, and £1 15s. for books and other school materials, or £28 in all. No charge is made for instruction.

Attention is being given to the breeding of draught horses and Indian remounts. Most of the horses used on the farm have been bred on it. There are several highly-bred Clydesdale mares, and a first-class stallion has been purchased by the Council of Agricultural Education, to be used for stud purposes on the farm and for approved mares of the farmers from the surrounding districts. The cattle on the farm include Ayrshires principally, also Herefords and Short-horns. Farmers, on paying a small fee, may have the use of the stud bulls for their cows. The breeds of sheep kept are Lincolns, Merinoes, Hampshire Downs, and South Downs. The raising of early lambs for the market occupies considerable attention. The pigs kept are pure imported Berkshires, and imported large white Yorkshires. There is a good demand for them for stud purposes. The poultry



industry is fostered, and pens of the best breeds are kept, a number of the birds being imported from England.

The Longerenong Agricultural College and Farm, under the control of the Council of Agricultural Education, is situated about eight miles from Horsham, and three miles from Doon railway station. It was re-opened as a college on the 1st November, 1906, and accommodates thirty-five resident students, several non-resident students the sons of neighbouring farmers are also attending the classes. The staff consists of the principal (Mr. G. A. Sinclair), the farm manager (Mr. J. D. Martin), and two resident masters (Messrs. Gibson and Baxter); also visiting lecturers for veterinary science, wool-classing, poultry-breeding, &c. The farm contains 2,386 acres of land, about 500 acres being cropped each year with wheat, oats, and barley, wheat being the staple crop.

Longere-  
nong  
Agricultu-  
ral College.

The orchard, containing 28 acres—5 acres of which are planted with phylloxera-resistant vines; 50 acres of lucerne; and about 10 acres of summer fodder-crops, are all irrigated each season by water obtained from Western Wimmera Waterworks Trust, in an open channel running from the Doon pumping station. Ten acres are devoted to experimental work in conjunction with the Department of Agriculture. There are 19 draught horses, 4 hacks, 20 dairy cows, Ayrshire bull, 30 Berkshire pigs, 50 Shropshires, 800 breeding ewes, and 25 steers. Lamb-raising is one of the chief industries. About 700 acres are only fit for grazing, being low-lying and subject to floods in winter. The remainder is good wheat-growing land.

Besides three brick underground silos, an over-ground timber silo, of a capacity of 100 tons, was erected in 1906 and filled with surplus grass from the avenues and plantations. Considerable attention has been paid to tree-planting, sugar-gums, pepper-trees, and pines of different kinds bordering the roadways; and several plantations of fair extent are established in different portions of the estate. The paddocks are watered by six tanks, varying in capacity from 1,000 to 5,000 cubic yards which, in dry years, are filled from the irrigation channel. The college has been thoroughly renovated, and water, raised by a windmill, is laid on to the lavatories, shower-baths, kitchen, &c. The buildings are sewered on the septic-tank principle.

The Government Tobacco Experimental Station, of 18 acres of land at Edi, in the North-Eastern District of Victoria, has been relinquished for a larger area of 113 acres, at Whitfield, where a greater range of soil is available, and the situation more central for the district. Experiments in the culture of the better classes of tobacco and their treatment will still form a leading feature in the work of the enlarged farm. Manuring experiments, which are intended to be an object lesson to farmers generally, will be continued, with a view of ascertaining the varieties of tobacco best suited to the soils and climate, for improving the quality of leaf

Government  
Tobacco  
Experi-  
mental  
Station.

and increasing returns. During the year 2,000 lbs. (dry weight) of cigar leaf were grown and cured from varieties known as Comstock, Zimmer—Spanish, Connecticut seed leaf, and Connecticut broad leaf, all of which gave good results; but the Comstock was found the most suitable for the district. Other varieties, viz.:—Sumatra, Vuelta Abajo, Pennsylvania, and Stirling gave poor results, being evidently unsuited to the climate and soil of the district. A crop of pipe tobacco, of approximately 1,500 lbs., was also grown from varieties named Jacks, Hester, Blue Pryor, Conqueror, Medley Pryor, Bonanza, Bullion, Orinoco, and Kentucky Yellow. Of these, Jacks, Orinoco, Medley Pryor, and Blue Pryor succeeded best in quality and yield.

Experimental plots have been established at Bruthen, Mount William, and throughout the North-East and seed of improved types has been distributed.

Prices for Victorian-grown tobacco have been higher for all classes of leaf than has been the case for the last five years, the whole of the crop being purchased by manufacturers.

Rutherglen  
Viticultural  
Station.

The chief work being done at the Viticultural Station is in connexion with the propagation and grafting of the American and Franco-American resistant vines for the reconstitution of phylloxerated vineyards.

As is well known, the ordinary European vines rapidly succumb to the attack of phylloxera—a tiny insect that injures the vine roots and quickly destroys vineyards wherever it has obtained a footing. Phylloxera was discovered in Victoria in 1877. By its inevitable spread it soon destroyed the vines in the districts to which it had been introduced. Other districts became infected. The seriousness of these attacks led to the trials of many methods to exterminate the pest, all of which have unfortunately proved futile. French investigators had discovered that certain American vines were able to resist the deadly action of the tiny but formidable phylloxera. These are used as stocks on which to graft the desired producing kinds, as their roots were able to withstand the attacks of the insidious insect foe.

There are a number of American vines grown, but all are not equally suitable for all soils, nor adapted as graft-bearers for all European varieties, hence the work undertaken at the viticultural station is to discover the most eligible kinds. To test their adaptability to the different soils, sub-stations were founded in each viticultural district of the State, and data were carefully collected regarding the growth of each variety in the very diverse soils purposely selected for these tests. Only such as are of vigorous growth are recommended.

To ascertain the grafting affinities of each kind of stock and scion, some of each of the principal wine and table varieties were grafted on each kind of resisting stock. These were then planted out

permanently and the results noted. Growers can readily see by this plot which stock suits a certain variety best. The grafting of those European vines (of wine, table, and drying varieties that are in greatest demand) on suitable resistant stocks is carried out extensively during the season. The work is done both by hand and machines. A few rootlings are used as stocks, but the majority of the grafts are cuttings. A large number of the cuttings grown at the station are utilized in grafting chosen varieties for vigneron, who may not have facilities or time to carry out this operation for themselves.

A modern grafting shed and extensive callusing frames have been built to cope with the ever-increasing work of providing grafted resistant stocks.

Large areas are devoted to the permanent growth of resistant stocks for the production of cuttings. Three nurseries contain large numbers of grafted and ungrafted cuttings.

To practically prove the efficacy of resistant stocks, grafted vines have been planted on the very sites of phylloxerated vines that had to be uprooted. These are growing luxuriantly, and afford striking testimony to their resistant value, as the vines by which they were originally surrounded are all dead as the result of the pest.

The principal resistant stocks grown belong to the genera *Riparia* and *Rupestris*, with their hybrids. As its name indicates, the *Riparia* in its native habitat loves moist, fertile soils along water-courses. Its root system is spreading and horizontal. Placed in such conditions as it is naturally accustomed to, it grows luxuriantly, but from the character of the root system, it is susceptible to drought. The species of *Rupestris* that are cultivated are more erect in habit than the *Riparias*, which are trailing. They are generally deeper rooted plants, and hence are better able to thrive in districts with a less generous rainfall. The Hybrids—usually designated by numbers—apparently inherit the good qualities of both parent plants, and have so far proved themselves most suitable for all conditions of soil and climate. They have also a wider range of affinity as graft bearers.

As a rule American vines do not take kindly to calcareous soils. The *Berlandieri* is one of the best for planting under such conditions, while for saline soils *Solonis* has so far proved itself most suitable.

Recently fourteen varieties, mostly new to Australia, of wine-making grapes have been imported. They are largely cultivated in South-eastern France, and will be grown and tested at the Viti-cultural Station with a view to proving their value as wine producers. The average yield of wine per acre in Victoria compares very unfavorably with that of Europe, and it is to be hoped that among this new importation varieties will be found which will increase the yield without diminishing the quality of the product. Two of the varieties

are white grapes from the famous Sauterne vineyards, and are calculated to improve the quality of white table wines, which are becoming more and more popular every year. Other varieties have been received from the Douro Valley in Portugal, and the Sherry district of Spain. Already wines of a port and sherry type of very considerable merit are produced in Victoria, chiefly from French grapes. With the Portuguese and Spanish varieties about to be imported the quality of this class of wines should be improved out of all knowledge, and permanently enhance the reputation of Australian wines.

An excellent laboratory has been erected, and should permit of excellent work being done in the chemical analysis and bacteriological examination of wines.

In the vineyard attached to the station, interesting and useful experiments are being conducted in methods of pruning, cultivation, manuring, &c.

As a college for the sons of vine-growers the Viticultural Station did not become popular, but the buildings are now being filled with boys from the Neglected Children's Department, who are being trained in scientific and practical agriculture and viticulture, and are already supplying vigneron and farmers with skilled labour of a class now difficult to obtain.

Experimental work is carried out with manures, cereals, grasses, fodder, and reputedly drought-resisting plants. A model orchard has been planted, and is worked under the supervision of the horticultural branch.

Experimental dairying and the cross-breeding of dairy strains of cattle have been started at the Viticultural Station, with a view to investigating the possibilities of dairying in the drier districts of the State. A dairy herd is being gradually built up. Milking and feeding sheds with necessary silos have been erected, and dairying, as practised in dry climates, forms part of the regular instruction.

Sheep are also kept, and the growth of suitable summer fodder crops is an important branch of the work.

The station is open to inspection on all week days, and is well patronized by visitors anxious to learn.

The Gunyah Gunyah, Olangolah, and Bullarto reserves have never been used for the purposes of colleges, but Gunyah Gunyah, which contains 2,500 acres, is let for grazing and agriculture, and Bullarto, containing 817 acres, is let for grazing.

Gunyah  
Gunyah,  
Olangolah,  
and Bullarto.

Endowment  
lands.

In addition to the college and farm lands provision was made, by the Act of 1884, to permanently reserve from sale an area of not more than 150,000 acres of Crown lands, and to vest it in trustees to be appointed, who should hold it in trust for the benefit of and by way of an endowment for State agricultural colleges and experimental farms. The land so reserved now amounts to 144,294 acres,

and is described in the following table. At present the areas are let for grazing and agricultural purposes:—

ENDOWMENT AREAS.

Parish.	Acres.	Parish.	Acres.
Ararat .. .. .	1,100	Leeor .. .. .	125
Ardno .. .. .	210	Moyston .. .. .	242
Alexandra .. .. .	79	Moyston West .. .. .	319
Bellallen and Illawarra .. .. .	750	Mullroo and Yelta .. .. .	28,600
Beveridge Island .. .. .	2,732	Meering .. .. .	690
Branket .. .. .	387	Myrree .. .. .	394
Berrigama .. .. .	199	Mooroopna .. .. .	98
Bealiba .. .. .	135	Milloo .. .. .	120
Bumbang .. .. .	10,000	Mirampiram .. .. .	99
Byawatha .. .. .	108	Moir .. .. .	136
Buckrabanyule .. .. .	220	Mologa .. .. .	107
Bringalbart .. .. .	79	Nurcoung .. .. .	230
Bangerang .. .. .	58	Pental Island .. .. .	17,350
Broadwater .. .. .	198	Pannoomilloo .. .. .	100
Carraragarmungee .. .. .	1,864	Peecheember .. .. .	50
Cudgewa .. .. .	732	Purnim .. .. .	3,678
Colac Colac .. .. .	420	Quantong .. .. .	495
Corack East .. .. .	474	Quambatook .. .. .	380
Charam .. .. .	331	Torrumberry North .. .. .	615
Carchap .. .. .	99	Tullich .. .. .	400
Charlton East .. .. .	228	Terrick Terrick East and West .. .. .	160
Dropmore and Ruffy .. .. .	454	Terrick Terrick East .. .. .	40
Dinyarrak .. .. .	359	Tallandoon .. .. .	116
Dartagook .. .. .	120	Tarwin .. .. .	167
Estcourt .. .. .	2,831	Torrumberry .. .. .	281
French Island .. .. .	340	Tallygaroopna .. .. .	430
Gooram Gong .. .. .	582	Tragowel .. .. .	250
Granya .. .. .	586	Toolongrook .. .. .	160
Gowangardie and Currawa .. .. .	272	Wychitella .. .. .	1,015
Glenpatrick .. .. .	100	Walwa .. .. .	200
Glynwylln .. .. .	524	Windham .. .. .	452
Jumbuk .. .. .	2,641	Wabba .. .. .	335
Kunat Kunat .. .. .	700	Warrenbayne .. .. .	145
Karramomus and Tamleugh .. .. .	672	Wappan .. .. .	293
Kerrisdale .. .. .	148	Woorak .. .. .	630
Kaarimba .. .. .	429	Waratah .. .. .	148
Knowsley .. .. .	103	Wareek .. .. .	100
Knowsley East .. .. .	296	Warrenmang .. .. .	120
Korarak Korarak .. .. .	150	Wail .. .. .	240
Kinypanial .. .. .	80	Wonthaggi North .. .. .	2,535
Koonik Koonik .. .. .	37	Yarek .. .. .	569
Konnepra .. .. .	126	Yanac-a-Yanac .. .. .	168
Kerang .. .. .	90	Yeringa .. .. .	160
Lindsay Island .. .. .	42,000	Yeerung .. .. .	1,400
Laen .. .. .	887		
Longwood .. .. .	242		
Lang Lang and Yallock .. .. .	4,780	Total .. .. .	144,294

The total annual rental for endowment areas was £7,400.

## SCHOOL OF HORTICULTURE.

The school is situated in the Richmond Park. The site covers 33 acres of ground, and was originally part of the old police paddock. In 1890, the Government decided to start on this site an institution for the training of orchardists and small settlers, and during the past ten years much has been done to provide for teaching the regular and casual students, and those visitors calling in search of special information.

Effective roads and culverts have been laid, model orchard blocks, farm land, gardens, and a student's training ground have been prepared, and a large variety of instructive implementa got together for use in the class and field work.

Class room instruction is given in horticultural science, vegetable pathology, botany, physical and commercial geography, entomology, measuring, levelling, designing, and plotting of homesteads, orchards, small farm and garden areas, and the most approved methods of raising and managing fruit trees and plants. Practical work includes the propagation and management of orchard trees, citrus, table grapes, bush fruits, harvesting, storing, packing, marketing, drying and canning fruit, vegetable culture, clearing, grading, and trenching of land, management of soils, manures, drainage, and villa gardening.

The principal and his assistant carry out this programme by affording lessons daily in the class room and field. Much of the landed estate has recently been prepared to receive domestic and farm animals of all kinds, and these are now added, and form a helpful source of instruction to students.

In 1899, women students were first admitted. They have for the most part devoted their attention to the designing and making of villa gardens, vegetable and herb culture, and the special cultivation of table grapes and lemons—branches of commercial horticulture most suited to women.

Previous to 1903, instruction was free, but a fee of £5 per annum is now charged. There is a steady advance in the number of students, and every indication of the school doing generally helpful work in the service of the State. The flower gardens surrounding the principal's residence are noted for their beauty, and the instructional character of the work ever in progress makes the place well worth a visit at any season. The school year extends from February to December. Application for admission should be made to the Secretary for Agriculture, Public Offices, Melbourne.

## AGRICULTURAL HIGH SCHOOLS.

The proposals to establish Agricultural High Schools have now taken definite shape by the decision of the Government to devote the sum of £3,000 for this purpose during the year. The sum is made available under the following conditions:—

- (a) At least one-half of the cost of the necessary buildings and equipment shall be contributed by local subscriptions.

- (b) An area of land of not less than 20 acres, situated in a convenient position to the High School, shall be provided and vested in the Minister of Public Instruction.
- (c) At least 50 students paying prescribed fees shall be guaranteed before the proposal to establish an Agricultural High School is entertained.

It is proposed that pupils for admission to the High School must be at least 14 years of age, and have obtained the certificate of merit at the local school, or have passed the primary or some higher examination at the Melbourne University, or must have satisfied an Inspector of Schools that they are qualified to profit by the course of study.

A local council will be appointed for each district High School, and will exercise a general oversight over the work of the school, particularly with regard to the farm operations, and expend the maintenance allowance allotted to the school. In addition, they will nominate for free instruction students who possess the above qualifications, provided the number of students so nominated shall not, in any one year, exceed 10 per cent. of the total number paying full fees enrolled in the school.

Arrangements have been completed for opening such high schools at Warrnambool and Sale.

#### AGRICULTURAL SOCIETIES.

There are altogether 90 agricultural societies in the State which received aid from the Government during 1905-6. The total of such aid for that year amounted to £2,075, including £314 for medals, of which those for £100 were awarded at the Royal Agricultural Society's Annual Show. Particulars respecting the most important of these societies are as follow:—

In any account of the origin of the Royal Agricultural Society of Victoria, it is necessary to allude to the old Port Phillip Farmers' Society, as it was practically from the ashes of that institution the present society arose. The Port Phillip Society, after years of useful work, gradually became disintegrated, largely through internal dissensions, and was allowed to collapse. Then, as the result of a public meeting, in November, 1870, it was resolved—in the absence of any central society to promote the interests of producers—to form a new agricultural society on a wide basis, and this was accordingly done, the institution being called the National Agricultural Society of Victoria. In February, 1871, the foundation council was elected with the Hon. W. Degraives as president. The trustees of the old institution afterwards handed over their balance of funds and rights to a show ground site to the new society. With some fluctuations during its progress, this society—now the Royal Agricultural Society of Victoria, having had its title altered in 1890

The Royal  
Agricultural  
Society.

—has grown to be the most important agricultural institution in Australasia. Its objects are to promote the development of the agricultural, pastoral, and industrial resources of the State in the manner following:—

- (1) By holding exhibitions at such places and times as the council shall appoint; and by offering and awarding prizes and premiums at all such exhibitions, if deemed desirable.
- (2) By holding meetings at such places and times as the council shall appoint, at which meetings papers may be read and discussed.
- (3) By collecting such information from agricultural publications, scientific and other works, as may be useful in promoting the objects of the society.
- (4) By corresponding with agricultural and other kindred societies at home and abroad, and collecting from such correspondence all information which, in the opinion of the council, may lead to practical benefit in the cultivation of the soil and breeding of stock, as well as in the prosecution of other important industries.
- (5) By encouraging the attention of men of science to the discovery of better methods of cultivation, the improvement of agricultural implements and machinery, the construction of farm buildings, the application of chemistry to the general purposes of agriculture, the destruction of insects injurious to vegetable life, and the eradication or utilization of weeds.
- (6) By promoting the discovery and introduction of new varieties of cereals, vegetables, or grasses suitable to the climate, and capable of being cultivated with profit; and also the introduction of desirable kinds and varieties of live stock.
- (7) By collecting information regarding the management of plantations, live-fences, and other subjects connected with rural improvement.
- (8) By investigating the nature of diseases in animals or plants, and taking measures for the publication, at such times and periods as the council may appoint, of the information thus collected, together with all approved original essays sent in, lectures delivered, or papers read to the society; besides making provision for the establishment of a library and reading-room for the use of members.
- (9) By remunerating any person, if thought fit—who shall ascertain by experiment how far such information may lead to useful results in practice—for any loss incurred by such experiments.



The society possesses the Crown grant of show grounds at Flemington, 30 acres in extent, together with 12 acres added by purchase, on which over £59,000 has been spent in permanent improvements.

This large sum has been derived from the general income of the society, excepting £3,000 provided by the Government as a recompense for all buildings and fencing on the site previously held on the St. Kilda-road. Three years ago the society was quite out of debt, but owing to recent heavy expenditure, principally incurred in altering the conformation of the grounds, erecting new buildings, and buying additional land, its present overdraft is over £11,000.

The annual exhibition, in the first week in September, is one of the most important public events of the year. Last year the prize money offered for competition amounted to over £2,600, and there were 6,124 entries of exhibits of a very high standard of excellence. Every year the show is patronized by an increasingly large number of visitors, its importance being recognised and accentuated by the proclamation of a public holiday on the Thursday of show week.

The society has a membership roll of 1,518 subscribers, and a general income of over £11,000, its principal sources of revenue being gate money, entry fees, subscriptions, and donations. Its expenditure is mainly incurred in providing additional accommodation at the show grounds for the annually increasing number of exhibits, in prize money, and in working expenses in carrying out the objects of the society.

The institution is governed by a council of 36 members. Of these, three are trustees, who hold office continuously, the remaining 33 being elective members, of whom eleven, or one-third, retire each year, and are eligible for re-election. The society occupies, on lease, commodious offices in the Equitable Building, Collins-street, with a reading-room and a good agricultural library.

This society was established in 1856, its objects being the improvement and advancement of agricultural and pastoral pursuits, of implements and machinery incidental thereto, and of the breed of stock.

Ballarat  
Agricultural and  
Pastoral  
Society.

Ballarat, being the centre of the great merino district of the State, holds a special sheep show each year, in the month of September. Since 1876, when these special shows were first inaugurated, they have been most successful, the prizes awarded up to date having reached the amount of £11,793.

The agricultural show of the society is usually held each year in the month of October. It is amongst the most important in the Western District, and always attracts a large number of entries. The prize money awarded and paid from 1861 to 1906 inclusive was £32,083.

The total amount of prize money paid since 1861 is £57,449, awarded as follows:—Ploughing matches, £9,245; farm and garden produce, £1,877; agricultural shows, £32,083; sheep shows, £11,606; tenant farms, £2,168; reaper and binder trials, £283.

A sum of £13,628 has been expended in improvements and repairs to the show yards, keeping them in first class order, and providing proper accommodation for all exhibits. On the 30th April, 1906, the society's debit bank balance, covering all liabilities, was £290. The total receipts for the year ended 30th April, 1906, were £1,663, and the expenditure £1,714.

Bendigo  
Agricultural and  
Horticultural  
Society.

This society was founded about 42 years ago. The shows are held on a portion of Rosalind Park, of which the society holds a permissive occupancy from the Bendigo City Council. The progress of the society of late years has been most marked, and buildings of a substantial character for the accommodation of exhibits and the public have been provided.

Its annual spring show is held in the second week of October, and extends over three days, the average attendance being about 15,000 persons. About £1,100 in cash and trophy prizes are distributed. It is practically free from debt, and has valuable assets in the form of buildings and freehold land.

The show room is 200 feet long by 48 feet wide, and in it dairy produce, flowers, fruits, and vegetables are exhibited. The two grandstands will seat 2,000 visitors. The refreshment and luncheon rooms are permanent structures.

This society is noted for the splendid display of jumping at the annual show, the Australian record was made there, in 1903, and again in 1906. The society is effecting many improvements in the yards preparatory to the ensuing show.

Kyneton  
Agricultural Association.

This association was formally inaugurated in 1856. In 1857, permissive occupancy was obtained of a piece of land opposite the hospital for a show ground, and there the shows were held for the next 30 years. The first grain show was held in March, 1858, and the first show for stock and implements in November of the same year. In 1886, the society had made such progress, and the entries had become so numerous, that it was necessary to procure a more suitable site for show purposes. This site was found on the race-course reserve, and consists of about 87 acres, where about £4,000 was spent in the erection of fencing and buildings, £3,000 being contributed by the society, and the balance by the District Racing Club. The exhibits of draught horses have always been regarded as of a very high order; and notwithstanding declining grants from the Government, the committee has been able to keep the prize list up to from £450 to £500 annually. The whole of the loan is now repaid. In 1906, the Grand National Show was held under the auspices of the society, and it was generally conceded to be the best show ever held at Kyneton.

North-  
Eastern  
and  
Goulburn  
Valley  
Agricultural,  
and  
Pastoral  
Association.

This society came into existence about thirty-three years ago. Its objects are to further the agricultural and pastoral industries of the State by holding shows, awarding prizes, and generally promoting the best interests of the farming, dairying, and grazing industries. Its show grounds, which are situated at Tatura, cover 25 acres, and provide comfortable and extensive accommodation for stock of all kinds. The land is valued at £650, buildings

and improvements at £4,500, and represent a total asset of £5,150. The annual show, held in the third week in October, is popular, and commands up to 3,000 entries annually. Liberal and comprehensive prizes are offered, amounting to between £700 and £800 per annum. The annual revenue is about £1,400; members' subscriptions amounting to £700. The show is very successful, situated as the grounds are, within the Rodney Irrigation district.

This society is one of the first that has taken up the new conditions that the Department of Agriculture requires in connexion with the annual subsidy. Prizes were given during the past year for farms 300 to 1,000 acres and for farms under 300 acres: prizes were also given for lucerne paddocks, and maize, also for chaff ensilage, and hay stack building.

The society was inaugurated in 1878. The objects of the society are to promote the advancement of agricultural, horticultural, pastoral, and industrial pursuits, in such manner as from time to time may seem most advisable. Shepparton  
Agricultural  
Society

The society has progressed since 1891 to the present day as follows:—Membership, 150 to 420; prize money, £425 to £700; gate money, £121 to £362; exhibits from under 1,000 to over 3,000. The society's show grounds now cover 23 acres, and the expenditure on improvements, buildings, land, &c., has been over £4,100. The receipts for the society's year ended 31st January, 1907, were £2,963, and the expenditure £2,757. The society's position is very sound, its solid assets exceeding its liabilities by £2,036, after deducting some £1,500 for depreciation of buildings, fencing, &c.

The North Gippsland Agricultural Society was founded in 1861, at Sale, and was the first institution of its kind in Gippsland. The Annual show is held in the last week in October, on a good ground, 13 acres in area, situated about 1 mile out of Sale. There are numerous entries, and the attendance is a large one. The number of members is 220. The total receipts for the year were £581, and the expenditure £602. There is a loan liability of £900. North  
Gippsland  
Agricultural  
Society.

The agricultural societies furnishing returns for 1906, including those just specified, have grounds covering an area of 1,590 acres, and a total membership of 16,131. The receipts amounted to £55,378, and the expenditure to £64,054. Thirty-five horticultural societies also furnished returns. The grounds of these societies cover 44 acres, their membership in 1906 was 3,238, the receipts were £3,872, and the expenditure £3,700. Agricultural  
and Horti-  
cultural  
Societies.

#### DEPARTMENT OF AGRICULTURE.

This Department is controlled by a Minister of the Crown, and has a large staff of experts, with a Director of Agriculture at the head. They are actively engaged in supervising all matters relating to the Agricultural, Pastoral, Fruit, and Dairying Industries of the State, and affording instruction to those engaged therein. The Department publishes a monthly journal.

## INSPECTION OF ORCHARDS, NURSERIES, &amp;C.

*Extract from a Report by the Government Entomologist.*

Orchards, nurseries, and gardens are systematically inspected. Nurseries are inspected every six months, and certified by the Departmental Inspector if clean and free from disease. Old, worn-out infected orchards are destroyed.

Plants and cuttings coming into Victoria from foreign parts are fumigated at the Burnley Gardens, if a certificate that they have been treated at the port of shipment does not accompany the consignment. Even when they have been thus certified, the entomologist reserves the right of examination, and, if necessary, a second fumigation.

Besides lectures, inspections and experiments, the entomological branch carries on a great deal of correspondence, possesses a library of books and publications on technical matters, and controls a valuable museum of economic entomology and ornithology, which teachers from the Education Department, pupils of the Veterinary College, and members of the Field Naturalists and Science Clubs have visited, and from which collections are sent to exhibitions and shows of agricultural societies.

The fear of introducing either of the fruit flies, *Tephritis tryoni* and *Halterophora capitata*, has induced the Hon. the Minister of Agriculture to arrange for the erection of a large shed on the wharf, and in which will be open trays for the more thorough examination of fruit from New South Wales, Queensland, and elsewhere, as also a fumigating plant, and the appointment of a number of additional inspectors, and packers. The fruit-fly question is a most grave one, and should either of the abovenamed insects obtain a footing in Victoria, a great portion of the large and important fruit industry of our State would be practically ruined. An Act to further amend the Vegetation Diseases Act, has been passed by Parliament, and is now in force. The increasing area of land for orchard purposes will necessitate the appointment of additional inspectors, and this will be done as circumstances dictate. The Plates and MS. for Vol. IV. of the *Destructive Insects of Victoria* are nearly ready, and the publication of same may shortly be expected.

## GENERAL REMARKS ON LIVE STOCK DISEASES IN VICTORIA.

No country in the world is as free from malignant infectious disorders in stock as Victoria. The State interferes in every direction to prevent spread and importation of disease, and exercises a strict supervision over all animals slaughtered for food.

The inspection of meat products for export is carried out under stringent regulations, and by properly trained officers, and no meats are allowed to be canned unless they are of a perfectly wholesome character, and derived from animals free from disease. The premises where canning of meat is conducted are rigorously inspected, and cleanliness is a factor insisted upon in the packing operations.

The Commonwealth Government has now assumed control of all meats exported from Australia, and, in addition, Victorian State laws insist on a thorough inspection of meats for export, and all inspectors associated with the work are officials of the Crown. All countries where meats of Victorian origin are consumed are officially assured that meats canned in this State are subjected to the closest scrutiny. The State jealously guards the wholesomeness of all oversea products intended for food of man. By a recent enactment the whole of the milk supply of the State is subjected to a strict inspection by the central government, and cleanliness in production and distribution are prominent features of the measure.

*Horses.*—Horses are particularly free from malignant infectious disorders. Glanders and farcy do not prevail anywhere in Australia. Tuberculosis does not occur in Victorian horses. Complaints caused by parasites that are common all the world over are occasionally encountered.

*Cattle.*—Rinderpest, eczema-epizootica (foot and mouth disease), Texas-fever or tick fever, a disease dependent on a malarial organism, *Pyrosomum Bigeminum*, and introduced into the blood of cattle by the cattle tick (*Ixodes Bovis*), do not exist in the State. The herds of Victoria are not seriously affected with tuberculosis. In consequence of the mildness of the climate, cattle can be kept in the open all the year round, and this continuous life in the open is conducive to the health of animals, and to the suppression of this disease. Tubercle does not prevail to any greater extent than about 5 per cent. in Victorian cattle, and, as greater care is now being exercised by stock-owners in the feeding and sheltering of milch cows, it is hoped that in a few years the percentage noted will undergo a material decline. Parasitic diseases are rare in Victorian cattle, and none inimical to human health have ever been found.

*Sheep.*—Tuberculosis has never been observed in Australian sheep. Scab has been completely exterminated, and as regards other parasitic diseases no country in the world can produce so clean a bill of health for its ovines as Australia.

*Swine.*—Trichinosis (*Trichina Spiralis*) and "measles" (*Cysticercus Cellulosæ*), the hydatid stage of the tapeworm *Tænia Solium* of man, do not exist in Victoria. The conditions under which pigs are reared and kept in Victoria are conducive to their well-being and freedom from disease. The mildness of the climate and life in the open are the great factors insuring their healthfulness. Tubercle does not exist to a greater extent than 2 per cent. in Victorian swine.

*Dogs.*—Rabies (Hydrophobia) does not exist in Victoria, and there are no serious diseases prevailing in canines.

*Poultry.*—No serious diseases prevail in Victorian birds, and inspections of poultry of the State are regularly conducted. Efforts are being made to expand the industry of rearing chickens for export, and the wholesomeness of such products originating in Victoria cannot be questioned.

## EXPERIMENTAL FIELD WORK IN 1906.

During 1906, the experimental field work, both in the Northern wheat-producing areas and in the Southern portions of the State has been put on a more concrete basis as regards continuity of the work.

Agreements have been made with some 30 farmers to set aside 10 acres for continuous experiment over a term of seven years. The seed, manures, and supervision are furnished by the Agricultural Department, which also provides an annual payment of £15 for the conduct of the work.

The experiment is an endeavour to solve the problem of increasing the average yield of wheat in the State, and at the same time to point out the way of permanent improvement in methods.

The fields were sown in 1905, and embraced a series of comparative manure trials, different depths of cultivation, sub-soiling, green manuring, 40 varieties of wheat, and the growth of fodder crops.

The last year's results point out the confirmation of similar previous trials with manures, and emphasize the superiority of the superphosphate over other forms of phosphatic manures. The inutility (up to the present time) of the addition of nitrogenous and potassic fertilizers is further demonstrated.

As was expected, the first season's trials of deep cultivation, indicated little beyond the fact that, the extra cost of such treatment would be compensated for by the increased yield of grain. The results from the variety wheats were of especial interest and brought into prominence some twenty varieties imported from neighbouring States, the yields of which were greatly in excess of those hitherto in use by the wheat farmer.

The result of the fodder crops was disappointing, the absence of moisture preventing this class of farm produce from maturing normally. Without irrigation, green summer fodders must always be a precarious crop in localities with a 12 to 18-inch rainfall.

During 1906, three-fourths of the Northern fields were fallowed in three separate ways, ordinary bare fallow, rape fallow, and sub-soil fallow, the remainder of the fields were again sown with wheat varieties. The harvest returns of these varieties show that those which were prominent in yield last season are again to the fore in that respect. Federation, Dart's Imperial, Australian Talavera, Jade, Sussex, Silver King, Tarragon, White Tuscan, Frampton and Marshall's No. 3 averaged over five bags a-piece, the maximum yield being Federation 43 bushels per acre. The seed wheat furnished by the farmers themselves averaged 16.8 bushels per acre, with a maximum crop of 32.1 bushels.

It may safely be claimed that some 25 new varieties are well worthy of introduction into our own wheat districts, as a result of the two seasons' work on the experimental fields. Especial attention will in the future be given to the selection of varieties carrying a high percentage of "strong" flour.

It is proposed to undertake the systematic analyses of Victorian wheats, in order to encourage only the growth of those yielding a high percentage of flour (and low percentage of by-products in the shape of bran and pollard) of good "strength" and quality.

## MANURE EXPERIMENTS IN THE SOUTH.

Several five-acre forage and potato experiments have been carried on during the year. The trials embrace different fodder crops, grasses, roots, potatoes, cow peas, flax, and onions. The results of all crops are not sufficiently advanced to permit of detailed criticism, but it is sufficiently evident that the superphosphate used alone is hardly adequate to sustain the heavy yields of green fodder produced in localities where the rainfall is from 20 to 35 inches per annum. The addition of nitrogen in the shape of sulphate of ammonia or nitrate of soda to the superphosphate, has in nearly all cases shown a marked improvement both in the quantity and quality of the produce. The addition of potash has given negative results, except in soils of a sandy nature. The application of lime and farm manure has been productive of moderately good results, which will become more prominent as time goes on.

The application of artificial manures to grazing land has been extensively carried on during the year on some 400 acres. Out of some ten different dressings, the superphosphate, bone dust, Thomas' phosphate and lime, and in a minor degree, gypsum—have given the most satisfactory results. It is intended to extend this class of experiment all over the State. In the dairying districts in particular, the stock carrying capacity of the pastures is a matter in want of immediate attention.

Extensive experiments in the direction of the utilization of at present worthless Crown lands, have been undertaken. At Stawell, worthless mining land has been made to produce up to 2½ tons of hay—with suitable manuring. At Munro, in sandy, stringy-bark country, the yield of wheat was satisfactory. Experiments in the, at present, large areas of unoccupied Crown land covered by heath at Portland, Casterton, and Foster are projected. The poor land in other parts of the State will also receive attention.

Special attention has been given to the potato industry, and some 10 acres, embracing 30 imported varieties of tubers, were sown. The results from some varieties were highly satisfactory, and while the effect of artificial fertilization was not over marked, it was sufficient as a guide to future extension of this class of work.

Experiments in top-dressing backward cereal crops with nitrate of soda have been conducted with moderate success. It has been found that the imperfect conditions of drainage in many light sandy soils with clay subsoil near the surface, are responsible for many of the evils attendant on crops sown early on these soils. Deeper cultivation and subsoiling with the addition of lime are recommended as a remedy, but until facilities are provided for getting rid of the surplus moisture, crops are bound to remain backward in growth in the Spring.

To summarize the whole experimental work of the Department, it is progressive and on lines which must ultimately bring about permanent success in the different lines of inquiry. The Victorian farmer is willing to be taught, but he wants convincing proof, and this can only be secured by methods that are necessarily slow and cautious.

#### FORESTRY.

In the *Year Book* of 1903, an exhaustive paper setting out the history, present position, and aim of forestry in Victoria, and the value of Victorian timbers from a commercial point of view, from the pen of Mr. H. Mackay, was inserted, and this was amplified by the author for the 1904 volume. The writer sets out that the true aim of forestry is the preservation of the forests by wise use. Forest areas must be maintained in a timber-yielding condition, denuded areas must be re-planted, and open plains, niggard as regards natural vesture, planted with suitable trees. Above all, the sylvan wealth with which nature has clothed hill, valley, and plain must be maintained and increased by correcting wasteful and inferior growth, and so regulating the yearly output of timber as to give the best yield possible without deterioration of the forest areas.

Victoria, with a total area of 56,245,000 acres, has about twelve million acres of woodland. Of the latter, over 4,600,000 acres are set aside as climatic reserves and for the production of timber, but no portion is formally dedicated in perpetuity for the purpose of forest and water supply. Of the State forest domain, some 3,000,000 acres are situated on the slopes of high mountain ranges, and their protection is essential for the maintenance of streams and springs; over half-a-million acres are situated in the extreme Eastern part of the State, but, owing to difficulties of transport, are not at present accessible for practical working; half-a-million acres, chiefly in the central district, which have been cut over, are closed for the protection of the young timber; while in the remaining area, over 600,000 acres, timber cutting is carried on in various parts. The bulk of the forest revenue is, however, derived from a total area of about 100,000 acres, the trees being felled on the selection system of treatment; while for the supply of mine-props and fuel, large blocks are allotted and worked as coppice, or coppice under standards, thinnings only, light or severe as the circumstances require, being taken out in some districts.

The licence system is now abolished in the greater part of Victoria, and strict control enforced over the operations of timber-getters.

As usual in newly-settled countries, little care was exercised respecting our natural forests, and, though Victoria is the best-wooded of the Australian States, the fact is due to the extent of our



mountain territory and our ample rainfall. In some districts, particularly in the moister portions of the State, re-afforestation by natural process has been going on.

The timbers of commercial value in Victoria number twenty, all species of the eucalyptus family. Blackwood is a very valuable commercial timber—it is an acacia (*a. melanoxylon*). It should be added, that large revenue is obtained from wattle bark, and the State has established a number of wattle plantations, also two plantations of Valonia oak for tanning products; that the State is now selling at remunerative rates pine timber from the plantations; and that tens of thousands of poplar cuttings are being set out annually to provide suitable timber for butter boxes in the future. It might also be worth mentioning that fruit, grown at Harcourt for export, is now packed in boxes made in Victoria, from the *insignis* pine timber grown in the State plantations. Alarmist statements to the effect that there is an increasing scarcity of commercial timber here are ill-founded, as there are ready for felling trees of species which yield valuable sleeper material, and which are now going to waste, and supplies of hardwood are assured for many years to come.

There is a State nursery for raising trees for general distribution at Macedon, and State plantations near Geelong, Maryborough, and Creswick. Although the work is largely experimental, and mistakes have been made, yet the experience gained in the propagation and growing of Australian hardwoods, as well as exotic conifers, has been of great benefit to the community. Transplants are distributed to farmers, municipalities, and State schools, the former particularly benefiting by the planting of trees around their homesteads, the protection of homes from wind and weather adding greater comfort to the life indoors, and the shelter and shade afforded to live stock insuring healthier cattle and increased returns.

It is expected that proposed legislation will aid greatly in conserving our forests, and, at the same time, increase their produce, by systematically controlling their working.

#### AGRICULTURAL, DAIRYING, AND PASTORAL INDUSTRIES.

The Constitution Act provides that, after the inauguration of Federation, the control of the payment of bounties shall pass to the Executive Government of the Commonwealth. A State is therefore precluded from offering bounties on the production or export of its products, and the Department of Agriculture is now only dealing with applications for the bonuses to the extent for which provision had been made at the time of the establishment of the Commonwealth. Out of the provision that had been made prior to that time, the State Government, up to the end of June, 1906, had paid out of the general revenue the sum of £374,108. Bonuses have also been paid

Expenditure on agricultural bonuses.

out of loan moneys borrowed for the purpose, particulars of which are set out in the following table:—

### BONUSES GRANTED UNDER LOAN ACTS.

Subject of Bonus.	Period during which Bonus operated.	Rate of Bonus.	Expenditure to 30.6.1906.
<i>Under Act No. 1451.</i>			
Green Fruit exported {	prior to 24.7.96	2s. per case	£ 5,404
Honey exported ... {	after 6.11.96	1s. "	
Raisins, Currants, and Figs made	prior to 9.11.95	1d. per lb.	61
Vegetable Oil manufactured ...	1895	£5 per ton	2,134
Flax and Hemp Fibre produced ...	...	1s. per gal.	197
General Vegetable Products	...	£5 per ton	557
grown	1895	£2 per acre	3,668
Wineries (assistance in building machinery and appliance producing 60,000 gallons of wine in three years)	...	£2,000 each	8,000
Viticultural Education ...	...	...	7,999
Fruit Pulp exported ...	...	½d. per lb.	3,402
Total ...	...	...	31,422
<i>Under Acts No. 1564, etc.</i>			
District Co-operative Wineries and Viticulture Industry ...	...	...	15,085
Dairy Schools, Experimental Stations, purchase of Live Stock, Machinery, Implements and other Appliances, and Technical Agricultural Education	...	...	29,988
Development of the Export trade ...	...	...	7,565
Bonuses for the encouragement of the Cultivation, Manufacture, and Export of Fruit, Tobacco, Flax, Hemp, Silk, and of other Rural Industries	...	...	4,622
Total ...	...	...	57,260
To Beet Sugar Factory under Act No. 1440 ...	...	...	62,000
Grand Total ...	...	...	150,682

In addition, various sums have been advanced from loans and votes for the purpose of aiding closer settlement, for the resumption of mallee lands, and for relief to farmers on account of bush fires, flood losses, and purchase of seed wheat and fodder. These advances are gradually being repaid.

Particulars of State expenditure in aid of agricultural industries during each of the five financial years ended with 1905-6, are as follow :—

SUBSIDIES TO AGRICULTURE, &C.: 1901-2 TO 1905-6.

	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
Agricultural and Horticultural Societies, &c.	6,484	2,392	2,392	2,420	2,375
Carriage of Agricultural Produce at reduced Rates— Allowance to Railway Department	75,000	6,521	48,000	46,280	41,787
To promote the Agricultural, Dairying, Fruit, and Wine Industries	1,146	370	153	139	296
Expenses in connexion with export of Dairy Produce, Fruits, Meat, Rabbits, and other produce	33,503	33,672	27,500	32,320	31,130
Development of Export Trade	...	...	1,679	1,711	2,920
Viticultural Education and inspection of Vineyards	...	...	1,871	2,317	3,021
Eradication of Vine Diseases	50	...	...	30	...
„ Vegetation Diseases	2,983	3,804	4,147	4,202	4,257
Scab Prevention and Stock Diseases	4,970	5,358	7,417	7,190	7,319
Rabbit and Vermin Extermination	17,250	16,489	15,759	16,603	16,477
Maffra Beet Sugar Company— Expenses in connexion with Seed Advances	1,015	486	454	215	214
Technical Agricultural Education	17	110	67	9	23
Publishing Agricultural Reports	...	9,786	12,077	13,641	14,428
Carrum Advances Act	...	3,990	2,739	2,011	2,250
Advances to Settlers on account of Losses by Bush Fires	...	...	...	512	...
	...	...	...	...	3,486
Total	142,418	82,978	124,255	129,600	129,983

From the foregoing it will be seen that the State has rendered material assistance to all the producing industries connected with the land.

LAND OCCUPIED, CULTIVATION, AND STOCK.

Information relating to land occupied and cultivation and live stock thereon was collected in March, 1906. The land privately owned was summarized according to different sized holdings, and in the instances where Crown lands were held in conjunction therewith

Land occupied and cultivation and live stock thereon, 1906.

it was distributed, regardless of its size, as held by the different occupiers of lands privately owned. The particulars are as follow:—

LAND OCCUPIED, AND CULTIVATION AND LIVE STOCK THEREON,  
MARCH, 1906.

Privately-owned Land.			Crown Land held in conjunction with the privately owned.	Total Area occupied.	Area under—	
Size of Holdings. (In acres.)	Number of Holdings.	Area occupied.			Cultivation.	Pasture.
		Acres.	Acres.	Acres.	Acres.	Acres.
1 to 100 ..	19,173	721,669	554,759	1,276,428	196,580	1,079,848
101 " 320 ..	16,121	3,459,291	937,727	4,397,018	789,330	3,607,688
321 " 640 ..	9,319	4,497,331	1,604,280	6,101,611	1,197,538	4,904,075
641 " 1,000 ..	3,876	3,164,404	1,063,166	4,227,570	735,263	3,492,307
1,001 " 2,500 ..	3,466	5,112,200	2,200,867	7,313,067	1,009,034	6,304,033
2,501 " 5,000 ..	617	2,106,732	1,996,797	4,103,529	180,884	3,922,645
5,001 " 10,000 ..	220	1,567,251	471,271	2,038,522	44,347	1,994,175
10,001 and upwards	195	4,134,067	176,916	4,310,983	43,521	4,267,462
Total ..	52,987	24,762,945	9,005,783	33,768,728	4,196,495	29,572,233
Live Stock on Holdings.						
		Horses.	Cattle.		Sheep.	Pigs.
			Dairy Cows.	Other Cattle.		
1 to 100 ..	38,595	80,316	80,681	88,890	41,950	
101 " 320 ..	81,449	226,112	254,445	562,167	92,929	
321 " 640 ..	74,901	151,163	221,002	1,155,133	59,120	
641 " 1,000 ..	41,839	65,571	131,666	1,138,179	25,119	
1,001 " 2,500 ..	48,450	51,697	158,878	2,387,139	20,282	
2,501 " 5,000 ..	11,815	12,332	54,375	1,475,643	3,161	
5,001 " 10,000 ..	6,786	5,232	45,558	1,194,246	980	
10,001 and upwards	10,379	5,805	59,914	3,260,442	1,309	
Total ..	314,214	598,228	1,006,519	11,261,839	244,850	

The figures are exclusive of live stock travelling, and those in cities, towns, &c.; also of 1,288 holdings containing 749,798 acres of Crown lands not held in conjunction with any private land, and on which there were 73,382 acres of cultivation, 4,057 horses, 20,707 cattle, 78,283 sheep, and 3,352 pigs. The position disclosed is that 48,489 occupiers of 11,842,695 acres of private land up to 1,000 acres each, also occupied 4,159,932 acres of Crown land—a total of 16,002,627 acres, and less than half of the total area in occupation. These occupiers, however, controlled 70 per cent. of the total cultivation, and possessed 75 per cent. of the horses, 87 per cent. of the dairy cows, 69 per cent. of other cattle, 90 per cent. of the pigs and 26 per cent. of the sheep. To clearly illustrate the uses to which the land is put, percentages in each division, and the sheep

carrying capacity of the area under pasture, are given in the following table:—

CULTIVATION AND SHEEP CARRYING CAPACITY OF LAND IN DIFFERENT DIVISIONS, MARCH, 1906.

Size of Holdings of Private Land. (In Acres.)	Percentage in each Division to Total of—				Live Stock Grazed reduced to Equivalent in Sheep.	
	Area Occupied.	Area under Cultivation.	Area used for Pasture.	Equivalent in Sheep Grazed.	Total.	Per Acre used for Grazing.
1 to 100 ..	3.78	4.68	3.65	6.00	1,440,822	1.33
101 „ 320 ..	13.02	18.81	12.20	17.73	4,259,999	1.18
321 „ 640 ..	18.07	28.54	16.58	17.21	4,137,133	.84
641 „ 1,000 ..	12.52	17.52	11.81	11.40	2,739,991	.78
1,001 „ 2,500 ..	21.66	24.04	21.32	17.20	4,135,089	.66
2,501 „ 5,000 ..	12.15	4.31	13.27	8.30	1,994,035	.51
5,001 „ 10,000 ..	6.04	1.06	6.74	6.52	1,566,846	.79
10,001 and upwards	12.76	1.04	14.43	15.64	3,758,546	.88
Total ..	100.00	100.00	100.00	100.00	24,032,461	.81

Horses and cattle have been reduced to an equivalent in sheep on the assumption that one head of the former will eat as much as ten, and one of the latter as much as six sheep. In this return it may be seen that 47.39 per cent. of the land occupied was in areas not exceeding 1,000 acres, and, after supplying 70 per cent. of the cultivation, contained 52 per cent. of the live stock; whilst holdings of over 1,000 acres supplied 56 per cent. of the total area used for grazing, and only 48 per cent. of the stock. As many of the large areas are situated in the rich Western District, which is favoured with a good annual rainfall, it requires only the introduction of labour to utilize the capability of these lands to carry sheep at least equal to that carried by holdings of 320 acres or under. The figures show that there is sufficient land in use in Victoria to carry at least twelve million more sheep than at present. Dairying is principally carried on in the small holdings, more than a third of the dairy cows being on holdings between 101 and 321 acres. Naturally, pigs also are most numerous in the same holdings, being found to be in about the same proportion as dairy cows—over one-third of their total in the State.

The following tables show the land in occupation in March, 1907, in districts, and the uses to which the land was put :—

LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1907.

(Areas 1 acre and upwards.)

District.	Number of Occupiers.	ACRES OCCUPIED.				
		For Agricultural Purposes.	For Pasture.		Other Purposes and Unproductive.	Total.
			Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
Central ...	12,121	302,214	171,340	2,079,605	35,474	2,588,633
North Central ...	5,121	166,801	54,129	1,647,914	16,175	1,885,019
Western ...	9,472	254,102	180,017	5,904,459	124,834	6,463,412
Wimmera ...	5,577	1,252,988	577	3,945,465	87,207	5,286,237
Mallee ...	2,858	874,885	5,382	3,436,924	1,668,155	5,985,346
Northern ...	9,640	1,233,484	28,436	3,716,361	26,826	5,005,107
North-Eastern ...	4,347	122,473	1,711	2,987,824	335,260	3,447,268
Gippsland ...	7,275	87,606	654,050	3,018,698	887,983	4,648,337
Total ...	56,411	4,294,553	1,095,642	26,737,250	3,181,914	35,309,359
PERCENTAGE OF TOTAL OCCUPIED IN EACH DISTRICT.						
Central ...	...	11·67	6·62	80·34	1·37	100·00
North Central ...	...	8·85	2·87	87·42	·86	100·00
Western ...	...	3·93	2·79	91·35	1·93	100·00
Wimmera ...	...	23·70	·01	74·64	1·65	100·00
Mallee ...	...	14·62	·09	57·42	27·87	100·00
Northern ...	...	24·64	·57	74·25	·54	100·00
North-Eastern ...	...	3·55	·05	86·67	9·73	100·00
Gippsland ...	...	1·89	14·07	64·94	19·10	100·00
Total ...	...	12·16	3·10	75·73	9·01	100·00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.						
Central ...	21·48	7·04	15·64	7·78	1·12	7·33
North Central ...	9·08	3·88	4·94	6·16	·51	5·34
Western ...	16·79	5·92	16·43	22·08	3·92	18·30
Wimmera ...	9·89	29·18	·06	14·76	2·74	14·97
Mallee ...	5·07	20·37	·49	12·86	52·43	16·95
Northern ...	17·09	28·72	2·59	13·90	·84	14·18
North-Eastern ...	7·71	2·85	·16	11·17	10·53	9·76
Gippsland ...	12·89	2·04	59·69	11·29	27·91	13·17
Total ...	100·00	100·00	100·00	100·00	100·00	100·00

It will be seen from these tables that in the Wimmera, Northern, and Mallee districts, the greatest area under cultivation and the greatest proportion of cultivation to land occupied are found. About 24 per cent. of land occupied in the Wimmera and Northern districts is devoted to agriculture, and each of these districts supplied 29 per cent. of the cultivation in Victoria. In Gippsland, the Western,

and North-Eastern districts, the land is very largely devoted to grazing; and in Gippsland attention has been given to the cultivation of grasses, as 60 per cent. of the sown grasses in the State are found to be there.

In the next table the distribution of cattle and sheep on pastoral lands in March, 1907, is given.

AREA CULTIVATED AND STOCK, 1906-7.

District,	Acres Occupied for		Number of		Stock— Equivalent of Sheep— per 100 acres used for Pasture.*
	Agriculture.	Pasture.	Cattle.	Sheep.	
Central ...	302,214	2,250,945	290,584	1,169,606	129
North Central ...	166,801	1,702,043	141,055	942,025	105
Western ...	254,102	6,084,476	353,228	4,618,985	111
Wimmera ...	1,252,988	3,946,042	63,095	2,243,299	66
Mallee ...	874,885	3,442,306	45,733	431,698	21
Northern ...	1,233,484	3,744,797	253,653	2,002,262	94
North-Eastern ...	122,473	2,989,535	232,798	750,104	72
Gippsland ...	87,606	3,672,748	424,177	779,461	91
Total ...	4,294,553	27,832,892	1,804,323	12,937,440	85

\* Reckoning six sheep as the equivalent of one head of cattle.

The area occupied does not include 3,181,914 acres regarded as mostly in an unproductive state, and horses grazing have not been allowed for in the stock. There has been a substantial increase in the number of sheep—there being 12,937,400 in March, 1907, as against 11,455,115 a year earlier. The increase is spread over all the districts, but the largest increases are in the Northern (397,476), Gippsland (230,259), and Wimmera (181,617) districts. The practice among farmers to combine sheep-farming with agriculture is growing in the State with very satisfactory results. In the Mallee, the number of sheep compared with the previous year shows an increase of 29 per cent., and it is among the small holders that the substantial increase has taken place.

In connexion with the pastoral industry in Victoria, it is advisable to point out that the number of sheep in the principal sheep countries of the world is decreasing, while the populations of those countries are increasing.

World's  
supply and  
consump-  
tion of  
mutton.

### NUMBER OF SHEEP IN THE PRINCIPAL SHEEP-PRODUCING COUNTRIES OF THE WORLD, 1887 AND 1903.

Countries.		1887.	1900-3.
United Kingdom	...	28,900,000	30,000,000
Other European countries	...	168,800,000	141,000,000
Total	...	197,700,000	171,000,000
United States	...	43,500,000	52,000,000
Australian States and New Zealand	...	96,600,000	*76,000,000
Cape Colony	...	13,100,000	11,500,000
Canada	...	2,600,000	2,500,000
Argentine Republic	...	70,450,000	80,500,000
Uruguay	...	10,550,000	14,500,000
Total	...	236,800,000	237,000,000
Grand Total	...	434,500,000	408,000,000

\* The number of sheep in the Australian States and New Zealand has since increased to 104,000,000.

### ESTIMATED POPULATION OF THE PRINCIPAL SHEEP-PRODUCING COUNTRIES OF THE WORLD, 1887 AND 1903.

Countries.		1887.	1903.
United Kingdom	...	36,600,000	42,371,000
Other European countries	...	303,320,000	344,256,000
Total for Europe	...	339,920,000	386,627,000
Other principal countries	...	72,370,000	97,108,000
Grand Total	...	412,290,000	483,735,000

It will be seen that the decrease in the number of sheep in Europe in the sixteen years was 26,700,000, and that the other countries, taken together, remained about stationary. At the same time, the population increased by 71,445,000.

The following additional figures, bearing upon the question, have been extracted from Mulhall's *Dictionary of Statistics*. No later figures than those for 1895 and 1896 are available, but there is no reason to suppose that, in recent years, the decline in production and the increase in consumption have not continued in the countries named:—

### UNITED KINGDOM—PRODUCTION AND CONSUMPTION OF MUTTON, 1875 AND 1895.

Year.	Production Tons.	Imports Tons.	Consumption. Tons.
1875	370,000	55,000	425,000
1895	320,000	230,000	550,000
Increase (+) or Decrease (—)	—50,000	+175,000	+125,000



UNITED STATES—PRODUCTION OF MUTTON.

Year.			Tons.
1876	...	...	360,000
1886	...	...	480,000
1890	...	...	440,000
1896	...	...	380,000

It will be seen that there is great opportunity in Victoria for expansion in the sheep industry. At present there is practically no fodder grown for sheep, yet wonderful results have been achieved in that direction in New Zealand.

PERSONS ENGAGED IN RURAL PURSUITS.

The occupations of persons settled on the land are only collected in the census years in full detail. Occupations of persons settled on the land—Pastoral and dairying (Census).

In 1891 the number of persons engaged in pastoral and dairying pursuits was 15,296, and in 1901, 30,920. The full particulars for last census year are as follow:—

RETURN OF PERSONS ENGAGED IN PASTORAL AND DAIRYING PURSUITS, 1901.

Persons Following Pastoral and Dairying Pursuits.	Employers of Labour.		In Business on their own account, but not employing labour.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Grazier, Pastoralist, Stock Breeder, and Relative Assisting	2,242	177	2,422	303	—	—	1,159	1,062	—	—
Station Manager, Overseer, Clerk	—	—	—	—	593	4	1	7	39	—
Stock Rider, Drover, Shearer, Shepherd, Pastoral Labourer	47	—	100	—	4,540	7	5	—	248	—
Dairy Farmer, and Relative Assisting	2,205	276	3,007	756	—	—	3,263	4,456	—	—
Dairy Assistant, Milker	—	—	—	—	3,194	386	—	—	32	3
Poultry Farmer	19	8	132	79	17	3	16	41	1	—
Stock and Brands Department Officer	—	—	—	—	18	—	—	—	—	—
Others, including Pig Farmers	3	1	10	—	34	—	2	—	2	—
Total	4,516	462	5,671	1,138	8,396	400	4,446	5,566	322	3

Total Males	..	..	..	..	23,351
Total Females	..	..	..	..	7,569
Grand Total	..	..	..	..	30,920

Occupations  
of persons  
settled on  
the land—  
Agricultural  
(Census).

In 1891 the number engaged in agricultural pursuits was 82,482, and in 1901 that number had increased to 95,920. The following return gives particulars of persons mainly engaged in agricultural pursuits when the last census was taken:—

#### RETURN OF PERSONS ENGAGED IN AGRICULTURAL PURSUITS, 1901.

Persons Following Agricultural Pursuits.	Employers of Labour.		In Business on their own account, but not employing labour.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Farmer and Relative Assisting ..	13,287	1,099	15,096	1,693	—	—	16,361	13,238	—	—
Farm Manager, Overseer ..	—	—	—	—	359	6	—	—	3	—
Farm Servant, Agricultural Labourer ..	—	—	—	—	20,204	599	—	—	956	5
Market Gardener ..	859	19	1,647	32	1,518	9	576	132	22	—
Fruit Grower, Orchardist ..	493	44	868	91	700	43	465	172	14	—
Hop, Cotton, Tea, Coffee Grower ..	10	2	7	—	48	48	9	2	—	—
Tobacco Grower ..	10	—	25	—	24	—	1	—	—	—
Vine Grower, Vignerone ..	174	18	72	8	1,131	6	86	39	6	—
Sugar Planter ..	1	—	—	—	—	—	—	—	—	—
Horticulturist, Gardener ..	237	7	571	17	2,132	7	107	39	214	—
Agricultural Department Officer ..	—	—	—	—	41	—	—	—	—	—
Others, Threshing Machine Owners and Workers, &c.	20	1	26	—	72	2	4	3	103	—
Total .. .. .	15,071	1,190	18,312	1,841	26,229	720	17,609	13,625	1,318	—
Total Males .. .. .					78,539					
Total Females .. .. .					17,381					
Grand Total .. .. .					95,920					

Particulars are gathered by the collectors of agricultural statistics each year of the number of persons ordinarily employed upon the land occupied. For the last four years the particulars are as follow:—

#### NUMBER OF PERSONS EMPLOYED UPON FARMING, DAIRYING, AND PASTORAL HOLDINGS, 1903 TO 1906.

Year.	Males.	Females.	Total.
1903 .. .. .	87,322	48,561	135,883
1904 .. .. .	90,396	51,933	142,329
1905 .. .. .	91,336	50,982	142,318
1906 .. .. .	92,652	51,993	144,645

The number of hands ordinarily employed on any holding includes the occupier or manager, and those members of his family who actually work on it; but persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are not included, neither are domestic servants nor cooks. It is difficult to arrive at an estimate of the extent of the temporary labour employed upon the farms and pastoral holdings, and last year the collectors were asked to supply some information on the subject. From this

and particulars available from other sources it is believed that this labour may be set down as approximately equal to about 23,000 men employed continuously throughout the year.

In the following return will be found particulars showing the rates of wages paid (with rations) upon farms and pastoral holdings during 1906-7. The information has been furnished by the occupiers of holdings:—

### WAGES, AGRICULTURAL AND PASTORAL, 1906-7.

Occupations.	Range.	Prevailing Rate.
Ploughmen .. ..	12s. 6d. to 30s. per week ..	20s. per week
Farm labourers .. ..	10s. to 30s. ..	15s. ..
Threshing machine hands .. ..	6d. to 1s. per hour ..	6d. per hour
Harvest hands .. ..	3s. 4d. to 8s. per day ..	5s. per day
Milkers .. ..	7s. to 20s. per week ..	15s. per week
Maize pickers (without rations)	4d. to 6d. per bag ..	4d. per bag
Hop pickers .. ..	2½d. to 6d. per bushel ..	4d. per bushel
Married couples .. ..	15s. to 40s. per week ..	30s. per week
Female servants .. ..	5s. to 20s. ..	10s. ..
Men cooks .. ..	12s. 6d. to 30s. ..	20s. ..
Stockmen .. ..	£39 to £68 per annum ..	£52 per annum
Boundary riders .. ..	£25 to £35 ..	£45 ..
Shepherds .. ..	£26 to £52 ..	£40 ..
Hut keepers .. ..	£26 to £52 ..	£40 ..
Generally useful men .. ..	10s. to 30s. per week ..	17s. 6d. per week
Sheep washers .. ..	16s. to 30s. ..	20s. ..
Shearers, hand* .. ..	14s. to 20s. per 100 sheep	16s. per 100 sheep
„ machine* .. ..	14s. to 20s. ..	16s. ..
Bush carpenters .. ..	15s. to 50s. per week ..	30s. per week
Gardeners, market .. ..	10s. to 25s. ..	22s. 6d. ..
„ orchard .. ..	10s. to 25s. ..	20s. ..
Vineyard hands .. ..	10s. to 25s. ..	15s. ..

\* It is believed that in cases of some of the highest rates rations are not found.

In the following table will be found figures showing the land under cultivation in the years ended March, 1904 to 1907:—

Area under cultivation.

### CULTIVATION OF PRINCIPAL CROPS, 1903-4 TO 1906-7.

Crop.	Year Ended March.			
	1904.	1905.	1906.	1907.
	Acres.	Acres.	Acres.	Acres.
Wheat ... ..	1,968,599	2,277,537	2,070,517	2,031,893
Other Grain Crops ... ..	504,189	415,292	378,987	458,451
Root Crops ... ..	55,684	52,038	52,125	62,150
Hay ... ..	733,353	452,459	591,771	621,139
Green Forage ... ..	33,165	29,902	34,041	36,502
Vines ... ..	28,513	28,016	26,402	25,855
Orchards ... ..	51,357	52,751	52,274	54,021
Market Gardens ... ..	8,455	7,904	7,333	7,906
All other Crops ... ..	5,754	5,886	6,512	5,669
Land in Fallow ... ..	632,521	853,829	1,049,915	990,967
Total Cultivation ... ..	4,021,590	4,175,614	4,269,877	4,294,553

The area under cultivation, exclusive of permanent and artificial grasses, increased from 50 acres sown down with wheat in 1836 to 4,294,553 acres, which were under crops of various kinds and in fallow in 1906-7. The first returns of oats, maize, potato, and tobacco crops were obtained in 1838, barley and rye in 1839, hay in 1841, green forage and vines in 1842, peas and beans in 1849, mangel wurzel, carrots, parsnips, turnips, and onions in 1855-6, garden and orchard produce in 1856-7, and chicory, grass and clover seeds, and hops in 1867-8. Returns of land sown with artificial grass were first procured in 1855-6, and since that year steady and uninterrupted progress has been made. The area of land in fallow has also been increasing since 1858-9, and in recent years the increase has been very marked.

For the eleven years—1896-7 to 1906-7—the total area under cultivation, its proportion to the area of the State—56,245,760 acres—and the yearly increase or decrease, actual and centesimal, were:—

AREA UNDER CULTIVATION, 1896-7 TO 1906-7.

Year ended March.	Area under Tillage (exclusive of area under artificial Grass).		Yearly Increase (+) or Decrease (-).	
	Total.	Percentage of Area of Victoria.	Total.	Percentage.
	Acres.		Acres.	
1897 ...	2,925,416	5·20	...	...
1898 ...	3,144,574	5·59	+ 219,158	+ 7
1899 ...	3,727,765	6·63	+ 583,191	+ 19
1900 ...	3,668,556	6·52	- 59,209	- 2
1901 ...	3,717,002	6·61	+ 48,446	+ 1
1902 ...	3,647,459	6·48	- 69,543	- 2
1903 ...	3,738,873	6·65	+ 91,414	+ 3
1904 ...	4,021,590	7·15	+ 282,717	+ 8
1905 ...	4 175,614	7·42	+ 154,024	+ 4
1906 ...	4,269,877	7·59	+ 94,263	+ 2
1907 ...	4,294,553	7·64	+ 24,676	+ 0·5

The land under cultivation, including land in fallow, but excluding land under artificial grasses, in 1896-7, was 2,925,416 acres, and in 1906-7, 4,294,553—an increase of 1,369,137 acres in the eleven years, or 47 per cent. The increase has been fairly and almost constantly maintained. There are, however, two years in which a slight reduction appears. The area of land actually under crops of various kinds in 1906-7 was 3,303,586 acres.

Cultivation  
per head in  
Austral-  
asia.

The average area in cultivation (exclusive of artificial grasses) to each person, in each of the Australian States and New Zealand, on the last day of each of the years 1902 to 1906 was as follows:—

CULTIVATION PER HEAD IN AUSTRALASIA, 1902 TO 1906.

State.	1902.	1903.	1904.	1905.	1906.
	Acres.	Acres.	Acres.	Acres.	Acres.
Victoria ...	3·10	3·33	3·45	3·50	3·47
New South Wales ...	1·99	2·14	2·19	2·25	2·18
Queensland ...	·93	1·21	1·18	1·18	1·12
South Australia ...	8·61	8·83	8·83	8·84	8·46
Western Australia ...	1·06	1·61	1·68	1·83	2·15
Tasmania ...	1·56	1·66	1·43	1·48	1·55
New Zealand ...	2·04	2·14	2·15	2·09	1·95

In the following return will be found a statement of the production from cultivated lands for the past three years:—

Agricultural production.

AGRICULTURAL PRODUCTION, 1904-5 TO 1906-7.

Produce.	Year ended March.		
	1905.	1906.	1907.
Wheat ... .. bushels	21,092,139	23,417,670	22,618,043
Other Grain ... .. "	7,932,987	9,229,879	11,113,463
Root Crops ... .. tons	125,884	163,757	216,622
Hay ... .. "	514,316	864,177	881,276
Vines ... .. cwt. of grapes	452,433	498,590	752,826
Green Forage ... .. £	74,755	85,103	91,255
Orchards ... .. £	376,585	379,424	486,085
Market Gardens ... .. £	197,600	183,225	197,650
Other Agricultural Produce £	141,620	84,946	85,423

Regarding the production of the State in 1906-7 as a whole, the returns show a continuance of the improvement experienced in the preceding year.

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay.

Wheat was first grown in Victoria in 1836, and there was a general increase in the area under cultivation up to 1899-1900, when 2,165,693 acres were harvested. In the following seasons there was a decline in the area, until, in 1904-5, the area under wheat was 2,277,537 acres, the largest recorded, the return from which was 21,092,139 bushels—an average of 9.26 bushels per acre. In 1906-7, the area under wheat was 2,031,893 acres, which yielded 22,618,043 bushels, or 11.13 bushels per acre. With two exceptions, the total crop in 1906-7 was the highest ever obtained.

An estimate of the area under wheat was made on 31st July, 1906, and an estimate of the wheat yield on 28th November following. The following were the results:—

Estimated wheat yield, 1906-7.

Estimated area under wheat for grain ...	2,088,900 acres
"                    "          hay ...	200,000 "
Total ...	2,288,900 acres

Estimated produce of grain ... ..	24,540,800 bushels
Average per acre ... ..	11.75 "

Disappointing results in the counties of Rodney and Moira accounted for the yield being lower than anticipated.

The results in detail of the wheat harvest in the last three years are shown in the accompanying table:—

WHEAT YIELDS FOR THE SEASONS ENDED MARCH, 1905, 1906, AND 1907, IN COUNTIES.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1905.	1906.	1907.	1905.	1906.	1907.	1905.	1906.	1907.
	Acres.	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushls.	Bushls.	Bushls.
Central—									
Bourke ..	3,184	2,712	2,568	48,972	51,763	41,065	15.38	19.09	15.99
Grant ..	7,190	8,784	11,500	111,766	192,215	206,587	15.54	21.88	17.96
Mornington ..	129	150	58	1,205	1,457	850	9.34	9.71	14.66
Evelyn ..	33	144	136	710	2,739	2,357	21.52	19.02	17.33
North-Central—									
Anglesey ..	1,383	1,375	1,224	20,143	25,040	13,164	14.56	18.21	10.75
Dalhousie ..	6,720	5,257	3,704	81,694	106,266	44,592	12.16	20.21	12.04
Talbot ..	24,082	19,903	17,804	384,531	399,648	281,115	15.97	20.08	15.79
Western—									
Grenville ..	2,420	3,673	4,997	39,018	72,416	92,296	16.12	19.72	18.47
Polwarth ..	254	89	40	2,936	1,619	329	11.56	18.19	8.23
Heytesbury ..	8	21	30	189	332	521	23.63	15.81	17.37
Hampden ..	483	1,328	1,391	7,795	19,230	19,629	16.14	14.48	14.11
Ripon ..	58,272	60,168	68,087	965,719	998,484	1,018,873	16.57	16.59	14.96
Villiers ..	414	937	880	7,816	16,286	14,889	18.88	17.38	16.92
Normanby ..	719	794	745	11,466	14,931	12,298	15.95	18.81	16.51
Dundas ..	3,399	2,603	1,866	61,963	43,503	26,756	18.23	16.71	14.34
Follett ..	974	941	631	16,157	16,273	9,629	16.59	17.29	15.26
Wimmera—									
Lowan ..	165,977	162,585	164,440	1,878,996	2,020,407	1,763,348	11.32	12.43	10.72
Borong ..	380,492	309,884	317,055	4,198,169	4,216,774	4,445,954	11.03	13.61	14.02
Kara Kara ..	122,512	119,140	111,710	1,531,858	1,738,093	1,635,021	12.60	14.59	14.64
Mallee—									
Millewa ..	20,756	22,105	25,105	150,234	166,566	231,263	7.24	7.54	9.21
Weeah ..	360,881	321,511	326,998	1,345,789	1,856,110	2,666,564	3.30	5.77	8.15
Karkaroc ..	342,022	312,380	286,138	1,146,768	1,664,361	2,576,608	3.35	5.33	9.00
Tatchera ..									
Northern—									
Gunbower ..	43,555	40,000	33,543	381,872	427,831	354,722	8.77	10.70	10.58
Gladstone ..	107,534	104,475	102,807	1,328,792	1,405,429	1,483,018	12.36	13.45	14.43
Bendigo ..	110,926	100,966	103,257	1,490,773	1,527,351	1,501,076	13.44	15.13	14.54
Rodney ..	131,822	128,048	123,107	1,634,132	1,968,618	1,278,327	12.40	15.37	10.38
Moir ..	323,811	295,402	279,123	3,572,725	3,754,598	2,509,387	10.87	12.71	8.99
North-Eastern—									
Delatite ..	11,520	10,877	8,744	153,758	163,874	67,554	13.35	15.06	7.73
Bogong ..	36,972	29,667	29,962	451,349	417,983	231,592	12.21	14.09	7.73
Benambra ..	1,013	795	681	15,750	14,510	11,380	15.55	18.25	16.71
Wonnangatta ..	24	32	27	424	662	269	17.67	21.31	9.96
Gippsland—									
Croajlong ..	88	77	65	1,092	1,269	1,076	12.41	16.48	16.55
Tambo ..	16	50	22	147	997	521	9.19	19.94	23.68
Dargo ..	17	22	..	189	750	..	11.12	34.09	..
Tanjil ..	2,743	3,448	3,306	44,340	105,239	72,983	16.16	30.52	22.08
Buln Buln ..	192	174	142	2,902	4,026	2,430	15.11	23.14	17.11
Total ..	2,277,537	2,070,517	2,031,893	21,092,139	23,417,670	22,618,043	9.26	11.31	11.13

It will be observed that the area harvested for wheat last season was 38,624 acres less than in the previous one. The falling-off was principally in the counties of Moira and Tatchera. On the other hand, there has been a large addition to the wheat area in the county of Ripon, where there were 68,087 acres in 1906-7, compared with 60,168 in the previous season.

The principal districts where wheat is grown are the Wimmera, comprising the counties of Lowan, Borung, and Kara Kara; the Mallee, comprising those of Weeah, Karkarooc, and Tatchera; and the northern, comprising Gunbower, Gladstone, Bendigo, Rodney, and Moira. Of the total wheat harvested in 1906-7, that in the counties enumerated was 1,873,283 acres, or 92 per cent. of the total, producing 20,445,288 bushels, or 90 per cent. of the total in the State. The other districts are, however, not to be regarded as unsuitable for wheat growing, as though providing only a small proportion of the area and produce in 1906-7, the average per acre was more than  $2\frac{1}{2}$  bushels per acre better than in the counties mentioned.

The following table shows the area of each of the principal wheat-growing counties, the cultivation for the years of first and largest record, and for last year:—

WHEAT-GROWING COUNTIES: AREA AND PRODUCTION.

District and County.	Area of County.	First Cultivation Recorded.			Largest Cultivation Recorded.			Cultivation for 1906-7.	
		Year.	Area.	Average Yield Per Acre.	Year.	Area.	Average Yield Per Acre.	Area.	Average Yield Per Acre.
			Acres.	Bushels.		Acres.	Bushels.	Acres.	Bushels.
Western Dist.— Ripon ..	1,125,760	1855-6	40	35.62	1906-7	68,087	14.96	68,087	14.96
Wimmera Dist.— Lowan ..	3,181,440	1871-2	232	16.69	1892-3	257,685	8.58	164,440	10.72
Borung ..	2,740,480	1871-2	4,590	15.59	1903-4	424,224	13.67	317,055	14.02
Kara Kara ..	1,472,640	1871-2	7,987	14.34	1899-00	125,345	9.68	111,710	14.64
Mallee Dist.— Weeah ..	2,562,560	1891-2	40	21.00	1906-7	25,105	9.21	25,105	9.21
Karkarooc ..	3,797,120	1879-80	233	10.87	1902-3	371,069	22	326,998	8.15
Tatchera ..	2,138,240	1871-2	2	12.00	1904-5	342,022	3.35	286,138	9.00
Northern Dist.— Gunbower ..	862,720	1871-2	181	13.36	1880-1	75,114	9.29	33,543	10.58
Gladstone ..	1,153,280	1869-70	7,988	17.46	1904-5	107,534	12.36	102,807	14.43
Bendigo ..	1,247,360	1869-70	21,038	16.26	1904-5	110,926	13.44	103,257	14.54
Rodney ..	1,087,360	1855-6	63	26.66	1898-9	132,273	13.92	123,107	10.38
Moira ..	1,986,560	1871-2	14,936	15.93	1904-5	328,811	10.87	279,123	8.99

In the next table the average yield of wheat per acre in each of these counties during the last ten years is given:—

AVERAGE YIELD OF WHEAT PER ACRE IN WHEAT-GROWING COUNTIES, 1897-8 TO 1906-7.

District and County.	Average Yield of Wheat per Acre (in Bushels) during Year ended March.									
	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Western District—										
Ripon ..	15.17	15.57	19.17	16.75	18.13	9.60	15.32	16.57	16.59	14.96
Wimmera District—										
Lowan ..	4.27	8.88	5.90	7.43	8.53	3.21	13.47	11.32	12.43	10.72
Borong ..	3.95	10.15	6.41	8.83	7.22	.47	13.67	11.03	13.61	14.02
Kara Kara ..	7.81	11.29	9.68	10.10	10.19	1.38	15.97	12.50	14.59	14.64
Mallee District—										
Weeah ..	2.38	7.70	4.70	9.80	5.65	.46	12.39	7.24	7.54	9.21
Karkarooc ..	.99	3.38	2.93	6.41	3.77	.22	10.76	3.30	5.77	8.15
Tatchera ..	4.15	4.48	5.19	4.83	3.22	.10	11.99	3.35	5.33	9.00
Northern District—										
Gunbower ..	9.74	5.80	6.33	9.56	3.93	.27	14.54	8.77	10.70	10.58
Gladstone ..	8.06	12.27	8.95	9.79	8.49	1.25	16.68	12.36	13.45	14.43
Bendigo ..	12.12	12.90	10.26	12.31	8.35	1.40	18.54	13.44	15.13	14.54
Rodney ..	13.81	13.92	11.07	13.04	10.82	4.37	17.40	12.40	15.37	10.38
Moir ..	11.06	9.77	8.68	11.70	9.27	1.15	17.18	10.87	12.71	8.99

The following table shows the area of each county, and the rise and fall in the cultivation of wheat in the central and north central districts:—

DECLINE OF WHEAT CULTIVATION IN CERTAIN COUNTIES.

District and County.	Area of County.	First Cultivation Recorded.			
		Year.		Area.	Average Yield Per Acre.
				Acres.	Bushels.
Central District—	Acres.			Acres.	Bushels.
Bourke .. ..	1,101,440	1855-6		13,606	25.03
Grant .. ..	1,173,760	1855-6		12,072	25.65
Mornington ..	1,040,000	1855-6		943	29.57
Evelyn .. ..	750,080	1855-6		1,124	31.43
North-Central District—					
Anglesey .. ..	1,054,080	1855-6		129	28.77
Dalhousie ..	838,400	1855-6		3,113	26.67
Talbot .. ..	1,037,440	1855-6		445	33.68

District and County.	Largest Cultivation Recorded.			Cultivation in 1905-6.		Cultivation in 1906-7.	
	Year.	Area.	Average Yield Per Acre.	Area.	Average Yield Per Acre.	Area.	Average Yield per Acre.
Central District—		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Bourke .. ..	1861-2	30,268	17.12	2,712	19.09	2,568	15.99
Grant .. ..	1861-2	35,349	15.86	8,784	21.88	11,500	17.96
Mornington ..	1860-1	3,153	14.03	150	9.71	58	14.66
Evelyn .. ..	1859-60	1,789	15.43	144	19.02	136	17.33
North-Central District—							
Anglesey .. ..	1874-5	4,146	12.96	1,375	18.21	1,224	10.75
Dalhousie ..	1869-70	25,124	21.47	5,257	20.21	3,704	12.04
Talbot .. ..	1871-2	76,555	13.81	19,903	20.08	17,804	15.79



The following is a table showing the area under wheat, the gross produce, and the average yield per acre, during the last eleven years:—

WHEAT RETURNS, 1896-7 TO 1906-7.

Year ended March.	Area under Crop.	Gross Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1897 .. ..	1,580,613	7,091,029	4.49
1898 .. ..	1,657,450	10,580,217	6.38
1899 .. ..	2,154,163	19,581,304	9.09
1900 .. ..	2,165,693	15,237,948	7.04
1901 .. ..	2,017,321	17,847,321	8.85
1902 .. ..	1,754,417	12,127,382	6.91
1903 .. ..	1,994,271	2,569,364	1.29
1904 .. ..	1,968,599	28,525,579	14.49
1905 .. ..	2,277,537	21,092,139	9.26
1906 .. ..	2,070,517	23,417,670	11.31
1907 .. ..	2,031,893	22,618,043	11.13

In 1902-3 wheat was grown on about 17,100 holdings, in 1903-4 on 17,400 holdings, in 1904-5 on 18,000 holdings, in 1905-6 on 18,362 holdings, and in 1906-7 on 18,077 holdings. The decline in the yield and the average per acre, which is observed during the two seasons prior to 1903-4, was due to the severity of the seasons experienced all over the wheat-growing districts of the State. In 1903-4 the yield was the highest ever recorded, although the area under crop was not so large as in the previous year. The yield in 1905-6, 23,417,670 bushels, and that in 1906-7, 22,618,043 bushels, come next to that of 1903-4. In addition to 2,031,893 acres, harvested for grain, there were also 231,408 acres of wheat cut for hay, so that the total area sown with wheat in 1906-7 was 2,263,301 acres; from information received from growers it is estimated that the corresponding area for the season 1907-8 is 2,133,000 acres, or a reduction of over 130,000 acres, the most notable decrease being in the northern district. Apparently the wheat growers there are now giving more attention to sheep, as a reference to the live stock returns shows that in March last the number of sheep in that district was nearly 400,000 more than in the previous year. The standard weight of wheat is reckoned to be 60 lbs. to the bushel, but the actual weight of a bushel of Victorian wheat, according to the standard fixed by the Chamber of Commerce, was 62½ lbs. in 1899-1900, 1900-1, and 1901-2; 61 lbs. in 1902-3; 60½ lbs. in 1903-4; 61½ lbs. in 1904-5; 63 lbs. in 1905-6; and 62¾ lbs. in 1906-7.

With a view of improving wheat production in Victoria, the Agricultural Department is supervising experimental work in the direction of improved methods of cultivation, use of fertilizers, and the introduction of new varieties of seed. The experiments will

Experi-  
ments in  
cultivation  
of wheat.

cover a term of seven years, and, during the season 1906-7, the second series of these were conducted in twenty-three fields located in different parts between the Wimmera, Mallee, and the Northern and North-Eastern plains. In these tests, thirty-eight varieties of wheat selected by the Department and one by the resident farmer were sown in adjoining plots of one-tenth of an acre each. The seed was graded, pickled with bluestone, and sown during April and May, 1906, at the rate of 50 lbs. per acre. Superphosphate at the rate of 56 lbs. per acre was used uniformly on all varieties, and the results were as follow:—

WHEAT PRODUCED PER ACRE FROM EXPERIMENTAL FIELDS, 1906-7.

Variety of Wheat.	Yield per Acre in—					
	Mallee and Mallee Fringe. (9 Fields.)	Wimmera District. (6 Fields.)	Northern and North-Eastern Districts. (8 Fields.)	Victoria (23 Fields).		
	Maximum.	Minimum.	Average.	Maximum.	Minimum.	Average.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Federation ..	19.0	30.0	27.8	42.9	12.1	24.0
Dart's Imperial ..	15.1	26.9	22.3	38.1	7.1	20.4
Australian Talavera ..	15.6	23.8	23.6	39.0	9.1	20.3
Jade ..	14.8	26.8	22.0	36.7	9.2	20.1
Sussex ..	15.0	26.2	23.4	38.0	7.6	20.0
Silver King ..	14.6	26.7	21.5	36.0	8.5	19.8
Tarragon ..	14.3	24.8	24.4	40.0	9.7	19.7
White Tuscan ..	15.0	23.3	20.1	35.0	4.3	18.7
Frampton ..	13.1	24.4	20.9	33.8	6.5	18.4
Marshall's No. 3 ..	13.4	25.4	19.5	37.6	5.2	18.3
Farmer's Friend ..	14.5	22.7	18.1	28.3	8.0	17.9
Majestic ..	12.5	21.7	23.6	30.0	8.3	17.0
Hudson's Purple Straw ..	11.5	20.5	20.5	32.4	4.1	16.9
Fan ..	13.0	24.3	16.5	29.8	5.7	16.9
College Purple ..	10.9	21.6	19.5	32.1	5.1	16.7
Tardent's Blue ..	13.9	20.0	18.8	31.3	2.2	16.6
Steer's Purple Straw ..	13.2	21.6	16.8	28.0	6.0	16.4
Kubanka ..	12.7	19.4	18.2	34.3	4.2	16.2
Improved Steinwedel ..	11.7	15.3	19.7	28.0	7.6	15.8
John Brown ..	11.0	18.7	18.8	29.6	4.4	15.7
Bobs ..	9.4	17.6	19.2	29.5	3.5	15.0
Schneider ..	10.5	14.7	20.2	30.6	7.1	14.8
Smart's Pioneer ..	10.6	17.7	18.6	26.8	5.3	14.8
Warrick ..	13.5	13.6	17.0	23.6	9.4	14.8
Petatz Surprise ..	10.7	19.0	14.9	23.8	6.3	14.6
Newman's ..	11.9	19.5	13.9	27.1	6.1	14.1
King's Early ..	10.8	12.8	17.2	25.0	4.5	13.5
Manitoba ..	11.3	17.5	13.4	32.1	2.0	13.4
Nut Cut ..	10.7	12.5	16.8	24.0	6.0	13.3
Wilkinson's Purple Straw ..	11.3	13.6	15.3	24.5	7.6	13.2
Terkin ..	10.5	12.2	16.4	27.6	4.0	12.9
Cumberland ..	10.2	13.5	15.4	34.6	4.3	12.8
Outpost ..	10.2	13.4	15.2	24.3	5.6	12.6
Steinwedel ..	9.8	12.1	15.6	22.8	5.8	12.4
Guyas ..	9.1	16.3	14.1	23.2	3.0	12.3
Bloomerang ..	10.7	15.3	9.3	21.6	1.9	11.2
Waddy ..	8.2	11.8	8.9	16.6	3.5	9.1
Ranji ..	5.7	9.5	8.1	15.0	1.1	7.2
Seed Selected by Farmer	12.0	21.2	19.3	32.1	3.2	16.8

The results of the experiments during 1906-7 compared with those of 1905-6 indicate the superiority of the first-mentioned eight varieties, as seven of these also occupied places in a similar division in 1905-6, the only exception being Australian Talavera, which

improved from tenth in average yield in 1905-6 to third in 1906-7, while Hudson's Purple Straw, which was fifth in the former, fell to thirteenth in the latter season. The seed supplied by farmers—mostly Purple Straw and Dart's Imperial—shows a lower average than fourteen of the selected varieties. In 1906-7 the harvest returns of wheat in Victoria gave an average per acre of 8.6 bushels in the Mallee, 13.2 bushels in the Wimmera, and of 10.9 in the Northern and North-Eastern districts. If these averages be compared with the figures in the table above, it will be at once observed that the cultivation applied to the experimental plots gave by far the better return, especially in the farmers' own selection of seed. It is evident that if the example set by the supervisor for the Agricultural Department were followed by the farmers their harvest returns and profits would have been considerably increased. The very many varieties tested for experimental purposes returned an average per acre of 15.8 bushels against one of 10.8 bushels obtained by farmers in the same districts.

The following table shows, for 1898, and each subsequent year to 1906, the mean population of Victoria; the stocks of old wheat and flour on hand at the beginning of each year; the quantity of wheat grown; the quantity (after deducting imports) of wheat, flour, and biscuit exported; and the breadstuffs left over and available for home consumption. In addition to that required for food consumption, a quantity is required for seed purposes, equal, on an average, to three-quarters of a bushel per acre. Reliable information in regard to wheat imported across the border from New South Wales and South Australia is not now available, and this makes it impossible to state the particulars for 1907 :—

Population  
and bread-  
stuffs.

POPULATION AND WHEAT RETURNS, 1898 TO 1906.

Year.	Mean Population.	Stocks of old wheat and flour on hand (1st January).	Wheat harvested for season ended March in each year.	Wheat, Flour, and Biscuit.	
				Exported after deducting Imports.	Available for Home Consumption.
		Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	1,172,950	330,224	10,580,217	1,855,951	9,054,490
1899 ...	1,186,265	1,282,902	19,581,304	10,662,011	10,202,195
1900 ...	1,193,338	2,121,700	15,237,948	7,011,242	10,348,406
1901 ...	1,202,960	1,872,000	17,847,321	10,248,093	9,471,228
1902 ...	1,207,110	1,525,288	12,127,382	3,899,246	9,753,424
1903 ...	1,208,880	903,616	2,569,364	-4,495,403*	7,968,383
1904 ...	1,207,537	173,708	28,525,579	18,616,831	10,082,456
1905 ...	1,212,517	2,609,878	21,092,139	15,427,229	8,274,788
1906 ...	1,227,072	549,930	23,417,670	17,053,652	6,913,948

\* Net import.

Disposal of  
breadstuffs.

The manner in which the breadstuffs available for home consumption have been disposed of in each of the years under review is as follows:—

## DISPOSAL OF BREADSTUFFS.

Year.	Wheat and Flour.				
	Quantity available for Home Consumption.	How disposed of—			
		Stocks on hand on 31st December.	Required for Seed.	Used for Food, &c.	
				Total.	Per Head.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	9,054,490	1,282,902	1,770,941	6,000,647	5·12
1899 ...	10,202,195	2,121,700	1,772,602	6,307,893	5·32
1900 ...	10,348,406	1,872,000	1,696,000	6,780,406	5·68
1901 ...	9,471,228	1,525,288	1,529,249	6,416,691	5·33
1902 ...	9,753,424	903,616	1,616,946	7,232,862	5·99
1903 ...	9,968,383	173,708	1,626,954	6,167,721	5·10
1904 ...	10,082,456	2,609,878	1,807,351	5,665,227	4·69
1905 ...	8,274,788	549,930	1,705,182	6,019,676	4·96

With the exception of 1896 and 1903, the breadstuffs produced in the twenty-nine years ended 1905 have been more than enough to supply home consumption. Wheat has, therefore, been exported each year, with these two exceptions. The maximum export was 18,616,831 bushels in 1904.

Stocks of  
wheat and  
flour.

As previously mentioned, there is now no reliable information of the wheat imported through border stations, and this makes it difficult to accurately account for the disposal of that harvested in 1906-7, but it is estimated that about 8,000,000 bushels are required locally for food and seed, which will leave 14,600,000 bushels of Victorian wheat for export during the year. Information as to the stocks of wheat and flour on hand on 30th June, 1907, has been received from holders, and is as follows:—

## WHEAT AND FLOUR ON HAND, 30TH JUNE, 1907.

Where Located.	Quantity in Bushels.		
	Wheat.	Flour (equivalent in Wheat).	Total.
Railway Stations and in transit ...	167,403	106,800	274,205
Sites leased from Railways ...	3,725,096	37,050	3,762,146
Mills and Stores (other than on Railways) ...	2,749,346	917,550	3,666,896
Farms ... ..	1,542,831	...	1,542,831
Total ... ..	8,184,678	1,061,400	9,246,078

The wheat crop of the world, according to the yearly statement of the United States Agricultural Department, except in the case of Australasia, was as follows in the last three years:—

### WHEAT PRODUCTION OF THE WORLD, 1904 TO 1906.

Continent.	1904.	1905.	1906.
	Bushels.	Bushels.	Bushels.
Australasia ... ..	82,041,000	63,659,000	75,320,000
Europe ... ..	1,744,844,000	1,802,662,000	1,825,608,000
Asia ... ..	475,468,000	420,602,000	444,786,000
Africa ... ..	50,496,000	39,070,000	48,404,000
America, North ... ..	637,006,000	811,420,000	871,875,000
„ South ... ..	155,185,000	176,745,000	155,337,000
Total ... ..	3,145,040,000	3,314,158,000	3,421,330,000

In 1906-7, the land under oats in Victoria was 380,493 acres, from which a yield of 8,845,654 bushels was obtained, giving an average of 23.25 bushels to the acre. The following return shows the harvest results for this crop for the last eleven years:—

### OATS GROWN, 1896-7 TO 1906-7.

Year Ended March.	Area under Crop.	Gross Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1897 .. ..	419,460	6,816,951	16.25
1898 .. ..	294,183	4,809,479	16.35
1899 .. ..	266,159	5,523,419	20.75
1900 .. ..	271,280	6,116,046	22.55
1901 .. ..	362,689	9,582,332	26.42
1902 .. ..	329,150	6,724,900	20.43
1903 .. ..	433,489	4,402,982	10.16
1904 .. ..	433,638	13,434,952	30.98
1905 .. ..	344,019	6,203,429	18.03
1906 .. ..	312,052	7,232,425	23.18
1907 .. ..	380,493	8,845,654	23.25

In addition to the area shown for the last season, there were also 377,887 acres of oats cut for hay, so that the total area under oat crop was 758,380 acres in 1906-7. In June, 1907, it was estimated that the area under this crop for 1907-8 is 931,700 acres, or an increase of over 173,000 acres.

The area under barley was 52,816 acres in 1906-7, 30,052 acres being under malting barley, and 22,764 acres under other barley. There is a remarkable fluctuation in the area of land sown under barley, which seems strange, seeing that the market

for this product is uniformly good. The following shows the return for the last eleven years. It will be noticed that the average per acre in 1905-6 is the best for the period covered by the table:—

BARLEY RETURNS, 1896-7 TO 1906-7.

Year ended March.	Area under Crop.		Gross Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1897	53,421	8,952	641,406	174,199	12·01	19·45	13·08
1898	26,118	11,087	502,411	256,043	19·24	23·09	20·39
1899	33,584	14,275	776,785	335,782	23·13	23·52	23·25
1900	65,970	13,603	1,197,948	268,140	18·16	19·71	18·42
1901	49,723	9,130	1,003,477	212,001	20·18	23·22	20·65
1902	25,480	6,943	527,564	166,287	20·71	23·95	21·40
1903	26,436	11,280	394,877	166,267	14·94	14·74	14·88
1904	33,586	14,174	878,721	339,282	26·17	23·80	25·50
1905	30,799	15,290	575,505	298,594	18·69	19·53	18·97
1906	26,279	14,659	645,456	416,683	24·56	28·43	25·95
1907	30,052	22,764	674,043	581,399	22·43	25·54	23·77

Potatoes

The greatest area of land planted with potatoes was 57,334 acres in 1891-2; the next being 56,383 acres in 1894-5. The highest yield was 204,155 tons in 1890-1, the next 200,523 tons in 1891-2. The area planted in 1906-7 was 55,372 acres, and the produce 166,839 tons, or 3·01 tons per acre. The following table shows the potato returns for the last eleven years:—

POTATOES GROWN, 1896-7 TO 1906-7.

Year ended June.			Area under Crop.	Gross Produce.	Average per Acre.
			Acres.	Tons.	Tons.
1897	..	..	43,532	146,555	3·37
1898	..	..	44,197	67,296	1·52
1899	..	..	41,252	161,142	3·91
1900	..	..	55,469	173,381	3·13
1901	..	..	38,477	123,126	3·20
1902	..	..	40,058	125,474	3·13
1903	..	..	49,706	168,759	3·40
1904	..	..	48,930	167,736	3·43
1905	..	..	46,912	92,872	1·98
1906	..	..	44,670	115,352	2·58
1907	..	..	55,372	166,839	3·01

Hay.

Statistics of the hay crop were collected as far back as 1841, when 450 acres returned 900 tons. From that date onward there has been a steady increase in the crop cut for hay. The greatest area and produce were in 1903, when 733,353 acres were cut for 1,233,063 tons; next in 1901, with 659,239 acres for 884,369 tons; and next in last year, when 621,139 acres were harvested for 881,276 tons, being an increase over the previous year of 29,368 acres in the area and of 17,099 tons in the produce. The quantity

of straw returned for the season 1906-7 was 151,625 tons. The following is a return of the hay crop for the last eleven years:—

### HAY RETURNS, 1896 TO 1906.

Year.			Area under Crop.	Gross Produce.	Average per Acre.
			Acres.	Tons.	Tons.
1896	..	..	416,667	449,056	1·08
1897	..	..	580,000	659,635	1·14
1898	..	..	565,345	723,299	1·28
1899	..	..	450,189	596,193	1·32
1900	..	..	502,105	677,757	1·35
1901	..	..	659,239	884,369	1·34
1902	..	..	580,884	601,272	1·04
1903	..	..	733,353	1,233,063	1·68
1904	..	..	452,459	514,316	1·14
1905	..	..	591,771	864,177	1·46
1906	..	..	621,139	881,276	1·42

The area under the five principal crops during the last eight years, the production of these crops, and the proportion of each to the population, are exhibited in the following table. It is interesting to observe the variations per head of the population in the areas under crop, and in the yields during the period covered by the table:—

### AREA, PRODUCTION, AND AVERAGES PER HEAD OF POPULATION OF FIVE PRINCIPAL CROPS, 1899-1900 TO 1906-7.

Year ended March.		Wheat.	Oats.	Barley.	Potatoes.	Hay.
AREA.						
		Acres.	Acres.	Acres.	Acres.	Acres.
1900	..	2,165,693	271,280	79,573	55,469	450,189
1901	..	2,017,321	362,689	58,853	38,477	502,105
1902	..	1,754,417	329,150	32,423	40,058	659,239
1903	..	1,994,271	433,489	37,716	49,706	580,884
1904	..	1,968,599	433,638	47,760	48,930	733,353
1905	..	2,277,537	344,019	46,089	46,912	452,459
1906	..	2,070,517	312,052	40,938	44,670	591,771
1907	..	2,031,893	380,493	52,816	55,372	621,139
PRODUCTION.						
		Bushels.	Bushels.	Bushels.	Tons.	Tons.
1900	..	15,237,948	6,116,046	1,466,088	173,381	596,193
1901	..	17,847,321	9,582,332	1,215,478	123,126	677,757
1902	..	12,127,382	6,724,900	693,851	125,474	884,369
1903	..	2,569,364	4,402,982	561,144	168,759	601,272
1904	..	28,525,579	13,434,952	1,218,003	167,736	1,233,063
1905	..	21,092,139	6,203,429	874,099	92,872	514,316
1906	..	23,417,670	7,232,425	1,062,139	115,352	864,177
1907	..	22,618,043	8,845,654	1,255,442	166,839	881,276

AREA, PRODUCTION, AND AVERAGES PER HEAD OF POPULATION OF  
FIVE PRINCIPAL CROPS, 1899-1900 TO 1906-7—*continued.*

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.
AREA PER HEAD OF POPULATION.					
	Acres.	Acres.	Acres.	Acres.	Acres.
1900 ..	1·82	·23	·07	·05	·38
1901 ..	1·69	·30	·05	·03	·42
1902 ..	1·45	·27	·03	·03	·54
1903 ..	1·65	·36	·03	·04	·48
1904 ..	1·62	·36	·04	·04	·61
1905 ..	1·88	·28	·04	·04	·37
1906 ..	1·70	·26	·03	·04	·49
1907 ..	1·66	·31	·04	·04	·51
PRODUCTION PER HEAD OF POPULATION.					
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1900 ..	12·81	5·14	1·23	·15	·50
1901 ..	14·91	8·00	1·02	·10	·57
1902 ..	10·01	5·56	·57	·10	·73
1903 ..	2·12	3·63	·46	·14	·50
1904 ..	23·60	11·11	1·01	·14	1·02
1905 ..	17·47	5·14	·72	·08	·42
1906 ..	19·22	5·94	·87	·10	·71
1907 ..	18·43	7·21	1·02	·14	·72

The percentage of total area under principal crops in each district during last season was as follows:—

PERCENTAGE OF AREA IN EACH DISTRICT TO TOTAL AREA UNDER EACH  
OF THE PRINCIPAL CROPS, 1906-7.

District.	Percentage in each District of Area under—						
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.	Fallow.
Central .. ..	·70	9·72	34·70	39·21	20·05	36·37	2·78
North-Central .. ..	1·12	11·34	10·45	22·13	9·48	4·91	1·65
Western .. ..	3·87	9·26	16·68	20·61	12·51	7·88	2·98
Wimmera .. ..	29·20	21·54	1·46	·58	18·47	3·87	45·99
Mallee .. ..	31·41	9·33	5·02	·02	6·77	5·42	14·90
Northern .. ..	31·59	31·10	24·85	·09	22·04	11·83	30·69
North-Eastern .. ..	1·94	5·01	1·05	3·97	5·75	10·92	·79
Gippsland .. ..	·17	2·70	5·79	13·39	4·93	18·80	·22

NOTE.—For counties contained in each district, see table on page 534.

This statement shows that during last season 92 per cent. of the area under wheat was in the Wimmera, Mallee, and Northern districts; more than half that under oats was in the Wimmera and Northern districts; three-fifths of that under barley was in the Central and Northern districts; and four-fifths of that under potatoes was in the Central, North Central, and Western districts. Hay was more uniformly cultivated over the whole State, though the proportion was somewhat small in the Mallee, North-Eastern, and Gippsland districts. The Central district accounted for more than one-third of the area under minor crops, principally through a much larger area being used for gardens and orchards and for peas and



beans. Naturally the fallow land is confined to the wheat-growing districts.

The area under principal crops in proportion to cultivation in each district during last season was as follows:—

PERCENTAGE OF AREA UNDER PRINCIPAL CROPS TO TOTAL CULTIVATION IN EACH DISTRICT, 1906-7.

District.	Percentage of Total Cultivation under—						
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.	Fallow.
Central .. ..	4.72	12.23	6.06	7.18	41.20	19.48	9.13
North-Central .. ..	13.63	25.86	3.31	7.35	35.28	4.76	9.81
Western .. ..	30.96	13.86	3.47	4.49	30.57	5.02	11.63
Wimmera .. ..	47.34	6.54	.06	.03	9.16	.50	36.37
Mallee .. ..	72.95	4.06	.30	..	4.81	1.00	16.88
Northern .. ..	52.04	9.59	1.06	.01	11.10	1.55	24.65
North-Eastern .. ..	32.19	15.58	.45	1.79	29.15	14.43	6.41
Gippsland .. ..	4.04	11.75	3.49	8.46	35.00	34.73	2.53
Total of Victoria .. ..	47.31	8.86	1.23	1.29	14.46	3.77	23.08

NOTE.—For counties contained in each district, see table on page 534.

It is apparent that the area cultivated was almost wholly confined to wheat in the Wimmera, Mallee, and Northern districts; largely to wheat and hay in the Western and North-Eastern districts; to oats and hay in the North-Central district: and to hay and minor crops in the Central and Gippsland districts.

In Victoria the proportion of the land under each crop to the total area under tillage during the last nine years was:—

PROPORTION TO TOTAL CULTIVATION OF LAND UNDER EACH CROP, 1898-9 TO 1906-7.

Year ended March—	Proportionate Area to Total Cultivated Land of— (Exclusive of Area under Artificial Grass.)						
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.	Fallow.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1899	57.78	7.14	1.28	1.11	15.17	3.64	13.88
1900	59.04	7.39	2.17	1.51	12.27	3.74	13.88
1901	54.28	9.76	1.58	1.03	13.51	3.62	16.22
1902	48.09	9.02	.89	1.10	18.08	4.13	18.69
1903	53.34	11.59	1.01	1.33	15.54	4.02	13.17
1904	48.95	10.78	1.19	1.22	18.24	3.90	15.72
1905	54.54	8.24	1.10	1.12	10.84	3.71	20.45
1906	48.49	7.30	.96	1.05	13.86	3.75	24.59
1907	47.31	8.86	1.23	1.29	14.46	3.77	23.08

It is shown on page 532, that in the period covered by this table, the area under cultivation has steadily increased. By the figures in the table above it would seem that the actual area under wheat has not made anything like a corresponding increase, though taken in conjunction with land in fallow which is mainly used for wheat cropping, it will be observed that in proportion to the total area under cultivation, that used for wheat has been fairly uniform in the last nine years, but that in the later years the practice to fallow preparatory to sowing has grown considerably.

Prices of  
agricultural  
produce.

The following information regarding prices in February and March has been procured direct from the growers. The table gives the average price for each of the last nine years:—

### PRICES OF PRODUCE, 1899 TO 1907.

	Average Price in February and March.						
Year.	Wheat.	Oats.	Barley.		Hay.	Potatoes.	
			Malting.	Other.		Early Crop.	Main Crop (after March).
		Per bushel. s. d.	Per bushel. s. d.	Per bushel. s. d.	Per bushel. s. d.	Per ton. s. d.	Per ton. s. d.
1899	2 2	1 7½	4 2½	2 2½	34 5	73 0	36 5
1900	2 5	2 1	3 2½	2 3½	40 9	41 11	26 11
1901	2 5¾	1 6½	2 10¾	1 11¼	39 4	73 11	55 10
1902	2 10¼	2 4	3 9¼	2 9¼	55 5	77 7	84 4
1903	6 0	3 2¾	4 5¾	3 8	100 1	91 3	47 1
1904	2 8	1 1½	2 10¾	1 9½	27 2	52 6	26 1
1905	2 11½	1 6	3 2¾	2 1	33 6	110 0	84 0
1906	2 10½	1 10½	3 11	2 8½	38 0	115 6	101 5
1907	2 9	1 10¼	4 2	2 2¾	38 2	59 1	37 6

In Melbourne the price of wheat has been good, ranging from 3s. 1d. to 3s. 5 $\frac{1}{2}$ d. per bushel throughout last year, the latter price being reached in July. After August the price declined, and in December was as low as 3s. 1d. Apart from such temporary fluctuations, the course of the market has been determined throughout the greater part of the year by the movements of the European markets, the fluctuations of which have been within comparatively narrow limits. The highest and the lowest prices in Melbourne during each month in 1906 were as follows:—

### PRICES OF WHEAT IN MELBOURNE, 1906.

Month.			Price per Bushel.	
			Highest.	Lowest.
			s. d.	s. d.
January	...	...	3 3 $\frac{3}{4}$	3 2 $\frac{1}{2}$
February	...	...	3 2 $\frac{1}{2}$	3 1 $\frac{1}{2}$
March	...	...	3 3	3 1 $\frac{1}{2}$
April	...	...	3 3 $\frac{1}{4}$	3 2 $\frac{1}{2}$
May	...	...	3 5	3 4 $\frac{1}{4}$
June	...	...	3 5	3 3 $\frac{3}{4}$
July	...	...	3 5 $\frac{1}{2}$	3 4 $\frac{1}{2}$
August	...	...	3 5	3 3
September	...	...	3 3 $\frac{3}{4}$	3 2 $\frac{1}{2}$
October	...	...	3 3 $\frac{1}{4}$	3 2 $\frac{1}{2}$
November	...	...	3 2	3 1 $\frac{1}{2}$
December	...	...	3 2	3 1

The following return shows the yield of the principal crops in the various Australian States and New Zealand for each of the nine years ended March, 1907 :—

Yield of crops in Australasia.

YIELD OF PRINCIPAL CROPS IN AUSTRALASIA 1898-9 TO 1906-7.

Year ended March.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
<b>WHEAT.</b>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	19,581,304	9,276,216	607,012	8,778,900	870,909	2,303,512	13,073,416
1900 ...	15,237,948	13,604,166	614,414	8,453,135	966,601	1,101,303	8,581,898
1901 ...	17,847,321	16,173,771	1,194,088	11,253,148	774,653	1,110,421	6,527,154
1902 ...	12,127,382	14,808,705	1,692,222	8,012,762	956,886	963,662	4,046,589
1903 ...	2,569,364	1,585,097	6,165	6,354,912	970,571	876,971	7,457,915
1904 ...	28,525,579	27,334,141	2,436,799	13,209,465	1,855,460	767,398	7,891,654
1905 ...	21,092,139	16,464,415	2,149,663	12,023,172	2,013,237	792,956	9,123,673
1906 ...	23,417,670	20,737,200	1,137,321	20,143,798	2,308,305	776,478	6,798,934
1907 ...	22,618,043	21,817,938	1,108,902	17,145,796	2,758,567	651,408	5,605,252
<b>OATS.</b>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	5,523,419	278,007	4,047	304,002	55,854	2,271,070	16,511,388
1900 ...	6,116,046	627,904	10,712	218,331	73,556	1,148,160	16,325,832
1901 ...	9,582,332	593,548	7,855	366,229	86,433	1,406,913	19,085,837
1902 ...	6,724,900	687,179	42,208	469,254	163,653	1,702,659	15,045,233
1903 ...	4,402,982	351,758	520	620,823	161,714	1,752,745	21,766,708
1904 ...	13,434,952	1,252,156	70,713	902,936	255,300	1,621,950	15,107,237
1905 ...	6,203,429	652,646	15,137	555,696	226,318	1,178,819	14,553,611
1906 ...	7,232,425	883,081	5,858	869,146	283,987	1,200,024	12,707,982
1907 ...	8,845,654	1,404,554	28,884	896,166	457,155	1,979,574	11,201,789
<b>BARLEY.</b>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	1,112,567	64,094	34,865	234,135	29,295	184,225	1,677,908
1900 ...	1,466,088	132,476	118,443	188,917	56,587	142,721	1,585,145
1901 ...	1,215,478	114,228	127,144	211,102	29,188	116,911	1,027,651
1902 ...	693,851	103,361	277,037	243,362	34,723	167,483	855,993
1903 ...	561,144	18,233	3,595	317,155	45,778	201,133	1,136,232
1904 ...	1,218,003	174,147	510,557	487,920	51,487	212,459	1,160,504
1905 ...	874,099	266,781	331,772	346,718	37,332	163,194	1,128,164
1906 ...	1,062,139	111,266	61,816	505,916	49,497	93,664	1,024,045
1907 ...	1,255,442	152,739	158,283	491,246	48,827	141,895	1,035,346
<b>POTATOES.</b>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1899 ...	161,142	61,900	16,413	14,445	5,698	88,166	298,561
1900 ...	173,381	81,337	22,675	19,716	8,373	101,670	222,124
1901 ...	123,126	63,253	20,014	14,566	4,835	93,862	169,042
1902 ...	125,474	39,146	22,402	15,059	5,739	114,704	206,815
1903 ...	168,759	30,732	3,257	28,312	6,200	163,518	193,267
1904 ...	167,736	56,743	17,649	31,415	4,315	168,419	208,787
1905 ...	92,872	48,754	19,231	19,521	5,614	110,547	134,608
1906 ...	115,352	49,889	11,308	20,328	6,297	64,606	123,402
1907 ...	166,839	114,856	15,830	22,277	5,028	182,323	169,875
<b>HAY.</b>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1899 ...	723,299	334,297	70,235	258,518	77,297	82,448	151,240
1900 ...	596,193	546,850	103,409	229,800	70,078	51,123	136,468
1901 ...	677,757	526,260	78,758	353,662	103,813	94,198	136,046*
1902 ...	884,369	472,621	122,039	346,467	89,729	88,125	125,968*
1903 ...	601,272	243,289	23,181	308,825	91,593	89,210	138,684*
1904 ...	1,233,063	816,810	136,117	479,723	119,156	115,513	154,334*
1905 ...	514,316	366,293	80,662	294,252	113,794	73,457	157,632*
1906 ...	864,177	459,182	56,829	435,546	139,380	90,077	161,498*
1907 ...	881,276	621,846	94,343	395,766	158,112	104,797	140,402*

\* Estimated.

Other crops.

The following table shows the area and production under other than principal crops since March, 1901:—

## OTHER THAN PRINCIPAL CROPS, 1901-2 TO 1906-7.

Crop.	1901-2.		1902-3.		1903-4.	
	Area.	Production.	Area.	Production.	Area.	Production.
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Maize .. ..	10,020	615,472	10,906	750,524	11,810	904,239
Rye .. ..	828	14,418	1,487	21,179	2,021	29,586
Peas and Beans ..	8,297	169,971	8,085	141,888	8,960	213,735
		Tons.		Tons.		Tons.
Mangel-wurzel ..	865	9,679	1,392	17,174	1,564	21,305
Beet, Carrots, Pars-nips, and Turnips	561	4,140	747	5,600	1,014	9,879
Onions .. ..	4,151	20,859	5,565	27,467	4,176	25,218
Green Forage ..	32,795	..	31,145	..	33,165	..
		Bushels.		Bushels.		Bushels.
Grass and Clover Seeds	1,877	60,144	1,568	15,836	2,749	35,660
		Cwt.		Cwt.		Cwt.
Hops .. ..	307	2,249	213	1,572	214	2,447
Tobacco .. ..	103	345	171	781	129	848
Vines—Grapes ..	28,592	497,269	28,374	444,966	28,513	654,965
Flax .. ..	200	{ 268 fibre 842 seed }	233	{ 320 fibre 990 seed }	259	{ 61 fibre 1,226 seed }
Gardens and Or-chards	58,807	..	58,415	..	59,812	..
Minor Crops ..	2,991	..	2,201	..	2,403	..
Land in Fallow ..	681,778	..	492,305	..	632,521	..
Artificial Grasses	162,954	..	565,635	..	962,665	..

Crop.	1904-5.		1905-6.		1906-7.	
	Area.	Production.	Area.	Production.	Area.	Production.
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Maize .. ..	11,394	623,736	11,785	641,216	11,559	704,961
Rye .. ..	2,267	30,578	1,959	28,893	1,571	20,770
Peas and Beans ..	11,523	201,145	12,253	265,206	12,012	286,636
		Tons.		Tons.		Tons.
Mangel-wurzel ..	1,441	13,894	1,657	16,400	1,360	16,139
Beet, Carrots, Pars-nips, and Turnips	823	6,149	909	6,408	713	5,644
Onions .. ..	2,862	12,969	4,889	25,597	4,705	28,000
Green Forage ..	29,902	..	34,041	..	36,502	..
		Bushels.		Bushels.		Bushels.
Grass and Clover Seeds	2,249	27,300	2,767	33,281	1,859	17,494
		Cwt.		Cwt.		Cwt.
Hops .. ..	251	1,449	313	1,906	323	2,787
Tobacco .. ..	106	1,112	169	1,405	133	+
Vines—Grapes ..	28,016	452,433	26,402	498,590	25,855	752,826
Flax .. ..	564	{ 320 fibre 781 seed }	500	{ 332 fibre 2,357 seed }	655	{ 1,116 fibre 4,853 seed }
Gardens and Or-chards	60,655	..	59,607	..	61,927	..
Minor Crops ..	2,716	..	2,763	..	2,699*	..
Land in Fallow ..	853,829	..	1,049,915	..	990,967	..
Artificial Grasses	953,543	..	1,040,335	..	1,095,642	..

\* For details see page 557.

† Not yet available.

In the year 1901-2 there were 10,020 acres under maize, from which a return of 615,472 bushels was obtained. The area of land under this crop was fairly constant from that year, and in 1903-4, there were 11,810 acres sown, and 904,239 bushels produced; in 1904-5, 11,394 acres produced 623,736 bushels; in 1905-6, 11,785 acres produced 641,216 bushels; and in 1906-7, 11,559 acres produced 704,961 bushels, of which Tangil produced 244,896 bushels, Tambo, 176,334 bushels, Dargo, 113,997 bushels, Croajingalong, 118,341 bushels, Bogong, 19,149 bushels, Benambra, 13,486 bushels, Delatite, 11,936 bushels, and Buln Buln 4,066 bushels. Other districts of the State also grow maize, but not to any great extent.

In 1906-7, the area under rye was 1,571 acres, from which 20,770 bushels were obtained. The area and yield of this crop have been decreasing during the last three seasons. Rye was last season grown all over the State, except in Borung, Kara Kara, Gladstone, and the Mallee counties of Millewa, Weeah, Karkaroc, and Tatchera. In Delatite, the quantity grown was 8,159 bushels, in Bogong, 1,914 bushels, and in Benambra, 1,360 bushels. In Bourke, Talbot, and Normanby, the produce exceeded 1,000 bushels; but in the other counties of the State it was under 1,000 bushels.

In the area under peas and beans there was an increase from 8,297 acres in 1901-2 to 12,253 acres in 1905-6, and 12,012 acres in 1906-7. The production in the six years has substantially increased, the yields being 169,971 bushels in 1901-2, and 286,636 bushels in 1906-7. Peas and beans are generally grown in all the counties except those in the Mallee, the principal crops last season coming from Bourke, where 54,623 bushels were obtained; Grant supplied 51,661 bushels; Buln Buln, 36,194 bushels; Tangil, 29,821 bushels; Talbot, 22,930 bushels; and Dalhousie, 20,608 bushels.

A very considerable increase was made in the area under mangel-wurzel since 1900-1, being 865 acres in 1901-2, and 1,360 acres in 1906-7. During the same period the production increased from 9,679 tons to 16,139 tons. Mangolds are grown principally in the Gipps-land counties of Tangil and Buln Buln, and in Bourke, Grant, Villiers, and Grenville. In other counties the production is not very large.

The cultivation of beet, carrots, parsnips, and turnips, exclusive of those grown in market gardens, increased by 27 per cent. in area and 36 per cent. in production in the six years ended 1906-7. In 1901-2, the land sown was 561 acres; in 1905-6, 909 acres; and in 1906-7, 713 acres. The produce was 4,140 tons, 6,408 tons, and 5,644 tons, in the respective years named.

Onions are grown in nearly every county south of the Dividing Range. The counties yielding the largest crops last season were—Bourke, Grant, Polwarth, Mornington, and Grenville. In Bourke the yield was 6,429 tons from 980 acres; in Grant it was 4,826 tons from 971 acres; in Polwarth, 3,890 tons from 594 acres; in Mornington, 3,141 tons from 609 acres; in Grenville, 3,001 tons from 489

acres; in Buln Buln, 2,260 tons from 360 acres; in Villiers, 1,856 tons from 316 acres; and in Hampden, 1,609 tons from 231 acres. The total area under onions in 1906-7 was exceeded in previous years, but the production—28,000 tons—was the highest recorded. The following is a return for the last twelve years:—

# ONION CULTIVATION, 1895-6 TO 1906-7.

Year.	Area.	Produce.	Year.	Area.	Produce.
	Acres.	Tons.		Acres.	Tons.
1895-6 ..	3,780	10,759	1901-2 ..	4,151	20,859
1896-7 ..	3,735	11,256	1902-3 ..	5,565	27,467
1897-8 ..	3,751	11,217	1903-4 ..	4,176	25,218
1898-9 ..	4,472	17,308	1904-5 ..	2,862	12,969
1899-1900 ..	4,436	19,905	1905-6 ..	4,889	25,597
1900-1 ..	2,815	12,766	1906-7 ..	4,705	28,000

Green  
forage.

During the last six seasons the area devoted to green forage was lowest in 1904-5, when it was 29,902 acres. In 1905-6, it increased to 36,502 acres, which is the highest for the period.

Grass and  
clover  
seed.

The area under grass and clover for seed shows a decline, that for 1906-7 being only 1,859 acres, which is with one exception the lowest during the last eighteen years. The product returned was 17,494 bushels or an average of nearly 9½ bushels per acre, and it is remarkable that such profitable results are not availed of more widely.

Hops.

The hop-growing industry attained its maximum development in 1883-4, when 1,758 acres were planted, and yielded 15,717 cwt. Dargo, Tanjil, Delatite, Bogong, and Tambo were the chief counties in which hops were grown, and in Evelyn, Buln Buln, Villiers, Polwarth, and Croajingolong smaller yields were recorded. There has, however, been a heavy falling off in the last twenty-two years. In 1906-7 there were only 53 growers, whose return from 323 acres was 2,787 cwt.

Flax.

In 1895-6 there were 1,969 acres under flax or linseed ("Linum Usitatissimum"), but in 1898-9 the area had fallen to 72 acres. Since that year the area sown has increased, the returns for 1903-4 showing 19 growers of flax, who cultivated 259 acres, and produced 1,226 cwt. of seed, 61 cwt. of made fibre, and 4,769 cwt. of straw for treatment; in 1904-5 there was a considerable increase, the number of growers being 33, the area cultivated, 564 acres, the produce 781 cwt. of seed, 320 cwt. of fibre made, and straw for treatment 3,060 cwt. Last year there were 72 growers, and the area still further increased to 655 acres, which produced 4,853 cwt. of seed and 1,116 cwt. of fibre, with 13,800 cwt. of straw awaiting treatment. Results have shown that in Victoria the cultivation of this crop will return handsome profits. Up to the present time, the drawback has been principally the want of machinery to treat the product: but this difficulty has been overcome as several mills are now established, chiefly in the Gippsland district. The industry has also been established at

Pentridge, as the growing of a few acres there has been found so remunerative that the Penal Department has erected machinery, and are now purchasing largely—from farmers—the product as it comes from the field. Out of last season's crop upwards of 300 tons have been delivered there, and are under treatment. The prices obtained by farmers were highly satisfactory, with the result that a great impetus has been given to cultivation, and it is reported that a much larger area has been sown this season. This satisfactory position is the result principally of information and instruction given by the Agricultural Department, which with the aid of a complete plant for treating flax, also gave demonstrations in various districts, and in many cases enabled the farmer to test his crop, and to ascertain its profitable nature. There are two mills in the State available for the treatment of seed for oil making, but, so far, only one has been utilized, and that chiefly on imported seed. In 1906, imports into Victoria included linseed to the value of £2,640; linseed oil, £42,168; and fibre, £86,423. After supplying local requirements there is an extensive market, as there is scarcely any limit to the demand for linseed and fibre in other parts of the world, so there is great promise that in this State the flax industry will rapidly become established, and be very profitable. The Agricultural Department is now also giving some attention to the introduction of *Phormium tenax*, or New Zealand flax. Last season 6 acres, and this season 44 acres, have been put under this plant. The crop requires three or four years to mature, and the result of the experiment will be awaited with interest.

As well as the Government tobacco experimental station (see page 505), there are plantations in the counties of Delatite, along the banks of the King River, and in Bogong. The number of growers in the State, the area of land cultivated, and the produce for the last eleven years, were:—

## CULTIVATION OF TOBACCO, 1896-7 TO 1906-7.

Year.	Number of Growers.	Area.	Produce.
		Acres.	Cwt. (dry.)
1896-7 .. .. .	233	1,264	7,890
1897-8 .. .. .	77	522	3,419
1898-9 .. .. .	31	78	190
1899-1900 .. .. .	28	155	1,365
1900-1 .. .. .	16	109	311
1901-2 .. .. .	17	103	345
1902-3 .. .. .	24	171	781
1903-4 .. .. .	25	129	848
1904-5 .. .. .	20	106	1,112
1905-6 .. .. .	31	169	1,405
1906-7 .. .. .	30	133	..

The maximum quantity of tobacco grown was in 1880-1, when 17,333 cwt. of dry leaf was produced, but of late years tobacco growing in Victoria has been upon a very small scale.

Vines, wine,  
raisins, &c.

The area under vines shows a steady increase from 4,284 acres in 1879-80, to 30,307 acres in 1894-5. In 1900-01 the area was 30,634 acres, but since then there has been a falling off to 25,855 acres in 1906-7. The vineyards are distributed fairly all over the State. There are, however, districts where the principal industries are connected with vine-growing: the Shire of Mildura producing last season 341,140 cwt. of grapes; Rutherglen, 197,120 cwt.; and Yackandandah, 27,345 cwt. In the Goulburn Valley wine-making is a flourishing industry. In the Wimmera district, in the County of Borung, there are many vineyards, particularly in the Stawell Shire, where 20,412 cwt. of grapes were produced in 1906-7. At Mildura, the crop was principally dried for raisins and currants. The results of eleven years' operations are as follow:—

#### VINE PRODUCTION, 1897 TO 1907.

Year ended June.	Number of Growers.	Area.	Produce.			
			Grapes Gathered.	Wine made.	Raisins Made.	Currants Made.
		Acres.	Cwt.	Gallons.	Cwt.	Cwt.
1897 ..	2,603	27,934	601,053	2,822,263	11,276	762
1898 ..	2,364	27,701	457,437	1,919,389	13,234	462
1899 ..	2,453	27,568	468,887	1,882,209	17,979	1,033
1900 ..	2,382	27,550	298,920	933,282	17,847	3,315
1901 ..	2,486	30,634	631,912	2,578,187	29,370	3,715
1902 ..	2,469	28,592	497,269	1,981,475	27,533	2,546
1903 ..	2,347	28,374	444,966	1,547,188	35,534	3,722
1904 ..	2,260	28,513	654,965	2,551,150	53,447	7,490
1905 ..	2,253	28,016	452,433	1,832,386	30,295	5,974
1906 ..	2,009	26,402	498,590	1,726,444	42,975	6,403
1907 ..	1,860	25,855	752,826	2,044,833	98,127	11,730

Of the total quantity of grapes gathered in 1906-7, 292,119 cwt. were used for making wine, 357,035 cwt. for raisins and currants, and 103,672 cwt. for table consumption and export. Of the 98,127 cwt. of raisins made, 43,284 cwt. were sultanas almost entirely from Mildura. That destructive insect affecting the vines, the phylloxera vastatrix, has not during recent years shown itself to any marked extent. Attempts are now being made to completely stamp out the pest by the Department of Agriculture by the distribution of disease-resistant stocks.

Raisins are now being produced in Victoria upon a scale far in excess of local requirements. It is estimated that a year's consumption of raisins is about 19,800 cwt., so there are over 78,000 cwt. of the production in 1907 available for export. With regard to currants, a year's consumption is about 29,650 cwt., so that although there has been a substantial increase in them also, production must extend largely before local requirements are met.



The total number of persons in the State growing fruit for sale was 5,367 in 1906-7, as against 5,163 in 1905-6, and 5,341 in 1904-5. The area under such orchards in these years was 49,086, 47,312, and 47,205 acres respectively. The orchards are fairly spread over the whole State. The largest areas last season were in the Counties of Evelyn, with 12,164 acres; Bourke, 10,016 acres; Mornington, 6,357 acres; Rodney, 2,942 acres; Talbot, 2,563 acres; Bendigo, 2,043 acres; Karkarooc (including Mildura), 1,709 acres; Grant, 1,483 acres; Borung, 1,257 acres; and Buln Buln, 1,122 acres.

In the following table will be found a statement of the number of fruit trees and plants—showing trees bearing and non-bearing—of the various kinds of fruit grown during the season 1904-5:—

RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS WHERE FRUIT IS GROWN FOR SALE, 1904-5.

Fruit.	Number of Trees, Plants, &c., 1904-5.		
	Not Bearing.	Bearing.	Total.
Apples .. .. .	831,921	1,026,477	1,858,398
Pears .. .. .	203,836	188,843	392,679
Quinces .. .. .	17,900	54,299	72,199
Plums .. .. .	201,811	237,016	438,827
Cherries .. .. .	140,657	212,160	352,817
Peaches .. .. .	115,426	261,295	376,721
Apricots .. .. .	62,027	226,149	288,176
Nectarines .. .. .	1,988	5,052	7,040
Oranges .. .. .	12,773	37,466	50,239
Lemons .. .. .	22,223	53,870	76,093
Loquats .. .. .	3,991	3,812	7,803
Medlars .. .. .	68	191	259
Figs .. .. .	9,235	35,125	44,360
Passion .. .. .	4,243	4,525	8,768
Guavas .. .. .	1,088	397	1,485
Pomegranates .. .. .	117	144	261
Persimmons .. .. .	402	771	1,173
Total Large Fruits .. .. .	1,629,706	2,347,592	3,977,298
Raspberries .. .. .	..	..	4,576,767
Strawberries .. .. .	..	..	3,896,109
Gooseberries .. .. .	..	..	455,514
Mulberries .. .. .	..	..	1,986
Olives .. .. .	..	..	4,402
Currants (Red, White, and Black) .. .. .	..	..	107,776
Almonds .. .. .	12,266	21,114	33,380
Walnuts .. .. .	5,085	3,570	8,655
Filberts .. .. .	1,078	1,347	2,425
Chestnuts .. .. .	552	521	1,073
Total Nuts .. .. .	18,981	26,552	45,533

Orchards  
growing  
fruit for  
sale.

Particulars of the number of fruit trees, &c., are not collected every year, and no collection has been made since March, 1905.

The area under orchards growing fruit for sale increased steadily from 5,800 acres in 1872-3, to 10,048 in 1882-3, 31,370 in 1892-3, 44,502 in 1902-3, 47,205 in 1904-5, and to 49,086 acres in 1906-7, which is the largest area returned up to date. Details of the produce from orchards growing fruit for sale during the last seven years are as follow :—

### ORCHARDS GROWING FRUIT FOR SALE, 1900-1 TO 1906-7.

Year Ended March.	Number of Fruit-growers.	Area under Gardens and Orchards.	LARGE FRUITS GATHERED.						
			Apples.	Pears.	Quinces.	Plums.			
		Acres.	Bushels.	Bushels.	Bushels.	Bushels.			
1901	5,400	44,688	893,418	251,384	71,357	172,467			
1902	5,693	45,885	652,525	118,742	64,145	201,291			
1903	5,301	44,502	903,853	248,030	91,665	154,112			
1904	5,254	46,642	805,034	158,186	81,516	289,972			
1905	5,341	47,205	1,019,816	188,849	90,735	121,725			
1906	5,163	47,312	578,700	219,864	56,898	130,917			
1907	5,367	49,086	1,010,381	303,647	77,277	237,468			
LARGE FRUITS GATHERED—continued.									
	Cherries.	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Others.		
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.		
1901	105,032	160,968	228,686	37,184	57,866	21,846	9,901		
1902	111,891	284,312	234,101	60,150	64,954	18,135	9,363		
1903	102,512	173,414	168,348	23,210	48,083	19,214	8,187		
1904	124,423	260,589	336,899	27,670	61,429	26,405	8,863		
1905	82,504	230,130	186,360	34,088	81,716	23,500	7,335		
1906	116,845	132,870	154,791	21,364	63,904	32,467	12,339		
1907	120,496	276,077	258,049	23,431	37,662	29,549	16,817		
SMALL FRUITS GATHERED.				NUTS GATHERED.					
	Rasp- berries.	Straw- berries.	Goose- berries.	Currants (Red, Black, & White).	Others.	Almonds.	Walnuts.	Filberts.	Chest- nuts.
	cwt.	cwt.	cwt.	cwt.	cwt.	lbs.	lbs.	lbs.	lbs.
1901	20,396	4,246	12,431	1,794	882	66,837	25,294	6,818	6,469
1902	13,610	4,435	10,436	1,383	968	72,528	18,435	3,469	6,990
1903	20,185	3,101	11,573	1,456	1,011	41,551	19,378	3,437	8,262
1904	22,377	3,122	14,199	2,312	1,327	113,791	13,276	2,223	6,677
1905	12,480	5,456	13,558	1,805	1,320	80,758	28,306	1,756	4,396
1906	6,821	2,643	9,814	2,113	1,320	81,077	23,131	6,144	4,696
1907	13,816	5,487	12,276	2,054	3,307	69,378	15,863	5,339	3,506

NOTE.—In previous issues of this work the quantities of large fruits were given in cases, it being understood that a case was equal to about a bushel.

The following return shows the average produce per tree for all trees for the years 1898-9 and 1901-2, and for all trees, and for bearing trees only, for the year 1904-5:—

PRODUCE OF FRUIT TREES.

Fruit Trees.	AVERAGE PER TREE.			
	1898-9.	1901-2.	1904-5.	
			All Trees.	Bearing Trees.
	Cases.	Cases.	Cases.	Cases.
Apples .. ..	·90	·77	·55	·99
Pears .. ..	·59	1·00	·48	1·00
Quinces .. ..	1·48	1·43	1·26	1·67
Plums .. ..	·46	·54	·28	·51
Cherries .. ..	·37	·40	·23	·39
Peaches .. ..	·56	·52	·61	·88
Apricots .. ..	·69	·83	·65	·82
Nectarines .. ..	·32	·92	·57	·79
Oranges .. ..	·51	·88	·68	·91
Lemons .. ..	·65	·87	1·07	1·52
Loquats .. ..	·97	·49	·07	·14
Medlars .. ..	·40	1·53	·27	·37
Figs .. ..	·60	·69	·53	·67
Passion Fruit .. ..	·20	·43	·20	·39
Guavas .. ..	·14	·09	·15	·57
Pomegranates .. ..	·13	1·13	1·38	2·50
Persimmons .. ..	2·70	·63	·32	·49
Total Large Fruits only .. ..	·64	·72	·52	·88
	lbs.	lbs.	lbs.	lbs.
Almonds .. ..	2·22	2·78	2·42	3·82
Walnuts .. ..	2·99	1·52	3·27	7·93
Filberts .. ..	1·34	1·73	·72	1·30
Chestnuts .. ..	6·89	6·40	4·16	8·44

This table shows, between 1898-9 and 1901-2, a fair increase in the average production of large fruits, but a serious falling off in 1904-5, *i.e.*, when taking all trees into consideration; and this is probably due to the large planting of young trees during recent years, as well as to a bad season in 1904-5, in which year returns for bearing trees alone have been obtained for the first time.

In addition, large quantities of melons, rhubarb, and tomatoes were produced in these orchards, the following being the quantities returned for 1906-7:—Melons, 12,586 cwt.; rhubarb, 35,572 dozen bundles, and tomatoes, 30,125 cwt. There were also 4,935 acres laid down in private fruit gardens, the value of the produce being estimated at about £10,000.

Previous to 1904-5 the value of the fruit produce of the State was estimated at the rate of £25 per acre; but serious doubt was entertained as to the accuracy of this estimate, and during the last three years extensive inquiries have been made, the most prominent

growers, the various fruit associations, and others interested in the trade having been consulted, with the result that it has been decided to estimate only the value of such fruit as reaches the market. Upon this basis, and according to the prices received by the growers, the estimated value of the fruit sold was £341,891 in 1904-5, £345,844 in 1905-6, and £451,672 in 1906-7. This, of course, will not represent the actual value of all the fruit grown, large quantities being privately consumed in various ways, but no very reliable estimate of the value of such fruit can be prepared. It may, however, be set down at about £35,000 from orchards growing fruit for sale, and from private gardens.

In recent years some attention has been given to cider making, and, with a view of encouraging this industry, the Agricultural Department has imported a complete cider-making plant, and had it sent to various districts, which resulted in large quantities of cider having been made by it. Local manufacturers of machinery have since made machines on the lines of the imported one, with the result that cider mills are being established in several districts. This has already caused a most useful outlet for apples, as during last season one Melbourne firm secured up to 40,000 gallons of cider, while a grower in the Diamond Creek district recently manufactured 9,000 gallons at his own mill.

Market  
gardens.

The area under market gardens for the year 1906-7 was 7,906 acres. In view of the fact that these gardens are generally situated near large centres of population, and the producers are consequently able to dispose of the bulk of their goods with a minimum of loss from waste, &c., an average return of £25 per acre is regarded as a fair estimate. On this basis, the total value of the produce may be stated as close upon £200,000. This does not include crops of one acre and over of potatoes, onions, mangel wurzel, beet, carrots, parsnips, and turnips grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

Dried fruit.

The quantity of dried fruit (weight after drying) was for the first time collected in 1895-6, when 179,460 lbs. were returned, and it increased to 636,294 lbs. in 1900-1, but the quantity has, principally under the head of apricots, since declined, though the figures for last season present a notable improvement when compared with those for 1905-6. The details for the last seven seasons are as follow:—

DRIED FRUIT, 1900-1 TO 1906-7.

Year ended June.	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1901 .. ..	28,944	35,931	97,254	411,526	62,639	636,294
1902 .. ..	42,218	33,789	90,328	328,599	66,472	561,406
1903 .. ..	27,113	28,996	70,759	110,666	69,069	306,603
1904 .. ..	25,137	58,293	114,096	184,960	17,599	400,085
1905 .. ..	28,021	33,080	134,019	179,520	41,137	415,777
1906 .. ..	19,290	9,207	27,703	252,746	29,227	338,173
1907 .. ..	42,113	64,648	109,958	143,970	37,716	398,405

Nearly all the dried fruit comes from Mildura, where fruit trees are to a large extent being replaced by vines of the sultana variety, which accounts for the falling-off in the quantity of dried fruit. At Mildura in 1906-7, there were 4,829,328 lbs. of sultana raisins made, which represent an increase of 2,655,538 lbs. on the figures for the previous year.

The following is a return of the minor crops for the last two Minor crops. seasons. The items do not in all cases represent the whole of the respective crops grown, but only such as were taken cognisance of by the collectors:—

## MINOR CROPS, 1905-6 AND 1906-7.

Crop.	1905-6.		1906-7.	
	Area Sown.	Produce.	Area Sown.	Produce.
	Acres.		Acres.	
Artichokes ... ..	2	80 cwt.	5	80 cwt.
Chicory ... ..	244	189 tons (dry)	191	114 tons (dry)
Flowers ... ..	94	...	116	...
Garlic ... ..	3	60 cwt.	2	51 cwt.
Millet—Broom ... ..	263	{ 1,215 cwt. fibre 883 cwt. seed }	283	{ 1,498 cwt. fibre 1,246 cwt. seed }
Nursery ... ..	295	...	473	...
Opium poppies ... ..	13	200 lbs.	8	95 lbs.
Pumpkins ... ..	1,794	13,901 tons	1,487	14,029 tons
Rape for seed ... ..	12	...	...	...
Rice ... ..	...	...	17	...
Seeds—Agricultural and garden ... ..	32	...	15	...
Sunflowers ... ..	11	88 bushels	102	6,890 bushels
Total... ..	2,763		2,699	

The fallowing of land commenced in 1858-9, when 6,000 acres were so treated. With annual variations in acreage, but a general increase, the area in fallow reached 853,829 acres in 1904-5, 1,049,915 acres in 1905-6, and 990,967 acres in 1906-7. The system of fallowing is much more extensive in the wheat-growing counties than in other districts of the State. It is gratifying to find that the enormous advantages obtainable from this mode of treating the land are now being properly recognised; and from the experiments made by the late Chemist for Agriculture on manured land, it would appear that, when fallowed in alternate years, there is a gain in wheat crops of from 3 to 5 bushels per acre, and on unmanured land the gain is nearly 3 bushels per acre. Land in fallow.

The soils of Victoria, like those of every part of the world, vary widely in their physical and chemical condition. Colour, alone, is a poor index to productivity, yet to the average mind a darkish colour Characteris- tics of Vic- torian soils.

in soils is generally accepted as indicating a higher potential fertility than lighter coloured soils. There is some logic in this reasoning on account of darkish coloured soils containing generally more organic matter, and, other things being equal, having a better absorptive and retentive power for moisture. Fertility, however, is the harmonious operation of a number of factors, some of which are difficult to control. The absorption, retention, and movement of the soil moisture are entirely dependent on the composition, size, and nature of the soil particles, and in this particular, many farmers do not sufficiently appreciate the far-reaching effects of cultivation as the most economical manner in which the latent wealth of the soil may be made available to the needs of crops. Porosity, or natural drainage, controls the temperature, especially during the period when growth is most abundant, viz., the Spring, hence it is that many soils whose drainage is imperfect, remain cold at that season and the crops grown upon them are restricted in yield. Capillarity, or the power of the soil, to transfer moisture from subsoil to the upper cultivated portion, wherein the roots of crops develop, is exemplified in the case of the two extreme types of sand and clay. In the former case, the surface dries rapidly during summer, although there may be an abundant supply of moisture a few feet down—in the latter case, owing to the facility with which moisture rises from the subsoil to the surface and is lost by evaporation, the soil becomes hard and dry. It is, however, the amounts of the mineral elements of plant food present which are usually regarded as the true measure of fertility. Without food no plant can thrive, but without an adequate supply of moisture no seed can even germinate, much less produce a mature plant. Hence it is that the chemical condition of a soil is subordinate in importance to its physical composition.

During the past eighteen years some thousands of chemical analyses of Victorian soils have been made by the Chemical Branch of the Department of Agriculture, and the tabulation of the figures have given us a general knowledge of the characteristics of soils in every district in the State.

To divide the State into three broad divisions of coastal plain, northern plain, and hill country, is sufficient classification for the general statement that the soils of each locality are somewhat below the standard for phosphoric acid, hence the universal suitability of manures containing this ingredient. In the extensive areas stretching from the coast to the hills throughout Gippsland and the Western District, field experiments have indicated the necessity for a supplementary application of manures containing nitrogen. The greater rainfall of these southern districts permits a more luxuriant growth of vegetation, and as the function of nitrogen is to build up the framework of the plant, it is logical enough that these soils should require feeding in that direction. As regards potash, there is evidence that the majority of Victorian soils, particularly those of the clay type, are well furnished, and at all events, for some time, except it may be for special crops, there would appear to be little necessity

for manures supplying this element. It must not be forgotten, however, that plant foods produce their best results when in correct proportions to one another, and on sandy soils, when root crops and legumes are grown, potash fertilization may be found necessary.

The percentage of lime present forms a distinct feature in soils of the northern plain, but, with the exception of certain places in the south, where the geological formation is of limestone, this most essential element is lacking. It is not too much to say that many thousands of acres in Southern Victoria stand in more need of drainage and liming than manures. As a corrector of soil acidity, and the formation of a base, wherewith other plant foods may combine and be held in such a manner as to become gradually available to the needs of plants, lime will be found of great service. For the breaking down of adhesive clay soils, so as to render the passage of implements easier, lime well repays the application of from 5 to 10 cwt. per acre—once every four or five years.

Useful as the work of soil analyses has been, its value will be made more manifest once the agriculturist has standards of fertility established to meet the requirements of different soil types under varying climatic conditions.

A better appreciation on the part of the farmer of the powerful influence that soil treatment exerts on the production of crops and a clearer conception of the rational principles of fertilization will gradually lead to a higher standard of farming, and the all round increase in the average yields of all crops grown within the State.

So widespread is the range of application, and so universal has the use of artificial manures become in Victoria, that it would appear difficult to add anything of interest to the purchaser of these modern aids to agriculture. If there is one point more than another, with which the purchaser of manures is not entirely conversant, it is probably a knowledge of safeguards afforded him by the Artificial Manures Act.

Use of  
artificial  
manures.

After divesting the intentions of the framers of the Act of their legal phraseology, it will be found that every vendor of artificial manures (over the amount of one half hundred-weight) within the State is required each year during the months of October or November to furnish the Agricultural Chemist with samples of all manures, together with the selling price of each, which it is intended to sell during the ensuing twelve months. From these samples the Unit Values or values of 1 per cent. of each class of plant food (Nitrogen, Phosphoric Acid, and Potash) in a ton of manure are calculated. The Unit Values so established operate for twelve months only, and what is called the "real value" of all manures sold during that period is calculated from them. A list showing the "real value" and selling price of all manures will be found in the *Agricultural Journal*. The Act further requires that each bag of manure shall have a label attached showing the net weight and analysis of the

contents. It may not be generally known that each purchaser of manures is required under the Act to produce these labels if a case for prosecution arise. Purchasers of manures, therefore, may, with advantage to themselves, observe the precaution of keeping these labels.

In order to check the quality of manures despatched to the country, inspectors are empowered to take samples during transit, at a railway station, or on the farm itself. The compliance of the vendors with their guaranteed article is best described in the words of the Agricultural Chemist—"It is quite noteworthy that almost without exception the whole of the samples were well up to the guarantee, and in many cases were in excess of the percentages of fertilizing constituents guaranteed." So far then the Victorian farmer can have no fault to find with the quality of the article sold in the State.

As regards the price per ton, it is equally gratifying to find that farmers are able to purchase manures of even quality at a cheaper rate per ton than that which rules in adjoining States.

It may be assumed that superphosphates form by far the largest proportion of manures sold, and the position is concisely put by the Agricultural Chemist in the statement "That a superphosphate of 20 per cent. water soluble and  $1\frac{1}{2}$  per cent. insoluble would cost per ton in Victoria, £4 11s. 6d., as against £5 3s. 10 $\frac{1}{2}$ d. in New South Wales and £6 5s. 3d. in New Zealand."

The unit values in several of the American States are also higher than those prevailing in Victoria. The Victorian purchaser of artificial manures may thus congratulate himself on being able to purchase high-grade manures at a very moderate price. It is, moreover, a matter of further congratulation that complete harmony exists between the Department of Agriculture as the administrators of the Act and the merchants whose business is amenable to its operation.

It has come to be recognised by progressive farmers that, valuable as are the effects of manures rationally used, their usefulness is controlled by the cultivation given to the land. In other words, it is unreasonable to expect the maximum benefit from manures on imperfectly tilled land the moisture content of which is below what it should be. Cultivation always has been, and always will be, the most important of all operations on the farm, and it is the recognition of this fact which leads to some persons securing better results than their neighbours.

The three watchwords in agricultural practice may be described as Cultivation, Rotation, and Fertilization, the proper observance of which leads to that higher standard of production towards which the demands of civilization are forcing the agriculturists of all nations to aspire.

The quantity of manure used for fertilization has in recent years very considerably increased, and to show the position clearly the following table is presented.



MANURE USED FOR FERTILIZATION, 1898 TO 1906.

Year.	Farmers using.	Area used on.	Natural Manure used.	Artificial Manure used.
		Acres.	Tons.	Tons.
1898 ...	7,318	225,830	143,586	16,052
1901 ...	11,439	556,777	153,611	23,535
1902 ...	18,537	1,099,686	206,676	36,630
1903 ...	19,921	1,205,443	207,817	41,639
1904 ...	20,167	1,521,946	190,903	45,940
1905 ...	21,586	1,791,537	210,507	54,674
1906 ...	23,072	1,985,148	205,906	60,871

In order to ascertain the value of manuring, extensive information has been collected with respect to the results during the past three years. For the purposes of the comparison, cases of areas manured and areas not manured in the same localities have been taken in eleven of the principal wheat-growing counties of the State, so that a comparison may be made between areas of the same class of land. The last two seasons were somewhat similar in regard to the yield of wheat, and their results were as follow:—

WHEAT MANURED AND UNMANURED, 1905-6 AND 1906-7.

Counties in Wheat-growing Districts.	Manured.			Not Manured.		
	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.
1905-6.						
Lowan ..	Acres.	Bushels.	Bushels.	Acres.	Bushels.	Bushels.
Borong ..	6,898	88,275	12·80	6,978	72,794	10·43
Kara Kara ..	30,938	423,265	13·68	30,498	328,782	10·78
Weeah ..	3,801	41,560	10·93	3,507	23,417	6·68
Karkarooc ..	4,568	42,974	9·41	4,480	31,877	7·11
Tatchera ..	39,573	237,750	6·01	37,778	189,437	5·01
Gunbower ..	25,830	178,246	6·90	27,620	135,570	4·91
Gladstone ..	11,398	132,328	11·61	8,155	71,427	8·76
Bendigo ..	31,404	380,170	12·11	1,753	15,804	9·01
Rodney ..	44,828	695,372	15·51	2,785	28,916	10·40
Moir ..	32,653	506,318	15·51	11,369	146,407	12·87
Moir ..	52,571	714,819	13·60	63,175	675,444	10·69
Total ..	284,462	3,441,077	12·10	198,098	1,719,875	8·68
1906-7.						
Lowan ...	2,340	26,269	11·23	2,160	16,604	7·69
Borong ...	11,583	144,040	12·44	11,066	98,560	8·91
Kara Kara ...	3,458	49,054	14·19	3,137	31,333	9·99
Weeah ...	2,039	19,527	9·58	1,435	11,059	7·71
Karkarooc ...	29,740	286,415	9·63	29,717	207,689	6·99
Tatchera ...	20,659	221,822	10·74	19,084	144,501	7·57
Gunbower ...	2,628	29,639	11·23	2,625	20,680	7·88
Gladstone ...	1,581	25,189	15·93	1,394	13,912	9·98
Bendigo ...	3,206	49,733	15·51	2,725	31,530	11·57
Rodney ...	7,769	96,442	12·41	6,047	60,553	10·01
Moir ...	14,099	144,463	10·25	13,704	100,593	7·34
Total ...	99,102	1,092,593	11·03	93,094	737,014	7·92

Reliable averages of areas manured and unmanured in the same localities have been obtained to only a limited extent in each county for 1906-7. The figures, however, as in previous years, show that manuring had the effect of improving the yield by over 3 bushels per acre. From the facts disclosed it would seem that wheat manuring, so far as has been attempted, has cost about 3s. per acre, which in turn gave an increased yield to fully the extent in value of 9s. per acre in each of the last two seasons.

During 1906 the quantity of manure imported into Victoria was 1,353,731 cwt., and its value £199,631, while that exported was 297,083 cwt. valued at £61,801.

Farm  
implements.

In recent years the number of engines, horse-works, and machinery, and other implements on agricultural, dairying, and pastoral holdings was ascertained at the time of the collectors' visits. The particulars for the last two years are as follow:—

MACHINERY AND IMPLEMENTS ON FARMS AND PASTORAL HOLDINGS  
IN EACH DISTRICT, 1906 AND 1907.

Districts.	Number of —													
	Engines.		Horse-works.	Harvesters.	Threshing Machines.	Winnowing Machines.	Reapers and Binders.	Strippers.	Ploughs.	Harrowa.	Cultivators.	Grain Drills.	Chaff- cutters.	Cream Separators.
	Steam.	Oil.												
1906.														
Central ..	390	93	1,614	48	73	265	2,539	19	13,376	9,730	4,319	1,327	4,663	3,696
North Central ..	233	32	1,051	102	46	327	1,939	64	5,233	3,745	1,090	980	2,011	1,530
Western ..	154	161	1,432	379	64	258	2,036	187	7,086	5,132	1,224	1,042	2,444	1,220
Wimmera ..	104	55	2,891	1,426	62	2,545	2,761	3,927	8,171	5,687	2,743	3,150	3,439	1,130
Mallee ..	90	2	605	398	14	1,530	811	2,704	3,413	1,765	1,757	1,111	389	630
Northern ..	515	54	2,031	3,019	156	3,416	4,921	3,633	12,641	8,339	4,488	3,313	3,001	3,207
North-Eastern ..	214	17	805	141	46	321	1,151	339	4,511	2,886	805	455	1,419	893
Gippsland ..	373	36	565	31	51	107	564	4	6,170	4,634	1,542	323	1,557	3,494
Total ..	2,103	456	10,994	5,544	512	8,769	16,722	10,877	60,601	41,939	17,968	12,231	19,373	15,710
1907.														
Central ..	440	158	1,652	55	77	306	2,591	37	13,864	10,089	4,355	1,533	4,315	4,089
North Central ..	262	58	1,043	132	38	290	1,20	43	5,308	3,966	1,147	1,039	2,020	1,986
Western ..	226	244	1,524	453	62	255	2,156	145	7,660	5,624	1,508	1,227	2,587	1,765
Wimmera ..	104	127	2,959	1,876	63	2,397	2,854	3,831	3,310	5,590	3,167	3,415	3,511	1,584
Mallee ..	100	28	831	691	23	1,448	875	2,644	3,378	1,684	1,943	1,318	996	922
Northern ..	524	76	1,932	3,629	136	3,242	4,935	3,318	12,571	8,313	4,585	4,203	2,895	3,994
North-Eastern ..	231	41	807	178	39	337	1,223	336	4,605	3,047	931	569	1,378	1,117
Gippsland ..	450	58	517	35	50	112	614	38	6,646	4,917	1,865	387	1,621	3,989
Total ..	2,337	790	11,315	7,047	488	8,387	17,168	10,442	62,342	43,250	19,501	13,696	10,823	19,446

Compared with 1906, the only decreases shown by the figures for 1907 are in threshing machines, winnowers, and strippers, and this position is the result of the increased use of harvesters, which, especially in the Wimmera, Mallee, and Northern districts have grown considerably in numbers. The Western, Wimmera, and Gippsland districts are mainly responsible for a marked increase in cultivators, and there is also shown a more popular use of grain drills throughout

the State. The most marked increase, however, is in cream separators, which are much more numerous, each district having contributed its share towards the alteration.

The following are particulars respecting dairy cows in Victoria in Dairy cows. each of the last four years:—

DAIRY COWS, 1903 TO 1906.

Year.	Number of Cow-keepers.	Number of Dairy Cows at end of Year.	Butter Made.	Cheese Made.	Number of Cream Separators in use.
			lbs.	lbs.	
1903 ..	41,824	515,179	46,685,727	5,681,515	8,986
1904 ..	42,931	632,493	61,002,841	4,747,851	13,408
1905 ..	46,757	649,100	57,606,821	4,297,350	15,710
1906 ..	47,741	701,309	68,088,168	4,877,593	19,446

The number of cow-keepers, dairy cows, and cream separators continue to show a large annual increase. It is generally regarded that the milk required to make one pound of butter will make about 2 lbs. of cheese, and on this basis the figures in the table show that, after supplies required for milk and cream consumed in their natural state and for milk concentrated, condensed, or preserved, the average production from each dairy cow is equal to 100 lbs. of butter in 1904 and 1906 against an average of 92 lbs. in 1905 and 97 lbs. in 1903.

The numbers of horses, cattle, sheep, and pigs, in each census year Live stock. since 1861, together with the number per head of the population at each period, are shown in the following table. The progress of the industries dependent on the breeding of stock is thus indicated:—

LIVE STOCK PER HEAD OF POPULATION, RETURN FOR FIVE CENSUS YEARS.

Stock.	1861.		1871.		1881.		1891.		1901.	
	Population 540,322.		Population 731,528.		Population 862,346.		Population 1,140,405.		Population 1,201,341.	
	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.
Horses (including foals) ..	76,536	·14	209,025	·29	275,516	·32	436,469	·38	392,237	·33
Cattle—										
Milch Cows	197,332	·37	212,193	·29	329,198	·38	395,192	·35	521,612	·43
Other ..	525,000	·97	564,534	·77	957,069	1·11	1,387,689	1·22	1,080,772	·90
Sheep ..	5,780,896	10·70	10,477,976	14·32	10,360,235	12·01	12,692,843	11·13	10,841,790	9·03
Pigs ..	61,259	·11	180,109	·25	241,936	·28	282,457	·25	350,370	·29

The animals are here averaged to the number of inhabitants of Victoria, a continually changing quantity. In the next table they are averaged to a constant quantity—the number of square miles in the State. The actual increases are thus shown:—

**LIVE STOCK PER SQUARE MILE: RETURN FOR FIVE CENSUS YEARS.**

Year.	Average per Square Mile (Area of Victoria, 87,884 Square Miles).				
	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
1861 .. ..	·87	2·25	5·97	65·78	·70
1871 .. ..	2·38	2·41	6·42	119·22	2·05
1881 .. ..	3·14	3·75	10·89	117·88	2·75
1891 .. ..	4·97	4·50	15·79	144·43	3·21
1901 .. ..	4·46	5·94	12·30	123·36	4·00

The increase in each class was constant up to 1891, with the exception of a slight fall in the number of sheep between 1871 and 1881. Between the census of 1891 and 1901, however, there has been a reduction in the numbers of horses, cattle generally, and sheep, probably due to the dry seasons in the intercensal period. There was also an exceptional export of horses to South Africa for some time prior to the 1901 census. The number of milch cows increased considerably in the decade, indicating the growth of the dairying industry, and explaining in part the largely augmented output of butter. The number of pigs has steadily and satisfactorily increased throughout the intercensal periods, although since 1901 there has been a falling-off.

The following return shows the live stock in Victoria in the last three years. Tables showing the stock, classified in conjunction with the holdings, and the sheep, further classified in different sized flocks, in March, 1906, will be found on pages 524 and 571:—

**LIVE STOCK IN VICTORIA, 1905 TO 1907.**

Live Stock.	1905.	1906.	1907.
Horses (including foals)...	372,397	385,513	406,840
Cattle—			
Dairy Cows ... ..	632,493	649,100	701,309
Other (including calves)	1,053,483	1,088,590	1,103,014
Sheep ... ..	10,167,691	11,455,115	12,937,440
Pigs ... ..	286,070	273,682	220,452

It will be seen that there has been an increase over the previous year's figures in all classes except pigs. The increase in cattle is principally in dairy cows which numbered 52,209 more than in March, 1906, one-fourth of this increase being in the Gippsland district. An increase in sheep occurred in every county with the exception of Follett and Millewa, the largest increases being in the counties of Moira, Buln Buln, and Borung. During the year, horses which include 49,952 foals reared, show an increase of 21,327, and as there was a net export of 2,640, the number which died is about 26,000, or  $6\frac{3}{4}$  per cent. Allowing for accidents and old age this is a very light mortality, and indicates that the rearing of horses in Victoria is not interrupted by disease of any kind. Pigs continue to decline in numbers, and, as they are now in good demand at improved values, there is the very best prospect of a most profitable return in the rearing of them.

In the following table will be found a statement of the average and range of prices obtaining in Melbourne during the years 1905 and 1906. The information has been extracted from the Melbourne *Stock and Station Journal*.—

PRICES IN MELBOURNE OF LIVE STOCK, 1905 AND 1906.

Stock.	Prices in 1905.						Prices in 1906.					
	Average.			Range.			Average.			Range.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
<i>Horses.</i>												
Extra heavy draught	43	0	0	40	0	0 to	47	10	0	47	12	0
Medium	30	11	0	26	5	0 to	35	0	0	32	17	0
Delivery Cart	13	10	0	12	5	0 to	17	10	0	24	3	0
Order Cart	30	11	0	25	0	0 to	34	0	0	15	0	0
Indian Remounts	10	8	0	7	10	0 to	13	0	0	11	13	0
Saddle and Harness	180	4	0	120	15	0 to	178	10	0	65	16	0
Carriage, per pair	20	10	0	15	0	0 to	25	0	0	22	1	0
Ponies										15	0	0
										38	10	0
										22	10	0
										15	0	0
										12	0	0
										25	10	0
										7	10	0
										110	0	0
										15	0	0
										30	0	0
<i>Fat Cattle.</i>												
<i>Bullocks—</i>												
Extra Prime	12	14	0	11	0	0 to	14	8	6	13	5	6
Prime	11	3	0	10	0	0 to	12	15	0	11	7	10
Good	9	10	0	8	10	0 to	10	15	0	9	9	0
Good Light and										7	15	0
Handy Weights	8	3	0	7	2	6 to	9	12	6	7	16	6
Second	6	12	6	5	0	0 to	8	2	6	6	8	2
<i>Cows—</i>												
Best	8	0	0	6	0	0 to	9	10	0	8	1	3
Others	5	13	0	4	0	0 to	7	15	0	5	14	0
<i>Calves—</i>												
Prime Steers and												
Heifers	4	14	0	3	12	6 to	5	16	0	4	11	4
Prime Calves	2	15	3	2	2	6 to	3	15	0	2	14	5
Other Good	1	14	8	1	2	6 to	2	10	0	1	16	2
										3	10	0
										1	7	0
										2	10	0
<i>Dairy Cattle.</i>												
Best Milkers	9	18	0	8	12	6 to	11	17	6	10	2	5
Good	7	17	3	6	15	0 to	8	17	6	8	0	7
Medium	6	0	0	5	0	0 to	6	12	6	6	2	0
Inferior	4	13	0	3	10	0 to	5	10	0	5	0	0
Springers, best	8	5	9	7	0	0 to	10	7	6	4	2	0
Heifers, best Springers	6	7	3	4	11	0 to	7	10	0	8	9	4
Dry Cows	4	9	0	3	12	6 to	5	0	0	6	14	4
Stores	2	15	6	2	5	0 to	3	17	6	4	12	6
										3	15	0
										2	15	0
										4	0	0

### PRICES IN MELBOURNE OF LIVE STOCK, 1905 AND 1906—continued.

Stock.	Prices in 1905.						Prices in 1906.					
	Average.			Range.			Average.			Range.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
<i>Fat Sheep.</i>												
Wethers (cross)—												
Extra Prime ..	1	2	5	0	16	3 to	1	8	6	1	2	8
Prime ..	1	0	3	0	15	6 to	1	4	3	0	15	0 to
Good ..	0	17	0	0	13	3 to	0	19	6	0	12	6 to
Ewes (cross)—												
Extra Prime ..	1	0	3	0	14	6 to	1	5	6	0	14	0 to
Prime ..	0	17	10	0	13	3 to	1	2	0	0	13	6 to
Good ..	0	15	3	0	12	3 to	0	19	0	0	12	0 to
Wethers (merino)—												
Prime ..	0	19	1	0	14	9 to	1	3	9	0	14	0 to
Good ..	0	16	2	0	12	6 to	1	0	0	0	12	0 to
Ewes (merino) ..	0	13	2	0	8	3 to	0	19	0	0	10	6 to
<i>Fat Lambs.</i>												
Extra Prime ..	0	17	1	0	14	9 to	1	1	0	0	13	0 to
Prime ..	0	14	8	0	12	10 to	0	17	3	0	11	6 to
Good ..	0	12	5	0	10	6 to	0	15	0	0	9	0 to
Second ..	0	10	2	0	7	9 to	0	12	0	0	7	6 to
<i>Pigs.</i>												
Back Fattens—												
Extra Heavy ..												
Prime ..	3	19	6	3	2	6 to	4	11	3	3	15	0
Extra Prime and												
Weighty ..	2	12	4	2	5	0 to	3	1	0	2	5	0 to
Baconers—												
Extra Prime ..	2	10	3	1	19	0 to	3	6	6	2	0	0 to
Prime ..	2	3	0	1	10	6 to	2	17	0	1	15	0 to
Porkers ..	1	3	11	0	19	0 to	1	9	6	1	6	3 to
Stores ..	0	13	6	0	11	6 to	0	17	0	0	10	0 to
Slips ..												
Suckers ..	0	6	4	0	3	9 to	0	10	0	0	4	0 to

Compared with 1905 the average prices in 1906 point to an improved value for horses and dairy cattle, but in other lines of stock, though there have been slight variations, taken as a whole the prices rule at about the same figure. The range of prices in both years denotes a great unevenness in the quality of all classes of stock.

The return of the stock slaughtered for 1906 was partly furnished by the municipal authorities, and partly collected by the police. The number includes those slaughtered on farms and stations, as well as those in municipal abattoirs. Previous to 1903, the returns were furnished solely by the municipal authorities, an estimate being made of the stock slaughtered privately.

STOCK SLAUGHTERED: 1900 TO 1906.

Year.			Numbers Slaughtered.		
			Sheep and Lambs.	Cattle.	Pigs.
1900	..	..	2,371,415	248,797	231,752
1901	..	..	2,469,797	251,477	261,479
1902	..	..	2,827,938	233,206	224,431
1903	..	..	2,652,569	235,284	164,745
1904	..	..	2,305,729	243,937	191,311
1905	..	..	2,576,316	249,454	248,568
1906	..	..	2,826,144	261,034	274,391

The purposes for which the carcasses of the slaughtered animals were used were:—

Year.	For Butcher and Private Use.			For Freezing.			For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1900	1,821,284	244,571	119,137	437,332	3,808	..	9,181	115	112,604	3,618	303	11
1901	2,016,863	249,079	134,276	431,740	980	..	10,087	937	127,145	11,107	481	58
1902	2,337,262	229,728	106,390	378,029	2,293	..	13,211	485	117,984	99,436	700	57
1903	2,337,958	231,682	52,681	294,906	1,630	4,200	11,400	1,473	107,754	8,305	499	110
1904	1,843,896	242,276	67,302	459,963	720	3,200	1,095	699	120,758	775	242	51
1905	1,922,402	231,519	92,347	649,107	16,663	1,959	3,229	981	154,190	1,578	291	72
1906	2,170,581	251,004	96,618	651,914	8,009	2,580	2,522	1,476	175,120	1,127	545	73

The most noticeable figures in these tables are those relating to the sheep—a large proportion of which were lambs—and cattle slaughtered for freezing. They point emphatically to the growing importance of the frozen-meat trade in Victoria. There has also been a large increase in the number of pigs slaughtered, 274,391 in 1906, against 191,311 in 1904. Pigs slaughtered, both for private use and for preserving and salting, are resuming the proportions of four years previously.

The following is a return of the imports and exports of animals under principal heads during last year. The export of horses is largely to India; but the other trade in live stock is principally with Australian States:—

Gain or loss  
in live  
stock.

#### LIVE STOCK IMPORTED AND EXPORTED, 1906.

			Number of			
			Horses.	Cattle.	Sheep.	Pigs.
Imported	...	...	7,353	79,277	1,481,192	4,456
Exported	...	...	9,993	121,793	651,273	216
Net Imports	...	...	...	...	829,919	4,240
Net Exports	...	...	2,640	42,516	...	...

The information in this table combined with that of stock held at end of year and stock slaughtered during the year show that there has been no serious mortality among live stock in 1906, and that any losses are probably due to unavoidable causes—accidents and age. By adding the net increase in stock held at end of 1906, the number slaughtered, and the net exports, it is evident that, after replacing losses by mortality, those reared give a net production for the year of about 24,000 horses, 370,000 cattle, 3,480,000 sheep, and 217,000 pigs.

Wool pro-  
duction.

In the last two years the wool production of the State has been arrived at upon a new basis, which gives a far more accurate estimate of the season's production. The information relating to the clip has been obtained direct from the growers, and an allowance has been made for the wool on Victorian skins, both stripped and exported. Previously, the wool production was estimated from the Customs returns for the calendar year, but it is considered that under the present method the production of each particular season can be better distinguished.

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION,  
SEASON 1906-7.

Districts.	Wool Clip, 1906-7.		
	Sheep.	Lambs.	Total.
	lbs.	lbs.	lbs.
Central ... ..	5,514,356	607,259	6,121,615
North Central ... ..	4,604,480	555,422	5,159,902
Western ... ..	27,224,747	2,495,054	29,719,801
Wimmera ... ..	11,877,684	1,027,545	12,905,229
Mallee ... ..	2,234,435	183,083	2,417,518
Northern ... ..	10,085,620	1,057,867	11,143,487
North-Eastern ... ..	3,373,591	361,914	3,735,505
Gippsland ... ..	3,028,871	451,272	3,480,143
Total Clip * { 1906-7	67,943,784	6,739,416	74,683,200
{ 1905-6	58,919,314	5,258,557	64,177,871
		1905-6.	1906-7.
		lbs.	lbs.
Wool clip ... ..		64,177,871	74,683,200
Estimated quantity of wool stripped from Victorian skins ... ..		3,938,935	4,288,186
Estimated quantity of wool on Victorian skins exported ... ..		7,621,497	9,462,910
Total production ... ..		75,738,303	88,434,296
Total value ... ..		£3,313,550	£3,869,000

NOTE. — In the Statistical Register a return will be found showing the details in counties.

\*The average weight of the fleece in 1906-7 is—sheep, 6.76 lbs; lambs, 2.45 lbs.; sheep and lambs combined, 5.84 lbs.

Wool im-  
ported, ex-  
ported, and  
used  
locally.

The following table shows the wool imported, exported, and used in the factories of the State, and the value of the same. With an allowance for weight lost in washing and scouring and for the wool



on skins exported, the figures will give approximately the quantity of wool produced in the last eight calendar years:—

QUANTITY AND VALUE OF WOOL IMPORTED, EXPORTED, AND USED LOCALLY—1899 TO 1906.

Year	Wool Imported.		Wool Exported.		Wool Used in Manufactures in the State.			Wool Production—Greasy and Scoured (Approximately).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Rate per lb.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	s. d.	£	lbs.	£
1899	63,067,135	2,351,059	121,877,604	5,701,410	2,867,884	1 0	143,394	61,678,353	3,493,745
1900	62,527,987	1,927,677	102,205,965	4,217,018	3,045,292	0 6	76,132	42,723,270	2,365,163
1901	61,796,450	1,840,066	131,623,062	4,350,285	3,408,526	0 6	85,213	73,235,138	2,595,432
1902	38,008,765	1,141,715	100,516,094	3,473,372	3,473,835	0 8	115,794	65,981,164	2,447,451
1903	36,726,396	1,381,647	84,560,603	3,186,054	3,772,390	0 9	141,464	51,606,597	1,945,871
1904	51,449,037	2,076,958	123,208,133	5,452,973	4,027,080	0 10	167,795	75,786,176	3,543,810
1905	67,935,833	2,911,556	125,181,191	5,420,259	4,493,041	0 10½	196,570	61,738,399	2,705,273
1906	32,989,583	3,578,056	141,696,567	6,154,382	4,765,687	0 10½	208,498	63,472,671	2,784,824

The quantity and value of wool produced in 1905 in the various Australian States and New Zealand, estimated on the import and export returns, were:—

	Quantity. (Greasy, Washed, and Scoured.)			Value.	
	lbs.	£		lbs.	£
Victoria .. ..	61,738,399	2,705,273	..	12,339,017	..
New South Wales .. ..	264,700,910	..	..	2,655,351	..
Queensland .. ..	53,185,157	..	..	1,356,595	..
South Australia .. ..	35,442,796	..	..	594,872	..
Western Australia .. ..	17,489,402	..	..	390,987	..
Tasmania .. ..	9,542,625	..	..	5,511,199	..
New Zealand .. ..	143,307,869	..	..	..	..

Wool production—Australasia.

The 1905 figures have been inserted, as the information for some of the other States for 1906 is not procurable.

The following information as to the average prices of wool per lb. obtaining for the past three seasons, has been extracted from Messrs. Goldsborough, Mort, and Co.'s annual review:—

PRICES OF WOOL, 1904-5 TO 1906-7.

Class of Wool.	Average Value per lb. in—		
	1904-5.	1905-6.	1906-7.
GREASY MERINO.			
Extra Super (Western District) ..	up to 17½d.	up to 17½d.	up to 18½d.
Super .. ..	13½d. to 15d.	13d. to 15d.	15½d. to 16½d.
Good .. ..	10½d. to 12d.	11d. to 12½d.	14d. to 14½d.
Average .. ..	9½d. to 10½d.	10d. to 10½d.	10½d. to 11½d.
Wasty and Inferior .. ..	6½d. to 8½d.	7d. to 8½d.	7½d. to 8½d.
Extra Super Lambs .. ..	up to 17½d.	up to 20½d.	up to 20½d.
Super Lambs .. ..	11½d. to 13½d.	11½d. to 14½d.	12½d. to 15½d.
Good Lambs .. ..	10d. to 11d.	10½d. to 11d.	10½d. to 11½d.
Average Lambs .. ..	8½d. to 9½d.	8½d. to 9½d.	8d. to 9½d.
Inferior Lambs .. ..	4½d. to 6d.	5½d. to 6½d.	5½d. to 7½d.

PRICES OF WOOL, 1904-5 TO 1906-7—*continued.*

Class of Wool.	Average Value per lb. in—		
	1904-5.	1905-6.	1906-7.
<b>GREASY CROSSBRED.</b>			
Extra Super Comebacks ...	up to 15½d.	up to 16½d.	up to 17½d.
Super Comebacks ...	12d. to 13d.	13d. to 15d.	15½d. to 16d.
Fine Crossbred ...	10½d. to 11½d.	11d. to 13d.	15d. to 15d.
Medium Crossbred ...	9d. to 10½d.	9½d. to 11d.	12½d. to 13½d.
Coarse Crossbred and Lincoln ...	9d. to 10d.	9d. to 9½d.	9½d. to 11½d.
Super Fine Crossbred Lambs ...	11d. to 13d.	11½d. to 14½d.	13d. to 14½d.
Good Crossbred Lambs ...	9d. to 10½d.	10d. to 12d.	11½d. to 12½d.
Coarse and Lincoln Lambs ...	7½d. to 8½d.	8½d. to 9½d.	9½d. to 10½d.
<b>SCOUREDS.</b>			
Extra Super Fleece ...	up to 23½d.	up to 24½d.	up to 24½d.
Super Fleece ...	21d. to 22d.	21½d. to 23d.	22d. to 24d.
Good Fleece ...	19d. to 20d.	20d. to 21d.	20½d. to 21½d.
Average Fleece ...	18d. to 19d.	19d. to 20d.	19½d. to 20½d.
<b>RECORD PRICES FOR THE SEASON.</b>			
Greasy Merino Fleece ...	17½d.	17½d.	18½d.
" Comeback Fleece ...	15½d.	16½d.	17½d.
" Merino Lambs ...	17½d.	20½d.	20½d.
" Comeback Lambs ...	13d.	14½d.	14½d.
Scoured Fleece ...	23½d.	24½d.	24½d.

Flocks of  
sheep.

Returns tabulated for the first time gave full information as to the flocks of sheep in Victoria in March, 1906. The number of flocks and of sheep then in the different districts were as follow:—

## NUMBER OF FLOCKS AND SHEEP IN DISTRICTS, 1906.

District.	Number of—		Average Number of Sheep in a Flock.	Percentage to Total of—	
	Flocks.	Sheep.		Flocks.	Sheep.
Central ..	1,618	1,036,363	641	10.07	9.14
North-Central ..	1,337	811,783	607	8.32	7.16
Western ..	3,563	4,399,511	1,235	22.18	38.80
Wimmera ..	3,267	2,038,068	624	20.33	17.97
Mallee ..	551	335,704	609	3.43	2.96
Northern ..	3,220	1,592,939	495	20.04	14.05
North-Eastern ..	1,266	578,517	457	7.88	5.10
Gippsland ..	1,245	547,237	440	7.75	4.82
Total ..	16,067	11,340,122	706	100.00	100.00

The figures do not include 114,993 sheep travelling on roads, or in cities and towns. The average number of sheep to a flock in Victoria is exceeded only in one of its divisions—the Western District—where some very large-sized flocks are responsible for giving

to it 39 per cent. of the total sheep in the State, though only possessing 22 per cent. of the total flocks. In the Northern, North-Eastern, and Gippsland districts, which supply 36 per cent. of the flocks, but only 24 per cent. of the sheep, there is a much better distribution, and also the evidence that raising lambs and wool is more combined with cultivation. A classification of sheep according to sizes of flocks in each county was also compiled. Excluding those travelling and in cities and towns, the following divisions are made for the whole State:—

SHEEP ACCORDING TO SIZES OF FLOCKS, 1906.

Size of Flocks.	Number of—		Percentage to Total of—	
	Flocks.	Sheep.	Flocks.	Sheep.
Under 500 ..	11,647	1,709,472	72.49	15.07
500 to 1,000 ..	2,407	1,671,223	14.98	14.74
1,001 „ 2,000 ..	1,112	1,557,476	6.92	13.73
2,001 „ 3,000 ..	326	814,763	2.03	7.18
3,001 „ 5,000 ..	213	850,454	1.33	7.50
5,001 „ 7,000 ..	99	581,360	.62	5.13
7,001 „ 10,000 ..	82	694,651	.51	6.13
10,001 „ 15,000 ..	75	905,966	.46	7.99
15,001 „ 20,000 ..	50	867,279	.31	7.65
Over 20,000 ..	56	1,687,478	.35	14.88
Total ..	16,067	11,340,122	100.00	100.00

Flocks of over 20,000, though not very numerous, being only about one in every 300, accounted for almost as many sheep as those in the most general size—that under 500—which formed  $72\frac{1}{2}$  per cent. of the total flocks. Of the largest flocks, 38 containing 1,149,324 sheep belong to the Western District counties, and 4, containing 151,086 to the Central District counties. Flocks of the second largest size were also chiefly confined to the Western District, where 34 of them, representing 578,745 sheep, were found—a proportion in each of over two-thirds of the respective totals of this size in the State. The Western District has, altogether, nearly 39 per cent. of the total sheep in Victoria, but only 13 per cent. of their number in this district is in flocks up to 1,000. In every other district the keeping of sheep is combined with agriculture to a much greater extent, as of the total in each district the proportion per cent. in flocks up to 1,000 was, in the Northern, 45; North-Eastern, 44; Wimmera, 44; Gippsland, 41; North Central, 36; Mallee, 35; and in the Central, 28.

The export trade in frozen lamb began in 1892, and, in the few years that have elapsed, it has so enormously developed that it

Lamb  
raising.

has come now to be recognised as one of the permanently established industries of the State.

In 1892, 11,794 centals of beef and mutton were exported, and, in 1894, 111,715 centals of mutton, or some 250,000 carcasses, were shipped. In two years the trade had increased tenfold, and it augured well for its future prosperity.

For 3 or 4 years after the inception of the trade mutton was the chief export, but in 1896 the export of lambs commenced to be seriously viewed by graziers. The trade in lambs has since grown to such an extent that even the most sanguine prophecies concerning it seem likely to fall short of realization. In 1906 there were exported 531,731 carcasses of lamb and 142,530 carcasses of mutton.

The soil and climate of Victoria are well suited to the economical production of both lamb and mutton, and breeds, if properly selected, would be profitable, not only as meat but as wool producers. The climate permits of flocks being kept on open pasture all the year round, and there are certain districts where, in consequence of exceptionally mild conditions prevailing, the industry can be carried on with absolute success.

In Victoria the legislative trend is towards the breaking up of large estates, and, with small holdings, and the adoption of intense culture methods, lamb raising is certain to become a very extensive industry. Oversea markets for lamb and mutton are continually being opened up, so there is no risk of the trade being overdone.

The demand in Europe and America for mutton and wool, and in Japan for wool alone, is ever persistently increasing, while the supplies of these commodities are ever relatively decreasing, in consequence of the continuous growth and spread of population, and the progressive inability of stock owners in old countries to augment their flocks, in consequence of the proportionate contraction of their grazing lands. Old lands, whose territories are limited, and whose populations are vast and increasing, cannot find room to depasture the great flocks and herds necessary to meet their requirements, and so must look for supplies of meat and wool to newer lands, where sheep will flourish and where extensive open expanses exist, and where population, sparsely distributed, has not as yet threatened limitation of flocks. The possibilities, then, for settlers in Victoria to embark in the industry of raising lambs for export oversea are unbounded; the hours of toil are neither long nor exacting, and it is now one of the most profitable and popular of farming occupations. With the breaking up of large estates and the settlement of ever increasing numbers of small sheep farmers on the land, mutton will become the primary and wool the incidental consideration, instead of the present reverse condition.

The time is rapidly coming when sheep will be grown in Victoria primarily for mutton, but, although this is certain, it is also certain that the sheep will also require to be producers of good fleeces.

If special fodder crops are generally grown and methods of husbandry practised on the same lines as in New Zealand, it should be quite possible for Victoria to soon possess 25,000,000 sheep. At present we have about 12,900,000, and our genial climate and our productive soil should warrant our readily doubling that number. The carrying capacity of a farm is increased by growing special fodder crops, yet, at the present time, although unlimited markets exist abroad, it is not the practice for graziers to make any special provision for feeding their stock. They, for the most part, rely entirely on the natural pastures. If, however, systematic efforts were made to extensively grow fodder crops, graziers would not only materially augment their own incomes, but would increase the resources and prosperity of the State.

There is no limit to the demand for meat in Britain, and the only real rival we have in the London market is the Argentine Republic, for there the seasons correspond with our own. Victoria is a State peculiarly free from diseases that decimate flocks, and in this respect is in a much more fortunate position than the Argentine. In 1906 the United Kingdom imported fresh mutton and lambs to the value of £7,646,000, of which less than 5 per cent. was from Victoria.

The possibilities, then, for farmers engaging in the trade of raising lambs in Victoria for export are very great, and no apprehension need be felt that the outlet for lambs is ever likely to become contracted. The significant feature to keep before the mind is that the number of sheep all the world over is declining, whilst the population is rapidly increasing. Europe will, therefore, have to look to Australia principally for its mutton supply.

Raising lambs, although not an arduous vocation, is, however, a calling in which one would have to possess some knowledge of farm practice and the management of flocks, as well as having an acquaintance with diseases incidental to sheep, before he could hope to successfully embark in the enterprise.

In connexion with the export of meat products from Victoria, it is well to draw attention to the fact that the State assumes direct control of the inspection of all meats exported, and all inspectors associated with the work are officials of the Crown under the control of Dr. A. A. Brown, the Inspector of Foods for Export.

Live stock  
in Australia  
and New  
Zealand.

The total number and the number per square mile of horses, cattle, sheep, and pigs in the various Australian States and New Zealand, according to the returns for the end of 1906, are as follow:—

### LIVE STOCK IN AUSTRALASIA, 1906.

State.	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
Total Number.					
Victoria ..	406,840	701,309	1,103,014	12,937,440	220,452
New South Wales	537,762	713,049	1,836,095	44,132,421	243,370
Queensland ..	452,916	3,413,919		14,886,438	138,282
South Australia*	206,212	97,137	227,757	6,655,150	107,337
Western Australia..	104,922	34,822	655,189	3,332,983	56,203
Tasmania ..	38,299	49,132	161,985	1,729,394	42,985
New Zealand ..	342,608	543,927	1,307,823	20,108,471	242,273
Number per Square Mile.					
Victoria ..	4.63	7.98	12.55	147.21	2.51
New South Wales	1.73	2.30	5.92	142.19	.78
Queensland ..	.68	5.11		22.27	.21
South Australia*	.54	.26	.60	17.51	.28
Western Australia..	.11	.04	.67	3.42	.06
Tasmania ..	1.46	1.87	6.18	65.97	1.64
New Zealand ..	3.28	5.19	12.49	191.97	2.31

\* Exclusive of Northern Territory.

The most striking feature in the figures presented in this table is an all-round decrease in the number of pigs as compared with the preceding year. The reduction was as much as 25 per cent. in Tasmania and Western Australia, 22 per cent. in New South Wales, 20 per cent. in Victoria, 16 per cent. in Queensland, 9 per cent. in South Australia, but only 3 per cent. in New Zealand. There is no apparent reason for these reductions, as the rearing of pigs is, especially now, a most profitable adjunct to farming or dairying. Other classes of stock show an increase in every case, excepting two small losses in milch cows, viz. :—189 in Western Australia, and 486 in Tasmania. The stock, in proportion to area, is evidently most numerous in New Zealand, which possesses horses, cattle, and sheep equal to about 331 sheep to the square mile; Victoria comes next with 317; then follow New South Wales, 209; Tasmania, 129; Queensland, 60; South Australia, 28; and Western Australia, with the lowest average, having stock equivalent to less than 9 sheep to the square mile.

The importance of the preservation of forage in a green state is <sup>Ensilage.</sup> so great that public attention to the question is highly desirable. Not only will stock eat anything of a vegetable nature that will make useful ensilage, but ensilage-fed animals at all times present an appearance of health and vigour. It cannot be affirmed that the uncertainty of the result of the system need militate against the trial. The silo is no longer in an experimental stage. Ancient nations are known to have practised the preservation of forage and fruits in a green state in large subterranean vaults; and during the last twenty years experiments on a large scale have been carried on, particularly in America, where the almost universal testimony of farmers is to its economy in feeding cattle, and the consequent increased stock-carrying capacity of the land. As a result of these experiments, many farmers have introduced silos upon their holdings, but it is a matter of surprise that so little has been done in Australia. Dr. Cherry, in a paper on "The Modern Silo," published as Bulletin No. 8 of the Department of Agriculture of Victoria, points out particularly that "animals which chew the cud differ from all other classes in requiring their food comparatively juicy and bulky. Their digestive apparatus is formed to suit this kind of food. Hence the cow or bullock cannot thrive on exclusively dry food so well as a horse." In Victoria, where every season the rapid drying up of the grass under the excessive heat of the summer sun causes large areas of pasture land to be parched and grassless, and green food usually disappears from December till autumn — an artificial method of preserving fodder should be of the utmost possible benefit, and the advantage of the luxuriance of trefoil, grasses, and self-sown crops in the spring would not then be lost. The juicy state in which the silo preserves ensilage fulfils another of the requirements of ruminant animals, that their food should be presented in a succulent condition. A supply of such nutriment in the winter, judiciously mixed with drier protein-bearing food, or with grain, bran, oil cake, &c., means to the farmer and stock-raiser an economizing of green stuffs when their luxuriance would otherwise tend to wastefulness, a steady and assured food supply for the summer, and a consequent augmentation, not only of the quantity, but also of the quality, of the milk yielded. Even in districts where fresh green fodder is available throughout the greater part of the year, the advantage of being able to secure the crop when it is in its best condition seems so evident, that the silo should soon become an indispensable adjunct on every farm.

Notwithstanding the importance of this means of preserving food for stock, the returns for Victoria show that in the last two seasons there has been a reduction in the number of farmers who made ensilage and in the material used, compared with 1904-5 or 1903-4.

The following figures show how little has been done in this direction up to the present:—

#### ENSILAGE RETURNS, 1900-1 TO 1906-7.

Year Ended March.	Number of Farms on which made.	Weight of Materials Used.
		tons.
1901 .. ..	131	5,834
1902 .. ..	125	5,065
1903 .. ..	111	4,703
1904 .. ..	290	10,931
1905 .. ..	300	12,779
1906 .. ..	160	7,240
1907 .. ..	210	10,581

Bee-  
keeping.

The returns for 1905-6 show that there were 5,300 bee-keepers, owning 23,382 frame and 18,398 box hives, producing 948,305 and 260,839 lbs. of honey respectively, and 21,844 lbs. of beeswax. In 1906-7, there were 4,974 bee-keepers, owning 29,157 frame and 18,848 box hives, producing 2,643,808 and 321,491 lbs. of honey respectively, and 46,780 lbs. of beeswax.

The number of bee hives increased from 21,412 in 1900-1 to 49,120 in 1904-5, and 48,005 in 1906-7. In 1891-2, the quantity of honey returned was 1,128,283 lbs. After a decline in the next two years, the quantity gathered in 1894-5 was 1,323,982 lbs. A further falling off is recorded from that year to 195,163 lbs. in 1897-8. A recovery has since been made, and the returns for the last three years indicate that the industry is making rapid progress. The production of honey and wax in 1906-7 was more than double that in 1905-6, the increase being most pronounced in the counties of Borung, Dundas, Talbot, Kara Kara, Gladstone, Villiers, and Bendigo.

#### BEE-KEEPING, 1900-1 TO 1906-7.

Season ended May.	Number of Bee-keepers.	Bee Hives.	Honey.	Beeswax.
			lbs.	lbs.
1901 .. ..	2,293	21,412	957,020	15,269
1902 .. ..	3,776	22,083	572,477	13,530
1903 .. ..	4,402	32,126	1,199,331	23,061
1904 .. ..	5,609	40,759	833,968	18,979
1905 .. ..	6,494	49,120	1,906,188	28,653
1906 .. ..	5,300	41,780	1,209,144	21,844
1907 .. ..	4,974	48,005	2,965,299	46,780

It is considered that the large increase shown last season in the production of honey and beeswax is due in a large measure to an improved method of collecting the statistics relating to bee-keeping.



The numbers of the various kinds of poultry in the State at the date of the last census—31st March, 1901—as ascertained from the schedules, were as follow:—

Fowls	...	...	3,619,938
Ducks	...	...	257,204
Geese	...	...	76,853
Turkeys	...	...	209,823

Taking the above figures as a basis, it is estimated that the gross value of poultry production for the year 1906 was £1,500,550.

The following table shows the number of poultry and poultry-owners as ascertained at the censuses of 1881, 1891, and 1901:—

Poultry and poultry-owners at census, 1881, 1891, and 1901.

POULTRY: RETURN FOR THREE CENSUS YEARS.

Census.	Poultry-owners.	Fowls.	Ducks.	Geese.	Turkeys.
1881 .. ..	97,152	2,332,529	181,698	92,654	153,078
1891 .. ..	142,797	3,487,989	303,520	89,145	216,440
1901 .. ..	132,419	3,619,938	257,204	76,853	209,823

It thus appears that there has been a falling off in the number of poultry-owners between 1891 and 1901, and although fowls show a slight increase, there has been a diminution in the other kinds of poultry. The United Kingdom imports annually over £6,000,000 worth of eggs, and over £1,000,000 worth of poultry and game, nearly all of which comes from foreign countries. Every encouragement exists in these figures for expansion in poultry production.

Active operations for the destruction of rabbits, &c., on Crown lands were first undertaken by the Government in 1880, and from that date to the 30th June, 1906, sums amounting to £464,797 had been expended in connexion therewith, including subsidies to Shire Councils for the destruction of wild animals. The following are the amounts spent since 1879:—

State expenditure on rabbit destruction.

EXPENDITURE ON DESTRUCTION OF RABBITS, ETC.

1879-80 to 1888-9	..	£ 142,963	1902-3...	...	...	£ 16,489
1889-90 to 1898-9	..	208,638	1903-4...	...	...	15,759
1899-1900	...	14,801	1904-5...	...	...	16,603
1900-1...	...	15,817	1905-6...	...	...	16,477
1901-2 ..	...	17,250				

The whole of the State, with the exception of portions of Gippsland, is more or less troubled with rabbits. In addition to the expenditure of £464,797, referred to above, a loan of £150,000 was allocated to shires in 1890 for the purchase of wire netting to advance to land-holders, repayable in ten years, and in 1896 a loan of £50,000 was advanced on similar terms, except that 3 per cent. interest was added. A complete system, administered by an officer called the Chief Inspector, under the Vermin Destruction Act, exists for effectually keeping the rabbits under control.

Rabbits and  
wild-fowl  
received at  
Melbourne  
market.

The number of pairs of rabbits and brace of wild-fowl received at the Melbourne Market, the number sold, and the number condemned, during the last seven years, were as follow:—

RABBITS AND WILD-FOWL, 1900 TO 1906.

Year.	Pairs of Rabbits.			Brace of Teal and Duck.		
	Sold.	Condemned.	Total.	Sold.	Condemned.	Total.
1900 ..	480,519	5,727	486,246	35,610	728	36,338
1901 ..	596,610	2,717	599,327	59,156	930	60,086
1902 ..	471,964	4,472	476,436	32,756	232	32,988
1903 ..	316,462	3,810	320,272	13,130	80	13,210
1904 ..	402,944	3,952	406,896	49,556	178	49,734
1905 ..	364,066	2,349	366,415	47,348	331	47,679
1906 ..	275,166	1,238	276,404	28,610	372	28,982

In 1906, there were also received at the Melbourne market 551 brace of hares—of which 16 brace were condemned, and the others sold. During the seven years tabulated in the preceding table, a great increase took place in the exports to the United Kingdom and other oversea countries of frozen rabbits and hares, which amounted to 2,826,794 pairs in 1900, 2,068,915 pairs in 1901, 3,213,376 pairs in 1902, 3,447,077 pairs in 1903, 4,045,036 pairs in 1904, 5,093,952 pairs in 1905, and 4,622,307 pairs in 1906. The value of such exports in 1906 amounted to £221,064.

The fishing  
industry.

In the following tables some information is given regarding the fishing industry. The first shows the various fishing districts round the coast—with Echuca, Kerang, Nathalia, and Swan Hill in connexion with the Murray and Goulburn Rivers—the number of men and boats engaged, and the value of the general fishing plant in use. The second shows the approximate weight and value of fish caught in the various waters, and sold in the Metropolitan market during the years 1905 and 1906.

FISHERIES—MEN AND BOATS EMPLOYED, 1906.

District.	Number of Men.	1906.		Value of Nets and other Plant.
		Boats.		
		Number.	Value.	
			£	£
Anderson's Inlet .. ..	11	8	190	170
Barwon Heads and Ocean Grove ..	33	17	713	196
Brighton .. ..	7	5	83	72
Corner Inlet, Welshpool, and Toora ..	53	37	4,150	691
Dromana .. ..	21	17	470	179
Echuca .. ..	6	4	40	52
Frankston .. ..	8	7	83	60
Geelong .. ..	50	26	644	551
Gippsland Lakes .. ..	295	189	4,346	2,505
Kerang .. ..	7	5	12	20
Lorne .. ..	10	4	69	53
Mentone .. ..	10	9	75	64
Mordialloc .. ..	10	12	292	77
Moraington .. ..	23	15	354	339
Nathalia .. ..	28	9	27	..
Portarlington and St. Leonards ..	58	34	1,228	391
Portland .. ..	39	24	1,110	500
Port Albert .. ..	57	32	724	612
Port Fairy .. ..	57	37	1,875	569
Port Melbourne .. ..	36	28	808	589
Queenscliff .. ..	106	55	4,160	573
Sandringham .. ..	19	17	494	53
Sorrento, Portsea, and Rye .. ..	27	21	605	120
St. Kilda .. ..	6	3	55	60
Swan Hill .. ..	2	2	8	8
Warrnambool .. ..	8	7	142	58
Western Port, Cowes, Hastings, Flin- ders, San Remo, and Tooradin ..	105	55	1,145	863
Williamstown .. ..	28	14	280	182
Total .. ..	1,120	603	24,182	9,607

The quantities and values of Victorian and other fish sold in the Melbourne Fish Market during the last two years were as shown hereunder:—

FISH SOLD IN THE MELBOURNE FISH MARKET, 1905 AND 1906.

		1905.		1906.	
		Quantity.	Value.	Quantity.	Value.
			£		£
Fresh Fish (Victorian)	lbs.	10,750,085	58,230	10,271,260	55,640
Crayfish (Victorian)	doz.	19,662	7,496	20,517	8,720
Imported Fish	lbs.	1,619,810	20,248	1,603,485	20,100
Oysters	bushels	31,542	12,617	30,855	12,340
Total			98,591		96,800

In connexion with this subject, the quantities and values of the different classes of fish imported are of interest. The figures for the last two years are as follow :—

## FISH IMPORTED, 1905 AND 1906.

	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Fish—		£		£
Fresh .. .. lbs.	339,291	3,745	557,568	5,520
Smoked, &c. .. ..	872,000	10,651	678,380	8,550
Fresh Oysters .. cwt.	25,744	12,594	25,824	12,428
Potted, &c. .. ..	..	1,463	..	2,532
Preserved, in tins, &c. lbs.	5,121,163	117,304	4,837,563	108,338
N.E.I. .. .. cwt.	7,210	12,166	7,274	12,911
Total .. ..	..	157,923	..	150,279

Of the most important item in this table—fish preserved in tins and other air-tight vessels—more than three parts came from the United Kingdom, Canada, and the United States.

Imports by  
United  
Kingdom  
of articles  
that may  
be further  
developed  
in Victoria.

In Victoria the natural conditions are most suitable for agricultural and pastoral pursuits, and there is room for considerable expansion in these avenues of production. There is little need to fear over-production, as the United Kingdom offers an almost unlimited market for the consumption of many articles which could be supplied from here and give very profitable employment. Some idea of the enormous importations by the United Kingdom from foreign countries of certain articles that may be profitably produced here is given in the table which follows. The figures which are taken from the United Kingdom Board of Trade returns represent the average annual imports for the five years 1901 to 1905 :—

AVERAGE ANNUAL IMPORTS INTO THE UNITED KINGDOM,  
1901 TO 1905.

Articles.	Annual Value of Imports into United Kingdom from—				
	Victoria.	Other States of Australia.	Other British Possessions.	Foreign Countries.	All Countries.
	£	£	£	£	£
Butter .. ..	812,010	543,594	2,315,927	16,993,784	20,665,315
Cheese .. ..	..	..	4,555,434	1,820,052	6,375,486
Eggs .. ..	..	..	187,028	6,206,044	6,393,072
Meats—Bacon and Hams .. ..	..	..	2,174,422	14,624,881	16,799,303
Meats—All other ..	505,239	879,582	4,102,441	16,483,713	21,970,975
Poultry and Game ..	..	6,052	25,269	1,060,448	1,091,769

**AVERAGE ANNUAL IMPORTS INTO THE UNITED KINGDOM, 1901 TO 1905—continued.**

Articles.	Annual Value of Imports into United Kingdom from—				
	Victoria.	Other States of Australia.	Other British Possessions.	Foreign Countries.	All Countries.
Fruit—Fresh and Preserved ..	£ 22,219	£ 239,298	£ 1,092,304	£ 10,138,135	£ 11,491,956
Flax and Hemp ..	..	..	857,948	6,326,336	7,184,284
Maize ..	..	..	669,296	10,900,268	11,569,564
Wheat ..	1,060,700	1,114,968	8,116,037	19,637,841	29,929,546
Wheatmeal and Flour	106,777	118,907	896,745	7,336,417	8,458,846
Wine ..	52,587	68,828	16,834	4,354,762	4,493,011
Leather ..	146,069	277,000	2,411,116	5,291,976	8,126,161
Skins, Furs, and Hides ..	252,427	506,268	2,740,689	4,613,323	8,112,707
Tallow and Stearine	97,524	545,727	534,766	1,151,720	2,329,737
Wool ..	2,929,214	7,140,180	7,772,919	3,405,529	21,247,842

In the sixteen articles specified, the requirements of the United Kingdom are to the extent of 70 per cent. met by Foreign Countries. Only 3 per cent. is supplied by Victoria, where bountiful soils and a salubrious climate give an opportunity of doing much more, especially in the further supply of butter, meats, fruit, and bread-stuffs. That it requires only increased population to enormously swell the output of primary products is apparent if a comparison be made with Great Britain, which is of equal size and less favoured generally by climate. The figures relating to agriculture and live stock for 1906 in Victoria and Great Britain are for comparative purposes placed side by side in the table which follows:—

**AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1906.**

—				Victoria.	Great Britain.
Area ..	..	..	acres	56,245,760	56,201,418
Wheat produced ..	..	..	bushels	22,618,043	59,091,768
Oats ..	..	..	..	8,845,654	123,384,840
Barley ..	..	..	..	1,255,442	60,553,432
Potatoes ..	..	..	tons	166,839	3,428,711
Horses ..	..	..	No.	406,840	1,568,681
Cattle ..	..	..	..	1,804,323	7,010,856
Sheep ..	..	..	..	12,937,440	25,420,360
Pigs ..	..	..	..	220,452	2,323,461

It should be possible in Victoria to have as great a production from agriculture and to maintain as many live stock as in Great Britain.

## MINING.

The following useful and informative paper on "The Economic Minerals and Rocks of Victoria" is furnished by Mr. A. E. Kitson, F.G.S., Department of Mines, Victoria.

## THE ECONOMIC MINERALS AND ROCKS OF VICTORIA.

The minerals of Victoria are diverse in character. Ores of all the commoner metals occur in considerable quantities—a few of them in large masses—in various parts of the State. Some, however, are found either in quantities too small, or in situations where the local conditions render them of doubtful or of no economic value at the present prices of the metals, and the competition with similar ores from Australasia and other parts of the world. In the matter of gold, Victoria occupies a leading position among the mineral countries of the world. Since gold has a standard value, depending on its quality, and is not affected by fluctuations of the market, there is no such drawback to the development of gold mines as is the case with other metals. In the gold mining industry miners have only the local conditions governing cost of production to consider, and can, therefore, work steadily, without anxiety regarding any probable changes in the price of the metal. This has been one cause of the almost entire neglect until recent years of prospecting for other minerals.

Victoria undoubtedly owes to gold its high position as a mineral country. Its general progress also is very largely due to the indirect assistance given by gold to the agricultural and manufacturing industries.

Under the division "Gold" are some details respecting its occurrence and distribution, but the subject is one much too large and important to more than merely scan in this paper. It may, however, be here stated that the total value of gold produced in Victoria since the discovery of that metal in 1851 is £276,500,000. Also in this State was found the largest mass of gold known in the world, the "Welcome Stranger" nugget, 2,280 ozs. in weight, value £9,534, found at Moliagul, in West-Central Victoria, on 5th February, 1869. Hundreds of other very large nuggets have been found, and numbers are still being discovered. The mineral products known to occur in the greatest quantity in Victoria, and to be of special value, are gold, tin, fctile and pigment clays, building stones, limestones, marble, black coal, brown coal and abrasive materials. Most of these have not received anything like the attention their importance demands. This is a matter of vital interest to the State, and one which deserves its serious consideration.

*Gold.*

The occurrence of gold may be grouped under two main divisions: A—matrix gold; B—re-distributed gold.

A. Gold in the matrix occurs in—

- (1) Quartz reefs, of fissure, saddle, contact, and other kinds, traversing Ordovician, Silurian, and Lower Devonian sedimentary rocks, metamorphic rocks—such as schists, gneissic granites, &c.—and granitoid and porphyritic rocks.
- (2) Quartz reefs, veins, and lenticles in dykes (igneous rock intrusions), of granitoid, porphyritic, dioritic, and felspathic rocks; or between dykes and the walls of intruded rocks.
- (3) Fracture planes or joints in granitoid rocks.

In the whole of the above types of occurrences there are ores (chiefly sulphides) of iron, arsenic and iron, copper and iron, zinc, lead, antimony, silver, &c., associated with the gold, which occurs either as free gold or in mechanical combination with such ores.

B. Gold re-distributed occurs among—

- (1) Shallow gravels and sands of existing streams.
- (2) Deep leads—the channels of former streams filled up by a succession of stream and lake deposits, or by flows of volcanic rock (basalt), or by both.
- (3) Littoral gravels and sands under basalt at sea or lake mouths of old rivers.
- (4) Cleavage and joint planes of the bed rock underlying deep leads, or of pebbles in these deep leads, in which gold has been precipitated from a state of solution after the formation of the leads.

In B (1-3) the gold is waterworn, and is frequently accompanied by stream tin ore, precious stones, ilmenite (oxide of iron and titanium), magnetite (oxide of iron), &c.

*Distribution of Gold.*

On looking at the geological map of Victoria, published by the Department of Mines, one sees a large area coloured pale blue in the eastern portion of the State, extending from the Murray up the basins of the Indigo Creek, the Ovens and Mitta Mitta Rivers, and down those of the Mitchell, Nicholson and Tambo Rivers to near the southern coast. Another area of the same colour in the west-central portion of the State extends from the edge of the Murray Plains on the north to the great western volcanic plains on the south. These are areas of Ordovician rocks, consisting of slates, sandstones, &c., and in them are many of our principal gold-fields, such as Bendigo, Ballarat, Castlemaine, Maldon, Daylesford, Blackwood, Berringa, Steiglitz, Clunes, Creswick, Maryborough, Dunolly, Wedderburn, Inglewood, Avoca, Ararat, Stawell, and St. Arnaud on the west; with Chiltern, Rutherglen, Myrtleford, Harrietville, Dargo, Bulumwaal, Dart River, &c., on the east.

Again, a large area from the Murray plains on the north to the La Trobe and Koo-wee-rup basins in the south forms the east-central portion, coloured brownish-grey on the map. This area consists of Silurian shales, sandstones, mudstones and limestones, and contains the gold-fields of Walhalla, Wood's Point, Foster, Tanjil, Yarra basin, Reedy Creek, Rushworth, Heathcote, and Upper Goulburn basin.

In addition to these principal areas there are large portions of the counties of Bogong, Benambra and Dargo, where metamorphic rocks (schists, gneissic granite, &c.), coloured purplish-drab, occur, and in them gold-fields of limited extent occur in many places. Further, in areas occupied by granitoid rocks, coloured red on map, gold occurs either in the free state or mechanically associated with sulphides of iron and copper along fracture planes through the rock.

The preceding remarks apply specially to those parts of the country where gold is found in quartz reefs, or in the main masses of the hard rocks themselves, but over large areas of volcanic rocks (coloured pink and vermilion), and sedimentary rocks of Cainozoic (Tertiary) to Recent age (coloured brownish-green), gold occurs in a re-distributed state in the clayey gravels and sands of stream deposits. These vary in thickness from a few feet to nearly 500 feet, and consist either wholly of sediments or of basalt in addition. The long strips of pink and vermilion on the blue areas indicate the old auriferous river-valleys, which were filled up by the volcanic flows; while around the edges of these blue areas, contiguous to the plain country, these and other old rivers ran out for miles into the open country of the time, and terminated in the old marine or lacustrine fringe that washed the foot of the slopes during the geological period when the rivers were formed.

### *Tin.*

Next in importance to gold among the metals found in Victoria is tin. It is not present in the metallic state, but only in the form of the oxide (cassiterite), a black, shining, heavy mineral. It occurs both in its original place in lodes, &c., and in a re-distributed form. The matrices of tin are—

- (1) Thin veins (*stockworks*) ramifying granitic and porphyritic rocks.
- (2) Dykes of coarsely crystalline rocks (pegmatite and greisen).
- (3) Quartz reefs traversing granitic and porphyritic rocks.

In a re-distributed form it is found among the sands and gravels of streams, which have worn down the rocks containing the tin and transported the mineral with the gravel and sand into the channels. This is the alluvial mode of occurrence, and the mineral is called stream tin. Lode tin ore is found in the matrix in various parts of the State, always in areas where granitoid or porphyritic rocks occur, or where pegmatite dykes intrude igneous, sedimentary or schistose rocks. The principal localities are Mt. Cudgewa, Mt. Wills, Pilot Range and Eskdale in the North-Eastern district, and Mt. Singapore on Wilson's Promontory, Southern Gippsland.



Stream tin is much more widely distributed, and occurs at Mt. Wills, Beechworth, Eldorado, Chiltern, Stanley, Koetong, Cudgewa, in the North-Eastern district; Tin Creek and Agnes River, Southern Gippsland; near Bruthen, Eastern Gippsland; Gembrook, Neerim, Darnum, the Bunyip and Tarago Rivers, Western Gippsland; Upper Yarra; and other districts. All streams traversing areas where the bed-rock contains tin ore have it among their gravels. In other cases it is found in the stream deposits along the borders of tin-bearing rocks, and again, as at Agnes River, the deposits containing the tin rest on stratified rocks of the Jurassic coal series, with the nearest known area of granite, likely to contain the tin ore, at Wilson's Promontory, some 12 miles away.

Stream tin has been mined for a great number of years, either for the tin only, or, as is more usually the case, for its associated gold as well. Tin in the matrix is not being mined at present, except at Mt. Cudgewa. With the great price the metal is now—about £200 per ton—increased attention is being paid to prospecting for it, and discoveries are sure to be made.

#### *Tungsten.*

This metal is a valuable one, and its chief economic uses are as a hardening agent in the manufacture of steel, a mordant in dyeing fabrics, an agent to render fabrics unflammable, a hardening agent for plaster of Paris, &c.

The ores of tungsten found in Victoria are wolfram (tungstate of iron and manganese), and scheelite (tungstate of lime).

Wolfram is a mineral very much resembling cassiterite. It occurs in similar rocks to those in which cassiterite is found, and it is also distributed among stream gravels, often associated with gold. Lode wolfram occurs at Maldon; near Chiltern; and on the Buckwong River, in the North-Eastern district, in quartz reefs that traverse metamorphic rocks, such as mica-schist and gneissic granite. Stream wolfram is found in the Upper Yarra district; Nicholson River and Boggy Creek, near Bairnsdale, Central Gippsland, and other places.

Scheelite is a dirty-white to brownish-yellow mineral that occurs in quartz reefs at Maldon, in the Costerfield district in Rodney, at Mt. Cudgewa, and Boggy Creek.

The great increase in the price of tungsten of late years has induced extended prospecting for its ores, with the result that several new occurrences of wolfram have been found, and doubtless the mineral occurs, as yet undiscovered, in various other localities.

#### *Silver.*

Native silver, argentite (sulphide) and embolite (chloro-bromide), occur in small quantities in quartz reefs traversing Ordovician slates and sandstones at St. Arnaud and Landsborough, in Kara Kara and Stawell, in Borung. Silver is also found at Gelantipy, Eastern Gippsland, associated with gold, pyrite and oxide of iron. As cerargyrite (chloride) it occurs at Glen Wills and Bulumwaal, and as pyrrargyrite (sulphantimonite) also at Glen Wills. Its commonest occurrence, however, is as an alloy of gold. In some gold-fields,

especially those in schistose rocks, such as Mt. Wills, it is present in considerable quantities, when of course the value of the gold is much reduced. During the year 1906, 35,125 ozs. of silver were obtained by refining the gold bought at the Melbourne Mint, out of a total of 848,298 ozs. of gold treated from the whole of the State. Silver is also of common occurrence in association with galena (sulphide of lead). Under lead ores the districts in which it occurs will be specified. Quite recently silver has been found associated with antimony sulphide at the Meerscham mine, near Glen Wills, where exceptionally rich ore, assaying up to 2,770 ozs. of silver per ton, has been obtained.

### *Lead.*

The ores of lead are distributed throughout those portions of the State in which are present:—(1) Ordovician and Silurian strata; (2) granitic, porphyritic and metamorphic rocks; (3) marine limestones of the Silurian and Middle Devonian periods, at and near their contact with underlying Lower Devonian volcanic ash beds.

Their modes of occurrence may be classified thus:—

- (a) In quartz reefs, as galena (sulphide of lead), associated with some, or all, of the following minerals:—Free gold, pyrite (sulphide of iron), arsenopyrite (sulph-arsenide of iron), chalcopyrite and bornite (sulphides of copper and iron), and blende (sulphide of zinc), where below the zone of surface decomposition; and as cerussite (carbonate of lead), minium (oxide of lead), pyromorphite (chloro-phosphate of lead), angle-site (sulphate of lead), associated with hydrous carbonates of copper (malachite and azurite), limonite (hydrous oxide of iron), above this zone, where the original galena has been decomposed and converted into these minerals.

In the above forms it occurs in the reefs of most of the known gold-fields of Victoria, especially at Bendigo, Daylesford, and Steiglitz, and in the Omeo and Croajingolong districts, where it is regarded as a promising indication of the proximity of gold.

- (b) In lodes, associated with the above minerals and quartz, as at Cassilis near Omeo, Dart River, Bethanga, Barnawartha, Costerfield, Buchan, and Mt. Deddick, Eastern Gippsland, and Roseneath in Dundas.
- (c) In crystals of galena, scattered through the main mass of, or along fracture planes in, granitic and porphyritic rocks in various parts of the State.
- (d) In vughs, solution cavities, or fractures, in crystalline limestone and contact planes of underlying rocks at Buchan, Murrindal River and Snowy River, in Eastern Gippsland; Wombat Creek, North-Eastern District; Lillydale, near Melbourne.

Silver-lead ore is not at present being mined for the metals, as the deposits are not of sufficient size to be profitable.

*Copper.*

Copper ores occur in various metamorphic rocks, such as micaschists, altered granite, &c., and in diabasic and dioritic rocks. They are present in considerable quantities in several places, and are sparsely distributed through the containing rocks in many other localities. They occur either as definite lodes, consisting principally of chalcoppyrite and bornite (sulphides of copper and iron), with gold and the sulphides of lead, iron, arsenic, antimony and zinc; or as scattered crystals of the sulphides in quartz reefs.

At Bethanga, in schists, a complex ore of the various sulphides mentioned was mined for many years for copper and its associated gold. At Sandy Creek, in Bogong, it also occurs with pyrite and gold.

In the Walhalla copper mine, on the Thomson River, a valuable deposit of copper ore occurs in a hornblende diorite dyke traversing Silurian sandstones and mudstones. The ore contains gold up to 2 dwts. per ton, silver up to 18 dwts. per ton, and platinum, 5 dwts. per ton. The mine was worked intermittently years ago, and, even with a rather primitive method of smelting, there are records of nearly 650 tons of copper having been obtained. It is expected that operations will be resumed shortly.

On the Snowy River and at Mount Tara, near Buchan, copper ores occur in quartz reefs in granitoid and porphyritic rocks.

The principal remaining occurrences of these ores are on Snowy Creek and Wombat Creek, in Bogong; Dart River, in Benambra; Mount Camel, near Heathcote; and Cassilis, near Omeo. In addition to the ores already mentioned, tetrahedrite (sulphide of copper and antimony) and bournonite (sulphide of copper, antimony, and lead) occur at Warrandyte near Melbourne, Mount Wills, Walhalla, Steiglitz, and Costerfield in small quantities; while the ores of the oxidized zone, viz., malachite and azurite (green and blue hydrous carbonates), chrysocolla (hydrous silicate), cuprite (red oxide), melanconite (black oxide), chalcantite (hydrous sulphate), occur as decomposition products of the sulphides.

No mines are at present being worked for their copper contents.

*Antimony.*

The ores of antimony found in the State are stibnite (sulphide), jamesonite (sulphide of lead and antimony), bournonite (sulphide of copper, lead, and antimony), kermesite (oxy-sulphide), cervantine and valentinite (oxides), derived from the sulphide through its decomposition.

These ores have a wide distribution, occurring both as definite lodes and as patches and veins in quartz reefs traversing Ordovician and Silurian slates, mudstones and sandstones. Stibnite is found in considerable quantities at Costerfield, Tooborac and Heathcote, in Dalhousie; Graytown, Whroo, and Redcastle, in Rodney; Templestowe, Warrandyte and Ringwood, near Melbourne; Reedy

Creek, in Anglesey; Big River, near Enoch's Point, in Wonnagatta. Among other principal localities where found may be mentioned Dunolly, in Gladstone; Bacchus Marsh, Box Hill and Sunbury, in Bourke; Steiglitz, in Grant; Yea, Alexandra and Mer-ton, in Anglesey; Toombullup, in Delatite; and Queenstown, in Evelyn.

The ores invariably contain more or less gold, but, owing to the difficulty of separating the gold from the antimony, the ores are at present being mined for the antimony alone.

Owing to the increased value of that metal, the demand is now brisk, and mines which have been idle for many years are now being, or are about to be, worked.

### *Iron.*

This important metal is very widely distributed throughout almost all the various formations of the State. It occurs as—

- (a) Scattered crystals, strings and small patches as pyrite (sulphide), pyrrhotite (magnetic sulphide) and siderite (carbonate), in joint planes, and through the main mass of slates, sandstones, shales, mudstones, quartzites, &c., of the Palæozoic period; various granitoid and porphyritic rocks; sparingly in black coal seams and shales of the Jurassic coal measures and brown coal and lignite of the Cainozoic period; also as vivianite (hydrous phosphate) in basalt, shales, and mudstones, principally at the Wannon Falls, in the Western District, where it occurs in lumps in the decomposed basalt.
- (b) As pyrite in quartz reefs, or as pyritous lodes, through the various sedimentary, metamorphic and igneous rocks of the Palæozoic period, associated with gold and the sulphides of lead, zinc, antimony, copper, &c.
- (c) Irregular masses, at and near the surface, consisting of the various oxides (hæmatite, limonite, magnetite, goëthite), formed by accretion and segregation after the decomposition of highly ferruginous volcanic ash beds, dolerite and basalt of the Older Volcanic (Cainozoic) series, in various parts of Northern, Western and Southern Gippsland, the Colac and Otway districts, Mornington Peninsula, Phillip Island, &c.
- (d) Irregular masses and lodes of hæmatite and limonite in the porphyritic rocks of Mount Nowa Nowa and Mount Tara, in Tambo, Eastern Gippsland; the diabasic rocks of Dookie, in the North-Eastern District; the Ordovician slates and sandstones of Lal Lal, near Ballarat; and other places.
- (e) Surface gravels of pisolite (earthy oxide of iron), covering large tracts of Newer Volcanic (Cainozoic) dolerite and basalt in the Western District, less commonly so on areas of Older Palæozoic ferruginous sandstones,

quartzites, &c., in various parts of the State, and Jurassic sandstones in Southern Gippsland. Usually this pisolite occurs as a loose gravel, the grains with a diameter up to  $\frac{1}{2}$  inch, and is called "buckshot gravel"; in other places it is cemented together, and becomes pisolitic conglomerate. It is not of economic value as an iron ore.

The ores occurring under sections (c) and (d) are in sufficiently large quantities and of such good quality as to lead to the hope of their economic value in the near future; but at present the price at which pig iron can be imported, and the absence of the combined occurrence of suitable fuel and flux close to the locations of the ores, preclude any chance of the establishment of the iron smelting industry on a sound basis, unless with assistance.

#### *Arsenic.*

Arsenic occurs in the form of arsenopyrite (sulph-arsenide of iron), and is of wide distribution, especially about Ballarat, where, associated with pyrite (sulphide of iron), it is scattered through the slates, sandstones and quartz reefs. It is known by miners as "white mundic." It also occurs in patches and lumps in some districts, as Bethanga, Cassilis, Granite Peak, in Bogong, and near Romsey. In many places it contains an appreciable amount of gold. As far as known, the mineral is not turned to any economic account, except at Ballarat, where a small amount of the oxide is obtained from the flues of the roasting furnaces. Realgar and orpiment (sulphides of arsenic) occur sparingly in the Deptford district, Eastern Gippsland, and at Stawell.

#### *Zinc.*

Ores of zinc do not occur in great quantities in Victoria; neither are they in great variety. Blende (sulphide) is the commonest of the ores, and it has a wide distribution. It is found in many quartz reefs in the various gold-fields, associated with gold, galena, &c., and in highly mineralized lode matter, consisting of the sulphides of copper, iron, lead and antimony.

Smithsonite (silicate) and calamine (carbonate) occur rarely in small crystals, as decomposition products of the blende.

The ores of zinc are not mined for metallic zinc in this State.

#### *Platinum.*

The only undoubted occurrence of platinum is at the Walhalla Copper Mine, on the Thomson River, Gippsland, where it has been recently found, by assay of the copper ore, to be present in it to the amount of from a trace to 5 dwts. per ton. The copper ore is not at present being mined. Platinum is also reported as having been found at Turton's Creek, associated with gold and iridosmine.

*Iridium—Osmium.*

These two metals, so closely allied to platinum, occur in combination as the mineral iridosmine at Turton's Creek near Foster, Stockyard Creek at Foster, and Waratah Bay, Southern Gippsland. It is found as white scales, plates and flattened grains among auriferous gravels resting on Silurian slates and sandstones; and, though occurring in small quantity, it is sufficiently valuable to be collected with the gold. Its matrix has not been discovered, but may be some highly basic dyke traversing the Silurian strata. Iridosmine is also reported from the auriferous gravels of the Upper Yarra.

*Other Metallic Minerals.*

Among the remaining metallic minerals of economic value are manganese, cobalt, bismuth, mercury, chromium, molybdenum and barium, but, as found, they are not of much importance at the present prices of the metals.

*Manganese, Cobalt and Nickel.*

The oxides of manganese (pyrolusite and psilomelane) occur in small masses in, and as coatings on, the quartz of reefs in Ordovician and Silurian strata in various parts of the country.

Asbolite (oxide of manganese and cobalt) is found in some quantity among Silurian rocks near Tanjil, Western Gippsland. It also occurs at the Walhalla Copper Mine; Grant, in Dargo; Snowy River, and other places. The oxide of iron and manganese occurs in large masses at Mount Nowa Nowa and Mount Tara, Eastern Gippsland, in porphyry and pre-Ordovician (?) cherts and jaspers.

Cobalt ore, containing nickel, occurs in a lode near Bulumwaal.

*Bismuth.*

Bismuth ores, comprising bismuthinite (sulphide); bismite (oxide), bismutite (hydrous carbonate), together with metallic bismuth, are found in some quantity among the deposits of Wombat and Snowy Creeks, in the North-Eastern District. The ores also occur in reefs at Moliagul and Kingower, in Gladstone; Linton, in Grenville; St. Arnaud, Maldon, &c. An interesting alloy of gold and bismuth, called maldonite, occurs rarely at Maldon.

*Mercury.*

Mercury is found near Jamieson, in Wonnangatta. It occurs in chloritic slates of the pre-Ordovician (?) period, as native mercury and as cinnabar (sulphide). The deposit was worked at one time, but unprofitably, owing to the small quantity of the metal present. Small fragments of cinnabar have also been found close to a quartz reef near Bulumwaal, Central Gippsland.

*Chromium.*

As oxide of iron and chromium (chromite), this metal occurs in considerable quantities in an area of serpentine on the Wellington River, Northern Gippsland. It is, however, in too inaccessible a place to be of economic value at present. Chromite is also found in reefs at Heathcote and at Corryong, North-Eastern District, and among stream sands in parts of the Gippsland, Beechworth and Benalla districts.

*Molybdenum.*

Molybdenite (sulphide) occurs in certain reefs in the Moliagul district and among granitoid rocks at Yackandandah, in Bogong; Yea, Yarck, in Anglesey; near Euroa, in Delatite; Mafeking, in Ripon, where it coats fracture planes in grano-diorite; and at Maldon, but not in known payable quantities at any of these places.

*Barium.*

Barytes (sulphate of barium), used as an adulterant of white lead, occurs in different parts of the State. It is in commercially valuable quantities at Mount Tara and Gelantipy, near Buchan, Eastern Gippsland, in porphyry, but is not being worked.

*Magnesium.*

Magnesite, the carbonate of magnesium, occurs in nodules and lumps scattered among decomposing basalt of the Newer Volcanic series (Cainozoic period) or the soil derived therefrom; or, similarly, in decomposing diabase of the pre-Ordovician period, in the districts where such rocks occur. A good deal of it may be seen in the quarries at Clifton Hill and Richmond, Melbourne, and it also occurs at Costerfield, but its association there is not known. As found, it is of doubtful economic value.

*Precious Stones.*

Most kinds of precious stones have been found in Victoria; some are of comparatively common occurrence. The principal ones recorded are diamond, corundum, sapphire, ruby, oriental emerald, oriental topaz, garnet, zircon, topaz, rock crystal, turquoise, carnelian, chalcedony, agate with its varieties and chrysolite.

Diamonds have been found in the gravels of streams running through granite country in the Beechworth district; at Kongbool, near Casterton, Western District; and, it is said, also near Mansfield and Toombullup, near Benalla. They are, however, rare, and are usually very small, varying from  $\frac{1}{8}$  to  $2\frac{1}{2}$  carats. The largest one recorded, found at Beechworth, weighed 17.64 carats.

Corundums, with the coloured varieties—sapphires (blue), oriental emeralds (green)—occur commonly in many localities; oriental topazes (yellow) and oriental amethysts (purplish-pink) are found rarely among stream gravels, derived from granitic and older basalt areas. Most of the larger gems are flawed and not

of good colour, but numbers of fine stones can be obtained. Rubies (red corundums) have been obtained from gravels in the Beechworth district, and near Pakenham and Mornington, but they are very rare and small. The principal localities where the different corundums occur are Beechworth district; Daylesford and Trentham, in Dalhousie; Blackwood, in Bourke; Upper Yarra; Tubba Rubba and Bull Dog Creek, near Mornington; Pakenham, Grantville and Gembrook, in Mornington; Toombullup, in Delatite; Koorooman and Agnes River, in Buln Buln; and Macallister River, in Tanjil.

Garnets, of the red, iron-alumina variety (almandite), are found embedded in various kinds of schistose, granitic and porphyritic rocks. They are not of common occurrence among stream gravels, as they decompose too quickly. They are not of value as found in this State.

Zircons are the commonest gems found in Victoria. They occur in many districts, almost invariably associated with sapphires. In some places, as at Toombullup, Daylesford, Beechworth, they are of large size, and beautiful shades of red and yellow. When cut they make pretty stones, and are the gems usually, though erroneously, called rubies by miners. Zircon sand occurs in considerable quantities among the auriferous gravels, but is not economically valuable for incandescent filaments, owing to the cost of separating it from its associated material.

Topazes have a wide distribution in stream gravels on granitic areas, or in gravels, originally derived from granitic rocks. Fine stones are found in the Beechworth, Maude (in Grant), Dunolly, Maldon and Upper Yarra districts.

Rock crystals are generally distributed among all older Palæozoic sedimentary and plutonic rocks, and in the Cainozoic gravels derived from them. They are found *in situ* in vughs in quartz reefs, and in veins and cavities in plutonic rocks. The yellow variety (cainngorm) and the dark-coloured one (morion or smoky quartz) occur in profusion in the Maldon, Beechworth and Beenak (Upper Yarra) districts. Amethystine quartz is found near Beechworth, Casterton and Mafeking (Western District), and other places, in stream gravels; while a thin vein of it occurs in the bank of Moonee Creek, Brunswick, near Melbourne.

Carnelian, chalcedony and agate, with its varieties, are found in numerous localities—(1) Where older basalt occurs; (2) among stream gravels derived from glacial deposits and older basalt; (3) among glacial conglomerate; (4) in petrified wood in the Jurassic black coal measures of Southern Gippsland and the Otway Ranges.

Among the localities may be mentioned the Dandenong Ranges; Casterton district; Derrinal, near Heathcote; Bacchus Marsh; Glenrowan, near Benalla; Southern Gippsland; Otway coast.

Many of the agates are large, and when cut and polished would make beautiful ornaments; while some very good carnelians are obtainable. Nothing, however, is being done towards devoting them to economic purposes.



Turquoise is found in thin veins in dark carbonaceous Ordovician slates at Edi, in Delatite, and at Tatong, near Benalla. Some of the stone is of rich blue colour, and of high commercial value, but some again is a bluish-green, and practically valueless. The gem is not being mined systematically, owing partly to the want of a satisfactory market, and partly to the thinness of the veins. An interesting feature about it is the fact that it is being deposited at the present time, nails and bits of candles left in the old workings having in some cases been coated with the material, which hardens on exposure to the air.

Chrysolite or olivine is of common occurrence among the basalts of the Cainozoic period, especially among those of the Newer Series of Pliocene age in the Western district. Around the numerous volcanic craters large lumps and small pieces may be seen in the agglomerates and scorïæ, and forming the cores of numerous volcanic bombs. Most of this is valueless as gem stone, as it is of too pale a yellowish-green colour, and is too much cleaved; but there are many pieces of a rich green and not flawed, which would be suitable for cutting. Some good stone, of a rich colour, occurs in the basalt of the Older Cainozoic volcanic necks in Southern Gippsland.

#### *Monazite.*

This phosphate of cerium, didymium, lanthanum and thorium occurs in the form of grains, associated with gold or tin oxide, among the sands and gravels derived from the granite contact areas in many parts of the State. Among these places may be mentioned Bonang and Dargo districts, in Eastern Gippsland; Buxton, in Anglesey; Bethanga, and the middle Mitta Mitta River, in the North-Eastern district; Stawell district, in Borung; Glenhope, near Kynterton; and Neerim district, in Western Gippsland. So far as known, however, the cost of separation from the associated sands is too great to admit of its economic working for the quantities as found.

#### *Asbestos.*

In the serpentine areas of the Wannon River district, the Howqua River, in Wonnangatta, and the Wellington River district, in Northern Gippsland, there are thin veins of asbestos, but as far as yet known, these are not of economic value.

#### *Diatomaceous Earth (Diatomite).*

This earth, so useful for polishing purposes, boiler and steam pipe packings, as bases for dynamite, toilet soaps, &c., occurs in several places in considerable quantities, interbedded with sands and clays in basalt sheets, or lying in hollows on the surfaces of basalt sheets. At Lillicur, near Talbot, it is of exceptional purity, being snow white in colour, light and porous. It has been regularly mined for many years, and is exported to Europe. Near Portland diatomite of rather poorer quality occurs, and is being raised and sent to Melbourne at present. Another occurrence on the Deep Creek, in

the Glengower district, near Clunes, is of good quality, and was worked for some time. It also occurs at Cardigan and Sebastopol, near Ballarat; Lancefield and Donnybrook, in Bourke; Maryborough, Daylesford, Alexandra and Lake Coringle, Snowy River.

#### *Graphite.*

Graphite is found in a fairly pure state, but in small quantities only, in Ordovician slates, &c., at Kerrie, near Riddell, in Bourke, and near Wood's Point. In the Ordovician slates of several of the gold-fields, principally Bendigo, Castlemaine and Daylesford, there is a large proportion of graphite; but, as far as known, there are no deposits of commercial value of this mineral.

#### *Salt.*

Salt is of general distribution in the Western and North-Western portions of Victoria, where numerous salt lakes and pans dry up, wholly or partially, during the summer. Large quantities of salt are then collected, bagged, and sent throughout the State, and exported as well.

Salterns have been made near Geelong, in which sea water is impounded, evaporated, and the resulting salt collected.

#### *Mineral Manures.*

The mineral which is principally used as a manure in Victoria is "copi," an impure gypsum (hydrous sulphate of lime). It occurs in enormous quantities on the surface, and for many feet below it in some places, over a large portion of North-Western Victoria. It is simply collected, ground up, bagged and distributed over the different districts where it is used.

Next in importance to "copi" is limestone. This is chiefly burnt for lime, which is then spread over the ground, but the limestone is also, like the "copi," ground up and distributed in its raw state.

Decomposing basalt and volcanic ash of good quality have a distinct value as fertilizers. They have been used as such with great advantage in some places.

The only other mineral likely to be of use as a manure is phosphate of alumina or wavellite, which will be referred to later.

#### *Phosphatic Rocks.*

No phosphate of lime of commercial value is known to occur in the State.

Phosphate of alumina or wavellite is, however, found in several places near Mansfield, interbedded with highly folded rocks, probably of the pre-Ordovician period. The bands of the phosphate of alumina are only a few inches thick, and they are at present being opened up with a view to the utilization of the material as a manure in agriculture.

*Building Stones, Macadam.*

Victoria is especially rich in building stones, but remarkably indifferent or ignorant regarding its wealth of this kind. Among the more useful stones may be mentioned several varieties of red and grey granite, or, more strictly speaking, grano-diorite; porphyry, of various shades of grey, pink, red, green and brown colours; bluish-grey diorite, dacite, trachyte, dolerite and basalt; variously coloured marble; crystalline and non-crystalline limestone; sandstone; slate; and flagstone. They are widely distributed throughout nearly the whole of the State.

The industry is as yet merely in its infancy, and the principal localities whence building stones are obtained are:—Grey granite, at Harcourt, in Talbot, and Cape Woolamai, on Phillip Island; red granite (so-called syenite), at Gabo Island, near Cape Howe; porphyry, at Mount Cudgewa, in Benambra; basalt, at Footscray and Malmesbury; non-crystalline limestone, at Waurin Ponds and Batesford, near Geelong; sandstone, at Bacchus Marsh and the Grampians, near Stawell; slate and flagstone, at Castlemaine and Gisborne.

The remaining kinds of rocks previously mentioned have not yet been used for building purposes to any extent.

There is an exceptionally wide field of expansion for this industry.

Laboratory experiments have shown that decomposing basalt can be easily fused into a good dark glass, suitable for paving, channelling, and other purposes. If it can be cheaply decolourized there is a possible wide application for its use.

For road purposes as macadamizing, kerbing, channelling, asphalt-ing, great quantities of the Younger and Older Cainozoic basalt and dolerite are broken or crushed in the Melbourne and various other districts. Diorites, porphyries, granites, trachyte, limestones, ferruginous and calcareous grits, &c., make good macadam. They are so used in many districts.

Beach, lake and river sands and gravels are of widespread occurrence, and of varying grades of coarseness. These are very largely used as top dressings to roads and in the manufacture of mortar and cement.

Ferruginous grits are found in many districts among the Cainozoic sediments, and make very serviceable covering to roads with light traffic. Under the action of the weather the material becomes cemented together, and forms a firm surface.

In many parts of Southern Gippsland and the Otway, the Jurassic mudstones, shales and fine sandstones are burnt to a certain extent, and used as dressing to roads. The material sets well, and forms a splendid surface for light traffic.

*Marble.*

Marble is the crystalline form of limestone, due to its metamorphism. It occurs among strata of Silurian age in several places in the valley of the Thomson River, Walhalla district; and near the source of the Indi River, near Omeo, in the North-Eastern district; while crystalline limestone, which has not been quite so much changed by metamorphism, occurs at Lillydale, near Melbourne, Waratah Bay, Mitta Mitta River, Tyers River (Central Gippsland), and Mansfield. The marble near Omeo is a handsome stone, very varied in colour and character. Some of it is white, of regular and moderately fine texture, and suitable for statuary purposes; other varieties are of various shades of grey, red and pale green. In some cases the fossils are clear and distinct, standing out prominently when polished, and giving to the rock a handsome appearance.

The marble from Marble Creek, Thomson River, near Toongabbie, is chiefly of good grey colour and crowded with fragments of the stems of encrinites. It takes a good polish, when the fossils are displayed to great advantage. Though the localities, especially the Omeo one, are rather remote and not easy of access, it is a matter for surprise that the stone has not yet been commercially raised. It is eminently suitable for monumental and all kinds of decorative and sanitary purposes. Steps are now being taken to bring these marbles before the public, and it is earnestly to be hoped that the attempt will be successful, for at present a great source of wealth lies undeveloped.

*Wood Opal, Common Opal, Precious Opal.*

This mineral—hydrous silica, stained in streaks, patches and bands of various shades of yellow, brown, red, grey, white and black by impurities, principally oxides of iron—occurs in a number of localities. Wood opal (the mineral in which the original ligneous tissue has been replaced by hydrous silica) occurs among the gravels and sands of old river beds in various parts of the State, such as at Omeo, Dargo, Beechworth, deep leads of the Loddon system, &c.

Common opal is found in large lumps and pieces in the basins of the Buchan, Murrindal and Snowy Rivers, Eastern Gippsland. Some of this material has rich and variegated colouring, and is capable of taking a good polish. Both kinds of opal would make very pretty ornaments, much less liable to scratching than those of kauri gum, and equally as pretty as it, if not more so. They are not, however, yet used for that purpose.

Precious opal has been found in the Beechworth district, but it is very rare.

*Jasper.*

This is a non-crystalline form of silica. It occurs as beds in various places, such as at Toolleen and Heathcote, in Rodney; Dookie, near Benalla; Waratah Bay; Macallister River; and Buchan, Eastern Gippsland, &c., among pre-Ordovician strata. As pebbles, it occurs in the deposits of streams traversing these districts, or among

glacial deposits and the deposits derived from them. It is usually of red, brown and greenish-grey colours, and is very suitable for manufacture into sanitary fittings and embellishments, ornaments, decorative panels, &c., but it is not yet devoted to any of such purposes.

### *Serpentine.*

Serpentine is a mineral and rock of green colour, which is found among pre-Ordovician rocks in small quantities in the Wannon district, Western Victoria; Waratah Bay, Southern Gippsland; Howqua River, in Wonnangatta; and in the Wellington Valley, Northern Gippsland. The material is valuable for various ornamental purposes, such as mantelpieces, the fittings of bath-rooms, &c. As yet known in this State it is not of commercial value, except for small ornaments and jewellery.

### *Abrasive, Moulding, Glazing, Cleansing Materials.*

**Abrasive material.**—Many of the sandstones occurring in the Devonian and Carboniferous formations of East-Central Victoria; near Bacchus Marsh, in Bourke; and the Grampians, in Western Victoria, are well suited for grindstones, scythe stones, &c., but they are not yet utilized for those purposes.

Cherts and quartzites occur in great masses in pre-Ordovician and Older Cainozoic strata, and can be utilized for abrasive purposes after being crushed. Diatomite, also, referred to under its own heading, can be used in this way.

Polishing powder is obtained by crushing certain felspathic dyke-rock, near Melbourne, and is found to be of very good quality, and suitable for cutlery, brasses, &c.

Massive dense mudstones, from which first-class hones can be prepared, occur in many parts of the Silurian series of strata, east of the meridian of Melbourne, especially in the Wandong district, on the North-Eastern railway.

**Moulding material.**—Fine sands, suitable for iron moulding, occur among the freshwater beds of the Cainozoic period in Southern Gippsland; the La Trobe Valley; at Rowsley, near Bacchus Marsh; and elsewhere. At Rowsley there is a bed of especially good sand of fine grade, which is not being utilized. The same may be said of a splendid sand occurring in the Cainozoic deposits at Mildura, North-Western district.

**Glazing material.**—Felspathic rock occurs in the form of dykes in various parts of the district east of and near Melbourne, and at a depth where not decomposed, the material should be especially valuable for glazing purposes. Principally in the eastern part of Victoria, there are large masses of felspar-porphry, which are probably of value as glazing material. Felspar occurs also in large

and numerous crystals in granitic masses, notably in the Strathbogie Ranges, near Mansfield. It is not, however, being used.

The purest limestones, silica, kaolin and barytes are also of value as glazes, but they do not as yet seem to be devoted to that purpose.

Cleansing material.—Fuller's Earth has recently been found near Trentham, but has at present none other than a local use. A large deposit of it occurs at Clifton Springs, near Geelong, and it is also recorded from Lillydale.

### *Pottery Clays.*

Kaolin (hydrous silicate of alumina, or pure clay) is found in many parts of the State. There are four types of occurrence, viz. :—

- (1) As the completely decomposed felspar constituent of granite in decomposed granite masses.
- (2) As decayed felspathic rock of dykes.
- (3) As beds in river and lake deposits of the Cainozoic period.
- (4) As decayed shales and claystones of the Ordovician and Silurian periods.

Kaolin is being commercially raised in several localities. At Lal Lal, near Ballarat, where it is found in decayed granite, it is being mixed with its associated quartz and made into splendid fire-bricks. There is a similar occurrence at Bulla, near Melbourne, which was worked many years ago for kaolin, obtained by puddling and settling in tanks; but nothing is being done there now. At Egerton, in Grant, very fine material is found in a decomposed felspathic dyke. It is being mined, and a good deal of it is being exported.

A considerable quantity of good material is being produced at Knowsley, near Bendigo, and a large deposit, also of good quality, occurs in Cainozoic lacustrine deposits near Bacchus Marsh, where it is being mined and sent to Melbourne.

At Epsom, near Bendigo, a very fine clay in Cainozoic strata is being utilized in the manufacture of chinaware, and inferior clays in the coarser kinds of pottery. At Stawell, in similar strata, white clays of excellent quality occur. Good kaolin also occurs at Traralgon, Murtoa, Dunolly and Gordon.

Brick and Tile Clays.—These clays have a very wide distribution. There are immense quantities of them in the Silurian and Ordovician mudstones and claystones that occupy vast areas of the State. In various parts of the Melbourne district these rocks are ground up, puddled and made into first-class bricks, drain pipes, tiles, &c. In numerous other localities sedimentary clays of the Cainozoic period occur in great quantities. They are merely excavated, puddled and made into bricks of good quality.

At Mitcham, Tunstall and Brunswick, near Melbourne, good clay, obtained from decayed Silurian claystones and felspathic dykes, is manufactured into white tiles, which are largely used for ornamental building purposes. Various other kinds of pottery are also made here.

Throughout the Jurassic coal-bearing areas of Southern Gippsland, the Otway Ranges, and the Wannon district, there are numerous beds of bluish-grey and olive-grey mudstones, which, after crushing, can be made into splendid bricks and tiles, but though there is a good opening for profitable local enterprise in this direction, no industry has yet sprung up in it. These bricks should not be burnt at a greater heat than about 1200 deg. C., since the material possesses sufficient alkalies to cause fusion at temperatures above 1250 deg. C.

Fire-clay.—Clay, suitable for the manufacture of fire-bricks, occurs among the freshwater beds of the Lower Cainozoic sediments in various parts of Southern and Central Gippsland, and numbers of other districts, but it has not yet come into use, owing partly, it is said, to the high railway freights.

Fire-bricks of good quality are made at South Yarra, Melbourne, from the decayed granite material of a dyke, and at Lal Lal, from decayed granite of a large mass.

Near Bacchus Marsh, clays of fine quality are being raised and manufactured into good fire-bricks, tiles, pipes, &c.

#### *Lime, Cement and Plaster.*

Lime of excellent quality is obtained by burning the Silurian marine crystalline limestone at Lillydale, Waratah Bay and Mansfield; also the early Cainozoic marine non-crystalline limestones at Fyansford, Batesford and Waurin Ponds, in the Geelong district; Maude, on the Moorabool River; Portland and Timboon, &c., in the Western district. The Cainozoic limestones are interbedded with nearly horizontally disposed clays and sands. They are highly fossiliferous, and make excellent lime for ordinary purposes, while some of them yield good hydraulic lime and cement.

Freshwater limestone of the late Cainozoic period occurs near Lara (Geelong district) and Bacchus Marsh, where it is converted into a good hydraulic lime.

Selenite (the crystalline form of gypsum) is widely distributed among the Cainozoic clays and marls over many parts of the coastal districts. It occurs in scattered crystals, and in bunches of crystals, and yields a very pure plaster of Paris; but, though available for local uses on a small scale, it is not commercially valuable.

*Pigments and Paints.*

Throughout the Silurian and Ordovician strata in the State there are claystones, shales and mudstones of various shades of grey, red, pink, yellow and brown which are specially suitable for and make good pigments, both in their raw state and on roasting, when they change their colours. Among the Jurassic strata also there are mudstones and shales, principally of greenish-grey colours when raw, and brick-red when roasted, which are of value as pigments; while among the Cainozoic clays some of good colour, such as fawn, lilac, bluish-grey, and of good quality, occur. Beyond a systematic endeavour at Mulgrave, near Melbourne, to place these pigments on the market, little has been done in this most promising industry.

Among the volcanic ash deposits that cover large areas of Southern and Central Gippsland, red and brown ochreous clays occur. They are suitable for preparation into first-class pigments, while among these ash beds are large deposits of hæmatite and limonite (oxides of iron), which by grinding can be used as paints of splendid quality.

From roasted pyrites obtained from the concentrates of mines a very serviceable purplish-red or brownish-red paint is manufactured at Ballarat, and has a general use throughout the State.

*Black Coal.*

Coal of first-class quality for steaming and household purposes occurs in the Jurassic coal measures in Southern Gippsland, the Otway Ranges and the Wannon district.

The seams of workable thickness, ranging from 2 ft. 3 in. to 6 ft., occur, so far as known, in the Cape Paterson, Korumburra, Jumbunna, Outtrim, Kilcunda, Woolamai, Coalville, Mirboo and Foster districts, all in Southern Gippsland. In the first four localities mines are now being worked. The black coal mining industry is, however, greatly handicapped by the extremely faulted character of the strata containing the coal. This necessarily greatly increases the cost of mining it, while the cost of transport to Melbourne presses rather heavily against the development of the industry, especially in the districts without railway communication.

Though these coals are not, as a rule, specially suitable for the manufacture of coke, the coal in a 3 feet seam at Kilcunda yields a coke of splendid quality and admits of development into a promising industry.



*Brown Coal and Lignite.*

The deposits of these fuels in Victoria are of enormous proportions, one district possessing the thickest known masses in the world. They occur among the gravels, sands and clays of the Cainozoic period—principally the Eocene freshwater or estuarine series—over large areas in Southern and Central Gippsland, Mornington Peninsula, Werribee Plains, Gellibrand, Barwon and Moorabool basins. At Morwell, in the Latrobe valley, Central Gippsland, several beds, with a total thickness of over 800 feet out of an aggregate of 1,110 feet of brown coal and associated deposits, have been proved by a bore.

At Altona, near Melbourne, there are two beds, totalling 75 feet in thickness, which thicken to 134 feet near Laverton, some two miles to the south-west, and thin again to 33 feet, some five miles further south-west. The material in most places is of excellent quality, but requires special grates of fine bars, since, if burnt in ordinary grates, it is, owing to its combustibility and friability, rapidly consumed.

Several attempts have been made to manufacture briquettes, and place the fuel in that form on the market. They have, however, resulted in failure, owing probably to several causes, such as cost of production, want of an effective method of manufacture, of management, and of public support.

Mining operations have been carried on at several places, viz., near Morwell (not the thick deposit), Dean's Marsh, and Altona, where the coal was extracted and sold in its raw state but the industry has not been established.

At the present time preliminary work is being done at Altona, and reported to be in prospect at Morwell, with a view to the generation of electrical energy for transmission to Melbourne. There seems no reason to doubt the success of these ventures, assuming there be capable management and proper public support. When one bears in mind the importance of the brown coal industry to other countries of the world, especially Germany, it is a matter for wonderment that these deposits of such great value to the State should for so long have remained undeveloped.

Besides the value of brown coal as a fuel, its use as a base for deodorants should not be overlooked.

Thin beds of lignite and brown coal occur also in numerous localities in Victoria among younger Cainozoic deposits.

In the preceding remarks it has been practicable to give only the merest outline of the mineral resources of Victoria. It will be recognised that there are great probabilities of future discoveries of other valuable mineral deposits in the thousands of square miles of country as yet unprospected; while the development of many of the known deposits will probably take place in a few years.

## MINING DEVELOPMENT.

Expenditure  
in aid of  
mining  
industry.

In addition to the sums annually voted, £271,665 have been apportioned from loan receipts towards mining enterprise. Of this sum £83 were expended during 1905-6, making a total of £271,022 expended up to 30th June, 1906, and leaving £643 yet to be expended. Particulars of the amount spent are shown in the following statement:—

LOAN MONEY EXPENDED ON MINING ENTERPRISE TO  
30TH JUNE, 1906.

Loan Act.	Allo- cated under Act.	Purpose for which Allocation was made.	Amount Expended.
			£
1451	1461	Advances to companies: draining .. ..	58,523
"	"	Construction of roads and tracks .. ..	42,390
"	"	Plant for testing metalliferous material .. ..	11,922
"	"	Construction of races and dams .. ..	5,708
"	"	Advances to miners for prospecting .. ..	17,011
"	"	Disseminating information: exhibition expenses .. ..	3,368
"	1806	Removal and re-erection of testing plants .. ..	436
1564	1566	Draining: advances to companies for pioneer work .. ..	18,008
"	"	Construction of races and dams .. ..	249
"	"	Advances to miners for prospecting .. ..	3,152
"	"	Purchase of Cyanide process patent rights: equipment of Schools of Mines; developing pigments, &c. .. ..	23,043
"	1882	Advance to mining company for pioneer operations .. ..	230
1623	1566	Draining: advance to company, and expenses .. ..	3,862
"	"	Construction of roads and tracks .. ..	20
"	"	Construction of races and dams .. ..	704
"	"	Advances to miners for prospecting .. ..	1,562
"	"	Disseminating information and equipping Schools of Mines .. ..	2,860
"	1882	Advances to miners, companies: draining and track- cutting: and disseminating information .. ..	1,690
1659	1566	Advances to companies: draining .. ..	18,768
"	"	Construction of roads and tracks .. ..	9,247
"	"	Construction of races and dams .. ..	810
"	"	Advances to miners for prospecting .. ..	4,381
"	"	Disseminating information: Schools of Mines equip- ment, &c. .. ..	5,998
"	1767	Purchase and equipment of building for metallurgical work .. ..	40
1753	1566	Advances to companies: draining .. ..	4,650
"	"	Construction of roads and tracks .. ..	1,634
"	"	Construction of races and dams .. ..	682
"	"	Advances to miners for prospecting .. ..	55
"	"	Disseminating information: Schools of Mines equip- ment .. ..	540
"	1767	Purchase and equipment of building for metallurgical work .. ..	630
1800	1806	Purchase and equipment of building for metallurgical work .. ..	1,777

LOAN MONEY EXPENDED ON MINING ENTERPRISE TO 30TH JUNE, 1906  
—continued.

Loan Act.	Allo- cated under Act.	Purpose for which Allocation was made.	Amount expended.
1800	1806	Advances to companies: draining .. .. .	£ 20,032
"	"	Construction of roads and tracks .. .. .	4,245
"	"	Construction of races and dams .. .. .	107
"	"	Advances to miners for prospecting .. .. .	1,670
"	"	Disseminating information: Schools of Mines equip- ment .. .. .	1,018
		Total .. .. .	271,022

The following table gives particulars of the expenditure from Revenue in aid of the mining industry during each of the last five financial years:—

## EXPENDITURE ON MINING: 1901-2 TO 1905-6.

—	1901-2.	1902-3.	1903-4.	1904-5.	1905-6.
	£	£	£	£	£
Mining Department ...	36,305	35,815	23,702	24,526	} 25,431
Mining boards ...	3,500	3,500	3,500	2,916	
Victorian coal—Allowance to Railway Department on carriage of ...	9,946	5,568	5,099	8,847	10,807
Diamond drills for pros- pecting ....	} 2,546	2,798	{ 4,993	10,823	11,231
Testing plants ...					
Geological and under- ground surveys of mines	5,809	5,245	5,450	5,616	5,469
Miscellaneous ...	1,396	1,035	873	963	777
Total ...	59,502	53,961	45,975	56,355	56,178

The expenditure under the heading Mining Department prior to 1903-4 included also the Water Supply Department. In 1904, however, the departments were separated, and the figures for the three

latter years in the above statement refer solely to the cost of the Mines Department. Yearly grants are also made to Schools of Mines, particulars of which will be found on page 232 of this work.

The following statement shows the manner of occupation of all persons connected with mining industries throughout the State according to the Census returns of 1901:—

### RETURN OF PERSONS ENGAGED IN MINING PURSUITS, 1901.

Persons following Mining Pursuits.	Employers of Labour.		In business on their own Account, but not employing Labour.		Receiving Salary or Wages.		Relative assisting.		Not at work for more than a week prior to Census.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Mines Department officer (not Geologist) .. ..	..	..	..	..	76	3	..	1	..	..
Mining engineer, inspector, surveyor, (not Government) ..	15	..	32	..	90	..	..	..	11	..
Mine, gold (quartz), proprietor, manager, worker ..	216	2	1,567	..	7,747	..	65	..	925	..
„ gold (alluvial), proprietor, manager, worker ..	87	..	4,141	..	4,285	..	107	..	448	..
„ gold (undefined), proprietor, manager, worker ..	35	1	682	..	1,142	..	20	..	213	..
„ (undefined), proprietor, manager, worker ..	79	1	1,165	..	4,264	..	30	..	624	..
„ tin (lode), worker ..	..	..	1	..	..	..	..	..	1	..
„ tin (alluvial), proprietor, manager, worker ..	..	..	9	..	9	..	..	..	1	..
„ silver, proprietor, manager, worker ..	..	..	..	..	2	..	..	..	3	..
„ coal, proprietor, manager, worker ..	10	..	8	..	844	..	..	..	32	..
„ copper, manager, worker ..	..	..	1	..	9	..	..	..	2	..
„ precious stones, manager, worker ..	1	..	3	..	..	..	..	..	1	..
„ expert, amalgamator, diamond drill worker ..	5	..	12	..	56	..	..	..	3	..
„ director, agent, legal manager, clerk, secretary ..	65	..	97	1	334	8	1	1	17	..
Quartz crusher .. ..	17	..	14	..	573	..	1	..	30	..
Pyrites worker, ore roaster ..	2	..	2	..	61	..	..	..	2	..
Cyanide worker, &c. ..	32	..	7	..	170	..	..	..	1	..
Smelter, gold ..	..	..	1	..	3	..	..	..	..	..
„ other ..	..	..	..	..	17	..	..	..	4	..
Quarry proprietor, manager, clerk ..	41	1	51	..	1	..	7	..	..	..
„ man, worker ..	..	..	..	..	734	..	..	..	62	..
Others .. ..	..	..	1	..	..	..	..	..	1	..
Total .. ..	605	5	7,794	1	20,417	11	231	2	2,381	..

Total Males .. .. 31,428

Total Females .. .. 19

GRAND TOTAL .. .. 31,447

The average number of men employed in mining is estimated annually by the Mining Department, and the figures for the seven years ended with 1906 are subjoined:—

NUMBER OF MEN EMPLOYED IN GOLD MINING, 1900 TO 1906.

Year.	Alluvial Miners.	Quartz Miners.	Total.
1900 ... ..	12,836	16,199	29,035
1901 ... ..	12,886	14,891	27,777
1902 ... ..	11,963	14,140	26,103
1903 ... ..	11,058	14,150	25,208
1904 ... ..	10,405	13,926	24,331
1905 ... ..	11,403	13,966	25,369
1906 ... ..	10,951	14,353	25,304

The number of men employed in each mining district in 1906 was: — Ararat and Stawell, 1,425; Ballarat, 5,010; Bendigo, 5,290; Beechworth, 4,452; Castlemaine, 3,987; Gippsland, 1,891; and Maryborough, 3,249.

The following table shows the quantity and value of the metals and minerals produced in Victoria up to the end of 1906:—

TOTAL MINERAL PRODUCTION TO 31ST DECEMBER, 1906.

Metals and Minerals.	Recorded prior to 1906.		Recorded during 1906.		Total Recorded to end of 1906.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Gross. ozs.	£	Gross. ozs.	£	Gross. ozs.	£
Gold .. ..	68,367,403	273,236,500	834,775	3,280,478	69,202,178	276,516,978
Silver .. ..	27,184	7,446	..	..	27,184	7,446
	1,195,804*	186,069*	35,125*	4,980*	1,230,929*	191,049*
	tons.		tons.		tons.	
Coal, black ..	2,514,134	1,388,269	160,631	80,283	2,674,765	1,468,552
" brown ..	48,416	19,582	..	..	48,416	19,582
Lignite .. ..	12,923	3,086	..	..	12,923	3,086
Ore—copper ..	17,470	206,895	..	..	17,470	206,895
" tin ..	15,216	734,512	106	11,644	15,322	746,156
" antimony ..	22,972	177,736	205	..	23,177	180,811
" silverlead ..	793	5,760	..	..	793	5,760
" iron ..	5,434	12,540	..	..	5,434	12,540
Diamonds ..	..	108	..	..	..	108
Sapphires, &c. ..	..	630	..	..	..	630
Gypsum .. ..	11,509	7,259	1,389	348	12,898	7,607
Magnesite ..	6	12	..	..	6	12
Kaolin .. ..	2,572	8,017	383	383	2,955	8,400
Diatomaceous earth	1,608	7,302	280	1,120	1,888	8,422
Building stones, various	..	3,226,755†	..	63,272	..	3,413,937
Limestone ..	..	123,910†	..	..	..	..
Salt (crude) ..	..	34,216†	12,365	9,273	..	43,489
Total .. ..	..	279,386,604	..	3,454,856	..	282,841,460

\* Extracted from gold at the Melbourne Mint. —† From 1866 only. —‡ Record from 1900.

The total quantity of gold raised since the first discovery in 1851 to the end of 1906, amounts to 69,202,178 ounces gross, or 65,097,592 ounces fine, valued at £276,516,978. The value is based on the average value of the gold received at the Melbourne Mint, which in 1906 was £3 18s. 4d. per ounce. The yield of gold for 1906, 834,775 ounces gross, or 772,290 ounces fine, is 25,124 ounces fine, more than the yield of 1905, and has only been exceeded three times since 1876.

Mining  
district  
gold yields.

In the following return will be found the yield of gold from alluvial workings, and from quartz reefs during 1905 and 1906, in each mining district of the State, as estimated by mining registrars:—

GOLD DERIVED FROM ALLUVIAL WORKINGS AND QUARTZ REEFS,  
1905, AND 1906.

Mining District.	1905.			1906.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	oz.	oz.	oz.	oz.	oz.	oz.
Ararat and Stawell ...	11,496	12,156	23,651	8,638	16,261	24,899
Ballarat ...	40,316	105,014	145,331	51,881	112,184	164,065
Beechworth ...	101,439	32,147	133,587	103,514	31,298	134,812
Bendigo ...	12,744	199,721	212,465	9,270	211,917	221,187
Castlemaine ...	34,066	56,139	90,205	32,990	66,396	99,386
Gippsland ..	8,584	65,049	73,633	8,778	88,402	97,180
Maryborough...	46,384	39,385	85,768	38,595	41,672	80,267
Total ...	255,029	509,611	764,640	253,666	568,130	821,796

Deep  
shafts,  
gold  
mining.

At Bendigo thirteen mine shafts had attained great depths by 31st December, 1906, namely, the Victoria Quartz, 4,254 feet; the Lazarus New Chum, 3,777 feet; the New Chum Railway, 4,318 feet; the New Shenandoah, 3,276 feet; the New Chum and Victoria, 3,375 feet; Lansell's 180, 3,354 feet; New Chum Consolidated, 3,099 feet; North Johnson's, 3,500 feet; Great Extended Hustlers, 3,081 feet; the Eureka Extended, 3,060 feet; the Princess Dagmar, 3,040 feet; the Ironbark, 3,250 feet; and the Victoria Consols, 3,000 feet.

Dredge mining and hydraulic sluicing have reached considerable dimensions in recent years, and the following tables show the position of the industry at the 31st December, 1906.

Dredge mining and hydraulic sluicing.

## DREDGE MINING AND HYDRAULIC SLUICING, 1906.

District.	Number of Plants.	Gold won during 1906.	Dividends paid during 1906.*
		oz.	£
Ararat ... ..	1	33	..
Ballarat ... ..	20	11,270	2,025
Beechworth ... ..	44	41,790	36,315
Bendigo ... ..	4	1,611	1,200
Castlemaine ... ..	38	23,724	5,915
Gippsland ... ..	4	2,231	175
Maryborough ... ..	14	4,612	...
Total ... ..	125	85,271	45,630

\* These figures are merely approximate, as such information is not furnished in connexion with some privately-owned plants which are known to pay handsomely.

## DESCRIPTION OF PLANTS.

District.	Bucket Dredges.	Hydraulic Pump Sluices.	Jet Elevators.	Rotary Hydraulic Machine.	Total.
Ararat ... ..	...	1	...	...	1
Ballarat ... ..	4	16	...	...	20
Beechworth ... ..	26	13	5	...	44
Bendigo ... ..	...	4	...	...	4
Castlemaine ... ..	2	35	1	...	38
Gippsland ... ..	4	...	...	...	4
Maryborough ... ..	...	13	..	1	14
Total ... ..	36	82	6	1	125

The number of men employed in connexion with these plants was 2,667, and the wages paid, £200,443.

In addition to the above, twelve plants engaged in gravitation hydraulic sluicing, employing 146 men, produced 4,115 ounces of gold, and paid £10,500 in wages during 1906, and the mining registrars returned an additional 3,500 ounces, won by small parties working under miners' rights.

Value of  
machinery  
on gold-  
fields.

The following is a return showing the value of machinery used in alluvial and quartz mining for the seven years ended 1906 :—

VALUE OF MACHINERY ON GOLD-FIELDS, 1900 TO 1906.

Year.	Approximate Value of Machinery Employed in—		
	Alluvial Mining.	Quartz Mining.	Total.
	£	£	£
1900 ... ..	562,690	1,375,350	1,938 040
1901 ... ..	534,420	1,446 140	1,980,560
1902 ... ..	523,320	1,435,240	1,958,560
1903 ... ..	566,445	1,474,245	2,040,690
1904 ... ..	628,520	1,551,990	2,180,510
1905 ... ..	790,810	1,819,750	2,610 560
1906 ... ..	809,150	1,817,070	2,626,220

Gold-mining  
dividends.

The following return shows the amount paid in dividends in each mining district of the State for the last six years :—

DIVIDENDS PAID BY GOLD MINING COMPANIES IN EACH MINING DISTRICT, 1901 TO 1906.

Mining District.	Amount Distributed.					
	1901.	1902.	1903.	1904.	1905.	1906.
	£	£	£	£	£	£
Ararat and Stawell ...	13,353	13,900	15,105	10,167	102	...
Ballarat ... ..	101,650	114,408	123,900	77,315	66,700	62,700
Beechworth ... ..	10,263	18,100	48,159	57,511	70,413	65,599
Bendigo ... ..	184,771	213,4 8	319,370	382,321	228,028	251,727
Castlemaine ... ..	42,250	28,050	15,138	17,240	35,465	37,701
Gippsland ... ..	25,360	46,840	34,700	41,844	28,504	56,897
Maryborough ... ..	50,350	37,400	44,780	37,000	25,219	10,069

Yields and dividends for the whole State for the last seven years are shown below :—

YIELDS AND DIVIDENDS : 1900 TO 1906.

Year.	Value of Gold Produced.	Dividends Paid.
	£	£
1900 ... ..	3,190,940	453 333
1901 ... ..	3,102,753	427,997
1902 ... ..	3,062,028	472,136
1903 ... ..	3,259,483	601,152
1904 ... ..	3,252,045	623,398
1905 ... ..	3,173,744	454,431
1906 ... ..	3,280,478	484,693



The dividends paid in the years mentioned range from 14 to 19 per cent. of the gold produced, the average for the seven years being about 16 per cent.

The following table summarizes the production of gold in Australasia from 1851, the year of its first discovery. Prior to 1898, Victoria was almost invariably the leading gold-producing State of the group, but since then Western Australia has taken first place. The following is a statement of the quantity recorded as having been raised in the respective States at different periods:—

Gold raised  
in Austral  
asia.

### GOLD RAISED IN AUSTRALASIA, 1851 TO 1906.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.*	Western Australia.	Tasmania.	New Zealand.
	gross ozs.	gross ozs.	gross ozs.	gross ozs.	gross ozs.	gross ozs.	gross ozs.
1851-60	23,334,266	3,280,963	75,000	..	..	..	35,845
1861-70	16,276,566	3,542,912	250,000	..	..	3,504	5,507,004
1871-80	10,156,297	2,251,666	3,187,855	84,593	..	180,178	4,009,345
1881-90	7,103,448	1,164,452	3,925,620	209,275	46,967	397,983	2,265,616
1891-00	7,476,038	2,958,295	7,358,128	355,208	5,870,662	605,519	2,788,398
	64,346,612	13,198,288	14,796,604	649,076	5,917,629	1,187,184	14,606,208
	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.
1901 ..	730,453	216,888	598,382	28,951	1,703,416	69,491	412,876
1902 ..	720,866	254,435	640,463	24,082	1,871,037	70,996	459,406
1903 ..	767,297	254,260	668,546	22,269	2,064,801	59,891	461,648
1904 ..	765,600	269,817	639,151	17,925	1,983,230	65,921	467,897
1905 ..	747,166	274,267	592,620	20,447	1,955,316	73,540	492,955
1906 ..	772,290	253,981	544,636	14,077	1,794,547	60,023	534,617
	4,503,672	1,523,654	3,683,798	127,751	11,372,347	399,862	2,829,390

\* Quantity received at Melbourne and Sydney Mints.

The figures in this table have been revised since last publication, and the yields since 1900 are now given in fine ounces, thus making an accurate comparison possible. The total production of Australasia from 1851 to 1900, inclusive, amounts to 114 $\frac{3}{4}$  million ounces (gross), more than half of which was produced in Victoria. The Australasian production for the six years, 1901 to 1906, amounts to about 24 $\frac{1}{2}$  million ounces (fine), to which Western Australia contributed over 11 $\frac{1}{2}$  million ounces.

The total production of gold and silver for all countries since 1860, and the leading gold and silver producing countries in 1905, together with the approximate stocks of gold, silver, and paper money in the principal countries at the close of 1905, as set out in the following tables, have been extracted principally from the annual

World's pro-  
duction of  
gold and  
silver.

report issued in 1906, by the Director of the United States Mint. Since 1872, the figures are those of the Bureau of the Mint, and have been compiled from information furnished by foreign Governments, and revised from the latest data. The information contained in the fourth table, relating to the coinage of gold and silver, has been taken from the report of the Director of the British Mint:—

WORLD'S PRODUCTION OF GOLD AND SILVER SINCE 1860.

Year.	Gold.		Silver.	
	Ounces— Fine.	Value.	Ounces— Fine.	Value— Commercial.
		£		£
1860 to 1869 ... ..	61,314,500	264,059,200	378,311,600	105,151,400
1870 to 1879 ... ..	52,764,400	227,236,800	628,717,300	161,850,700
1880 to 1889 ... ..	51,405,100	221,383,000	921,103,100	200,523,200
1890 to 1899 ... ..	95,081,700	409,481,900	1,568,876,900	238,928,600
1900 ... ..	12,315,100	53,036,700	173,591,400	22,422,200
1901 ... ..	12,698,100	54,686,000	173,011,300	21,626,200
1902 ... ..	14,313,700	61,416,600	175,102,300	19,354,800
1903 ... ..	15,768,400	67,908,700	167,937,900	18,893,100
1904 ... ..	16,755,900	71,912,700	168,390,200	20,347,200
1905 ... ..	18,202,600	77,319,200	157,340,000	19,722,000
Total ... ..	350,619,500	1,508,440,800	4,512,382,000	828,819,400

WORLD'S PRODUCTION OF GOLD AND SILVER—PRINCIPAL COUNTRIES, 1905.

Country.	Gold.		Silver.	
	Ounces— Fine.	Value.	Ounces— Fine.	Value— Commercial.
		£		£
Africa ... ..	5,482,300	23,287,600	619,600	77,700
Australasia ... ..	4,156,300	17,653,600	12,561,600	1,574,600
Austria-Hungary ... ..	118,900	505,000	1,860,200	233,200
British India ... ..	563,800	2,395,000	...	...
Canada ... ..	700,800	2,976,800	5,974,900	748,900
Germany ... ..	3,200	13,700	5,820,900	729,600
Japan ... ..	161,100	678,200	2,409,900	302,100
Mexico ... ..	738,300	3,136,000	54,652,900	6,850,600
Peru ... ..	22,900	97,100	5,169,700	648,000
Russia ... ..	1,078,400	4,580,600	205,000	25,700
United States ... ..	4,265,700	18,119,900	56,101,600	7,032,100
Other Countries ... ..	910,900	3,875,700	11,963,700	1,499,500
Total ... ..	18,202,600	77,319,200	157,340,000	19,722,000

APPROXIMATE STOCKS OF MONEY IN THE PRINCIPAL COUNTRIES OF THE WORLD AT THE CLOSE OF 1905. World's stocks of money.

Country.	Value of—		
	Gold.	Silver.	Uncovered Paper.
	£	£	£
Argentina ...	20,549,000	*	60,269,000
Austria-Hungary ...	63,146,000	21,597,000	20,097,000
Belgium ...	6,267,000	5,076,000	22,994,000
British Empire—			
Australasia ...	29,672,000	1,253,000	*
Canada ...	10,911,000	1,377,000	13,377,000
India ...	56,920,000	124,073,000	6,658,000
South Africa ...	10,583,000	4,110,000	*
United Kingdom ...	114,888,000	22,994,000	23,960,000
Egypt ...	17,877,000	3,082,000	*
France ...	212,185,000	84,475,000	24,288,000
Germany ...	188,513,000	43,090,000	43,953,000
Italy ...	38,940,000	5,754,000	32,220,000
Japan ...	14,364,000	8,898,000	20,199,000
Mexico ...	1,767,000	11,672,000	*
Netherlands ...	8,425,000	11,117,000	11,117,000
Russia ...	175,670,000	16,829,000	*
Spain ...	15,227,000	35,693,000	23,939,000
Turkey ...	10,274,000	8,219,000	*
United States ...	291,955,000	141,128,000	119,614,000
Other Countries ...	44,139,000	102,188,000	308,004,000
Total ...	1,332,272,000	652,625,000	730,689,000

\* No information.

## WORLD'S COINAGE OF GOLD AND SILVER DURING THE YEAR 1906.

World's coinage.

Country.	Gold.	Silver.
	£	£
United Kingdom ...	12,589,700	1,822,400
Australasia ...	11,474,700	...
India (a) ...	...	13,334,300
British Colonies and Dependencies (b) ...	...	214,100
Austria-Hungary ...	1,519,600	170,700
France and Tunis ...	13,277,600	130,000
Germany and German East Africa ...	8,612,400	3,211,700
Japan ...	1,538,500	1,511,800
Mexico ...	4,890,300	902,200
Russia ...	...	904,300
Turkey ...	3,329,300	151,400
United States and Philippines (a) ...	11,042,100	999,000
Other Countries ...	436,100	4,224,400
Total ...	68,710,300	27,576,300

(a) Financial Year, 1905-6.

(b) Inclusive of coins struck at Calcutta and Bombay (during the Financial Year, 1905- and at the "Mint," Birmingham.

Coal production. Victoria:— The following return shows the total quantity of coal raised in

### BLACK COAL RAISED TO 31ST DECEMBER, 1906.

Year.	Tons.
Prior to 1876 ... ..	5,831
From 1876 to 31st December, 1890 ... ..	49,249
1891 ... ..	22,834
1892 ... ..	23,363
1893 ... ..	91,726
1894 ... ..	171,660
1895 ... ..	194,227
1896 ... ..	226,562
1897 ... ..	236,277
1898 ... ..	242,860
1899 ... ..	262,380
1900 ... ..	211,596
1901 ... ..	209,329
1902 ... ..	225,164
1903 ... ..	64,200
1904 ... ..	121,741
1905 ... ..	155,135
1906 ... ..	160,631
Total ... ..	2,674,765

Brown coal raised to date, 48,416 tons.

Many attempts were made to develop the coal industry of the State prior to 1889, but a great impetus was given in that year by the constitution of a Royal Commission, which was appointed to inquire into and report upon the best means of developing the industry. Several true coal seams, situated in various localities, chiefly in Gippsland, had been discovered, and were brought under the notice of the Commission. In 1890, five diamond drills were employed, and seams were worked at Boolarra and Korumburra, and, in 1891, at Jumbunna. Coal mining at the latter two places was immediately begun, and has been actively carried on ever since. The principal companies concerned in the industry are the Outtrim-Howitt Company, the Jumbunna Company, and the Coal Creek Proprietary Company.

Output of collieries. There were seven collieries working at the end of 1906, the output of each for that year being as follows:—

### OUTPUT OF BLACK COAL COMPANIES, 1906.

Company	Tons.
Outtrim-Howitt ... ..	74,812
Jumbunna ... ..	64,222
Coal Creek Proprietary ... ..	13,214
Silkstone ... ..	3,977
New Extended Co-operative ... ..	2,186
Strzelecki ... ..	2,000
San Remo ... ..	220
Total ... ..	160,631

No dividends were paid during 1904, 1905, and 1906.

There was an increase in the number of miners employed in coal mining in 1906, as compared with the preceding three years. This will be seen by the following figures:—

NUMBER OF COAL MINERS EMPLOYED, 1900 TO 1906.

Year.			Number of Miners at Work.
1900	...	...	807
1901	...	...	877
1902	...	...	1,303
1903	...	...	377
1904	...	...	589
1905	...	...	640
1906	...	...	693

These figures include men engaged in mining for brown coal.

In 1903, from January up to the end of the year, the coal miners of Korumburra, Outtrim, and Jumbunna were on strike. The small number employed in 1903 was owing to the difficulty of obtaining men in place of the strikers, and to the interruption of trade caused by the strike. The strike was responsible for the reduction in output from 225,164 tons in 1902 to 64,200 tons in 1903. The industry appears to be gradually recovering since the termination of the labour trouble, but the production of 160,631 tons in 1906 is lower than that of any year in the period 1894-1902.

In consequence of the labour troubles, and depression in the coal industry, a Royal Commission was appointed at the end of 1905 to inquire into—

Royal  
Commission  
on  
the coal  
industry.

- (1) The conditions under which miners are engaged to work in the coal mines of Victoria.
- (2) The wages paid to the said miners, and the conditions under which they labour.
- (3) The regulation of the selling price of coal, and generally as to the circumstances connected with the industry of coal mining in Victoria.

The report states that the general conditions of employment in the mines are unsatisfactory, that the ruling wages are inadequate remuneration for the work, and that the ventilation in all the mines is inefficient, and in some cases defective. It is recommended that a board somewhat on the lines of the Wages Boards be appointed to frame conditions, terms, and rules of employment, and also for the purpose of settling differences between managers and men; that the minimum wage for efficient and capable miners be not less than 8s. 4d. per shift of eight hours; that attention be directed to the improvement of the ventilation in all the mines; and that a coal Mines Bill be submitted to Parliament.

The present depression is stated to be due to labour troubles; difficulties through faults, displacements, and thin seams; the low selling price of coal; insufficient capital to thoroughly develop the areas under lease, and the neglect of the companies to provide a reserve fund during the period of prosperity. To further develop the industry, the Commission recommend that the Government, for five years from the 1st January, 1908, give a bonus of 6d. per ton to any company whose production is 20 per cent. more than its average output during the quinquennium, 1898-1902, and that the bonus be not paid on that portion of the production which exceeds an increase of 20 per cent. on the average annual output as stated. In the case of the three smaller companies, it is recommended that the bonus be calculated upon their output during 1905. The Commission also recommend that the companies reserve 10 per cent. of their net profits for the purpose of creating a fund for exploratory and developmental work; that the prices for Victorian coal supplied to the Railways during the next five years be not less than 12s. 6d. per ton for the best, and 11s. 6d. per ton for the second quality; that no freight higher than a half-penny per ton per mile be imposed, with a concession in freight for the small coal as compared with the large. Manufacturers are urged to purchase a proportion of their requirements from Victorian mines, in order to encourage an industry of such great importance to them. Attention is also directed to the necessity of reserving timber supplies for future requirements of the mines, and the companies are recommended to equip their mines with the most suitable appliances in coal-cutters and other labour-saving machinery.

The following statement shows the value of the local output, and for comparison, the quantity and value of black coal imported in the last seven years:—

Coal  
produced  
and  
imported

BLACK COAL PRODUCED AND IMPORTED, 1900 TO 1906.

Year.	Raised in State.		Imported.		
	Quantity	Value.	Quantity.	Value.	
				Official.*	Actual.†
	tons.	£	tons.	£	£
1900	211,596	101,599	690,567	403,723	578,350
1901	209,329	147,191	710,918	446,058	595,394
1902	225,164	155,850	656,656	428,904	533,533
1903	64,200	40,818	796,407	450,781	623,852
1904	121,741	70,208	743,470	412,765	539,016
1905	155,135	79,035	745,477	387,069	475,242
1906	160,631	80,283	917,392	475,806	567,638

\* Value according to Customs Returns which is the invoice value in New South Wales as given by importers.

† Estimated value found by adding to cost at Newcastle the actual freight, insurance, primage, &c.

The local production and imports of coal amounted to about 900,000 tons in each year from 1900 to 1905, but in 1906 they reached 1,078,000 tons, the increase occurring in the imports.

The quantity of coal raised in the various States and New Zealand back to the date of the earliest records is given below. There is no record of any coal mining being done in South Australia. Coal raised in Australasia.

COAL PRODUCED IN AUSTRALASIA.

Year.	Tons of Coal raised in—					
	Victoria.	New South Wales.	Queensland.	Western Australia.	Tasmania.	New Zealand.
Prior to 1878	9,346	17,538,869	507,226	..	92,176	709,931
1878 to 1882..	13	8,503,937	305,692	..	54,010	1,408,893
1883 to 1887..	7,951	13,902,101	911,416	..	59,554	2,506,631
1888 to 1892..	83,967	17,738,842	1,444,669	..	216,882	3,179,846
1893 to 1897..	920,452	18,982,101	1,587,973	..	184,391	3,785,485
1898 to 1902..	1,151,329	26,721,213	2,440,078	434,716	242,114	5,566,597
1903	64,200	6,354,846	507,801	133,000	51,805	1,420,193
1904	121,741	6,019,809	512,015	138,550	61,612	1,537,838
1905	155,135	6,632,138	529,326	127,364	50,464	1,585,756
1906	160,631	7,626,362	606,772	149,755	..	1,729,536

NOTE.—For details of single years see previous issue of this publication.

Coal Pro-  
duction of  
the World.

The total known coal production of the world (exclusive of brown coal and lignite) in 1905 was about 840 million tons (of 2,240 lbs.).

The following return shows the production and consumption of coal in the principal coal-producing countries of the world.

### COAL PRODUCED IN VARIOUS COUNTRIES, 1905.

Country.	Production.	Value per ton at Collieries.	Excess of Imports (+) or Exports (-)	Number of Men Employed under and over ground.
Australasia—	Tons.	s. d.	Tons.	
Victoria ... ..	155,135	10 2	+ 701,300	634
New South Wales ... ..	6,632,138	6 1	- 3,450,500	14,137
Queensland ... ..	529,326	5 10½	+ 20,000	1,223†
Western Australia ... ..	127,364	8 8	+ 152,100	383†
Tasmania ... ..	50,464	9 8	+ 62,300	166
New Zealand ... ..	1,585,756	10 7	+ 46,200	3,269
Austria-Hungary ... ..	13,530,000	6 11¼*	+ 5,860,000	66,072‡
Belgium ... ..	21,506,000	10 8*	- 1,845,000	134,980
Canada ... ..	7,836,000	9 3	+ 5,193,000	15,736*
France ... ..	34,778,000	10 10½*	+ 11,268,000	168,319*
Germany ... ..	119,349,000	8 9½	- 12,634,000	490,604*
Japan ... ..	11,650,000	5 3½*	- 2,164,000	88,330*
United Kingdom ... ..	236,129,000	6 11½	- 67,112,000	837,100
United States ... ..	350,821,000	5 8	- 7,541,000	594,768*

NOTE.—Some of these figures are provisional.

\* Figures for 1904. † Census Figures, 1901. ‡ Austria only.

Stone  
quarries.

There were 82 stone quarries at work in 1906 employing 671 hands, and paying £46,730 in wages. These figures include the hands and wages connected with stone-breaking and tar-paving works carried on in conjunction with quarries, which cannot be separated. The quantity and value of stone raised during the last seven years are set forth in the following table:—



## STONE QUARRIES: 1900 TO 1906.

Year.	Quantity of Stone Operated on—			Approximate Total Value of Stone Raised.
	Bluestone.	Sandstone, Freestone, Slate, &c.	Granite.	
	c. yds.	c. yds.	c. yds.	£
1900 ... ..	252,870	1,263	400	44,513
1901 ... ..	270,126	2,400	1,500	45,447
1902 ... ..	328,485	3,964	3,099	53,395
1903 ... ..	259,012	300	940	42,649
1904 ... ..	295,213	253	444	44,943
1905 ... ..	357,474	300	584	52,649
1906 ... ..	393,873	222	983	58,373

During 1906 the Mining Department had five steam diamond drill machines at work, which put down 14 bores for gold and 10 bores for coal. These gold bores totalled 5,372 feet, and the coal bores 8,026 feet in depth. Three percussion drills having oil for their motive power were also at work, and sunk 75 bores—67 for gold, totalling 4,449 feet in depth, and 8 for water, totalling 1,557 feet in depth. In addition there were 4 hand-boring plants, which sunk 84 bores for gold, totalling 7,781 feet. Diamond drills.

During 1906 Government batteries were located in 20 districts, and treated 3,483 tons of ore, which yielded 2,254 ounces of gold, the net cost to the Mining Department being £2,362. Government Batteries.

There was an increase in the number of accidents in connexion with gold mining during 1906, as compared with previous years back to 1898. In the last twenty years the average number of men employed in gold mining was 27,081, and the average yearly number of accidents 107; 32 persons per annum being killed, and 83 injured, or 1.2 and 3.05 respectively per thousand employed. In coal mining during the eighteen years, 1889-1906, there were 27 persons killed and 99 injured. Mining Accidents

## MANUFACTORIES.

In order to secure uniformity throughout the States of Australia and New Zealand, in tabulating and promulgating statistics relating to manufactories, the Australian Statisticians have agreed to regard as factories all establishments employing, on the average, four hands or upwards, also those with less than four hands, where machinery is worked by power other than manual, making or repairing for the trade, or for export. Where two or more industries are carried on by one proprietor in one building, each industry is, when possible, treated as a separate establishment. Definition of a factory.

The following table shows the number of factories in each class of industry prepared on this basis, the power used, the number of persons employed, the salaries and wages paid to such persons Classification of factories.

# FACTORIES—HANDS, WAGES, AND VALUE OF MACHINERY, PLANT, LAND AND BUILDINGS, 1906.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electricity.	Oil.	Water, Wind, Horses.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>Class I.—Treating Raw Material, the Product of Pastoral Pursuits, or Vegetable Products, not otherwise Classed.</i>													£	£	£
1. <i>Animal Products.</i>															
Boiling down .. .. .	12	12	..	..	..	..	136	6	81	..	..	9.3	5,448	10,924	7,696
Bone milling .. .. .	21	18	1	..	(1)2	..	476	16	91	..	1	8.0	6,334	26,483	15,405
Catgut, sausage skins .. .. .	4	..	..	..	..	..	..	4	99	..	..	12.0	7,097	740	1,979
Tanning, fellmongering, woolwashing ..	84	55	1	(4)3	3	5	1,152	88	1,567	..	2	10.4	123,677	114,951	157,294
2. <i>Vegetable Products.</i>															
Bark milling .. .. .	2	100	37	9	(1)37	1	1,323	196	678	6	6	5.0 7.3	38,003	58,353	120,248
Chaff cutting, corn crushing .. .. .	182														
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>															
Oil, grease, glue .. .. .	5	2	..	1	..	..	44	1	47	..	1	10.6	3,138	5,572	10,080
Soap, candle .. .. .	15	12	1	..	..	..	215	9	499	..	15	12.0	41,635	104,244	96,000

(excluding working proprietors), and the value of the machinery, plant, land, buildings, and improvements for the year 1906:—

*Class III.—Processes relating to Stone, Clay, Glass, &c.*

Brick, pottery, earthenware .. ..	123	36	2	..	4	76	1,527	134	1,537	1	31	8.9	145,725	109,345	169,175
Cement, including cement pipes .. ..	4	2	..	..	1	..	440	1	142	..	1	12.0	10,656	26,549	7,350
Lime .. ..	11	4	..	..	2	..	52	11	131	..	..	9.6	8,236	4,660	8,970
Asbestos .. ..	1	1	3	..	..	..	70	9	581	..	1	11.7	47,083	25,227	24,630
Glass (including bottles) .. ..	9	..	..	..	..	..	..	..	..	..	..	10.5	..	..	..
Glass bevelling .. ..	16	4	2	4	..	..	52	14	167	..	1	11.7	15,507	4,374	20,240
Marble, stone dressing .. ..	37	5	4	5	..	..	107	44	320	..	2	11.4	32,726	11,871	32,156
Filter (stone) .. ..	2	1	1	..	..	..	5	8	73	..	..	8.1	5,575	1,275	6,090
Modelling in plaster, cement, &c. ..	5	..	..	..	..	..	..	..	..	..	..	12.0	..	..	..

*Class IV.—Working in Wood.*

Cooperage .. ..	10	..	2	..	..	..	10	16	66	..	..	12.0	6,293	2,178	11,181
Cork-cutting .. ..	2	..	..	..	..	..	..	..	..	..	..	11.5	..	..	..
Dairy, domestic implements .. ..	4	3	..	3	..	..	47	4	105	..	1	11.3	8,840	5,193	7,255
Bellows .. ..	2	..	..	..	..	..	..	..	..	..	..	11.8	..	..	..
Saw-milling, forest .. ..	112	110	..	..	..	2	1,605	129	1,487	..	1	7.9	105,017	90,305	10,454
Saw-milling—moulding, joinery, &c. ..	101	43	33	17	1	..	2,225	112	1,891	..	8	9.7	169,005	102,399	162,484
Mantelpiece .. ..	6	1	..	..	..	..	14	8	170	..	..	11.6	12,222	1,067	6,050
Woodcarving, turnery .. ..	33	5	(2)15	10	2	..	148	41	175	..	3	11.3	11,697	10,345	25,872

*Class V.—Metal Works, Machinery, &c.*

Agricultural implement .. ..	53	34	(1)5	..	(1)8	1	683	62	1,681	..	4	11.7	148,610	62,808	70,600
Engineering, boiler-making, iron foundry	251	112	(5)91	(7)24	(2)17	1	2,615	331	5,289	..	23	11.5	478,805	445,667	335,419
Railway workshop .. ..	15	9	3	..	..	..	511	..	2,285	..	5	12.0	281,597	164,802	259,414
Cutlery, tool .. ..	13	1	9	2	1	..	47	14	34	..	..	11.5	2,792	5,095	10,330
Nail .. ..	7	5	2	..	..	..	243	4	164	1	1	12.0	14,234	34,405	9,180
Iron safe, door .. ..	3	1	..	..	..	..	4	3	31	..	..	11.9	2,197	940	5,860
Sheet iron, tin (including japanning) ..	60	4	17	(1)3	..	1	131	63	983	..	6	11.6	64,049	42,554	90,137
Oven, range .. ..	10	..	4	2	..	..	38	13	180	..	2	12.0	13,879	3,880	17,564
Pattern .. ..	7	..	2	3	(1)2	..	18	7	27	..	..	12.0	2,260	983	2,673

*Production.*

FACTORIES—HANDS, WAGES, AND VALUE OF MACHINERY, PLANT, LAND AND BUILDINGS, 1906—*continued.*

620

*Victorian Year-Book, 1906-7.*

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—		
		Steam.	Gas.	Electricity.	Oil.	Water, Wind, Horses.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*	
								Working Proprietors.	Employés.	Working Proprietors.	Employés.					
<i>Class V.—Metal Works, Machinery, &amp;c.</i> —continued.																
Meter .. .. .	3	1	1	..	..	..	22	1	80	..	..	12.0	£ 6,103	£ 3,570	£ 4,060	
Spring .. .. .	3	3	..	..	..	..	30	3	55	1	1	12.0	3,266	5,150	6,050	
Brass, coppersmithing .. .. .	47	1	21	17	3	..	162	62	536	..	13	11.6	40,302	26,715	56,839	
Lead, shot, pewter, zinc, &c. ..	4	3	1	..	..	..	225	4	52	..	1	11.9	4,560	7,685	13,060	
Wireworking .. .. .	14	3	5	2	1	..	85	19	201	..	11	12.0	13,713	13,331	21,376	
Metallurgical .. .. .	9	3	..	5	..	1	35	14	20	..	..	9.6	1,193	4,239	4,814	
Smelting .. .. .	2	4	1	..	..	..	97	6	70	..	..	12.0	6,577	10,500	5,750	
Pyrites .. .. .	3											9.6				
Cyanide .. .. .	96	24	1	..	(2)21	15	231	129	566	..	..	9.3	44,965	47,391	5,903	
<i>Class VI.—Connected with Food and Drink, or Preparation thereof.</i> 1. <i>Animal Food.</i>																
Bacon-curing .. .. .	28	26	2	(1)	(2)	..	196	32	301	..	5	10.5	25,606	28,217	35,171	
Butter, cheese .. .. .	221	206	(1) 6	(4) 4	(2) 3	2	1,965	64	1,391	2	33	11.7	116,639	307,935	242,467	
Butterine .. .. .	1											12.0				
Creameries† .. .. .	202	200	..	..	2	..	887									
Meat freezing, preserving .. ..	41	12	(1)	(5)	..	..	1,755	13	508	1	..	9.8	36,818	93,568	198,956	

2. *Vegetable Food, including Products not Foods, but usually associated with the Manufacture of Foods.*

Biscuit .. .. .	4	4	(2)	(2)	..	..	119	5	704	..	358	12.0	52,534	42,946	47,530
Flour .. .. .	64	64	..	..	..	(3)	3,356	44	740	..	4	10.1	80,261	243,149	222,862
Jam, pickle, sauce, vinegar ..	26	18	(3)	(1)	1	(1)	281	17	831	1	439	11.3	63,702	39,541	88,882
Oatmeal, maizena, starch, arrowroot ..	18	3	5	(1)	4	1	841	17	221	..	141	11.3	24,252	68,363	120,313
Macaroni .. .. .	3	..	2	1	..	..	10	2	23	1	13	11.3	1,075	1,675	4,085
Sugar, treacle, refining .. .. .	2	10	(4)	6	(5)	2	946	28	909	1	566	12.0	107,905	122,812	141,338
Confectionery .. .. .	23	..	..	..	..	..	..	..	..	..	..	11.6	..	..	..

3. *Drinks and Stimulants.*

Aerated water, cordial, &c.	..	..	137	69	(144)	(2)	4	(1)	13	4	320	139	931	6	13	10.2	63,377	82,806	138,056
Malt	..	..	18	4	(1)	10	(1)	2	..	..	146	13	150	..	2	10.8	16,108	19,732	113,506
Brewing	..	..	39	38	(2)	(3)	1	..	..	1,012	27	1,001	1	1	11.7	126,352	235,980	487,967	
Distilling	..	..	9	9	..	..	..	..	..	179	7	74	..	..	6.2	2,188	62,871	81,928	
Condiments, coffee, chicory, cocoa, chocolate, mustard, spice, &c.	..	..	11	5	(1)	6	(1)	..	..	485	9	175	..	107	10.2	19,053	27,165	62,535	
Ice	..	..	13	2	..	(1)	1	..	..	311	7	92	1	..	8.6	5,606	22,688	23,369	
Salt	..	..	3	1	1	..	(1)	1	..	54	1	51	..	..	7.4	5,124	4,656	32,292	

4. *Narcotics.*

Tobacco, cigar, snuff .. .. .	12	2	..	(1)	3	..	256	13	790	..	1,043	10.8	111,169	78,522	150,668
-------------------------------	----	---	----	-----	---	----	-----	----	-----	----	-------	------	---------	--------	---------

*Class VII.—Clothing and Textile Fabrics, and Fibrous Material.*

1. *Textile.*

Woollen mill .. .. .	9	8	1	(2)	..	..	2,137	4	720	..	710	12.0	76,901	236,988	104,335
----------------------	---	---	---	-----	----	----	-------	---	-----	----	-----	------	--------	---------	---------

2. *Dress.*

Clothing, tailoring .. .. .	316	..	15	(2)	30	..	155	277	1,487	19	5,513	11.5	360,789	32,083	359,179
Corset .. .. .	4	..	..	..	..	..	..	..	163	2	308	12.0	1,718	93	5,060

footnotes see end of table.

*Production.*

FACTORIES—HANDS, WAGES, AND VALUE OF MACHINERY, PLANT, LAND AND BUILDINGS, 1906—continued.

622

Victorian Year-Book, 1906-7.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electricity.	Oil.	Water, Wind, Horses.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
Class VII.—continued.															
2. Dress—continued.															
Dressmaking, millinery, &c. .. ..	501	..	5	(2)19	..	..	85	34	114	430	7,789 } +102	11.1	£ 219,120	£ 25,818	£ 327,909
Underclothing, shirt .. ..	115	3	(1)13	(1)27	..	..	200	38	154	83	3,229 } +848	11.3	129,313	33,491	122,611
Hat, cap .. ..	32	8	(1)4	(1)11	..	1	243	29	497	7	786 } +32	11.1	77,386	24,588	55,156
Hosiery .. ..	16	..	4	(1)3	..	..	36	9	25	8	330 } +17	10.5	12,805	19,428	15,983
Oilskin, waterproof clothing .. ..	5	..	1	3	..	..	9	5	44	..	181 } +1	12.0	10,524	2,439	18,180
Boot, shoe .. ..	134	4	46	(4)26	1	..	543	169	3,629	8	1,897 } +40	11.1	332,538	99,042	154,394
Fur .. ..	6	..	1	..	..	..	1	6	140	6	12 } +3	11.2	2,903	270	3,220
Umbrella .. ..	8	..	2	4	..	..	6	6	66	1	160 } +2	11.9	11,616	1,270	14,830
Dyeing .. ..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Feather Dressing .. ..	1	2	(1)	..	..	..	25	4	40	..	134 } +11.7	7,913	5,296	10,050	
3. Fibrous Materials and Textiles, n.e.i.															
Rope, twine, mat, bag, and sack .. ..	14	3	2	(1)	..	1	637	18	350	..	266 } +11.4	11.5	30,912	47,499	48,618
Tent, sail, tarpaulin .. ..	9	..	1	3	..	..	7	7	49	..	16 } +11.4	12.0	4,448	932	9,899

*Class VIII.—Books, Paper, Printing, Engraving, &c.*

Printing (including newspapers), paper-bag, lithographic, electrotyping, stereotyping	267	5	(3)	(17)	(2)13	4	1,342	309	4,055	9	752	11.9	480,651	526,401	562,875
Photo lithography .. ..	3	..	1	2	..	..	4	4	43	..	1	12.0	5,586	4,650	3,590
Account-book, stationery, and rubber stamp	19	1	6	(1)2	1	..	204	16	580	..	750	11.1	67,862	67,683	114,465
Ink, printing ink .. ..	6	..	4	..	..	..	29	5	40	..	2	12.0	3,241	1,705	6,874
Paper, strawboard, millboard ..	3	3	..	..	..	..	690	..	164	..	19	9.1	14,128	59,000	33,500
Fancy box, &c. .. ..	15	2	2	5	..	..	36	10	120	1	354	11.5	17,892	8,897	19,265
Die-sinking, engraving, medals, &c. ..	12	..	2	8	1	..	29	20	116	..	1	11.3	10,584	7,110	22,640

*Class IX.—Musical Instruments.*

Organ, pianoforte .. ..	3	..	1	1	..	..	7	3	29	..	..	11.8	2,203	1,312	5,440
-------------------------	---	----	---	---	----	----	---	---	----	----	----	------	-------	-------	-------

*Class X.—Arms and Explosives.*

Ammunition .. ..	1	}	3	..	(1)	(1)1	..	127	2	95	..	233	{	11.6 8.0 12.0 11.8	15,595	44,206	28,282
Blasting powder, dynamite, lithofracteur, &c.	1																
Fireworks .. ..	1																
Fuse .. ..	2																

*Class XI.—Vehicles and Fittings, Saddlery, Harness, &c.*

Coach, carriage, waggon	..	..	253	}	24	15	4	9	1	278	314	2,247	..	12	{	12.0	155,979	44,651	203,325
Carriage lamp	..	..	2		..	..	..	..	..	..	..	..	..	..		11.8			
Cycle	..	..	50	..	..	15	23	..	..	77	42	411	..	9	11.5	25,416	10,725	56,019	
Perambulator	..	..	4	..	..	1	..	..	..	1	5	42	1	..	10.9	3,630	475	3,080	
Saddle, harness	..	..	48	..	..	..	3	..	..	3	50	332	..	32	12.0	26,719	3,039	61,045	
Saddle-tree, saddlers' ironmongery, &c.	..	..	3	..	2	..	..	..	..	10	6	15	..	1	11.9	1,221	850	2,386	
Whip	..	..	1	}	..	..	..	..	..	..	..	..	..	1	{	12.0	..	..	..
	..	..	..																

For footnotes see end of table.

# FACTORIES—HANDS, WAGES, AND VALUE OF MACHINERY, PLANT, LAND AND BUILDINGS, 1906—*continued.*

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—		
		Steam.	Gas.	Electricity.	Oil.	Water, Wind, Horses.	Actual Horse-power of Engines used.	Males.		Females.			Machinery and Plant in Use.	Lands, Buildings, and Improvements.*	
								Working Proprietors.	Employés.	Working Proprietors.					Employés.
<i>Class XII.—Shipbuilding, Fittings, &amp;c.</i>															
Ship, boat .. .. .	4	2	..	..	..	..	11	6	19	..	..	12.0	£ 1,772	£ 125	£ 1,930
Docks, slips .. .. .	7	7	..	..	..	..	1,160	4	105	..	..	9.3	1,1491	54,680	391,380
<i>Class XIII.—Furniture; Bedding, &amp;c.</i>															
Upholstery, bedding, flock .. ..	34	4	4	(1)1	..	..	119	18	326	2	124	{ 11.7 12.0 }	30,760	14,722	51,489
Bedstead .. .. .	1														
Curled hair .. .. .	2	..	2	..	..	..	16	2	36	..	8	12.0	2,407	890	1,280
Cabinet, including billiard table .. ..	121	8	(1)18	13	..	..	264	159	1,194	2	32	11.5	104,514	18,504	161,899
Picture frame .. .. .	20	..	2	(1)13	..	..	25	21	164	1	37	11.6	10,503	2,444	23,387
Venetian blind .. .. .	5	2	..	1	..	..	13	8	34	..	..	11.9	1,977	1,464	7,110
<i>Class XIV.—Drugs, Chemicals, and By-products.</i>															
Blacking, blue, washing powder, &c. ..	13	3	(1)3	(1)2	1	..	96	18	160	1	111	11.9	13,758	8,224	29,409
Chemical .. .. .	30	13	(1)6	(3)2	..	..	950	23	558	1	102	11.8	55,119	101,482	170,963
Essential oil .. .. .	15	11	..	..	..	..	40	11	122	2	2	8.5	5,200	2,945	6,025
Paint, varnish, white-lead .. .. .	3	2	..	(1)1	..	..	16	2	35	..	..	9.0	3,172	2,020	7,850



Class XV.—Surgical and Scientific Appliances.																
Philosophical instrument .. ..	6	..	..	5	..	..	6	4	22	..	2	11·2	1,427	962	5,659	
Surgical instrument .. ..	5	..	2	3	..	..	4	2	15	..	3	10·8	1,272	520	2,492	
Class XVI.—Timepieces, Jewellery, and Platedware.																
Goldsmithing, jewellery, gold-beating, electroplating	55	2	9	(1)22	1	1	96	61	552	..	38	11·8	54,171	15,972	85,070	
Class XVII.—Heat, Light, and Energy.																
Electric apparatus .. ..	6	..	2	(1)4	..	..	27	4	66	..	..	11·9	5,935	4,924	8,512	
Electric light .. ..	9	9	..	(2)	..	..	9,130	..	363	..	..	12·0	38,398	491,171	144,529	
Gas, § coke .. ..	48	5	(2)2	..	..	..	554	3	1,122	..	..	12·0	138,701	1,239,651	463,107	
Match .. ..	1	}	..	..	..	..	..	..	..	..	{	9·6	..	..	..	
Fire kindlers .. ..	1		2	..	..	..	48	2	21	..		76	11·8	3,595	2,130	3,162
Ironfounders' charcoal dust .. ..	1		..	..	..	..	..	..	..	..		..	12·0	..	..	..
Hydraulic power .. ..	2	2	..	..	..	..	800	..	16	..	..	12·0	2,140	42,522	30,589	
Class XVIII.—Leatherware (except Saddlery and Harness).																
Fancy leather .. ..	11	4	(1)2	2	..	..	89	15	171	..	79	12·0	14,731	5,115	10,386	
Leather belting .. ..	5	..	2	1	..	..	18	8	40	..	5	11·9	3,846	2,890	8,360	
Portmanteau, trunk .. ..	6	..	..	2	..	..	2	6	55	..	10	12·0	4,013	830	6,345	
Class XIX.—Minor Wares, not elsewhere included.																
Basket, wicker .. ..	7	..	1	..	..	..	3	11	43	1	1	11·6	2,325	244	6,644	
Bellows (see Class IV.) .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Brush, broom .. ..	18	..	6	5	..	..	24	24	178	1	50	11·3	15,804	4,437	18,625	
Rubber goods .. ..	8	6	(3)1	(1)	..	..	386	6	446	..	158	10·3	41,061	43,150	32,335	
Total .. ..	4,360	1,255	709	439	155	118	48,765	3,834	52,396	611	26,957	..	5,468,470	6,450,355	8,062,110	
			39)	(85)	(20)	(3)			‡109		‡1,322					

NOTE.—Where the number of factories is braced the information has been combined in order to conceal the contents of individual schedules. The figures in parentheses indicate engines worked in conjunction with those of a different description.

\* The figures in this column apply to purchased land only. Two hundred and eight establishments (including twelve creameries and seventy cyanide works) were carried on upon Crown lands; in these cases, no valuation of the land has been given.

† Creameries are not counted as separate establishments, but are regarded merely as branches of butter factories. The number of hands employed was 243 males.

‡ Factory workers, working at their own homes.

§ Including one Pintsch gas-works.

Classification  
according  
to hands  
employed.

The following grouping shows the factories arranged according to the number of hands employed:—

Under 4 hands	...	...	632 factories	1,753 hands.
4 hands	...	...	501 "	2,004 "
5 to 10 hands	...	...	1,626 "	11,373 "
11 to 20 hands	...	...	776 "	11,353 "
21 to 50 hands	...	...	517 "	16,038 "
51 to 100 hands	...	...	164 "	11,197 "
101 hands and upwards	...	...	144 "	31,511 "
Total	...	...	4,360 "	85,229 "

Of the 4,360 establishments, 2,676 used steam or other power, and employed 66,221 hands; and 1,684 used manual labour only, and employed 19,008 hands.

Factories,  
metro-  
politan and  
country.

In the next return will be found particulars for the years 1905 and 1906, of the factories operating in the metropolitan and country districts. In 1906 there were 95 more factories in the metropolis than in 1905, but country factories increased by one only:—

FACTORIES AND HANDS EMPLOYED, METROPOLIS AND COUNTRY:  
1905 AND 1906.

Nature of Industry.	1905.			1906.		
	No. of Manu- factories.	Average Num- ber of Persons Employed.		No. of Manu- factories.	Average Num- ber of Persons Employed.	
		Males.	Females		Males.	Females
<i>Metropolitan Area.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	86	1,540	4	73	1,519	3
2. Oils and fats, animal and vegetable ..	12	467	12	10	479	15
3. Processes relating to stone, clay, glass, &c.	82	2,154	7	88	2,310	8
4. Working in wood .. ..	115	2,133	5	119	2,308	9
5. Metal works, machinery, &c. ..	322	8,133	52	340	9,381	55
6. Connected with food and drink, &c. ..	163	5,514	2,315	176	5,992	2,606
7. Clothing and textile fabrics, &c. ..	869	6,361	18,817	899	6,530	19,857
8. Books, paper, printing, engraving, &c.	207	4,257	1,630	212	4,367	1,785
9. Musical instruments .. ..	2	27	..	3	32	..
10. Arms and explosives .. ..	2	46	153	2	61	200
11. Vehicles, &c., saddlery, harness, &c. ..	169	1,668	30	178	1,820	36
12. Shipbuilding, fitting, &c. .. ..	8	89	..	9	116	..
13. Furniture, bedding, &c. .. ..	158	1,719	177	168	1,856	203
14. Drugs, chemicals, and by-products ..	43	720	213	44	749	215
15. Surgical and scientific appliances ..	8	31	4	11	43	5
16. Timepieces, jewellery, and plated ware	46	552	35	49	591	38
17. Heat, light, and energy .. ..	23	1,119	102	23	1,368	76
18. Leatherware, except saddlery and har- ness	19	251	96	22	295	94
19. Wares not elsewhere included .. ..	30	731	236	33	708	211
Total .. ..	2,364	37,512	23,888	2,459	40,525	25,416

## FACTORIES AND HANDS EMPLOYED—continued.

Nature of Industry.	1905.			1906.		
	No. of Manu- factories.	Average Number of Persons Employed.		No. of Manu- factories.	Average Number of Persons Employed.	
		Males.	Females		Males.	Females
<i>Country Districts.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	231	1,284	11	232	1,307	12
2. Oils and fats, animal and vegetable ..	12	79	..	10	77	1
3. Processes relating to stone, clay, glass, &c.	122	819	31	120	862	29
4. Working in wood .. ..	156	1,876	2	151	1,896	4
5. Metal works, machinery, &c. ..	252	3,441	12	260	3,608	14
6. Connected with food and drink, &c. ..	466	3,304	139	470	3,338	133
7. Clothing and textile fabrics, &c. ..	287	1,400	3,089	274	1,376	3,118
8. Books, paper, printing, engraving, &c.	110	1,071	89	113	1,115	104
9. Musical instruments .. ..	..	..	..	..	..	..
10. Arms and explosives .. ..	3	37	28	3	36	33
11. Vehicles, &c., saddlery, harness, &c. ..	178	1,592	12	183	1,644	19
12. Shipbuilding, fitting, &c. .. ..	2	14	..	2	18	..
13. Furniture, bedding, &c. .. ..	15	97	3	15	106	3
14. Drugs, chemicals, and by-products ..	16	153	4	17	180	4
15. Surgical and scientific appliances ..	..	..	..	..	..	..
16. Timepieces, jewellery, and plated ware	6	17	1	6	22	..
17. Heat, light, and energy .. ..	44	229	1	45	229	..
18. Leatherware, except saddlery and harness	..	..	..	..	..	..
19. Wares not elsewhere included .. ..	..	..	..	..	..	..
Total .. ..	1,900	15,413	3,422	1,901	15,814	3,474
<i>State.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	317	2,824	15	305	2,826	15
2. Oils and fats, animal and vegetable ..	24	546	12	20	556	16
3. Processes relating to stone, clay, glass, &c.	204	2,973	38	208	3,172	37
4. Working in wood .. ..	271	4,009	7	270	4,204	13
5. Metal works, machinery, &c. .. ..	574	11,574	64	600	12,989	69
6. Connected with food and drink, &c. ..	629	8,818	2,454	646	9,330	2,739
7. Clothing and textile fabrics, &c. ..	1,156	7,761	21,906	1,173	7,906	22,975
8. Books, paper, printing, engraving, &c.	317	5,328	1,719	325	5,482	1,889
9. Musical instruments .. ..	2	27	..	3	32	..
10. Arms and explosives .. ..	5	83	181	5	97	233
11. Vehicles, &c., saddlery, harness, &c. ..	347	3,260	42	361	3,464	55
12. Shipbuilding, fitting, &c. .. ..	10	103	..	11	134	..
13. Furniture, bedding, &c. .. ..	173	1,816	180	183	1,962	206
14. Drugs, chemicals, and by-products ..	59	873	217	61	929	219
15. Surgical and scientific appliances ..	8	31	4	11	43	5
16. Timepieces, jewellery, and plated ware	52	569	36	55	613	38
17. Heat, light, and energy .. ..	67	1,348	103	68	1,597	76
18. Leatherware, except saddlery and harness	19	251	96	22	295	94
19. Wares not elsewhere included .. ..	30	731	236	33	708	211
Total .. ..	4,264	52,925	27,310	4,360	56,339	28,890

In the metropolitan district the additional factories established were principally those connected with processes relating to stone, clay, &c. (6); working in wood (4); metal works, &c. (18); food and drinks, &c. (13); clothing, &c. (30); books, printing, &c. (5); vehicles, saddlery, &c. (9); furniture, &c. (10); scientific appliances (3); jewellery, (3); leatherware (3); and rubber goods (3); whilst the class of factories treating raw products such as boiling down, tanning, fellmongering, &c., and chaff-cutting was reduced by 13 during the same period. In the country the noticeable differences between the two years were increases of 8, 4, 3, and 5 respectively under the heads of metal works, &c.; food and drink, &c.; books, printing, &c.; vehicles and saddlery, &c.; and decreases of 5 and 13 respectively under the heads of working in wood; and clothing, &c. The workers in the metropolitan factories have increased by 4,541 since 1905, the industries employing most of the extra hands being metal works, &c. (1,251), clothing, &c. (1,209), and foods, drinks, &c. (769). The country factories employed 453 more hands in 1906 than in 1905, the industry most prominent in connexion with the increase being metal works, &c., with 169 extra hands.

The following summary shows the power used, hands employed, and value of machinery, land, and buildings for the last five years:—

FACTORIES—POWER, HANDS, &c. : 1902 TO 1906.

Year.	Number of Factories.	Power Employed.				Actual Horse-Power of Engines Used.
		Steam.	Gas.	Electric, Oil, Water, Wind, or Horse.	Manual.	
1902	4,003	1,328	755	330	1,590	43,821
1903	4,151	1,316	724	437	1,674	42,750
1904	4,208	1,304	734	509	1,661	40,859
1905	4,264	1,276	715	615	1,658	43,492
1906	4,360	1,255	709	712	1,684	48,765

Year.	Hands Employed.			Approximate Value of—		
	Males.	Females.	Total.	Machinery and Plant.	Land.	Buildings and Improvements.
				£	£	£
1902	49,658	23,405	73,063	5,082,023	3,045,291	5,125,969
1903	49,434	23,795	73,229	5,010,896	2,855,174	5,112,771
1904	50,554	25,733	76,287	6,027,134	2,721,076	4,919,975
1905	52,925	27,310	80,235	6,187,919	2,767,071	5,004,167
1906	56,339	28,890	85,229	6,450,355	2,857,411	5,204,699

This table reveals considerable progress in the five years. The factories have increased to the extent of 357, the actual horse-power of engines by 4,944, the hands employed by 12,166, of whom 6,681 were males, and 5,485 females; the approximate value of machinery and plant by £1,368,332, and that of buildings, &c., by £78,730. A noticeable feature in connexion with the power employed is the increase in the use of electricity. In 1906 the number of engines worked by electricity was 438, an increase of 279 on the factories using this power in 1902.

In the next table the hands employed in factories during the last three years are grouped according to the nature of their work. The total hands show an increase of 4,994 compared with 1905, and of 8,942 compared with 1904:—

TOTAL HANDS EMPLOYED.

			1904.		1905.		1906.
Males	...	...	50,554	...	52,925	...	56,339
Females	...	...	25,733	...	27,310	...	28,890
Total	...	...	76,287	...	80,235	...	85,229

CLASSIFICATION OF HANDS EMPLOYED.

			1904.		1905.		1906.
Working Proprietors—							
Males	...	...	3,612	...	3,705	...	3,834
Females	...	...	576	...	612	...	611
Managers and Overseers—							
Males	...	...	2,213	...	2,192	...	2,266
Females	...	...	342	...	377	...	369
Accountants and Clerks—							
Males	...	...	2,085	...	2,102	...	2,181
Females	...	...	273	...	322	...	393
Engine-drivers—							
Males	...	...	1,470	...	1,473	...	1,493
Workers in Factories—							
Males	...	...	37,567	...	39,680	...	42,654
Females	...	...	23,553	...	24,834	...	26,130
Factory Workers working in their own homes—							
Males	...	...	79	...	86	...	109
Females	...	...	912	...	1,100	...	1,322
Carters and Messengers—							
Males	...	...	2,657	...	2,774	...	2,793
All Others—							
Males	...	...	871	...	913	...	1,009
Females	...	...	77	...	65	...	65

Wages, fuel, material, and output of factories The subjoined statement tabulates the principal items of outlay, and the value of articles produced or work done in connexion with each class of manufacturing for the year 1906:—

VALUE OF WAGES, FUEL, MATERIALS, AND OUTPUT OF  
FACTORIES, 1906.

Class of Industry.	Value of—			
	Wages paid, exclusive of amounts drawn by Working Proprietors.	Fuel and Light used.	Materials used.	Articles produced or Work done.
	£	£	£	£
1. Treating raw material, the product of pastoral pursuits, &c.	180,559	19,379	1,548,121	1,926,353
2. Oils and fats, animal and vegetable ..	44,773	10,377	261,652	381,660
3. Processes relating to stone, clay, glass, &c	265,508	63,659	125,735	583,345
4. Working in wood .. .. .	313,074	6,820	466,482	986,141
5. Metal works, machinery, &c. ..	1,129,102	76,150	1,639,777	3,469,917
6. Connected with food and drink, &c. ..	857,769	117,283	8,345,800	0,959,250
7. Clothing and textile fabrics, &c. ..	1,278,886	36,673	2,712,521	4,701,238
8. Books, paper, printing, &c. ..	602,147	25,935	585,255	1,775,446
9. Musical instruments .. .. .				
10. Arms and explosives .. .. .	15,595	1,031	55,084	99,733
11. Vehicles, &c., saddlery, harness, &c. ..	212,965	7,850	257,920	606,415
12. Shipbuilding, fitting, &c. .. ..	13,263	611	7,705	30,654
13. Furniture, bedding, &c. .. ..	150,161	2,702	258,733	488,356
14. Drugs, chemicals, and by-products ..	77,249	6,633	402,860	662,867
15. Surgical and scientific appliances ..	2,699	79	2,020	7,451
16. Timepieces, jewellery, plated ware ..	54,171	1,659	103,473	205,878
17. Heat, light, and energy .. .. .	188,769	27,547	170,345	728,779
18. Leatherware (except saddlery and harness)	22,590	566	96,797	136,136
19. Wares not elsewhere included .. ..	59,190	5,013	247,920	352,861
Total .. .. .	5,468,470	409,967	17,288,170	28,102,480

The total amount of wages paid during the year (£5,468,470) represents a payment per head on the average for all employés of £67 14s., an increase of £1 7s. on the average payment per head in 1905, although the proportion of males and females is the same for 1906 as for 1905, viz., 65 per cent. of males, and 35 per cent. of females. This average is very much below the general rate of wages, as shown in the table "Wages in Melbourne" on page 631, which relates to adult workers only, whereas the average payment of £67 14s. relates to all employés, adult and juvenile, male and female, apprentices and improvers, employed in each industry. Further, all hands are not continuously employed, nor are all factories working throughout the year. It would, therefore, be quite misleading to say from these figures that £67 14s. was the average rate of wages per head in factories.

The proportion per cent. that each of the items of outlay bore to the value of the output in the last two years is shown in the next statement.

	1905.		1906.	
	Value.	Proportion per cent.	Value.	Proportion per cent.
	£		£	
Wages ... ..	5,039,115	19·9	5,468,470	19·5
Fuel and Light ... ..	371,996	1·5	409,967	1·4
Materials ... ..	15,058,471	59·8	17,288,170	61·5
	20,469,542	81·2	23,166,607	82·4
Articles produced ... ..	25,400,648	100·0	28,102,480	100·0
Margin for profit and miscellaneous ex- penses	4,731,066	18·8	4,935,873	17·6

The proportion of the total of the various items of outlay to the value of articles produced and work done has increased to the extent of 1.2 per cent. since 1905—wages, fuel and light showing slight decreases, but value of materials an increase of 1.7 per cent. The proportion that the balance between outlay and output, available for miscellaneous expenses and profit, bears to the output is 1.2 per cent. less than in 1905.

In the following return will be found a statement of the rates of wages obtaining in the various industries in Melbourne during 1906, the information having been collected direct from the employers. For information relating to Wages Boards in Victoria and the rise in earnings caused thereby, see page 272 of this work:—

### WAGES IN MELBOURNE, 1906.

#### A.—WAGES FOR ADULT WORKERS IN CLASSIFIED MANUFACTURING INDUSTRIES.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class I.—Treating Raw Material the product of pastoral pursuits or vegetable products not otherwise classed.</i>			
<i>Order 1.—Animal products.</i>			
Boiling down .. ..	{ Foremen .. .. Tallowmen .. .. Labourers .. .. Carters .. ..	.. ..	42s. per week
Bone mill .. ..		.. ..	40s. "
		.. ..	36s. "
Sausage casing .. ..		40s. to 45s. per week	
Tanning, fellmongery, wool- washing, scouring	Sausage skin cleaners		40s. per week
	Curriers .. ..	40s. to 60s. per week	48s. "
	Tanners .. ..	36s. to 45s. "	38s. "
	Beamsmen .. ..	40s. to 50s. "	45s. "
	Shedsmen .. ..	36s. to 45s. "	38s. "
	Fellmongers .. ..	30s. to 45s. "	36s. "
	Woolscourers .. ..	36s. to 42s. "	36s. "
<i>Order 2.—Vegetable products.</i>			
Chaff-cutting .. ..	Labourers .. ..	36s. to 39s. per week	37s. 6d. per wk

## WAGES IN MELBOURNE, 1906--continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>			
Oil, grease, glue .. ..	Labourers .. ..	6s. to 7s. per day ..	6s. 6d. per day
Soap, candle .. ..	Soap and candle makers ..	90s. to 95s. per week ..	80s. per week
	Assistant soapboilers ..	.. ..	50s. "
	Foremen .. ..	.. ..	48s. "
	In charge of milling-room ..	.. ..	47s. 6d. "
	Stillmen .. ..	.. ..	42s. "
	Acidifiers, glycerine distillers, pressroom gaugers ..	.. ..	41s. "
	Candle-room gaugers ..	.. ..	36s. "
	Candle moulders, labourers ..	.. ..	40s. "
	Carters .. ..	40s. to 42s. per week ..	40s. "
<i>Class III.—Processes relating to Stone, Clay, Glass, &amp;c.</i>			
Asbestos .. ..	Machinists .. ..	36s. to 42s. per week ..	40s. per week.
Asphalt .. ..	Asphalters and tarpavers ..	7s. to 9s. per day ..	8s. per day
Brick, pottery, earthenware ..	Patternmakers .. ..	.. ..	1s. 4½d. per hr.
	Clayhole men .. ..	.. ..	10½d. "
	Setters—Brick .. ..	.. ..	11½d. "
	Burners .. ..	10½d. to 1s. per hour ..	1s. 1d. per hr.
	Drawers .. ..	56s. 3d. to 62s. 6d. per week ..	45s. per week
	Pipe-burners .. ..	.. ..	45s. per week
	Pipe setters and pressers ..	.. ..	42s. to 45s. per week
	Tile moulders and pressers ..	.. ..	45s. to 50s. "
	Hollow-ware pressers ..	.. ..	40s. to 45s. "
	Stone-ware throwers ..	.. ..	50s. per week
	Mould makers .. ..	.. ..	45s. to 50s. "
	Placers and others .. ..	.. ..	50s. to 55s. "
Glass (including bottles) ..	Bottlemakers .. ..	.. ..	50s. to 55s. "
	Lampware blowers ..	.. ..	50s. to 60s. "
	finishers .. ..	.. ..	50s. to 60s. "
Glass bevelling, &c. ..	Bevellers .. ..	.. ..	42s. "
	Silverers .. ..	.. ..	42s. "
	Cutters .. ..	48s. to 54s. "	.. ..
Lime, cement, cement pipes ..	Labourers .. ..	6s. 8d. to 7s. 6d. per day ..	1s. 10½d. per hr.
Marble, stone-dressing ..	Building carvers ..	.. ..	1s. 4½d. "
	Carvers and letter cutters ..	.. ..	1s. 3d. "
	Granite cutters ..	.. ..	1s. 2d. "
	Bluestone, marble cutters ..	.. ..	10½d., 11d. "
	Polishers .. ..	.. ..	10d. "
Modelling .. ..	Labourers .. ..	12s. to 14s. per day ..	.. ..
	Modellers .. ..	.. ..	.. ..
	Shophands .. ..	10s. to 11s. "	.. ..
	Pressers .. ..	.. ..	42s. per week
Stonefilter .. ..	Filtermakers .. ..	.. ..	35s. "
<i>Class IV.—Working in Wood.</i>			
Bellocks .. ..	Bellocks-makers .. ..	32s. 6d. to 45s. per week ..	40s. per week
Cooperage .. ..	Coopers .. ..	56s. to 62s. "	56s. "
Corkcutting .. ..	Corkcutters .. ..	30s. to 45s. "	37s. 6d. "
Dairy implement (churn, &c.) ..	Box and case makers ..	.. ..	48s. "
	Carpenters .. ..	.. ..	54s. "
Mantelpiece .. ..	Mantelpiece makers ..	.. ..	52s. "
	Polishers, enamellers ..	.. ..	50s. "
Saw-milling, moulding, joinery, sash, door, box, &c. ..	Sawyers .. ..	45s. to 63s. per week ..	.. ..
	Pullers-out .. ..	36s. to 45s. "	.. ..
	Carpenters and joiners ..	51s. to 60s. "	.. ..
	Machinists .. ..	45s. to 64s. "	.. ..
	Woodturners .. ..	.. ..	54s. per week
	Boxmakers .. ..	.. ..	48s. "



## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.		
		Range.	General Rate.	
<i>Class IV—continued.</i>				
Saw-milling, moulding, joinery, sash, door, box, &c.	Painters and glaziers	..	51s. per week	
	Polishers ..	..	50s. "	
	Engine-drivers ..	45s. to 60s. per week	..	
	Salesmen, tallymen, ordermen	..	48s. per week	
Wood-carving, turning ..	Draymen and labourers	36s. to 45s. per week	42s. "	
	Carvers ..	48s. to 54s. "	50s. "	
	Turners ..	..	54s. "	
<i>Class V.—Metal Works, Machinery, &amp;c.</i>				
Agricultural implement ..	Blacksmiths ..	54s. to 60s. per week	60s. per week	
	Fitters and turners ..	54s. to 60s. "	54s. "	
	Carpenters ..	48s. to 60s. "	54s. "	
	Painters ..	42s. to 54s. "	48s. "	
	Labourers ..	36s. to 42s. "	36s. "	
Brass, copper, smithing ..	Brass moulderers, finishers	..	48s. "	
	Brasspolishers ..	..	42s. "	
Cutlery ..	Coppersmiths ..	45s. to 54s. per week	..	
	Cutlers ..	60s. to 70s. "	60s. per week	
	Knivesmiths ..	50s. to 55s. "	50s. "	
	Sawmakers ..	40s. to 60s. "	50s. "	
Engineering, boilermaking, iron foundry	Saw and tool grinders	30s. to 55s. "	45s. "	
	Blacksmiths ..	54s. to 72s. "	60s. "	
	Strikers ..	39s. to 45s. "	42s. "	
	Fitters and turners ..	54s. to 66s. "	60s. "	
	Boilermakers and platers	60s. to 72s. "	60s. "	
	Riveters ..	60s. to 72s. "	60s. "	
	Moulderers—Heavy ..	54s. to 72s. "	60s. "	
	" Light ..	48s. to 60s. "	48s. "	
	Pipe moulderers ..	45s. to 57s. "	..	
	Planers and slotters ..	45s. to 63s. "	54s. per week	
	Drillers ..	38s. to 45s. "	42s. "	
	Coremakers ..	48s. to 66s. "	60s. "	
	Patternmakers ..	66s. to 75s. "	66s. "	
	Iron dressers ..	40s. to 42s. "	40s. "	
	Carpenters ..	..	60s. "	
	Labourers ..	38s. to 44s. per week	42s. "	
	Furnacemen, engine- drivers	45s. to 60s. "	45s. "	
	Bedstead, fender ..	Blacksmiths ..	42s. to 54s. "	42s. "
		Fitters ..	45s. to 54s. "	45s. "
Chill fitters ..		48s. to 60s. "	54s. "	
Chippers ..		36s. to 42s. "	36s. "	
Modellers ..		56s. to 70s. "	60s. "	
Moulderers ..		42s. to 60s. "	48s. "	
Grinders and polishers		42s. to 56s. "	50s. "	
Japanners ..		36s. to 50s. "	36s. "	
Electroplaters ..		56s. to 70s. "	56s. "	
Fireproof safe, &c., makers		35s. to 80s. "	60s. "	
Iron safe, door ..	Labourers in lead and shot factories	36s. to 45s. "	40s. "	
	Zincworkers ..	48s. to 72s. "	60s. "	
Lead, shot, pewter, zinc ..	Instrument fitters ..	48s. to 60s. "	54s. "	
	Nail makers ..	40s. to 70s. "	60s. "	
Meter ..	Machine feeders (under 21)	20s. to 30s. "	25s. "	
	Labourers ..	30s. to 35s. "	30s. "	
Nail, barbed wire ..	Barbed wire workers ..	32s. 6d. to 48s. "	35s. "	
	Pattern makers ..	..	66s. "	
Pattern making ..	Metallurgists and as- sayers	£3 to £5 per week ..	£3 "	
	Cyaniders ..	36s. to 55s. "	..	
	Chlorinators ..	40s. to 55s. "	..	
	Smelters ..	45s. to 70s. "	..	
	Roasters ..	36s. to 42s. "	..	
	Furnacemen ..	42s. to 60s. "	..	
	Labourers ..	36s. to 48s. "	..	
	Smelting, chlorination, cyanide, pyrites	..	..	

## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class V.—continued.</i>			
Spring .. ..	Spring fitters ..	45s. to 60s. per week	54s. per week
	Springsmiths ..		50s. "
Stove, range, oven ..	Stove fitters ..	42s. to 48s. "	"
	Oven fitters ..	42s. to 48s. "	"
Tinsmithing, galvanized iron, sheet iron, japanning	Tinsmiths ..	40s. to 44s. "	"
	Sheet iron workers ..		44s. per week
	Galvanizers ..	42s. to 70s. "	42s. "
	Canister makers ..	38s. to 42s. "	"
	Japanners ..	35s. to 45s. "	"
Wire working .. ..	Wire workers ..	35s. to 48s. "	35s. per week
Wire mattress .. ..	Weavers, framemakers ..		48s. "
	Weavers (female) ..		32s. "
	Varnishers ..		45s. "
<i>Class VI.—Connected with Food and Drink, or the preparation thereof.</i>			
<i>Order 1.—Animal Food.</i>			
Bacon-curing .. ..	Slaughtermen, cutters-up, &c. ..	40s. to 55s. per week	48s. per week
Butter, cheese, concentrated milk	Factory managers ..	60s. to 100s. "	70s. "
	Butter makers, and churners ..	40s. to 50s. "	45s. "
	Labourers, packers ..	30s. to 40s. "	35s. "
Butterine, margarine ..	Labourers ..	30s. to 42s. "	36s. "
Condensed milk .. ..	Condensers ..	50s. to 80s. "	60s. "
Meat, fish preserving, freezing	Slaughtermen ..		23s. per 100 sheep
	Kitchen hands, tallow-men ..	36s. to 60s. per week	42s. per week
	Boners .. ..	42s. to 48s. "	"
	Preservers .. ..	45s. to 60s. "	50s. per week
	Tinsmiths .. ..	50s. to 70s. "	"
		(piece-work)	
	Labourers, packers ..	36s. to 48s. "	40s. per week
	Chambermen, &c. ..		42s. "
<i>Order 2.—Vegetable Food, including products not foods but usually associated with the manufacture of foods.</i>			
Biscuits .. ..	Factory foremen ..	38s. to 80s. per week	50s. per week
	Forewomen ..	20s. to 32s. 6d. "	20s. "
	Biscuit makers ..	35s. to 37s. 6d. "	35s. "
	Cake makers ..	40s. to 54s. "	40s. "
	Machine hands ..	30s. to 40s. "	35s. "
	Packers—male ..	32s. to 37s. 6d. "	32s. "
	" female ..		14s. "
Confectionery .. ..	Confectioners ..		50s. "
	Storemen .. ..	45s. to 60s. per week	45s. "
	" Assistants ..		36s. "
	Labourers .. ..		30s. "
	Chocolate dippers—		
	Male .. ..		30s. "
	Female .. ..	17s. to 20s. per week	17s. "
Flour mill .. ..	Foremen .. ..		60s. "
	Smuttermen ..	40s. to 44s. per week	40s. "
	Wheat shooters ..		40s. "
	Flour and bran packers ..	30s. to 38s. per week	36s. "
	Engine-drivers, firemen ..	50s. to 70s. "	60s. "
Jam, fruit-preserving, pickle, sauce, vinegar	Foremen .. ..	55s. to 85s. "	60s. "
	Tinsmiths .. ..	42s. to 45s. "	42s. "
	Coopers .. ..	60s. to 80s. "	56s. "
	Engine-drivers ..	48s. to 54s. "	50s. "
	General hands—male ..	30s. to 35s. "	30s. "
	" female .. ..	14s. to 21s. "	14s. "
Oatmeal, cornflour, starch, arrowroot, macaroni	" male .. ..	30s. to 60s. "	"
	" female .. ..	12s. to 30s. "	"
Sugar, treacle refining ..	Vacuum hands and others ..	42s. to 115s. "	"

WAGES IN MELBOURNE, 1906—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate
<i>Class VI.—continued. Order 3.—Drinks and Stimulants.</i>			
Aerated waters, cordials ..	Cordial makers ..	..	60s. per week
	Engine-drivers ..	..	40s. "
	Bottlers ..	35s. to 40s. per week	..
	Wires ..	..	32s. 6d. per week
Brewing .. ..	Washers ..	..	32s. 6d. "
	Topmen ..	44s. to 50s. per week	44s. "
	Cellarmen ..	44s. to 60s. "	44s. "
	Cask washers ..	44s. to 48s. "	44s. "
	Storemen ..	44s. to 50s. "	44s. "
	Coopers ..	56s. to 62s. "	56s. "
	Farriers ..	44s. to 72s. "	44s. "
	Carters, stablemen ..	44s. to 47s. 6d. "	47s. 6d. "
	Rackers, corks. &c. ..	..	35s. "
	Packers ..	..	32s. 6d. "
	Headers-up ..	..	30s. "
Distilling .. ..	Brewers ..	..	50s. "
	" assistants ..	..	40s. "
	Coopers ..	56s. to 60s. per week	56s. "
	Store and bottling hands ..	38s. to 42s. "	38s. "
Condiments, coffee, <sup>chicory</sup> , cocoa, chocolate, spice, &c.	General hands—male ..	30s. to 60s. "	..
	" female ..	12s. to 30s. "	..
	Storemen ..	40s. to 60s. "	40s. per week
	Chambermen ..	40s. to 45s. "	40s. "
	Ice pullers ..	36s. to 42s. "	39s. "
Ice, refrigerating .. ..	Engine-drivers, firemen ..	42s. to 60s. "	48s. "
	Carters ..	42s. to 52s. "	45s. "
	Maltsters ..	40s. to 70s. "	..
<i>Order 4.—Narcotics.</i>			
Tobacco, cigar, cigarette ..	Tobacco (plug) makers ..	45s. to 80s. per week	62s. per week
	" wrappers ..	25s. to 34s. "	30s. "
	—female ..	..	..
	Cigar makers ..	35s. to 65s. "	48s. "
Cigarette makers ..	(hand)—female ..	20s. to 30s. "	25s. "
	<i>Class VII.—Clothing and Textile Fabrics and Fibrous Materials.</i>		
<i>Order 1.—Textile.</i>			
Woollen cloth, blanket, rug ..	Foremen ..	40s. to 60s. per week	..
	Pattern weavers, tuners ..	..	40s. per week
	Power-loom weavers ..	..	22s. 6d. "
	Fettlers, yarnmen, spinners ..	..	36s. "
	Wool scourers ..	30s. to 40s. per week	30s. "
	Dye house labourers ..	30s. to 40s. "	30s. "
	Wool dryers, warpers ..	..	30s. "
	Wiley house labourers ..	..	36s. "
	Warpers—female ..	..	25s. "
	Mule minders ..	20s. to 30s. per week	30s. "
	<i>Order 2.—Dress.</i>		
Boot, shoe .. ..	Makers, finishers, clickers, stuff-cutters, &c. ..	45s. to 65s. per week	45s. per week
	Machine operators ..	45s. to 70s. "	50s. "
	Assistant stuff-cutters ..	40s. to 50s. "	40s. "
	lining cutters, and all others ..	..	..
	Machinists—female ..	20s. to 30s. "	20s. "

## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class VII.—Order 2—continued.			
Clothing, tailoring .. ..	Cutters—order ..	60s. to 160s. per week	80s. per week
	" stock ..	50s. to 80s. ..	60s. "
	Tailors, trimmers ..	45s. to 60s. ..	45s. "
	Machinists .. ..	45s. to 50s. ..	45s. "
	Tailoresses .. ..	20s. to 35s. ..	20s. "
	Pressers, examiners ..	45s. to 55s. ..	45s. "
	—female .. ..	30s. ..	30s. "
	Machinists—female ..	20s. to 30s. per week	20s. "
	Buttonholers, folders, and brushers ..	20s. to 25s. ..	20s. "
	Corset .. ..	Corset makers—female ..	17s. 6d. to 25s. ..
Dressmaking, millinery .. ..	Dressmakers in charge ..	40s. to 160s. ..	60s. "
	Dressmakers' assistants ..	16s. to 30s. ..	16s. "
	—female .. ..	40s. to 80s. ..	40s. "
	Mantlemakers—female ..	16s. to 30s. ..	16s. "
	Mantlemakers' assistants—female ..	40s. to 80s. ..	40s. "
	Milliners in charge ..	20s. to 35s. ..	20s. "
	Milliners' assistants—female ..	20s. to 30s. ..	20s. "
	Pressers—female .. ..	20s. to 25s. ..	20s. "
	Machinists—female ..	20s. to 25s. ..	20s. "
	Dye works .. ..	Dyers .. ..	50s. to 100s. ..
Pressers .. ..		45s. to 50s. ..	45s. "
Pressers—female .. ..		16s. to 30s. ..	20s. "
Furrier .. ..	Cleaners .. ..	40s. to 50s. ..	40s. "
	Cutters .. ..	50s. to 80s. ..	60s. "
	Machinists, &c.—female ..	16s. to 25s. ..	18s. "
Hat, cap .. ..	Body makers, silk hats ..	50s. to 60s. ..	55s. "
	Finishers .. ..	55s. to 70s. ..	60s. "
	Shapers .. ..	55s. to 65s. ..	60s. "
	Crown sewers, silk hats ..	20s. to 30s. ..	25s. "
	—female .. ..	22s. 6d. to 26s. ..	25s. "
	Trimmers, silk hats—female ..	60s. to 65s. ..	65s. per week
	Blockers, felt hats ..	70s. to 90s. ..	67s. 6d. "
	Bodymakers .. ..	70s. to 100s. ..	75s. "
	Finishers .. ..	15s. to 30s. per week	65s. "
	Shapers .. ..	15s. to 30s. ..	20s. "
	Binders, felt hats—female ..	15s. to 30s. ..	20s. "
	Trimmers, felt hats—female ..	20s. to 30s. ..	25s. "
	Machinists, straw hats ..	20s. to 30s. ..	20s. "
	—female .. ..	.. ..	20s. "
	Trimmers, straw hats—female ..	.. ..	42s. 6d. "
Hosiery .. ..	Blockers, pressers, women's hats ..	15s. to 25s. per week	20s. "
	Machinists, caps—female ..	20s. to 28s. ..	22s. 6d. "
	Machinists, knitting—female ..	17s. 6d. to 28s. ..	20s. "
	Machinists, sewing—female ..	20s. to 24s. ..	22s. "
	Linkers—female .. ..	40s. to 50s. ..	45s. "
Ollskin, waterproof clothing ..	Pressers—male .. ..	20s. to 30s. ..	25s. "
	—female .. ..	16s. to 20s. ..	18s. "
	Winders—female .. ..	18s. to 22s. 6d. ..	20s. "
	Menders, &c.—female ..	35s. to 60s. ..	40s. "
	Oilskin workers .. ..	20s. to 30s. ..	25s. "
	Machinists, female ..	50s. to 60s. ..	50s. "
	Waterproof cutters ..	20s. to 30s. ..	25s. "
Ostrich feather .. ..	Machinists, &c.—female ..	50s. to 63s. ..	50s. "
	Feather dyers .. ..	.. ..	35s. "
	—female .. ..	15s. to 35s. per week	25s. "

per week at  
piece-work  
rates

## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VII.—Order 2—continued.</i>			
Shirtmaking, underclothing ..	Shirt makers—female	16s. to 25s. per week	18s. per week
	Underclothing makers—female	16s. to 25s. "	18s. "
Umbrella, parasol ..	Laundry ironers, &c.—female	16s. to 25s. "	20s. "
	Frame makers ..	40s. to 50s. "	40s. "
	Cutters ..	40s. to 55s. "	40s. "
	Finishers ..	25s. to 50s. "	37s. 6d. "
	Machinists—female ..	15s. to 25s. "	20s. "
	Tippers ..	15s. to 20s. "	16s. "
<i>Order 3.—Fibrous Materials and Textiles not elsewhere included.</i>			
Bag, sack (including calico bag)	Bagmender ..	20s. to 45s. per week	32s. per week
Rope, twine ..	Undefined—males ..	36s. to 70s. "	40s. "
	" females ..	15s. to 25s. "	18s. "
Tarpaulin, tent, sail ..	Tarpaulin, tent, sail makers	40s. to 60s. "	48s. "
<i>Class VIII.—Books, Paper, Printing, Engraving.</i>			
Die sinking, engraving ..	Die sinkers ..	52s. 6d. to 80s. per week	60s. per week
	Engravers, general ..	52s. 6d. to 80s. "	55s. "
Ink, printing ink ..	Process engravers ..	50s. to 90s. "	55s. "
	Ink makers ..	45s. to 70s. "	50s. "
Paper bag, box, cartoon, &c.	Box cutters ..	35s. to 52s. "	40s. "
	Makers-up—female	15s. to 23s. "	18s. "
Paper, millboard, strawboard	Paper, &c., makers ..	..	50s. "
	Beatermen ..	..	42s. "
	Breakermen ..	..	42s. "
	General hands ..	..	36s. "
	Engine drivers ..	..	54s. "
	Printers—Compositors	52s. to 80s. per week	52s. "
	" machinists	52s. to 60s. "	52s. "
" linotype-operators	70s. to 84s. "	..	
Printing (including lithographic printing, electrotyping, stereotyping)	Lithographers ..	52s. to 65s. "	52s. per week
	Stereotypers—casters	..	40s. "
	" moulders	..	60s. "
	" finishers	..	55s. "
	Bookbinders ..	52s. to 80s. per week	52s. "
Bookbinding, account-book making, stationery, &c.	Pagers—female ..	16s. to 17s. 6d. "	16s. "
	Sewers and folders—female	20s. to 30s. "	20s. "
	Paper rulers ..	52s. to 75s. "	52s. "
<i>Class IX.—Musical Instruments.</i>			
Organ, pianoforte ..	Organ builders, expert ..	..	84s. per week
	" " ordinary	60s. to 72s. per week	60s. "
	Tuners and voicers ..	..	72s. "
	Case makers ..	..	60s. "
	Nickel pipe makers ..	..	60s. "
<i>Class X.—Arms and Explosives.</i>			
Ammunition ..	Cartridge operators—female	15s. to 25s. per week	18s. per week
	Mechanics (fitters, &c.)	55s. to 72s. "	..
Explosive ..	Labourers ..	36s. to 45s. "	..
	Nitro-glycerine workers	42s. to 55s. "	48s. per week
	Acid workers ..	..	45s. "
	Labourers and carters	36s. to 42s. per week	36s. "
Fireworks, fuse ..	Fireworks makers ..	33s. to 45s. "	..

## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XI.—Vehicles, Fittings, Saddlery, Harness, &amp;c.</i>			
Carriage lamp .. ..	Lamp makers ..	44s. to 60s. per week	44s. per week
Coach, waggon, tramcar, spoke and felloe, wheelwright	Body makers ..	40s. to 60s. "	45s. "
	Wheelers ..	40s. to 50s. "	45s. "
	Smiths ..	40s. to 60s. "	48s. "
	Trimmers ..	40s. to 60s. "	45s. "
	Painters ..	40s. to 60s. "	48s. "
	Vicemen ..	35s. to 45s. "	40s. "
Cycle .. ..	Cycle builders ..	35s. to 48s. "	40s. "
	Motor builders ..	50s. to 70s. "	60s. "
	Turners ..	50s. to 60s. "	60s. "
	Filers ..	30s. to 40s. "	35s. "
	Platers ..	45s. to 60s. "	45s. "
	Polishers ..	..	42s. "
	Smiths ..	..	48s. "
Perambulator .. ..	Wickerworkers ..	..	48s. "
	Fitters up ..	30s. to 50s. per week	30s. "
Saddlery, harness .. ..	Saddle makers ..	48s. to 55s. "	48s. "
	Collar makers ..	48s. to 55s. "	48s. "
	Harness makers ..	48s. to 55s. "	48s. "
Saddle-tree, saddlers' ironmongery, &c.	Saddle-tree makers ..	37s. 6d. to 60s. "	48s. "
Whip .. ..	Thong makers—males ..	..	44s. "
	" " females ..	..	30s. "
Horse shoeing, &c .. ..	Farriers .. ..	35s. to 45s. per week	40s. "
<i>Class XII.—Ship Building, Fittings, &amp;c.</i>			
Dock, slip .. ..	Shipwrights ..	..	12s. per day
	Foundry and shipsmiths ..	..	11s. "
	Labourers and painters ..	..	8s. "
	Stevedore-men and lumpers ..	..	1s. 3d. per hr.
Boat building .. ..	Wharf labourers ..	..	1s. "
	Boat builders ..	48s. to 60s. per week	48s. per week
<i>Class XIII.—Furniture, Bedding, &amp;c.</i>			
Bedding, flock, upholstery ..	Bedding and mattress makers ..	46s. to 50s. per week	46s. per week
	Machinists—female ..	20s. to 22s. 6d. "	20s. "
	Machine feeders ..	..	25s. "
	Sorters, &c.—female ..	..	15s. "
Curled hair .. ..	Upholsterers ..	48s. to 70s. per week	48s. "
	Curled hair, horsehair workers ..	36s. to 70s. "	45s. "
Furniture, cabinet making, chair, billiard table	Cabinet makers ..	48s. to 60s. "	48s. "
	Carvers ..	48s. to 54s. "	48s. "
	Turners ..	48s. to 54s. "	48s. "
	Polishers ..	48s. to 54s. "	48s. "
	Billiard table makers ..	54s. to 60s. "	54s. "
	Cushion makers, machinists ..	..	60s. "
	Slate rubbers ..	..	42s. "
Picture frame .. ..	Frame makers ..	40s. to 60s. per week	42s. "
	Mount cutters ..	35s. to 55s. "	40s. "
	Compo workers ..	35s. to 50s. "	40s. "
	Fitters-up—female ..	12s. 6d. to 25s. "	15s. "
Venetian blind, window blind	Venetian blind makers ..	36s. to 48s. "	36s. "

## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XIV.—Drugs, Chemicals, By-products.</i>			
Blacking, blue, washing powder, soda	Skilled, undefined ..	40s. to 100s. per week	..
	Unskilled " ..	25s. to 37s. 6d. "	..
	Wrappers—female ..	12s. 6d. to 20s. "	..
Chemical, drug, horse and cattle medicine	Makers of pharmaceutical preparations	40s. to 75s. per week	50s. per week
	Others working in drugs, &c.	35s. to 45s. "	40s. "
Essential oil .. ..	Disinfectant makers	35s. to 45s. "	40s. "
Fertilizer .. ..	Essence blending ..	35s. to 55s. "	40s. "
	Chemical manure workers	36s. to 40s. "	36s. "
Paint, varnish, white-lead ..	Paint and varnish makers	40s. to 80s. "	55s. "
<i>Class XV.—Surgical and Scientific Appliances.</i>			
Optical, philosophical instrument, &c.	Opticians, &c. ..	35s. to 60s. per week	45s. per week
Surgical appliance, instrument	Surgical instrument makers	40s. to 80s. "	50s. "
<i>Class XVI.—Timepiece, Jewellery, Platedware.</i>			
Electroplating .. ..	Electroplaters and silversmiths	50s. to 70s. per week	55s. per week
	Metal polishers ..	35s. to 48s. "	35s. "
Goldsmithing, jewellery, gold-beating	Lacquerers—female ..	15s. to 30s. "	20s. "
	Goldsmiths, jewellers	50s. to 90s. "	55s. "
Watchmaking, &c. ..	Setters .. ..	50s. to 100s. "	80s. "
	Watchmakers	45s. to 90s. "	55s. "
<i>Class XVII.—Heat, Light, and Energy.</i>			
Electric apparatus .. ..	Engine-drivers ..	..	60s. per week
	Winders .. ..	48s. to 60s. per week	54s. "
Electric light .. ..	Engine-drivers ..	..	10s. 6d. per day
	Firemen .. ..	8s. 6d. to 9s. per day	9s. per day
	Dynamo attendants	..	54s. per week
	Electrical fitters ..	9s. to 11s. per day	9s. per day
	Switchboard attendants	..	9s. "
	Linemen .. ..	7s. to 8s. per day	7s. "
	Carboners .. ..	..	7s. 6d. "
	Patrolmen .. ..	..	8s. "
	Wires .. ..	8s. to 9s. per day	8s. "
	Greasers .. ..	..	7s. "
	Stokers .. ..	8s. to 9s. per day ..	8s. "
	Enginemmen .. ..	8s. to 9s. "	8s. "
	Purifiers .. ..	6s. 4d. to 6s. 9d. "	..
	Sulphate workers ..	..	8s. per day
	Stove repairers and fitters	8s. to 11s. 6d. per day	..
Gas and coke .. ..	Service layers ..	7s. 10d. to 8s. 2d. "	..
	Main layers .. ..	7s. to 9s. 6d. "	..
	Inspectors .. ..	8s. 9d. to 11s. 6d. "	..
	Labourers .. ..	6s. 6d. to 6s. 10d. "	..
	Enginemmen .. ..	..	8s. per day
	Firemen .. ..	..	7s. 6d. "
	Fitters .. ..	..	9s. "
	Main layers .. ..	..	9s. "
	Special labourers ..	..	8s. "
	Ordinary labourers ..	..	7s. "
Hydraulic power .. ..	Enginemmen .. ..	..	8s. per day
	Firemen .. ..	..	7s. 6d. "
	Fitters .. ..	..	9s. "
	Main layers .. ..	..	9s. "

## WAGES IN MELBOURNE, 1906—continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XVII.—continued.</i>			
Ironfounders' dust, charcoal dust	Labourers ..	42s. to 50s. per week	45 . per week
Match .. ..	Vesta makers—female	12s. 6d. to 24s. "	16s. "
	Box makers—female	12s. to 21s. "	14s. "
<i>Class XVIII.—Leatherware (excluding Saddlery and Harness.)</i>			
Leather Belting .. ..	Belt makers ..	48s. to 60s. per week	48s. per week
	Machinists, putters-up, ..	..	48s. "
Portmanteau, gladstone bag	Leather bag makers	45s. to 60s. per week	45s. "
	Portmanteau makers	45s. to 60s. "	45s. "
	Bagmakers (female) ..	18s. to 20s. "	20s. "
<i>Class XIX.—Wares not elsewhere included.</i>			
Basket, wickerware ..	Wicker workers (piece work)	30s. to 50s. per week	48s. per week
	Pith cane, bamboo workers	48s. to 50s. "	48s. "
Bellows .. ..	Bellows makers ..	32s. 6d. to 45s. "	40s. "
Broom, brushware .. ..	Millet broom makers	35s. to 45s. "	40s. "
	Hair broom, brush makers	45s. to 60s. "	45s. "
Rubber goods (including cycle tires)	Rubber workers, expert	60s. to 90s. "	60s. "
	" ordinary	35s. to 50s. "	37s. 6d. "
	Trimmers, finishers, and small rubber goods makers—female	15s. to 25s. "	20s. "
Quarry .. ..	Quarrymen ..	48s. to 54s. "	48s. "
	Stonebreakers ..	2s. to 2s. 6d. per c. yd. (2½ in.)	..
	Labourers .. ..	..	42s. per week



WAGES IN MELBOURNE, 1906—continued.

B.—WAGES FOR SERVANTS AND ADULT WORKERS IN UNCLASSIFIED TRADES AND INDUSTRIES.

Industry or Service.	Occupations.	Wages.	
		Range.	General Rate.
Educational* .. ..	Governesses .. ..	£20 to £40 per annum	..
	Teachers in advanced schools—	£40 to £60 ..	..
	Males (elementary) ..	£50 to £100 ..	..
	Teachers (advanced) ..	£100 to £300 ..	..
	Females (elementary) ..	£20 to £40 ..	..
Clerical .. ..	Teachers (advanced) ..	£50 to £150 ..	..
	Bookkeepers .. ..	40s. to 70s. per week	..
	Shorthand clerks and typists .. ..	30s. to 70s. ..	..
	Shorthand clerks and typists (female) ..	20s. to 50s. ..	..
Domestic servants*—males ..	Coachmen, footmen, grooms, gardeners ..	15s. to 30s. ..	20s. per week
	Butlers .. ..	20s. to 40s. ..	25s. ..
	Cooks .. ..	15s. to 30s. ..	20s. ..
	Laundresses .. ..	15s. to 20s. ..	15s. ..
	Housemaids .. ..	10s. to 15s. ..	12s. ..
	Nursemaids .. ..	8s. to 15s. ..	10s. ..
	General servants .. ..	10s. to 17s. ..	14s. ..
	Girls .. ..	5s. to 8s. ..	7s. ..
	Barmen .. ..	20s. to 35s. ..	25s. ..
	Waiters .. ..	20s. to 30s. ..	25s. ..
Hotel servants*—males ..	Boots .. ..	12s. to 20s. ..	15s. ..
	Ostlers .. ..	12s. 6d. to 25s. ..	18s. ..
	Cooks .. ..	25s. to 60s. ..	30s. ..
	Barmen .. ..	15s. to 25s. ..	20s. ..
	Waitresses .. ..	10s. to 15s. ..	12s. 6d. ..
	Housemaids .. ..	10s. to 15s. ..	12s. 6d. ..
	Cooks .. ..	15s. to 30s. ..	25s. ..
	Bricklayers .. ..	11s. to 12s. per day	11s. per day
	Hod-carriers .. ..	8s. to 9s. ..	8s. ..
	Carpenters and joiners ..	9s. to 10s. ..	10s. ..
Building, &c. .. ..	Labourers .. ..	7s. to 8s. ..	8s. ..
	Masons .. ..	7s. to 9s. ..	10s. ..
	Painters and glaziers ..	7s. to 9s. per day	8s. ..
	Paperhangers .. ..	7s. to 9s. ..	8s. ..
	Plasterers .. ..	7s. to 9s. ..	10s. ..
	Plumbers .. ..	9s. to 10s. per day	10s. ..
	Plumbers, licensed sanitary ..	11s. to 12s. ..	11s. ..
	Signwriters and decorators ..	.. ..	10s. ..
	Slaters .. ..	.. ..	10s. ..
	Bakers, bread .. ..	.. ..	50s. per week
Bakehouse .. ..	Bakers, bread (foremen) ..	54s. to 80s. per week	..
	Slaughtermen .. ..	50s. to 60s. ..	..
	Shopmen .. ..	55s. to 80s. ..	55s. per week
	General butchers .. ..	.. ..	45s. ..
	Small goods men .. ..	55s. to 80s. per week	55s. ..
Butchering .. ..	Drivers .. ..	35s. to 45s. ..	..
	Laundresses—female ..	20s. to 24s. ..	20s. per week
	Operators .. ..	50s. to 120s. ..	..
	Printers .. ..	30s. to 60s. ..	50s. per week
	Retouchers—female ..	20s. to 35s. ..	20s. ..
Laundry .. ..	Finishers .. ..	15s. to 30s. ..	20s. ..
	Makers of photographic materials ..	36s. to 80s. ..	45s. ..
	Finishers, packers—female ..	17s. 6d. to 25s. ..	17s. 6d. ..
	Photography .. ..	.. ..	..
	.. ..	.. ..	..

\* With board and lodging.

Tanneries,  
&c.

The number of tanneries, fellmongery and wool washing establishments was reduced by four during 1906, leaving 84 in operation. The hands employed increased from 1,614 to 1,657. The wages paid last year to the hands (excluding working proprietors) amounted to £123,677. The following table shows the approximate value of the machinery, plant, land, buildings, and improvements during each of the last seven years:—

VALUE OF TANNERIES: 1900 TO 1906.

Year.	Approximate Value of—		
	Machinery and Plant in Use.	Land.	Buildings and Improvements.
	£	£	£
1900 ... ..	91,530	51,250	117,960
1901 ... ..	99,710	47,750	98,950
1902 ... ..	103,329	54,179	104,114
1903 ... ..	110,796	48,341	112,407
1904 ... ..	109,095	41,979	104,005
1905 ... ..	114,863	46,301	112,714
1906 ... ..	114,951	47,139	110,155

Tanning operations during the past year were carried on in 2,672 pits where 9,520 tons of bark were used. The output for the last seven years was:—

OUTPUT OF TANNERIES, &amp;c.: 1900 TO 1906.

Year.	Number Tanned of—			Sheep Skins Stripped.	Wool Washed (weight after washing).
	Hides.	Calf Skins.	Sheep and other Skins.		
				No.	lbs.
1900 ... ..	500,549	165,802	1,395,600	1,431,811	6,866,383
1901 ... ..	496,260	181,522	676,936	615,614	8,511,171
1902 ... ..	424,786	189,886	313,166	453,660	5,279,916
1903 ... ..	397,367	179,425	629,465	925,263	6,197,723
1904 ... ..	381,473	134,003	674,105	643,532	5,166,200
1905 ... ..	393,695	139,506	544,145	562,705	4,543,927
1906 ... ..	485,620	132,210	518,139	612,598	5,676,464

The columns under "Hides" and "Skins" include the number of skins dealt with in small tanneries. The work done in these small tanneries in 1906 was the tanning of 2,601 hides, 2,968 calf skins, and 12,134 sheep and other skins. The value of the leather imported into Victoria in 1906 was £282,197; of that exported, £363,712. The export of Victorian leather was valued at £300,106.

The leather  
industry.

The manufacture of leather in Victoria began at a very early date, and the industry was soon established on a firm basis, since excellent tan bark abounded. It has now assumed considerable proportions,

84 tanneries, employing 1,657 hands, being in actual existence. In 1906, there were tanned 485,620 cattle hides, 132,210 calf skins, and 518,139 sheep and other skins. Including fellmongery and wool washing, the added value to material operated on during the year was nearly a quarter of a million sterling. Raw hides and skins are imported from various other parts of the world for the purpose of being converted into leather, and the finished article is exported in considerable quantity.

Leathers manufactured in Victoria are treated on up-to-date methods, and no mineral adulteration obtains; and it is worthy of note that a brisk demand exists for them in British markets. The value of locally manufactured leather exported from Victoria to the United Kingdom was £147,053 in 1906, as against £91,123 in 1905.

The State, recognising that the processes associated with the industry are worthy of investigation, has actively taken up the question, and the Department of Agriculture is conducting researches that will no doubt lead to further improvement in the character of the leathers tanned under its jurisdiction.

There were 15 soap and candle works in operation in 1906—five less than in the previous year. These factories employed 514 hands and 9 working proprietors. The amount of wages paid to the hands in 1906 was £41,635. The value of the machinery, plant, land, buildings and improvements, and the quantity of soap and candles produced in the last seven years were as follow:—

Soap and  
candle  
works.

SOAP AND CANDLE WORKS—VALUE AND PRODUCTS: 1900 TO 1906.

Year.	Approximate Value of—			Products Made.	
	Machinery and Plant in Use.	Land.	Buildings and Improvements.	Soap.*	Candles.
	£	£	£	cwt.	cwt.
1900 ...	95,114	42,675	58,049	122,458	46,624
1901 ...	97,260	42,870	60,940	132,031	47,313
1902 ...	91,325	39,967	56,852	150,698	49,406
1903 ...	103,411	42,288	64,354	138,045	45,052
1904 ...	101,486	38,295	62,961	162,126	41,521
1905 ...	105,529	36,605	61,588	150,261	42,049
1906 ...	104,244	36,171	59,829	154,570	43,094

\* Not including soap made in small soap works not classified as factories, viz., 11,220 cwt. in 1900, 11,109 cwt. in 1901, 14,490 cwt. in 1902, 13,369 cwt. in 1903, 7,902 in 1904, 7,185 cwt. in 1905, and 11,706 in 1906.

The quantity of tallow used in the manufacture of soap and candles in factories was 136,733 cwt., and in minor works 4,706 cwt. in 1906.

The quantity of soap, perfumed and other, imported during 1906 was 2,598,417 lbs., valued at £55,631; the quantity exported was 5,398,617 lbs., of which 4,610,268 lbs. were Victorian made. The former was valued at £60,512; and the latter at £43,503. The quantity of candles imported was 1,119,859 lbs., valued at £22,108;

Brickyards,  
potteries,  
earthen-  
ware, &c.

and the exports 1,354,034 lbs., valued at £26,624, including 878,950 lbs. of Victorian-made candles, valued at £17,877.

The brickyards and potteries at work during the year numbered 123. The hands employed numbered 1,568, and the working proprietors 135. The sum of £145,725 was paid to the employes in wages; and the value of land, plant, buildings, &c., was £278,520. The estimated value of the bricks made in these brickyards in 1906 was £182,620.

The number of bricks made, and the value of pottery and of pipes and tiles manufactured during the last seven years, were returned as follow:—

#### POTTERY, PIPES AND TILES: 1900 TO 1906.

Year.		Number of Bricks Made.*	Value of	
			Pipes and Tiles.	Pottery.
			£	£
1900	...	83,477,275	55,751	19,870
1901	...	84,898,000	73,060	23,695
1902	...	90,545,280	71,074	27,289
1903	...	77,826,631	81,732	34,572
1904	...	80,026,511	53,454	31,438
1905	...	90,990,284	56,086	27,205
1906	...	112,966,270	58,349	27,570

\* In addition bricks made in small brickyards not tabulated as factories numbered 1,900,000 in 1900, 1,871,000 in 1901, 1,957,800 in 1902, 1,279,200 in 1903, 685,000 in 1904, 505,000 in 1905, and 530,500 in 1906.

The expansion of building operations, especially in Melbourne and suburbs, during the last year, is indicated by the number of bricks made.

Forest  
saw-mills,  
&c.

The number of Forest saw-mills working in 1906 was 112, being 12 less than in 1905. The hands employed in 1906 numbered 1,488, the working proprietors 129, and wages paid amounted to £105,017. The approximate value of machinery, plant, land, buildings, improvements, together with the quantity and value of timber sawn during the last seven years appear in the following statement:—

#### FOREST SAW-MILLS: 1900 TO 1906.

Year.		Approximate Value of—			Timber Sawn.	
		Machinery and Plant in use.	Land.	Buildings and Improvements.	Quantity.	Value.
		£	£	£	Super ft.	£
1900	...	104,500	7,520	27,350	44,782,330	125,121
1901	...	91,810	6,170	13,500	46,495,885	134,310
1902	...	81,898	6,380	11,854	40,494,660	128,430
1903	...	80,039	1,495*	10,797	38,841,322	116,845
1904	...	89,760	1,966*	12,301	49,250,000	147,750
1905	...	87,757	2,553*	10,861	47,635,358	142,905
1906	...	90,305	1,168*	9,286	51,103,000	153,309

\* Value of land occupied by saw-mills only

The other factories working in wood number 158, comprising—cooperage and cork-cutting works (12), employing 82 persons, and paying £6,293 in wages; dairy and domestic implements and bellows (6), employing 110 persons, and paying £8,840 in wages; saw-milling, moulding and joinery works (101), employing 2,011 persons (of whom 112 were working proprietors), and paying £169,005 in wages; mantelpiece (6), employing 178 persons, and paying £12,222 in wages; and wood carving and turnery (33), employing 219 persons, and paying £11,697 in wages. The total amount paid in wages to workers in wood, other than those employed in forest saw-mills, was £208,057; and the approximate value of land, buildings, machinery, &c., in use in the works £334,024.

As the result of an investigation, it has been estimated that the approximate value of the production of firewood for consumption in a year is £385,000. In addition, there are supplies of railway sleepers, piles, posts and rails, shingles, and timber for mines, obtained from the forests, but it has been found impossible to procure reliable information as to their value. &c.

There were 28 establishments connected with this industry in 1906. The hands employed numbered 338, of whom 32 were working proprietors; and the wages paid to employes amounted to £25,606. Further details of the industry for the last seven years are as follow:— Bacon and ham curing.

BACON CURING: 1900 TO 1906.

Year.	Approximate Value of—			Pigs Slaughtered for Curing.	Weight of Bacon and Hams Cured.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	No.	lbs.
1900 ...	23,210	7,680	25,200	102,086	9,761,553
1901 ...	27,900	8,690	27,670	109,283	11,485,460
1902 ...	29,611	9,231	30,625	112,244	11,507,224
1903 ...	26,810	5,721	23,415	88,541	9,633,206
1904 ...	27,822	5,641	25,730	104,604	11,229,768
1905 ...	28,335	5,941	25,650	117,582	11,360,698
1906 ...	28,217	6,031	29,140	135,492	12,910,575

This table does not include pigs slaughtered for curing, nor bacon and hams cured in small curing works; the pigs so slaughtered numbered 7,533 in 1900, 3,145 in 1901, 2,295 in 1902, 2,438 in 1903, 2,124 in 1904, 2,801 in 1905, and 2,680 in 1906; the pounds of bacon and hams cured being 506,225 in 1900, 211,250 in 1901, 195,098 in 1902, 181,745 in 1903, 194,102 in 1904, 246,374 in 1905, and 252,348 in 1906.

In addition, the following quantities of bacon and hams were returned as having been cured on farms, viz.:—2,936,769 lbs. in 1900, 3,314,906 lbs. in 1901, 2,736,048 lbs. in 1902, 2,689,900 lbs. in 1903, 3,428,074 lbs. in 1904, 4,826,593 lbs. in 1905, and 4,888,243 lbs. in 1906. The total for the State in 1906 was thus 18,051,166 lbs.

Imports and  
exports of  
bacon and  
hams.

The imports of bacon and hams in 1906 were 223,089 lbs., valued at £6,250; and the exports were 4,368,952 lbs., valued at £139,368, including 3,930,177 lbs., valued at £125,338, cured in Victoria.

Butter and  
cheese  
factories.

The number of butter and cheese factories (including 1 butterine factory) exclusive of creameries, was 222 in 1906. Of these factories, 175 made butter, 7 made butter and cheese, 6 made butter and concentrated milk, 33 made cheese only, and 1 made butterine. There were 202 creameries attached to these factories. The number of hands employed was 1,424, and of working proprietors 66, a combined increase of 109 on the previous year. The approximate value of machinery, plant, land, buildings, and improvements was £550,402. The quantity of milk received at the factories and creameries increased from 77,520,000 gallons in 1895—the first year in which a record was kept—to 146,656,005 gallons in 1906, an increase of over 24,000,000 gallons on the figures for 1905. The output from butter and cheese factories during the last seven years was:—

#### BUTTER AND CHEESE FACTORIES: 1900 TO 1906.

Year.	Butter.	Cream Sold.	Cheese.	Concentrated Milk Made.
	lbs.	gallons.	lbs.	gallons.
1900 ...	48,839,996	38,274	2,508,843	263,138
1901 ...	40,824,928	50,092	2,073,940	266,083
1902 ...	32,927,546	23,739	2,128,835	243,904
1903 ...	40,707,877	17,882	3,602,988	236,581
1904 ...	55,058,391	7,242	2,599,443	226,810
1905 ...	52,274,639	16,513	2,447,938	232,310
1906 ...	63,231,222	20,332	2,852,687	309,138

Butter and  
cheese  
made on  
farms.

In addition to the quantity of butter and cheese made in the factories, the following quantities were returned as having been made on farms, viz.:—Butter, 6,764,122 lbs. in 1900, 6,032,644 lbs. in 1901, 6,300,208 lbs. in 1902, 5,978,350 lbs. in 1903, 5,944,450 lbs. in 1904, 5,332,182 lbs. in 1905, and 4,856,946 lbs. in 1906; cheese, 1,775,327 lbs. in 1900, 1,900,728 lbs. in 1901, 1,720,726 lbs. in 1902, 2,078,527 lbs. in 1903, 2,148,408 lbs. in 1904, 1,849,412 lbs. in 1905, and 2,024,906 lbs. in 1906.

Total butter  
and cheese  
made.

Taking the returns of butter from all sources, the largest quantity, 68,088,168 lbs., was made in 1906. The largest quantity of cheese returned was 5,681,515 lbs. in 1903. The total quantity of cheese made in factories and on farms in 1906 was 4,877,593 lbs.

Imports and  
exports of  
butter and  
cheese.

In 1906, butter imported amounted to 1,114,443 lbs., valued at £46,116; the exports in the same year amounted to 46,899,872 lbs., valued at £2,069,596, of which 45,620,166 lbs. were Victorian produce, valued at £2,011,047. The imports of cheese in 1906 amounted to 399,886 lbs. in weight and £10,862 in value; the exports being 1,249,772 lbs. valued at £30,900—1,130,829 lbs., valued at £27,853, being Victorian cheese.

Meat freez-  
ing and  
preserving  
works.

The works for freezing and preserving meat numbered 14 in 1906, and employed 509 hands and 13 working proprietors, the wages of

the employes amounting to £36,818. The approximate value of machinery, plant, land, buildings, and improvements in 1906 was £292,524. The output of the last seven years was as follows:—

MEAT FREEZING AND PRESERVING: 1900 TO 1906.

Year.			Frozen.			
			Sheep.	Cattle.	Rabbits.	Poultry.
			No.	Qrs.	No.	No.
1900	...	...	437,242	16,096	4,840,128	44,050
1901	...	...	417,721	6,395	3,990,460	71,490
1902	...	...	375,178	1,338	6,218,422	34,228
1903	...	...	294,906	1,424	7,003,022	41,460
1904	...	...	459,963	3,394	8,086,776	46,820
1905	...	...	649,107	5,656	10,259,904	51,705
1906	...	...	651,914	4,248	9,538,535	72,410

Year.			Preserved.			
			Beef.	Mutton.	Rabbits.	Fish.
			Cwt.	Cwt.	Cwt.	Cwt.
1900	...	...	5,593	2,198	24,874	831
1901	...	...	3,304	2,417	26,303	1,140
1902	...	...	7,705	14,913	16,537	2,134
1903	...	...	8,796	2,653	17,380	4,492
1904	...	...	4,248	491	14,977	535
1905	...	...	4,866	1,435	6,665	...
1906	...	...	6,011	1,700	496	...

NOTE.—As well as the above, 15,249 calves, 1,959 pigs, and 25,952 hares were treated at freezing works in 1905, and 6,347 calves, 2,580 pigs, and 35,397 hares in 1906.

The following statement shows the imports and exports of frozen and preserved meats, exclusive of bacon and ham, during 1906:—

	Imports (including transfers from other States).		Exports.	
	Quantity.	Value.	Quantity.	Value.
Frozen—		£		£
Mutton	3,643,792 lbs.	45,576	28,697,517 lbs.	398,421
Beef	39,324 "	501	1,414,467 "	17,096
Pork	83,884 "	2,591	414,650 "	6,993
Rabbits and Hares	6,102 "	33	...	221,566
Poultry	10,784 "	369	...	9,611
Game	3,492 "	348	33,153 "	1,137
Other meats	155,450 "	1,951	217,602 "	3,953
Meats—Fresh and smoked	587,660 "	4,501	2,291,004 "	27,429
" Potted and concentrated	...	7,041	...	1,387
" Preserved in tins	595,828 "	19,797	1,254,490 "	29,673
" Not elsewhere included	1,208 cwt.	1,783	1,084 cwt.	1,554
Total value	...	84,491	...	718,820

Imports and exports of frozen and preserved meats.

## Flour mills.

The number of flour mills in 1906 was 64, employing 788 persons, of whom 44 were working proprietors. The wages paid to employes amounted to £80,261. Further particulars for seven years are given in the following table:—

FLOUR MILLS: 1900 TO 1906.

Year.	Approximate Value of—			Wheat Ground into Flour.	Flour Made.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	bushels.	tons.
1900	297,880	74,442	184,470	8,387,323	169,739
1901	280,130	70,530	175,520	9,482,175	190,845
1902	256,980	76,121	171,125	8,491,224	170,696
1903	261,530	68,917	166,869	5,762,849	115,368
1904	235,508	52,220	147,559	10,012,476	202,314
1905	238,139	56,910	157,785	10,282,491	209,058
1906	243,149	59,540	163,322	10,892,056	219,166

Other grain operated on amounted to 81,658 bushels in 1900, 75,704 bushels in 1901, 126,765 bushels in 1902, 139,702 bushels in 1903, 157,403 bushels in 1904, 75,595 bushels in 1905, and 111,719 bushels in 1906.

## Import and export of bread-stuffs.

During the year 1906, 2,052,548 lbs. of Victorian biscuits, valued at £39,491, and 79,699 tons of Victorian flour, valued at £582,494, were exported; as well as 171,095 lbs. of biscuits, valued at £3,768, and 1,658 tons of flour, valued at £12,509, received from outside the State. The imports were 324,665 lbs. of biscuits, valued at £8,094, and 1,991 tons of flour, valued at £14,411.

## Jam, pickle, and sauce works.

There were 26 manufactories engaged in making jams, pickles, and sauces in 1906, and employing 1,288 persons, of whom 18 were working proprietors. The wages paid to the employes amounted to £63,702, and the value of machinery, plant, land, and buildings was £128,423. The materials used and the output for the last three years were as follow:—

JAM, PICKLE, AND SAUCE WORKS: 1904 TO 1906.

Year.	Fruit used.	Sugar used.	Jams and Jellies made.	Fruit Preserved.	Fruit Pulped.	Sauce made.	Pickles made.
	cwt.	cwt.	cwt.	cwt.	cwt.	pints.	pints.
1904 ...	199,306	97,057	190,151	22,408	115,295	2,143,555	444,963
1905 ...	175,119	107,382	192,579	35,395	44,450	2,029,644	312,680
1906 ...	195,902	107,194	203,038	43,138	56,619	2,943,380	288,810

## Imports and exports, jams, sauces, &amp;c.

In 1906 2,457,493 lbs. of jams and jellies, valued at £34,832 were imported, as well as preserved fruit valued at £26,869, and pickles valued at £15,732. In the same year the total exports of jams and jellies amounted to 6,568,256 lbs., and of fruit pulped to



267,954 lbs., the value of preserved fruits being £47,597, and of pickles and sauces £20,684. The Victorian produce represented in these exports was 5,617,600 lbs. of jams and jellies, and 212,100 lbs. of fruit pulped, preserved fruit valued at £39,800, and pickles and sauces valued at £16,100.

There are two sugar refineries working in Victoria, full particulars of which for the last seven years will be found in the following table:—

SUGAR REFINERIES: 1900 TO 1906.

Year.	Number of Sugar Refineries.		Actual Horse-power of Engines Used.	Average Number of Hands Employed.	Approximate Value of—			Cane Sugar Treated (Raw).	Sugar Refined.	Treacle Refined.
	Total.	Using Steam Engines.			Machinery and Plant.	Land.	Buildings and improvements.			
					£	£	£	cwt.	cwt.	cwt.
1900	2	2	424	301	74,500	7,000	56,000	1,004,913	944,049	34,080
1901	2	2	424	324	74,500	7,000	56,000	1,129,586	1,052,742	40,320
1902	2	2	424	346	82,000	10,000	76,500	952,801	879,521	51,052
1903	2	2	474	344	83,500	10,000	76,500	1,087,005	1,025,583	51,109
1904	2	2	506	343	83,500	10,000	76,500	1,123,381	1,071,995	36,803
1905	2	2	526	352	87,500	10,000	76,900	1,143,742	1,079,454	42,219
1906	2	2	776	409	88,550	10,000	83,400	1,317,172	1,238,010	47,109

The raw sugar treated is imported, and during 1906 the imports of cane sugar into Victoria amounted to 1,433,491 cwt., of which 960,671 cwt. was from Queensland, and 410,861 cwt. from Java. During the same year 146,648 cwt. of sugar and molasses was exported, of which 123,109 cwt. was to other States of Australia.

There were 39 breweries in 1906, or five less than in the previous year, but the hands employed, 1,030, were one more than in 1905. The approximate value of the machinery, plant, land, buildings, and improvements, the quantities of materials used, and the beer made during the last seven years were as follow:—

BREWERIES: 1900 TO 1906.

Year.	Approximate Value of—			Materials Used—			Beer Made.
	Machinery and Plant.	Land.	Buildings and Improvements.	Sugar.	Malt.	Hops.	
	£	£	£	cwt.	bushels.	lbs.	gallons.
1900	204,840	230,530	269,410	111,863	598,094	648,648	16,162,550
1901	212,280	236,310	271,600	113,686	608,445	650,214	16,563,068
1902	211,036	228,990	273,325	115,258	625,441	677,262	17,162,680
1903	209,492	229,965	277,383	102,651	552,042	569,981	15,423,149
1904	231,687	229,965	291,180	100,430	530,771	544,524	14,927,873
1905	232,354	198,760	291,738	99,230	529,067	582,012	15,176,439
1906	235,980	197,985	289,982	101,692	533,531	623,249	16,409,465

**Distilleries.**

The number of distilleries increased from 7 in 1905 to 9 in 1906, the hands employed from 38 to 81, and the estimated value of the machinery, plant, land, buildings, and improvements from £32,782 to £144,799. The increases are due principally to one large distillery having commenced work after being closed down for three years. Although there has been some improvement in the last three years, the industry is still a long way behind what it was in 1900 and 1901. The materials used in manufacture, and the quantity of spirits distilled in the last seven years were as follow:—

**DISTILLERIES: 1900 TO 1906.**

Year.	Materials Used.							Spirits Distilled.
	Wine.	Malt.	Wheat.	Maize.	Other Grain.	Sugar and Molasses.	Beer.	
	Gal.	Bush.	Bush.	Bush.	Bush.	lbs.	Gal.	Proo gal.
1900	160,301	91,223	2,353	3,692	26	4,652,480	...	439,117
1901	148,584	123,394	1,541	16,000	2,464	2,853,760	2,265	490,550
1902	128,272	16,744	87	11,880	2,507	1,780,016	...	190,644
1903	207,621	...	...	...	...	...	1,187	41,083
1904	293,836	...	...	...	...	...	...	58,745
1905	348,791	...	...	...	...	199,360	...	85,690
1906	324,005	13,038	...	...	...	101,024	...	94,674

Spirits made by vine-growers for fortifying wine are not included in this table. The following quantities were distilled for that purpose during the last seven years in vineyards:—30,554 gallons in 1900, 38,058 gallons in 1901, 49,867 gallons in 1902, 56,851 gallons in 1903, 73,210 gallons in 1904, 78,163 gallons in 1905, and 60,521 gallons in 1906.

**Salt works.**

The following table contains particulars relating to salt works for the past seven years:—

**SALT WORKS: 1900 TO 1906.**

Year.	Number of Manufactories.	Number using Machinery.	Hands Employed.	Approximate Value of—			Crude Salt Raised.	
				Machinery and Plant in use	Land.	Buildings and Improvements.	Quantity.	Value.
				£	£	£	Tons.	£
1900	5	2	76	2,650	700	20,950	5,326	3,995
1901	5	2	72	4,550	700	24,080	7,118	5,339
1902	4	1	59	4,150	410	24,660	7,147	5,360
1903	3	1	63	4,300	400	26,025	9,374	7,030
1904	4	2	54	4,675	690	26,623	2,739	2,053
1905	3	3	52	4,043	404	27,016	13,920	10,440
1906	3	3	52	4,656	2,900	29,392	12,365	9,273

There were 12 tobacco manufactories in 1906, or two more than in the previous year, the number of hands employed was greater by 308, and the value of machinery, plant, land, buildings, and improvements increased from £190,528 to £229,190. The material used and the output also very materially increased, as will be seen from the particulars for the last seven years in the following table:—

Tobacco, &c.  
manufac-  
tories.

## TOBACCO FACTORIES: 1900 TO 1906.

Year.	Unmanufactured Leaf.			Quantity Manufactured of—			
	Imported Duty Paid.	Operated on.		Tobacco.	Snuff.	Cigars.	Cigarettes.
		Imported.	Colonial.				
	lbs.	lbs.	lbs.	lbs.	lbs.	No.	No.
1900	1,743,280	1,661,632	276,407	1,722,236	794	11,584,442	111,010,705
1901	2,742,653	2,542,580	230,113	2,365,831	1,133	13,025,840	125,693,600
1902	969,602	1,379,905	205,434	1,630,510	550	11,936,451	100,817,104
1903	1,910,553	2,052,100	304,049	2,390,976	813	9,336,975	58,928,535
1904	2,597,035	2,768,873	266,053	3,166,767	1,122	12,419,426	73,304,100
1905	3,271,866	3,597,887	265,219	3,981,357	1,051	14,324,566	103,673,300
1906	3,672,884	4,172,065	431,941	4,650,113	516	18,762,205	131,161,460

Note.—The quantity manufactured in small factories (£5 licences) is included in the above table.

There were 9 woollen mills working in 1906, or two less than in 1905, but there was a general improvement in the business of the mills; the horse-power of the engines increased from 2,000 to 2,137, the number of hands from 1,315 to 1,434, and the approximate value of the machinery, plant, land, buildings, and improvements from £328,169 to £341,323 during the same period. The quantities of wool and cotton used, and of goods manufactured in the last seven years are as follow:—

Woollen  
mills.

## WOOLLEN MILLS: 1900 TO 1906.

Year.	Quantity of Scoured* Wool Used	Quantity of Cotton Used.	Goods Manufactured—			
			Tweed and Cloth.	Flannel.	Blankets.	Shawls and Rugs.
	lbs.	lbs	yards.	yards.	No of Pairs	No.
1900	1,831,000	178,332	971,267	1,596,120	56,340	3,500
1901	2,023,509	250,184	818,975	2,229,617	49,502	4,600
1902	2,149,897	273,335	708,749	2,612,343	67,609	5,718
1903	2,130,100	368,749	662,381	3,201,275	77,601	6,565
1904	2,368,871	211,256	697,726	3,301,004	86,253	8,431
1905	2,663,587	499,630	738,924	3,355,013	145,106	8,516
1906	2,825,218	658,882	840,649	3,637,846	146,628	8,883

The boot and shoe industry in Victoria is a very important one, and one that has grown very considerably of late years. The following particulars of the industry generally, and of its growth in Victoria from the earliest times, will, it is thought, be found interesting.

Boot and  
shoe  
industry.

By way of introducing the subject, a brief sketch of the development of boot and shoe making in older countries may not be out of place. Its history may be summed up in four stages, as follows:

First.—The primitive shoemaker, who worked in his home or small shop, making shoes or sandals in single pairs to measure for the community, and held the trade from pre-historic times down to two centuries ago.

Second.—The old-fashioned shoe shops, where boots and shoes were made to measure, and to a small extent for stock, and where from two or three to twenty workmen were employed, and in some cases even more. These flourished in Europe in the eighteenth and first half of the nineteenth centuries, and a few survive to this day, making what are called "bespoke boots" for well-to-do customers, and for wearers with abnormal feet.

Third.—In the early part of the last century, what may be termed the primitive factory was introduced, its first phase being a clicking room, where uppers are cut, and a sole cutting department, the work of "closing" the uppers and "making and finishing" the boot being done by hand outside. It was in the hands of this class of manufacturer that the export trade of the United Kingdom first attained to importance. The introduction of engine power, sole cutting presses, and the pegging and riveting systems of making boots, gradually lessened the practice of home work, and the invention of sewing machines for uppers, and, later, for sole sewing, powerfully contributed to the same result.

Fourth.—In the latter part of the nineteenth century, first in the United States, and then in Europe and elsewhere, the primitive factory system above described gradually gave way to the modern system now in vogue, in which, with the exception of the upper-cutting department, machinery has almost entirely displaced hand methods; and specialisation, and sub-division of labour, are the order of the day. Outside work (except in the bespoke and hand-sewn trade) is a thing of the past, and operations are now conducted in the spacious, well-lighted and well-ventilated factories found in all countries where boots and shoes are manufactured on a large scale.

Turning now to Victoria, the wants of the community in boots and shoes were practically met by imports for the first thirty years after the settlement of Port Phillip in 1837. A complete set of figures would occupy too much space, but it will suffice to say that in 1842 the importations of boots and shoes (inclusive of slippers) reached 25,583 pairs, of the value of £5,457. These figures increased, until the maximum was reached in 1865, when the value of the year's imports reached the large total of £632,488.

In the decade between 1860 and 1870, what is described in the third introductory paragraph as the primitive factory system, was established in Victoria. The boots made were chiefly what are known in the trade as "strong work," that is, kip boots pegged or riveted for country wear, and for outdoor workers in towns and their families. The lighter and more expensive classes of boots and shoes continued to be imported, and it was not until about 1876 that the manufacture of machine-sewn boots was begun.

The growth of the industry, although somewhat chequered, was fairly rapid. It is shown in the following table:—

Year.	Number of Factories.	Number of Operatives.	Value of Land, Build- ings and Machinery.	Wages Paid.
			£	£
1866	3	...	...	...
1871	29	1,471	34,019	...
1876	67	2,264	93,372	...
1880	105	3,919	196,809	...
1882	90	3,672	167,424	...
1885	91	4,100	205,773	...
1890	92	3,787	226,950	...
1894	90	3,735	191,300	...
1898	89	4,019	179,945	...
1900	108	4,812	204,080	...
1903	136	5,267	229,396	299,176
1904	131	5,655	241,342	332,749
1905	136	5,910	243,549	330,023
1906	134	5,755	253,436	332,538

As the hold of Victorian manufacturers upon local trade increased, two effects naturally followed. The first was a great decline in the value of imports and the second was the opening of an export trade to the neighbouring States. The latter began in a very small way to the Riverina border towns in 1870, followed later by exports to other Colonies, but the movement was checked by adverse Tariffs between 1882 and 1893. Shortly after that time it moved up again upon the establishment of free-trade in New South Wales, until, as is well known, exports took a great leap after the inauguration of Inter-State free-trade under Federation on 8th October, 1901.

These latter developments were greatly facilitated by the establishment of the modern factory system between 1890 and 1895, and by the making of "turned" and "welted" boots and shoes from the earlier of these dates. The whole of these movements are

reflected in the particulars of the imports and exports of boots and shoes to and from Victoria in the subjoined tables:—

Year.	Imports.	Re-export of Imported Boots.	Victorian-made Exports.	Total Exports.
	£	£	£	£
1842 ...	5,457	...	...	...
1865 ...	632,448	118,646	4,894	123,540
1870 ...	303,437	45,840	588	46,428
1875 ...	202,532	61,941	14,106	76,047
1880 ...	100,941	68,011	54,131	122,142
1885 ...	109,998	21,263	25,482	46,745
1890 ...	127,286	21,402	15,645	37,047
1893 ...	40,993	12,467	6,828	19,295
1897 ...	33,962	5,420	48,213	53,633
1900 ...	49,295	6,489	61,463	67,952
1902 ...	80,537	8,515	186,224	194,739
1903 ...	79,704	14,537	237,127	251,664
1904 ...	95,078	47,147	280,895	328,042
1905 ...	93,879	45,733	294,016	339,749
1906 ...	101,308	47,853	335,789	383,642

Destination  
of Victorian  
Inter-State  
exports.

It is interesting to note the value of boots exported from Victoria to each of the other States of the Commonwealth, and how the trade tends to develop with each. The particulars are:—

	1905.	1906.
	£	£
To New South Wales ...	143,767	138,216
West Australia ...	65,029	81,136
Tasmania ...	49,803	61,966
South Australia ...	39,947	54,032
Queensland ...	32,407	34,700
	330,953	370,050

The figures for the first half of 1907 show an increase over the corresponding period of 1906, the respective totals being £183,458 as against £165,631. The trade for the latter half of the year is always greater than for the first six months.

Value of  
output.

In Victoria it was ascertained that the value of the boots and shoes produced in Victorian factories in the year 1900, at manufacturers' selling prices (that is, wholesale price) was £900,000 in round figures, equal to 15s. per inhabitant per year. Another 10d. per inhabitant was provided by imports. The value of the output of Victorian boot factories for 1906 was £1,194,575, which is an average of 19s. 6d. per head of the population. The value of the imported boots in that year was £101,308, or 1s. 8d. per head, about half of which was re-exported.

The following table shows the quantities of goods manufactured <sup>Boot</sup> and house-boots, which were not returned previous to these years. <sup>factories.</sup> in each of the last seven years:—

## BOOT FACTORIES: 1900 TO 1906.

Year.	Goods Manufactured—	
	Boots and Shoes.	Slippers.
	No. of pairs.	No. of pairs.
1900 ... ..	3,446,809	66,740
1901 ... ..	3,123,749	92,174
1902 ... ..	3,613,487	216,483
1903 ... ..	3,574,761	150,012
1904 ... ..	4,065,881	189,108
1905 ... ..	3,951,033	165,892
1906 ... ..	4,001,580	175,575

NOTE.—The number of slippers returned for 1902, and each year since, includes canvas shoes and house-boots, which were not returned previous to these years.

The progress of the boot manufacturing industry is a matter in which the pastoral and agricultural industries of the State are directly concerned, Victorian boot manufacturers being large consumers of leather made from the hides and skins produced in this State. The development of the leather and boot trades whereby raw material produced is made up locally, is of considerable importance in the prosperity of the State generally.

The number of electric light works was 9 in 1906, or two more than in 1905, and there was a marked advance in the industry in all other ways. The number of hands employed was 363, against 251 in the previous year, and the horse-power of the engines used was raised from 6,754 to 9,130. Other particulars relating to this class of works for the last seven years are given in the following table:—

Electric  
light  
works.

## ELECTRIC LIGHT WORKS: 1900 TO 1906.

Year.	Approximate Value of—			Electricity Supplied.
	Machinery and Plant.	Land.	Buildings and Improvements	
	£	£	£	
1900 ...	145,580	16,060	37,700	6,100,519
1901 ...	220,690	15,240	86,730	6,680,214
1902 ...	204,022	10,000	67,661	6,450,560
1903 ...	198,751	9,750	76,733	5,626,568
1904 ...	374,850	12,085	98,809	6,644,343
1905 ...	416,847	13,709	107,543	7,698,394
1906 ...	491,171	14,378	129,951	9,760,046

## Gasworks.

Forty-eight gasworks were in operation in 1906, the same number as in the previous year. The quantities of coal used, of gas made, and of coke produced, during the last seven years are shown hereunder:—

## GASWORKS: 1900 TO 1906.

Year.	Coal Used.	Gas Made.	Coke Produced.
	tons.	cubic feet.	tons.
1900 ...	153,455	1,516,531,100	77,255
1901 ...	159,374	1,567,649,380	84,546
1902 ...	169,356	1,642,652,799	92,308
1903 ...	166,018	1,628,899,400	94,947
1904 ...	166,307	1,649,396,000	97,357
1905 ...	168,007	1,707,184,000	98,559
1906 ...	178,251	1,810,405,800	105,909

In addition to the coal used, 108,531 gallons of oil were also consumed in 1902, 105,651 in 1903, 117,114 in 1904, 137,247 in 1905, and 154,486 in 1906.

## Total production.

The following is a return of the value of Victorian production for the years 1904, 1905, and 1906, which shows a total of £36,549,206 in 1906, an increase on the previous year of £2,613,595, or 8 per cent.

## VALUE OF VICTORIAN PRODUCTION: 1904 TO 1906.

Produce.	Value in		
	1904.	1905.	1906.
<i>Cultivation.</i>	£	£	£
Wheat ... ..	3,119,878	3,366,290	3,109,980
Oats ... ..	465,257	678,040	810,851
Barley, Malting ... ..	92,320	126,402	140,425
Barley, Other ... ..	31,103	56,426	65,407
Maize ... ..	79,967	88,167	70,496
Other Cereals ... ..	34,758	52,693	47,391
Grass and Clover Seed ... ..	6,825	8,320	4,519
Potatoes ... ..	417,150	597,426	333,678
Onions ... ..	116,721	133,638	79,800
Other Root Crops ... ..	35,075	39,914	24,233
Hay ... ..	861,479	1,641,936	1,681,768
Straw ... ..	96,277	35,384	37,906
Green Forage ... ..	74,755	85,103	91,255
Tobacco ... ..	1,219	1,944	1,529
Grapes, not made into wine, raisins, &c. ... ..	28,678	27,071	38,877
Raisins, ordinary ... ..	49,526	43,715	89,577
" sultanas ... ..		45,631	90,896
Currants ... ..	9,757	11,952	21,994
Wine ... ..	83,984	86,322	110,761
Hops ... ..	9,419	11,563	12,960



## VALUE OF VICTORIAN PRODUCTION: 1904 TO 1906—continued.

Produce.	Value in		
	1904.	1905.	1906.
<i>Cultivation—continued.</i>	£	£	£
Other Crops... ..	27,880	27,735	28,509
Fruit grown for Sale in Orchards and Gardens	365,493	359,500	476,215
Fruit in Private Orchards and Gardens	11,092	9,924	9,870
Market Gardens ... ..	197,600	183,325	197,650
<b>Total ... ..</b>	<b>6,216,213</b>	<b>7,728,421</b>	<b>7,576,547</b>
<i>Dairying and Pastoral.</i>			
Milk Consumed in natural state	648,752	697,276	737,719
Butter made ... ..	2,414,695	2,496,580	2,978,860
Cheese made ... ..	89,022	102,563	116,860
Cream made (not for butter) ...	8,529	15,580	20,083
Concentrated Milk ... ..	39,691	40,654	59,515
Horses produced ... ..	198,456	176,267	335,538
Cattle " ... ..	1,740,767	2,064,000	2,480,226
Sheep " ... ..	1,429,970	1,599,800	1,913,202
Pigs " ... ..	380,616	331,140	325,381
Wool " ... ..	3,543,810	3,313,550	3,869,000
<b>Total ... ..</b>	<b>10,494,308</b>	<b>10,837,410</b>	<b>12,836,384</b>
<i>Mining.</i>			
Gold ... ..	3,252,045	3,173,744	3,280,478
Coal ... ..	70,208	79,060	80,283
Stone from Quarries (including limestone)	83,585	81,565	63,272
Salt (crude) ... ..	2,053	10,440	9,273
Other Metals and Minerals ...	12,245	16,646	21,550
<b>Total ... ..</b>	<b>3,420,136</b>	<b>3,361,455</b>	<b>3,454,856</b>
<i>Forest Produce.</i>			
Timber (Forest Saw-mills only)	147,750	142,905	153,309
Firewood (estimated) ... ..	380,000	380,000	385,000
Bark for Tanning ... ..	82,817	63,820	64,260
<b>Total ... ..</b>	<b>610,567</b>	<b>586,725</b>	<b>602,569</b>
<i>Miscellaneous.</i>			
Honey and Beeswax ... ..	21,408	16,206	39,015
Poultry production (estimated)	1,491,550	1,491,550	1,500,550
Rabbits and Hares ... ..	137,590	183,560	164,547
Fish ... ..	75,023	69,034	67,775
<b>Total ... ..</b>	<b>1,725,571</b>	<b>1,760,350</b>	<b>1,771,887</b>
<b>Total Value of Primary Products</b>	<b>22,466,795</b>	<b>24,274,361</b>	<b>26,242,243</b>
<b>Manufacturing.—Added value*</b>	<b>9,185,238</b>	<b>9,661,250</b>	<b>10,306,963</b>
<b>Grand Total ... ..</b>	<b>31,652,033</b>	<b>33,935,611</b>	<b>36,549,206</b>

\* Exclusive of butter and cheese factories and forest saw-mills (as regards Victorian timbers) included above.

Compared with 1905 a good increase is shown in 1906 under all heads, with the exception of cultivation. The decline in the value of cultivation is due principally to wheat and potatoes, as of the former there was a decreased production of about 800,000 bushels, while of the latter though the production had increased by over 50,000 tons, the market value which was over £5 per ton for the potato crop planted in 1905 fell to below £2 per ton for last season's crop. The value of production per head of the total population in each of the last three seasons is as follows:—

VALUE OF PRODUCTION PER HEAD OF POPULATION: 1904 TO 1906.

Produce.	Value of Produce per head in—		
	1904.	1905.	1906.
	£ s. d.	£ s. d.	£ s. d.
Cultivation ... ..	5 2 11½	6 7 5½	6 3 6
Dairying and Pastoral... ..	8 13 9½	8 18 9½	10 9 2
Mining ... ..	2 16 7½	2 15 5½	2 16 4
Forest ... ..	0 10 1½	0 9 8	0 9 10
Miscellaneous ... ..	1 8 7	1 9 0½	1 8 10
Total Primary Produce	18 12 1½	20 0 4¾	21 7 8
Manufactures ... ..	7 12 1½	7 19 4½	8 8 0
Grand Total ... ..	26 4 2¾	27 19 9	29 15 8

During the three years very satisfactory progress was made in the value of produce from pastoral pursuits, and also from manufactures. Other lines of produce, though not showing any remarkable increase, maintain a sound position. The improvement in pastoral products is accounted for by an increased production and value of butter, live stock, and wool.

## No. 1.—GENERAL STATISTICS

## No. 1.—GENERAL STATISTICS

[illegible][illegible]



Year.	Total Area Cultivated.	Area under each Description of Tillage.																	Artificial Grass.	Produce Raised.																	Year.				
		Wheat.	Oats.	Barley.	Maize.	Rye.	Pease and Beans.	Potatoes.	Mangel-wurzel.	Beet Carrots, Parsnips, and Turnips.	Onions.	Hay.	Green Forage.	Chicory.	Grass and Clover Seeds.	Hops.	Tobacco.	Vines.		Other Crops.	Gardens and Orchards.	Land in Fallow.	Wheat.	Oats.	Barley.	Maize.	Rye.	Pease and Beans.	Potatoes.	Mangel-wurzel.	Beet, Carrots, Parsnips, and Turnips.	Onions.	Hay.	Chicory.	Grass and Clover Seeds.	Hops.		Tobacco.	Grapes not made into Wine.	Grapes made into Wine.	Wine made.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	tons.	tons.	tons.	cwt.	tons.	tons.	bushels.	cwt.	cwt.	cwt.	cwt.	gallons.		
1836	50	50	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1836
1837	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1837
1838	149½	82½	22½	...	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1838
1839	2,069	1,302	252	161	140	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1839
1840	3,210	1,940	820	300	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1840
1841	4,881	1,702	1,285	353	82	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1841
1842	8,124½	2,432	2,410	761	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1842
1843	12,722½	4,674	2,560	1,063	773	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1843
1844	16,529½	6,919½	3,082½	1,630½	1,063	...	2	2,487	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1844
1845	25,133½	11,466½	4,817	749	763	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1845
1846-7	31,578½	15,802	6,099	1,691½	1,213	...	1	2,140½	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1846-7
1847-8	36,289½	17,679½	7,173	2,161½	1,303	...	1	2,638½	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1847-8
1848-9	40,792½	19,387½	8,289	2,579½	1,48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1848-9
1849-50	45,975½	24,247	5,379½	2,303½	283	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1849-50
1850-51	52,340½	28,510½	5,702½	2,101½	243	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1850-51
1851-2	57,472	29,623½	6,426½	1,327½	11	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1851-2
1852-3	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1852-3
1853-4	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1853-4
1854-5	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1854-5
1855-6	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1855-6
1856-7	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1856-7
1857-8	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1857-8
1858-9	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1858-9
1859-60	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1859-60
1860-61	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1860-61
1861-2	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1861-2
1862-3	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1862-3
1863-4	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1863-4
1864-5	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1864-5
1865-6	57,472	16,823	2,947½	411½	1	...	...	...	...	...	...	...	...	...	...																										