

Subs.
VICTORIAN YEAR-BOOK

FOR

1890 - 91.

(EIGHTEENTH YEAR OF ISSUE.)

BY

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IN TWO VOLUMES.—VOLUME II.



BY AUTHORITY.

MELBOURNE:

PRINTED FOR THE GOVERNMENT PRINTER

BY SANDS & McDougall Limited, 365 COLLINS STREET.

SOLD AT THE GOVERNMENT PRINTING OFFICE AND BY ALL BOOKSELLERS
IN VICTORIA.

LONDON:

TRÜBNER & Co., 57 & 59 LUDGATE HILL.

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ERRATA.

VOLUME I.

Page 173, paragraph 241, ninth line, *read* “*” *instead of* “†.”

Page 258, first line, *read* “1891” *instead of* “1890.”

Page 348, Class IV., *read* “κακεξία,” *instead of* “καχεξία.”

Page 350, Class I., Sub-class 6, *read* “Phagedæna,” *instead of* “Phagadæna.”

VOLUME II.

Page 82, paragraph 68, last line but one, last word, *read* “1889” *instead of* “1890.”

STATISTICAL SUMMARY OF VICTORIA FROM 1836 TO 1890 INCLUSIVE.

Main statistical table with columns for Year, Population, Births, Deaths, Marriages, Emigrants, General Revenue, Crown Land Sales, Live Stock, Postage, Shipping, Vessels, Mortgages, Imports, Exports, and Wool. It contains detailed data for each year from 1836 to 1890.

Table of Government Expenditure, Railways, Electric Telegraphs, Banks of Issue, Savings Banks, Friendly Societies, Cities, Towns, and Boroughs, Shires and Districts, Manufacturing, Mining, Churches and Chapels, Schools, Melbourne University, and Number of Persons. It details various public and private expenditures and statistics.

Figures revised and corrected since last publication. * Prior to 1871 the expenditure was for the year ending 31st December. The figures for 1871 are therefore for the six months ending 30th June, and the figures for subsequent years are for the twelve months ending 30th June. The amounts since 1874 are not, for the first time, exclusive of receipts and expenditure to be recouped. In addition to the quantity of land sold and amount realized within the year, the figures under the head 'Crown Land Sales' represent, during each of the years after 1888, the total extent of, and amount paid on, lands purchased under deferred payments of which the payments were completed within the year, although such payments had extended over a series of years. The extent sold, of which the purchase had not been completed, is not included in the area sold. The amount, at the end of 1880, of 6,897,174 acres, was not included in the area sold. The extent sold, of which the purchase had not been completed, is not included in the area sold. The amount, at the end of 1880, of 6,897,174 acres, was not included in the area sold. The extent sold, of which the purchase had not been completed, is not included in the area sold. The amount, at the end of 1880, of 6,897,174 acres, was not included in the area sold.

SUMMARY OF THE AGRICULTURAL STATISTICS OF VICTORIA FROM 1836 TO 1890-91 INCLUSIVE.

Table with columns for Year, Total Area Cultivated, and various crops (Wheat, Oats, Barley, Maize, Rye, Pease and Beans, Potatoes, Turnips, Mangr-wurzel, Beet, Carrots, Parsnips, Onions, Hay, Green Forage, Chicory, Grass and Clover Seeds, Hops, Tobacco, Vines, Other Crops, Gardens and Orchards, Land in Fallow). It also includes a section for Produce Raised with columns for Wheat, Oats, Barley, Maize, Rye, Pease and Beans, Potatoes, Turnips, Mangr-wurzel, Beet, Carrots, Parsnips, etc., Onions, Hay, Chicory, Grass and Clover Seeds, Hops, Tobacco, Grapes not made into Wine, Grapes made into Wine, Wine made, and Brandy made.

* In 1863-4, 1864-5, and 1878-9, the yield of wheat was much affected by "rust."

† The tobacco crop in 1875-6, 1879-80, and 1890-91, failed in most parts of the colony.

SUMMARY OF AUSTRALASIAN STATISTICS, FROM 1873 TO 1890.

Main data table with columns for Name of Colony, Year, Population, Births, Deaths, Marriages, Emigrants, Public Revenue, Public Debt, Imports, Exports, Shipping, Agriculture (Wheat, Oats, Barley, Maize, etc.), and Livestock (Horses, Cattle, Sheep, Pigs).

Where asterisks occur the information has not been furnished. Revised and corrected since last publication. Including land in fallow in all the colonies in 1890, and in all except New South Wales prior to 1880. Excludes 200,000 acres in Victoria; 200,000 acres in New South Wales; 14,000 acres in Queensland; 640,000 acres (approximate) in New South Australia; 25,000 acres in Western Australia; 1,000 acres in Tasmania; and 200,000 acres in New Zealand.

VICTORIAN YEAR-BOOK, 1890-91.

PART VI.—INTERCHANGE.

1. The weights and measures used in Victoria are in every respect similar to those in use in the United Kingdom. Weights and measures.

2. In converting the weights and measures of foreign countries into their English equivalents, which is often necessary in the progress of this work, the operation is performed by using the scale adopted by the Imperial Board of Trade, which is as follows:— Foreign weights and measures.

FOREIGN WEIGHTS AND MEASURES, WITH THEIR ENGLISH EQUIVALENTS.

Countries.	Foreign Weights and Measures.	English Equivalents.
Austria-Hungary, Belgium, France, Germany, Holland, Italy, Norway, Portugal, Roumania, Spain, Sweden, and Switzerland	Kilomètre	·621 of a mile
	Square kilomètre	·386 of a square mile
	Are	·0247 of an acre
	Hectare	2·47 acres
	Cubic mètre	1·308 cubic yard
	Mètre	1·094 yard or 3·28 feet
	Kilogramme	2·204 lbs. avoirdupois
	Quintal métrique	220·4 lbs. „
	Tonneau (coal)	2,204 lbs. „
	Hectolitre (liquid measure)	22 Imperial gallons
„ (cereals, etc.)	2·75 Imperial bushels	
China	Ts'un	1·41 inch
	Ch'ih	1·175 foot
	Chang	11·75 feet
	Li	2,115 feet
	Tael	1·33 ounce avoirdupois
	Catty	1·33 lb. „
	Picul	133½ lbs. „
Denmark	Dansk mil	4·68 miles
	Geo. mil	4·61 miles
	Geo. sq. mil	21·195 square miles
	Tøndeland	1·36 acre
	Tønne (corn)	3·8 Imperial bushels
	„ (coal)	4·6775 bushels
	Pund	1·102 lb. avoirdupois
Egypt	Oke	2·7 lbs. „
	Cantar	98·06 lbs. „
	Ardeb of wheat or maize (118 okes)	318·6 lbs. „
	„ barley (88 okes)	237·6 lbs. „
„ rice (152 okes)	410·4 lbs. „	

FOREIGN WEIGHTS AND MEASURES, WITH THEIR ENGLISH
EQUIVALENTS—*continued.*

Countries.	Foreign Weights and Measures.	English Equivalents.
Greece	{}	Ocque 2·84 lbs. „
		Quintal 123·2 lbs. „
		Livre 1·1 lb. „
		Drachme $\frac{1}{9}$ ounce
Japan	{}	Ri 2·4403 miles
		Ri carré 5·9552 square miles
		Tchô 5·4229 chains
		Tchô carré 2·4507 acres
		Ken 1·9884 yard
		Tsoubo 3·9538 square yards
		Kokou (liquid) 39·7033 gallons
		„ (dry) 4·9629 bushels
		Chô (liquid) 1·5881 quart
		„ (dry) 1·985 peck
Russia	{}	Kwan 8·2817 lbs. avoirdupois
		Verste 1·663 mile
		Sq. verste 1·44 square mile
		Dessiatine 2·7 acres
		Pood 36 lbs. avoirdupois
		Berkovet 360 lbs. „
		Tchetvert 5·77 Imperial bushels
Vedro 2·7 Imperial gallons		

Imports and
exports
classified.

3. The returns of imports and exports, as given in the following pages, are arranged according to a system of classification recommended by the Statistical Conference of representatives of the Australasian colonies held in Tasmania in 1875,* the principle kept in view being that articles of a like nature should be classed together, and the form adopted that then employed in the tabulation of the Victorian Census Return of Occupations, means thus being thereby afforded of making calculations in respect to the number of persons in the colony working at the various trades in connexion with which articles are manufactured similar to those imported into and exported from the colony. The year under review is the thirteenth in which this mode of classification has been used in Victoria. It has met with the approval of eminent statisticians in Europe and elsewhere, but up to the present time has only been adopted by one of the other colonies represented at the Conference.

Mode of
valuing im-
ports and
exports.

4. The Customs valuations are made upon the following principle. In the case of the imports, goods on which *ad valorem* duties

* See Report of Conference, with introductory letter by the Government Statist of Victoria (Parliamentary Paper, No. 11, Session 1875), page 6, paragraph 16; page 9, resolution 6; and page 12, Appendix A.; also *Victorian Year-Book*, 1875, paragraphs 96 to 99, and footnotes.

are payable are by law appraised at their fair market value at the principal markets of the country whence they were exported, with 10 per cent added.* Valuations of other goods may be practically said to be their cost price on landing, *i.e.*, their invoice values with the addition of freight and charges. In the case of the exports, the valuations are presumed to be the actual values in the local markets at the time of shipment. In the case of both imports and exports, the values are carefully checked by officers of the Customs Department, and returned to the merchants for amendment if found incorrect.

5. In the following table, the rates of import duty† are given, also the amount collected in connexion with each article. The quantities of the various articles are also given where possible, as well as the values, and, in addition, the excess of imports over exports, or the contrary, of each article. Table of imports and exports.

6. The table of imports and exports is preceded by the following summary of the headings adopted for the classification of articles; also by an alphabetical index, which will still further facilitate the discovery of the position of any article:— Classification and index of imports and exports.

CLASSIFICATION OF ENTRIES OF ARTICLES IMPORTED AND EXPORTED.

CLASS I.—ART AND MECHANIC PRODUCTIONS.	CLASS II.—TEXTILE FABRICS AND DRESS.
Order 1. Books, etc. „ 2. Musical instruments. „ 3. Prints, pictures, etc. „ 4. Carving, figures, etc. „ 5. Tackle for sports and games. „ 6. Watches, philosophical instruments, etc. „ 7. Surgical instruments. „ 8. Arms, ammunition, etc. „ 9. Machines, tools and implements. „ 10. Carriages, harness, etc. „ 11. Ships and boats, and matters connected therewith. „ 12. Building materials. „ 13. Furniture. „ 14. Chemicals.	Order 15. Wool and worsted manufactures. „ 16. Silk manufactures. „ 17. Cotton and flax manufactures. „ 18. Drapery and haberdashery. „ 19. Dress. „ 20. Manufactures of fibrous materials. CLASS III.—FOOD, DRINKS, ETC. Order 21. Animal food. „ 22. Vegetable food. „ 23. Drinks and stimulants. CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES. Order 24. Animal substances. „ 25. Vegetable substances. „ 26. Oils.‡

* This has been assumed by the Victorian authorities to be the average rate at which goods increase in value *in transitu* by reason of freight and other charges.

† A complete set of the Australasian Tariffs were published in an Appendix to the second volume of the *Victorian Year-Book*, 1888-9. References to subsequent amendments therein will be found in an Appendix to the second volume of that work for 1889-90, and at the end of this volume.

‡ It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this heading.

CLASSIFICATION OF ENTRIES OF ARTICLES IMPORTED AND EXPORTED—*continued.*

<p>CLASS V.—MINERALS AND METALS.</p> <p>Order 27. Articles connected with mining.</p> <p>„ 28. Coal, etc.</p> <p>„ 29. Stone, clay, earthenware, and glass.</p> <p>„ 30. Water.</p> <p>„ 31. Gold, silver, specie, and precious stones.</p> <p>„ 32. Metals other than gold and silver.</p>	<p>CLASS VI.—LIVE ANIMALS AND PLANTS.</p> <p>Order 33. Animals and birds.</p> <p>„ 34. Plants.</p> <p>CLASS VII.—MISCELLANEOUS MATTERS.</p> <p>Order 35. Miscellaneous articles of trade, etc.</p> <p>„ 36. Indefinite articles.</p>
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Seal oil	... 26			Weaving and spinning	
" skins	... 24	Tackle for sports and		machinery	... 9
Seeds—canary, clover,		games	... 5	Whalebone	... 24
grass	... 25	Tallow	... 24	Wheat	... 22
Seed oil	... 26	" oil	... 26	Whisky	... 23
Sewing machines	9	Tanks, iron	... 32	Whiting	... 29
Shale	... 28	Tapioca	... 22	Wicker and basketware	25
Sheep	... 33	Tar	... 25	Wine	... 23
" skins	... 24	Tares	... 25	" spirits of	... 23
Shell—pearl, tortoise	24	Tarpaulins, linen	... 17	Wire netting	... 32
Shellfish	... 21	Tea	... 23	Wooden tobacco pipes	4
Ships, boats, etc.	... 11	Telegraphic materials	35	Woodenware	... 25
Shoes	... 19	" wire	... 32	Wool	... 24
Shot	... 8	Tents, linen	... 17	" and worsted manu-	
Silk—manufactures,		Timber, all kinds	... 25	factures	... 15
mixtures; silks	... 16	Tin—block, foil, ore,		Woollen piece goods	... 15
Silver—plate, specie	... 31	plates, ware	... 32	Woolpacks	... 20
Skins	... 24	Tobacco	... 23	Works of art	... 3
Slate slabs	... 29	" pipes	... 4	Writing paper	... 25
Slates, roofing	... 12	Tonite	... 8		
Slops	... 19	Tools	... 9		
Snuff	... 23	Tortoise shell	... 24	Yarn	... 15
Soap	... 24	Toys	... 5		
Soda—ash, bicarbonate,		Travellers' samples	... 35	Zinc—ingots, sheet, per-	
caustic, crystals, ni-		Tricycles, bicycles	... 10	forated	... 32
trate, silicate	... 14				

IMPORTS, 1890.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS.				
<i>Order 1.—Books, etc.</i>				
Free ...	...	Books, printed ... ..	...	268,879
3s. per doz. packs	1,385	Cards, playing ... doz. packs	10,344	2,616
20 per cent. and free	11,855	Stationery* ... ..	...	94,989
<i>Order 2.—Musical Instruments.</i>				
£3 each ...	69	Harmoniums No.	22	280
" ...	1,608	Organs ...	472	6,223
£15 each ...	915	Pianofortes, Grand	74	5,272
£5 each ...	17,770	" Upright	3,932	89,036
25 per cent.	683	Pianoforte actions, etc.	...	2,731
Free ...	...	Others, undescribed	...	14,984
<i>Order 3.—Prints, Pictures, etc.</i>				
Free ...	...	Paintings and engravings ... ..	...	48,905
" ...	...	Works of art ... ..	...	6,518
<i>Order 4.—Carving, Figures, etc.</i>				
25 per cent.	...	Mouldings, gilt ... ..	...	...
1s. per gross	148	Pipes, tobacco—clay ... gross	2,301	218
25 per cent.	181	" " meerschaum ... ..	...	723
" ...	5,326	" " wooden ... gross	5,032	20,755
" ...	272	" " other ... ..	...	1,082
" ...	10	Pipe cases ... ..	...	40
" ...	79	Turnery ... ..	...	317
<i>Order 5.—Tackle for Sports and Games.</i>				
20 per cent.	193	Fireworks ... ..	...	1,400
Free ...	...	Toys ... ..	...	24,105
<i>Order 6.—Watches, Philosophical Instruments, etc.</i>				
20 per cent.	3,430	Clocks ... ..	...	17,146
Free ...	...	Instruments, optical ... ..	...	12,987
" ...	...	" scientific ... ..	...	15,480
20 per cent.	10,420	Watches ... ..	...	58,572
Free ...	...	Watchmakers' materials ... ..	...	6,228
<i>Order 7.—Surgical Instruments.</i>				
Free ...	...	Instruments, surgical ... ..	...	20,728

* See also "Paper," Order 25.

EXPORTS, 1890.

*** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
<i>Order 1.—Books, etc.</i>				
...	61,891	Books, printed ... ..	...	+ 206,988
2,190	661	Cards, playing ... doz. packs	+ 8,154	+ 1,955
...	36,203	Stationery* ... ..	...	+ 58,786
<i>Order 2.—Musical Instruments.</i>				
9	134	Harmoniums No.	+ 13	+ 146
102	2,209	Organs "	+ 370	+ 4,014
318	12,175	Pianofortes "	+ 3,688	+ 82,133
...	...	Pianoforte actions, etc. ...	...	+ 2,731
...	3,330	Others, undescribed ... ..	...	+ 11,654
<i>Order 3.—Prints, Pictures, etc.</i>				
...	34,842	Paintings and engravings ... ..	...	+ 14,063
...	153	Works of art ... ..	...	+ 6,365
<i>Order 4.—Carving, Figures, etc.</i>				
...	142	Mouldings, gilt ... ..	...	- 142
1,256	229	Pipes, tobacco—clay ... gross	+ 1,045	- 11
...	793	" " meerschaum ... ..	...	- 70
1,032	4,810	" " wooden ... gross	+ 4,000	+ 15,945
...	...	" " other ... ..	...	+ 1,082
...	...	Pipe cases ... ..	...	+ 40
...	573	Turnery ... ..	...	- 256
<i>Order 5.—Tackle for Sports and Games.</i>				
...	237	Fireworks ... ..	...	+ 1,163
...	2,649	Toys ... ..	...	+ 21,456
<i>Order 6.—Watches, Philosophical Instruments, etc.</i>				
...	1,821	Clocks ... ..	...	+ 15,325
...	1,679	Instruments, optical ... ..	...	+ 11,308
...	799	" " scientific ... ..	...	+ 14,681
...	9,806	Watches ... ..	...	+ 48,766
...	33	Watchmakers' materials ... ..	...	+ 6,195
<i>Order 7.—Surgical Instruments.</i>				
...	431	Instruments, surgical ... ..	...	+ 20,297

* See also "Paper," Order 25.

IMPORTS, 1890—*continued.*** For the position of any article, see Index *ante.*

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS—<i>continued.</i>				
<i>Order 8.—Arms, Ammunition, etc.</i>				
Free	...	Arms, pistols, etc. ...	No. 1,808	1,019
"	...	" sporting ...	" 8,366	18,965
"	...	Ammunition, etc.—		
"	...	" caps ...	...	1,636
"	...	" cartridges ...	...	5,995
"	...	" cartridge cases ...	...	3,948
4d. per lb....	2,085	" dynamite ...	lbs. 144,600	10,631
1½d. per coil	356	" fuse ...	coils 43,618	1,041
1d. per lb....	100	" gelatine, blasting	lbs. 32,000	3,250
"	880	" " dynamite	" 243,400	22,430
"	3,546	" powder, blasting	" 893,544	19,127
3d. per lb....	1,637	" " sporting	" 199,575	14,124
Free	...	" " fine	" 250	7
1d. per lb....	430	" shot ...	" 85,186	707
4d. per lb....	...	" tonite ...	" ...	...
Free	...	" unenumerated ...	" ...	1,443
<i>Order 9.—Machines, Tools, and Implements.</i>				
35 per cent.	1,081	Boilers, steam ...	No. 14	2,799
"	...	Cream separators ...	...	7,458
Free	2,578	Cutlery ...	...	45,257
35 per cent.	...	Engines, steam ...	No. 33	5,154
Free	3,882	" traction ...	" 11	6,027
25 per cent.	5,214	" portable ...	" 124	21,348
20 per cent.	...	Implements, agricultural, undescribed	...	32,490
Free	...	Machinery, agricultural	...	96,850
"	...	" spinning and weaving	...	8,927
"	47,182	" undescribed	...	45,230
35 per cent.	...	" " "	...	162,391
Free	...	Sewing machines ...	No. 16,564	54,940
"	...	Tools and utensils ...	...	82,625
<i>Order 10.—Carriages, Harness, etc.</i>				
10s. per arm	1,182	Axles and arms, with brass caps	No. 2,308	1,811
7s. per arm	773	" " mail patent, over 1½in.	" 2,193	1,661
4s. 6d. p. arm	873	" " " to 1½in.	" 3,774	1,894
4s. 6d. p. arm	29	" " common nut, over 1½in.	" 102	39
3s. per arm	1,688	" " " to 1½in.	" 10,418	1,824
25 per cent.	738	" " common dray ...	" 4,185	2,933
35 per cent.	59	Axle-boxes ...	" 1,900	168

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of—		
Quantity.	Value.		Imports over Exports (+).	Exports over Imports (-).	
	£		Quantity.	Value.	
				£	
CLASS I.—ART AND MECHANIC PRODUCTIONS—<i>continued.</i>					
<i>Order 8.—Arms, Ammunition, etc.</i>					
...	...	Arms, pistols, etc....	No.	+ 1,808	+ 1,019
373	1,624	„ sporting ...	„	+ 7,993	+ 17,341
Ammunition, etc.—					
...	45	„ caps ...	...	...	+ 1,591
...	302	„ cartridges ...	...	...	+ 5,693
...	20	„ cartridge cases ...	...	...	+ 3,928
101,060	8,278	„ dynamite ...	lbs.	+ 43,540	+ 2,353
78,989	2,196	„ fuse ...	coils	- 35,371	- 1,155
6,000	660	„ gelatine, blasting	lbs.	+ 26,000	+ 2,590
...	...	„ „ dynamite	„	+ 243,400	+ 22,430
65,738	2,189	„ powder, blasting	„	+ 827,806	+ 16,938
6,663	791	„ „ sporting	„	+ 192,907	+ 13,333
...	...	„ „ fine	„	+ 250	+ 7
39,123	522	„ shot ...	„	+ 46,063	+ 185
600	60	„ tonite ...	„	- 600	- 60
...	...	„ unenumerated	„	...	+ 1,443
<i>Order 9.—Machines, Tools, and Imple- ments.</i>					
13	2,610	Boilers, steam ...	No.	+ 1	+ 189
...	...	Cream separators ...	...	...	+ 7,458
...	2,517	Cutlery ...	...	...	+ 42,740
66	12,086	Engines, steam ...	No.	- 33	- 6,932
...	...	„ traction ...	„	+ 11	+ 6,027
...	...	„ portable ...	„	+ 124	+ 21,348
...	32,605	Implements, agricultural, undescribed	...	...	- 115
...	21,971	Machinery, agricultural	...	...	+ 74,879
...	...	„ spinning and weaving	...	...	+ 8,927
...	99,298	„ undescribed	...	...	+ 108,323
5,224	20,539	Sewing machines ...	No.	+ 11,340	+ 34,401
...	3,465	Tools and utensils...	...	...	+ 79,160
<i>Order 10.—Carriages, Harness, etc.</i>					
1,758	1,111	Axles and arms, with brass caps	No.	+ 21,222	+ 9,051
		„ „ mail patent	„		
		„ „ common nut	„		
		„ „ common dray	„		
8	2	Axle-boxes	„	+ 1,892	+ 166

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS—continued.				
<i>Order 10.—Carriages, Harness, etc.</i>				
<i>—continued.</i>				
		Carriages and carts—		
£50 each ...	750	Barouches, broughams, mail phaetons, drags, etc. No.	13	2,699
20 per cent.	82	All carts and waggons without springs	58	878
£40 each ...	80	Omnibuses and coaches	2	302
£20 each ...	280	Hansom cabs, etc.	17	964
£15 each ...	120	Express waggons, etc.	7	258
£10 each ...	170	Dog carts, etc.	20	761
25 per cent.	2,494	Unenumerated ... ..	...	9,912
" ...	3,255	Bicycles, tricycles, etc. ... ..	...	12,676
35 per cent.	340	Carriage materials ... ..	...	1,099
Various ...	829	" wheels, poles, shafts, bars, under-gear, buggy tops	...	1,705
25 per cent.	1,125	Saddlery and harness... ..	...	4,619
Free ...	...	Saddlers' ironmongery ... ..	...	17,754
10s. per doz.	2	Saddle-trees (harness) ... doz.	3	6
20s. per doz.	81	" (riding)	55	197
<i>Order 11.—Ships and Boats, and matters connected therewith.</i>				
Free ...	...	Anchors	No. 109	415
" ...	...	Boats	" 15	522
" ...	...	Chain cables	tons 38	553
" ...	...	Oars, ash	No. 2,336	459
<i>Order 12.—Building Materials.</i>				
(See also Order 29, post.)				
35 per cent.	34	Bricks, air	No. 5,122	96
Free ...	...	" clay	" 152,933	391
20s. per 1,000	755	" fire	" 754,120	5,696
Free ...	...	Cement	cwt. 888,668	183,714
5s. to 7s. 6d. each	144	Doors	No. 805	566
5s. each ...	5	Frames, door and window	" 22	26
Free ...	...	Lime	tons 125	393
2s. per pair	1	Sashes, window	pairs 6	4
3s. per pair	5	" " glazed	" 34	32
Free ...	...	Slates, roofing	No. 7,764,038	59,365
<i>Order 13.—Furniture.</i>				
35 per cent.	25,831	Furniture and upholstery ... ..	...	73,336
10 per cent.	59	Furniture springs ... ..	...	674
35 per cent.	221	Gasaliers and chandeliers ... ..	...	831
25 per cent.	3,291	Lamps and lampware ... ..	...	13,352

EXPORTS, 1890—continued.

** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of—	
Quantity.	Value.		Imports over Exports (+).	Exports over Imports (-).
	£		Quantity.	Value.
				£
CLASS I.—ART AND MECHANIC PRODUCTIONS—continued.				
<i>Order 10.—Carriages, Harness, etc.</i>				
—continued.				
		Carriages and carts—		
		Barouches, broughams, mail phaetons, drags, etc.	No.	
166	6,135	" " " "	"	
		Omnibuses and coaches ...	"	-49
		All other kinds...	"	-273
		Express waggons, etc. ...	"	
		Dog carts, etc. ...	"	
...	...	Unenumerated ...	...	+9,912
...	1,183	Bicycles, tricycles, etc. ...	...	+11,493
		Carriage materials ...	...
...	1,610	" wheels, poles, shafts, and bars	...	+1,194
...	9,322	Saddlery and harness ...	...	-4,703
...	368	Saddlers' ironmongery ...	...	+17,386
6	12	Saddle-trees (harness) ...	doz.	-3
149	666	" (riding) ...	"	-94
		" (riding) ...	"	-469
<i>Order 11.—Ships and Boats, and matters connected therewith.</i>				
6	92	Anchors ...	No.	+103
29	509	Boats ...	"	-14
12	257	Chain cables ...	tons	+26
61	50	Oars, ash ...	No.	+2,275
		" ...	...	+409
<i>Order 12.—Building Materials.</i>				
(See also Order 29, post.)				
...	...	Bricks, air ...	No.	+5,122
137,400	353	" clay ...	"	+96
3,500	35	" fire ...	"	+38
9,640	2,302	Cement ...	cwt.	+750,620
1,217	315	Doors ...	No.	+5,661
...	...	Frames, door and window ...	"	+879,028
338	996	Lime ...	tons	+181,412
586	337	Sashes, window ...	pairs	-412
6,560	69	Slates, roofing ...	No.	+22
		" ...	...	+26
		" ...	...	-213
		" ...	...	-546
		" ...	...	-301
		" ...	...	+7,757,478
		" ...	...	+59,296
<i>Order 13.—Furniture.</i>				
...	26,573	Furniture and upholstery ...	...	+46,763
...	...	Furniture springs ...	...	+674
...	...	Gasaliers and chandeliers ...	...	+831
...	1,686	Lamps and lampware ...	...	+11,666

IMPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS—*continued.*

		Order 14.— <i>Chemicals.</i>				
3d. per lb....	583	Acid, acetic ...	...	lbs.	56,321	1,669
5s. per cwt.	14	„ undescrbed	...	„	6,048	88
Free	...	„ „	...	„	578,189	30,437
Free	...	Alkali, soda ash	...	cwt.	14,036	4,256
„	...	„ „ bicarbonate	...	„	7,351	2,241
„	...	„ „ caustic	...	„	11,405	7,534
40s. per ton	11	„ „ crystals	...	tons	2	9
Free	...	Alum	...	cwt.	4,014	1,196
„	...	Arsenic	...	„	326	271
„	...	Asphalte	...	„	4,935	1,430
25 per cent.	1,174	Blacking	...	...	...	5,039
Free	...	Borax	...	cwt.	612	1,107
Various & free	1,274	Drugs and chemicals—miscellaneous	...	...	...	95,725
Free	...	Nitrate of soda	...	cwt.	5,589	2,808
„	...	Silicate of soda	...	„	2,931	989
„	...	Dyes	...	...	...	20,636
„	...	Essences and essential oils	...	...	...	7,941
3d. per lb....	239	Glycerine, pure	...	lbs.	26,133	842
Free	...	Guano	...	tons	1,251	7,636
„	...	Ink, printing	...	lbs.	309,370	5,728
6d. per lb....	210	„ coloured	...	„	8,387	950
10 per cent.	529	„ writing	...	...	...	5,260
Free	...	Manures, undescrbed	...	tons	465	2,476
1s. 3d. per gross	55	Matches and vestas in metal boxes	...	gross	1,377	476
1s. per gross	14,592	„ „ „ in paper boxes	...	„	294,317	42,837
Free	...	„ safety	...	„	78,833	5,996
6d. per gross	238	„ wooden	...	„	7,075	591
25 per cent.	13,802	Medicines, patent	...	...	...	64,179
Free	...	Medicinal roots	...	...	...	474
„	...	Naphtha	...	galls.	8,722	1,386
20s. per lb.	16,591	Opium, prepared	...	lbs.	17,684	35,736
Free	...	Paints and colours, dry colours, etc.	...	cwt.	14,178	19,622
80s. per ton	670	„ „ mixed for use	...	„	3,518	7,740
40s. per ton	4,433	„ „ ground in oil	...	„	44,155	53,055
1s. per gal.	142	Spirits, methylated	...	galls.	2,715	580
Free	...	Sulphur	...	cwt.	47,831	10,351
„	...	Turpentine	...	galls.	81,114	10,176

CLASS II.—TEXTILE FABRICS AND DRESS.

		Order 15— <i>Wool and Worsted Manufactures.</i>				
25 per cent.	9,500	Blankets	...	pairs	98,751	44,445
20 per cent.	19,970	Carpeting and druggeting	...	...	...	89,918
Free	...	„ printed felt	...	...	...	1,524

EXPORTS, 1890—*continued.*** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £

CLASS I.—ART AND MECHANIC PRODUCTIONS—*continued.*

		<i>Order 14.—Chemicals.</i>				
16,291	311	Acid, acetic	...	lbs.	+ 40,030	+ 1,358
91,175	2,071	„ undescrbed	...	„	+ 493,062	+ 23,454
1,080	495	Alkali, soda ash	...	cwt.	+ 12,956	+ 3,761
295	201	„ „ bicarbonate	...	„	+ 7,056	+ 2,040
1,105	644	„ „ caustic	...	„	+ 10,300	+ 6,890
18	149	„ „ crystals	...	tons	- 16	- 140
16	12	Alum	...	cwt.	+ 3,998	+ 1,184
94	95	Arsenic	...	„	+ 232	+ 176
60	32	Asphalte	...	„	+ 4,875	+ 1,398
...	246	Blacking	...	...	...	+ 4,793
48	154	Borax	...	cwt.	+ 564	+ 953
...	30,306	Drugs and chemicals—miscellaneous	...	...	...	+ 65,419
200	160	Nitrate of soda	...	cwt.	+ 5,389	+ 2,648
472	221	Silicate of soda	...	„	+ 2,459	+ 768
...	2,533	Dyes	...	...	...	+ 18,103
...	5,812	Essences and essential oils	...	...	...	+ 2,129
25,680	688	Glycerine, pure	...	lbs.	+ 453	+ 154
264	1,351	Guano	...	tons	+ 987	+ 6,285
24,676	741	Ink, printing	...	lbs.	+ 284,694	+ 4,987
...	...	„ coloured	...	„	+ 8,387	+ 950
...	344	„ writing	...	...	...	+ 4,916
2,631	26,145	Manures, undescrbed	...	tons	- 2,166	- 23,669
31,169	5,063	Matches and vestas	...	gross	+ 350,433	+ 44,837
...	9,504	Medicines, patent	...	...	...	+ 54,675
...	...	Medicinal roots	...	...	...	+ 474
240	62	Naphtha	...	galls.	+ 8,482	+ 1,324
882	1,738	Opium, prepared	...	lbs.	+ 16,802	+ 33,998
4,379	7,410	Paints and colours	...	cwt.	+ 57,472	+ 72,977
476	67	„ „ mixed for use	...	„		
823	523	„ „ ground in oil	...	„	+ 2,239	+ 513
5,977	873	Spirits, methylated	...	galls.	+ 47,008	+ 9,828
		Sulphur	...	cwt.	+ 75,137	+ 9,303
		Turpentine	...	galls.		

CLASS II.—TEXTILE FABRICS AND DRESS.

		<i>Order 15.—Wool and Worsted Manufactures.</i>				
7,973	4,041	Blankets	...	pairs	+ 90,778	+ 40,404
...	4,048	Carpeting and druggeting	...	...	...	+ 85,870
...	...	„ printed felt	...	...	...	+ 1,524

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS II.—TEXTILE FABRICS AND DRESS—continued.				
<i>Order 15.—Wool and Worsted Manufactures—continued.</i>				
30 per cent.	7,027	Flannels, piece	...	22,110
25 per cent.	1,906	Rugs, woollen	...	7,691
		Woollen piece goods—		
30 per cent.	107,036	Broad and narrow cloths, tweeds, etc.	...	363,959
Free	...	Dress goods, containing wool	...	302,736
		" women's	...	...
30 per cent.	547	Shirtings	...	3,142
Free	...	Undescribed	...	34,773
"	...	Woollen manufactures unenumerated	...	7,105
"	...	Yarn	... lbs.	4,991
			316,117	
<i>Order 16.—Silk Manufactures.</i>				
20 per cent.	69,481	Silks and satins, dress	...	347,875
"	860	" dress goods, mixed with other material	...	4,783
"	96	Silk pongees	...	540
"	3,481	" ribbons	...	16,940
"	403	" velvets and crapes	...	2,564
"	1,259	" other manufactures of	...	9,055
Free	...	" " "	...	22,503
<i>Order 17.—Cotton and Flax Manufactures.</i>				
Free	...	Cotton piece goods (all cotton)	...	905,615
"	...	" manufactures, such as counterpanes, etc.	...	52,651
"	...	" waste	... lbs.	9,825
"	...	" wick	"	3,441
"	...	Linen piece goods	...	37,059
"	...	" manufactures, such as table linen, towels, etc.	...	3,975
20 per cent.	16	" tents and tarpaulins	...	82
<i>Order 18.—Drapery and Haberdashery.</i>				
Free	...	Haberdashery	...	313,115
25 per cent.	1,020	Bags—Fancy	...	4,161
30 per cent.	1,673	Quilts	...	5,520
<i>Order 19.—Dress.</i>				
25 per cent.	82,615	Apparel and slops	...	323,495
35 per cent.	30,337	" "	...	87,295
Free	...	" "	...	17,706

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
CLASS II.—TEXTILE FABRICS AND DRESS—<i>continued.</i>				
<i>Order 15.—Wool and Worsted Manufactures—continued.</i>				
...	1,027	Flannels, piece ... ..	...	+ 21,083
...	2,701	Rugs, woollen ... ..	...	+ 4,990
...	39,340	Woollen piece goods— Broad and narrow cloths, tweed, etc.	...	+ 324,619
...	...	Dress goods, containing wool	...	+ 302,736
...	17,700	" women's ... ..	...	- 17,700
...	...	Shirtings ... ..	...	+ 3,142
...	...	Undescribed ... ..	...	+ 34,773
...	811	Woollen manufactures unenumerated	...	+ 6,294
23,188	465	Yarn lbs.	+ 292,929	+ 4,526
<i>Order 16.—Silk Manufactures.</i>				
...	40,245	Silks and satins, dress ... ..	...	+ 307,630
...	...	" dress goods, mixed with other material	...	+ 4,783
...	...	Silk pongees ... ..	...	+ 540
...	5	" ribbons ... ..	...	+ 16,935
...	...	" velvets and crapes ... ..	...	+ 2,564
...	460	" other manufactures of ... ..	...	+ 31,098
<i>Order 17.—Cotton and Flax Manufactures.</i>				
...	67,924	Cotton piece goods (all cotton) ... ..	...	+ 837,691
...	9,236	" manufactures, such as counter- panes, etc.	...	+ 43,415
17,648	332	" waste lbs.	+ 854,943	+ 9,493
6,550	423	" wick "	+ 49,616	+ 3,018
...	4,065	Linen piece goods ... ..	...	+ 32,994
...	324	" manufactures, such as table linen, towels, etc.	...	+ 3,651
...	...	" tents and tarpaulins ... ..	...	+ 82
<i>Order 18.—Draperies and Haberdashery.</i>				
...	39,019	Haberdashery ... ..	...	+ 274,096
...	356	Bags—Fancy ... ..	...	+ 3,805
...	337	Quilts ... ..	...	+ 5,183
<i>Order 19.—Dress.</i>				
...	167,682	Apparel and slops ... ..	...	+ 260,814

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—continued.

Order 19.—Dress—continued.

25 per cent.	856	Bonnets, fancy and trimmed ...	...	3,523
4s. to 45s. p. doz. pairs	31,609	Boots and shoes ...	pairs 535,302	118,424
Free ...	...	„ „ infants, Nos. 0-3	„ 119,167	8,862
20 per cent.	13	Clogs and pattens ...	...	66
25 per cent.	6,560	Feathers, ornamental ...	...	26,713
Free ...	...	Flowers, artificial ...	...	18,307
25 per cent.	1,811	Frillings and ruffings	...	7,237
2d. per lb.	53	Furs, dressed ...	lbs. 6,341	3,465
Free ...	...	„ undressed ...	...	88
25 per cent.	238	„ hatters'	...	599
20 per cent.	18,044	Gloves, kid or leather	...	89,798
Free ...	...	„ other ...	...	36,385
10 per cent.	2,321	Handkerchiefs ...	...	23,553
		Hats and caps—		
60s. per doz.	941	Dress ...	No. 3,914	2,183
30s. per doz.	49	With calico frame and covered, etc.	„ 904	136
20s. per doz.	17,690	Men's, boys', etc., felt	„ 216,400	38,276
8s. per doz.	1,379	Cloth, sewn, etc. ...	„ 57,382	2,003
5s. per doz.	656	Felt hoods ...	„ 25,764	1,701
Free ...	...	Straw, untrimmed ...	„ 1,119,239	63,062
25 per cent.	2,339	Others unenumerated	„ 92,908	9,192
	23,054	Total hats and caps ...	„ 1,516,511	116,553
Free ...	...	Hatters' materials ...	...	9,738
„ ...	...	Hosiery, cotton ...	...	63,873
25 per cent.	18,219	„ wool and silk ...	...	74,511
„ ...	...	Millinery ...	...	...
2s. 6d. each	1,251	Umbrellas and parasols, silk	No. 10,091	5,509
1s. each ...	64	„ „ other ...	„ 1,344	343
„ ...	2	Umbrella sticks ...	„ 71	8
Free ...	...	„ materials ...	...	1,559
		Order 20.—Manufactures of Fibrous Materials.		
Free ...	...	Bags and sacks, bran bags ...	No. 1,331,140	23,838
„ ...	...	„ „ corn and flour sacks	„ 4,630,822	113,146
„ ...	...	„ „ gunny bags ...	„ 1,006,630	21,558
3s. per doz.	3,010	„ „ woolpacks ...	„ 337,515	35,093
6d. per doz.	4	„ „ undescribed ...	„ 18,308	238
Free ...	...	„ „ „ ...	„ 190,451	2,953
„ ...	...	Boot webbing ...	...	3,787
„ ...	...	Canvas ...	...	20,827

EXPORTS, 1890—*continued.*** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
CLASS II.—TEXTILE FABRICS AND DRESS—<i>continued.</i>				
<i>Order 19.—Dress—continued.</i>				
...	...	Bonnets, fancy and trimmed ...	...	+ 3,523
131,540	37,047	Boots and shoes ... pairs	+ 522,929	+ 90,239
...	...	Clogs and pattens ...	...	+ 66
...	3,095	Feathers, ornamental ...	...	+ 23,618
...	705	Flowers, artificial ...	...	+ 17,602
...	962	Frillings and ruffings ...	...	+ 6,275
...	1,255	Furs, dressed ...	...	+ 2,210
...	...	„ undressed ...	...	+ 88
...	...	„ hatters' ...	...	+ 599
...	15,673	Gloves ...	...	+ 110,510
...	3,264	Handkerchiefs ...	...	+ 20,289
...	...	Hats and caps—		
...	...	Dress ... No.		
...	...	With calico frame and covered, etc. „		
164,264	17,401	Men's, boys', etc., felt ... „	+ 1,352,247	+ 99,152
...	...	Cloth, sewn, etc. ... „		
...	...	Felt hoods ... „		
...	...	Straw, untrimmed ... „		
...	...	Other unenumerated ... „		
...	1,000	Hatters' materials ...	...	+ 8,738
...	7,240	Hosiery ...	...	+ 131,144
...	125	Millinery ...	...	- 125
8,046	2,547	Umbrellas and parasols, silk ... No.	+ 3,389	+ 3,305
...	...	„ „ other „		
...	...	Umbrella sticks ... „	+ 71	+ 8
...	...	„ materials ... „	...	+ 1,559
<i>Order 20.—Manufactures of Fibrous Materials.</i>				
102,453	1,912	Bags and sacks, bran bags ... No.	+ 1,228,687	+ 21,926
729,995	18,540	„ „ corn and flour sacks „	+ 3,900,827	+ 94,606
...	...	„ „ gunny bags „	+ 1,006,630	+ 21,558
200,190	19,686	„ „ woolpacks... „	+ 137,325	+ 15,407
647,293	7,884	„ „ undescribed „	- 438,534	- 4,693
...	459	Boot webbing ...	...	+ 3,328
...	2,195	Canvas ...	...	+ 18,632

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—continued.

Order 20.—Manufactures of Fibrous Materials—continued.

5s. per cwt.	106	Cordage, coir cwt.	375	494
12s. per cwt.	484	„ hempen „	1,117	3,917
„ ...	288	„ white lines „	479	3,316
Free ...	...	„ unserviceable tons	60	357
12s. per cwt.	354	Engine packing cwt.	606	4,015
Free ...	...	Felt, sheathing ... ..	...	1,758
„ ...	3*	Jute piece goods ... ..	...	31,979
25 per cent.	702	Mats ... ..	...	2,683
20 per cent.	270	Matting, coir, jute ... ..	...	1,102
Free ...	...	„ other ... ..	...	3,029
„ ...	...	Nets and netting cwt.	373	2,680
20 per cent.	11,490	Oil and other floor cloths ... ..	...	48,593
2½d. per lb.	1,793	Twine and lines lbs.	184,992	6,828
8s. per cwt.	1,237	„ reaper and binder „	363,216	8,878
Free ...	...	„ sewing or seaming „	402,555	13,017

CLASS III.—FOOD, DRINKS, ETC.

Order 21.—Animal Food.

2d. per lb. ...	5,685	Butter lbs.	713,282	29,887
„ ...	1,986	Cheese „	249,399	7,279
2s. per gross	7,042	Eggs No.	10,140,000	34,403
Free ...	...	Fish, fresh ... ..	...	5,931
2d. per lb. ...	33,993	„ preserved lbs.	4,341,247	120,480
Free ...	...	„ salted... .. cwt.	24,173	38,968
„ ...	...	„ shell... ..	...	28,771
2d. per lb. ...	3	Honey lbs.	409	10
10 per cent.	87	Isinglass „	3,391	920
Free ...	...	„ uncut „	23,775	3,163
„ ...	...	Lard „	7,827	116
„ ...	...	Meats, fresh cwt.	2,889	2,968
2d. per lb. ...	3,036	„ preserved lbs.	386,706	17,308
„ ...	183	„ bacon „	24,273	857
5s. per cwt.	106	„ beef, salted cwt.	515	817
2d. per lb. ...	1,985	„ hams lbs.	358,244	15,413
5s. per cwt.	111	„ pork, salted cwt.	452	1,222
20 per cent.	1,382	„ potted, etc. ... ..	...	7,466

Order 22.—Vegetable Food.

2d. per lb. ...	707	Arrowroot lbs.	134,480	2,053
„ ...	72	Biscuit, fancy „	8,667	251

* Paid on post warrant.

EXPORTS, 1890—*continued.*** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £

CLASS II.—TEXTILE FABRICS AND DRESS—*continued.**Order 20.—Manufactures of Fibrous
Materials—continued.*

1,778	5,444	Cordage, coir cwt.	}	+ 193	+ 2,283	
						„ hempen „
147	445	„ white lines „	}	- 87	- 88	
68	499	„ unserviceable tons				
...	105	Engine packing cwt.		+ 538	+ 3,516	
...	2,114	Felt, sheathing ... ..		...	+ 1,653
...	879	Jute piece goods ... ..		...	+ 29,865
...	438	Mats ... ..		...	+ 1,804
...	4	Matting, China	}	...	+ 3,693	
...	2,820					„ coir and other
...	...	Nets and netting ... ..		...	+ 2,676
...	...	Oil and other floor cloths ... ..		...	+ 45,773
242,874	8,703	Twine and lines lbs.	}	+ 707,889	+ 20,020	
						„ reaper and binder „
						„ sewing or seaming „

CLASS III.—FOOD, DRINKS, ETC.

Order 21.—Animal Food.

1,627,405	60,377	Butter lbs.	- 914,123	- 30,490
222,494	6,019	Cheese „	+ 26,905	+ 1,260
88,146	235	Eggs No.	+ 10,051,854	+ 34,168
...	392	Fish, fresh ... ..	...	+ 5,539
476,883	14,760	„ preserved lbs.	+ 3,864,364	+ 105,720
418	661	„ salted cwt.	+ 23,755	+ 38,307
...	134	„ shell ... ..	...	+ 28,637
24,804	525	Honey lbs.	- 24,395	- 515
4,602	823	Isinglass „	- 1,211	+ 97
...	...	„ uncut „	+ 23,775	+ 3,163
7,804	209	Lard „	+ 23	- 93
1,078	1,110	Meats, fresh cwt.	+ 1,811	+ 1,858
1,050,074	23,634	„ preserved lbs.	- 663,368	- 6,326
90,325	3,647	„ bacon „	- 66,052	- 2,790
1,169	1,342	„ beef, salted cwt.	- 654	- 525
26,187	1,260	„ hams lbs.	+ 332,057	+ 14,153
717	2,806	„ pork, salted cwt.	- 265	- 1,584
...	...	„ potted, etc. ... ..	...	+ 7,466

Order 22.—Vegetable Food.

25,971	466	Arrowroot lbs.	+ 108,509	+ 1,587
1,072,795	18,975	Biscuit, fancy „	- 1,064,128	- 18,724

IMPORTS, 1890.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
<i>CLASS III.—FOOD, DRINKS, ETC.—continued.</i>				
<i>Order 22.—Vegetable Food.—contd.</i>				
Free ...	...	Biscuit, old ...	lbs.	2,843 30
" ...	...	Cocoanuts ...	No.	359,240 1,754
2d. per lb. ...	4,778	Confectionery ...	lbs.	590,293 26,091
" ...	13	" sugar candy ...	"	1,576 27
" ...	...	Fruit, bottled ...	"	... ...
18s. per doz.	2	" (over a quart and up to a gallon)	doz.	15 23
3s. per doz.	1,296	" (pints and over half a pint)	"	6,317 2,218
2d. per lb. ...	10,761	" dried ...	lbs.	1,319,982 23,012
" ...	37,839	" currants ...	"	4,395,214 52,259
" ...	19,478	" raisins ...	"	2,396,415 47,357
Free ...	...	" fresh, bananas, etc. ...	bushels	248,663 69,118
9d. per bush.	11,279	" oranges and lemons	"	300,777 101,881
1s. 6d. p. bush.	10,447	" all other ...	"	139,292 51,575
3s. p. cental	33	Grain and pulse, barley ...	centals	437 155
2s. 11d. p. ctl.	140	" beans and peas	"	1,047 836
" ...	1,047	" maize ...	"	7,179 1,586
4s. 6d. p. bush.	1,116	" malt ...	bushels	17,461 6,321
3s. p. cental	20,217	" oats ...	centals	215,066 59,607
2s. p. cental	200	" peanuts ...	"	2,018 1,816
6s. p. cental	12,598	" rice ...	"	68,314 45,522
4s. p. cental	7,221	" dressed in bond	"	58,126 33,960
2s. p. cental	1	" rye ...	"	12 5
2s. 11d. p. ctl.	141	" wheat ...	"	82,093 23,707
2s. p. cental	4	" unenumerated	"	40 28
		" prepared—		
7s. 6d. p. ctl.	25	Barley, pearl ...	"	151 87
5s. p. cental	87	Flour ...	"	25,146 11,357
9s. p. cental	19	Oatmeal ...	"	541 411
5s. p. cental	374	Peas, split ...	"	1,905 1,014
5s. p. cental	35	Semolina ...	"	318 587
" ...	...	Unenumerated ...	"	22 20
3d. per lb.	4,595	Jams and preserves ...	lbs.	398,801 9,766
2d. per lb.	2,342	" peel, candied	"	241,096 5,122
Free ...	...	" dried	"	5,684 181
2d. per lb. ...	292	Liquorice ...	"	46,942 1,987
" ...	820	Macaroni and vermicelli ...	"	94,021 1,705
" ..	4,912	Maizena and corn flour ...	"	944,864 23,744
Free ...	...	Molasses, unrefined ...	cwt.	26,586 4,181
3s. per cwt.	27	" refined ...	"	118 90
2s. per cwt.	952	" Victorian refined (in bond)	"	... ...
2d. per lb. ...	740	Nuts ...	lbs.	100,637 1,352
" ...	1,318	" almonds ...	"	148,151 5,028
" ...	105	" walnuts ...	"	11,863 204

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
CLASS III.—FOOD, DRINKS, ETC.— <i>continued.</i>				
Order 22.— <i>Vegetable Food.</i> —contd.				
...	...	Biscuit, old lbs.	+ 2,843	+ 30
25,600	138	Cocoanuts No.	+ 333,640	+ 1,616
84,414	3,248	Confectionery lbs.	+ 505,879	+ 22,843
...	...	" sugar candy "	+ 1,576	+ 27
222,783	3,998	Fruit, bottled "	- 222,783	- 3,998
...	...	" " (over a quart and up to a gallon) doz.	+ 15	+ 23
...	...	" " (pints and over half a pint) .. "	+ 6,317	+ 2,218
233,447	3,885	" dried lbs.	+ 1,086,535	+ 19,127
978,733	13,773	" " currants "	+ 3,416,481	+ 38,486
671,679	13,415	" " raisins "	+ 1,724,736	+ 33,942
...	...	" " fresh, bananas, etc. ... bushels	+ 248,663	+ 69,118
...	...	" " oranges and lemons .. "	+ 300,777	+ 101,881
43,938	16,622	" " all other "	+ 95,354	+ 34,953
3,433	1,244	Grain and pulse, barley ... centals	- 2,996	- 1,089
3,743	1,964	" " beans and peas .. "	- 2,696	- 1,128
2,344	771	" " maize "	+ 4,835	+ 815
12,279	4,394	" " malt bushels	+ 5,182	+ 1,927
14,083	4,745	" " oats centals	+ 200,983	+ 54,862
...	...	" " peanuts "	+ 2,018	+ 1,816
27,487	22,974	" " rice "	+ 98,953	+ 56,508
...	...	" " rye "	+ 12	+ 5
360,829	114,357	" " wheat "	- 278,736	- 90,650
...	...	" " unenumerated .. "	+ 40	+ 28
...	...	" " prepared—		
224	166	Barley, pearl "	- 73	- 79
789,021	374,150	Flour "	- 763,875	- 362,793
39,000	33,796	Oatmeal "	- 38,459	- 33,385
899	657	Peas, split "	+ 1,006	+ 357
...	...	Semolina "	+ 318	+ 587
...	...	Unenumerated "	+ 22	+ 20
259,077	5,854	Jams and preserves ... lbs.	+ 139,724	+ 3,912
10,975	346	" " peel, candied .. "	+ 230,121	+ 4,776
...	...	" " " dried .. "	+ 5,684	+ 181
11,508	325	Liquorice "	+ 35,434	+ 1,662
8,654	277	Macaroni and vermicelli ... "	+ 85,367	+ 1,428
64,343	1,484	Maizena and corn flour ... "	+ 880,521	+ 22,260
6,705	5,056	Molasses... .. cwt.	+ 19,999	- 785
...	...	" Victorian, refined ... .. "	...	...
12,868	236	Nuts lbs.	+ 87,769	+ 1,116
51,828	1,967	" almonds "	+ 96,323	+ 3,061
...	...	" walnuts "	+ 11,863	+ 204

IMPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Duty.		Articles.	Total Imports.		
Rate.	Amount Collected.		Quantity.	Value.	
	£			£	
CLASS III.—FOOD, DRINKS, ETC.—<i>continued.</i>					
<i>Order 22.—Vegetable Food—continued.</i>					
20s. per ton	5	Onions	tons	6	51
10s. per ton	2,557	Potatoes	"	5,106	22,244
Free ...	...	Sago	lbs.	321,407	2,627
		Sugar—			
3s. per cwt.	64,628	Cane, raw	cwt.	498,726	499,982
2s. per cwt.	42,749	" Victorian refined (in bond)	"	506,379	371,433
3s. per cwt.	44,877	" refined	"	299,583	318,569
6s. per cwt.	633	Beet	"	2,538	3,364
3s. per cwt.	1,545	Glucose	"	14,712	11,151
	154,432	Total Sugar	"	1,321,938	1,204,499
Free ...	...	Tapioca	lbs.	1,915,016	18,033
3s. per doz.	614	Vegetables, bottled (pints and over half a pint)	doz.	4,395	1,638
Free ...	...	" fresh	cwt.	6,746	3,972
2d. per lb...	38	" dried	lbs.	30,746	486
5s. per cwt.	31	" salted	cwt.	122	100
<i>Order 23.—Drinks and Stimulants.</i>					
10 per cent.	131	Aërated and mineral waters ...	doz.	6,308	1,255
9d. per gal.	52,060	Beer (ale and porter)...	galls.	1,585,520	312,244
1s. 6d. p. doz. pts.	4,129	" lager	"	40,456	7,331
3d. per lb...	450	Chicory	lbs.	87,362	390
" ...	...	" root	tons	...	...
3d. per lb...	5,389	Chocolate and cocoa	lbs.	364,370	28,093
9d. per gal.	47	Cider and perry	galls.	1,504	514
Free ...	...	Cocoa, raw	lbs.	130,843	4,702
3d. per lb...	641	Coffee, ground	"	69,362	4,182
Free ...	...	" raw	"	1,286,547	61,206
" ...	...	Ginger	"	91,831	1,314
8d. per lb...	7,821	Hops	"	330,576	19,125
20 per cent.	21	Limejuice	galls.	271	38
Free ...	...	" ... ..	"	21,225	1,834
2d. per lb.	6,848	Milk, preserved	lbs.	879,719	19,021
" ...	2,598	Mustard	"	312,840	16,996
Free ...	...	Pepper	"	506,869	17,155
2d. per lb.	10	" ground	"	3,048	72
20 per cent.	1,495	Perfumery* ... ..	...	...	7,820
12s. per doz.	2	Pickles (over a quart and up to a gallon)	doz.	3	8
3s. per doz.	5	" (quarts and over a pint)	"	119	43

* See also Spirits, perfumed.

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
<i>CLASS III.—FOOD, DRINKS, ETC.—continued.</i>				
<i>Order 22.—Vegetable Food—continued.</i>				
5,803	27,960	Onions tons	- 5,797	- 27,909
6,741	24,787	Potatoes „	- 1,635	- 2,543
77,068	738	Sago lbs.	+ 244,339	+ 1,889
...	...	Sugar—		
...	...	Cane, raw cwt.	+ 498,726	+ 499,982
...	...	„ Victorian refined „	+ 506,379	+ 371,433
123,449	126,468	„ refined „	+ 176,134	+ 192,101
5	7	Beet „	+ 2,533	+ 3,357
536	457	Glucose „	+ 14,176	+ 10,694
123,990	126,932	Total Sugar „	+ 1,197,948	+ 1,077,567
167,734	1,422	Tapioca lbs.	+ 1,747,282	+ 16,611
...	...	Vegetables, bottled (pint and over half a pint) doz.	+ 4,395	+ 1,638
25,620	7,245	„ fresh cwt.	- 18,874	- 3,273
25,367	615	„ preserved lbs.	+ 5,379	- 129
...	...	„ salted... .. cwt.	+ 122	+ 100
<i>Order 23.—Drinks and Stimulants.</i>				
12,915	1,890	Aërated and mineral waters... doz.	- 6,607	- 635
123,270	20,219	Beer (ale and porter) ... galls.	+ 1,462,250	+ 292,025
...	...	„ lager „	+ 40,456	+ 7,331
18,370	204	Chicory lbs.	+ 68,992	+ 186
35	195	„ root tons	- 35	- 195
54,091	3,343	Chocolate and cocoa ... lbs.	+ 310,279	+ 24,750
96	34	Cider and perry galls.	+ 1,408	+ 480
2,128	102	Cocoa, raw lbs.	+ 128,715	+ 4,600
146,136	7,265	Coffee „	+ 1,209,773	+ 58,123
11,713	305	Ginger „	+ 80,118	+ 1,009
376,308	19,111	Hops „	- 45,732	+ 14
12,700	1,730	Limejuice galls.	+ 8,796	+ 142
215,030	5,519	Milk, preserved lbs.	+ 664,689	+ 13,502
50,749	2,457	Mustard... .. „	+ 262,091	+ 14,539
72,148	3,450	Pepper „	+ 437,769	+ 13,777
...	1,036	Perfumery* „	...	+ 6,784
...	...	Pickles (over a quart and up to a gallon) doz.	+ 3	+ 8
1,546	1,286	„ (quarts and over a pint) „	- 1,427	- 1,243

* See also Spirits, perfumed.

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS III.—FOOD, DRINKS, ETC.—continued.

Order 23.—Drinks and Stimulants—continued.					
2s. 6d. p. doz.	2,617	Pickles (pints and over half a pint)	doz.	29,516	11,466
1s. per doz.	1	„ (half-pints and smaller)	„	26	8
20 per cent.	9	„ other	...	...	46
20s. per ton.	9,903	Salt	tons	11,691	44,343
Free	...	„ rock	„	747	2,203
„	...	Saltpetre	cwt.	3,748	3,950
2s. per doz.	1,591	Sauces (pints and over half a pint)	doz.	17,946	9,610
10 per cent.	7	„ other	...	...	65
Free	...	Spices, unenumerated	lbs.	207,838	10,279
2d. per lb.	169	„ ground	„	20,792	613
12s. per gal.	149,192	Spirits, brandy	galls.	312,781	150,669
„	2,445	„ cordials and bitters	„	6,161	5,826
„	75,125	„ gin	„	145,126	29,620
„	680	„ of wine	„	3,705	291
24s. per gal.	3,728	„ perfumed	„	3,053	13,324
12s. per gal.	58,039	„ rum	„	96,851	17,352
„	347,165	„ whisky	„	641,951	227,833
„	34,082	„ other, undescribed	„	78,960	42,446
1d. per lb.	58,674	Tea	lbs.	15,310,442	666,239
3s. per lb....	229,495	Tobacco (manufactured)	„	2,261,118	172,795
1s. per lb....	29,609	„ (unmanufactured)	„	971,340	56,123
6s. per lb....	46,601	„ cigars	„	207,440	90,049
„	9,830	„ cigarettes	„	33,580	15,276
3s. per lb....	688	„ snuff	„	4,899	1,136
6d. per gal.	2,497	Vinegar	galls.	131,522	12,611
6s. per gal.	27,305	Wine, in wood and bottled	„	150,591	61,680
8s. per gal.	14,664	„ sparkling	„	44,824	81,665

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES.

Order 24.—Animal Substances.					
Free	...	Beeswax	cwt.	5	20
„	...	Bones	tons	78	236
„	...	Bonedust	„	...	...
„	...	Bristles	lbs.	33,076	6,162
2d. per lb.	7,420	Candles	„	947,282	31,981
10 per cent.	479	Combs	...	...	4,957
Free	...	Flock	tons	6	110
2d. per lb.	1,328	Glue	lbs.	174,571	5,970
20 per cent.	155	„ liquid	...	...	755
Free	...	„ pieces	tons	...	...
60s. per ton	382	Grease	„	126	2,120
Free	...	Hair	lbs.	43,063	1,386
2d. per lb.	1,031	„ curled	„	121,277	4,256

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).		
Quantity.	Value. £		Quantity.	Value. £	
CLASS III.—FOOD, DRINKS, ETC.—<i>continued.</i>					
<i>Order 23.—Drinks and Stimulants— continued.</i>					
...	...	Pickles (pints and over half a pint)	doz.	+29,516	+ 11,466
...	...	„ (half-pints and smaller)	„	+ 26	+ 8
...	...	„ other	...	...	+ 46
724	2,686	Salt	tons	+ 10,967	+ 41,657
318	973	„ rock	„	+ 429	+ 1,230
326	409	Saltpetre	cwt.	+ 3,422	+ 3,541
6,710	2,796	Sauces (pints)	doz.	+ 11,236	+ 6,814
...	...	„ other	...	...	+ 65
78,058	3,593	Spices, unenumerated	lbs.	+ 129,780	+ 6,686
...	...	„ ground	„	+ 20,792	+ 613
63,115	26,299	Spirits, brandy	galls.	+ 249,666	+ 124,370
20,812	14,599	„ cordials and bitters	„	- 14,651	- 8,773
14,748	4,849	„ gin	„	+ 130,378	+ 24,771
1,006	147	„ of wine	„	+ 2,699	+ 144
177	456	„ perfumed	„	+ 2,876	+ 12,868
18,333	4,474	„ rum	„	+ 78,518	+ 12,878
88,989	33,443	„ whisky	„	+ 552,962	+ 194,390
4,000	5,182	„ other, undescribed	„	+ 74,960	+ 37,264
7,093,128	367,865	Tea	lbs.	+ 8,217,314	+ 298,374
933,371	67,941	Tobacco (manufactured)	„	+ 1,327,747	+ 104,854
163,270	8,951	„ (unmanufactured)	„	+ 808,070	+ 47,172
85,696	27,961	„ cigars	„	+ 121,744	+ 62,088
7,494	2,995	„ cigarettes	„	+ 26,086	+ 12,281
499	80	„ snuff	„	+ 4,400	+ 1,056
14,963	1,547	Vinegar	galls.	+ 116,559	+ 11,064
210,059	55,519	Wine, in wood and bottled	„	- 59,468	+ 6,161
3,957	7,866	„ sparkling	„	+ 40,867	+ 73,799

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES.

Order 24.—Animal Substances.

21	113	Beeswax	cwt.	- 16	- 93
122	530	Bones	tons	- 44	- 294
1,238	6,584	Bonedust	„	- 1,238	- 6,584
1,384	297	Bristles	lbs.	+ 31,692	+ 5,865
185,505	5,179	Candles	„	+ 761,777	+ 26,802
...	208	Combs	...	...	+ 4,749
30	616	Flock	tons	- 24	- 506
15,364	622	Glue	lbs.	+ 159,207	+ 5,348
...	...	„ liquid	...	...	+ 755
64	823	„ pieces	tons	- 64	- 823
10	250	Grease	„	+ 116	+ 1,870
136,155	2,055	Hair	lbs.	- 93,092	- 669
738	47	„ curled	„	+ 120,539	+ 4,209

IMPORTS, 1890—continued.

** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.				
<i>Order 24.—Animal Substances—contd.</i>				
Free	...	Hair seating	...	2,476
"	...	Hides	No. 71,610	66,166
"	...	Horns and hoofs	cwt. 54	71
"	...	Ivory	" 3	635
"	...	Leather	...	6,368
6d. per lb.	9,498	"	cwt. 3,670	68,298
"	1,209	" calf	" 454	7,878
Free	...	" kid, calf kid, etc.	" 1,116	58,196
25 per cent.	116	" cut into shapes	...	473
6d. per lb.	571	" fancy, patent, etc.	lbs. 23,795	4,759
Free	...	" imitation	...	5,087
1s. per lb.	377	" laces	lbs. 8,170	1,170
"	784	" morocco, roan, skiver, etc.	" 14,331	4,591
24s. p. dz. prs.	94	" uppers, closed, men's	pairs 510	135
18s. p. dz. prs.	12	" " women's	" 49	10
6s. p. dz. prs.	71	" " wellington	" 2,695	459
		fronts and grafts		
3s. p. dz. prs.	705	" " cashmere	" 46,356	1,351
25 per cent.	8,825	Leatherware	...	34,918
Free	...	Sausage skins	lbs. 275,560	12,768
"	...	Skins, kangaroo	No. 86,459	8,446
"	...	" opossum	" 55,237	1,212
"	...	" rabbit	" 613,955	3,363
"	...	" sheep, with wool	" 191,594	22,415
"	...	" " without wool	" 7,163	379
"	...	" undescribed	" 50,676	5,996
2d. per lb.	241	Soap, common	lbs. 31,359	627
4d. per lb.	5,466	" fancy, perfumed	" 330,880	20,002
Free	...	Sponges	" 23,472	5,307
2d. per lb.	...	Stearine	" 20	1
Free	...	Tallow	tons 363	6,470
"	...	Whalebone	lbs. 448	170
"	...	Wool,* greasy	" 69,005,609	2,642,317
"	...	" scoured	" 9,204,458	540,936
"	...	" washed	" 159,713	6,986
"	...	" Angora	" 1,176	59
<i>Order 25.—Vegetable Substances.</i>				
Free	...	Bark	tons 2,237	19,755
"	...	Bass	" 55	3,316
2d. per lb.	462	Blue	lbs. 55,453	2,011
5s. p. cental	12	Bran	centals 5,455	857

* The quantity of wool imported amounted to 78,370,956 lbs., valued at £3,190,298, of which all but 19,853,071 lbs., valued at £771,924, was brought overland from New South Wales.

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of—	
Quantity.	Value.		Imports over Exports (+).	Exports over Imports (-).
	£		Quantity.	Value.
				£
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—<i>continued.</i>				
<i>Order 24.—Animal Substances—contd.</i>				
...	17	Hair seating ... ..	...	+ 2,459
21,316	13,717	Hides No.	+ 50,294	+ 52,449
4,900	4,144	Horns and hoofs ... cwt.	- 4,846	- 4,073
...	...	Ivory "	+ 3	+ 635
49,743	202,138	Leather "	- 44,503	- 61,398*
...	...	" cut into shapes ... ..	...	+ 473
...	181	" fancy, patent, etc. ... ..	...	+ 4,578
...	65	" imitation ... ..	...	+ 5,022
...	...	" laces lbs.	+ 8,170	+ 1,170
...	...	" morocco, roan, skiver, etc. "	+ 14,331	+ 4,591
...	644	" uppers ... ..	...	+ 1,311
...	9,882	Leatherware ... ..	...	+ 25,036
122,081	5,359	Sausage skins lbs.	+ 153,479	+ 7,409
45,253	9,581	Skins, kangaroo No.	+ 41,206	- 1,135
452,172	10,178	" opossum "	- 396,935	- 8,966
4,913,351	25,667	" rabbit "	- 4,299,396	- 22,304
617,125	109,893	" sheep, with wool "	- 425,531	- 87,478
168,846	3,630	" " without wool "	- 161,683	- 3,251
5,959	215	" undescribed "	+ 44,717	+ 5,781
1,548,265	11,592	Soap, common lbs.	- 1,516,906	- 10,965
210,576	12,092	" fancy, perfumed "	+ 120,304	+ 7,910
256	83	Sponges "	+ 23,216	+ 5,224
20,272	411	Stearine cwt.	- 20,252	- 410
8,121	156,851	Tallow tons	- 7,758	- 150,381
...	...	Whalebone lbs.	+ 448	+ 170
113,157,230	4,742,739	Wool, † greasy "	- 44,151,621	- 2,100,422
18,073,991	1,136,689	" scoured "	- 8,869,533	- 595,753
916,986	54,175	" washed "	- 757,273	- 47,189
820	96	" Angora "	+ 356	- 37
<i>Order 25.—Vegetable Substances.</i>				
5,659	60,411	Bark tons	- 3,422	- 40,656
4	95	Bass "	+ 51	+ 3,221
73,658	1,840	Blue lbs.	- 18,205	+ 171
22,690	4,316	Bran centals	- 17,235	- 3,459

* Including £6,368, for which the quantity was not returned.

† The quantity of wool exported amounted to 132,149,027 lbs., valued at £5,933,699, of which 17,496,785 lbs., valued at £811,751, was entered as the produce of places outside Victoria.

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

ORDER IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.

		Order 25.—Vegetable Substances— continued.			
Free	...	Canes and rattans	...	bundles	17,744 4,199
25 per cent.	149	Casks	...	No.	1,093 595
Free	...	„ empty	...	„	7,100 1,288
„	...	Copra	...	tons	... 8
„	...	Cork	...	cwt.	600 900
4d. per lb....	6,178	„ cut	...	lbs.	450,478 45,365
Free	...	Cotton, raw	...	„	163,956 2,976
2s. p. cental	9	Dholl	...	centals	300 170
Free	...	Fibre, cocoanut	...	tons	38 436
„	...	„ undescribed	...	„	1,777 21,998
„	...	Firewood	...	„	9,578 2,984
„	...	Flax, "Phormium," N.Z.	...	„	576 11,810
„	...	Gum	...	„	106 6,056
„	...	Gutta-percha goods	...	...	... 1
„	...	Hay and chaff	...	tons	1,858 5,395
„	...	Hemp	...	„	1,481 54,008
„	...	Indiarubber goods	...	...	... 71,389
„	...	Jute	...	tons	108 1,640
„	...	Meal, linseed	...	lbs.	5,600 37
„	...	Millet, broom corn, etc.	...	tons.	163 5,020
„	...	Oakum	...	cwt.	19 19
„	...	Oilcake	...	tons	35 279
4d. per lb.	2,128	Paper, advertising matter	...	lbs.	167,978 6,555
15s. p. cwt.	987	„ bags...	...	cwt.	1,336 3,056
25 per cent.	282	„ boxes, cardboard	...	...	... 1,570
„	1,124	„ „ glove, etc.	...	...	... 4,464
Free	...	„ printing, uncut	...	cwt.	145,269 191,445
6s. per cwt.	4,178	„ wrapping	...	„	12,593 13,101
2d. per lb....	147	„ writing	...	lbs.	20,812 960
Free	...	„ „ uncut	...	„	2,466,576 51,106
2d. per lb....	291	„ undescribed, cut	...	„	40,199 1,889
6s. per cwt.	3,293	„ „ uncut	...	cwt.	11,610 24,435
4s. per cwt.	723	„ cardboard	...	„	3,877 6,433
Free	...	Paperhangings	...	...	... 38,057
„	...	Paper patterns	...	...	... ..
Free	...	Pitch and tar	...	cwt.	9,156 3,730
5s. per cental	13	Pollard	...	centals	1,547 432
Free	...	Rags	...	tons	606 2,802
„	...	Resin	...	cwt.	30,421 7,786
10 per cent.	191	Seeds, canary	...	centals	4,104 2,007
Free	...	„ clover	...	„	2,876 7,161
„	...	„ grass	...	„	10,325 11,525
„	...	„ undescribed	...	...	... 11,613
2d. per lb....	4,628	Starch	...	lbs.	564,438 8,032

EXPORTS, 1890—continued.

** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of—	
Quantity.	Value.		Imports over Exports (+).	Exports over Imports (-).
	£		Quantity.	Value.
				£
ORDER IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.				
<i>Order 25.—Vegetable Substances—continued.</i>				
1,186	366	Canes and rattans... bundles	+ 16,558	+ 3,833
...	...	Casks ... No.	+ 1,093	+ 595
12,896	6,099	„ empty ... „	- 5,796	- 4,811
...	16	Copra ... tons	...	- 8
4	16	Cork ... cwt.	+ 596	+ 884
36,224	4,261	„ cut ... lbs.	+ 414,254	+ 41,104
4,128	134	Cotton, raw ... „	+ 159,828	+ 2,842
...	...	Dholl ... centals	+ 300	+ 170
21	243	Fibre, cocoanut ... tons	+ 17	+ 193
91	5,227	„ undescribed ... „	+ 1,686	+ 16,771
...	...	Firewood ... „	+ 9,578	+ 2,984
29	577	Flax, "Phormium," N.Z. ... „	+ 547	+ 11,233
7	613	Gum ... „	+ 99	+ 5,443
...	...	Gutta-percha goods ...	...	+ 1
19,535	83,558	Hay and chaff ... tons	- 17,677	- 78,163
22	810	Hemp ... „	+ 1,459	+ 53,198
...	4,129	Indiarubber goods ...	...	+ 67,260
...	...	Jute ... tons	+ 108	+ 1,640
8,198	79	Meal, linseed ... lbs.	- 2,598	- 42
20	644	Millet, broom corn, etc. ... tons	+ 143	+ 4,376
2	3	Oakum ... cwt.	+ 17	+ 16
...	...	Oilcake ... tons	+ 35	+ 279
...	...	Paper, advertising matter ... lbs.	+ 167,978	+ 6,555
707	1,261	„ bags ... cwt.	+ 629	+ 1,795
...	113	„ boxes, cardboard ...	...	+ 1,457
...	...	„ „ glove, etc. ...	...	+ 4,464
7,226	13,233	„ printing ... cwt.	+ 138,043	+ 178,212
4,798	7,196	„ wrapping ... „	+ 7,795	+ 5,905
44,800	1,257	„ writing ... lbs.	+ 2,442,588	+ 50,809
...	...	„ undescribed, cut ... „	+ 40,199	+ 1,889
...	...	„ „ uncut ... cwt.	+ 11,610	+ 24,435
...	...	„ cardboard ...	+ 3,877	+ 6,433
...	2,073	Paperhangings ...	...	+ 35,984
...	1,433	Paper patterns ...	...	- 1,433
1,376	802	Pitch and tar ... cwt.	+ 7,780	+ 2,928
2,568	602	Pollard ... centals	- 1,021	- 170
186	3,448	Rags ... tons	+ 420	- 646
677	283	Resin ... cwt.	+ 29,744	+ 7,503
81	83	Seeds, canary ... centals	+ 4,023	+ 1,924
10	28	„ clover ... „	+ 2,866	+ 7,133
1,332	1,665	„ grass ... „	+ 8,993	+ 9,860
...	5,603	„ undescribed ...	...	+ 6,010
340,928	6,593	Starch ... lbs.	+ 223,510	+ 1,439

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.

		Order 25.—Vegetable Substances— continued.			
2s. p. cental	63	Tares	centals	585	372
25 per cent.	107	*Timber, bent and finished ... ..	...	...	445
6d. p. cub. ft.	410	„ cut into shapes	cub. ft.	20,631	3,371
Free ...	...	„ deals	sup. ft.	20,964,200	181,445
2/6 p. 100 s. f.	4,304	„ other, of sizes less than 7in. x 2½in.	„	3,444,600	41,035
2s. p. 100 s. f.	11,110	„ undressed, hardwood	„	11,091,600	78,798
Free ...	...	„ „ other	„	65,497,700	451,967
1/6 p. 100 s. f.	39,243	„ flooring boards	„	52,221,600	401,977
„ ...	1,110	„ lining boards	„	1,480,100	10,112
„ ...	1,762	„ weatherboards	„	2,350,100	15,644
7s. per 100 l. f.	211	„ mouldings (3 inches and over)	lin. ft.	60,500	867
4s. per 100 l. f.	2,610	„ „ (under 3 inches)	„	1,378,700	6,865
5s. per 1,000	2,323	„ laths	No.	9,292,300	14,328
Free ...	...	„ logs	sup. ft.	4,943,600	29,037
9d. per 100	63	„ palings	No.	167,200	1,090
6/6 per 100	...	„ pickets, dressed	„	121	2
6d. per 100	444	„ „ undressed	„	1,777,200	12,379
Free ...	...	„ posts and rails	„	19,683	734
9d. per 1,000	1	„ shingles	„	17,000	30
Free ...	...	„ staves, rough	„	67,215	2,899
25 per cent.	39	„ „ shaped	„	4,516	154
Free ...	...	„ spars and piles	sup. ft.	2,559,400	23,346
6d. per 100	34	„ spokes and felloes	No.	137,250	2,008
Free ...	...	„ „ „ of hickory undressed	„	55,374	8,861
„ ...	...	„ other unenumerated ... ..	...	...	1,588
	63,771	Total timber ... ..	...	...	1,288,982
2s. per gal.	4,835	Varnish	galls.	50,143	24,647
25 per cent.	1,115	Wicker and basket ware ... ..	...	...	4,687
„	12,143	Woodenware ... ..	...	...	48,355
		Order 26.—Oils.†			
6d. per gal.	3	Almond	galls.	118	71
Free ...	...	Black	„	20,487	2,334
6d. per gal.	7,538	Castor	„	321,782	47,816
12s. per doz.	1	„ (over a quart and up to a gallon)	doz.	1	2

* See also Order 13 ante.

† It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see Order 14 ante.

EXPORTS, 1890—*continued*.*** For the position of any article, see *Index ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—<i>continued</i>				
<i>Order 25.—Vegetable Substances— continued.</i>				
...	...	Tares centals	+ 585	+ 372
...	...	Timber, bent and finished ... ..	...	+ 445
...	...	„ cut into shapes cub. ft.	+ 20,631	+ 3,371
152,406	1,224	„ deals sup. ft.	+ 20,811,794	+ 180,221
979,308	10,078	„ dressed, other „	+ 2,465,292	+ 30,957
2,395,748	19,725	„ undressed „	+ 74,193,552	+ 511,040
44,566	425	„ flooring boards „	+ 52,177,034	+ 401,552
...	...	„ lining boards „	+ 1,480,100	+ 10,112
...	...	„ weatherboards „	+ 2,350,100	+ 15,644
101,668	1,199	„ mouldings and skirtings lin. ft.	+ 1,337,532	+ 6,533
96,192	466	„ laths No.	+ 9,196,108	+ 13,862
12,726	151	„ logs sup. ft.	+ 4,980,874	+ 28,886
49,680	394	„ palings No.	+ 117,520	+ 696
2,000	15	„ pickets „	+ 1,775,321	+ 12,366
75	3	„ posts and rails „	+ 19,608	+ 731
...	...	„ shingles „	+ 17,000	+ 30
16,277	231	„ shooks and staves „	+ 55,454	+ 2,822
...	...	„ spars and piles sup. ft.	+ 2,559,400	+ 23,346
13,992	600	„ spokes and felloes „	+ 123,258	+ 1,408
...	...	„ „ „ undressed „	+ 55,374	+ 8,861
...	1,189	„ other unenumerated ... ..	...	+ 399
...	35,700	Total timber ... ..	...	1,253,282
4,806	2,884	Varnish galls.	+ 45,337	+ 21,763
...	841	Wicker and basket ware ... ..	...	+ 3,846
...	10,281	Woodenware ... ..	...	+ 38,074
<i>Order 26.—Oils.*</i>				
...	...	Almond galls.	+ 118	+ 71
4,703	343	Black „	+ 15,784	+ 1,991
23,544	3,961	Castor „	+ 298,238	+ 43,855
...	...	„ (over a quart and up to doz. a gallon)	+ 1	+ 2

* It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see *Order 14 ante*.

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.		
Rate.	Amount Collected.		Quantity.	Value.	
	£			£	
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.					
<i>Order 26.—Oils*—continued.</i>					
2s. per doz.	567	Castor (pints and over half a pint)	doz.	6,238	2,321
6d. per gal.	987	Chinese	galls.	41,364	6,596
Free	...	Cocoanut	"	26,847	2,984
"	...	Cod	"	64,914	7,266
6d. per gal.	3	Codliver	"	135	31
Free	...	"	"	1,449	281
2s. per doz.	18	" (pints and over half a pint)	doz.	272	349
6d. per gal.	635	Colza	galls.	24,106	3,532
Free	...	Kerosene	"	2,207,188	110,515
6d. per gal.	412	Lard	"	16,192	2,531
"	7,915	Linseed	"	270,254	30,638
2s. per doz.	3	" (pints and over half a pint)	doz.	27	13
6d. per gal.	25	Lubricating...	galls.	214	26
Free	...	"	"	321,883	21,614
12s. per doz.	6	" (over a quart and up to a gallon)	doz.	10	10
2s. per doz.	268	" (pints and over half a pint)	"	2,668	559
"	29	Medicinal (pints and over half a pint)	"	292	513
"	3	Mineral (pints and over half a pint)	"	33	17
Free	...	" unrefined	galls.	53,572	4,256
6d. per gal.	13	Muttonbird	"	528	35
"	3	Neatsfoot	"	138	23
"	2	Nut	"	98	25
"	332	Olive	"	12,219	2,674
Free	...	Palm	"	8,642	760
"	...	Paraffine	"	4,000	250
6d. per gal.	1	Pine	"	25	3
"	1	Rape	"	24	3
Free	...	Resin	"	5,076	211
"	...	Salad	"	...	...
12s. per doz.	22	" (over a quart and up to a gal.)	doz.	17	65
2s. per doz.	2,401	" (pints and over half a pint)	"	25,688	11,334
6d. per gall.	45	Seed	galls.	1,074	147
Free	...	Sperm	"	11,947	1,238
"	...	Tallow	"	...	...
6d. per gal.	66	Vegetable	"	2,632	544
2s. per doz.	2	" (pints and over half a pint)	doz.	16	8
Free	...	Oils undescribed	galls.	1,307	184
6d. per gal.	41	"	"	1,597	270
	21,336	Total Oils	galls.	3,472,747	262,049

* It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see order 14 ante.

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of—	
Quantity.	Value.		Imports over Exports (+).	Exports over Imports (-).
	£		Quantity.	Value.
	£			£
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES— <i>continued.</i>				
<i>Order 26.—Oils*—</i>				
<i>continued.</i>				
...	...	Castor (pints and over half a pint) doz.	+ 6,238	+ 2,321
3,118	654	Chinese galls.	+ 38,246	+ 5,942
1,133	116	Cocanut "	+ 25,714	+ 2,868
9,058	1,194	Cod "	+ 55,856	+ 6,072
40	12	Codliver "	+ 1,544	+ 300
...	...	" (pints and over half a pint) doz.	+ 272	+ 349
2,128	407	Colza galls.	+ 21,978	+ 3,125
117,789	6,701	Kerosene "	+ 2,089,399	+ 103,814
613	136	Lard "	+ 15,579	+ 2,395
43,221	6,826	Linseed "	+ 227,033	+ 23,812
...	...	" doz. pints	+ 27	+ 13
33,434	3,768	Lubricating galls.	+ 288,663	+ 17,872
...	...	" (over a quart and up to a doz. gallon)	+ 10	+ 10
...	...	" (pints and over half a pint) "	+ 2,668	+ 559
...	...	Medicinal (pints and over half a pint) "	+ 292	+ 513
5,510	590	Mineral galls.	- 5,477	- 573
...	...	" unrefined "	+ 53,572	+ 4,256
...	...	Muttonbird "	+ 528	+ 35
2,907	378	Neatsfoot "	- 2,769	- 355
...	...	Nut "	+ 98	+ 25
1,482	398	Olive "	+ 10,737	+ 2,276
991	120	Palm "	+ 7,651	+ 640
...	...	Paraffine "	+ 4,000	+ 250
...	...	Pine "	+ 25	+ 3
...	...	Rape "	+ 24	+ 3
...	...	Resin "	+ 5,076	+ 211
3,503	1,601	Salad "	- 3,503	- 1,601
...	...	" (over a quart and up to a gallon) doz.	+ 17	+ 65
...	...	" (pints and over half a pint) "	+ 25,688	+ 11,334
...	...	Seed galls.	+ 1,074	+ 147
...	...	Sperm "	+ 11,947	+ 1,238
65,718	3,922	Tallow "	- 65,718	- 3,922
225	93	Vegetable "	+ 2,423	+ 459
5,966	968	Oils undescribed "	- 3,062	- 514
325,083	32,188	Total Oils ... galls.	+ 3,147,664	+ 229,861

* It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see Order 14 *ante.*

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS V.—MINERALS AND METALS.				
<i>Order 27.—Articles connected with Mining.*</i>				
<i>Order 28.—Coal, etc.</i>				
Free ...	...	Coal tons	696,701	745,589
20 per cent.	33	Coal and charcoal, ground ... ..	...	169
Free ...	...	Coke, charcoal tons	7,347	17,113
” ...	...	Kerosene shale ”	7,347	21,499
” ...	...	Paraffine ”	81	2,360
<i>Order 29.—Stones, Clay, Earthenware, and Glass.—(See also Order 12 ante.)</i>				
Free ...	...	Bricks, bath No.	41,666	149
20 per cent.	2,617	Brownware ... ..	...	13,138
15 per cent.	4,352	Chinaware and porcelain ... ..	...	29,380
8d. per c. ft.	10,079	Earthenware cub. feet	315,784	63,426
6d. per c. ft.	2,285	Glass bottles, for aerated waters	98,036	14,270
		and medicines		
6d. per doz.	24,992	” containing spirits doz.	398,178	19,890)
3d. per doz.	257	” ” pickles ”	13,654	342)
Free ...	...	Glass, plate sup. feet	284,364	22,892
” ...	...	” window ”	3,497,541	32,986
20 per cent.	359	” bent ... ..	...	1,796
1s. 6d. p. c. ft.	3,577	Glassware, cut cub. feet	44,660	16,635)
6d. per c. ft.	3,967	” uncut ”	162,051	36,677)
Free ...	...	” sodawater syphons ... ..	...	7,803)
20 per cent.	1,878	Marble, wrought ... ..	...	9,679
Free ...	...	” unwrought tons	972	6,346
” ...	...	Plaster of paris cwt.	2,052	614
” ...	...	” American ”	34,943	7,809
40s. per ton	329	Putty	3,293	1,248
Free ...	...	Slate slabs No.	6,998	2,530
” ...	...	Stones, grind ”	5,839	1,245
” ...	...	” mill ”	10	104
” ...	...	” unwrought tons	1,648	3,568
20 per cent.	1,254	” wrought ”	308	6,111
Free ...	...	Whiting ”	3,252	8,465
<i>Order 31.—Gold, Silver, Specie, and Precious Stones.</i>				
Free ...	...	Gold, bullion ozs.	142,052	563,721
” ...	...	” specie ... ..	...	36,282
” ...	...	Silver, bullion ozs.	13,191	2,655
” ...	...	” specie ... ..	...	66,450

* The Customs returns do not distinguish mining materials. No doubt machinery, tools, etc., specially intended for use in mining operations, were landed during the year, and possibly some such articles were exported; but their connexion with mining was not shown by the entries.

EXPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
CLASS V.—MINERALS AND METALS.				
<i>Order 27.—Articles connected with Mining.*</i>				
<i>Order 28.—Coal, etc.</i>				
434	503	Coal tons	+ 696,267	+ 745,086
...	...	Coal and charcoal, ground ... ..	...	+ 169
500	601	Coke, charcoal tons	+ 6,847	+ 16,512
...	...	Kerosene shale "	+ 7,347	+ 21,499
16	637	Paraffine "	+ 65	+ 1,723
<i>Order 29.—Stone, Clay, Earthenware, and Glass.—(See also Order 12 ante.)</i>				
700	6	Bricks, bath No.	+ 40,966	+ 143
...	399	Brownware ... ..	...	+ 12,739
...	1,654	Chinaware and porcelain ... ..	...	+ 27,726
...	15,034	Earthenware ... ..	...	+ 48,392
...	...	Glass bottles cub. ft.	+ 98,036	+ 14,270
13,735	1,444	„ doz.	+ 398,097	+ 18,788
7,725	989	Glass, plate sup. feet	+ 276,639	+ 21,903
162,501	2,318	„ window "	+ 3,335,040	+ 30,668
...	...	„ bent "	...	+ 1,796
...	19,132	Glassware ... ..	...	+ 41,983
...	1,169	Marble, wrought ... ..	...	+ 8,510
10	85	„ unwrought tons	+ 962	+ 6,261
157	45	Plaster of paris cwt.	+ 1,895	+ 569
33	9	„ American "	+ 34,910	+ 7,800
7	9	Putty "	+ 3,286	+ 1,239
225	99	Slate slabs No.	+ 6,773	+ 2,431
85	40	Stones, grind "	+ 5,754	+ 1,205
...	...	„ mill "	+ 10	+ 104
125	106	„ unwrought tons	+ 1,523	+ 3,462
1,013	4,447	„ wrought "	- 705	+ 1,664
86	389	Whiting... .. "	+ 3,166	+ 8,076
<i>Order 31.—Gold, Silver, Specie, and Precious Stones.</i>				
128,181	516,438	Gold, bullion ozs.	+ 13,871	+ 47,283
...	2,223,065	„ specie ... ..	...	- 2,186,783
42,598	9,374	Silver, bullion ozs.	- 29,407	- 6,719
...	13,100	„ specie ... ..	...	+ 53,350

* The Customs returns do not distinguish mining materials. No doubt machinery, tools, etc., specially intended for use in mining operations, were landed during the year, and possibly some such articles were exported; but their connexion with mining was not shown by the entries.

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
<i>CLASS V.—MINERALS AND METALS—continued.</i>				
<i>Order 31.—Gold, Silver, Specie, and Precious Stones—continued.</i>				
Free	...	Silver ore	... tons	30 201
Free	...	„ amalgam and gold	... „	... ..
Free	...	Copper, specie	... ..	... 2
20 per cent.	830	Gold-leaf	... No.	2,051,500 4,149
8s. per oz....	32	Gold, plate of	... ozs.	79 279
20 per cent.	9,009	Jewellery	... ..	... 49,458)
4s. per dwt.	10	„ rings of gold	... dwts.	48 29)
20 per cent.	6	Silver leaf	... No.	47,700 30
2s. per oz....	1,844	Silver, plate of	... ozs.	19,140 10,797
Free	...	Precious stones, cameos, etc., unset	... ..	... 1,895
„	...	Quartz	... tons	56 937
<i>Order 32.—Metals other than Gold and Silver.</i>				
Free	...	Antimony, ore	... tons	2 138
35 per cent.	1,009	Brassware	... ..	... 2,922)
Free	...	„	... ..	... 24,794)
„	...	Copper	... tons	141 7,849
„	...	„ ore	... „	1 27
„	...	„ sheet	... cwt.	4,595 14,893
„	...	„ wire	... „	2,253 11,451
„	...	Copperware	... ..	... 7,207)
35 per cent.	118	„	... ..	... 295)
„	1,890	Grates and stoves	... No.	6,022 5,360
Free	...	Iron, bar and rod	... tons	18,416 159,572
35 per cent.	4,448	„ bolts and nuts	... „	729 13,916
„	2,075	„ castings	... „	361 6,105)
60s. per ton	1,091	„ „	... „	424 2,643)
25 per cent.	89	„ galvanized buckets and tubs	... No.	7,312 360
Free	...	„ „ cordage	... tons	107 3,315
25 per cent.	...	„ „ guttering	... ..	... ..
Free	...	„ „ sheet	... tons	16,077 285,910
60s. per ton	7,962	„ girders	... „	2,838 19,000
Free	...	„ hoop	... „	1,296 14,073
„	...	„ ore	... „	74 228
„	...	„ pig	... „	19,335 83,950
60s. per ton	13,184	„ pipes, cast	... „	4,426 21,442
Free	...	„ „ wrought...	... „	3,738 77,342
„	...	„ plate	... „	10,317 98,283
„	...	„ railway rails, etc.	... „	25,029 162,548
„	...	„ scrap	... „	3,609 14,356
„	...	„ sheet	... „	1,393 15,920
„	...	„ tanks	... No.	2,189 6,570

EXPORTS, 1890—continued.

** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of—	
Quantity.	Value.		Imports over Exports (+).	Exports over Imports (-).
	£		Quantity.	Value.
				£
<i>Order 31.—Gold, Silver, Specie, and Precious Stones—continued.</i>				
4	97	Silver ore tons	+ 26	+ 104
63	2,027	„ amalgam and gold	- 63	- 2,027
...	150	Copper, specie ... ..	...	- 148
40,500	115	Gold-leaf No.	+ 2,011,000	+ 4,034
...	...	Gold, plate of ozs.	+ 79	+ 279
...	7,176	Jewellery ... ..	...	+ 42,311
...	...	Silver leaf No.	+ 47,700	+ 30
3,784	2,061	Silver, plate of ozs.	+ 15,356	+ 8,736
...	...	Precious stones, cameos, etc., unset ...	...	+ 1,895
17	100	Quartz tons	+ 39	+ 837
<i>Order 32.—Metals other than Gold and Silver.</i>				
40	601	Antimony, ore tons	- 38	- 463
...	818	Brassware ... ..	...	+ 26,898
37	1,342	Copper tons	+ 104	+ 6,507
...	...	„ ore	+ 1	+ 27
9	49	„ sheet	+ 4,586	+ 14,844
143	669	„ wire	+ 2,110	+ 10,782
...	1,388	Copperware ... ..	...	+ 6,114
36	151	Grates and stoves No.	+ 5,986	+ 5,209
595	6,715	Iron, bar and rod tons	+ 17,821	+ 152,857
9	231	„ bolts and nuts	+ 720	+ 13,685
283	3,140	„ castings	+ 502	+ 5,608
1,600	189	„ galvanized buckets and tubs No.	+ 5,712	+ 171
10	604	„ „ cordage tons	+ 97	+ 2,711
...	1,230	„ „ guttering ... ..	...	- 1,230
871	16,917	„ „ sheet tons	+ 15,206	+ 268,993
...	...	„ girders	+ 2,838	+ 19,000
35	462	„ hoop	+ 1,261	+ 13,611
...	...	„ ore	+ 74	+ 228
192	976	„ pig	+ 19,143	+ 82,974
93	788	„ pipes, cast	+ 4,333	+ 20,654
201	4,992	„ „ wrought	+ 3,537	+ 72,350
64	869	„ plate	+ 10,253	+ 97,414
268	2,246	„ railway rails, etc.	+ 24,761	+ 160,302
...	...	„ scrap	+ 3,609	+ 14,356
30	424	„ sheet	+ 1,363	+ 15,496
151	654	„ tanks No.	+ 2,038	+ 5,916

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS—continued.

<i>Order 32.—Metals other than Gold and Silver—continued.</i>					
Free	...	Iron wire, fencing and undescribed	tons	8,619	92,394
60s. per ton	2,994	„ „ barbed	„	1,022	18,555
Free	...	„ „ telegraphic	„	5	278
„	...	Lead, pig	„	1,956	33,251
2s. 6d. p. cwt.	...	„ pipe	cwt.	1	2
„	201	„ sheet	„	455	350
35 per cent.	70,484	Metal, manufactures of	...	...	202,651
Free	...	„ yellow	cwt.	426	1,421
„	...	Metals, undescribed	„	220	802
20 per cent.	1,864	Metalware, mixed	...	...	9,370
5s. per cwt.	4,822	Nails	cwt.	20,291	13,489
12s. per cwt.	862	„ horseshoe	„	1,420	3,064
Free	...	Ores, mineral earths, clays, etc.	tons	1,095	5,472
20 per cent.	14,148	Platedware	...	...	71,408
Free	...	Plumbago	cwt.	882	648
„	...	Quicksilver	lbs.	33,152	4,433
„	...	Screws	cwt.	3,164	7,818
„	...	Spelter	„	320	399
„	...	Steel	tons	4,096	53,740
„	...	„ cordage	„	714	31,096
„	...	Tin, block	cwt.	3,420	15,961
„	...	„ foil	lbs.	102,352	2,013
„	...	„ ore	tons	2	99
„	...	„ „ black sand	cwt.	...	...
„	...	„ plate	boxes	40,172	33,992
35 per cent.	767	Tinware	...	...	2,261
Free	...	Wire netting	...	...	110,423
„	...	Zinc, ingots	cwt.	147	203
35 per cent.	140	„ perforated	...	...	516
Free	...	„ sheet	cwt.	3,104	4,304

CLASS VI.—LIVE ANIMALS AND PLANTS.

<i>Order 33.—Animals and Birds.</i>					
Free	...	Birds	No.	4,000	422
„	...	Deer	„	1	5
„	...	Dogs	„	33	344
„	...	Leeches	„	...	...
5s. each	664	Horses, overland	„	3,730	164,296
„	...	„ seaward	„	406	25,344
„	33,156	Horned cattle, overland	„	151,025	789,860
„	...	„ seaward	„	144	1,190
Free	...	Calves, overland	„	1,766	2,255

EXPORTS, 1890—*continued.*** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £

CLASS V.—MINERALS AND METALS—*continued.*

		<i>Order 32.—Metals other than Gold and Silver—continued.</i>			
1,268	16,310	Iron wire, fencing and undescribed	tons	+ 8,373	+ 94,639
...	...	„ „ telegraphic	„	+ 5	+ 278
4	63	Lead, pig	„	+ 1,952	+ 33,188
2,283	2,150	„ pipe	cwt.	- 2,282	- 2,148
6,287	5,655	„ sheet	„	- 5,832	- 5,305
...	33,869	Metal, manufactures of	...	...	+ 168,782
84	234	„ yellow	cwt.	+ 342	+ 1,187
7	35	Metals, undescribed	„	+ 213	+ 767
...	838	Metalware, mixed	...	...	+ 8,532
5,342	5,554	Nails	cwt.	+ 14,949	+ 7,935
...	...	„ horseshoe	„	+ 1,420	+ 3,064
55	1,470	Ores, mineral earths, clays, etc.	tons	+ 1,040	+ 4,002
...	10,400	Platedware	...	...	+ 61,008
57	103	Plumbago	cwt.	+ 825	+ 545
12,817	1,939	Quicksilver	lbs.	+ 20,335	+ 2,494
118	187	Screws	cwt.	+ 3,046	+ 7,631
1,980	1,305	Spelter	„	- 1,660	- 906
129	2,748	Steel	tons	+ 3,967	+ 50,992
4	156	„ cordage	„	+ 710	+ 30,940
300	1,375	Tin, block	cwt.	+ 3,120	+ 14,586
3,236	100	„ foil	lbs.	+ 99,116	+ 1,913
13	272	„ ore	tons	- 11	- 173
100	90	„ „ black sand	cwt.	- 100	- 90
2,567	2,719	„ plate	boxes	+ 37,605	+ 31,273
...	1,713	Tinware	...	...	+ 548
...	10,095	Wire netting	...	..	+ 100,328
1,147	960	Zinc, ingots	cwt.	- 1,000	- 757
...	...	„ perforated	...	...	+ 516
101	153	„ sheet	cwt.	+ 3,003	+ 4,151

CLASS VI.—LIVE ANIMALS AND PLANTS.

		<i>Order 33.—Animals and Birds.</i>			
124	43	Birds	No.	+ 3,876	+ 379
...	...	Deer	„	+ 1	+ 5
32	206	Dogs	„	+ 1	+ 138
6,500	18	Leeches	„	- 6,500	- 18
3,673	119,861	Horses, overland	„	+ 57	+ 44,435
4,236	124,126	„ seaward	„	- 3,830	- 98,782
23,037	87,254	Horned cattle, overland	„	+ 127,988	+ 702,606
482	5,135	„ seaward	„	- 338	- 3,945
...	...	Calves	„	+ 1,766	+ 2,255

IMPORTS, 1890—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS VI.—LIVE ANIMALS AND PLANTS—continued.				
<i>Order 33.—Animals and Birds—contd.</i>				
6d. each	53,096	Sheep, overland No.	2,212,947	981,736
		„ seaward „	26,731	23,930
2s. each	397	Pigs, overland „	3,062	5,206
		„ seaward „	1,812	2,890
Free	...	Poultry „	4,929	733
„	...	Other „	37	69
<i>Order 34.—Plants.</i>				
Free	...	Plants ... ..	...	9,281
CLASS VII.—MISCELLANEOUS MATTERS.				
<i>Order 35.—Miscellaneous Articles of Trade, etc.</i>				
35 per cent.	5,468	Brushware and brooms, hair ... ..	...	15,024
„	151	„ undescribed ... ..	...	856
10 per cent.	5,481	Fancy goods ... ..	...	54,851
Free	...	Grindery ... ..	...	34,664
„	...	Hardware and ironmongery, undescribed	...	148,506
„	...	Holloware ... ..	...	10,563
20 and 10 per cent.	3,978	Oilmen's stores, unenumerated...	...	23,949
Free	...	Ordnance stores ... ..	...	216,006
„	...	Photographic goods ... ..	...	8,719
„	...	Printing materials ... ..	...	22,166
„	...	Telegraphic materials (except wire)	...	18,580
„	...	Travellers' samples ... ..	...	68,971
<i>Order 36.—Indefinite Articles.</i>				
Free	...	Curiosities ... ..	...	300
„	...	Exhibits undescribed ... ..	...	...
„	...	Goods, manufactured... ..	...	58,457
„	...	Personal effects ... ..	...	71,840
„	...	Specimens of natural history ... ..	...	794
...	2,704,380	Total Imports ... ..	...	22,954,015

NOTE.—The value of the overland imports included in this table was £4,609,837, consisting chiefly of wool and live stock. * Inclusive of duty collected and afterwards refunded, amounting to £126,353.

EXPORTS, 1890—*continued.**** For the position of any article, see Index *ante.*

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value. £		Quantity.	Value. £
CLASS VI.—LIVE ANIMALS AND PLANTS—<i>continued.</i>				
<i>Order 33—Animals and Birds—contd.</i>				
156,206	107,788	Sheep, overland No.	+ 2,056,741	+ 873,948
54,896	30,752	„ seaward „	- 28,165	- 6,822
1,393	1,556	Pigs, overland „	+ 1,669	+ 3,650
11	39	„ seaward „	+ 1,801	+ 2,851
2,312	269	Poultry „	+ 2,617	+ 464
55	87	Other „	- 18	- 18
<i>Order 34.—Plants.</i>				
...	6,666	Plants ... ..	...	+ 2,615
CLASS VII.—MISCELLANEOUS MATTERS.				
<i>Order 35.—Miscellaneous Articles of Trade, etc.</i>				
...	1,566	Brushware and brooms, hair ... ..	...	+ 13,458
...	1,563	„ „ undescrbed ... ..	...	- 707
...	10,514	Fancy goods ... ..	...	+ 44,337
...	6,688	Grindery ... ..	...	+ 27,976
...	35,078	Hardware & ironmongery, undescrbed ... ..	...	+ 113,428
...	156	Holloware ... ..	...	+ 10,407
...	15,802	Oilmen's stores, unenumerated ... ..	...	+ 8,147
...	227	Ordnance stores ... ..	...	+ 215,779
...	3,556	Photographic goods ... ..	...	+ 5,163
...	11,583	Printing materials ... ..	...	+ 10,583
...	5,648	Telegraphic materials (except wire) ... ..	...	+ 12,932
...	73,367	Travellers' samples ... ..	...	- 4,396
<i>Order 36.—Indefinite Articles.</i>				
...	515	Curiosities ... ..	...	- 215
...	30	Exhibits undescrbed ... ..	...	- 30
...	9,707	Goods, manufactured ... ..	...	+ 48,750
...	37,977	Personal effects ... ..	...	+ 33,863
...	3,295	Specimens of natural history ... ..	...	- 2,501
...	13,266,222	Total Exports ... ..	...	+ 9,687,793

NOTE.—The value of the overland exports included in this table was £1,263,694. Exports for drawback valued at £672,124, are also included.

Imports,
exports,
and trade.

7. In 1890, the total declared value of the imports having been £22,954,015, and that of the exports £13,266,222, the excess of imports over exports was £9,687,793, and the whole value of external trade was £36,220,237.

Imports and
exports last
two years.

8. The value of imports was lower in 1890 than in 1889 by £1,448,745, or by 6 per cent., but the value of exports was higher than in that year by £531,488, or by 4 per cent. The value of the total trade was thus lower than in the previous year by £917,257.

Imports and
exports
latest and
former
years.

9. The imports in 1890, as indicated by their values, were higher than in any other year of the colony's history, except 1888 and 1889; the exports, however, according to the same standard, although higher than in 1889, 1887, and 1886, were exceeded in all but seven of the other 35 years which have elapsed since 1854.*

Imports and
exports per
heads, 1851-
1890.

10. In the year under review, the value per head of imports was lower by £1 17s. 2d., but the value per head of exports was higher by 3s. 8d. than in 1889. The following table shows the value of imports and exports per head in each of the forty years ended with 1890:—

IMPORTS AND EXPORTS PER HEAD, 1851 TO 1890.

Year.	Value per Head of the Population† of—								
	Imports.			Exports.			Both.		
	£	s.	d.	£	s.	d.	£	s.	d.
1851	12	3	4	16	7	9	28	11	1
1852	30	12	5	56	1	4	86	13	9
1853	81	1	9	56	12	4	137	14	1
1854	66	0	11	44	0	10	110	1	9
1855	35	9	10	39	17	8	75	7	6
1856	39	5	6	40	13	3	79	18	9
1857	40	2	0	35	0	10	75	2	10
1858	31	4	6	28	18	3	60	2	9
1859	30	4	1	26	16	3	57	0	4
1860	23	5	3	22	5	5	50	10	8
1861	25	1	4	25	12	5	50	13	9
1862	24	12	2	23	15	7	48	7	9
1863	25	1	6	24	1	11	49	3	5
1864	25	10	8	23	13	11	49	4	7
1865	21	13	9	21	10	3	43	4	0
1866	23	9	7	20	9	9	43	19	4
1867	18	2	4	19	15	0	37	17	4
1868	20	1	9	23	10	4	43	12	1
1869	20	4	11	19	11	10	39	16	9
1870	17	9	3	17	9	8	34	18	11
1871	16	14	11	19	15	1	36	10	0

* For value of imports and exports in each year, see Statistical Summary of Victoria (first folding sheet) *ante*.

† For the estimated mean population used in making these calculations, see table of Breadstuffs available for consumption in Part "Production," *post*. The rates for 1881 and subsequent years have been recalculated since last publication, in accordance with revised estimates of population, based on the returns of the census of 1891.

IMPORTS AND EXPORTS PER HEAD, 1851 TO 1890—*continued.*

Year.	Value per Head of the Population of—								
	Imports.			Exports.			Both.		
	£	s.	d.	£	s.	d.	£	s.	d.
1872	18	3	6	18	8	4	36	11	10
1873	21	12	0	19	19	10	41	11	10
1874	21	16	0	19	17	2	41	13	2
1875	21	3	11	18	15	1	39	19	0
1876	19	14	4	17	16	6	37	10	10
1877	20	4	9	18	14	11	38	19	8
1878	19	13	6	18	3	5	37	16	11
1879	18	0	7	14	18	8	32	19	3
1880	17	2	5	18	15	3	35	17	8
1881	19	4	10	18	14	1	37	18	11
1882	21	1	7	18	4	0	39	5	7
1883	19	10	2	18	0	7	37	10	9
1884	20	11	9	17	4	6	37	16	3
1885	18	17	7	16	5	5	35	3	0
1886	18	16	10	11	19	11	30	16	9
1887	18	14	10	11	3	8	29	18	6
1888	22	15	5	13	3	2	35	18	7
1889	22	8	8	11	14	2	34	2	10
1890	20	11	6	11	17	10	32	9	4

11. It will be observed that in 1890 the value of imports per head was much lower than in 1889 or 1888, was about the same as in 1884, but was higher than in any other of the previous 23 years, except 1882, and the three years, 1873 to 1875; also that the value of exports per head in 1890 was higher than in 1889 or 1887, but lower than in every other year since the separation of Victoria from New South Wales.

Imports and exports per head 1890 and former years.

12. The total value and value per head of imports and exports are given in the following table for the different Australasian colonies; the returns being for each of the eleven years ended with 1889:—

Imports and exports of Australasian colonies.

IMPORTS AND EXPORTS OF AUSTRALASIAN COLONIES.

Colony.	Year.	Imports.		Exports.	
		Total Value.	Value per Head.*	Total Value.	Value per Head.*
		£	£ s. d.	£	£ s. d.
Victoria	1879	15,035,538	18 0 7	12,454,170	14 18 8
	1880	14,556,894	17 2 5	15,954,559	18 15 3
	1881	16,718,521	19 4 10	16,252,103	18 14 1
	1882	18,748,081	21 1 7	16,193,579	18 4 0
	1883	17,743,846	19 10 2	16,398,863	18 0 7
	1884	19,201,633	20 11 9	16,050,465	17 4 6

* The populations on which the values of imports and exports per head have been based have not been corrected in accordance with the results of the recent census in the case of any of the colonies except Victoria.

IMPORTS AND EXPORTS OF AUSTRALASIAN COLONIES—*continued.*

Colony.	Year.	Imports.		Exports.	
		Total Value.	Value per Head.*	Total Value.	Value per Head.*
		£	£ s. d.	£	£ s. d.
Victoria— <i>continued</i>	1885	18,044,604	18 17 7	15,551,758	16 5 5
	1886	18,530,575	18 16 10	11,795,321	11 19 11
	1887	19,022,151	18 14 10	11,351,145	11 3 8
	1888	23,972,134	22 15 5	13,853,763	13 3 2
	1889	24,402,760	22 8 8	12,734,734	11 14 2
Mean of 11 years	...	18,725,158	19 15 0	14,417,315	15 9 5
New South Wales...	1879	14,198,847	20 11 2	13,086,819	18 18 11
	1880	13,950,075	19 4 6	15,525,138	21 7 11
	1881	17,409,326	22 18 0	16,049,503	21 2 3
	1882	21,281,130	26 15 5	16,716,961	21 0 8
	1883	20,960,157	25 2 6	19,886,018	23 16 9
	1884	22,826,985	25 18 4	18,251,506	20 14 5
	1885	23,365,196	25 2 0	16,541,745	17 15 4
	1886	20,973,548	21 8 1	15,556,213	15 17 6
	1887	18,806,236	18 7 10	18,496,917	18 1 10
	1888	20,885,557	19 12 6	20,859,715	19 12 0
1889	22,863,057	20 14 2	23,294,934	21 2 0	
Mean of 11 years	...	19,774,556	22 6 9	17,660,497	19 19 1
Queensland ...	1879	3,080,889	14 7 8	3,434,034	16 0 8
	1880	3,087,296	13 18 2	3,448,160	15 10 8
	1881	4,063,625	18 7 9	3,540,366	16 0 4
	1882	6,318,463	26 11 10	3,534,452	14 17 6
	1883	6,233,351	23 5 5	5,276,608	19 14 0
	1884	6,381,976	21 12 11	4,673,864	15 17 1
	1885	6,422,490	20 16 0	5,243,404	16 19 7
	1886	6,103,227	18 7 1	4,933,970	14 16 9
	1887	5,821,611	16 8 2	6,453,945	18 3 10
	1888	6,646,738	17 12 5	6,126,362	16 4 10
1889	6,052,562	15 4 10	7,736,309	19 9 8	
Mean of 11 years	...	5,473,839	18 15 8	4,945,589	16 14 1
South Australia† ...	1879	5,014,150	19 14 7	4,762,727	18 14 10
	1880	5,581,497	21 3 7	5,574,505	21 3 1
	1881	5,244,064	18 3 5	4,407,757	15 5 6
	1882	6,707,788	23 2 9	5,359,890	18 9 9
	1883	6,310,055	21 2 1	4,883,461	16 6 8
	1884	5,749,353	18 12 7	6,623,704	21 9 2
	1885	5,548,403	17 14 5	5,636,255	18 0 0
	1886	4,852,750	15 10 0	4,489,008	14 6 9
	1887	5,096,293	16 5 3	5,330,780	17 0 3
	1888	5,413,638	17 0 7	6,984,098	21 19 5
1889	6,804,451	21 3 5	7,259,365	22 11 9	
Mean of 11 years	...	5,665,677	19 1 2	5,573,777	18 13 5

* See footnote (*) on previous page.

† Exclusive of the Northern Territory ; also of the overland traffic.

IMPORTS AND EXPORTS OF AUSTRALASIAN COLONIES—*continued.*

Colony.	Year.	Imports.		Exports.	
		Total Value.	Value per Head.*	Total Value.	Value per Head.*
		£	£ s. d.	£	£ s. d.
Western Australia..	1879	407,299	14 6 8	494,884	17 8 3
	1880	353,669	12 5 3	499,183	17 6 1
	1881	404,831	13 12 9	502,770	16 18 9
	1882	508,755	16 14 9	583,056	19 3 8
	1883	516,847	16 11 0	447,010	14 6 3
	1884	521,167	16 2 5	405,693	12 11 0
	1885	650,391	19 1 9	446,692	13 2 2
	1886	758,013	20 7 9	630,393	16 19 1
	1887	666,344	15 19 7	604,655	14 10 0
	1888	786,250	18 11 8	680,346	16 1 7
	1889	818,127	19 0 1	761,392	17 13 8
Mean of 11 years	...	581,063	16 12 2	550,552	16 0 1
Tasmania ...	1879	1,267,475	11 7 11	1,301,097	11 14 0
	1880	1,369,223	12 1 0	1,511,931	13 6 2
	1881	1,431,144	12 4 0	1,555,576	13 5 2
	1882	1,670,872	13 16 10	1,587,389	13 3 0
	1883	1,832,637	14 14 9	1,731,599	13 18 6
	1884	1,656,118	12 18 0	1,475,857	11 9 11
	1885	1,757,486	13 5 11	1,313,693	9 18 10
	1886	1,756,567	12 19 3	1,331,540	9 16 6
	1887	1,596,817	11 8 4	1,449,371	10 7 3
	1888	1,610,664	11 3 3	1,333,865	9 4 10
	1889	1,611,035	10 16 6	1,459,857	9 16 2
Mean of 11 years	...	1,596,367	12 8 8	1,459,252	11 9 1
New Zealand ...	1879	8,374,585	18 13 9	5,743,126	12 16 4
	1880	6,162,011	12 19 10	6,352,692	13 7 10
	1881	7,457,045	15 2 3	6,060,876	12 5 7
	1882	8,609,270	16 18 1	6,658,008	13 1 5
	1883	7,974,038	15 1 4	7,095,999	13 8 2
	1884	7,663,888	13 19 0	7,091,667	12 18 4
	1885	7,479,921	13 4 3	6,819,939	12 0 11
	1886	6,759,013	11 12 3	6,672,791	11 9 3
	1887	6,245,515	10 9 5	6,866,169	11 10 3
	1888	5,941,900	9 16 4	7,767,325	12 16 7
	1889	6,297,097	10 5 2	9,339,265	15 4 4
Mean of 11 years	...	7,178,571	13 9 3	6,951,623	12 16 3

NOTE.—For the imports and exports of the different colonies during 1890, see General Summary of Australasian Statistics (third folding sheet) *ante*; also Appendix A. *post*.

13. In 1889 the imports were above the average in all the colonies except New Zealand, and the exports were above the average in all except Victoria, but only very slightly so in the case of Tasmania.

Gross imports and exports of colonies.

* See footnote (*) on page 45.

The imports in Victoria, South Australia, and Western Australia, and the exports in New South Wales, Queensland, South Australia, Western Australia, and New Zealand, were of greater value in the last than in any of the previous years named. In only one colony—Queensland—did the imports, and in only one—Victoria—did the exports, show a falling off as compared with the previous year.

Imports and exports of colonies per head.

14. Per head of the population, the imports in 1889 were below the average in all the colonies except Victoria, South Australia, and Western Australia; the exports were above the average in all the colonies, except Victoria and Tasmania, but more especially in Queensland, South Australia, and New Zealand. In South Australia and New Zealand, the exports per head in 1889 were higher than in any previous year named; but, in all other cases, the exports per head, and in all cases the imports per head, were higher in one or more of the other years named than in 1889. But in all except Victoria, Queensland, and Tasmania, the imports per head in 1889 exceeded those in 1888; whilst the exports per head were also higher in 1889 than in 1888 in all the colonies except Victoria.

Order of colonies in respect to imports and exports.

15. In the six years ended with 1886, the total value of imports, and in 1879 and the eight years ended with 1889, the total value of exports, was higher in New South Wales than in Victoria, but in all the other years the values were higher in Victoria than in New South Wales or any other Australasian colony. The following is the order of the colonies in regard to the total value of imports and exports in 1889, and in the eleven years 1879 to 1889:—

ORDER OF COLONIES IN REFERENCE TO TOTAL VALUE OF IMPORTS AND EXPORTS.

Order in 1889.	Order in a Series of Years.
1. New South Wales.	1. New South Wales.
2. Victoria.	2. Victoria.
3. New Zealand.	3. New Zealand.
4. South Australia.	4. South Australia.
5. Queensland.	5. Queensland.
6. Tasmania.	6. Tasmania.
7. Western Australia.	7. Western Australia.

New South Wales wool passing through Victoria.

16. In regard to the comparison of the trade of New South Wales with that of Victoria, it should be remembered that the Victorian returns of imports and exports are each year largely swelled

by the value of wool brought to Melbourne from the neighbouring colonies for convenience of shipment.

17. The value of imports per head in 1889 was greatest in Victoria ; but that of exports per head was greatest in South Australia, Victoria being as low as sixth in regard to the latter. Over a series of years Victoria stood second in the case of imports, and fifth in the case of exports per head ; whilst in both cases New South Wales was at the head of the list. Tasmania usually stands at the bottom of the list as regards both imports and exports per head, but in the four years ended with 1889 New Zealand was below it in regard to the former. The following lists show the order of the colonies in regard to the imports and the exports per head during the year 1889, and in the whole period of eleven years :—

**ORDER OF COLONIES IN REFERENCE TO VALUE OF IMPORTS
PER HEAD.**

Order in 1889.		Order in a Series of Years.
1. Victoria.		1. New South Wales.
2. South Australia.		2. Victoria.
3. New South Wales.		3. South Australia.
4. Western Australia.		4. Queensland.
5. Queensland.		5. Western Australia.
6. Tasmania.		6. New Zealand.
7. New Zealand.		7. Tasmania.

**ORDER OF COLONIES IN REFERENCE TO VALUE OF EXPORTS
PER HEAD.**

Order in 1889.		Order in a Series of Years.
1. South Australia.		1. New South Wales.
2. New South Wales.		2. South Australia.
3. Queensland.		3. Queensland.
4. Western Australia.		4. Western Australia.
5. New Zealand.		5. Victoria.
6. Victoria.		6. New Zealand.
7. Tasmania.		7. Tasmania.

18. The imports and exports of the colonies on the Australian continent, taken as a whole, also the imports and exports of those colonies with the addition of Tasmania and New Zealand, will be found in the following table for each of the eleven years ended with 1889 :—

IMPORTS AND EXPORTS OF AUSTRALIA AND AUSTRALASIA, 1879 TO 1889.
(Inclusive of the Intercolonial Trade.)

—	Year.	Imports.			Exports.				
		Total Value.	Value per Head.*		Total Value.	Value per Head.*			
		£	£	s. d.	£	£	s. d.		
Continent of Australia... ..	1879	37,736,723	18	13	4	34,232,634	16	18	8
	1880	37,529,431	17	19	9	41,001,545	19	12	4
	1881	43,840,367	20	4	4	40,752,499	18	16	0
	1882	53,564,217	23	17	8	42,387,938	18	17	11
	1883	51,764,256	22	0	11	46,891,960	20	0	2
	1884	54,681,114	22	6	3	46,005,232	18	15	6
	1885	54,031,084	21	4	6	43,419,854	17	1	2
	1886	51,218,113	19	6	7	37,404,905	14	2	4
	1887	49,412,635	17	19	1	42,237,442	15	7	0
	1888	57,704,317	20	3	0	48,504,284	16	18	9
	1889	60,940,957	20	10	5	51,786,734	17	8	9
Mean of 11 years	...	50,220,292	20	7	10	43,147,730	17	12	7
Continent of Australia, with Tasmania and New Zealand ...	1879	47,378,783	18	7	2	41,276,857	15	19	11
	1880	45,060,665	16	16	6	48,866,168	18	4	10
	1881	52,728,556	18	19	5	48,368,941	17	8	0
	1882	63,844,359	22	4	6	50,633,335	17	12	6
	1883	61,570,931	20	10	11	55,719,558	18	18	6
	1884	64,001,120	20	9	3	54,572,756	17	8	11
	1885	63,268,491	19	10	1	51,553,486	15	17	10
	1886	59,733,693	17	14	9	45,409,236	13	9	8
	1887	57,254,967	16	8	3	50,552,982	14	9	10
	1888	65,256,881	18	1	2	57,605,474	15	18	10
	1889	68,849,089	18	8	11	62,585,856	16	15	4
Mean of 11 years	...	58,995,230	18	17	4	51,558,604	16	11	3

19. In regard to the Australian continent, also in regard to that continent combined with Tasmania and New Zealand, it will be observed that the imports show considerable increase since 1887, and the exports since 1886 and 1887, both imports and exports being considerably higher in 1889 than in any of the previous years named in the table; also that in continental Australia, the imports per head were higher by 2s. 7d., but the exports per head were less by 3s. 10d. than the average of eleven years, whereas, in continental and insular Australia combined, the imports per head were less by 8s. 5d., but the exports per head were higher by 4s. 1d. than the average of eleven years.

20. It must be borne in mind that in the last table the total imports and exports of each colony are dealt with; therefore the trade

* These proportions are liable to correction where the population estimates of the different colonies have been revised to accord with the results of the census of 1891.

the colonies carry on with each other is included, as well as that with places outside the Australasian group. Hence the same merchandise may form part of the imports and exports of several colonies. The following table shows the extent of the intercolonial trade of each of the colonies during 1888 and 1889:—

INTERCOLONIAL TRADE OF AUSTRALASIAN COLONIES, 1888 AND 1889.*

Colony.	Imports.		Exports.	
	1888.	1889.	1888.	1889.
	£	£	£	£
Victoria	8,561,938	8,605,643	4,318,631	4,039,484
New South Wales	8,741,847	10,647,312	9,554,200	10,741,045
Queensland	3,072,371	2,717,671	4,069,793	5,167,790
South Australia	2,434,619	4,045,691	2,572,394	3,283,734
Western Australia	413,998	334,969	176,521	147,557
Total	23,224,773	26,351,286	20,691,539	23,379,610
Tasmania	1,081,684	1,037,078	1,111,753	1,208,006
New Zealand	1,218,593	1,107,132	1,563,130	2,145,671
Grand Total	25,525,050	28,495,496	23,366,422	26,733,287

21. From the figures in the last two tables it is ascertained that the intercolonial import trade of the colonies on the Australian continent amounted in 1888 to 48 per cent., and in 1889 to 43 per cent. of the whole import trade, and their intercolonial export trade amounted in the same years respectively to 50 and 45 per cent. of the whole export trade; but if the continental colonies be combined with Tasmania and New Zealand, these proportions would be respectively 45 and 47 per cent. for 1888, and 41 and 43 per cent. for 1889.

22. In 1889, as compared with the previous year, the intercolonial import trade showed an increase of nearly £3,000,000, and the intercolonial export trade an increase of nearly £3,400,000. The increase in the intercolonial import trade occurred chiefly in New South Wales and South Australia, there being a decrease in all the other colonies except Victoria; whilst the increase in the intercolonial export trade was distributed over the colonies of New South Wales, Queensland, South Australia, and New Zealand.

23. With reference to the returns of imports, it may be remarked that there is strong reason to believe the values are considerably

* For later information, see Appendix A. *post.*

Proportion of inter-colonial to total trade.

Intercolonial trade, 1888 and 1889 compared.

Overvaluation of imports and exports in some colonies.

overstated in some, if not all, the colonies. This probably arises from the fact that the price set down in the merchant's invoice is that upon which the Customs valuation is based, whereas the invoice price, on the basis of which sales are effected in the colony, is often purposely entered much above the actual value. It is believed that the exports are also over-valued, especially so far as the article wool is concerned, but that the total is not affected to the same extent as that of the import. It may be remarked that, from the indefinite manner in which many articles are returned in the various colonies, *e.g.*, cotton, linen, silk, or woollen "manufactures;" "haberdashery and millinery," "drapery," etc.; also from the fact of the number of packages being often given instead of the number, weight, or measurement of the articles, considerable difficulties lie in the way of arriving at accurate conclusions.*

24. The following table shows the imports and exports during 1889 of the United Kingdom and its various dependencies throughout the world. The figures have been taken from recent official documents, and the calculations have been made in the office of the Government Statist, Melbourne:—

IMPORTS AND EXPORTS OF BRITISH DOMINIONS, 1889.

(Including bullion and specie, except where daggers (†) are marked).

Country or Colony.	Imports.			Exports.		
	Total Value.	Value per Head.		Total Value.	Value per Head.	
	£	£	s. d.	£	£	s. d.
EUROPE.						
United Kingdom† ...	427,637,595	11	2 6	314,705,741	8	3 9
Gibraltar ...	844,119	35	3 8	46,126	1	18 5
Malta† ...	1,010,756	6	3 4	138,962	0	17 0
ASIA.						
India‡ ...	83,285,427	0	7 9	98,833,879	0	9 2
Ceylon ...	4,172,791	1	7 10	3,226,060	1	1 6
Straits Settlements§ ...	23,429,859	41	5 0	19,982,892	35	3 8
Protected Malay States ...	2,258,053	5	0 4	2,865,662	6	7 4
Labuan ...	62,363	10	7 4	66,689	11	1 9
British North Borneo ...	254,946	1	9 2	99,370	0	11 4
Hong Kong ...	2,378,197	12	4 7	1,129,190	5	16 1
Sarawak ...	211,694	0	14 1	252,039	0	16 10
Cyprus ...	244,324	1	4 5	314,628	1	11 6
AFRICA.						
Mauritius... ..	1,252,087	3	7 3	3,319,878	8	18 2
Natal	4,527,015	8	10 9	1,656,318	3	2 6

* See *Victorian Year-Book*, 1885-6, paragraph 760.

† The figures for the United Kingdom are exclusive of bullion and specie. In other cases where daggers (†) occur the imports and exports of bullion and specie were not specified in the returns. In 1889 the United Kingdom imported bullion and specie to the value of £27,099,439, and exported it to the value of £25,121,630.

‡ Exclusive of Frontier trade.

§ Exclusive of the trade between the Settlements.

IMPORTS AND EXPORTS OF BRITISH DOMINIONS, 1889—*continued*.
(Including bullion and specie, except where daggers (†) are marked).

Country or Colony.	Imports.		Exports.	
	Total Value.	Value per Head.	Total Value.	Value per Head.
AFRICA—<i>continued</i>.				
Cape of Good Hope ...	£ 10,841,454	£ s. d. 7 2 3	£ 9,829,900	£ s. d. 6 9 0
St. Helena ...	28,963	5 13 7	5,643	1 2 2
Lagos ...	464,260	4 12 10	457,649	4 11 6
Gold Coast ...	440,868	0 5 10	415,926	0 5 6
Sierra Leone ...	277,781	3 14 1	319,719	4 5 3
Gambia ...	140,818	9 19 0	167,599	11 16 11
AMERICA.				
Canada ...	23,676,356	4 13 3	18,326,541	3 12 2
Newfoundland ...	1,376,472	6 19 6	1,231,769	6 4 10
Bermuda † ...	272,603	17 6 4	64,976	4 2 6
Honduras... ...	260,089	9 9 6	300,879	10 19 2
British Guiana ...	1,803,777	6 7 11	2,471,200	8 15 3
West Indies —				
Bahamas ...	175,516	3 10 11	130,512	2 12 9
Turk's Island ...	27,369	5 5 3	34,485	6 12 8
Jamaica ...	1,597,600	2 11 2	1,614,824	2 11 9
St. Lucia ...	172,048	3 19 9	161,950	3 15 1
St. Vincent † ...	98,212	2 1 11	124,587	2 13 2
Barbados † ...	1,211,370	6 13 1	1,029,588	5 13 2
Grenada † ...	174,081	3 9 1	195,595	3 17 8
Tobago † ...	32,595	1 11 7	39,526	1 18 4
Virgin Islands † ...	3,324	0 13 4	4,341	0 17 4
St. Christopher † ...	177,794	3 19 0	343,172	7 12 6
Nevis † ...				
Antigua † ...	165,788	4 14 9	266,522	7 12 4
Montserrat ...	24,843	2 3 4	28,392	2 9 7
Dominica † ...	57,248	1 19 6	47,325	1 12 8
Trinidad ...	2,093,932	10 13 6	2,308,832	11 15 5
AUSTRALASIA AND SOUTH SEAS.				
Australia, Tasmania, and New Zealand *	68,849,089	18 8 11	62,585,856	16 15 4
Fiji † ...				
Falkland Islands † ...	189,393	1 10 4	364,282	2 18 4
	55,716	28 18 7	116,102	60 5 7
Total ...	666,258,585	2 8 7	549,625,126	2 0 1

25. On comparing the totals in this table with the corresponding ones for the previous year, an increase is observed in the total value of the imports of Great Britain and her dependencies to the extent of over fifty-five millions sterling, or over 9 per cent., and an increase in the value of the exports of nearly thirty-two millions sterling, or over 6 per cent. The increase in the import trade was made up of an increase

External trade of British possessions 1876-89.

* Including intercolonial trade. For imports and exports of the different Australasian Colonies, see tables following paragraphs 12 and 20 *ante*.

† See footnote (†) on page 52.

of forty millions—or about 10 per cent.—in that of the United Kingdom, and an increase of fifteen millions—or 7 per cent.—in that of other British possessions; whilst the increase in the export trade was seventeen millions—or 6 per cent.—in the trade of the United Kingdom, and of nearly fifteen millions—or 7 per cent.—in that of her various possessions. From a comparison of the figures in the following table, it appears that, although the total trade of the British Dominions had fallen off considerably since 1882 and 1883, it has in the last two or three years been gradually recovering, and was higher in 1889 than in any of the previous thirteen years, as will be seen by the following table:—

**IMPORTS AND EXPORTS OF THE UNITED KINGDOM AND OTHER
BRITISH POSSESSIONS, 1876 TO 1889 (000'S OMITTED).**

Year.	Value of Imports from all places to—			Value of Exports to all places from—		
	The United Kingdom.*	Other British Possessions.†	Total.	The United Kingdom.*	Other British Possessions.†	Total.
	£	£	£	£	£	£
1876	375,155,	158,507,	533,662,	256,777,	166,074,	422,851,
1877	394,420,	164,360,	558,780,	252,346,	171,645,	423,991,
1878	368,770,	185,009,	553,779,	245,484,	179,760,	425,244,
1879	362,992,	172,866,	535,858,	248,783,	177,984,	426,767,
1880	411,229,	172,636,	583,865,	286,414,	188,191,	474,605,
1881	307,022,	201,669,	508,691,	297,083,	199,889,	496,972,
1882	413,020,	223,580,	636,600,	306,661,	222,148,	528,809,
1883	426,892,	225,466,	652,358,	305,437,	228,096,	533,533,
1884	390,019,	216,257,	606,276,	295,968,	217,901,	513,869,
1885	370,968,	215,886,	586,854,	271,404,	211,767,	483,171,
1886	349,863,	206,732,	556,595,	268,667,	198,336,	467,003,
1887	362,227,	210,320,	572,547,	280,763,	211,836,	492,599,
1888	387,636,	223,252,	610,888,	297,885,	220,091,	517,976,
1889	427,638,	238,621,	666,259,	314,706,	234,919,	549,625,

Victorian trade compared with other British possessions.

26. The total value of the external trade of Victoria is greater than that of any other British possession except British India, New South Wales, Straits Settlements, Canada, and the United Kingdom itself.

Australasian trade compared with other British possessions.

27. The total value of the external trade of the Australasian colonies,† taken as a whole, is less than that of the United Kingdom and of India, but more than three times as large as that of Canada, and also much larger than that of any other possession.

External trade of foreign countries.

28. The total value and value per head of the general imports and general exports of the principal Foreign countries during 1889 is given in the following table, which has been compiled in the

* Exclusive of bullion and specie.

† Including intercolonial trade.

office of the Government Statist, Melbourne, chiefly from official documents:—

GENERAL IMPORTS AND EXPORTS OF FOREIGN COUNTRIES, 1889.
(Including bullion and specie.)

Countries.	Imports.		Exports.	
	Total Value (000's omitted).	Value per Head.	Total Value (000's omitted).	Value per Head.
EUROPE.	£	£ s. d.	£	£ s. d.
Austria-Hungary ...	51,279,*	1 5 0	64,677,†	1 11 7
Belgium ..	129,516,	21 5 1	124,509,	20 8 8
Denmark ...	17,240,	7 18 9	11,907,	5 9 8
France ...	234,535,	6 2 9	205,242,	5 7 5
German Empire ...	283,585,	6 1 0	240,580,	5 2 8
Greece ...	6,485,	2 19 4	4,639,	2 2 5
Holland ...	103,773,*	22 16 2	91,173,†	20 0 10
Italy ...	59,836,	1 18 8	42,432,	1 7 5
Portugal... ..	13,906,	3 4 7	7,837,	1 16 5
Roumania ...	11,718,	2 14 9	10,967,	2 0 10
Russia§ ...	43,197,*	0 9 3‡	76,600,†	0 16 4‡
Spain ...	34,652,	1 19 6	35,875,	2 0 11
Sweden and Norway ...	31,601,	4 13 7	24,155,	3 11 6
Turkey|| ...	17,511,	0 13 11	12,191,	0 9 8
ASIA.				
China ...	26,781,	0 1 5	23,486,	0 1 3
Japan ...	10,122,	0 5 1	10,728,	0 5 5
Persia¶ ...	1,000,||	0 2 8	500,||	0 1 4
AFRICA.				
Egypt§ ...	7,314,*	1 1 6	12,451,†	1 16 7
Morocco ...	1,681,	0 3 7	1,585,	0 3 5
AMERICA.				
Argentine Confederation ...	35,264,	8 12 7	30,249,	7 8 1
Brazil|| ...	29,362,	2 1 11	23,917,	1 14 2
Chile ...	15,751,	5 16 0	14,325,	5 5 6
Mexico ...	8,339,	0 14 4	12,533,	1 1 6
United States ...	161,270,	2 11 3	174,801,	2 15 7
Uruguay ...	8,859,	13 13 5	7,521,	11 12 0
Total ...	1,347,577,	1 11 1	1,264,880,	1 9 2

NOTE.—In the cases of the Argentine Confederation, Chile, and Uruguay, the official values are given, which are said to be 25 per cent. below the real values.

29. By comparing the figures in this with those in a previous table,** it will be at once seen that the imports and exports of the United Kingdom, even exclusive of bullion and specie, represent a Trade in Australasia and other countries compared.

* Imports for home consumption only.

† Exports of home produce only.

‡ These calculations are based upon the population of Russia in Europe, exclusive of Finland.

§ Exclusive of bullion and specie.

¶ The figures for Persia are only estimates.

|| Figures for 1887.

** See table following paragraph 24 ante.

much higher value than those of any other country in the world, and that those of Germany and France come next, in this respect; then follow in succession, according to their total trade, the United States, Belgium, Holland, and India, which are the only other countries possessing a larger external trade than the Australasian colonies taken collectively, where such trade, including that between the colonies, is larger by 12 millions than in Russia, by 16 millions than in Austria-Hungary, and by 29 millions than in Italy. The external commerce of Victoria* is much larger than that of Denmark, Greece, Portugal, Roumania, or Turkey, but is not so extensive as that of Spain or Sweden and Norway; it is also less than that of the Argentine Confederation, Brazil, or China, but it is larger than that of the other extra-European countries shown in the table.

Trade per head in Australasia and other countries compared.

30. The external trade of the United Kingdom,† as expressed by the value of imports and exports per head of the population, is larger than that of any Foreign country named except Holland, Belgium, and Uruguay. The external trade of every one of the Australasian colonies,† as similarly expressed, is much larger than that of the United Kingdom; whilst that of Victoria, Queensland, and South Australia is usually nearly as large as that of Belgium, and that of New South Wales is nearly as large as that of Holland.

Imports and exports the produce of various countries.

31. The value of the imports into Victoria of articles entered as being the produce or manufacture of the United Kingdom, of other British dominions, and of Foreign states, and the value of the exports from Victoria of articles entered as the produce or manufacture of the same countries and of the colony itself, also the percentage of such values to the total values of imports and exports in 1890, will be found in the following table:—

IMPORTS AND EXPORTS THE PRODUCE OF DIFFERENT COUNTRIES, 1890.

Articles the Produce or Manufacture of—	Imports.		Exports.	
	Value.	Percentage.	Value.	Percentage.
	£		£	
Victoria ... ..	...	...	10,291,821	77·58
The United Kingdom ...	9,637,926	41·99	1,127,642	8·50
Other British possessions ...	9,485,951	41·33	1,175,454	8·86
Foreign States	3,830,138	16·68	671,305	5·06
Total	22,954,015	100·00	13,266,222	100·00

* See table following paragraph 12 *ante*.

† See table following paragraph 24 *ante*.

32. The following table gives the total value and value per head of articles of Victorian produce exported, and their proportion to the total exports, in each of the last twenty-four years:—

EXPORTS OF VICTORIAN PRODUCE, 1867 TO 1890.

Year.	Exports of Articles Produced or Manufactured in Victoria.		
	Total Value.	Value per head of the Population.*	Percentage of Total Exports.
	£	£ s. d.	
1867	9,972,333	15 9 7	78·37
1868	11,697,893	17 12 10	75·02
1869	9,539,816	13 17 8	70·85
1870	9,103,323	12 15 3	73·00
1871	11,151,622	15 2 7	76·60
1872	10,758,658	14 5 8	77·56
1873	11,876,707	15 10 4	77·61
1874	11,352,515	14 12 0	73·52
1875	10,571,806	13 8 6	71·59
1876	10,155,916	12 15 0	71·54
1877	11,269,086	13 18 9	74·35
1878	10,676,499	12 19 11	71·53
1879	8,069,857	9 13 6	64·80
1880	11,220,467	13 3 11	70·33
1881	12,480,567	14 7 3	76·79
1882	12,570,788	14 2 7	77·63
1883	13,292,294	14 12 1	81·06
1884	13,155,484	14 2 1	81·96
1885	12,452,245	13 0 3	80·06
1886	9,054,687	9 3 11	76·77
1887	8,502,979	8 7 3	74·91
1888	10,356,633	9 16 4	74·76
1889	9,776,670	8 19 4	76·77
1890	10,291,821	9 4 0	77·58

33. It should be pointed out that the returns of articles set down as produced or manufactured in Victoria are not always reliable, there being no other evidence as to the origin of such articles than the statements of the shippers, which, it is known, are sometimes made very loosely. It will be seen that, according to the figures, the total value of exports of local productions shows a considerable falling off during the last five years as compared with the six previous ones. The worst year was 1887, when such value was lower than in any of the previous twenty years, except 1879, and the value of such exports per head was absolutely the lowest in the whole period; but since then the local export trade has slightly revived, although it is still considerably below the standard of the

* Averages per head since 1881 corrected in accordance with revised estimates of population based on the census of 1891.

earlier years. The proportion of exports of home products to the total exports was higher in 1890 than in the great majority of previous years.

Exports of
Victorian
products,
1884 to
1890.

34. The following are the values of goods entered as the produce or manufacture of Victoria during each of the years forming the septennial period ended with 1890, the names of all the most important articles being given:—

EXPORTS OF ARTICLES ENTERED AS THE PRODUCE OR MANUFACTURE
OF VICTORIA, 1884 TO 1890.*

(See Index following paragraph 6 *ante*.)

Order.	Articles.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
		£	£	£	£	£	£	£
1	Stationery ...	22,113	17,949	14,395	13,231	15,420	16,097	17,182
9	Agricultural im- plements	10,347	11,017	11,732	15,613	22,076	19,915	27,575
10	Machinery ...	98,468	73,227	48,034	90,403	56,562	62,167	61,105
10	Saddlery and harness	14,260	13,105	9,866	7,147	10,018	6,882	8,330
13	Furniture and upholstery	43,734	39,143	24,109	20,286	22,558	17,614	19,680
14	Manure ...	21,987	19,780	24,579	25,431	24,033	23,910	26,145
14	Drugs and chemicals	12,398	17,144	13,164	10,647	7,522	4,711	8,467
15	Woollens and woollen piece goods	10,633	4,189	2,751	1,820	9,439	2,609	6,817
19	Apparel & slops	257,269	242,617	155,358	117,858	121,801	98,367	118,536
19	Boots and shoes	36,916	25,482	20,926	23,137	20,937	16,254	15,645
20	Cordage... ..	29,312	20,695	9,195	5,398	4,012	4,683	3,434
21	Butter & cheese	145,484	103,365	90,221	43,123	68,862	45,274	66,293
21	Hams, bacon, and lard	17,232	13,061	10,343	8,817	7,756	5,455	3,958
21	Beef and pork, salted	33,072	18,905	9,951	4,077	4,931	3,550	3,834
21	Preserved meats	116,903	99,861	88,187	41,561	16,115	16,156	20,197
22	Confectionery ...	13,062	11,290	6,703	3,798	2,883	2,751	2,537
22	Biscuit	40,370	45,015	37,689	26,870	20,962	20,653	18,975
22	Flour	277,556	303,305	313,709	408,434	380,387	270,499	350,917
22	Grain & pulse—							
22	Wheat	1,426,905	407,668	165,391	410,524	502,275	70,147	102,603
22	Other†	23,316	8,307	10,387	13,317	8,535	5,581	6,726
22	Fruit	38,021	23,662	21,967	10,105	18,719	15,147	17,869
22	Jams and pre- serves	28,515	15,932	14,678	6,563	6,497	4,638	4,239
22	Oatmeal... ..	28,540	29,550	25,222	17,978	27,159	28,467	33,796
22	Onions	38,710	31,868	34,696	33,482	40,678	35,308	27,960
22	Potatoes	148,929	103,644	120,532	37,861	94,301	57,612	24,787
22	Sugar, refined, and molasses	106,483	52,048	32,462	41,130	50,617	38,647	40,400
22	Vegetables ...	99,031	17,480	4,436	12,423	4,911	3,292	7,268
23	Wine	13,450	15,362	27,094	29,345	33,273	33,240	31,990
24	Bones	1,951	1,211	500	541	559	539	530
24	Bone-dust	11,380	14,458	9,674	5,270	11,328	11,057	6,584
24	Candles	3,655	7,163	5,561	1,629	551	298	421
24	Glue pieces ...	1,055	1,400	1,783	1,780	1,657	988	823

* Including all articles partly or wholly made up of imported materials.

† Not including malt.

EXPORTS OF ARTICLES ENTERED AS THE PRODUCE OR MANUFACTURE
OF VICTORIA, 1884 TO 1890*—*continued.*

(See Index following paragraph 6 *ante.*)

Order.	Articles.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
		£	£	£	£	£		£
24	Hides	8,696	10,284	9,581	15,250	17,136	25,000	13,717
„	Horns and hoofs	1,174	678	1,005	633	1,691	2,691	4,144
„	Leather	338,029	342,252	254,597	207,606	181,886	190,322	184,574
„	Skins—sheep, etc.	139,942	92,149	98,763	104,543	185,272	206,931	159,099
„	Soap	15,559	18,189	13,354	10,485	10,375	9,856	12,375
„	Stearine... ..	6,247	...	5	96	553	85	411
„	Tallow	256,686	155,918	121,900	85,640	157,601	149,429	156,851
„	Wool†	5,707,668	4,428,231	4,306,352	4,508,105	3,755,265	5,193,858	5,121,852
25	Bark and timber	33,472	32,782	37,481	23,470	51,813	53,610	76,986
„	Bran and pollard	16,102	9,598	23,010	4,323	9,727	2,101	1,107
„	Hay and chaff ...	194,393	84,825	174,139	63,660	134,971	129,390	83,558
„	Seeds	13,722	9,699	6,227	4,412	3,713	4,855	6,203
26	Oil—neatsfoot and ex tallow	9,016	7,634	7,478	3,625	2,207	1,816	4,159
31	Gold—bullion ...	760,875	353,362	336,874	243,425	166,877	296,375	516,438
„	„ specie ...	1,249,420	3,956,173	1,610,829	1,011,121	3,523,642	1,983,913	2,223,065
32	Minerals, metals, etc., exclusive of gold	31,858	25,716	32,393	14,733	12,731	14,619	19,380
33	Horned cattle ...	235,019	101,935	57,604	71,833	56,662	83,971	55,999
„	Horses	171,732	170,926	133,691	148,018	116,732	99,848	179,299
„	Sheep	307,609	426,149	101,232	191,246	94,571	119,742	96,350
34	Plants	7,561	7,343	5,664	5,920	6,447	6,948	6,666
35	Hardware and manufactures of metals	24,911	19,405	20,834	16,440	15,800	15,528	21,500
„	Oilmen's stores	15,421	14,400	11,898	13,622	11,211	9,284	9,721
...	All other articles	439,315	375,694	324,481	265,174	222,416	233,990	252,744
	Total ...	13,155,484	12,452,245	9,054,687	8,502,979	10,356,633	9,776,670	10,291,821

NOTE.—The border traffic is included in all the years.

35. It has been already stated that in 1890, as compared with 1889, the increase in the total exports amounted in value to £531,488, of which increase £515,151 was in exports of home produce or manufactures. The increase in the exports of such products was spread over 33 articles, the total value of the increase of which was set down as £803,270; but as against this there was an increase in the exports of 22 articles, amounting in all to an increased value of £288,119, so that the net increase in the value of exports of home produce was as stated. The chief increase was in exports of gold bullion and specie, amounting to about £459,000, wheat and flour (£113,000), horses (£79,000), bark and timber (£23,400), butter and cheese (£21,000), and apparel and slops (£20,000). The chief articles of home produce

Increase or
decrease of
exports of
articles of
home pro-
duce.

* Including all articles partly or wholly made up of imported materials.

† It is believed a portion of this wool was produced outside Victoria.

of which the exports decreased were wool (£72,000), cattle and sheep (£50,300), skins (£47,800), hay and chaff (£46,000), and potatoes (£33,000). The following table gives the names of the articles and the amount of increase or falling off in the exports of each article:—

INCREASE OR DECREASE OF EXPORTS OF ARTICLES OF HOME
PRODUCE, 1890.

Increase 1890, as compared with 1889.		Decrease 1890, as compared with 1889.	
Articles.	Amount of Increase.	Articles.	Amount of Decrease.
	£		£
Stationery	1,085	Machinery	1,062
Agricultural implements ...	7,660	Boots and shoes	609
Saddlery and harness	1,448	Cordage	1,249
Furniture and upholstery ...	2,066	Hams, bacon and lard ...	1,497
Manure	2,235	Confectionery	214
Drugs and chemicals	3,756	Biscuit	1,678
Woollens and woollen piece goods	4,208	Jams and preserves ...	399
Apparel and slops	20,169	Onions	7,348
Butter and cheese	21,019	Potatoes	32,825
Beef and pork, salted	284	Wine	1,250
Preserved meats	4,041	Bones	9
Flour	80,418	Bone-dust	4,473
Grain and pulse—wheat ...	32,456	Glue pieces	165
„ „ other	1,145	Hides	11,283
Fruit	2,722	Leather	5,748
Oatmeal	5,329	Skins—sheep, etc. ...	47,832
Sugar—refined, and molasses	1,753	Wool	72,006
Vegetables	3,976	Bran and pollard ...	994
Candles	123	Hay and chaff	45,832
Horns and hoofs	1,453	Horned cattle	27,972
Soap	2,519	Sheep	23,392
Stearine	326	Plants	282
Tallow	7,422		
Bark and timber	23,376		
Seeds	1,348		
Oil—neatsfoot and ex tallow	2,343		
Gold—bullion	220,063		
„ specie	239,152		
Minerals, metals, etc., exclusive of gold	4,761		
Horses	79,451		
Hardware and manufactures of metals	5,972		
Oilmen's stores	437		
All other articles	18,754		
Total increase	803,270		
Deduct decrease	288,119		
Net increase	515,151	Total decrease... ..	288,119

36. The next table shows the total value and value per head of the exports of home produce or manufacture from each of the Australasian colonies during the eleven years 1879 to 1889, also the proportion of the value of such articles to that of the total exports:—

Exports of home produce from Australasian colonies.

EXPORTS OF HOME PRODUCE FROM AUSTRALASIAN COLONIES,
1879 TO 1889.

Colony.	Year.	Export of Articles Produced or Manufactured in each Colony.		
		Total Value.	Value per Head of the Population.*	Percentage of Total Exports.
		£	£ s. d.	
Victoria ...	1879	8,069,857	9 13 6	64·80
	1880	11,220,467	13 3 11	70·33
	1881	12,480,567	14 7 3	76·79
	1882	12,570,788	14 2 7	77·63
	1883	13,292,294	14 12 1	81·06
	1884	13,155,484	14 2 1	81·96
	1885	12,452,245	13 0 3	80·06
	1886	9,054,687	9 3 11	76·77
	1887	8,502,979	8 7 3	74·91
	1888	10,356,633	9 16 4	74·76
	1889	9,776,670	8 19 4	76·77
New South Wales ...	1879	10,775,644	15 12 0	82·34
	1880	12,679,782	17 9 5	81·67
	1881	12,895,493	16 19 2	80·35
	1882	13,208,459	16 12 4	79·01
	1883	16,129,867	19 6 8	81·11
	1884	14,595,736	16 11 4	79·97
	1885	12,957,881	13 18 5	78·33
	1886	12,884,200	13 3 0	82·82
	1887	15,472,361	15 2 8	83·65
	1888	17,289,487	16 4 11	82·88
	1889	17,423,311	15 15 8	74·79
Queensland ...	1879	3,259,613	15 4 5	94·92
	1880	3,150,151	14 3 10	91·36
	1881	3,289,253	14 17 8	92·91
	1882	3,183,947	13 8 0	90·01
	1883	5,156,835	19 5 1	97·73
	1884	4,553,477	15 8 11	97·43
	1885	5,116,293	16 11 5	97·58
	1886	4,813,092	14 9 6	97·55
	1887	6,338,205	17 17 4	98·21
	1888	6,012,722	15 18 10	98·15
	1889	7,511,744	18 18 4	97·10
South Australia ...	1879	3,957,854	15 11 6	83·10
	1880	4,829,577	18 6 6	86·64
	1881	3,643,402	12 12 6	82·66
	1882	4,187,840	14 8 11	78·13

* The averages for Victoria have been corrected since last publication in accordance with amended estimates of population based on the census of 1891; those for the other colonies have not yet been similarly revised.

EXPORTS OF HOME PRODUCE FROM AUSTRALASIAN COLONIES,
1879 TO 1889—*continued.*

Colony.	Year.	Exports of Articles Produced or Manufactured in each Colony.				
		Total Value.	Value per Head of the Population.*		Percentage of Total Exports.	
		£	£	s.	d.	
South Australia— <i>continued.</i>	1883	3,487,827	11	13	3	71·42
	1884	5,292,222	17	2	11	79·90
	1885	4,385,599	14	0	2	77·81
	1886	2,822,138	9	0	3	62·87
	1887	3,348,561	10	13	9	62·82
	1888	4,670,773	14	13	10	66·88
	1889	3,694,692	11	9	11	50·90
Western Australia ...	1879	492,707	17	6	9	99·56
	1880	496,408	17	4	2	99·44
	1881	498,634	16	14	1	99·18
	1882	580,765	19	2	2	99·61
	1883	444,764	14	4	10	99·50
	1884	404,000	12	9	11	99·58
	1885	445,208	13	1	4	99·67
	1886	626,524	16	17	0	99·40
	1887	601,656	14	8	7	99·50
	1888	673,519	15	18	4	99·00
1889	748,898	17	7	11	98·36	
Tasmania ...	1879	1,289,395	11	11	11	99·10
	1880	1,481,330	13	0	9	97·98
	1881	1,548,116	13	3	11	99·52
	1882	1,578,517	13	1	6	99·44
	1883	1,698,334	13	13	2	98·08
	1884	1,448,714	11	5	8	98·16
	1885	1,299,011	9	16	7	98·88
	1886	1,312,416	9	13	8	98·57
	1887	1,425,457	10	3	10	98·35
	1888	1,303,908	9	0	8	97·75
1889	1,442,605	9	13	11	98·81	
New Zealand ...	1879	5,563,455	12	8	4	96·87
	1880	6,102,400	12	17	4	96·06
	1881	5,762,250	11	13	5	95·07
	1882	6,253,350	12	5	7	93·94
	1883	6,855,244	12	19	0	96·61
	1884	6,942,486	12	12	10	97·90
	1885	6,591,911	11	12	10	96·66
	1886	6,386,682	10	19	5	95·71
	1887	6,551,081	10	19	8	95·41
	1888	7,255,128	11	19	8	93·41
1889	9,042,008	14	14	7	96·82	

Exports of home produce, 1888 and 1889.

37. According to its total value and its value per head, the home produce exported in 1889 was much higher than in 1888 in all the colonies except Victoria, New South Wales, and South Australia—the

* See footnote (*) on previous page.

greatest increases per head being in Queensland and New Zealand; but in 1889, as compared with 1888, the proportion of exports of home produce to the total exports was lower in all the colonies except Victoria, Tasmania, and New Zealand. It should be mentioned that the same circumstance which makes the returns of Victorian home produce exported not absolutely reliable, as has been already stated,* may probably also operate against the truthfulness of the returns of the other colonies; consequently, some caution should be exercised in drawing deductions from the figures.

38. New South Wales being a coal-producing country, and being, moreover, from the extent of her territory, able to raise a very large quantity of wool and other pastoral produce, which is only partially counterbalanced by the larger quantities of grain and gold produced in Victoria, the value of home products exported from the former has of late years been in excess of that from the latter. This was the case in all the years shown; the difference in favour of New South Wales being greatest in 1887, 1888, and 1889, in each of which it amounted to about 7 millions sterling, and next greatest in 1886, when it amounted to $3\frac{4}{5}$ millions sterling. Victoria is, however, in advance of every Australasian colony except New South Wales in regard to the value of home produce exported. The following is the order in which the colonies stood in this respect according to the returns of 1889:—

Order of colonies in respect to exports of home produce.

ORDER OF COLONIES IN REFERENCE TO TOTAL VALUE OF EXPORTS OF HOME PRODUCE, 1889.

- | | |
|---------------------|-----------------------|
| 1. New South Wales. | 5. South Australia. |
| 2. Victoria. | 6. Tasmania. |
| 3. New Zealand. | 7. Western Australia. |
| 4. Queensland. | |

39. In respect to the value of exports of domestic produce per head of the population in 1889, Victoria stood lowest on the list, at the top of which stood Queensland, Western Australia standing second. The following was the order of the colonies in this particular:—

Order of colonies in respect to exports of home produce per head.

ORDER OF COLONIES IN REFERENCE TO VALUE PER HEAD OF EXPORTS OF HOME PRODUCE, 1889.

- | | |
|-----------------------|---------------------|
| 1. Queensland. | 5. South Australia. |
| 2. Western Australia. | 6. Tasmania. |
| 3. New South Wales. | 7. Victoria. |
| 4. New Zealand. | |

* See paragraph 33 *ante*.

Order of colonies in respect to proportion of home products to total exports.

40. In Victoria during the same year, the value of articles of domestic produce bore a slightly larger proportion to that of the total exports than in New South Wales, and a much larger proportion than in South Australia, but a much smaller proportion than in any other colony. It is probable, however, that the proportion in Victoria would have been larger but for the total exports being so much swelled by the exportation of wool produced in the adjacent colonies and imported over the frontiers. The colonies in this respect stood in the following order in 1889:—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF EXPORTS OF HOME PRODUCE TO TOTAL EXPORTS, 1889.

1. Tasmania.	5. Victoria.
2. Western Australia.	6. New South Wales.
3. Queensland.	7. South Australia.
4. New Zealand.	

Exports of Australasian produce.

41. The aggregate value of the exports of home produce from all the Australasian colonies amounted in 1889 to £49,639,928, or over 79½ per cent. of the total exports, as compared with £47,562,170, or 82½ per cent. of the total exports in 1888. During the last twelve years the exports of home produce have varied from 33 millions in 1879 to 49½ millions in 1889; and the proportion to the total exports has ranged from 81 to 85 per cent.

Trade with various countries 1890.

42. In 1890, according to value, 42 per cent. of the Victorian imports were from, and 52 per cent. of the Victorian exports were to, the United Kingdom. About 37 per cent. of the former, and 31 per cent. of the latter, were conveyed between Victoria and the neighbouring colonies, chiefly New South Wales. In regard to British possessions out of Australia, the imports therefrom and the exports thereto each amounted to about 6 per cent. of the totals; whilst in regard to Foreign countries the imports therefrom amounted to over 15 per cent., and the exports thereto to about 11½ per cent., of the totals. The value of the imports from and the exports to the principal British and Foreign countries, and the percentage of such values to the total imports and exports, are given in the following table:—

VICTORIAN IMPORTS FROM AND EXPORTS TO DIFFERENT COUNTRIES,
1890.

Countries.	Imports therefrom.		Exports thereto.	
	Value.	Percentage.	Value.	Percentage.
BRITISH COUNTRIES.				
	£		£	
The United Kingdom ...	9,607,193	41·85	6,850,014	51·64
Australasia—				
New South Wales ...	6,569,987	28·63	2,034,647	15·34
Queensland ...	258,224	1·12	327,141	2·47
South Australia ...	544,320	2·37	610,039	4·60
Western Australia ...	111,977	·49	132,261	1·00
Tasmania ...	308,151	1·34	609,103	4·59
New Zealand ...	665,519	2·90	336,015	2·53
Fiji ...	67,581	·29	14,870	·11
Mauritius ...	423,694	1·85	39,550	·30
Hong Kong ...	286,805	1·25	90,792	·68
India ...	404,288	1·76	519,155	3·91
Ceylon ...	100,838	·44	157,331	1·19
Straits Settlements ...	43,750	·19	6,839	·05
Canada ...	55,740	·25	60	...
Other British Possessions ...	5,804	·02	4,007	·03
Total ...	19,453,871	84·75	11,731,824	88·44
FOREIGN COUNTRIES.				
Belgium ...	121,060	·53	654,748	4·94
France ...	174,547	·76	452,807	3·41
Germany ...	682,166	2·97	240,088	1·81
Sweden and Norway ...	565,501	2·47	...	...
Java ...	401,969	1·75	3,119	·02
Philippine Islands ...	435	...	7,959	·06
China ...	399,556	1·74	15	...
United States ...	1,069,297	4·66	155,872	1·17
Others ...	85,613	·37	19,790	·15
Total ...	3,500,144	15·25	1,534,398	11·56
Grand Total ...	22,954,015	100·00	13,266,222	100·00

43. Comparing the imports in 1890 with those in 1889, a decrease of as much as £1,807,500 is shown in the value of those from the United Kingdom alone. The imports from the other Australasian colonies also show a net falling off of £81,670, there having been a considerable decrease in those from South Australia, Tasmania, and New Zealand, but an increase from New South Wales and the other colonies; whilst there was a net increase of £109,691 from India and other British possessions. As regards foreign countries, there was an

Increase or decrease of imports from various countries, 1890.

improved trade in most cases, the only exceptions being France, Philippine Islands, and China. The largest increases were £162,800 from Java, £78,300 from the United States, and £75,500 from Germany; whilst the net increase from Foreign countries as a whole was £330,729. The following table shows the value of goods imported from each country in the last two years, and the increase or falling off of such value in the last year:—

**INCREASE OR DECREASE IN IMPORTS FROM DIFFERENT COUNTRIES,
1890.**

Countries.	Imports therefrom.		Increase.	Decrease.
	1889.	1890.		
BRITISH COUNTRIES.				
The United Kingdom ...	£ 11,414,682	£ 9,607,193	...	1,807,489
Australasia—				
New South Wales ...	6,326,440	6,569,987	243,547	...
Queensland ...	189,072	258,224	69,152	...
South Australia ...	633,035	544,320	...	88,715
Western Australia ...	90,654	111,977	21,323	...
Tasmania ...	418,053	308,151	...	109,902
New Zealand ...	882,600	665,519	...	217,081
Fiji ...	65,789	67,581	1,792	...
Mauritius ...	390,185	423,694	33,509	...
Hong Kong ...	353,873	286,805	...	67,068
India ...	252,860	404,288	151,428	...
Ceylon ...	77,313	100,838	23,525	...
Straits Settlements ...	45,519	43,750	...	1,769
Canada... ..	77,548	55,740	...	21,808
Other British Possessions ...	15,722	5,804	...	9,918
Total ...	21,233,345	19,453,871	...	*1,779,474
FOREIGN COUNTRIES.				
Belgium ...	111,053	121,060	10,007	...
France ...	181,490	174,547	...	6,943
Germany ..	606,673	682,166	75,493	...
Sweden and Norway ...	512,165	565,501	53,336	...
Java ...	239,154	401,969	162,815	...
Philippine Islands ...	10,483	435	...	10,048
China ...	444,529	399,556	...	44,973
United States ...	991,009	1,069,297	78,288	...
Others ...	72,859	85,613	12,754	...
Total ...	3,169,415	3,500,144	*330,729	..
Grand Total ...	24,402,760	22,954,015	...	*1,448,745

* Net figures.

44. In 1890, as compared with 1889, the exports to the United Kingdom fell off by £186,600. The only other countries to which the exports decreased were all the Australasian colonies except Western Australia and Tasmania, Fiji, and the Philippine Islands. The net increase in the exports to British countries, taken as a whole, was £129,000; whilst there was an increase of £319,300 to France, of £57,000 to Belgium, and a net increase of £26,106 to other Foreign countries. The following table shows the amount by which the exports to each country increased or decreased in the year:—

INCREASE OR DECREASE IN EXPORTS TO DIFFERENT COUNTRIES,
1890.

Countries.	Exports thereto.		Increase.	Decrease.
	1889.	1890.		
BRITISH COUNTRIES.	£	£	£	£
The United Kingdom ...	7,036,585	6,850,014	...	186,571
Australasia—				
New South Wales ...	2,114,034	2,034,647	...	79,387
Queensland ...	358,272	327,141	...	31,131
South Australia ...	616,097	610,039	...	6,058
Western Australia ...	83,673	132,261	48,588	...
Tasmania ...	493,766	609,103	115,337	...
New Zealand ...	356,212	336,015	...	20,197
Fiji ...	17,430	14,870	...	2,560
Mauritius ...	32,826	39,550	6,724	...
Hong Kong ...	71,233	90,792	19,559	...
India ...	400,145	519,155	119,010	...
Ceylon ...	17,810	157,331	139,521	...
Straits Settlements ...	1,618	6,839	5,221	...
Other British Possessions ...	3,142	4,067	925	...
Total ...	11,602,843	11,731,824	128,981*	...
FOREIGN COUNTRIES.				
Belgium ...	597,641	654,748	57,107	...
France ...	133,513	452,807	319,294	...
Germany ...	218,652	240,088	21,436	...
Sweden and Norway ...	...	...	...	...
Java ...	1,317	3,119	1,802	...
Philippine Islands ...	17,045	7,959	...	9,086
China ...	8	15	7	...
United States ...	153,563	155,872	2,309	...
Others ...	10,152	19,790	9,638	...
Total ...	1,131,891	1,534,398	402,507*	...
Grand Total ...	12,734,734	13,266,222	531,488*	...

* Net figures.

Trade with various countries at three periods.

45. The next table shows the value of the Victorian imports from and exports to different countries in 1890 and in the first year of each of the two previous quinquennia :—

IMPORTS AND EXPORTS TO DIFFERENT COUNTRIES, 1880, 1885, AND 1890.

Countries.	Imports therefrom.			Exports thereto.		
	1880.	1885.	1890.	1880.	1885.	1890.
BRITISH COUNTRIES.	£	£	£	£	£	£
The United Kingdom	5,892,834	8,946,816	9,607,193	9,249,873	8,159,135	6,850,014
Australasia—						
New South Wales ...	4,856,893	4,117,870	6,569,987	2,192,511	3,806,574	2,034,647
Queensland ...	32,731	254,636	258,224	22,091	20,964	327,141
South Australia ...	282,538	448,812	544,320	869,140	757,335	610,039
Western Australia ...	8,243	8,703	111,977	71,416	99,425	132,261
Tasmania ...	341,951	370,316	308,151	647,603	577,537	609,103
New Zealand ...	777,241	451,832	665,519	765,221	371,412	336,015
Fiji ...	16,817	27,379	67,581	26,159	22,262	14,870
Mauritius ...	491,756	435,203	423,694	15,200	41,559	39,550
Hong Kong ...	123,016	190,715	286,805	1,348	607	90,792
India ...	200,772	257,655	404,288	64,859	120,252	519,155
Ceylon ...	139,861	122,209	100,838	1,842,221	659,470	157,331
Straits Settlements ...	33,099	39,735	43,750	431	45	6,839
Canada ...	23,905	77,844	55,740	...	28	60
Other British possessions	13,665	1,677	5,804	14,953	1,887	4,007
Total ...	13,235,322	15,751,402	19,453,871	15,783,026	14,638,492	11,731,824
FOREIGN COUNTRIES.						
Belgium ...	...	93,241	121,060	...	124,807	654,748
France ...	62,816	187,532	174,547	224	528,633	452,807
Germany ...	27,434	204,465	682,166	...	30,219	240,088
Sweden and Norway	62,145	282,008	565,501	...	...	...
Java ...	271,222	101,151	401,969	10,775	2,100	3,119
Philippine Islands ...	29,311	10,153	435	65,730	58,556	7,959
China ...	463,325	602,259	399,556	...	...	15
United States ...	362,844	747,753	1,069,297	83,155	158,835	155,872
Others ...	42,475	64,640	85,613	11,649	10,116	19,790
Total ...	1,321,572	2,293,202	3,500,144	171,533	913,266	1,534,398
Grand Total ...	14,556,894	18,044,604	22,954,015	15,954,559	15,551,758	13,266,222

NOTE.—Border traffic is included in all the years.

Imports at three periods compared.

46. It will be observed that the imports from Tasmania, Mauritius, Ceylon, the Philippine Islands, and China, represented a higher value at both former periods than in the year under review, as also did those from New Zealand at the first period, and those from Canada and France at the second period. From all the other specified countries the value represented was larger at the latest than at either of the former periods, the increase in imports from British countries taken

as a whole being £6,200,000 as compared with the first, and over £3,700,000 as compared with the second period; and the increase in imports from Foreign countries taken as a whole being nearly £2,200,000 as compared with the first, and close on £1,200,000 as compared with the second period. The imports from the United Kingdom and New South Wales show the largest increase, whilst a considerable trade with India, Germany, Sweden and Norway, and the United States, appears to be springing up.

47. In regard to the exports it will be noticed that the largest and most marked decreases were in those to the United Kingdom, New South Wales, and Ceylon; thus, in 1890, the exports to the United Kingdom were barely two-thirds of those in 1880, and those to New South Wales little more than half those in 1885. The countries to which the exports were much greater at the last than at either former period were Queensland, Western Australia, Hong Kong, India, the Straits Settlements, Belgium, and Germany; whilst on the other hand the exports were much lower at the last period to New South Wales, South Australia, New Zealand, Fiji, Ceylon, and the Philippine Islands. The exports to British countries, taken as a whole, showed a falling-off of over £4,000,000 as compared with the first, and of £2,900,000 as compared with the second period; but those to Foreign countries, taken as a whole, showed an increase of about £620,000 as compared with the second period, and of £1,360,000 as compared with the first period. Of the export trade to Foreign countries, that to Belgium and Germany shows the largest growth since 1885; but the trade to France has fallen off considerably, as also has that to the United States slightly. The export trade to the latter bears but a small proportion to the rapidly increasing import trade from that country. The great falling-off in the exports to Ceylon (nearly £1,700,000 as compared with 1880) is partly explained by the fact that the mail steamers leaving Australia now go right through to England, instead of transshipping to other steamers at Ceylon; and therefore the gold shipped in these vessels, which was formerly entered for the latter although intended to be sent on to the former country, is now entered at the Customs as for England direct.

Exports at
three
periods
compared.

48. The value in 1890 of imports to Victoria from the neighbouring colonies was somewhat lower than in 1888 or 1889, but considerably higher than in any other of the previous ten years. The value of the exports from Victoria to the neighbouring colonies, which had been

Trade with
neighbour-
ing colo-
nies, 1880
to 1890.

steadily increasing up to 1884, has since shown a considerable falling-off, and in 1890 was about the same as in 1889, when it was lower than in any of the previous ten years, as will be seen by the following figures :—

TRADE BETWEEN VICTORIA AND THE OTHER AUSTRALASIAN COLONIES,* 1880 TO 1890.

Year.	Imports from the Neighbouring Colonies.	Exports to the Neighbouring Colonies.	Excess in favour of—	
			Imports.	Exports.
	£	£	£	£
1880 ...	6,299,597	4,567,982	1,731,615	...
1881 ...	5,949,730	4,736,442	1,213,288	...
1882 ...	5,914,327	5,225,839	688,488	...
1883 ...	5,658,854	5,744,780	...	85,926
1884 ...	6,475,915	5,826,826	649,089	...
1885 ...	5,652,169	5,633,247	18,922	...
1886 ...	6,254,393	4,108,757	2,145,636	...
1887 ...	7,327,467	4,496,504	2,830,963	...
1888 ...	8,484,559	4,307,017	4,177,542	...
1889 ...	8,539,854	4,022,054	4,517,800	...
1890 ...	8,458,178	4,049,206	4,408,972	...

Imports from other colonies in excess of exports thereto.

49. It will be observed that Victoria imported from the other colonies more than she exported thereto in all the years named except 1883, and that the excess of imports in the last two was very much larger than in any other years shown. The figures in the last two columns show the net excess in favour of imports during the eleven years to have amounted to £22,296,389, or an average of nearly £2,030,000 per annum.

Imports and exports at each port.

50. In 1890, 79 per cent. of the imports were landed, and 86 per cent. of the exports were shipped, at the port of Melbourne. Nearly a fifth of the imports entered the colony at the Murray ports, but only about an eleventh of the exports were sent away therefrom. The chief of these ports is Echuca, at which nearly 10 per cent. of the total imports were landed. The only important port of shipment in Victoria, except Melbourne, is Geelong, from which, in 1890, 3½ per cent. of the total exports were sent away. The following table gives the names of the various ports and the value and percentage of the goods imported and exported at each during the year :—

* Exclusive of Fiji.

IMPORTS AND EXPORTS AT EACH PORT, 1890.

Ports.	Imports.		Exports.	
	Value.	Percentage.	Value.	Percentage.
	£		£	
Melbourne	18,102,266	78·84	11,384,376	85·82
Geelong	211,278	·92	472,900	3·57
Portland	6,784	·03	139,219	1·05
Port Fairy	642	...	395	...
Warrnambool	21,918	·10	5,338	·04
Bairnsdale	640	...	300	...
Franklin River	650	...	...	...
Murray ports and places—				
Cobram ... ..	...	...	220	...
Echuca	2,256,435	9·85	164,675	1·24
Koondrook	38,594	·16	180	...
Mildura	38,979	·17	31,724	·24
Narung	7,577	·03	...	...
Swan Hill	91,386	·40	16,682	·12
Tocumwal	54,113	·24	9,194	·07
Wahgunyah	569,188	2·47	82,943	·62
Gooramadda	39,543	·18	15,967	·12
Yarrawonga	23,322	·11	14,079	·12
Wodonga	1,342,562	5·86	293,415	2·21
Tintaldra	30,663	·13	9,002	·07
Ports unspecified ... ..	...	...	*571,975	4·31
Stations, Border, etc.	117,475	·51	53,638	·40
Total	22,954,015	100·00	13,266,222	100·00

51. The values of sixty-six of the principal articles imported in 1890 and in the first year of each of the two previous quinquennia are placed side by side in the following table:—

Imports of principal articles at three periods.

IMPORTS OF PRINCIPAL ARTICLES, 1880, 1885, AND 1890.

(See Index following paragraph 6 ante.)

Order.	Articles.	Value of Imports.		
		1880.	1885.	1890.
		£	£	£
1	Books	164,386	242,517	268,879
	Stationery	53,623	96,343	94,989
2	Musical instruments	53,210	128,933	118,526
6	Watches, clocks, and watchmakers' materials	48,123	81,767	81,946
9	Cutlery	19,839	26,326	45,257
	Machinery	60,488	179,593	348,726
	Sewing machines	52,256	71,680	54,940
	Tools and utensils	33,073	38,261	82,625

* The goods represented by this value were entered in Melbourne for export overland across the Border, and were consequently not credited to the various Murray ports.

IMPORTS OF PRINCIPAL ARTICLES, 1880, 1885, AND 1890—
continued.(See Index following paragraph 6 *ante.*)

Order.	Articles.	Value of Imports.		
		1880.	1885.	1890.
		£	£	£
12	Building materials	34,133	125,361	250,283
13	Furniture and upholstery	30,616	91,417	73,336
14	Drugs and chemicals	47,785	118,542	96,567
	Matches and vestas	33,660	24,743	49,900
	Opium	94,962	39,581	35,736
	Paints and colours	54,375	82,486	80,417
15	Carpeting and druggeting	45,573	88,967	91,442
	Woollens and woollen piece goods	645,543	953,774	785,961
16	Silks	195,761	266,338	404,260
17	Cottons	673,678	1,019,410	958,266
	Linen piece goods & manufactures	33,253	38,583	41,116
18	Haberdashery	224,657	381,826	313,115
19	Apparel and slops	245,811	359,514	428,496
	Boots and shoes	100,941	109,998	127,286
	Gloves	60,558	108,436	126,183
	Hats, caps, and bonnets	95,295	108,909	114,852
	Hosiery	90,923	132,506	138,384
20	Bags and sacks (including wool-packs)	122,736	144,240	196,826
21	Butter and cheese	904	7,924	37,166
	Fish	84,655	136,389	194,150
	Meats—fresh, preserved and salted	10,453	15,534	46,051
22	Fruit(including currants and raisins)	146,853	208,862	347,443
	Flour and biscuit	8,539	11,963	11,638
	Grain—wheat	24,522	2,929	23,707
	„ oats	24,029	96,714	59,607
	„ other (including malt and rice)	247,240	123,222	91,892
	Sugar and molasses	1,039,065	1,204,021	1,208,797
23	Beer, cider, and perry	168,549	218,993	320,089
	Coffee	65,216	90,267	65,388
	Hops	37,855	18,667	19,125
	Spirits	335,687	370,292	487,941
	Tea	583,490	749,063	666,239
	Tobacco, cigars, and snuff	156,927	251,846	335,379
	Wine	97,582	112,959	143,345
24	Hides, skins and pelts	75,210	181,455	107,977
	Leather, leatherware, and leathern cloth	136,550	171,143	191,738
	Wool*	2,977,264	2,201,968	3,190,298
25	Paper (including paper bags)	149,605	255,137	298,980
	Timber	261,805	759,523	1,288,982
	Woodenware	29,183	50,741	48,355
26	Oil of all kinds	199,361	253,409	262,049
28	Coal	306,966	450,974	745,589
29	Earthenware, brownware, and chinaware	47,414	128,116	105,944
	Glass and glassware	56,973	155,650	153,291

* Including the value of wool imported into Victoria across the Murray.

IMPORTS OF PRINCIPAL ARTICLES, 1880, 1885, AND 1890—
continued.

(See Index following paragraph 6 ante.)

Order.	Articles.	Value of Imports.		
		1880.	1885.	1890.
		£	£	£
31	Gold (exclusive of specie) ...	878,820	355,643	563,721
	Specie—gold... ..	10,015	3,313	36,282
	„ other	127,301	46,422	66,452
	Jewellery	53,237	56,387	49,487
32	Iron and steel (exclusive of railway rails, telegraph wire, etc.)	465,826	756,801	1,034,112
	Lead—ore, pig, pipe, sheet ...	8,230	15,088	33,603
	Manufactures of metal ...	47,866	140,116	202,651
	Tin	40,192	42,887	52,065
	Nails and screws	34,827	57,510	24,371
	Plated ware	13,507	29,455	71,408
33	Live stock	880,330	882,143	1,997,051
35	Fancy goods	29,545	98,598	54,851
	Hardware and ironmongery ...	76,860	202,567	148,506
	Oilmen's stores	13,726	18,842	23,949
	Total	13,267,437	15,993,584	20,217,983
	All other articles	1,289,457	2,051,020	2,736,032
	Total Imports... ..	14,556,894	18,044,604	22,954,015

52. Of all the articles named in the table the most important, according to the values in 1890, are wool—including that brought overland from New South Wales—live stock, timber, sugar, iron and steel, cottons, woollens, coal, tea, gold, and spirits, in the order named, the values of which varied in 1890 from £3,200,000 for wool to £488,000 for spirits. The aggregate value of these eleven items amounted in 1890 to close on £12,965,000, or to more than half the total value of all the articles imported. It may be mentioned that the value in 1880 of these articles was £9,058,500, in 1885 £9,707,000, and in 1889 £12,554,000, so that the value in 1890 was considerably higher than in 1889, and very much higher than in the earlier years named.

Eleven chief articles of import, 1890.

53. The total imports show an increased value in 1890, as compared with 1885, of nearly five millions, and as compared with 1880, of nearly eight and a half millions; while the imports of the articles named in the table have increased by four and a quarter millions and nearly seven millions respectively. Nearly all the items show very considerable increase at the last period as compared with either of the former periods, and of these the more important are cutlery, machinery, tools and utensils, building materials and timber, iron and

Imports of three periods compared.

steel, silks, apparel and slops, gloves, bags and sacks, fish, meats, fruit, beer, spirits, tobacco, wine, wool, paper, coal, plated ware, metal manufactures, live stock, and oilmen's stores. The imports of wool show an increase as compared with 1885 of £990,000, timber of £529,000, coal of £295,000, iron of £277,000, machinery of £169,000, silks and fruit of £140,000 each, building materials of £125,000, spirits of £118,000, and beer of £101,000. The items of import which showed decrease at the last period as compared with either of the former ones were few in number, the chief being opium and grain other than wheat and oats. Imports of sugar increased by only £5,000 since 1885, which is partly due to a fall in the price of this commodity, but chiefly to the cessation of refining operations on a large scale in the colony, a considerable proportion of refined sugar having been formerly exported.

54. The exports of fifty of the principal articles are in like manner given for the same three years:—

EXPORTS OF PRINCIPAL ARTICLES, 1880, 1885, AND 1890.

(See Index following paragraph 6 ante.)

Order.	Articles.	Value of Exports.		
		1880.	1885.	1890.
		£	£	£
1	Books	64,007	78,468	61,891
	Stationery	40,040	43,839	36,203
9	Machinery	100,222	131,318	135,965
15	Woollens and woollen piece goods ...	91,332	127,443	65,620
16	Silks	14,878	31,360	40,710
17	Cottons	61,014	86,224	77,915
18	Haberdashery	46,025	90,678	39,019
19	Apparel and slops	246,566	318,760	167,682
	Boots and shoes	122,142	46,745	37,047
20	Bags and sacks	76,079	47,846	48,022
21	Butter and cheese	82,490	103,665	66,396
	Meats—fresh and preserved... ..	144,470	100,614	24,744
	„ salted (including hams and bacon)	27,111	30,747	9,055
22	Fruits (including currants and raisins)	35,252	55,895	51,693
22	Flour and biscuit	283,822	363,895	393,125
	Grain—wheat	603,158	408,537	114,357
	„ oats	11,091	10,240	4,745
	„ other (including malt and rice)	95,437	44,153	32,170
	Onions	11,238	31,868	27,960
	Potatoes	58,307	103,644	24,787
	Sugar and molasses	254,219	173,774	131,988
23	Coffee	24,666	19,283	7,265
	Spirits	131,899	103,594	89,516
	Tea	258,079	370,812	367,865
	Tobacco, cigars and snuff	156,977	135,634	107,928
	Wine	42,528	47,924	63,385

Exports of
principal
articles at
three
periods.

EXPORTS OF PRINCIPAL ARTICLES, 1880, 1885, AND 1890—
continued.

(See Index following paragraph 6 *ante.*)

Order.	Articles.	Value of Exports.		
		1880.	1885.	1890.
		£	£	£
24	Bones and bone dust	17,168	15,669	7,114
	Candles	19,540	21,906	5,179
	Horns and hoofs	3,314	678	4,144
	Hides	9,953	10,284	13,717
	Skins and pelts	88,139	92,149	159,164
	Leather, leatherware and leathern cloth	321,565	372,916	212,910
	Soap	12,172	18,834	23,684
	Tallow	192,394	155,918	156,851
	Wool*	6,417,466	5,028,011	5,933,699
25	Bark	31,148	21,563	60,411
	Hay, straw and chaff	52,900	84,825	83,558
	Timber	48,605	27,271	35,700
26	Oil of all kinds	72,537	43,339	32,188
31	Gold (exclusive of specie)	967,924	353,362	516,438
	Specie—gold	2,919,610	3,956,173	2,223,065
	„ silver	50,000	3,121	13,100
32	Antimony ore, regulus, etc.	14,295	492	601
	Copper ore, regulus, etc.	18,725	1,299	2,060
	Iron, etc.	148,190	62,183	56,747
	Manufactures of metals	32,198	34,266	33,869
	Tin, tin ore, black sand	2,796	6,912	1,737
33	Live stock	340,426	900,801	476,717
35	Hardware and ironmongery	67,688	38,323	36,497
	Travellers' samples	52,110	103,450	73,367
	Total	14,983,912	14,460,705	12,389,570
	All other articles	970,647	1,091,053	876,652
	Total Exports	15,954,559	15,551,758	13,266,222

55. It appears from this table that the chief articles of Victorian export are wool—of which the value in 1890 was £5,934,000, and gold (inclusive of specie) valued at £2,739,500—which two articles alone contributed 65 per cent. to the total value of exports of all articles; next in order in 1890 were breadstuffs, £507,000; and live stock, £477,000; then tea, leather, apparel and slops, hides and skins, tallow, machinery, and sugar, in the order named—the values of which varied in 1890 between £368,000 and £132,000. It will be noticed, however, that, of these, sugar (excepting so far as the process of refining is concerned) and tea are not produced in Victoria, but are merely re-exports. The value of the eleven articles just named amounted in 1890 to £11,003,543, which leaves the balance of £2,262,679 distributed over all the other heads.

Eleven chief articles of export, 1890.

* Including wool from across the Murray, which is also included in the returns of imports *ante.*

Exports of
three
periods
compared.

56. The value of the total exports in 1890 shows a very large falling-off as compared with either of the two previous periods, it being over $2\frac{2}{3}$ millions lower than the value in 1880, and over $2\frac{1}{4}$ millions lower than the value in 1885. As against the two former periods, the articles showing decrease are numerous, the most important being gold, grain of all kinds (especially wheat), potatoes, sugar, spirits, tobacco, butter and cheese, meats, candles, leather, woollens, apparel and slops, boots and shoes, and antimony ore. The falling-off under several of these articles, however, such as sugar, spirits, and tobacco, is indicative of a decline in the re-export trade. On the other hand there was more or less increase, as compared with both the previous periods, in the exports of silks, flour, wine, hides, skins and pelts, horns, and bark. The exports of gold fell off by nearly £1,150,000 as compared with 1880, and by £1,570,000 as compared with 1885; and those of breadstuffs (notwithstanding the increase in flour exported) by £380,000 and £265,000 respectively; whilst those of wool, although higher by about £900,000 than in 1885, were, owing to its depreciated value, lower by £480,000 than in 1880. The value of apparel and slops, and of live stock, exported was only half as large in 1890 as in 1885.

Falling-off
in exports
of sugar
and wool.

57. With reference to the falling-off in the declared values of sugar and wool exported, it should be pointed out that this has partially arisen from the reduced value of those articles, and not altogether from a diminution of the quantities. This is made plain by the following figures:—

QUANTITY AND VALUE OF EXPORTS OF SUGAR AND WOOL,
1880-1890.

Year.	Refined Sugar and Molasses.			Wool.		
	Quantity.	Declared Value.		Quantity.	Declared Value.	
		Total.	Per cwt.		Total.	Per lb.
	cwt.	£	£	lbs.	£	d.
1880	155,469	254,219	1·63	112,486,206	6,417,466	13·7
1885	154,443	172,062	1·11	106,278,038	5,028,011	11·4
1886	139,364	143,618	1·03	107,984,839	4,999,662	11·1
1887	140,282	140,163	1·00	115,461,606	5,073,491	10·5
1888	140,785	141,444	1·00	118,453,968	5,170,930	10·5
1889	116,030	127,257	1·10	135,607,370	5,928,932	10·5
1890	130,154	131,524	1·01	132,149,027	5,933,699	10·8

58. It will be noticed that whilst the declared value of sugar exported was greater in 1880 than in 1890 by about £122,700, or by 49 per cent., the quantity exported was less by only 25,315 cwt., or 16 per cent.; also, that although the declared value of wool exported in 1880 exceeded that in 1890 by about £484,000, the quantity of such wool in the latter exceeded that in the former year by nearly 20 million pounds weight. The figures show that—supposing the qualities to be the same, which may not be the case—the average price of sugar has fallen off 38 per cent., and that of wool by 21 per cent., since 1880.

Falling-off more in value than quantity.

59. With reference to the wool, however, it should be pointed out that latterly a much larger proportion of greasy wool has been exported than formerly,* showing a reduced value, it is true, but one of much less extent than when the wool is considered as a whole, without reference to its condition when exported. The following table shows the quantity and declared value of greasy wool exported in the same seven years†:—

Exports of greasy wool.

QUANTITY AND VALUE OF EXPORTS OF GREASY WOOL, 1880-1890.

Year.	Quantity.	Declared Value.	
		Total.	Per lb.
	lbs.	£	d.
1880 ...	76,808,471	3,616,981	11·3
1885 ...	83,927,788	3,478,404	9·9
1886 ...	82,473,370	3,324,839	9·7
1887 ...	91,635,136	3,538,195	9·3
1888 ...	99,685,415	4,022,032	9·7
1889 ...	113,699,150	4,560,861	9·6
1890 ...	113,157,230	4,742,739	10·1

60. The quantity of greasy wool, it will be observed, exported in 1890 was much higher than in any previous year shown except 1889, and the total value of such wool was higher than in any of those years. The average price of greasy wool in 1890, although higher than in the previous five years, shows a decline, as compared with 1880, of 1¼d. per pound, or of about 11 per cent. Had greasy wool continued to fetch the price at which it was quoted in 1880, the value in 1890 would have amounted to over £560,000 more than that set down in the table.

Falling-off in value of greasy wool.

61. In thirty-five out of the fifty-four years ended with 1890, the value of imports to Victoria exceeded that of exports therefrom, but

Excess of imports over exports, etc., 1837 to 1890.

* The proportion of greasy to all kinds of wool exported was 68 per cent. in 1880, 79 per cent. in 1885, 76 per cent. in 1886, 80 per cent. in 1887, 84 per cent. in 1888 and 1889, and 85½ per cent. in 1890.

† For average prices of different classes of wool in Melbourne and London, see Part "Production" post.

in the other nineteen years the value of exports was the greater. The following is a statement of the amounts by which the imports exceeded the exports in those years in which the excess was in favour of the former, and the amounts by which the exports exceeded the imports in those years in which the excess was in the opposite direction; also the net excess of imports during the whole period:—

IMPORTS IN EXCESS OF EXPORTS, AND THE CONTRARY, 1837 TO 1890.

Year.	Imports in Excess of Exports.	Exports in Excess of Imports.	Year.	Imports in Excess of Exports.	Exports in Excess of Imports.
	£	£		£	£
1837	103,201	...	1867 ... ..	...	1,050,347
1838	45,232	...	1868 ... ..	...	2,273,328
1839	127,038	...	1869	444,636	...
1840	306,507	...	1870 ... ..	...	14,256
1841	164,094	...	1871 ... ..	...	2,215,825
1842	78,644	...	1872 ... ..	...	179,873
1843 ... ..	...	66,446	1873	1,231,402	...
1844 ... ..	...	105,785	1874	1,512,876	...
1845 ... ..	...	215,304	1875	1,918,900	...
1846 ... ..	...	109,640	1876	1,508,867	...
1847 ... ..	...	230,815	1877	1,204,617	...
1848 ... ..	...	301,683	1878	1,236,173	...
1849 ... ..	...	275,495	1879	2,581,368	...
1850 ... ..	...	296,871	1880 ... ..	...	1,397,665
1851 ... ..	...	366,472	1881	466,418	...
1852 ... ..	...	3,381,807	1882	2,554,502	...
1853	4,781,093	...	1883	1,344,983	...
1854	5,883,847	...	1884	3,151,168	...
1855 ... ..	...	1,485,399	1885	2,492,846	...
1856 ... ..	...	527,491	1886	6,735,254	...
1857	2,176,697	...	1887	7,671,006	...
1858	1,119,040	...	1888	10,118,371	...
1859	1,755,032	...	1889	11,668,026	...
1860	2,131,026	...	1890	9,677,783	...
1861 ... ..	...	296,154			
1862	448,365	...	Total	90,257,828	14,790,656
1863	552,431	...			
1864	1,076,431	...	Deduct excess of exports	14,790,656	...
1865	106,789	...			
1866	1,882,165	...	Net excess of imports	75,467,172	...

Balance of
trade in
fifty-four
years.

62. It will be observed that in the fifty-four years of which mention is made in the table the imports exceeded the exports by £75,500,000, or an average of about £1,400,000 per annum, which excess, it should be mentioned, would be added to if the value of the British and Foreign built ships placed on the register of Victoria were included with the imports, but diminished if freight, which is included in the value of imports, were also added to the exports. Moreover, profits

received on investments in the neighbouring colonies should not be overlooked.

63. In 1890 the excess of imports over exports was about £2,000,000 lower than in 1889, and about £440,000 lower than in 1888, but, with these exceptions, the imports in the last year exceeded the exports by a much larger amount than in any previous year. The excess of exports over imports was greatest in 1852, next in 1868, next in 1871, next in 1855, next in 1880; the last mentioned year being the only one during the last 18 years in which the exports were in excess of the imports. In connexion with the large excess of imports in the last seven, and especially in the last five years, it will be remembered that a new loan of nearly £1,400,000 was raised in London in 1884,* £819,000 in 1885,† £1,500,000 in 1886, £3,000,000 in 1887, £1,500,000 in 1888, £3,000,000 in 1889, and £4,000,000 in 1890; and, besides, that numerous municipal and private loans, and very large amounts of other capital, have been remitted for investment in Victoria as well as in the neighbouring colonies. These sums must either gradually find their way into the imports, or act as a temporary check on the exports by restricting the export of gold, etc., which would otherwise naturally leave our shores; in like manner the annual interest payable on these sums must find its way into the exports. Then, again, it has not been possible to ascertain for earlier years the profits derived by Victoria from its investments in the neighbouring colonies; but it has been ascertained that in 1890 nearly half a million (£453,250) was received by the colony in the shape of dividends from the Broken Hill silver mines (in New South Wales) alone, which amount, being clear profit, has not of course to be counterbalanced, as is usually the case, by a corresponding export. The Melbourne Exhibition, moreover, must, to a certain extent, have stimulated the imports in 1888.

Years in which excess of imports or exports was highest.

64. In 1889 the imports exceeded the exports in Victoria (largely), Western Australia, and Tasmania, but the reverse was the case in all the other colonies. The imports were in excess of the exports in Victoria in each of the last eleven years, with one exception; in New South Wales, with two exceptions; in Tasmania, with three exceptions; also in Queensland, Western Australia, and New Zealand, with four exceptions; and in South Australia, with five exceptions. The following table shows the amounts by which the imports exceeded the exports, or the contrary, in the different colonies during the eleven years ended with 1889, and the net result for each colony over the whole period:—

Excess of imports, etc., in Australasian colonies.

* Not including a redemption loan of £2,636,600. † Not including a redemption loan of £3,180,620.

IMPORTS IN EXCESS OF EXPORTS, AND THE CONTRARY, IN
AUSTRALASIAN COLONIES, 1879 TO 1889.

Colony.	Year.	Imports in Excess of Exports.	Exports in Excess of Imports.	Net Excess in 11 Years of Imports over Exports.
		£	£	£
Victoria	1879	2,581,368	...	} 47,386,277
	1880	...	1,397,665	
	1881	466,418	...	
	1882	2,554,502	...	
	1883	1,344,983	...	
	1884	3,151,168	...	
	1885	2,492,846	...	
	1886	6,735,254	...	
	1887	7,671,006	...	
	1888	10,118,371	...	
	1889	11,668,026	...	
New South Wales	1879	1,112,028	...	} 23,254,645
	1880	...	1,575,063	
	1881	1,359,823	...	
	1882	4,564,169	...	
	1883	1,074,139	...	
	1884	4,575,479	...	
	1885	6,823,451	...	
	1886	5,417,335	...	
	1887	309,319	...	
	1888	25,842	...	
	1889	...	431,877	
Queensland	1879	...	353,145	} 5,810,754
	1880	...	360,864	
	1881	523,259	...	
	1882	2,784,011	...	
	1883	956,743	...	
	1884	1,708,112	...	
	1885	1,179,086	...	
	1886	1,169,257	...	
	1887	...	632,334	
	1888	520,376	...	
	1889	...	1,683,747	
South Australia	1879	251,423	...	} 1,010,892
	1880	6,992	...	
	1881	836,307	...	
	1882	1,347,898	...	
	1883	1,426,594	...	
	1884	...	874,351	
	1885	...	87,852	
	1886	363,742	...	
	1887	...	234,487	
	1888	...	1,570,460	
1889	...	454,914		

IMPORTS IN EXCESS OF EXPORTS, AND THE CONTRARY, IN
AUSTRALASIAN COLONIES, 1879 TO 1889—*continued.*

Colony.	Year.	Imports in Excess of Exports.	Exports in Excess of Imports.	Net Excess in 11 Years of Imports over Exports.
		£	£	£
Western Australia	1879	...	87,585	335,621
	1880	...	145,514	
	1881	...	97,939	
	1882	...	74,301	
	1883	69,837	...	
	1884	115,474	...	
	1885	203,699	...	
	1886	127,620	...	
	1887	61,689	...	
	1888	105,906	...	
	1889	56,735	...	
Tasmania	1879	...	33,622	1,508,263
	1880	...	142,708	
	1881	...	124,432	
	1882	83,483	...	
	1883	101,038	...	
	1884	180,261	...	
	1885	443,793	...	
	1886	425,027	...	
	1887	147,446	...	
	1888	276,799	...	
	1889	151,178	...	
New Zealand	1879	2,631,459	...	2,496,436
	1880	...	190,681	
	1881	1,396,179	...	
	1882	1,951,262	...	
	1883	878,039	...	
	1884	572,221	...	
	1885	659,982	...	
	1886	86,222	...	
	1887	...	620,654	
	1888	...	1,825,425	
	1889	...	3,042,168	
Total	97,844,676	16,041,788	81,802,888
Deduct excess of exports	16,041,788
Net excess of imports	81,802,888	...	81,802,888

65. It will be observed that during the eleven years to which the table relates goods to the value of $47\frac{1}{3}$ millions sterling were received by Victoria, $23\frac{1}{4}$ millions by New South Wales, nearly 6 millions by Queensland, 1 million by South Australia, £336,000 by Western Australia, $1\frac{1}{2}$ million by Tasmania, and $2\frac{1}{2}$ millions by New Zealand, in excess of the values of the goods sent away.

Colonies in which imports exceed exports, and contrary.

Imports in excess of exports, etc., in Australia and Australasia.

66. During the period alluded to it will be found that the Australian continent, taken as a whole, received goods to the value of nearly 78 millions more than it exported, whereas the surplus received by the continent, with the addition of Tasmania and New Zealand, amounted to nearly 82 millions.

Effects of borrowings on imports and exports.

67. In regard to this large balance of imports, it will be borne in mind that the colonies borrow largely from London; thus, the Government debt of Australasia at the end of 1889, amounting to over 175* millions sterling, nearly all represents English capital. As a set-off against this, however, an annual return has to be made, as interest, which averages about 4 per cent. This item alone would be represented in the annual exports at the present time by a value amounting to about £7,000,000 annually. No information is available respecting the amount of private borrowings, but it is known they are extensive.

Excess of imports in United Kingdom.

68. The imports of the United Kingdom have always largely exceeded the exports, and, in the twenty years ended with 1875, this excess is calculated to have amounted in the aggregate to no less than 1,200 millions sterling.† In the five years ended with 1880, the total excess of imports over exports was 626 millions; in the five years ended with 1885 it was 518 millions; and in the year 1886 it was 95 millions; in the year 1887 it was 90 millions; in 1888, 89 millions; and in 1890, 115 millions. In all these cases bullion and specie are included.‡

British possessions in which imports exceed exports, etc., 1889.

69. The following are the British possessions in which in 1889 the imports exceeded the exports, and the contrary:—

BRITISH POSSESSIONS IN WHICH IMPORTS, 1889, EXCEEDED EXPORTS, AND THE CONTRARY.

Imports exceeded Exports in—		Exports exceeded Imports in—	
United Kingdom,	Lagos,	India,	St. Vincent,
Gibraltar,	Gold Coast,	Malay States,	Grenada,
Malta,	Canada,	Labuan,	Virgin Islands,
Ceylon,	Newfoundland,	Sarawak,	Tobago,
Straits Settlements,	Bermuda,	Cyprus,	St. Christopher,
North Borneo,	Bahamas,	Mauritius,	Nevis,
Hong Kong,	St. Lucia,	Sierra Leone,	Antigua,
Natal,	Barbados,	Gambia,	Montserrat,
Cape of Good Hope,	Dominica,	Honduras,	Trinidad,
St. Helena,	Australasia.	British Guiana,	Fiji,
		Turk's Island,	Falkland Islands.
		Jamaica,	

* This shows an increase, as compared with 1884, of 27 millions. By the end of 1890, the debt had increased to nearly 186 millions.

† See the paper of Mr. Stephen Bourne, F.S.S.; Journal of the Statistical Society, vol. xl., part i., p. 28. London: Stanford, 55 Charing Cross, S.W. 1877.

‡ For this reason the excess of imports over exports, as here shown, differs from figures derived from subtracting the one from the other as given in table following paragraph 24 *ante*. See first footnote to that table

70. Taking the British dominions as a whole, the imports in 1889 exceeded the exports in the same year by about 117 millions sterling; if, however, the United Kingdom be omitted, the excess will be found to have been less than 4 millions sterling. It should be mentioned that, in making up these figures, bullion and specie are included in nearly all cases.

Excess of imports over exports in British dominions.

71. During 1889, the imports of all the European countries respecting which particulars are given in a previous table,* with the exceptions of Austro-Hungary, Russia, and Spain, exceeded the exports; but in Japan, Egypt, Mexico, and the United States, the exports preponderated. The aggregate imports of Foreign countries exceeded the exports by nearly 83 millions sterling, or by 6½ per cent.

Excess of imports over exports in Foreign countries.

72. The following table shows the value of goods transhipped in Victorian ports without being landed during the twenty-one years ended with 1890. These goods are not included in the lists of imports and exports:—

Transshipments, 1870 to 1890.

TRANSHIPMENTS IN VICTORIAN PORTS, 1870 TO 1890.†

Value of Transshipments.			Value of Transshipments.		
1870	...	£1,145,882	1881	...	£1,946,804
1871	...	1,191,169	1882	...	1,334,137
1872	...	1,292,656	1883	...	1,059,427
1873	...	1,827,842	1884	...	876,527
1874	...	3,527,461	1885	...	861,427
1875	...	4,280,798	1886	...	724,792
1876	...	3,193,644	1887	...	1,159,080
1877	...	3,398,207	1888	...	1,346,568
1878	...	3,318,219	1889	...	1,874,338
1879	...	1,914,884	1890	...	1,542,134
1880	...	1,432,327			

73. It will be observed that the transshipments fell off considerably in the three years ended with 1886. This is attributed to the reduced quantities of gold coin and bullion received from New South Wales for transshipment, consequent upon the mail steamers on the Suez route, the terminus of which had previously been Melbourne, going on to Sydney. Since 1886, however, there has been a recovery, and although the value of transshipments in 1890 was not so high as in 1889, it was much larger than in any other previous year since 1879, except 1881.

Falling-off of transshipments.

* See table following paragraph 28 *ante*.

† In 1887 and previous years the full values of the transshipments are not represented by the figures given, in consequence of a number of packages not having any values assigned to them. It is understood that since then values have been assigned to all the packages.

Tranship-
ment to
various
countries.

74. The countries from which goods were received for transhipment, and to which they were transhipped, in 1890, also the value of the goods received from and transhipped to each country in the same year, are given in the following table :—

TRANSHIPMENTS FROM AND TO DIFFERENT COUNTRIES, 1890.

Countries or Settlements.	Value of Goods.	
	Received therefrom for Transhipment.	Transhipped thereto.
	£	£
United Kingdom	314,128	551,995
Australasia—		
New South Wales	231,030	248,210
New Zealand	72,971	188,176
Queensland	25,727	24,992
South Australia	259,265	247,706
Tasmania	331,227	217,267
Western Australia	1,810	25,118
Other British Possessions—		
Fiji	12,346	369
Mauritius	33,471	574
Aden	64	54
Hong Kong	52,404	713
India	66,608	4,583
Ceylon	2,708	366
Straits Settlements—Singapore	2,392	125
Natal ... ..	...	250
Cape Town ... ..	...	40
Seychelles ... ..	...	5
Foreign States—		
Europe—		
Belgium	2,390	3,209
France	4,590	1,560
Germany	58,754	2,886
Greece	1,217	...
Holland	551	...
Italy	52	237
„ Sicily	1,260	...
Norway	332	...
Sweden	658	...
Asia—		
China	11,357	3
Japan	2,895	60
Java	4,214	2
Siam ... ..	...	1,185
South America—Peru ... ..	...	15
Chile ... ..	...	7
United States	47,260	12,248

TRANSHIPMENTS FROM AND TO DIFFERENT COUNTRIES, 1890—
continued.

Countries or Settlements.	Value of Goods.	
	Received therefrom for Transhipment.	Transhipped thereto.
	£	£
Africa—Port Said	453	9
Madagascar ... ..	...	160
South Seas—		
New Britain ... ..	...	461
Tonga ... ..	...	1,820
Guam ... ..	...	7,729
Total	1,542,134	1,542,134

75. The following table is interesting, as showing the total value of goods entered and cleared at ports in Victoria from and to the United Kingdom and each foreign country, *viâ* the Suez Canal, in each of the years 1888, 1889, and 1890:—

VICTORIAN GOODS PASSING THROUGH THE SUEZ CANAL,
1888 TO 1890.

Countries.	Entered as from Victoria.			Cleared for Victoria.		
	1888.	1889.	1890.	1888.	1889.	1890.
	£	£	£	£	£	£
United Kingdom	4,054,395	3,223,736	2,873,557	5,583,935	4,528,272	4,121,482
Belgium ... ..	...	12,985	...	217,645	229,546	301,202
France	273,720	179,174	191,920	165,488	192,924	357,785
Germany... ..	261,908	331,974	556,208	128,082	220,670	382,009
Sweden ... ..	...	...	11,648	...	...	...
Total	4,590,023	3,747,869	3,633,333	6,095,150	5,171,412	5,162,478

76. The Customs revenue was smaller in 1890 than in 1889 by nearly £230,000. The receipts from import duties alone fell off by £186,000, in addition to which there was a decrease of £20,000 in those from excise duty on tobacco, of £22,500 in the tonnage received, owing to the reduction of the rate from 1s. in 1889, to 6d. in 1890, as well as smaller increases under the head of wharfage and harbour rates, licences, and fines and forfeitures. On the other hand there was an increase of £6,600 under the head of excise duties on spirits,

of about £450 from fees, and of about £700 in miscellaneous receipts. It should be stated that a revised tariff came into force on the 31st July, 1889, but the alterations in the rates of duty on several articles did not take effect until the latter part of the year.* The following are the amounts received under the different heads in the last two years:—

GROSS CUSTOMS REVENUE, 1889 AND 1890.

Heads of Revenue.	Year ended 31st December.	
	1889.	1890.
	£	£
Import duties	2,890,719	2,704,380
Wharfage and harbour rates†	52,897	45,635
Excise duties on—		
Spirits	95,825	102,466
Tobacco, cigars, and snuff ‡	50,937	30,890
Licences, other than tobacco licences	968	957
Tonnage §	42,449	19,969
Fees	7,095	7,546
Fines and forfeitures	1,005	599
Miscellaneous	12,023	12,739
Total	3,153,918	2,925,181

NOTE.—Drawbacks and repayments have not been deducted from the above figures; they amounted to £148,752 in 1889, and £126,353 in 1890.

Taxation on imports.

77. The import duties received in both 1889 and in 1890 amounted to 11·8 per cent. of the total value of imports. ||

Pilotage rates.

78. The pilotage rates, formerly payable over to the Pilot Board, but latterly to the newly constituted Marine Board, amounted in 1889 to £38,752, and in 1890 to £34,790. These rates, although collected by the Customs, are not included in the Customs revenue.

Revenue from spirits, wine and beer.

79. The following is a statement of the total revenue and revenue per head received from the import and excise duty on spirits, wine, and beer, during the last 25½ years:—

* For full particulars see table following paragraph 6 *ante*; also Appendix C. to Vol. II. of the *Victorian Year-Book*, 1888-9; also Appendix B. to Vol. II. of the edition for 1889-90.

† Including the proportion of wharfage rates received from the Melbourne Harbour Trust, amounting to £46,223 in 1889, and £41,407 in 1890.

‡ Including licences to sell and manufacture tobacco, returning £1,200 in 1889, and £1,300 in 1890.

§ The tonnage rate was 1s. per ton. It has, however, been reduced to 6d. since 1st January, 1890.

|| See also paragraph 207, Vol. I.

REVENUE FROM SPIRITS, WINE, AND BEER,* 1865 TO 1890.

Year.	Revenue received from—					Total Amount.	Amount per Head.
	Import duties on—			Spirits distilled in Victoria.	Beer made in Victoria.		
	Spirits.	Wine.	Beer.				
£	£	£	£	£	£	£ s. d.	
1865	503,346	46,509	34,847	16,821	...	601,523	0 19 8
1866	452,439	40,493	30,621	29,147	...	552,700	0 17 7
1867	596,294	40,886	31,474	28,603	...	697,257	1 1 8
1868	353,899	40,355	28,429	48,180	...	470,863	0 14 2
1869	445,220	38,250	28,170	43,176	...	554,816	0 16 2
1870	455,925	28,107	23,209	34,877	...	542,118	0 15 2
1871 (six months)	224,700	17,574	12,283	14,445	...	269,002	0 7 4
1871-2	476,408	34,890	26,723	32,479	...	570,500	0 15 3
1872-3	476,859	26,048	28,954	31,036	...	562,897	0 14 10
1873-4	501,044	32,235	32,729	32,869	...	598,877	0 15 6
1874-5	507,631	36,012	32,100	32,475	...	608,218	0 15 6
1875-6	520,557	37,716	27,096	33,437	...	618,806	0 15 8
1876-7	499,568	39,139	30,352	34,768	...	603,827	0 15 1
1877-8	489,236	37,893	29,346	36,309	...	592,784	0 14 6
1878-9	455,157	31,462	27,143	36,088	...	549,850	0 13 3
1879-80	420,872	34,095	27,372	41,230	...	523,569	0 12 5
1880-81	430,909	43,171	29,721	52,232	62,557	618,590	0 14 5
1881-2	443,431	45,112	29,770	52,620	98,955	669,888	0 15 3
1882-3	468,746	44,100	32,372	52,522	11,256	608,996	0 13 6
1883-4	472,259	39,096	33,845	53,638	...	598,838	0 13 0
1884-5	518,370	42,101	35,210	68,930	...	664,611	0 14 1
1885-6	545,170	41,086	37,904	67,250	...	691,410	0 14 3
1886-7	566,134	41,335	41,126	56,557	...	705,152	0 14 1
1887-8	611,256	44,688	46,047	65,603	...	767,594	0 14 10
1888-9	664,438	53,147	55,580	88,867	...	862,032	0 16 0
1889-90	661,129	51,409	56,830	98,712	...	868,080	0 15 9

NOTE.—The duty on imported spirits is 12s. per gallon; on wine, 8s. for sparkling, and 6s. for other kinds; on beer, 9d. per gallon; and on spirits distilled in Victoria, from 8s. to 10s. per gallon, according to the material from which made.

80. The total amount received during the 25½ years was £15,972,798, or an annual average of 15s. 3d. per head of the population. It will be noticed that the amounts per head vary from £1 1s. 8d. in 1867 to 12s. 5d. in 1879-80; also that the amount per head received in 1889-90 was 3d. less than in the preceding year, but more than in any other previous year since 1869.

Total and average receipts from spirits, wine and beer.

81. The system of allowing drawbacks on the re-export of imported goods on which duty has been paid was first introduced in 1872. Such re-exports are included in the returns of general exports.

Drawbacks.

* Exclusive of receipts for publicans' and other licences for the sale of fermented or spirituous liquors. These amount to about £110,000 per annum, nearly three-fourths of which is paid over to the municipalities. The approximate revenue from spirits, wine, and beer, in 1890-91 was £854,108.

In 1890 the value of the goods was £170,000 less than in 1889, and was also exceeded in every previous year since 1880; but the amount paid as drawback, although smaller by £3,400 than in 1889, was larger than in any other previous years except 1885 and 1888. This will be seen by the following figures:—

EXPORTS FOR DRAWBACK, 1872 TO 1890.

Year.	Value of Goods Exported for Drawback.	Amount Paid as Drawback.	Year.	Value of Goods Exported for Drawback.	Amount Paid as Drawback.
	£	£		£	£
1872 ...	461,559	29,083	1882 ...	784,806	93,414
1873 ...	522,752	43,685	1883 ...	765,342	95,241
1874 ...	753,033	62,895	1884 ...	863,163	113,087
1875 ...	831,799	79,055	1885 ...	934,620	122,342
1876 ...	832,292	81,915	1886 ...	748,135	114,646
1877 ...	854,509	87,021	1887 ...	791,871	115,938
1878 ...	573,454	69,168	1888 ...	743,394	116,479
1879 ...	493,816	59,933	1889 ...	845,065	119,404
1880 ...	606,055	68,018	1890 ...	672,124	116,013
1881 ...	725,957	92,412			

Drawbacks on Victorian manufactured goods.

82. Drawbacks are paid not only on goods exported in the same condition as when imported, but upon imported goods which have been subjected to some process of manufacture in Victoria. In 1890, goods to the value of £35,944, or 5 per cent. of the exports for drawback, had undergone some such process. The amount paid as drawback on such goods was £3,634, or 3 per cent. of the whole. The following are the goods referred to, also the values and amounts paid:—

DRAWBACKS ON EXPORT OF GOODS MANUFACTURED IN VICTORIA FROM IMPORTED MATERIALS, 1890.

Articles.	Value.	Amount paid as Drawback.*
	£	£
Apparel and slops ...	28,885	2,674
Boots and shoes ...	...	5
Fruits (canned) ...	1,558	653†
Jams and preserves ...	3,144	98
Paints ...	232	9
Paper bags ..	614	58
Rice (Victorian dressed) ...	427	75
Saddles and harness ...	948	43
Sugar (Victorian refined) ...	133	19†
Varnish ...	3	...
Total ...	35,944	3,634

* Includes amounts paid on account of 1889.

† Approximate.

83. The following is a statement of the goods in the various bonded warehouses of the colony at the end of 1890. It is to be regretted that in so many instances the weight or quantity of the articles is not given, but merely the number of cases, bales, packages, etc., also that the values are not given:—

Stocks in bond.

STOCKS IN BOND.

Article.	Quantity.
Brandy	4027 hhds., 24,570 casks.
Rum	842½ hhds., 892 cases.
Geneva	9¼ hhds., 9,945 cases (4-gal.), 899 cases (2-gal.)
Gin, sweetened	53 hhds., 4,428 cases.
Whisky	3,738¼ hhds., 57,934 cases.
Cordials	2,007 cases.
Spirits of wine	54½ casks.
Other spirits	1½ hhds., 12,627 cases.
Wine	2,413¼ hhds., 23,416 casks.
Beer	765 hhds., 48,048 cases and casks.
Tobacco, manufactured	20 half-tierces, 7 qr.-tierces, 674 ¾-boxes and boxes, 4,195 cases.
„ unmanufactured	578 tierces, hhds., and casks, 1,043 cases, 632 bales, 612 boxes.
Cigars	1,183½ cases.
Candles	202 chests and cases, 20 tanks, 3,878 boxes.
Cocoa and chocolate	286 packages.
Coffee	188 bags, 8 casks, 709 cases, 19 barrels.
Chicory	612 packages.
Opium	81 packages.
Oats	3,062 bags.
Hops	375 packages.
Rice	7,922 bags.
Salt	51,593 bags.
Vinegar	1,714 casks, 3,020 cases.
Tea	7,481 chests, 101,703 half-chests, 27,377 boxes.
Sugar, Mauritius	11,225 bags, 42,555 pockets.
„ other	22,650 bags, 12,319 mats.
„ refinery	622 tons.
„ Java	4,672 bags, 11 mats, 23,517 baskets.
„ cases and casks	5,154 No.
Milk Preserved	2,986 cases.
Woolpacks	3,475 bales.

84. The number of vessels entering and leaving Victorian ports in 1890 was smaller by 808 than in 1889, and by 421 than in 1888, but larger than in any other former years; the tonnage in 1890 was less by 235,837 than in 1889, but slightly more than in 1888 and considerably larger than in any other year. The following table contains a statement of the number, tonnage, and crews of vessels inwards and outwards during the twenty-three years ended with 1890:—

Vessels inwards and outwards.

VESSELS ENTERED AND CLEARED, 1868 TO 1890.

Year.	Vessels Entered.			Vessels Cleared.			Total Entered and Cleared.	
	Number.	Tons.	Men.	Number.	Tons.	Men.	Number.	Tons.
1868 ...	2,067	653,362	33,613	2,172	685,207	35,332	4,239	1,338,569
1869 ...	2,320	721,274	35,628	2,334	730,961	35,696	4,654	1,452,235
1870 ...	2,093	663,764	32,838	2,187	681,098	33,836	4,280	1,344,862
1871 ...	2,137	663,002	33,789	2,257	692,023	35,050	4,394	1,355,025
1872 ...	2,104	666,336	33,551	2,234	694,426	35,353	4,338	1,360,762
1873 ...	2,187	756,103	36,307	2,226	762,912	36,216	4,413	1,519,015
1874 ...	2,100	777,110	36,834	2,122	792,509	36,472	4,222	1,569,619
1875 ...	2,171	840,386	38,681	2,223	833,499	38,454	4,394	1,673,885
1876 ...	2,086	810,062	38,960	2,150	847,026	39,600	4,236	1,657,088
1877 ...	2,192	939,661	43,928	2,219	935,324	43,786	4,411	1,874,985
1878 ...	2,119	951,750	43,082	2,173	961,677	43,391	4,292	1,913,427
1879 ...	2,084	963,087	43,676	2,083	977,135	43,648	4,167	1,940,222
1880 ...	2,076	1,078,885	51,585	2,115	1,101,014	52,153	4,191	2,179,899
1881 ..	2,125	1,219,231	54,792	2,123	1,192,671	54,521	4,248	2,411,902
1882 ...	2,089	1,349,093	55,814	2,079	1,341,791	54,855	4,168	2,690,884
1883 ...	2,023	1,464,752	61,630	2,064	1,499,579	61,969	4,087	2,964,331
1884 ...	1,986	1,569,162	64,488	1,989	1,582,425	64,546	3,975	3,151,587
1885 ...	2,154	1,631,266	66,624	2,119	1,628,892	66,201	4,273	3,260,158
1886 ...	2,307	1,848,058	73,949	2,324	1,887,329	73,908	4,631	3,735,387
1887 ...	2,435	1,920,180	80,918	2,418	1,938,063	79,888	4,853	3,858,243
1888 ...	2,724	2,182,071	85,879	2,630	2,125,812	84,233	5,354	4,307,883
1889 ...	2,855	2,270,827	89,187	2,886	2,328,351	89,489	5,741	4,599,178
1890 ...	2,474	2,178,551	85,818	2,459	2,184,790	85,163	4,933	4,363,341

Increase
in shipping.

85. Some idea of the extension of Victorian commerce may be formed from the circumstance that, although the population of the colony increased by 56 per cent. during the twenty years ended with 1890, the tonnage of vessels entered and cleared in the last as compared with the first year of that period increased more than threefold; also, that whilst the population in the ten years ended with 1890 increased only 32 per cent., the tonnage in 1890 was twice as great as that in 1880.

Nationality
of vessels.

86. Of the vessels inwards and outwards during 1890, 75 per cent., embracing 49 per cent. of the tonnage, were Colonial; 18 per cent., embracing 38 per cent. of the tonnage, were British; and 7 per cent., embracing 13 per cent. of the tonnage, were Foreign. Of the crews entering and leaving Victorian ports in that year, 50 per cent. were attached to Colonial, 38 per cent. to British, and 12 per cent. to Foreign vessels. The following are the figures from which these proportions have been derived:—

NATIONALITY OF VESSELS ENTERED AND CLEARED, 1890.

Nationality.	Vessels Entered.			Vessels Cleared.		
	Number.	Tons.	Men.	Number.	Tons.	Men.
Colonial ...	1,855	1,076,710	43,221	1,835	1,079,164	42,975
British ...	435	827,122	32,698	435	825,769	32,323
Foreign ..	184	274,719	9,899	189	279,857	9,865
Total ...	2,474	2,178,551	85,818	2,459	2,184,790	85,163

87. Of Foreign vessels visiting Victorian ports in the last four years, the greatest number have been German; in 1890, the next largest was American, the next French, and the next Norwegian. The following are the nationalities of such vessels, the numbers entered and cleared of each nationality during 1890 being shown:—

Foreign vessels.

FOREIGN VESSELS ENTERED AND CLEARED, 1890.

Country.	Vessels Entered.	Vessels Cleared.	Both.
Germany ...	83	83	166
United States ...	43	47	90
France ...	27	27	54
Norway ...	16	18	34
Holland ...	3	4	7
Sweden ...	4	2	6
Nicaragua ...	3	3	6
Italy ...	2	2	4
Denmark ...	1	1	2
Hawaii ...	1	1	2
Austria ...	...	1	1
Chile... ..	1	...	1
Total ...	184	189	373

88. The following figures show the proportion of crews to tonnage in Colonial, British, and Foreign vessels during the last five years. It will be observed that Colonial vessels are, numerically, the best manned, and Foreign vessels usually the worst. In 1887, 1888, and 1889 there was in this respect either no difference, or only a slight difference, between British and Foreign vessels. With reference to the comparatively smaller number of hands in British and Foreign than in colonial vessels, it will be remembered that, whilst most of the Colonial vessels are steamers, a larger proportion of British and Foreign vessels are sailing vessels; and as steamers must have one

Crews, and proportion to tonnage.

crew to attend to the engines and another to look after the sails and cargo, they necessarily carry more hands in the aggregate than sailing vessels:—

	1886.	1887.	1888.	1889.	1890.
Colonial vessels had 1 man to	24 tons	23 tons	24 tons	25 tons	25 tons
British „ „	26 „	25 „	27 „	27 „	25½ „
Foreign „ „	29 „	25 „	27 „	28 „	28 „
All „ „	<u>25 tons</u>	<u>24 tons</u>	<u>25 tons</u>	<u>26 tons</u>	<u>25½ tons</u>

Steam and sailing vessels.

89. The steamers and sailing vessels which entered and left Victorian ports in 1890, together with their tonnage and crews, were as follow:—

STEAMERS AND SAILING VESSELS ENTERED AND CLEARED, 1890.

Description of Vessels.	Vessels.	Tons.	Crews.
INWARDS.			
Steamers	1,880	1,786,700	78,197
Sailing vessels	594	391,851	7,621
Total	2,474	2,178,551	85,818
OUTWARDS.			
Steamers	1,859	1,788,353	77,876
Sailing vessels	600	396,437	7,287
Total	2,459	2,184,790	85,163

Crews in steam and sailing vessels.

90. By means of the figures in the foregoing table, it is ascertained that, whilst steamers had one man to every 23 tons, sailing vessels had but one man to every 52 tons.

Vessels with cargoes and in ballast.

91. Over ninety-seven per cent. of the vessels, embracing 99 per cent. of the tonnage, in 1890, arrived with cargoes. In the same year 69 per cent. of the vessels, embracing 73 per cent. of the tonnage, left with cargoes. Although the latter proportion was higher in 1890 than in 1889 (when it was 68½ per cent.), there has been a gradual falling-off since 1884, when as many as 81 per cent. of the vessels, embracing 85 per cent. of the tonnage, left with cargoes. The following are the numbers and percentages of the vessels and of their tonnage which arrived and departed with cargoes and in ballast during the year:—

VESSELS WITH CARGOES AND IN BALLAST, 1890.

State of Vessels.	Vessels.		Tons.	
	Number.	Percentage.	Number.	Percentage.
INWARDS.				
With cargoes	2,406	97·25	2,159,843	99·13
In ballast	68	2·75	18,708	·87
Total	2,474	100·00	2,178,551	100·00
OUTWARDS.				
With cargoes	1,702	69·22	1,593,887	72·95
In ballast	757	30·78	590,903	27·05
Total	2,459	100·00	2,184,790	100·00

92. In the same year, 80 per cent. of the vessels inwards, embracing 94 per cent. of the tonnage, were entered at Melbourne, and 79 per cent. of the vessels outwards, embracing 94 per cent. of the tonnage, were cleared at the same port. Next to Melbourne, the largest number of vessels was entered and cleared at Swan Hill, Echuca, and Mildura, on the River Murray, but the largest amount of tonnage was that of vessels entered and cleared at Geelong. The following table shows the number and tonnage of vessels entered and cleared at each port in Victoria during the year:—

SHIPPING AT EACH PORT, 1890.

Ports.	Inwards.		Outwards.	
	Vessels.	Tons.	Vessels.	Tons.
Melbourne	1,967	2,051,826	1,954	2,045,156
Geelong	68	60,183	82	71,620
Portland	14	2,159	18	7,544
Port Fairy	4	465	3	219
Warrnambool	16	3,882	13	3,800
Bairnsdale	7	656	8	556
Murray ports—				
Mildura	117	13,192	104	11,270
Echuca	138	25,428	134	23,865
Swan Hill	143	20,760	143	20,760
Total	2,474	2,178,551	2,459	2,184,790

93. Taking the Murray ports as a whole, it will be observed that 779 vessels, or nearly a sixth of the total number, were entered and cleared thereat; but the burden of these vessels amounted in the aggregate to only 115,275 tons, or a thirty-eighth part of the total tonnage entered and cleared.

Shipping in
Austral-
asian
colonies.

94. The following table shows the number and tonnage of vessels entered and cleared in each Australasian colony during the years named* :—

SHIPPING IN AUSTRALASIAN COLONIES.

Colony.	Year.	Inwards.		Outwards.		Both.	
		Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Victoria	1874	2,100	777,110	2,122	792,509	4,222	1,569,619
	1878	2,119	951,750	2,173	961,677	4,292	1,913,427
	1882	2,089	1,349,093	2,079	1,341,791	4,168	2,690,884
	1886	2,307	1,848,058	2,324	1,887,329	4,631	3,735,387
	1887	2,435	1,920,180	2,418	1,938,063	4,853	3,858,243
	1888	2,724	2,182,071	2,630	2,125,812	5,354	4,307,883
	1889	2,855	2,270,827	2,886	2,328,351	5,741	4,599,178
New South Wales†	1874	2,217	1,016,369	2,168	974,525	4,385	1,990,894
	1878	2,469	1,267,374	2,307	1,192,130	4,776	2,459,504
	1882	2,437	1,686,620	2,340	1,610,045	4,777	3,296,665
	1886	2,684	2,114,618	2,755	2,143,986	5,439	4,258,604
	1887	2,815	2,142,457	2,906	2,180,301	5,721	4,322,758
	1888	2,955	2,414,750	2,972	2,350,669	5,927	4,765,419
	1889	3,254	2,632,081	3,229	2,689,098	6,483	5,321,179
Queensland‡	1874	713	302,825	657	269,925	1,370	572,750
	1878	1,111	541,850	1,117	524,908	2,228	1,066,758
	1882	1,492	962,600	1,467	917,991	2,959	1,880,591
	1886	918	557,026	977	563,453	1,895	1,120,479
	1887	838	468,180	879	456,052	1,717	924,232
	1888	928	478,517	936	517,712	1,864	996,229
	1889	760	506,780	773	494,229	1,533	1,001,009
South Australia ...	1874	720	265,899	720	268,651	1,440	534,550
	1878	1,026	452,738	1,035	453,535	2,061	906,273
	1882	1,113	675,441	1,099	661,777	2,212	1,337,218
	1886	859	770,922	878	787,554	1,737	1,558,476
	1887	907	841,422	905	836,461	1,812	1,677,883
	1888	969	973,479	1,019	1,000,172	1,988	1,973,651
	1889	1,036	978,532	1,046	980,810	2,082	1,959,342
Western Australia	1874	144	65,351	153	67,476	297	132,827
	1878	155	80,655	161	82,098	316	162,753
	1882	202	172,698	201	171,549	403	344,247
	1886	287	260,286	255	237,222	542	497,508
	1887	255	249,813	185	214,824	440	464,637
	1888	263	402,807	266	409,586	529	812,393
	1889	349	497,232	345	507,586	694	1,004,818

* For later information, and information respecting other years, see Appendix A. *post*, and third folding sheet *ante*.

† In consequence of vessels with cargoes on board which call at Sydney and Newcastle being counted at both ports, the earlier figures for New South Wales somewhat overstate the truth. It is understood that this practice has been discontinued since 1884.

‡ The figures of Queensland since 1882 are not comparable with those for that and previous years, inasmuch as since that year the ships arriving from abroad and calling at several ports of the colony have been counted at one port, viz., the final port of arrival and departure, instead of at each port, as previously.

SHIPPING IN AUSTRALASIAN COLONIES—*continued.*

Colony.	Year.	Inwards.		Outwards.		Both.	
		Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Tasmania	1874	607	119,706	620	119,801	1,227	239,507
	1878	693	159,063	688	156,791	1,381	315,854
	1882	733	208,934	718	208,484	1,451	417,418
	1886	690	343,656	715	348,773	1,405	692,429
	1887	677	360,404	714	374,895	1,391	735,299
	1888	770	385,650	795	390,628	1,565	776,278
	1889	842	458,247	819	453,999	1,661	912,246
New Zealand	1874	856	399,296	822	385,533	1,678	784,829
	1878	926	456,490	886	428,493	1,812	884,983
	1882	795	461,285	769	438,551	1,564	899,836
	1886	725	502,572	707	488,331	1,432	990,903
	1887	653	489,754	675	493,583	1,328	983,337
	1888	683	526,435	701	531,478	1,384	1,057,913
	1889	781	602,634	762	593,252	1,543	1,195,886

95. It will be noticed, that in all the colonies except Queensland and South Australia, the tonnage of vessels inwards and outwards was considerably greater in the last than in any other year named, but a falling-off, as compared with some previous years, took place in the last-named colonies. Notwithstanding the larger size of the vessels now employed in the Australian trade, the number of vessels in four of the colonies, viz., Victoria, New South Wales, Western Australia, and Tasmania, was also greater than in any previous year shown.

Shipping in colonies in 1889 and former years.

96. The vessels trading to New South Wales exceed those to Victoria, both in number and aggregate tonnage, which is no doubt chiefly owing to the large amount of shipping engaged in the coal trade of the former colony; but, with this exception, Victoria is in advance of all the Australasian colonies. The following is the order in which the colonies stand in regard to the amount of shipping trading to and from their ports in the last year named in the table. The ships stand in the same order in regard to their numbers as they do in regard to their tonnage, except that in the former case Western Australia falls to the bottom of the list, and Tasmania rises to the fourth place, whilst New Zealand and Queensland stand fifth and sixth respectively:—

Order of colonies in respect to shipping.

ORDER OF COLONIES IN REFERENCE TO TONNAGE OF SHIPPING
ENTERED AND CLEARED, 1889.

- | | | |
|---|--|---|
| 1. New South Wales.
2. Victoria.
3. South Australia.
4. New Zealand. | | 5. Western Australia.
6. Queensland.
7. Tasmania. |
|---|--|---|

Shipping in
Australia
and Aus-
tralasia.

97. The number and tonnage of the vessels entered at and cleared from the ports of the colonies situated upon the Australian continent taken as a whole, and of those colonies with the addition of Tasmania and New Zealand, are given in the following table for the years named:—

SHIPPING* IN AUSTRALIA AND AUSTRALASIA.

Year.	Vessels Entered and Cleared in—			
	Australia.		Australia with Tasmania and New Zealand.	
	Number.	Tons.	Number.	Tons.
1874	11,714	4,800,640	14,619	5,824,976
1878	13,673	6,508,715	16,866	7,709,552
1882	14,519	9,549,605	17,534	10,866,859
1886	14,244	11,170,454	17,081	12,853,786
1887	14,543	11,247,753	17,262	12,966,389
1888	15,662	12,855,575	18,611	14,689,766
1889	16,533	13,885,526	19,737	15,993,658

Increase in
tonnage
and vessels
to Australia
and Aus-
tralasia.

98. An increase in the aggregate tonnage of the vessels trading to the Australasian colonies is usually observable from period to period. Both as regards the Australian continent and that continent combined with Tasmania and New Zealand, the number and tonnage of vessels were far larger in 1889 than in any of the previous years named.

Shipping in
British
possessions.

99. The following is the tonnage of vessels entered at and cleared from British possessions throughout the world in the year 1889. The information is derived entirely from official documents:—

* Including vessels engaged in the intercolonial trade, but not those engaged in the coasting trade of any particular colony.

SHIPPING IN BRITISH POSSESSIONS, 1889.

(Exclusive of Coasting Trade.)

Country or Colony.	Burden of Vessels Entered and Cleared.	Country or Colony.	Burden of Vessels Entered and Cleared.
EUROPE.		AMERICA— <i>continued.</i>	
	Tons.		Tons.
United Kingdom* ...	71,889,895	British Guiana ...	634,770
Gibraltar ...	12,515,850	West Indies—	
Malta ...	10,407,116	Bahamas ...	207,326
		Turk's Island ...	215,274
ASIA.		Jamaica ...	1,704,889
India ...	6,983,332	St. Lucia ...	903,221
Ceylon ...	4,831,965	St. Vincent ...	266,123
Straits Settlements ...	8,136,605	Barbados ...	1,217,728
Labuan ...	54,390	Grenada ...	338,017
Hong Kong ...	8,971,990	Tobago ..	74,613
		Virgin Islands ...	8,506
AFRICA.		St. Christopher ...	} 388,148
Mauritius ...	654,535	Nevis ...	
Natal ...	1,013,108	Dominica ...	295,866
Cape of Good Hope ...	2,783,177	Montserrat ...	308,623
St. Helena ...	94,668	Antigua ...	385,964
Lagos ...	505,517	Trinidad ...	1,198,778
Gold Coast ...	569,046		
Sierra Leone ...	589,171	AUSTRALASIA AND SOUTH SEAS.	
Gambia ...	198,911	Australia, Tasmania, and New Zealand†	15,993,658
AMERICA.		Fiji ...	98,523
Canada ...	9,296,601	Falkland Islands ...	60,284
Newfoundland ...	656,556		
Bermuda ...	221,755		
Honduras ...	338,743	Total ...	165,013,242

100. The tonnage of vessels trading to Victoria exceeds that to any British possession outside Australasia except the United Kingdom, Gibraltar, Malta, India, Ceylon, the Straits Settlements, Hong Kong, and Canada. Excluding the United Kingdom, the tonnage to Australasia far exceeds that to any other British possession, being two-thirds as much again as that to Canada, and more than twice as much as that to India. Shipping compared with that of other British possessions.

101. In the next table a statement is given of the tonnage of vessels trading to the principal Foreign countries, by means of which and the previous table it will be seen that in France, Germany, Spain, and the United States, the tonnage is greater than, and in Austria it is about the same as, in Australasia. The information has been derived from the most reliable sources available:— Shipping in Foreign countries.

* The coasting trade, not included, amounted to 89,560,000 tons.

† Including vessels engaged in the intercolonial trade. For figures relating to each Australasian colony, see table following paragraph 94 *ante*.

SHIPPING IN FOREIGN COUNTRIES, 1889.

Country.	Inwards.	Outwards.	Both.
	Tons.	Tons.	Tons.
Argentine Confederation ...	6,711,686	5,842,972	12,554,658
Austria* ...	7,885,784	7,875,328	15,761,112
Belgium ...	5,158,436	5,146,001	10,304,437
Chile ...	2,667,497	2,630,784	5,298,281
China ...	2,967,109	2,897,571	5,864,680
Denmark ...	3,629,285	3,573,102	7,202,387
France ...	13,424,296	13,952,999	27,377,295
Germany ...	10,222,353	10,250,063	20,472,416
Holland ...	5,221,044	5,144,543	10,365,587
Italy ...	7,193,422	6,678,282	13,871,704
Japan† ...	1,469,586	1,442,234	2,911,820
Portugal ...	5,051,858	4,817,127	9,868,985
Russia in Europe ...	6,695,500	6,736,862	13,432,362
Spain ...	11,528,398	12,758,024	24,286,422
Sweden ...	5,249,760	5,180,834	10,430,594
Norway ...	2,705,293	2,629,177	5,334,470
United States (30th June)‡ ...	13,311,652	13,671,661	26,983,313
Uruguay ...	2,178,017	2,130,669	4,308,686
Total ...	113,270,976	113,358,233	226,629,209

Vessels
built and
registered.

102. Five vessels were built in Victoria during the year 1890. These were small, their aggregate burden being only 1,271 tons. The vessels registered numbered 21, of an average burden of 385 tons. The following were the classes and sizes of the vessels :—

VESSELS BUILT AND REGISTERED, 1890.

Vessels Built.			Vessels Registered.			
Description.	No.	Tons.	Description.	No.	Tons.	Men.
Steamers ...	3	1,256	Steamers ...	7	5,052	162
Sailing vessels ...	2	15	Barques ...	2	864	8
			Brigantines ...	2	352	16
			Schooners ...	2	109	8
			Ketches ...	2	86	6
			Hopper Barges ...	2	1,208	2
			Steam Dredges ...	2	392	40
			Steam Launches...	2	15	5
Total ...	5	1,271	Total ...	21	8,078	247

* Including coasting trade, exclusive of Hungary.

† The tonnage of Japanese vessels is that of vessels of foreign type only.

‡ Exclusive of the Lake trade between the United States and Canada.

103. The vessels on the Victorian register, and, therefore, presumably Victorian owned, were as follow on the 31st December, 1890, the ports of their registration being distinguished:—

VESSELS OWNED IN VICTORIA, 1890.

Port.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Melbourne	137	42,820	265	43,528	402	86,348
Geelong ... ..	...	...	4	358	4	358
Port Fairy	2	293	3	72	5	365
Portland	1	328	1	22	2	350
Total	140	43,441	273	43,980	413	87,421

104. The following is a statement of the number and net tonnage of vessels on the registers of all the Australasian colonies and Fiji on the 30th June, 1891* :—

VESSELS OWNED IN AUSTRALASIAN COLONIES, 30TH JUNE, 1891.

Colony.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Victoria	140	43,441	273	43,980	413	87,421
New South Wales	487	53,053	561	67,143	1,048	120,196
Queensland	94	13,180	108	9,915	202	23,095
South Australia	95	14,915	234	26,390	329	41,305
Western Australia	6	682	119	4,901	125	5,583
Tasmania	55	8,084	172	11,687	227	19,771
New Zealand	177	37,864	341	34,445	518	72,309
Total	1,054	171,219	1,808	198,461	2,862	369,680
Fiji † ... ..	...	...	13	579	13	579

105. The material for the following statement of the number of merchant vessels sailing under the flags of different nationalities has been taken from the *Journal of the Statistical Society of Paris* for June, 1891.† All steamers of 100 tons burden and under, and all sailing vessels of 50 tons burden and under, are excluded:—

* Figures kindly furnished by the Merchant Shipping and Underwriters' Association of Victoria Limited.

† On 30th June, 1889.

‡ Page 204, *et seq.*; Berger-Levrault et Cie, 5 Rue des Beaux Arts, Paris.

VESSELS OWNED IN VARIOUS COUNTRIES.

(Exclusive of Steamers not exceeding 100 tons, and Sailing Vessels not exceeding 50 tons.)

Countries.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons (00's omitted).	Number.	Tons (00's omitted).	Number.	Tons (00's omitted).
United Kingdom ...	5,302	8,043,9	10,559	3,693,7	15,861	11,737,6
France ...	471	806,0	1,627	298,8	2,098	1,104,8
Germany ...	689	930,8	1,698	706,5	2,387	1,637,3
Austria ...	111	149,4	330	120,7	441	270,1
Italy ...	300	294,7	2,401	655,6	2,701	950,3
Spain ...	350	423,6	1,359	253,4	1,709	677,0
Portugal ...	41	49,4	320	68,3	361	117,7
Sweden ...	403	172,0	1,799	373,4	2,202	545,4
Norway ...	371	245,1	3,567	1,405,9	3,938	1,651,0
Russia ...	230	177,8	2,131	455,9	2,361	633,7
Denmark ...	197	154,5	877	145,9	1,074	300,4
Holland ...	164	220,0	861	230,3	1,025	450,3
Belgium ...	55	98,1	...	...	55	98,1
Greece ...	68	70,4	1,457	299,5	1,525	369,9
Turkey ...	...	...	512	80,4	512	80,4
United States ...	419	533,3	3,406	1,445,0	3,825	1,978,3
Brazil ...	129	76,0	268	56,2	397	132,2
Argentine Republic ...	...	...	104	29,4	104	29,4
Chile ...	...	...	146	74,6	146	74,6
Japan ...	147	123,3	104	27,7	251	151,0
Total ...	9,447	12,568,3	33,526	10,421,2	42,973	22,989,5

Value of ships trading to Victoria

106. The next table* shows the tonnage and estimated value of British, Colonial, and Foreign owned vessels which entered the Port of Melbourne during the year 1885. No later information is available:—

VALUE OF BRITISH, COLONIAL, AND FOREIGN VESSELS TRADING TO PORT OF MELBOURNE, 1885.

Ownership of Vessels.	Tons.	Estimated Value.
		£
British ...	614,371	15,422,040
Colonial ...	695,502	20,071,330
Foreign ...	203,691	4,462,680
Total ...	1,513,564 †	39,956,050

Lighters and boats

107. The licences issued in 1890 to lighters numbered 80, and to boats 528. The former were to be employed in the conveyance of goods, and the latter for ferry, passenger, and other purposes.

* Compiled in the Department of Trade and Customs.

† This represented over 92 per cent. of the tonnage of vessels trading to Victoria.

108. An Act for the establishment of a Harbor Trust for the Port of Melbourne was passed in 1876, and came into force on the 1st January, 1877. This Statute was afterwards amended by an Act which came into operation in April, 1883. In 1890 these Acts were consolidated by Act 54 Vict. No. 1119, and on the 19th December of the same year an amendment of this Act was effected by the *Melbourne Harbor Trust Act 1890*, 54 Vict. No. 1,182.

Melbourne
Harbor
Trust.

109. To carry out the more important of the designs of the Harbor Trust, the services of Sir John Coode, C.E., were secured from England, and this eminent engineer submitted a general and comprehensive scheme for the permanent improvement of the port. The estimated total cost of the works recommended by Sir John Coode, including a fair margin for contingencies and superintendence, is, if the river be deepened to 20 feet, £1,163,200; or if it be deepened to 25 feet, £1,246,000.

Total cost
of works
recom-
mended.

110. In addition to the works designed by Sir John Coode, and reported on in previous years, advantage has been taken by the Trust of the division of the River channel at Yarraville to utilize the deep water of the old channel at this place, so as to provide accommodation for the timber trade of the port; and, on the side of the river opposite Yarraville, timber import wharf and jetties, which at present will accommodate 12 large ships, have been constructed at a cost of £36,334. Here ample space is provided for the discharge and sorting of large timber cargoes with facility and despatch. Land to the extent of 142 acres adjacent to the above has been vested in the Trust by Parliament, on which timber yards for storage and other purposes required by the trade will be provided; further, in order to connect this accommodation with the City by land, the Trust has formed and made Lorimer Street at a cost of £19,381. The distance by road from the timber wharf to the Queen's Bridge is $3\frac{1}{2}$ miles.

Recent
harbor
improve-
ments.

111. During the year 1890 many large and deeply laden ships came up the River from the Bay and discharged their cargoes on the Melbourne wharves. Ships over 400 feet in length and drawing 22 feet reached the wharves safely and without delay. In the Bay a channel 300 feet wide and 26 feet deep at low water has been completed from the Trust boundary beyond the Breakwater Pier, at Williamstown, to the Port Melbourne Piers, so that the largest vessels entering the port may berth and discharge at these piers.

Further
Harbor
Trust
improve-
ments.

Dredges.

112. In the same year the Trust possessed thirteen dredges, having an aggregate lifting capacity of 4,600 tons per hour of ordinary material, but varying according to the character of material dredged, whether silt, sand, clay, rotten rock, etc. Of the above dredges four are centre-ladder, three end-cutting, two side-cutting, and four are grab dredges or silt cranes. One of the principal, is a hopper dredge, and this vessel can, when required, take her own dredging to sea. Two end-cutting dredges were added to the Trust's plant during the year, and will each lift 600 tons per hour. These were built by Messrs. W. Simons & Co., of Renfrew, Scotland, and were delivered at Melbourne at a cost of £50,636. In addition to the above, the Commissioners have caused a side-cutting dredge to be constructed in Victoria at a cost of £32,120.

Silt raised.

113. The total quantity of dredgings actually raised in 1890 amounted to 2,693,848 cubic yards, viz., 1,418,578 cubic yards from the Bay, and 1,275,270 cubic yards from the River. Since the establishment of the Trust the River dredgings have amounted to 9,832,723 cubic yards, and the Bay dredgings to 5,711,966 cubic yards, making a total of 15,544,689 cubic yards. Of the dredgings, 8,699,835 cubic yards were deposited at sea, and 6,844,854 cubic yards were landed for roads and reclamation works. The average cost of dredging in 1890 was 5·72d. per cubic yard, and the average cost of landing silt was 10·74d. per cubic yard. The whole cost of getting the material and placing it on the ground was thus 16·46d. (nearly 1s. 4½d.) per cubic yard.*

Postal returns.

114. The following figures show the number of post offices throughout the colony, and the number of letters, packets, and newspapers which passed through them in the last two years:—

POSTAL RETURNS, 1889 AND 1890.

Year.	Number of Post Offices.	Number Despatched and Received of—			
		Letters.†	Newspapers.	Packets and Parcels.	Total.
1889 ..	1,640	48,097,268	20,662,732	6,959,508	75,719,508
1890 ...	1,671	62,526,448	22,729,005	7,491,316	92,746,769
Increase	31	14,429,180	2,066,273	531,808	17,027,261

* For revenue and expenditure of the Trust, and loans raised, see tables following paragraphs 216 and 286 in Vol. I.

† Including post cards. These were first issued on the 1st April, 1876. The number issued was 3,611,334 in 1889, and 1,530,180 in 1890. The decrease arises from the fact that the inland postage on letters was reduced also to 1d.

115. It will be noticed that an increase of $14\frac{1}{2}$ millions, or 30 per cent., took place in the number of letters despatched and received. This large increase was, no doubt, mainly due to the reduction on and after the 1st January, 1890, of the inland postage from 2d. to 1d. per half-ounce. The number of newspapers also increased by two millions, or by 10 per cent., and the number of packets, etc., by 530,000, or by nearly 8 per cent. The three items combined show a total increase of over 17 millions.

Falling-off
in corres-
pondence
explained.

116. The letters despatched and received in proportion to each head of population were 44 in 1889, and 56 in 1890.

Letters per
head.

117. The number of registered letters in 1890 was 574,013, or 1 in 109 of all the letters posted, as compared with 849,827, or 1 in 56, in the previous year.

Registered
letters.

118. The dead and irregularly-posted letters numbered, in 1889, 473,231, or 1 in every 102; and in 1890, 464,637, or about 1 in every 134 of the total number posted. In the former year, 3,783, and in the latter year 6,033, contained articles of value. The total value of notes, cheques, cash, etc., included, in 1889, was £26,718, and, in 1890, £10,304; for £25,796 of which, or 97 per cent., in the former, and £9,548, or 93 per cent., in the latter year, owners were found. In 1889, 12,646, or 1 in every 3,803 letters posted, and in 1890, 10,330, or 1 in every 6,053, were without addresses or were imperfectly addressed. Of these, 379 in 1889, and 176 in 1890, were envelopes without correspondence, covering cash, cheques, etc., to the value of over £5,500 and £1,800 respectively. Seven letters in 1889, and the same number in 1890, bore obscene or libellous addresses, and were detained for that reason. In 1889, 4,264 letters, and in 1890, 3,197 letters were refused by the persons to whom addressed, chiefly on account of postal charges, which were, however, subsequently recovered in most cases from the senders. In compliance with the provisions of the *Post Office Act* 1883, 4,016 letters in 1889, and 1,351 in 1890, having been unclaimed at hotels to which they were addressed, were forwarded to the Dead Letter Office. Under the powers given by the same Act, 7 letters in 1889, and 14 letters in 1890, intended for promoters of lotteries, etc., were detained during the year. Nineteen letters in 1889, and 9 in 1890, bore obliterated or defaced stamps. Besides letters, packets and newspapers were received at the Dead Letter Office during the year 1890; most of the letters were returned or delivered, but the packets and newspapers were generally destroyed.

Dead letters,
etc.

Disposal
of dead
letters.

119. The dead and irregularly-posted letters were dealt with as follow in the two years :—

DISPOSAL OF DEAD AND IRREGULARLY-POSTED LETTERS,
1889 AND 1890.

		1889.	1890.
Returned, delivered, etc.	... ..	445,853	425,048
Destroyed or on hand	... ..	27,378	39,589
Total	... ..	<u>473,231</u>	<u>464,637</u>

Inland and
Foreign
corres-
pondence.

120. Of the total number of letters, newspapers, and packets which passed through the Victorian Post Office in 1890, 81 per cent. were posted for delivery within the colony, 12 per cent. were despatched for or received from the neighbouring colonies, and 7 per cent. were despatched for or received from British or Foreign countries. The following table shows the number under each of these heads :—

INLAND, INTERCOLONIAL, AND FOREIGN CORRESPONDENCE, 1890.

Nature of Correspondence.	Inland (Posted.)	Intercolonial.		British and Foreign.	
		Despatched.	Received.	Despatched.	Received.
Letters and Post Cards	54,656,357	2,634,724	3,295,098	907,475	1,032,794
Newspapers ...	15,235,045	1,953,501	1,991,569	1,229,823	2,319,067
Packets ...	5,645,190	465,957	796,163	106,938	477,068
Total ...	75,536,592	5,054,182	6,082,830	2,244,236	3,828,929

Parcel post.

121. The following information relating to the Parcel Post has been furnished for this work by the Deputy Postmaster-General :—

THE INLAND PARCEL POST

Came into operation on the 1st July, 1887, and an increase of business of about 12 per cent. took place in 1890. The number of Inland Parcels posted during the year 1890 was 167,348, and the postage paid on them amounted to £8,238, as against 149,220 parcels and £7,240 for postage for the year 1889.

INTERCOLONIAL PARCEL POSTS.

A Parcels Post Exchange has been established with Western Australia, South Australia, New Zealand, and Tasmania; but that with New Zealand commenced only from the 1st January, 1890, and that with Tasmania from the 1st February, 1890. Parcels to these colonies are limited to 11lbs. weight. The number of intercolonial parcels received in 1890 was 1,970, and the number despatched 5,326. The charges for Intercolonial Parcel Post are 8d. for 1lb. or under, and 6d. for each additional lb. up to limit of weight.

As soon as the necessary legal authority has been given by the Legislatures of the other Australasian colonies and Fiji, the system will come into operation between them and Victoria.

THE BRITISH AND FOREIGN PARCEL POSTS.

This system came into operation on the 1st July, 1886. In 1890, the total number of parcels received was 14,534, and the number despatched was 3,783, or 18,317 in all, as compared with a total of 15,778 parcels in 1889. At first the business was almost solely confined to presents, now it is being used for mercantile purposes, and is made the medium for the consignment of watches, diamonds, jewellery, works of art, etc. The charge between Victoria and the United Kingdom is now 1s. 6d. for a 2-lb. parcel and 9d. for each extra lb.

A direct Parcel Post exchange with Germany has been established since June, 1888, and parcels are now forwarded by each German mail steamer up to 11lbs. weight, and one with Egypt will be established from the 1st October, 1891.

PARCEL POST WITH INDIA AND THE EAST.

The parcels exchanged between India and the East and Victoria increased from 528 for 1889 to 638 for 1890.

The Victorian share of the postage for British, Colonial, and Foreign Parcel Posts for 1890 was £1,262, and the duty collected and paid to the Customs Department was £3,314.

122. The postal returns of the various Australasian colonies during the year 1889 are given in the following table:—

Postal returns of Australasian colonies.

POSTAL RETURNS OF AUSTRALASIAN COLONIES, 1889.*

Colony.	Number of Post Offices.	Letters Despatched and Received.		Newspapers Despatched and Received.	
		Total Number.	Number per Head.	Total Number.	Number per Head.
Victoria ...	1,640	48,097,268	43·55	20,662,732	18·71
New South Wales ..	1,261	53,971,300	48·89	36,530,800	33·09
Queensland ...	834	13,070,083	32·92	10,937,339	27·55
South Australia ...	593	16,388,607	50·99	9,085,714	28·27
Western Australia ...	186	2,737,034	63·57	1,392,825	32·35
Total ...	4,514	134,264,292	45·21	78,609,410	26·47
Tasmania ...	293	4,703,324	31·61	5,424,657	36·45
New Zealand ...	1,189	44,151,393	71·93	16,721,016	27·24
Grand Total ...	5,996	183,119,009	49·06	100,755,083	26·99

123. Although the letters despatched and received in New South Wales exceed those in Victoria by over 12 per cent., the post offices in the latter exceed those in the former by 379, or nearly a fourth. Indeed, Victoria, so far as the establishment of post offices is concerned, appears to afford much greater facilities to correspondents than any other colony in the group. This is made plain by the following figures:—

Post offices per square mile in Australasian colonies.

* For later information, see Appendix A. *post.*

Victoria	has a post office to every 54 square miles.
New Zealand	„ „ 88 „
Tasmania	„ „ 90 „
New South Wales	„ „ 245 „
Queensland	„ „ 801 „
South Australia	„ „ 1,523 „
Western Australia	„ „ 5,246 „

Order of colonies in respect to correspondence per head.

124. In regard to the number of letters per head, Victoria stands above Tasmania and Queensland, but below all the other colonies; whilst in regard to newspapers per head, Victoria is very much below any of the other colonies. The following is the position of the colonies in these respects:—

ORDER OF THE COLONIES IN REFERENCE TO PROPORTION OF LETTERS AND NEWSPAPERS TO THE POPULATION.

Order according to Letters per Head.

1. New Zealand.
2. Western Australia.
3. South Australia.
4. New South Wales.
5. Victoria.
6. Queensland.
7. Tasmania.

Order according to Newspapers per Head.

1. Tasmania.
2. New South Wales.
3. Western Australia.
4. Queensland.
5. South Australia.
6. New Zealand.
7. Victoria.

Small number of newspapers posted in Victoria.

125. In making the returns of newspapers despatched and received, it is probable that some of the neighbouring colonies have included packets, and this may to a certain extent account for the extremely low position Victoria occupies in regard to the number per head. Should packets be combined with newspapers in the Victorian returns, the total number in 1889 would be 27,600,000, or over 23 per head, which proportion is higher than in any of the other colonies for which the particulars are available, except New Zealand and Tasmania. It may be remarked, moreover, that in consequence of the facilities existing in Victoria for communication with the interior by means of railways, newspapers are to a large extent transmitted by rail in parcels, in preference to being posted. It must also be remembered that in this colony there is a postage fee on newspapers, whereas, subject to certain exceptions and restrictions, newspapers posted in New South Wales, Queensland, and Tasmania, for places within the Australasian colonies, and in Western Australia for places within its own boundaries, are carried free. The fact of a fee being charged no doubt acts as a check on the posting of newspapers, and is probably the chief reason why the number here compares unfavourably with the numbers in those colonies in which they are carried free of charge.

Postal returns of United Kingdom.

126. The following are the postal returns of the United Kingdom for the year 1889-90* :—

* The postal year referred to commenced with the second quarter of 1889, and ended with the first quarter of 1890.

POSTAL RETURNS OF THE UNITED KINGDOM, 1889-90.

Country.	Millions delivered in 1889-90 of—		
	Letters.	Newspapers and Packets.	Total.
England and Wales ...	1,413	502	1,915
Scotland ...	140	58	198
Ireland ...	96	37	134
Total United Kingdom	1,649*	598	2,248

127. Per head of population, 49·07 letters (exclusive of post cards) were delivered in England and Wales, 33·98 in Scotland, and 20·59 in Ireland, during 1889-90. Taking the United Kingdom as a whole, the letters delivered in that year were in the proportion of 43·16 to each inhabitant, or with post cards in the proportion of 48·83 to each inhabitant. Proportion of letters to population of United Kingdom.

128. By the following table, showing the number of letters per head in the principal countries in the world, it appears that Australasia, in regard to the extent of her correspondence, heads the list with a proportion slightly higher than that in Great Britain, but more than twice as high as that in any other country named—except Switzerland:— Letters per head in various countries.

LETTERS PER HEAD IN VARIOUS COUNTRIES, 1884-5.†

Country.	Number of Letters‡ per Head.	Country.	Number of Letters‡ per Head.
Australasia ... (1889)	49·1	Algeria ...	3·3
United Kingdom (1889-90)	48·8	Argentine Republic ...	3·3
Switzerland ...	29·5	Brazil ...	3·0
United States ...	21·8	Uruguay ...	2·4
Belgium ...	21·1	Roumania ...	2·1
Germany ...	19·3	Japan ...	2·0
Holland ...	18·8	Greece ...	2·0
Luxemburg ...	17·5	Finland ...	1·9
France ...	16·7	Peru ...	1·8
Denmark ...	16·0	Russia ...	1·7
Canada ... (1887)	15·2	Egypt ...	·8
Austria-Hungary ...	10·7	British India ...	·7
Norway ...	9·3	Servia ...	·7
Sweden ...	9·2	Bulgaria ...	·6
Italy ...	5·3	Mexico ...	·4
Spain ...	5·0	Turkey ...	·4
Hawaii ...	4·8	Netherlands-India ...	·2
Chile ...	4·5	Columbia ...	·2
Portugal ...	4·2	Persia ...	·05

* Exclusive of 216½ millions of post cards.

† The figures, except those for Australasia, the United Kingdom, and Canada, have been taken from *L'Almanach de Gotha*, 1887, page 1063; Justus Perthes, Gotha.

‡ Including post cards in the case of Australasia and the United Kingdom, but it is not stated whether post cards are included in the other countries.

Inter-
colonial
Postal
Conference,
1891.

129. An intercolonial Postal and Telegraph Conference, at which all the Australasian Colonies were represented, was held in Sydney in February and March, 1891. The principal business dealt with comprised the adoption of an Australasian Postal Convention, with a view to the introduction, at an early date, of uniform postal rates and regulations between the different colonies; the adequate representation of the colonies at the Postal Union Congress at Vienna in May, 1891; and arrangements in connexion with the reduction of telegraphic charges to Europe.*

Rates of
postage.

130. On the 1st January, 1890, the postage on letters for delivery within the colony was reduced from 2d. to 1d. per $\frac{1}{2}$ oz., whilst the single rate for intercolonial letters remained at 2d.; the weight, however, allowed at the single rate on the latter—which had for some time previously been 1 oz.—being reduced, for the sake of uniformity, to $\frac{1}{2}$ oz. from the 1st January, 1891. In accordance with the resolutions agreed to at an Intercolonial Postal and Telegraph Conference,† held in Adelaide in May, 1890, the rate of postage on letters to the United Kingdom (formerly 6d. per $\frac{1}{2}$ oz. *viâ* Italy, France, or America, and 4d. by the long sea route), and all places beyond the colonies, was reduced to a uniform rate of 2½d. from the 1st January, 1891. This uniform rate was charged until the 3rd February, when, owing to representations made by the British postal authorities, the old rates were reverted to except in the case of the United Kingdom, pending the deliberations of the Vienna Postal Union Congress appointed to meet in May, 1891, at which representatives of Australia were to be present to advocate admission into the Union.‡ The 2½d. rate was also established with India, Ceylon, and Straits Settlements, from the 1st June, 1891. Moreover, post cards available for transmission to places within Victoria and to places in every other Australasian colony, except Fiji, are issued at 1d. each, and those to the United Kingdom at 2d. each. The postage on newspapers is ½d. to places in Victoria or any of the other Australasian colonies, and 1d. to the United Kingdom.

* See Report of the Victorian Post Office and Telegraph Department, 1890, Appendix A, page 3, *et seq.*; Brain, Melbourne, 1891.

† Western Australia and New Zealand were not represented at this Conference.

‡ See next paragraph.

131. In accordance with resolutions agreed to at an Intercolonial Postal and Telegraph Conference held in Sydney in February and March, 1891, Victoria, with the other Australian colonies, sent delegates to the Universal Postal Union Congress held in Vienna in May, 1891, at which it was decided that the Australian colonies should join the Universal Postal Union from the 1st October, 1891, and should have, collectively, one vote on all matters affecting the Union. From the date named, therefore, uniform rates have been chargeable on correspondence addressed to all countries outside Australasia (which for postal purposes includes British New Guinea, Fiji, and New Hebrides), in accordance with the following scale:—

Admission
of Austral-
asian
colonies to
Universal
Postal
Union.

POSTAL UNION CHARGES.

Letters—For every $\frac{1}{2}$ oz. or under	2½d.
Post Cards each	1½d.
Reply Post Cards	3d.
Newspapers (excepting those addressed to places in the United Kingdom), for 4oz. or under	1d.
Each additional 2oz. or fraction thereof	½d.
Newspapers addressed to places in the United Kingdom, irrespective of weight each	1d.
(a) Commercial Papers, 5oz. or under	2½d.
" " each additional 2oz. or under	1d.
(b) Printed Papers (other than Newspapers), for every 2oz. or under	1d.
(c) Patterns and Samples, for every 2oz. or under	1d.
Registration Fee	3d.
Acknowledgment of delivery of a Registered Article	2½d.

132. The following account of the Universal Postal Union has been translated for this work from *L'Almanach de Gotha*, 1891.*

Universal
Postal
Union.

UNIVERSAL POSTAL UNION.

“This Union, established under a treaty entered into at Berne on the 9th October, 1874, and further developed at Postal Conferences held at Berne in 1876 and at Paris in 1880, also at Postal Conferences held at Paris in 1878 and at Lisbon in 1885, has been joined by almost all the civilized countries in the world. Its jurisdiction, which extended at the time of its coming into operation over an area of about 37 millions of square kilometres with upwards of 350 millions of inhabitants, now covers about 87 millions of square kilometres with 915 millions of inhabitants.

“A central office, under the name of ‘*Le Bureau International de L'Union Postale*,’ has been established at Berne, at the joint cost of the countries interested in the Union.

“The following countries have joined the Union:—Europe (the whole), America (the whole), Russia in Asia, Turkey in Asia, Persia, British India (including Hindostan, Burmah, and the postal establishments at Aden, Muscat, and Guadir), Japan, Siam; most of the British, French, Dutch, Portuguese, and Spanish colonies; the British, French, and Japanese postal establishments in China and Corea; Egypt, Algeria, Tripoli, Tunis, and Liberia; the Independent State of Congo; the Azores; Madeira; the Spanish postal establishments at Morocco and in the Spanish possessions in North Africa; the Indian postal establishment at Zanzibar; the German territories

of Togo and South-East Africa; the French postal establishment at Tamatave (Madagascar); Hawaii and the Marshall Islands.

“The number of postal articles received and despatched throughout the extent of the Union in the year 1888 is estimated to have amounted to 14,760 millions, distributed as follows:—Letters, 6,920 millions; postcards, 1,550 millions; newspapers and official documents, written and printed, 5,690 millions; samples, 100 millions; post-office and other orders for remitting money, 240 millions remitting 12,100 million francs (£484,000,000); packets, 260 millions, with and without declarations of value, valued at 13,750 million francs (£550,000,000).”

Ocean mail services.

133. The following information respecting the various lines conveying mails between Australia and Europe has been supplied for this work by Mr. James Smibert, Deputy Postmaster-General of Victoria:—

- (a.) The weekly service conducted, since the 1st February, 1888, by means of alternate fortnightly trips made by vessels of the Peninsular and Oriental and Orient Companies respectively between Adelaide and Italy. These companies are subsidized to the extent of £170,000 per annum, towards which £95,000 is contributed by the Imperial Government, and the balance by Victoria, New South Wales, Queensland, South Australia, Tasmania, and Western Australia according to population, the amount payable by Victoria in 1891-92 being £26,369. The contracts will continue until the 31st January, 1895.
- (b.) The monthly service *via* Torres Straits, carried out between Queensland and Great Britain by the British-India Company, which receives a subsidy of £55,000 per annum from Queensland, but is required—in consideration of the subsidy—to carry immigrants for £16 per head.
- (c.) The monthly service between Sydney and San Francisco, undertaken by the Union Steamship Company of New Zealand, between Sydney and Honolulu, and between Honolulu and San Francisco by a local company. The total subsidy is £37,000 per annum. Of this sum the United States contributes £3,000, and of the balance New Zealand pays two-thirds and New South Wales one-third. (This contract has recently expired, but negotiations are being entered into for a fresh service.)
- (d.) The monthly service carried out by the Messageries Maritimes Company, subsidized by the French Government; the vessels of the company running between Marseilles and New Caledonia by way of the principal Australian ports.
- (e.) In addition to the foregoing, a four-weekly service, subsidized by the German Government, runs between Brindisi and Australia.

Subsidy payable by each colony.

134. The subsidy to the Peninsular and Oriental, and Orient Companies is paid by the different colonies according to the terms of the contract.* All the Australasian colonies now contribute except New Zealand. Fiji joined in contribution from the 1st October, 1890, the proportion paid by it being £47 8s. 8d., which is to be divided amongst the other contributing colonies. Omitting Fiji, the amounts of subsidy payable for the three years ended 31st March, 1892, by each contributing colony are as follow:—

* For an account of the terms of the mail contract, see *Victorian Year-Book*, 1889-90, Vol. II., paragraph 276, *et seq.*

MAIL SUBSIDY PAYABLE BY EACH CONTRIBUTING COLONY,
1889 TO 1892.

Colony.	Amount of Contribution Payable.		
	1889-90.	1890-91.	1891-2.
	£	£	£
Victoria	26,710	26,534	26,369
New South Wales	26,634	26,632	26,679
Queensland	9,460	9,651	9,711
South Australia	7,644	7,575	7,580
Western Australia	1,029	1,037	1,063
Tasmania	3,523	3,571	3,598
	75,000	75,000	75,000

135. The average time and the fastest time occupied in the transmission of letters from Australia to London, and *vice versa*, by means of various routes during 1890, were as follow:—

Time occupied by mail services.

TIME OCCUPIED BY MAILS BETWEEN ENGLAND AND AUSTRALIA,
1890.

Service.	London to Australia.		Australia to London.	
	Average Time.	Quickest Time.	Average Time.	Quickest Time.
	dys. hrs.	dys. hrs.	dys. hrs.	dys. hrs.
Melbourne, <i>via</i> Brindisi and Ceylon (P. and O. steamers)	33 5 $\frac{3}{8}$ $\frac{1}{0}$	30 12 $\frac{1}{12}$	34 19 $\frac{1}{8}$	32 18 $\frac{5}{12}$
Melbourne, <i>via</i> Brindisi or Naples (Orient steamers)	33 15 $\frac{1}{15}$	30 17	34 10 $\frac{1}{30}$	32 3 $\frac{3}{4}$
Melbourne, <i>via</i> Suez (French steamers)	35 0	32 0	33 15 $\frac{1}{2}$	33 1 $\frac{4}{15}$
Sydney, <i>via</i> San Francisco (Pacific steamers)	40 8 $\frac{13}{80}$	39 0	40 0	39 0
Brisbane, <i>via</i> Brindisi and Torres Straits (British-India steamers)	45 13 $\frac{23}{30}$	41 0 $\frac{1}{12}$	...	...

136. It will be remarked that the mails *en route* to Australia were, on the average, delivered in quicker time by the P. and O. than by the Orient steamers; but those *en route* to London were, on the average, delivered in quicker time by the latter than by the former. The quickest time occupied in the conveyance of mails to Melbourne, in 1890, was by a P. and O. steamer, in a fraction more than 30 $\frac{1}{2}$ days, and the quickest time to London was by an Orient steamer in a fraction less than 32 days 4 hours.

Comparative speed of Orient and P. & O. mails.

Time occupied 1889 and 1890 compared.

137. On comparing the times of delivery of Victorian mails by the P. and O. steamers with those in the previous year, it appears that in their conveyance from London the average was longer by 1 minute and to London shorter by 1 day 6 hours in 1890 than in 1889; whilst the average time occupied in the delivery of mails carried by the Orient steamers was shorter between London and Melbourne by over 9 hours, and between Melbourne and London by $35\frac{1}{3}$ hours in 1890 than in 1889.

Time occupied by German mail service.

138. The average time in 1890 occupied in the transit of mails from London to Melbourne by the German line of steamers was 36 days, and the quickest time was 33 days. During the same year the average time of the mails between Melbourne and London was 37 days 12 hours, and the quickest time was 32 days.

Contract time of mail steamers.

139. According to arrangements under the present Australian mail contract the time allowed for conveying letters from Melbourne to London averages 35 days $19\frac{1}{2}$ hours; and the time allowed from London to Melbourne averages 35 days $15\frac{1}{2}$ hours. The following is a statement of the times allowed each way for the two lines of mail steamers :—

TIME ALLOWED FOR MAILS BETWEEN LONDON AND MELBOURNE.

Section.	Time Allowed.			
	Outwards (London towards Melbourne).		Homewards (Melbourne towards London)	
	dys.	hrs.	dys.	hrs.
Between London and Brindisi or Naples	2	$7\frac{3}{4}$	2	$9\frac{1}{2}$
„ Brindisi or Naples and Adelaide	32	0	32	0
„ Adelaide and Melbourne	1	$5\frac{3}{4}$	1	0
Total Orient Steamers	35	$13\frac{1}{2}$	35	$9\frac{1}{2}$
Extra allowance to P. and O. Steamers	0	12	0	12
Total P. and O. Steamers	36	$1\frac{1}{2}$	35	$21\frac{1}{2}$

Cost of Victorian mail services with Italy, 1879 to 1890.

140. A comparison of the cost of the Victorian subsidized mail service with the United Kingdom under the four-weekly contract in existence during 1879; under the fortnightly contract which expired

in January, 1888, during the last two years of its existence, and the cost in the last, two years, under the weekly contract, is shown in the following table:—

**COST TO VICTORIA OF CONTRACT MAIL SERVICES AT
THREE PERIODS.**

Items of Receipt and Payment.	Four-weekly. 1879.	Fortnightly.		Weekly.	
		1886.	1887.	1889.	1890.
PAYMENTS.					
	£	£	£	£	£
Total amount of subsidy	90,000	85,000	85,000	27,595	26,543
Premiums for early arrival of mails	2,050	2,550	2,950	...	...
Cost of landing and shipping mails	242	170	23	156	93
Amount due to Great Britain ... ..	...	105	230	152	187
Transit, Italy and France ... ..	...	...	...	5,308	5,522
„ South Australia ... ..	...	...	...	1,161	1,544
Total	92,292	87,825	88,203	34,372	33,889
RECEIPTS.					
Postages collected in Victoria	15,261	17,893	17,986	32,255	33,912
Amount chargeable to Great Britain	14,741	..	...	} 2,890	2,929
„ „ New South Wales	13,236	16,352	16,793		
„ „ South Australia	18,321	7,290	7,115		
„ „ Tasmania	3,866	3,012	3,377		
„ „ Western Australia	2,336	3,793	4,226		
„ „ Queensland	1,602	5,257	6,410		
„ „ New Zealand	9,094	1,956	1,876		
„ „ Fiji	80	76	82		
„ „ Non-contributing colonies—New contracts ... ..	...	...	...	1,448	253
„ „ France	1,100	...	...	...	...
„ „ Italy ... ..	...	474	515	...	...
Balance on Parcel Post Accounts ... ..	...	...	...	609	686
Total	79,637	56,103	58,380	37,202	37,780
Net Deficit	12,655	31,722	29,823	...	...
„ Surplus ... ..	...	...	...	2,830	3,891

NOTE.—In 1888 Victoria and several of the other colonies became parties to a joint contract; prior to that date Victoria had a separate contract on her own account.

141. The four-weekly service in the last complete year of its existence (1879) cost Victoria somewhat less than £13,000; the fortnightly service cost at first only about £20,000, but eventually about £30,000 per annum. The existing weekly service was in 1889

Diminished cost of contract mail service.

and 1890, it will be observed, not only self-supporting, but carried on at a profit. It is probable, however, that the general reduction in the postal rates to the United Kingdom and other countries outside Australasia already referred to* will have the effect of again creating a deficit, which will continue for some years to come.

Net cost of ocean mail services.

142. The gross cost to Victoria in 1890 of the minor mail services, viz., those *viâ* San Francisco and the Torres Straits, was £6,536, which, added to the cost of the Federal service, £33,889, as shown in the last table, makes a total cost for all the ocean mail services of £40,425.† As a set-off against this, it is estimated that the total amount collected for postages was £39,724,‡ so that the net cost to the colony in 1890 was only £701, as against £2,116 in 1889, £7,532 in 1888, £37,453 in 1887, whilst in 1883, or seven years previously, it was £22,800. The reduced cost in 1889 and 1890 arises from the favourable contracts entered into by the Australasian colonies with the P. and O. and Orient Companies. The net cost for the last two years and for 1887 and 1883 was distributed as follows amongst the various mail services:—

NET COST OF STEAM POSTAL COMMUNICATION WITH EUROPE.

Lines of Steamers.	Net Cost to Victoria.			
	1883.	1887.	1889.	1890.
	£	£	£	£
P. and O. Service } Under joint Australian {	20,256	29,823	Cr. 2,836	Cr. 3,891
Orient „ } subsidy in 1888 {	...	4,457		
San Francisco Service	2,500	3,000	4,916	4,552
Torres Straits „	44	30	36	40
French Service (Messageries Maritimes) ...	...	143	...	...
Total	22,800	37,453	2,116	701

Postal revenue.

143. Since the postage stamp has been made available for payment, not only of postage and the transmission of telegraphic

* See paragraphs 130 and 131 *ante*.

† The cost referred to differs from that shown in the statement following paragraph 146 *post*, viz., £49,722; the one being the amount payable, the other that paid.

‡ The postages referred to were as follow:—Subsidized Service, £37,780; San Francisco Service, £1,944.

messages, but of fees, stamp duty, and any other charges for which payment is required to be made in stamps, it has been found impossible to ascertain the true postal revenue as apart from amounts unconnected with postal business also collected by the Post Office, and the Postal Department express themselves as consequently unable to determine whether the alterations made from time to time in the rates have proved a financial success or otherwise. The following is a statement of the amounts collected by the Post Office during the last two years:—

REVENUE RECEIVED BY THE POST OFFICE, 1889 AND 1890.

Heads of Revenue:	Amount received in—		Increase.	Decrease.
	1889.	1890.		
	£	£	£	£
Stamps on telegrams	127,720	138,969	11,249	...
Parcels Post	7,240	8,238	998	...
Stamps for payment of postage, duties, fees, etc.*	686,724	584,717	...	102,007
Total Stamps	821,684	731,924	...	89,760†
Commission on money orders... ..	13,448	14,263	815	...
Telephone Exchange subscriptions and private wires	31,373	36,808	5,435	...
Grand Total	866,505	782,995	...	83,510†

144. As has been already stated, a reduction in the rate of letter postage within the colony from 2d. to 1d. came into force on the 1st January, 1890. As was to be expected, the increased demand for 1d. stamps has caused a proportionate falling-off in the sale of other stamps, and of post and letter cards, but the fact that the same stamps are used for postage as for duty prevents any certain check being kept on the state of the postal revenue. It was estimated that the falling-off in consequence of the reduced rate of postage would be £96,000 for the first year, but so far as can be judged from the sale of stamps chiefly affected by the reduction the actual falling-off was no more than £79,600, as will be observed by the figures in the following

Stamp revenue affected by reduced postage.

* The amounts in this line are collected by the Post Office, but a considerable proportion of the stamps sold are used for other than postal purposes. Cash collections in the Registrar-General's Department, formerly paid in stamps, are not included. For numbers of stamps issued, see table following paragraph 148 post.

† Net figures.

statement. Notwithstanding the reduction, the amount of correspondence apparently increased by only $8\frac{1}{4}$ per cent. It should be stated that on account of the increased work consequent upon the introduction of the penny post, it was found necessary to add to the Post Office staff 90 persons, at an annual cost of £9,150:—

SALE OF STAMPS AFFECTED BY REDUCTION OF INLAND POSTAGE,
1889 AND 1890.

Denomination of Inland Stamps Sold.	Number Sold in—		Increase (+) or Decrease (—).	
	1889.	1890.	Number.	Per Cent.
Twopenny Stamps ...	26,889,810	3,720,104	— 23,169,706	— 86·17
Penny Stamps ...	25,266,977	56,258,864	+ 30,991,887	+ 122·66
„ Post Cards ...	3,564,054	1,521,120	— 2,042,934	— 57·32
$1\frac{1}{4}$ d., $1\frac{1}{2}$ d., and 2d. Letter Cards	1,216,986	104,778	— 1,112,208	— 91·39
Total ...	56,937,827	61,604,866	+ 4,667,039	+ 8·20
Value £	351,885	272,301	— 79,584	— 22·62

Government
corre-
spondence,
etc.,
trans-
mitted
free.

145. It should be pointed out that no credit is taken by the Post Office for the value of Government correspondence, on which postage is not charged. In 1890 the value of Government telegrams transmitted was £5,891; and the amount which would have been derived from official correspondence, if charged for, was some years ago estimated at about £60,000. This information has not been furnished for any late year.

Postal ex-
penditure.

146. In 1890 the total ordinary expenditure of the Post and Telegraph Department amounted to £626,984,* whilst the capital expenditure—which, however, is known to be understated—during the same year amounted to £109,759, which includes cost of extension of the General Post Office, Melbourne, etc. The ordinary expenditure, which shows an increase of about £44,000 over the corresponding amount in the previous year, includes all the annual charges—paid either by the Postal Department itself or by other Government Departments—in connexion with the maintenance of the postal and telegraphic services, with the exception of rent, or interest on capital expended on buildings. The ordinary and the capital expenditure in 1889 and 1890 were made up of the following items:—

* For estimated proportion of expenditure on account of the telegraph branch only, see paragraph 165 *post*.

EXPENDITURE IN CONNEXION WITH POST AND TELEGRAPHS,
1889 AND 1890.

Heads of Expenditure.	1889.	1890.	Increase.	Decrease.
ORDINARY.	£	£	£	£
Salaries and wages	277,593	302,158	24,565	...
Contingencies	116,962	121,312	4,350	...
Mail service, inland	115,100	123,912	8,812	...
" " British and foreign ...	43,141	49,722	6,581	...
Gratuities to masters of vessels ...	4,316	1,857	...	2,459
Duplicate cable subsidy	12,897	13,885	988	...
Cost of printing, books, forms, stamps, etc.*	12,901	14,138	1,237	...
Total	582,910	626,984	44,074†	...
CAPITAL.				
Telegraph lines‡	25,842	24,938	...	904
Erection and extension of offices § ...	88,969	84,821	...	4,148
Total	114,811	109,759	...	5,052
Grand Total	697,721	736,743	39,022†	...

147. The amount paid by the Postal Department in 1890 for the conveyance of Inland Mails was £123,912, of which £55,548 was paid to the Victorian Railways. The number of miles travelled with mails during the year was 4,334,691 by road, and 4,476,513 by rail, or 8,811,204 in all. Whence it follows that the average cost per mile of conveying mails by road was a little over 3 $\frac{3}{4}$ d., and by rail not quite 3d., the average being nearly 3 $\frac{1}{2}$ d. Moreover, if the total cost be compared with the whole number of inland letters, post cards, newspapers, and packets, it will be found that the average cost of transmitting each such item of correspondence was nearly two-fifths of a penny (.39d.). The total length of the inland mail service is about 19,040 miles, of which 383 miles is the length of new services opened in 1890. Cost of inland mail service.

148. Since the 1st January, 1884, only one kind of stamp has been used for the payment of postage, fees, and duty, also—since the 1st July, 1884—for telegrams. An accurate account is kept of the value of paid telegrams transmitted; but in other respects it is impossible to say what proportion is actually used for each of the other purposes indicated. || The following are the numbers and Stamps issued.

* Figures furnished by the Government printer.

† Net figures.

‡ Chiefly cost of construction, but repairs also included.

§ Expenditure defrayed by Public Works Department. The amount is incomplete, as the Post Offices often form part of buildings erected for general public purposes.

|| See also paragraph 143 *ante*.

nominal values of postal and duty stamps issued from the General Post Office, in the last two years :—

STAMPS ISSUED, 1889 AND 1890.

Description.	Number.		Nominal Value.	
	1889.	1890.	1889.	1890.
Adhesive	72,952,300	79,872,828	£ 764,251	£ 703,261
Impressed on Cheques and Receipts	10,383,160	10,838,712	43,263	45,161
Impressed on Bills of Exchange, Promissory Notes, Transfers of Freeholds, Conveyances, Mortgages, Drafts, etc.	430,168	154,760	39,299	16,350
Total	83,765,628	90,866,300	846,813	764,772

NOTE.—This table contains a statement of the stamps *issued* in the last two years, which differ considerably from the stamps *sold*. The value of the latter was £821,684 in 1889, and £731,924 in 1890. See table following paragraph 143 *ante*.

Commission on sale of stamps.

149. The value of commission paid in stamps to bank managers and licensed vendors of duty stamps (or those they replace) was £10,537 in 1889, and £8,984 in 1890; and that to licensed vendors of freight stamps was £336 in 1889, and £382 in 1890. The total value of commission paid on the sale of stamps was thus £10,873 in 1889, and £9,366 in 1890.

Postal staff.

150. The following are the numbers of male and female officers employed under the Postal Department in 1890. The figures do not include mail contractors, etc. :—

POST OFFICE STAFF, 1890.

Males	2,491
Females	368
Total	2,859

Money orders.

151. Money order offices in Victoria in connection with the Post Office had been established in 421 places up to the end of 1890. Besides the issue and payment of money orders at these places, such orders are issued in favour of Victoria, and Victorian orders are paid not only in Great Britain and Ireland, and the various Australasian colonies, but in most of the other principal countries of the world. The following is a comparative statement of the business in the last two years :—

MONEY ORDERS,* 1889 AND 1890.

Year.	Number of Money Order Offices.	Money Orders Issued.		Money Orders Paid.	
		Number.	Amount.	Number.	Amount.
1889 ...	390	251,245	£ 780,590	226,279	£ 705,653
1890 ...	421	251,267	778,313	229,745	720,189
Increase ...	31	22	...	3,466	14,536
Decrease ...	...	...	2,277	...	...

152. The commission on money orders for sums not exceeding £5 is sixpence to places in Victoria, and one shilling to places in the other Australasian colonies; whilst an extra 6d. and 1s. respectively are charged for every additional £5 up to £20. To the United Kingdom and most other countries outside of Australasia, the scale is as follows:—Not exceeding £2, one shilling; from £2 to £5, two shillings and sixpence; from £5 to £7, three shillings and sixpence; from £7 to £10, five shillings. Money orders may be made payable by telegraph either in the colony or to any of the other Australasian colonies (except New Zealand) on payment, in addition to the above rates, for a message of ten† words. Money orders are granted for sums not exceeding £20 to any of the Australasian colonies, China, India, or the United States, and for sums not exceeding £10 to other countries.

Rates of commission on money orders.

153. The number and value of money orders issued in favour of the United Kingdom have always been much greater than the number and value of those received therefrom; but the reverse has been the case with orders between Victoria and the neighbouring colonies. The net amount remitted to the United Kingdom by this means in 1890 was more than two-thirds as large again as in 1880, and a third as large again as in 1885; but the net amount received from the neighbouring colonies has fallen off to little more than a third of the amount received in the two earlier periods. The following table shows the net transactions with the United Kingdom and the neighbouring colonies during 1890 and the first year of the two previous quinquennia:—

Money remitted to United Kingdom and from neighbouring colonies.

* Exclusive of postal notes, for which see paragraphs 160 and 161 *post*.

† Six words in the case of Victoria.

MONEY ORDERS.—NET TRANSACTIONS WITH UNITED KINGDOM AND NEIGHBOURING COLONIES, 1880, 1885, AND 1890.

Year.	Money Orders sent to, in excess of those received from, the United Kingdom.		Money Orders received from, in excess of those sent to, the Neighbouring Colonies.	
	Number.	Amount.	Number.	Amount.
		£		£
1880	14,297	45,711	28,692	108,629
1885	18,202	60,826	28,640	98,669
1890	24,471	78,288	8,245	37,791

Money orders in New South Wales.

154. In New South Wales the money orders issued in 1890 numbered 442,425, and were of a total value of £1,252,305; those paid numbered 441,845, and were of a total value of £1,193,954. Comparing these figures with those of Victoria, it appears that in the same year the money orders issued and paid in New South Wales exceeded those in this colony by 84 per cent. in number, and by 63 per cent. in value. It should be pointed out, however, that if, in Victoria, postal notes were included with money orders, the number would be nearly trebled, and the value increased by 22 per cent.

Average value of money orders.

155. The average value of money orders (exclusive of postal notes) issued in Victoria was £3 2s. 2d. in 1889, and £3 1s. 11d. in 1890. The average value of those issued in New South Wales was £2 18s. 1d. in 1889, and £2 16s. 7d. in 1890, the latter being 5s. 4d. below the average value of those in Victoria during the same year.

Proposed rates for inter-colonial orders.

156. According to the Postal Convention adopted by the Inter-colonial Postal and Telegraph Conference, held in Sydney in March, 1891, it was agreed that the following should be the rates of commission chargeable on intercolonial money orders:—Not exceeding £2, 6d.; £5, 1s.; £7, 1s. 6d.; £10, 2s.; £12, 2s. 6d.; £15, 3s.; £17, 3s. 6d.; £20, 4s.

Money orders in United Kingdom.

157. The money orders issued in each division of the United Kingdom in 1889 were of the following number and amount:—

MONEY ORDERS* IN THE UNITED KINGDOM, 1889.

Country.	Money Orders Issued.	
	Number.	Amount.
		£
England and Wales	7,395,352	19,548,374
Scotland	1,068,457	2,501,572
Ireland	563,941	1,283,471
Total United Kingdom ...	9,027,750	23,333,417

* Exclusive of money orders issued in the United Kingdom for payment abroad, which numbered 363,825, of the value of £998,975.

158. The average value of each money order issued during 1889 in England was £2 12s. 10d., in Scotland £2 6s. 10d., and in Ireland £2 5s. 6d., or in the United Kingdom £2 11s. 8d. By reference to a previous paragraph,* it will be found that during 1889 the average value of money orders issued exceeded by 10s. 6d. in Victoria, and by 7s. 8d. in New South Wales, the average value of those issued in the United Kingdom.

Average value of money orders in United Kingdom.

159. To every 100 of the population nearly 23 money orders were issued in Victoria during 1890, which proportion differs but little from that in the previous year. To every 100 of the population, 40 money orders were issued in New South Wales in 1890; whilst, in 1889, 25 were issued in England, 26 in Scotland, and 12 in Ireland.

Proportion of money orders to population.

160. Postal notes were first issued in Victoria on the 1st January, 1885. These notes are for various amounts, £1 being the maximum, and their denominations have been so arranged that any sum of shillings and sixpences up to £1 may be remitted by not more than two notes. Should it be desired to add thereto broken sums of pence, uncanceled stamps to the value of 5d. may be affixed to the back of a note, in which case the amount of the note and stamps will be paid. The notes, if left blank as issued by the Department, are payable to bearer at any money order office in Victoria; but if the sender or holder so desire, he can make them payable to any person named, at any such office, by inserting the particulars in space reserved for the purpose on the face of the notes. The poundage or price charged is $\frac{1}{2}$ d. for notes of the value of 1s. or 1s. 6d.; 1d. for notes from 2s. to 4s. 6d. in value; 2d. for notes of 5s. or 7s. 6d. in value; and 3d. for notes from 10s. to 20s. in value. As the charge is 6d. for money orders under £5, it may be expected that such orders will be supplanted by postal notes so far as remittances up to £2 are concerned. Moreover, Victorian postal notes are payable at all money order offices in South Australia and Tasmania, and postal notes issued in the latter colonies are payable in Victoria, a further charge being paid by the payee, equal to the commission first paid. The total number of notes paid in 1890 (including intercolonial notes) was 413,173, valued at £171,230; showing an increase of about 97,000 in the number and £36,900 in the value, or of nearly one-third as compared with 1889.† The following were the numbers and amounts of Victorian and intercolonial notes paid in the last two years:—

Postal notes.

* See paragraph 155 *ante*.

† It should be pointed out that, if postal notes were reckoned in the same manner as money orders, the numbers in 1890 would be:—Notes issued—number 401,197, value £167,263; notes paid—number 407,298, value £168,406.

POSTAL NOTES, 1889 AND 1890.

Where Issued or Paid.	Number.		Value.	
	1889.	1890.	1889.	1890.
Victorian Notes paid in Victoria ...	307,149	395,322	£ 130,709	£ 164,439
" " " other Colonies	3,528	5,875	1,778	2,824
Intercolonial Notes paid in Victoria...	5,491	11,976	1,831	3,967
Total ...	316,168	413,173	134,318	171,230

Denomina-
tions of
postal
notes.

161. The following are the denominations, numbers, and nominal values of *Victorian* postal notes paid during the year 1890 :—

VICTORIAN POSTAL NOTES PAID, 1890.

Denomination.		Number.	Nominal Value.		
<i>s.</i>	<i>d.</i>		£	<i>s.</i>	<i>d.</i>
1	0	13,704	685	4	0
1	6	8,828	662	2	0
2	0	19,691	1,969	2	0
2	6	23,050	2,881	5	0
3	0	29,232	4,384	16	0
3	6	17,959	3,142	16	6
4	0	31,302	6,260	8	0
4	6	17,704	3,983	8	0
5	0	50,376	12,594	0	0
7	6	21,093	7,909	17	6
10	0	64,486	32,243	0	0
10	6	13,146	6,901	13	0
15	0	27,923	20,942	5	0
20	0	62,703	62,703	0	0
Total	...	401,197	167,262	17	0

NOTE.—Including 5,875 notes, valued at £2,824, paid in South Australia and Tasmania.

Electric
telegraphs.

162. Telegraphic communication exists in Victoria between 748 stations (including 404 railway telegraph stations) within her borders. Her lines are connected besides with the lines of New South Wales, and, by means of them, with Queensland and New Zealand; also with the lines of South Australia, and, by their means, with Western Australia, the Eastern Archipelago, Asia, Europe, and America; also with a submarine cable to Tasmania. About one-third of the line and one-third of the wire are worked in connexion with the Government railways, but are available for the use of the public; the remainder are under the postal and telegraph department. In 1890, as compared with the previous year, the number of stations increased by 92, and the miles of wire in operation by 619. The following are the particulars for the two years :—

ELECTRIC TELEGRAPHS, 1889 AND 1890.

Under the control of	Number of Stations.	Miles Open.	
		Line (poles).	Wire.
Postal Department ...	344	4,000	8,720
Railway Department ...	404	2,958	4,779*
Total, 1890 ...	748	6,958	13,499
„ 1889 ...	656	6,436	12,880
Increase ...	92	522	619

NOTE.—In previous editions of this work, the length of railway telegraphs was not taken into account, although the business done was included in the returns. Telephone lines are not included.

163. The number of telegrams transmitted in 1890 exceeded 3,100,000, at a cost to senders of about £207,200. As compared with the previous year, the former increased by over 229,000, or by nearly 8 per cent., and the latter by about £7,400, or by over 3½ per cent. Of the total number of messages, nearly five-sixths were inland telegrams, and rather more than one-eighth were to the neighbouring colonies. The returns for the two years are shown in the following table:—

Telegrams and cost to senders, 1889 and 1890.

TELEGRAMS AND COST TO SENDERS, 1889 AND 1890.

Whence Transmitted.	Number of Telegrams Transmitted.		Increase+ Decrease—	Cost to Senders.		Increase+ Decrease—
	1889.	1890.		1889.	1890.	
Paid—Inland	2,366,930	2,594,565	+ 227,635	£ 81,669	£ 88,467	+ 6,798
„ To neighbouring colonies	404,657	427,019	+ 22,362	49,188	52,875	+ 3,687
„ To Europe and East	11,164	11,308	+ 144	60,596	59,946	— 650
Unpaid—O.H.M. Service	103,168	81,891	— 21,277	8,327	5,891	— 2,436
Total ...	2,885,919	3,114,783	+ 228,864†	199,780	207,179	+ 7,399†

164. The actual revenue derived from telegrams in 1890 exceeded that in 1889 by £11,249, the amounts in the two years being as follow:—

Telegraph revenue.

* Of this extent, 3,879 miles is available for use of the public.

† Net figures.

TELEGRAPH REVENUE, 1889 AND 1890.

1889	...	...	...	...	£127,720
1890	...	...	...	...	138,969
				Increase ...	£11,249

Telegraph revenue and expenditure compared.

165. For the financial year ended 30th June, 1890, it was estimated by the postal authorities that the sum which should be fairly charged to the Telegraph Branch of the Department, exclusive of the cost of construction of telegraph lines, the cable subsidies, and the interest on the capital cost of works and buildings, was £184,923. Deducting from this amount the revenue for the year, viz., £131,013, a net deficiency is shown of £53,910.* This deficiency would be increased to £68,465 if the amount paid on account of cable subsidies were added.

Telegraph charges in Victoria.

166. The charge upon telegraphic messages to places in Victoria is 6d. for six words or less, and 1d. for each extra word; to places in New South Wales, 1s. for ten words, and 2d. for each extra word; to places in South Australia and Tasmania, 2s. for ten words, and 2d. for each extra word; to places in Queensland and Western Australia, 3s. for ten words, and 3d. for each extra word; to places in New Zealand, 10s. for ten words, and 1s. 1d. for each extra word. The charge for telegrams to places in the United Kingdom and Europe was reduced on the 1st May, 1891, from 9s. 4d. to 4s. 1d. for each word. In the case of telegrams to places on the Australian Continent, names and addresses are not charged for; to places in Tasmania they are not charged for unless they exceed ten words, but all words above that number are charged for as part of the message. In the case of telegrams to New Zealand, the United Kingdom, India, and other countries, the names and addresses of both sender and receiver are charged for as part of the message. The Intercolonial Postal and Telegraph Conference, held in Sydney in 1891, recommended an amended scale of charges for intercolonial telegrams, but this has not yet been approved by the Parliaments of the respective colonies.

Course of a telegram to London.

167. The course of a telegram along the 13,695 miles of wire over which it travels between Melbourne and London is shown in the following table. It will be observed that the length of the portion in Australia is 2,704 miles, or about a fifth of the whole distance:—

* See Report of the Post Office and Telegraph Department for 1890, page 38.

AUSTRALIAN AND EUROPEAN TELEGRAMS—COURSE BETWEEN
MELBOURNE AND LONDON.

Points of Connexion and Repetition.	Number of Miles of—		
	Cable.	Land Line.	Total.
Melbourne—Mount Gambier ... ..	...	300	300
Mount Gambier—Adelaide ... ..	...	270	270
Adelaide—Port Augusta... ..	...	200	200
Port Augusta—Alice Springs ... ..	...	1,036	1,036
Alice Springs—Port Darwin ... ..	...	898	898
*Port Darwin—Banjoewangie	1,150	...	1,150
Banjoewangie—Batavia ... ..	...	480	480
Batavia—Singapore	553	...	553
Singapore—Penang	399	...	399
Penang—Madras	1,280	...	1,280
Madras—Bombay ... ..	...	650	650
Bombay—Aden	1,662	...	1,662
Aden—Suez	1,346	...	1,346
Suez—Alexandria ... ..	...	224	224
Alexandria—Malta	828	...	828
Malta—Gibraltar	1,008	...	1,008
Gibraltar—Falmouth	1,061	...	1,061
Falmouth—London ... ..	...	350	350
Total	9,287	4,408	13,695

168. The following table shows the number of miles of electric telegraph open, with their proportion to area and population, in each of the Australasian colonies at the end of 1890 :—

Telegraphs
in Austral-
asian
colonies.

ELECTRIC TELEGRAPHS IN AUSTRALASIAN COLONIES, 1890.

Colony.	Number of Miles of Telegraph Open.		Miles of Line.	
	Line.	Wire.	Per 1,000 Square Miles.	Per 100,000 Inhabitants.
Victoria	6,958	13,499	79·2	614
New South Wales†	11,231	25,880	36·3	1,001
Queensland	9,830	17,437	14·7	2,514
South Australia	5,526	10,208	6·1	1,732
Western Australia	2,921	3,469	3·0	5,878
Total	36,466	70,493	12·0	1,210
Tasmania‡	2,104	3,060	79·7	1,448
New Zealand§... ..	5,060	12,771	48·5	809
Grand Total	43,630	86,324	14·2	1,153

NOTE.—Including railway telegraphs—for the first time in the case of Victoria—in all the colonies except New Zealand; but telephone lines and wire are excluded, except in the case of New South Wales.

* As an alternative line to that between Port Darwin and Banjoewangie, a cable has recently been successfully laid between the latter and Roebuck Bay in Western Australia.

† Including telephone lines and wire.

‡ Including 359 miles of submarine cable.

§ Including 202 miles of submarine cable. Railway telegraphs not included.

Order of colonies in respect to length of telegraphs.

169. The following is the order in which the respective colonies stood at the end of 1890 in regard to the number of miles of electric telegraph line open in each:—

ORDER OF COLONIES IN REFERENCE TO LENGTH OF TELEGRAPH LINE OPEN, 1890.

1. New South Wales.	4. South Australia.	6. Western Australia.
2. Queensland.	5. New Zealand.	7. Tasmania.
3. Victoria.		

Order of colonies in respect to ratio of telegraphs to area and population.

170. In proportion to area, Victoria had, in 1890, about the same extent of telegraph line as Tasmania, but a larger extent than any other colony; but in proportion to population, Victoria was at the bottom of the list. The order of the colonies in regard to the proportion of telegraph line to area is almost the reverse of that to population, as will be observed by the following lists:—

ORDER OF COLONIES IN REFERENCE TO RATIO OF TELEGRAPH LINE TO AREA AND POPULATION, 1890.

Proportion to Area.	Proportion to Population.
1. Tasmania.	1. Western Australia.
2. Victoria.	2. Queensland.
3. New Zealand.	3. South Australia.
4. New South Wales.	4. Tasmania.
5. Queensland.	5. New South Wales.
6. South Australia.	6. New Zealand.
7. Western Australia.	7. Victoria.

Telephone wire in Australasian colonies.

171. In addition to the telegraph wire, the following lengths of telephone wire were in use in 1890 in the five colonies named:—Victoria 7,898 miles, New Zealand 2,036 miles, South Australia 1,970 miles, Western Australia 517 miles, and Tasmania 382 miles. In New South Wales telephone is not distinguished from telegraph wire, whilst in Queensland there were (in 1889) 634 telephones in use. The Telephone Exchanges in Victoria had 2,307 subscribers.

Messages in Australasian colonies.

172. From the following figures, which show the extent to which electric telegraphy is made use of in the different colonies, it would appear that in 1890 most messages were transmitted* in New South Wales, the next largest number in Victoria, and the next in New Zealand:—

TELEGRAPHIC MESSAGES* IN AUSTRALASIAN COLONIES, 1890.

	Number of Messages Transmitted.		Number of Messages Transmitted.
New South Wales ...	3,592,519	South Australia ...	1,005,119*
Victoria ...	3,114,783	Tasmania ...	353,548
New Zealand ...	1,961,161	Western Australia	177,364
Queensland ...	1,197,620	Total ...	11,402,114

* Exclusive of messages received from other colonies or countries. The figures for South Australia include only her own proportion of the international traffic; which, if included, would increase the number of messages for that colony to 1,061,756—the messages passing through the colony in both directions being taken into account.

173. The proportion of telegrams per head of population was much larger in every one of the Australasian colonies than in any of the countries shown in the following list:—

Telegrams per head in various countries.

TELEGRAMS PER HEAD IN VARIOUS COUNTRIES.

Western Australia	...	3·7	Norway	...	...	...	·7
New South Wales	..	3·3	Denmark	...	...	...	·7
South Australia	...	3·2	France	...	...	...	·7
New Zealand	...	3·2	Germany	...	...	...	·5
Queensland...	...	3·1	Sweden	...	...	...	·4
Victoria	...	2·8	Portugal (1880)	...	...	...	·4
Tasmania	...	2·5	Austria (Proper)	...	...	...	·4
United Kingdom	...	1·6	Italy	...	...	...	·3
Belgium	...	1·3	Hungary	...	...	...	·3
Switzerland	...	1·1	Spain	...	...	...	·2
Holland	...	·9	Russia	...	...	...	·1
United States	...	·8					

NOTE.—Figures for the Australasian colonies relate to the year 1890; those for the other countries to the period 1887-9. The latter were taken from the *Statesman's Year Book*, 1891.

174. According to returns presented to the Intercolonial Postal and Telegraph Conference of 1891, the following was the cost of construction of telegraphs in the colonies named, also the revenue derived therefrom. As, however, few, if any, of the colonies keep a regular capital account, and the postal and telegraph departments are generally carried on in the same buildings and under the same management, it is probable the cost is based in part on estimates, and cannot implicitly be relied on. The cost of buildings and instruments is, moreover, probably not included in the amount, except in the case of South Australia:—

Cost of construction and revenue of Australasian telegraphs.

COST OF CONSTRUCTION AND REVENUE OF TELEGRAPHS IN THE AUSTRALASIAN COLONIES, 1890.

Colonies.	Miles Open.		Cost of Construction.		Revenue.	
	Line.	Wire.	Total.	Average per Mile of Line.	Total.	Average per Mile of Wire.
			£	£	£	£
Victoria ...	3,967	8,241	345,297*	87	138,969	16·9
New South Wales	11,231	23,698	743,698	66	178,735	7·6
South Australia ..	5,623	12,178	966,440†	172	67,132	5·5
Tasmania	1,283	1,909	53,555	42	15,884	8·3
New Zealand ...	5,060	12,771	578,154	114	89,508†	7·0

NOTE.—The above figures relate solely to lines under the control of the Postal and Telegraph Departments, and are therefore exclusive of those managed by the Railway Departments. Telephone line and wire are not included in the figures for Victoria or New Zealand, but are included in those of the other colonies. The calculations were made in the office of the Government Statist of Victoria.

* Exclusive of buildings.

† Inclusive of buildings.

‡ Exclusive of the value of Government telegrams, £26,071. The expenditure in New Zealand was £94,822.

Telegrams
to and
from
Europe
and other
countries.

175. During 1890 the number of telegrams which passed from Victoria to countries outside Australasia was 10,500, at a cost to senders of £59,946; and the number received from such countries was 11,649, at a cost to senders of £57,706. Taking the Australasian colonies as a whole, the number of foreign telegrams transmitted was 32,737, at a cost to senders of £165,488; and the number received was 34,329, at a cost of £165,979. Comparing 1890 with the previous year, the number of foreign telegrams transmitted increased by 5 per cent., and the number received by 8 per cent.; the value of the former, however, increased by only $1\frac{1}{4}$ per cent., and that of the latter by only 3 per cent. The following are the numbers transmitted from and received in each colony in 1890, the increase in that year being also shown:—

TELEGRAMS BETWEEN AUSTRALASIAN COLONIES AND OTHER COUNTRIES, 1890.

Colony.	Transmitted.		Received.	
	Number of Messages.	Cost to Senders.	Number of Messages.	Cost to Senders.
Victoria ...	10,500	£ 59,946	11,649	£ 57,706
New South Wales ...	9,752	47,792	8,654	39,957
Queensland ...	2,824	14,788	2,220	9,953
South Australia ...	3,903	15,167	6,526	33,238
Western Australia ...	867	2,734	607	2,265
Tasmania ...	475	1,992	416	1,717
New Zealand ...	4,416	23,069	4,257	21,143
Total 1890 ...	32,737	165,488	34,329	165,979
„ 1889 ...	31,133	163,423	31,776	161,214
Increase ...	1,604	2,065	2,553	4,765

Reduced
cable rates
to Europe,
etc.

176. In accordance with an agreement entered into with the Eastern Extension, Australasia, and China Telegraph Co. Limited, the charge for ordinary telegrams from Australia to Europe was reduced on the 1st May, 1891, from 9s. 4d. to 4s.* per word, similar reductions being made to other countries. The receipts under the former rate were distributed amongst the various countries and companies as follow:—South Australia 1s. 2d., Java $1\frac{1}{2}$ d., India $7\frac{1}{2}$ d., Europe 2d., Cis-Indian Administration† 2s. 9d., Eastern Extension Co. 4s. 6d., total 9s. 4d.; but the reduced rate is to be divided thus:—South Australia 5d., Java $1\frac{1}{2}$ d., India $3\frac{1}{2}$ d., Europe 2d., Cis-Indian Administration 2s. 7d., Eastern Extension Co. 5d.; total 4s.* It was also stipulated that one moiety of the deficiency,

* This is the rate to South or Western Australia. The inland rates of other colonies through which the telegram passes to be added.

† Consisting of Indo-European Telegraphic Department (of H.M. Indian Government), the Eastern Telegraph Co. Ltd., and Indo-European Telegraph Co. Ltd.

arising from the reduction, in the joint revenue of the Cis-Indian Administration and the Eastern Extension Company below that of 1889 (after deducting payments to other Administrations), should be paid by the contracting colonies, which embrace all those on the Australian continent (excepting Queensland) and Tasmania. Thus, the joint revenue in 1889 being £237,736, the amount receivable at the reduced rate would be £105,926 (assuming there was no increase of traffic), leaving a deficiency of £131,810, of which £65,905 would be borne by the companies, and £65,905 by the five colonies referred to in proportion to population. If, however, traffic increased by say 55 per cent., the deficiency would amount to only £73,550, and the Australian subsidy to only £36,775. It has also been agreed amongst the contracting colonies that any deficiency in the revenue of South Australia arising from the reduction in the rate over her lines from 1s. 2d. to 5d. shall be defrayed by the contracting colonies in proportion to their populations. This deficiency, without any increase of traffic, would amount to about £22,200, but with an increase of 55 per cent. to about £13,200. Judging from the large increase in the traffic during the 15 years ended with 1889 under the higher rates, it is expected that it will be still more rapid under the reduced rates, and that in less than 5 years* the Australian liability will cease. From figures published in the Appendices to the Report of the Victorian Post Office and Telegraph Department for 1890, it appears that the number of words transmitted and received on account of the Australasian international traffic was 235,160 in 1875, 353,348 in 1880, 537,355 in 1885, and 788,657 in 1889. If, however, this experiment should not prove a success, the agreement with the Eastern Extension Co. may be determined after due notice by either side at the expiration of the first or any subsequent year.

177. Comparing the returns for the Australasian colonies, which have recently come to hand, for the first four months under the new rates (*i.e.*, four months ended August, 1891) with those for the corresponding period of 1889, it appears that the messages increased from 20,166 to 27,264, or 35 per cent.; and the words from 256,727 to 394,982, or 54 per cent.; whilst the gross receipts fell off from £104,364 to £82,299, or by 21 per cent. In the Victorian business alone there was an increase of 42 per cent. in regard to the number of telegrams, or of 67 per cent. in regard to the number of words—the former having increased from 6,747 in the four months of 1889 to 9,583 in the corresponding period of 1891, and the latter from 94,261 to 156,756.

Messages,
words, and
receipts,
1889 and
1891.

* Judging from the actual experience, it will probably be considerably less than this. See next paragraph.

Telegraph
subsidies.

178. Including the subsidies just referred to, the following are the particulars of telegraph subsidies payable annually by Victoria:—

TELEGRAPH SUBSIDIES PAYABLE BY VICTORIA.

	£
Towards duplicate telegraph cable (Port Darwin to Penang) ...	13,200
To Eastern Extension Co. on account of reduced cable rates—Proportion payable by Victoria, based on actual returns of first four months' experience (54 per cent.)	12,810
To South Australia, do.	5,165
Total	£31,175

Telegraphs
in British
dominions.

179. The lengths of telegraph line open and number of messages transmitted in the United Kingdom and such British possessions as the information is available for are as follow, according to the latest information:—

ELECTRIC TELEGRAPHS IN BRITISH DOMINIONS, 1889
(Exclusive of Telephones).

Country or Colony.	Number of Miles of Telegraph Open.		Number of Messages Annually (000's omitted).
	Line.	Wire.	
United Kingdom	31,440	...	62,368,
Australasia (1890)	43,630	86,324	12,347,
Bermuda	32*	...	...
British Guiana	260*	...	...
British Bechuanaland ..	290	...	...
Canada	29,239*	62,020	5,033,
Cape of Good Hope	4,510	...	1,376,
Ceylon	734	...	...
Cyprus	240	...	...
Gold Coast	175	...	...
Gibraltar	3	...	...
India	33,462*	99,654	3,011,
Malta	65	...	...
Mauritius	122	...	...
Natal	535	...	...
Newfoundland	1,080	...	...
Protected Malay States ...	299	...	...
Straits Settlements	247	...	...
St. Helena	13	...	...
West Indies—			
Antigua	30	...	...
Grenada	40	...	...
Jamaica	608	...	87,
Trinidad	63	...	...
Zululand	30	...	...

NOTE.—The following particulars relate to telephone lines which are not included in the table:—United Kingdom, 28 exchanges with 1,370 subscribers; Bermuda, 300 miles; Canada, 17,500 miles; British Guiana, 145; Mauritius, telephone exchange with 64 subscribers; Straits Settlements, 235 miles; Barbados, 58 miles (but no telegraph lines); Jamaica, 87 miles; Trinidad, 600 miles; Australasia, about 13,000 miles.

* Excluding cable, viz., 15 miles in Bermuda, 12 in British Guiana, 215 in Canada, and 230 miles in India.

180. The following are the lengths of electric telegraph lines and wire open, and the number of messages sent, in some of the principal Foreign countries, according to the latest returns. The information, where possible, has been drawn from official sources:—

Telegraphs
in Foreign
countries.

ELECTRIC TELEGRAPHS IN FOREIGN COUNTRIES.

Country.	Year.	Number of Miles of Telegraph Open.		Number of Messages Annually (000's omitted).
		Line.	Wire.	
Algeria	1889	7,000	16,000	...
Argentine Confederation	1888-90	19,000	28,550	3,511,*
Austria-Hungary	1890	38,223	112,100	10,347,†
Belgium	1889	4,013	19,139	5,172,
Bolivia	1889	180	290	16,‡
Bosnia	1883	1,730	2,995	297,
Brazil	1889	6,700	11,460	568,
Bulgaria	1889	2,733	4,100	621,§
Chile	1889	13,040	18,500	603,
Cochin-China... ..	1888	1,810	...	...
Columbia	1888	3,000	3,500	...
Costa Rica	1889	600	700	113,§
Cuba	1889	2,795	5,400	...
Denmark	1889	2,748	7,514	1,494,
Egypt	1888	3,172	5,423	667,
France	1888	65,104	240,978	22,341,
Germany	1888-9	58,048	206,209	24,090,
Greece	1889	4,347	5,044	955,
Guatemala	1889	2,219	4,200	457,§
Hawaii	1890	250	890	...
Holland	1889	3,186	11,176	4,118,
Honduras	1889	1,840	2,680	...
Italy	1890	22,186	74,820	9,178,*
Japan	1889	6,581	18,593	2,767,§
Java	1885	5,746	...	378,
Luxemburg	1890	1,650	1,942	...
Mexico	1890	28,750	49,000	...
Nicaragua	1889	1,710	2,220	...
Orange Free State	1890	1,240	2,400	...
Paraguay	1888	95	190	32,†
Persia	1887-90	3,824	6,124	76,§
Peru	1888	2,700	5,200	...
Portugal	1889	3,210	7,468	1,730,
Roumania	1889	3,317	8,238	1,328,
Russia	1890	88,280	172,360	10,477,†
Servia	1889	1,806	3,068	471,§
Spain	1888	14,710	33,552	3,652,‡
Sweden	1889	5,388	13,991	1,709,
Norway	1890	5,638	10,274	1,246,§
Switzerland	1890	4,418	10,868	3,612,
Transvaal	1890	1,250	2,500	...
Turkey	1890	15,000	28,000	...
United States	1890	254,110	807,589	54,108,
Uruguay	1888	2,679	5,300	148,
Venezuela	1888	2,982	5,800	409,

* Figures for 1889.

† Figures for 1887.

‡ Figures for 1886.

§ Figures for 1888.

Telegraphs
in each
continent.

181. In *L'Almanach de Gotha*, 1887,* the number of miles of telegraph and the number of messages in each of the great continents of the world are set down as follow. To these the figures for the Australasian colonies in 1890 have been added:—

ELECTRIC TELEGRAPHS IN EACH CONTINENT.

Continent.	Miles of Line.	Messages (000's omitted).
Australasia	43,630	12,347,
Europe	326,709	138,634,
Asia	42,148	5,029,
Africa	17,981	1,221,
America	245,215	50,212,
Cables	103,096	...
The World	778,779	207,443,

Telegraphs
of the
world.

182. According to Mr. McCarty† (with a correction of the figures for Australasia), the length of telegraph lines in 1889-90 throughout the principal countries of the world was 857,831 miles, and that of telegraph wire was 2,436,827 miles. It will be observed that the former exceeds the total length of line given in the table by 79,000 miles.

Telephones.

183. Including aerial and underground cables, there were 1,121 miles of telephone line and 7,898 miles of telephone wire in the colony at the end of 1890. Some of these lines, however, are exclusively used by the Railway Department and are not available for public use, the wires being, where possible, carried on the same poles as telegraph wires. The telephone wires erected by the Postal Department are carried along 395 miles of special poles, and are for the most part connected with the Telephone Exchanges. The length of lines and wire, and number of instruments in use, under the control of each Department are shown in the following table:—

TELEPHONES, 1890.

Under the control of	Miles open.		Sets of Telephones in use.
	Line (poles and cable).	Wire.	
Postal Department ...	471	7,104	3,629
Railway Department ...	650	794	670
Total ...	1,121	7,898	4,299

* Page 1,061. The lengths have been reduced from kilomètres to miles, on the assumption that a kilomètre is equal to '621 of a mile.

† *Annual Statistician*, San Francisco, 1891, page 360.

184. Until September, 1887, the Telephone Exchanges in Victoria were worked by a private company, but in that month the business, together with buildings and plant, was purchased by the Government. The price paid was £40,000, but a considerable amount had to be expended to place the Exchanges in thorough repair. There are now nine Telephone Exchanges in the colony—two of which were opened during the year 1890, viz., at Brighton and Hawthorn. In the Central Exchange there are now ten sections of switch-board employed with a capacity to accommodate 2,000 subscribers; forty-six female switch-hands are employed during the day, and four male hands at night. The receipts for 1890, exclusive of £3,264 from private lines, amounted to £33,510; the total number of subscribers, exclusive of 226 who used private lines, at the end of the year was 2,307, and the amount subscribed during the year was £34,580. At present only subscribers are supposed to use the lines. The establishment of public telephone offices is still under consideration. The number of subscribers at the various Exchanges in the colony at the end of each of the last four years, together with the amount of subscriptions payable each year, was as follows* :—

SUBSCRIBERS TO TELEPHONE EXCHANGES, 1887 TO 1890.

	1887.	1888.	1889.	1890.
Melbourne ...	864	1,339	1,608	1,769
Ballarat ...	140	135	137	126
Bendigo (Sandhurst)	117	112	100	70
Geelong† ...	...	51	81	143
Warrnambool ...	...	...	Nil	54
Windsor† ...	...	...	26	53
Malvern† ...	...	...	36	45
Brighton† ...	...	...	...	34
Hawthorn† ...	...	...	...	13
Total ...	1,121	1,637	1,988	2,307
Subscriptions payable } during year ...)	£16,647	£24,649	£29,203	£34,580

185. The number of miles of railway open on the 30th June, 1890, was 2,471½, consisting of 2,193 miles of single and 278 miles of double line; and by the 30th June, 1891, the total length open increased to 2,764½ miles. The following table shows the names, lengths, and cost of construction of the different lines, and the distance travelled during the year ended 30th June, 1890 :—

* For an account of the Victorian Telephone system, see *Victorian Year-Book*, 1887-8, Vol. II., paragraph 978.

† These Exchanges are also connected by means of trunk lines with the Melbourne Exchange.

‡ Including 1½ mile on disputed territory near the South Australian border.

RAILWAYS.—LENGTH, COST, AND DISTANCE TRAVELLED.

Lines.	Length open on the 30th June, 1890.			Cost of Construction.*		Distance Travelled during the Year.
	Double.	Single.	Total.	Total.	Average per Mile.	
	Miles	Miles.	Miles.	£	£	Miles.
<i>Northern System.</i>						
Melbourne to Sandhurst (exclusive of Melb. Terminus)	100 $\frac{3}{4}$...	100 $\frac{3}{4}$	4,777,386†	47,418	2,762,314
Sandhurst to Echuca (including bridge over Murray at Echuca)	...	55 $\frac{1}{4}$	55 $\frac{1}{4}$	682,139‡	12,346	
Lancefield Junction to Lancefield	...	14 $\frac{1}{2}$	14 $\frac{1}{2}$	64,101	4,421	
Carlsruhe to Creswick ...	...	46 $\frac{1}{4}$	46 $\frac{1}{4}$	330,317	7,142
Castlemaine to Dunolly ...	...	47 $\frac{1}{2}$	47 $\frac{1}{2}$	335,524	7,064
Dunolly to Donald ...	...	56 $\frac{3}{4}$	56 $\frac{3}{4}$	257,325	4,534
Castlemaine to Maldon ...	...	10 $\frac{1}{4}$	10 $\frac{1}{4}$	61,085	5,959
Ballarat to Maryborough ...	...	42 $\frac{1}{2}$	42 $\frac{1}{2}$	273,982	6,447
Ballarat Racecourse Branch Line	...	2	2	7,347	3,674	
Maryborough to Avoca ...	...	15	15	61,714	4,114
Sandhurst to Wycheproof ...	...	89 $\frac{1}{4}$	89 $\frac{1}{4}$	418,834	4,693
Toolamba to Echuca ...	...	41 $\frac{3}{4}$	41 $\frac{3}{4}$	180,355	4,320
Wedderburn Junction to Wedderburn	...	4 $\frac{3}{4}$	4 $\frac{3}{4}$	17,746	3,736	
Korong Vale to Boort ...	...	18	18	72,745	4,041
Eaglehawk to Swan Hill ...	...	108 $\frac{3}{4}$	108 $\frac{3}{4}$	433,322	3,985
Ballarat Racecourse to Waubra ...	...	13 $\frac{3}{4}$	13 $\frac{3}{4}$	67,365	4,900
Inglewood to Dunolly ...	...	24 $\frac{3}{4}$	24 $\frac{3}{4}$	94,750	3,828
Sandhurst to Tooborac (portion of Wandong, Heathcote and Sandhurst line)	...	38 $\frac{1}{4}$	38 $\frac{1}{4}$	275,000§	...	
Wandong to Kilmore (portion of Wandong, Heathcote and Sandhurst line)	...	9 $\frac{1}{2}$	9 $\frac{1}{2}$			
Total ...	100 $\frac{3}{4}$	638 $\frac{3}{4}$	739 $\frac{1}{2}$	8,411,037	11,382	
<i>Western System.</i>						
Footscray Junction to Williamstown (including Piers and Breakwater)	6	...	6	487,795||	81,299	**
Newport to Geelong (including line to Geelong Wharf and Williamstown Racecourse Line)	1 $\frac{3}{4}$	37 $\frac{3}{4}$	39 $\frac{1}{2}$	1,150,878¶	29,136	
North Geelong to Ballarat...	53 $\frac{1}{2}$	...	53 $\frac{1}{2}$	1,862,414	34,811
Geelong to Queenscliff—(Queenscliff Junction to Queenscliff)	...	20 $\frac{3}{4}$	20 $\frac{3}{4}$	111,566	5,377	

* Exclusive of rolling stock, cost of Melbourne station, and general construction. See footnote (¶) on page 136 post.

† Excluding the Melbourne and North Melbourne stations, which cost £1,099,018.

‡ Including a bridge over the Murray at Echuca, constructed conjointly by Victoria and New South Wales, the proportion paid by Victoria to 30th June, 1884, being £49,282.

§ Approximate cost only.

|| Including the pier and breakwater, and western pier, which cost £179,549.

¶ Including the cost of the Geelong pier.

** For distance travelled see next page.

RAILWAYS.—LENGTH, COST, ETC.—*continued.*

Lines.	Length open on the 30th June, 1890.			Cost of Construction.*		Distance Travelled during the Year.
	Double.	Single.	Total.	Total.	Average per mile.	
	Miles	Miles.	Miles.	£	£	Miles.
<i>Western System—contd.</i>						
Geelong to Warrnambool (including Geelong Race- course Branch Line)	...	123	123	762,244	6,197	2,939,088
Mt. Moriac to Wensleydale	...	11 $\frac{1}{4}$	11 $\frac{1}{4}$	37,860	...	
Irrewarra to Beeac	...	8 $\frac{3}{4}$	8 $\frac{3}{4}$	39,302	4,492	
Terang to Mortlake	...	13	13	52,720	4,055	
Koroit to Warrnambool	...	9 $\frac{1}{2}$	9 $\frac{1}{2}$	73,746	7,763	
Koroit to Port Fairy	...	11 $\frac{1}{4}$	11 $\frac{1}{4}$	80,500	7,155	
Lal Lal Racecourse	...	2	2	11,332	5,666	
Ballarat East to Buninyong	...	7 $\frac{1}{2}$	7 $\frac{1}{2}$	61,075	8,143	
Ballarat to Ararat	3	54	57	397,206	6,969	
Ararat to S.A. Border	1	156 $\frac{1}{4}$	†157 $\frac{1}{4}$	917,625	5,835	
Ballarat Cattle Yards	...	3	3	12,368	4,123	
Ballarat to Scarsdale	...	13 $\frac{1}{4}$	13 $\frac{1}{4}$	59,525	4,492	
Ararat to Hamilton	...	66 $\frac{1}{2}$	66 $\frac{1}{2}$	317,400	4,773	
Hamilton to Portland	...	54	54	280,326	5,191	
Hamilton to Coleraine	...	23	23	107,843	4,689	
Branxholme to Casterton	...	32	32	175,969	5,499	
Lubeck to Rupanyup	...	9 $\frac{1}{2}$	9 $\frac{1}{2}$	42,318	4,455	
Murtoa to Warracknabeal	...	31 $\frac{1}{4}$	31 $\frac{1}{4}$	136,868	4,380	
Horsham to Noradjuha	...	20 $\frac{1}{4}$	20 $\frac{1}{4}$	77,107	3,808	
Footscray to Warrenheip	...	62 $\frac{1}{4}$	62 $\frac{1}{4}$	677,678	10,886	
Bacchus Marsh Junction to Newport	...	4 $\frac{3}{4}$	4 $\frac{3}{4}$	26,417	5,561	
Total ...	65 $\frac{1}{4}$	774 $\frac{3}{4}$	840	7,960,082	9,476	
<i>North-Eastern System.</i>						
Essendon Junction to Essen- don (including Racecourse Line)	5	...	5	149,332	29,866	
Essendon to Wodonga	61	121	182	2,045,617	11,240	
Wodonga to Murray River	...	2 $\frac{1}{4}$	2 $\frac{1}{4}$	36,047	16,021	
North Melbourne to Somer- ton <i>via</i> Coburg	2 $\frac{3}{4}$	9 $\frac{3}{4}$	12 $\frac{1}{2}$	246,180	19,694	
Royal Park Junction to Clif- ton Hill	$\frac{3}{4}$	2	2 $\frac{3}{4}$	150,351	54,673	
Fitzroy Branch	...	1	1	76,536	76,536	
Fitzroy to Whittlesea	1 $\frac{1}{4}$	20 $\frac{3}{4}$	22	216,862	9,857	
Tallarook to Yea	...	23 $\frac{3}{4}$	23 $\frac{3}{4}$	151,080	6,361	
Mangalore to Numurkah	...	65 $\frac{1}{2}$	65 $\frac{1}{2}$	329,485	5,030	
Benalla to Yarrawonga	...	40 $\frac{1}{4}$	40 $\frac{1}{4}$	168,913	4,197	
Wangaratta to Beechworth	...	23	23	158,541	6,893	
Everton to Myrtleford	...	16 $\frac{1}{2}$	16 $\frac{1}{2}$	75,719	4,589	
Springs to Wahgunyah	...	14	14	68,413	4,887	
Numurkah to Nathalia	...	14	14	50,319	3,594	

* Exclusive of rolling stock, cost of Melbourne station, and general construction. See footnote (¶) on next page.

† Includes 1 $\frac{1}{4}$ mile constructed on disputed territory on the border of South Australia.

‡ For distance travelled see next page.

RAILWAYS.—LENGTH, COST, ETC.—continued.

Lines.	Length open on the 30th June, 1890.			Cost of Construction.*		Distance Travelled during the Year.
	Double.	Single.	Total.	Total.	Average per mile.	
	Miles	Miles.	Miles.	£	£	Miles.
<i>North-Eastern System—con.</i>						
Numurkah to Cobram	21½	21½	79,493	3,697	} 2,521,128
Shepparton to Dookie ...	...	15	15	51,989	3,466
Yea to Cathkin ...	...	13½	13½	90,000†	...
Wodonga to Huon Lane ...	...	14¼	14¼	75,000†	...
Total ...	70¾	418	488¾	4,219,877	8,629	
<i>Eastern and South Suburban Systems.</i>						
Spencer to Flinders-street Junction	¾	¾	62,293	83,057	} 2,479,342
South Yarra to Oakleigh ...	6¾	...	6¾	271,890	40,280	
Oakleigh to Sale ...	...	118¼	118¼	970,962	8,211
Caulfield to Frankston ...	10¼	9¾	20	172,500	8,625	
Warragul to Jindivick ...	...	8¼	8¼	60,000†	...
Moe to Thorpedale ...	...	10¾	10¾	113,436	10,552
Morwell to Mirboo ...	...	20	20	151,731	7,586
Traralgon to Heyfield ...	...	23¼	23¼	120,745	5,193
Heyfield to Bairnsdale ...	...	50¾	50¾	250,816	4,942
Sale to Stratford ...	...	9¼	9¼	42,609	4,606
Maffra to Briagolong ...	...	12¼	12¼	50,638	4,134
Hawthorn to Healesville ...	5¾	29¾	35½	494,341	13,925	
Hawthorn to Kew ...	...	1¼	1¼	72,532	58,026
Brighton to Picnic Point ...	2	...	2	71,023	35,511	
Frankston to Stony Point ...	...	18½	18½	97,846	5,289
Mornington Junction to Mornington ...	...	7¾	7¾	54,448	7,025
Ringwood to Upper Fern Tree Gully ...	...	7½	7½	55,915	7,455
Dandenong to Tooradin (portion of Dandenong to Leongatha Line) ...	...	16	16	110,000†	...
Camberwell to Waverley Road ...	...	5	5	140,000†	...
Burnley to Oakleigh ...	...	7¼	7¼	149,778	20,659
Collingwood to Heidelberg ...	...	5¼	5¼	181,195‡	34,513
Hobson's Bay Lines (includ- ing the Port Melbourne Pier) ...	16½	...	16½	1,845,430§	111,844	
Total ...	41¼	361½	402¾	5,540,128	13,747	
Grand Total ...	278	2,193	2,471||	26,131,124¶	10,575	11,773,152

* Exclusive of rolling stock, cost of Melbourne station, and general construction. See footnote (¶) *infra*. † Approximate figures. ‡ Including junction station, Alphington, about £50,000.

§ Including expenditure on works, etc., between Prince's-bridge station (Melbourne) and Windsor, not yet apportioned, amounting to £224,793.

|| In addition to the Government lines of railway, a line five miles in length has been constructed between Rosstown and Elsternwick, suburbs of Melbourne. This line has not yet been worked.

¶ The total cost of the railways opened to the 30th June, 1890, was £32,700,429, viz., £26,131,124 as shown above, £4,236,166 on rolling-stock, £1,099,018 on the Melbourne and North Melbourne stations, £1,122,068 on general construction (such as sheds, workshops, machinery, etc.), and £112,053 cost of floating loans. To the 30th June, 1891, the total cost was (exclusive of cost of floating loans) £35,518,871. See paragraphs 199 and 200 *post*.

186. Under the *Railway Construction Act 1884* (48 Vict. No. 821), which came into operation on the 12th December, 1884, 62 new lines, of an aggregate length of about 1,200 miles, were authorized, at a total estimated cost of nearly 6 millions sterling. Of these lines, 54, of a total length of about 1,172 miles, were country, and 8, of a total length of 28 miles, were suburban lines. The expenditure authorized for country lines, including stations, but not including permanent-way materials or rolling-stock, was £3,960 per mile; and for suburban lines, including stations and permanent-way material, but not including rolling-stock, £14,294 per mile. The gross additional amount authorized for rolling-stock is £178,000, and for permanent-way material (on country lines only) £415,000. Of the 1,200 miles authorized under the Act, about 766 had been completed and opened for traffic on the 30th June, 1890, whilst 433 miles were in progress, and 1 mile had not been commenced. The following is a statement of the proposed lengths of the railways in progress at the 30th June, 1890:—

RAILWAYS IN PROGRESS, 30TH JUNE, 1890.

Names of Lines.	Approximate Length.
COUNTRY LINES.	
Avoca to Ararat	38 $\frac{3}{4}$
Birregurra and Cape Otway Forest	19 $\frac{3}{4}$
Camperdown and Curdie's River	22 $\frac{1}{2}$
Dandenong and Leongatha (section Tooradin to Leongatha)	53 $\frac{3}{4}$
Hamilton and Penshurst	18
Koroit Railway <i>via</i> Penshurst	49
Kyneton and Redesdale	16 $\frac{1}{4}$
Lancefield and Kilmore	17 $\frac{3}{4}$
Leongatha and Port Albert	47 $\frac{1}{4}$
Maldon towards Laanecoorie	14 $\frac{1}{2}$
Murchison and Rushworth	12 $\frac{3}{4}$
Myrtleford and Bright	18 $\frac{1}{2}$
Sale to the Canal	8 $\frac{3}{4}$
Scarsdale and Lintons	8
Wandong, Heathcote and Sandhurst (section Tooborac to Kilmore)	19 $\frac{1}{2}$
Warragul and Neerim (section Jindivick towards Neerim)	5 $\frac{1}{4}$
Wodonga and Tallangatta (section Huon Lane to Tallangatta)	11 $\frac{3}{4}$
Yackandandah and Beechworth	13
Yea and Mansfield* (section Cathkin to Mansfield)	42
Total	429
SUBURBAN LINES.	
Outer Circle Railway—Camberwell to Richmond and Alphington	4
Total	4
Grand Total	433

NOTE.—The expenditure on lines in progress was approximately £1,781,655.

* Including the branch from Cathkin to Alexandra, about 4 $\frac{3}{4}$ miles.

Railways
authorized
but not
commenced

187. The only line authorized, but not commenced, on the 30th June, 1890, was the Frankston Cemetery line, three-quarters of a mile in length.

Railways
Standing
Committee
Act 1890.

188. An Act* of the Victorian Legislature, passed on the 9th October, 1890, provides for the appointment of a Standing Committee on Railways, consisting of 13 members of Parliament, 5 to be members of and appointed by the Legislative Council, and 8 to be members of and appointed by the Legislative Assembly, to hold office only during the existence and continuance of the Assembly in session at the time of their appointment. The functions of the Committee are to consider and report on all railways (except those previously authorized or authorized in the then current session) to be thereafter executed in all cases where the estimated cost of completing any work should exceed £20,000, having regard mainly to (a) the stated purpose of such work; (b) the necessity or advisability of carrying it out; (c) the amount of revenue expected to be derived therefrom; and (d) its present and prospective value. Under the Act the lines included in the *Railway Construction Bill* 1890, read a first time on the 17th June, 1890, are specially referred to the Committee, as well as surveyed lines which might during the then current session be referred to it by resolution of the Assembly; but in other cases the works before being considered by the Committee must first be considered and explained to the Legislative Assembly by a Minister of the Crown, and then by motion, in the usual manner, be referred to the Committee, who, as soon as practicable, are to report to the Assembly the result of their inquiries, and after the receipt of such report the Assembly may decide whether it is expedient to carry out the proposed work or any portion thereof, or may, instead of so deciding, refer the report back to the Committee for further consideration.

Recom-
mendations
of Railways
Standing
Committee.

189. The Parliamentary Standing Committee on Railways, appointed under the Act just referred to, held their first meeting on the 23rd October, 1890, and after having made considerable progress with their inquiry into the lines referred to them, completed their first report on the 16th June, 1891. According to this report the Committee were proceeding with their investigation into 24 miles of suburban, and 2,148 miles of country lines; and it was at the outset resolved to recommend that, in order to keep the cost of construction of new lines

* *Railways Standing Committee Act* 1890 (54 Vict. No. 1177).

well under control, "the 'construction' and 'management' of the Victorian Railways should be entirely distinct and separate, and that the construction of new railways should be removed from the control of the Commissioners, who should be responsible only for the management of the traffic, and the proper maintenance of existing lines." The most important items in which the Committee are satisfied from evidence received that reductions can be made, are as follow:—(A) *Land and Compensation*: By reducing the width of the track below $1\frac{3}{4}$ chain; by the use of Government roads as tracks for the railways in lieu of purchasing land; by smaller areas being purchased for stations; and by accepting offers (several of which have already been made) of land free of cost. (B) *Clearing*: By allowing timber felled, for purposes of clearing the track, to be laid alongside the line, instead of removing and burning it off. (C) *Fencing*: By erecting less expensive fences, and using local timber and barbed wire, at a reduced cost of 50 per cent., and dispensing with fencing altogether in some cases. (D) *Level Crossings and Gatehouses*: By the more general use of cattle pits. (E) *Bridges and Culverts*: By constructing these on light lines without planking and ballasting at a possible saving of £85 per mile. (F) *Metalling and Graveling Roads, etc.*: By placing the stations in country districts as near a roadway as practicable, and thus dispensing with long metalled approaches. (G) *Ballast*: By using a less quantity in certain cases, or, where timber is plentiful, by adding to the number of sleepers, and using no ballast. (H) *Sleepers*: By using local timber these could be obtained in some cases at a saving of 50 per cent. (I) *Permanent Way Materials*: By using 50lb. instead of 60lb. (the minimum at present in general use) steel rails for trains running at a lower rate of speed, or in cases where more sleepers could be economically used, at a saving of about £125 per mile; also by utilizing the immense quantity of second-hand rails which are now lying unused, though worth £500 per mile. (K) *Earthworks*: By reducing the price to that paid by local bodies, which is about 30 per cent. less than that paid by the Department; also by letting the contracts in five-mile sections in country where the conditions are favourable, so as to favour competition; and by reducing the width and length of embankments. (L) *Stations and Goods Sheds*: By erecting less costly buildings, so as to give no more accommodation in each case than is warranted by the traffic requirements; also by dispensing with the traffic staff at intermediate roadside stations—the guard booking passengers—and by the employment of "island" platforms for both passengers and goods. The saving to be thus effected

under the last head alone was on a line of 30 miles calculated to be equal to £1,451 per mile.

Rolling-stock.

190. According to the following table a considerable increase took place in 1890 as compared with the previous year in all descriptions of rolling-stock, except locomotives, and especially in the number of goods trucks, waggons, etc. The increase in the total cost of rolling-stock was nearly £641,000:—

ROLLING-STOCK, 1889 AND 1890.

Year ended 30th June.	Number of—						Total Cost of Rolling-Stock.
	Locomotives.	First Class and Composite Carriages	Second Class Carriages.	Sheep and Cattle Trucks.	Goods Trucks, Waggons, etc.	Guard Vans and other Vehicles.	
1889	461	538	337	595	7,469	552	£ 3,595,323
1890	461	586	415	688	8,259	634	4,236,166
Increase ...	...	48	78	93	790	82	640,843

Passenger rates.

191. The passenger rates are somewhat higher on country lines than on the lines connecting Melbourne with its suburbs, which are now defined to be those within a radius of 15 miles from the heart of the city. The following are the respective rates per mile:—

PASSENGER RATES (SINGLE) PER MILE.

First class, country lines ...	2d.	Second class, country lines ...	1½d.
„ suburban lines ...	1d.	„ suburban lines ...	0¾d.

Miles open and travelled.

192. By the following statement of the number of miles open and the number of train miles travelled, and of the passengers and goods carried during the financial years 1888-9 and 1889-90, it is shown that, although a considerable increase took place in the mileage open and the train mileage—which increased by 9 and 10 per cent. respectively—the passenger traffic increased by only 3 per cent., and the goods traffic by a very slight proportion. In explanation of the small increase of traffic in the year under review as compared with the previous year, it will be remembered that the returns of 1888-9 were much swelled by the traffic which took place in connexion with the late Melbourne Centennial International Exhibition:—

RAILWAYS.—MILES OPEN AND TRAVELLED, AND PASSENGERS
AND GOODS CARRIED, 1888-9 AND 1889-90.*

Year.	Extent Open.		Train Mileage.	Passengers. †	Goods and Live Stock.
	At end of Year.	Average for Year.			
	Miles.	Miles.	Miles.	No.	Tons.
1888-9 ...	2,198½	2,144	10,680,743	68,904,427	4,160,126
1889-90 ...	2,471	2,330	11,773,152	71,058,940	4,170,436
Increase ...	272½†	186	1,092,409	2,154,513	10,310

193. The following were the railway receipts and working expenses Receipts and working expenses during the financial years 1888-9 and 1889-90 :—

RAILWAYS.—RECEIPTS AND WORKING EXPENSES,
1888-9 AND 1889-90.‡

Year ended 30th June.	Receipts.				Working Expenses.	Net Income.	Proportion of Working Expenses to Receipts.
	Passenger Fares.	Freight on Goods and Live Stock.	Sundries.	Total.			
	£	£	£	£	£	£	Per cent.
1889 ...	1,456,037	1,441,600	212,503	3,110,140	1,945,837	1,164,303	62·56
1890 ...	1,455,129	1,450,683	226,054||	3,131,866	2,132,158	999,708	68·08
Increase	...	9,083	13,551	21,726	186,321	...	5·52
Decrease	908	...	...	...	...	164,595	...

* During the year 1890-91, the train mileage was 12,249,747 ; the passengers carried numbered 71,970,885 ; and the quantity of goods and live stock carried was 4,425,609 tons.

† In order to compute the number of passengers, the single tickets sold have been added to 720 for each yearly, 360 for each half-yearly, 180 for each quarterly, and 60 for each monthly, 2 for each return, and 1 for each single, ticket issued to adults and youths ; and half these proportions for tickets issued to boys and girls. Tickets available for two or more systems, however, are reckoned twice or oftener accordingly ; the addition made in 1889-90 for travelling over more than one system being 12,107,144. No addition has been made for free passes.

‡ The following lines were opened for traffic during the year 1889-90 at the dates named :—
7th August, 1889, Maffra to Briagolong, 12¼ miles ; 7th August, Ondit to Beeac, 8¾ miles ; 12th September, Ballarat East to Buninyong, 7½ miles ; 10th November, portion of Frankston to Crib Point Line, between Mornington and Hastings, 8 miles ; 10th November, Mornington Line, 7¾ miles ; 10th November, Wodonga and Tallangatta, 14¼ miles ; 11th November, portion of Fitzroy to Whittlesea, between Whittlesea Junction and Preston Reservoir, 4¾ miles ; 3rd December, Ringwood to Ferntree Gully, 7½ miles ; 20th December, Coburg to Somerton, 7½ miles ; 12th January, 1890, portion of Yea to Mansfield, between Yea and Molesworth, 10¾ miles ; 1st February, portion of Fitzroy and Whittlesea, between Preston Reservoir and Whittlesea, 17¼ miles ; 4th February, Bacchus Marsh and Gordons, 17¾ miles ; 19th February, portion of Frankston to Crib Point, between Hastings and Stoney Point, 6 miles ; 21st February, Mount Moriac to Forest, 11¼ miles ; 26th February, Koroit to Warrnambool, 9½ miles ; 21st March, Terang to Mortlake, 13 miles ; 24th March, Burnley to Outer Circle, 7¼ miles ; 26th March, Koroit to Warrnambool, 11 miles ; 4th April, Camperdown to Warrnambool, 28¾ miles ; 12th May, portion of Warragul to Neerim between Warragul and Jindivick, 8¼ miles ; 30th May, Kerang to Swan Hill, 35 miles ; 30th May, portion of Burnley to Outer Circle, Camberwell to Waverley Road, 5 miles.

§ During the year 1890-91, the Railway receipts amounted to £3,298,567, and the working expenses to £2,310,645. The net income was thus £987,922 ; and the proportion of working expenses to receipts 70 per cent.

|| This amount is made up of parcels, etc., £90,572 ; horses, carriages, and dogs, £19,819 ; mails, £57,129 ; rents, £36,770 ; miscellaneous, £21,764.

Decrease in
railway
income.

194. It will be observed that, although the average extent of lines open for traffic in 1889-90 was 9 per cent. above that in 1888-9, the net income fell off by £164,600,—resulting from an increase of £186,300 in the working expenses, less one of £21,700 in the receipts. It should, however, be remembered that the revenue of 1888-9 was considerably augmented by the large traffic induced by the late International Exhibition held in Melbourne during that year, although, on the other hand, the following exceptional items appeared amongst the working expenses for that year:—£37,828 increased expenditure necessitated by the Newcastle coal strike, £23,682 for special renewal of rails—“properly chargeable to capital”—to meet growing requirements of traffic as well as to secure more rapid communication on some of the principal lines. Then again, the Commissioners state that the railways opened in the last two years (viz., 452 miles, or about 18 per cent. of the present mileage) were worked during the year under review at a loss of £100,000, and that the opening of the Ballarat line (on the 4th December, 1889) not only reduced the distance to that town, and consequently the rates and fares, by 25 per cent., and proportionately to places beyond, at an estimated loss of £1,000 per week, but necessitated the maintenance of a duplicate service without any corresponding gain to the revenue.

Proportion
of working
expenses to
receipts.

195. The proportion of working expenses to receipts was 68 per cent. in 1889-90, as compared with $62\frac{1}{2}$ per cent. in 1888-9, an average of $60\frac{4}{5}$ per cent. during the previous five years, and an average of 55 per cent. during the five years ended with 1882. An explanation of this increase is partly to be found in the policy of the department in reducing passenger fares and merchandize rates, whenever the net revenue reaches an amount which is more than sufficient to meet the interest on the railway loans. The Railway Commissioners estimate that the aggregate value of concessions so made during the last six years was not less than £800,000, and that the present annual loss arising therefrom amounts to £200,000.

Earnings
and ex-
penses per
mile.

196. The following table shows the average extent of Government railways open, the gross earnings and expenses, and the net profits per mile open, in each of the last seventeen years:—

EARNINGS AND EXPENSES OF RAILWAYS PER MILE OPEN,
1873-4 TO 1889-90.*

Year.	Average Number of Miles Open.	Gross Earnings per Mile.	Expenses per Mile.	Net Profits per Mile.
		£	£	£
1873-4 ...	414	2,056	905	1,151
1874-5 ...	541	1,701	890	811
1875-6 ...	608	1,636	821	815
1877 ...	787	1,443	753	690
1878 ...	967	1,258	647	611
1879 ...	1,091	1,120	587	533
1880 ...	1,194	1,250	682	568†
1881 ...	1,215	1,371	752	619†
1882 ...	1,300	1,370	845	525
1883 ...	1,432	1,326	890	436
1884 (6 months)	1,598	701	425	276
1884-5 ...	1,655	1,318	772	546
1885-6 ...	1,691	1,377	775	602
1886-7 ...	1,791	1,370	797	573
1887-8 ...	1,947	1,415	900‡	515
1888-9 ...	2,144	1,451	908	543
1889-90 ...	2,330	1,344	915	429

197. It will be observed that in 1873-4, when only 400 miles were open, the net profits averaged over £1,100 per mile, but they fell off as the lines were extended to a minimum of £436 per mile in 1883. Since then, the profits ranged between £500 and £600 per mile until 1889-90, when, there being 2,330 miles open, the net profits fell to £429 per mile, that being the lowest average during the whole period to which the table refers. Decrease of net profits per mile.

198. The total amount borrowed by the Government for railway construction to the end of June, 1890, inclusive of the debentures of the late Melbourne and Hobson's Bay Railway Company, but exclusive of loans paid off from the consolidated revenue, viz., £68,100 prior to 1889-90 and £276,100 during that year, was £31,973,519, of which £3,150,000 was raised during the year 1889-90. As, however, the gross proceeds exceeded the nominal amount by £181,707, whilst on the other hand the expenses of floating the loans amounted to £293,761,§ the net amount available for railway construction was only £31,861,465. Railway debt.

199. In addition to the amount derived from loans, certain other sums, amounting in the aggregate to £3,299,074, have also been Capital account of railways.

* During the year 1890-91, the average number of miles open was 2,510; the gross earnings averaged £1,314 per mile; the expenses per mile £920; and the net profit per mile £394.

† The increases in these years were in consequence of the transactions of the late Melbourne and Hobson's Bay Company's lines—on which the net profits per mile are naturally larger than on the country lines—being included for the first time in those years.

‡ Including expenses of the Windsor accident.

§ Including £12,193 increase of debt on conversion of debentures into stock at a lower rate of interest.

available for railway construction, viz., £2,654,874 derived from the alienation of Crown lands* and £644,200 from the consolidated revenue. The total expenditure on the construction of railways had amounted at the end of June, 1890, to £34,482,084, and at the same period the balance at credit was £790,509. The following is a statement of the railway capital account to that date :—

CAPITAL ACCOUNT OF VICTORIAN RAILWAYS TO 30TH JUNE, 1890.

RECEIPTS.			
Total amount of loans, exclusive of redemption loans	£31,973,519		
Railway loan liquidation and construction account*	2,200,000		
Railway construction account*	454,874		
From consolidated revenue	644,200†		
Total receipts			£35,272,593
EXPENDITURE.			
Construction of completed lines—			
Permanent way‡	£26,131,124		
Rolling-stock, general construction, etc.§	6,569,305		
Construction of lines in progress, and rolling-stock	} 1,781,655‡		
Preliminary surveys			
Total expenditure			34,482,084
Balance available			£790,509

Net income and cost of railways compared.

200. The first two items of expenditure in the above statement, amounting to £32,700,429, represent the capital cost of the lines open for traffic at the end of the year 1889-90, whilst the mean for the year may be set down at £30,912,855. The net income of the Victorian Railways in 1889-90 has already been stated|| to have been £999,708. A short calculation based upon these two amounts will show that the railways in that year made a return upon their capital cost of 3·234 per cent., equal to £3 4s. 8d. per £100, as compared with a proportion of 4·180, or £4 3s. 7d. per £100, in 1888-9, and of 3·888, or £3 17s. 9d. per £100 in 1887-8.¶ On the 30th June, 1890, the nominal rate of interest payable on the borrowed capital averaged 4·06 per cent.; or £4 1s. 2d. per £100.** At the end of 1883 the average rate was as high as 5 per cent., but owing to the redemption of 6 per cent. debentures and the

* See footnote (†) on page 107 in Vol. I.

† Viz., £344,200 loans paid off, and £300,000 under Act 879 for rolling-stock.

‡ For the particulars of the expenditure, see tables following paragraphs 185 and 186 ante.

§ Includes net cost of floating the loans, etc., £112,053; and cost Melbourne station, £1,099,018. See also footnote (¶) on page 136 ante. For cost of rolling-stock only, see paragraph 190 ante.

¶ See table following paragraph 193 ante.

¶ During the year 1890-91, the net income, which amounted to £987,922, was equivalent to 2·886 per cent. on the mean capital cost (£34,227,102) of the lines opened for traffic.

** See table on page 171 of Vol. I.

issue during subsequent years of 4 and $3\frac{1}{2}$ per cent. debentures in lieu thereof, a reduction of £168,586,* upon a total of £501,618, was effected in the annual interest payable.

201. The following is a statement of the proportion which the net earnings of the railways have borne to their capital cost during each of the last nine full financial years :—

PROPORTION OF EARNINGS TO COST OF RAILWAYS, 1881 TO 1890.†

	Per cent.		Per cent.
1881	4·083	1886-7	4·196
1882	3·512	1887-8	3·888
1883	2·958	1888-9	4·180
1884-5	4·081	1889-90	3·234
1885-6	4·373		

202. The late Melbourne and Hobson's Bay Company's railways, formerly consisting of $6\frac{3}{4}$ miles of single and $9\frac{3}{4}$ miles of double line— or $16\frac{1}{2}$ miles in all—between Melbourne and the principal suburbs on the south side of the Yarra, were purchased by the Government on the 1st July, 1878. For the first twelve months after the purchase they were worked by the company for the State, but have since been under immediate Government control. The lines are now double throughout. The cost to the 30th June, 1890, including rolling-stock, was £2,137,430. This amount includes expenditure on rolling-stock in course of construction, also £224,793 for additions and improvements to the permanent way, a portion of which is properly chargeable to other lines.

203. Six per cent. Hobson's Bay Railway debentures of the value of £281,200, and $3\frac{1}{2}$ per cent. debentures of the value of £200, were redeemed prior to 1889-90. The debentures now outstanding bear 5 per cent. interest, and represent a total value of £183,900.

204. Dating from the period at which the Hobson's Bay lines were purchased by the State, there had been until the end of 1883 a large falling-off in the net income derivable therefrom, whilst in one year (1882) the working expenses actually exceeded the receipts by nearly £72,000. After the railways were placed under the control of Commissioners there was a marked improvement, and in the financial years 1885-6, 1886-7, 1888-9, and 1889-90, the percentage of the net gain to the capital cost was apparently even higher than it was before the railways were purchased from the company. In the year 1889-90 the net gain was about £82,700, being equivalent to nearly 4 per cent. upon the capital, which was larger than in any previous

* Including interest on £276,100 paid off out of revenue.

† Figures for 1890-91 are given in footnote (***) on previous page.

year except 1888-9. In 1887-8 there was a net loss—in consequence of the large amount (£128,988) paid on account of the Windsor accident—of £60,000, or 3 per cent. The following table has been designed with the object of giving a comparative view of the profits or losses on working these lines before and since their purchase, and shows for each year their capital cost and the interest payable thereon, the net income and its percentage on the capital cost, also the amount and percentage of gain or loss on the working of the lines:—

HOBSON'S BAY LINES BEFORE AND AFTER PURCHASE BY THE STATE.

Year.	Capital Cost of Lines.*	Interest payable on Capital Cost.		Net Income. (Excess of Receipts over Expenditure.)		Net Gain (+) or Loss (-) on working Lines after payment of Interest.	
		Amount.	Average annual rate per cent. †	Amount.	Percentage of Capital Cost. †	Amount.	Percentage of Capital Cost. †
1873 to 1876 (annual average)	£ 1,000,000	£ 56,500 ‡	5·65	£ 82,627	8·26	+ £ 26,127	+ 2·61
1877-8 ...	1,015,011	57,348 ‡	5·65	81,152	8·00	+ 23,804	+ 2·35
1878-9 ...	1,337,128	65,093	4·87	43,728	3·27	- 21,365	- 1·60
1879 (6 months) ...	1,337,128	32,546	4·87	34,700	5·18	+ 2,154	+ ·31
1880 ...	1,362,316	65,476	4·81	61,317	4·50	- 4,159	- ·31
1881 ...	1,392,975	65,660	4·71	19,414	1·39	- 46,246	- 3·32
1882 ...	1,460,195	68,085	4·66	-71,828 §	-4·92 §	-139,913	- 9·58
1883 ...	1,576,520	72,413	4·59	23,579	1·50	- 48,834	- 3·09
1884 (6 months) ...	1,647,150	37,380	4·54	45,995	5·59	+ 8,615	+ 1·05
1884-5 ...	1,715,460	77,490	4·52	113,731	6·63	+ 36,241	+ 2·11
1885-6 ...	1,808,450	81,015	4·48	129,709	7·17	+ 48,694	+ 2·69
1886-7 ...	1,886,200	83,736	4·44	141,748	7·52	+ 58,012	+ 3·08
1887-8 ...	1,957,890	86,410	4·41	26,505 ||	1·35	- 59,905	- 3·06
1888-9 ...	2,020,273	88,910	4·40	212,719	10·53	+ 123,809	+ 6·13
1889-90 ...	2,092,704	91,578	4·36	174,260	8·33	+ 82,682	+ 3·95

NOTE.—The lines were purchased by the State on the 1st July, 1878. During the year 1890-91, the gross receipts amounted to £379,106, and the working expenses to £232,644. The net proceeds were thus £146,462, or 6·74 per cent. of the mean capital cost (£2,172,132).

Profit and loss on working Hobson's Bay lines.

205. It will be observed that since their purchase by the State there has been an actual loss on the lines during six of the years shown, but a gain in the remaining six years. During the most recent financial year the net income was equivalent to $8\frac{1}{3}$ per cent. per annum on the capital cost, which was 4 per cent higher than the

* The figures in this column represent the capital cost about the middle of the year or period named. On the 30th June, 1889, the capital cost was £2,047,978, and on the 30th June, 1890, £2,137,430, as stated in paragraph 202 *ante*.

† Rate during periods of six months doubled for purposes of comparison with whole years.

‡ These amounts have been calculated by charging interest upon the whole capital at the same rate as the average of that payable upon the debenture capital.

§ The minus sign (-) indicates that the working expenses exceeded the receipts.

|| Small net increase accounted for by the Windsor accident, on account of which £128,988 was paid as compensation during the year.

average rate at which the capital was borrowed; whilst the net amount gained, after providing for interest, was £82,700. The falling-off in the net revenue, as compared with the previous year, was £38,500, which has been attributed to the competition of cable trams—worked by a private company—which have been largely extended during the last two years.

206. The figures in the fifth column (net income) show that, during the 12 years between the purchase of the lines and the end of June, 1890, the receipts exceeded the working expenses by £955,577; and the figures in the last column but one show that there was a net gain upon working the lines in the same period amounting, after paying interest on capital, to £39,785.

Gain on working Hobson's Bay lines in 12 years.

207. The falling-off in the net income of the Hobson's Bay lines during the years 1881, 1882, 1883, and 1887-8, was largely due to the heavy compensation it was necessary to pay to sufferers from accidents which occurred thereon during the years 1881, 1882, and 1886-7. During the last 11½ years the amount of compensation so paid was no less than £322,900, equal to over a tenth of the gross receipts (£3,178,928), and was about twice as much as on all the other lines of the colony put together. The following table shows the amount payable during that period, the Hobson's Bay lines being distinguished from those embraced in the other railway systems:—

Compensation for railway accidents.

COMPENSATION FOR RAILWAY ACCIDENTS, ETC.*, 1879 TO 1889-90.

Year.	Amount of Compensation payable.		
	Hobson's Bay lines.	Other lines.	Total.
	£	£	£
1879	936	5,310	6,246
1880	76	3,010	3,086
1881	45,160	19,835	64,995
1882	114,587†	17,141	131,728
1883	25,802	27,737	53,539
1884 (first 6 months)	1,630	30,098	31,728
1884-5	1,042	4,774	5,816
1885-6	647	4,875	5,522
1886-7	784	5,871	6,655
1887-8	129,305	10,854	140,159
1888-9	1,537	17,492	19,029
1889-90	1,401	20,344	21,745
Total	322,907	167,341	490,248

* Compensation payable on account of goods damaged, lost, etc., is included prior to 1884-5, up to which date no separate account was kept, but in 1884-5, and subsequent years, the amount paid for personal damage only is included.

† This represents the amount set down as estimated to be payable when the accounts of the year were closed. It was subsequently found, however, that the liability had been under-estimated by about £25,000, which amount is therefore included in the accounts for the succeeding year.

Return on capital cost of each railway system.

208. The revenue returned in 1889-90 in proportion to the cost of construction (including rolling-stock) was $8\frac{1}{3}$ per cent. on the Hobson's Bay lines, and $4\frac{2}{3}$ per cent. on those of the North-Eastern system (which carries the Sydney traffic), but varied from $\frac{1}{4}$ per cent. to $3\frac{1}{4}$ per cent. on the other lines. All the lines, except the Northern, show a decreased percentage as compared with the previous year. The following are the results obtained on the working of the various systems during the four financial years ended with 1889-90, as calculated in the office of the Government Statist, Melbourne:—

PERCENTAGE OF NET REVENUE TO CAPITAL COST OF EACH RAILWAY SYSTEM, 1886-7 TO 1889-90.*

	1886-7.	1887-8.	1888-9.	1889-90.
Northern system... ..	2·93	3·39	2·70	2·81
Western system	4·10	4·04	4·08	3·24
North-Eastern system	6·20	6·71	6·30	4·57
Eastern system (exclusive of Hobson's Bay lines)	2·83	2·53	1·75	·28
Hobson's Bay lines	7·52	1·35†	10·53	8·33
All lines	4·20	3·89	4·18	3·23

Gross income and expenditure of railways, 1853 to 1890-91.

209. According to a statement distributed to members of the Legislative Assembly in July, 1891, the aggregate income from the State railways from the earliest time to the 30th June, 1891, was £40,870,672, and the aggregate expenditure on construction, maintenance, and working (including expenditure from loans and interest thereon), was £83,594,436, thus leaving a debtor balance over the whole period of $38\frac{1}{2}$ years, during which the railways have been in existence, of £42,723,764. Of this amount, however, £36,341,626 still appears in the railway account as capital expenditure, and the balance—£6,382,138—represents the deficiency which has been finally charged to the revenue of the colony. The following is a summary of the figures given in the statement referred to:—

VICTORIAN RAILWAYS' ACCOUNT WITH THE TREASURY, 1853 TO 1890-91.

Income in $38\frac{1}{2}$ years	£40,870,672
Expenditure from—	
Loans (construction only)	£33,585,446
Revenue—Interest and expenses	22,986,656
„ Construction	2,792,239†
„ All other (chiefly working expenses)	24,230,095
Aggregate expenditure	83,594,436
Dr. balance	£42,723,764

NOTE.—Advances from the revenue on account of loans have been included with loans.

* According to the Report of the Commissioners for 1890-91, recently published, the results for the five systems for that year were respectively as follow:—2·52, 2·70, 4·31, 0·14, and 6·64.

† Low proportion due to Windsor accident. ‡ Derived from the alienation of Crown Lands.

210. The following table shows the number of miles of railway open, and the proportion that the extent of lines bore to area and population, in each of the Australasian colonies at the end of every fifth year from 1870 to 1885, and for the three years ended with 1889:—

Railways in
Austral-
asian
colonies.

RAILWAYS IN AUSTRALASIAN COLONIES.

Colony.	Year.	Miles of Railway open on 31st December.		
		Number.	Per 10,000 Square Miles of Territory.	Per 100,000 Inhabitants.
Victoria* ...	1870	274	31	38
	1875	617	70	78
	1880	1,199	136	139
	1885	1,676	191	175
	1887	1,880	214	185
	1888	2,018	230	191
	1889	2,199	250	202
New South Wales ...	1870	335	11	67
	1875	437	14	74
	1880	850	28	115
	1885	1,777	57	186
	1887	2,081	67	200
	1888	2,206	71	203
	1889	2,252	73	201
Queensland ...	1870	206	3	178
	1875	265	4	146
	1880	633	9	280
	1885	1,434	21	455
	1887	1,765	26	481
	1888	1,931	29	498
	1889	2,064	31	508
South Australia ...	1870	133	1	72
	1875	274	3	130
	1880	667	7	249
	1885	1,063	12	339
	1887	1,420	16	441
	1888	1,518	17	477
	1889	1,774	20	547
Western Australia ...	1870	...	...	...
	1875	38	...	142
	1880	72	...	248
	1885	184	2	523
	1887	239	2	562
	1888	272	3	646
	1889	497	5	1,137

* The figures for Victoria since 1885 relate to the 30th June of each year.

RAILWAYS IN AUSTRALASIAN COLONIES—*continued.*

Colony.	Year.	Miles of Railway open on 31st December.		
		Number.	Per 10,000 Square Miles of Territory.	Per 100,000 Inhabitants.
Tasmania	1870	...	...	...
	1875	150	57	145
	1880	172	65	150
	1885	257	97	192
	1887	318	121	223
	1888	327	124	224
	1889	374	142	247
New Zealand	1870	...	...	...
	1875	542	52	144
	1880	1,258	121	259
	1885	1,654	159	288
	1887	1,841	177	305
	1888	1,865	179	307
	1889	1,912	183	308

NOTE.—For miles of railway open in each colony in 1890, see Summary of Australasian Statistics (third folding sheet) *ante*, also Appendix A. *post*.

Order of colonies in respect to length of railways.

211. During nine years Victoria added 1,000 miles to the length of her lines of railway, as compared with 1,400 in both New South Wales and Queensland, 1,100 in South Australia, and 650 in New Zealand. In 1889 the lines of Victoria extended over about 135 miles more than those of Queensland, but 53 miles less than those of New South Wales. The following is the order in which the respective colonies stood in 1889, in regard to the length of their lines of railway:—

ORDER OF COLONIES IN REFERENCE TO LENGTH OF RAILWAYS.

- | | |
|---------------------|-----------------------|
| 1. New South Wales. | 5. South Australia. |
| 2. Victoria. | 6. Western Australia. |
| 3. Queensland. | 7. Tasmania. |
| 4. New Zealand. | |

Order of colonies in respect to length of railway to area and population.

212. In regard to the extent of railways open in proportion to area, Victoria was much in advance of the other colonies; but, in proportion to population, she occupied the lowest position, but one, on the list. The following is the order of the colonies in 1889 in these respects:—

ORDER OF COLONIES IN REFERENCE TO THE PROPORTION OF LENGTH OF RAILWAYS.

- | | |
|-----------------------|-----------------------|
| To Area. | To Population. |
| 1. Victoria. | 1. Western Australia. |
| 2. New Zealand. | 2. South Australia. |
| 3. Tasmania. | 3. Queensland. |
| 4. New South Wales. | 4. New Zealand. |
| 5. Queensland. | 5. Tasmania. |
| 6. South Australia. | 6. Victoria. |
| 7. Western Australia. | 7. New South Wales. |

213. The progress of railway extension on the continent of Australia, and on that continent with the addition of Tasmania and New Zealand, between 1870 and 1889, is shown in the following table. It will be observed that the length in 1889 in Australia was over nine times, and in Australasia nearly twelve times, as great as it was at the commencement of the period:—

RAILWAYS IN AUSTRALIA AND AUSTRALASIA.

Year.	Miles of Railway Open on the 31st December.*	
	Continent of Australia.	Australia, with Tasmania and New Zealand.
1870	948	948
1875	1,631	2,323
1880	3,421	4,851
1885	6,134	8,045
1887	7,385	9,544
1888	7,945	10,137
1889	8,786	11,072

Railways in Australia and Australasia.

214. In 1889, there were on the continent of Australia an average of 3 miles of railway to every 1,000 square miles, or somewhat less than 300 miles to every 100,000 inhabitants; and on that continent, with the addition of Tasmania and New Zealand, there were 3.6 miles to every 1,000 square miles, or rather more than 300 miles to every 100,000 inhabitants.

Railways in Australasia in proportion to area and population.

215. All the Victorian lines are constructed upon a gauge of 5 feet 3 inches, which is also the national gauge in South Australia, but has not been adhered to in that colony, as 1,271 out of 1,774 miles have been constructed upon a 3 feet 6 inches gauge. In New South Wales, a 4 feet 8½ inches gauge has been adopted, but the private line of railway between Moama and Deniliquin, which is connected with the Victorian line from Sandhurst to Echuca, has been constructed upon a 5 feet 3 inches gauge. In Queensland, Western Australia, Tasmania and New Zealand all the railways have been constructed upon a gauge of 3 feet 6 inches.

Gauges of lines in Australasia.

216. The following is a statement of the length, capital cost, receipts, working expenses, and net revenue of the railways in each Australasian colony during the year 1889:—

Length, cost, and revenue of railways in each colony.

* See footnote to table following paragraph 210 *ante*.

LENGTH, CAPITAL COST, RECEIPTS, AND WORKING EXPENSES OF
RAILWAYS IN AUSTRALASIAN COLONIES, 1889.*

Colony.	At end of the Year.		During the Year. †		
	Number of Miles Open. †	Capital Cost. †	Receipts.	Working Expenses.	Net Revenue.
		£	£	£	£
Victoria ...	2,199	29,125,280	3,110,140	1,945,837	1,164,303
New South Wales ...	2,252	29,839,167	2,538,477	1,634,602	903,875
Queensland ...	2,064	13,332,046	868,123	595,149	272,974
South Australia ...	1,774	10,976,376	927,812	519,978	407,834
Western Australia ...	497	871,377	40,849	54,339	- 13,490§
Total ...	8,786	84,144,246	7,485,401	4,749,905	2,735,496
Tasmania ...	374	2,738,164	157,583	139,419	18,164
New Zealand ...	1,912	13,899,955	1,095,569	682,787	412,782
Grand Total ...	11,072	100,782,365	8,738,553	5,572,111	3,166,442

Cost per mile of railways in each colony.

217. The average cost of Government railways per mile, as deduced from the figures in the above table, ranges from £13,744 in New South Wales, and £13,245 in Victoria, to £4,271 in Western Australia. The following are the figures for each colony :—

CAPITAL COST PER MILE OF GOVERNMENT RAILWAYS IN EACH
AUSTRALASIAN COLONY, 1889.*

	£		£
1. New South Wales ...	13,744	5. Queensland ...	6,460
2. Victoria ...	13,245	6. South Australia ...	6,251
3. Tasmania ...	8,399	7. Western Australia ...	4,271
4. New Zealand ...	7,684		

Cost of railways per mile in various countries.

218. Comparing the figures just quoted with the following, it will be found that the capital cost of railways per mile has not been so high in Victoria and New South Wales as in the United Kingdom, France, Belgium, Germany, Switzerland, Austria, Holland, or Italy. In Tasmania the capital cost has been less than in any of the countries named except Sweden, Norway, and Cape Colony; whilst in the other Australasian colonies it has been lower than the capital cost in even those countries :—

* The figures for Victoria and New South Wales are for the year ended 30th June, 1889; for New Zealand for the year ended 31st March, 1890; and those for the other colonies for the year ended 31st December, 1889. For later information respecting the railways in the various colonies, see Appendix A. *post*.

† The following lengths of private railways are included, viz. :—81 miles in New South Wales; 18 miles in South Australia; 293 miles in Western Australia; 48 miles in Tasmania; and 103 miles in New Zealand.

‡ Government lines only.

§ Excess of working expenses over receipts.

CAPITAL COST PER MILE OF RAILWAYS IN VARIOUS COUNTRIES.

	Cost per Mile. £		Cost per Mile. £
England and Wales	51,559	Italy	16,894
United Kingdom	43,955	Ireland	13,270
Scotland	37,198	Canada	11,416
France	27,500	United States	11,157
Belgium	22,381	Australasia	9,572
British Dominions	20,751	India and Burma	8,997
Germany	20,282	Cape Colony	8,022
Austria	19,833	Norway	7,291
Switzerland	19,523	Sweden	6,083
Holland	18,566		

219. In 1889 the net railway revenue bore a higher proportion to the capital cost in Victoria than in any of the other Australasian colonies. South Australia derives a large profit from the traffic to the Broken Hill silver mines, situated just outside her frontier, which placed her next to Victoria. New South Wales was next, the proportion of revenue to capital cost being, however, 1 per cent. less than in Victoria. New Zealand and Queensland followed, the proportions, respectively, being 3 and 2 per cent. The proportion of revenue to cost in Tasmania was less than $\frac{3}{4}$ per cent., whilst in Western Australia the railways were worked at an apparent loss of $1\frac{1}{2}$ per cent.

PROPORTION OF NET REVENUE TO CAPITAL COST OF STATE RAILWAYS IN EACH COLONY, 1889.*

	Per Cent.		Per Cent.
1. Victoria	4.18	5. Queensland	2.07
2. South Australia	3.95	6. Tasmania	.71
3. New South Wales	3.20	7. Western Australia	-1.53†
4. New Zealand	3.02		

220. Taking the continent of Australia as a whole, the capital cost of Government railways averaged £10,024 per mile, and the proportion of net revenue to cost was 3.40 per cent. Combining the Australian continent with Tasmania and New Zealand, the capital cost averaged £9,572 per mile, and the proportion of net revenue to cost was 3.27 per cent.

221. The following figures compared with those relating to the Australasian colonies show the proportion of net revenue to capital cost to have been higher in Victoria than in any of the countries named except Cape Colony, Germany, India, Belgium, Argentine Confederation, England, Switzerland, and the United Kingdom, and higher in South Australia than in nearly one-half of the countries;

* For later information see Appendix A. *post*.

† The minus sign indicates a net loss.

whilst, in all the other colonies, the proportion was lower than in most of the countries named:—

PROPORTION OF NET REVENUE TO CAPITAL COST OF RAILWAYS
IN VARIOUS COUNTRIES.

	Per Cent.		Per Cent.
Cape Colony ...	5·74	British Dominions ...	3·93
Germany ...	5·40	Ireland ...	3·75
India and Burma ...	4·96	Scotland ...	3·68
Belgium ...	4·55	Australasia (1889) ...	3·27
Argentine Confederation ...	4·35	Sweden ...	3·24
England and Wales ...	4·32	Holland ...	3·18
Switzerland ...	4·21	Italy ...	2·62
United Kingdom ...	4·21	Norway ...	1·78
Austria-Hungary ...	4·10	Canada ...	1·46
France ...	3·99		

Actual and theoretical cost of Australasian railways.

222. Some engineers contend that the first cost of a railway should not exceed ten times its annual gross receipts, the latter being termed its "theoretical cost." The following figures show that in all the Australasian colonies, except Victoria, the theoretical cost was greatly exceeded by the actual cost. This, however, is to be expected in new and thinly peopled countries, and upon recently constructed lines where the railway traffic is not yet fully developed:—

ACTUAL AND THEORETICAL COST OF RAILWAYS IN THE
AUSTRALASIAN COLONIES.

Colony.	Actual Cost of Construction.	Theoretical Cost of Construction (Ten Times the Gross Receipts in 1889).	Actual in Excess of Theoretical Cost.
	£	£	£
Victoria ...	29,125,280	31,101,400	- 1,976,120*
New South Wales ...	29,839,167	25,384,770	4,454,397
Queensland ...	13,332,046	8,681,230	4,650,816
South Australia ...	10,976,376	9,278,120	1,698,256
Western Australia ...	871,377	408,490	462,887
Total ...	84,144,246	74,854,010	9,290,236†
Tasmania ...	2,738,164	1,575,830	1,162,334
New Zealand ...	13,899,955	10,955,690	2,944,265
Grand Total ...	100,782,365	87,385,530	13,396,835

Victorian railways remunerative in 1888-9.

223. The Standing Committee on Railways stated in their report that, under present conditions, the gross earnings of railways in

* Actual less than theoretical cost by this amount.

† Net figures.

Victoria must be equal to at least 10 per cent. of their capital cost to pay working expenses and interest. These conditions were more than fulfilled in 1888-9, a calculation based on the figures in the table showing that the gross earnings of Victorian railways in that year exceeded $10\frac{2}{3}$ per cent. of their capital cost.

224. The actual has been less than the theoretical cost of constructing the railways in Cape Colony, British India, Germany, Russia, and the United States; but the reverse has been the case in the rest of the following countries:—

Actual and theoretical cost of railways in various countries.

ACTUAL AND THEORETICAL COST OF CONSTRUCTING RAILWAYS
IN VARIOUS COUNTRIES.

Country.	Actual Cost of Construction.	Theoretical Cost of Construction (Ten times the Annual Receipts).	Actual in Excess of Theoretical Cost.	Actual Less than Theoretical Cost.
	£	£	£	£
United Kingdom ...	876,595,166	770,250,170	106,344,996	...
Scotland ...	115,983,977	83,078,500	32,905,477	...
Ireland ...	37,037,391	30,411,980	6,625,411	...
Australasia (1889) ...	100,782,365	87,385,530	13,396,835	...
Cape Colony ...	14,318,502	17,598,320	...	3,279,818
India and Burma* ...	144,931,384	145,163,450	...	232,066
Canada ...	158,453,426	87,811,700	70,641,726	...
Germany ...	503,771,000	584,480,000	...	80,709,000
France ...	562,105,000	463,750,000	98,355,000	...
Italy ...	121,583,000	94,510,000	27,073,000	...
Belgium ...	72,131,000	70,860,000	1,271,000	...
Russia ...	277,860,000	282,950,000	...	5,090,000
United States ...	1,791,267,000	2,068,450,000	...	277,183,000

225. In 1889 the length of lines open in Ireland and Scotland together was 2,877 miles less than the length open on the Australian continent; whilst the length open in England and Wales was about 3,000 miles greater than that upon the Australian continent, combined with Tasmania and New Zealand. Taking the United Kingdom as a whole, the working expenses were in the proportion of 52 per cent. of the receipts; whilst the net receipts amounted to over 4 per cent. of the capital cost. The following are the railway statistics of the United Kingdom for that year:—

Railways in United Kingdom.

* Including Feudatory Native States.

RAILWAYS IN THE UNITED KINGDOM, 1889.

Country.	Miles of Railway Open on the 31st December	Paid up Capital (Shares, Loans, etc.).	Number of Passengers (excluding Season Ticket Holders).	Traffic Receipts.	Working Expenses.
		£		£	£
England and Wales ...	14,034	723,573,798	683,263,574	65,675,969	34,402,969
Scotland ...	3,118	115,983,977	70,907,464	8,307,850	4,039,890
Ireland ...	2,791	37,037,391	21,012,035	3,041,198	1,651,257
Total United Kingdom	19,943	876,595,166	775,183,073	77,025,017	40,094,116

Daily receipts per mile on Victorian and British railways.

226. The gross daily receipts of the Victorian railways per mile open averaged £3 19s. 6d. in 1888-9, and £3 13s. 8d. in 1889-90.* The latter proportion was 7s. 5d. higher than in New South Wales during the same year, and much larger than the average receipts upon any of the other Australasian railways, or than any of the British railways, except the Metropolitan, as shown by the following figures:—

GROSS DAILY RECEIPTS PER MILE CONSTRUCTED.†

AUSTRALASIAN RAILWAYS, 1889-90.

	Average Receipts per Mile per Day.		
	£	s.	d.
Victoria ...	3	13	8*
New South Wales ...	3	6	3
South Australia ...	1	16	0
New Zealand ...	1	13	8
Tasmania... ..	1	3	3
Queensland ...	1	2	7

BRITISH RAILWAYS.

Metropolitan ...	11	9	1
London and Yorkshire ...	2	19	7
London, Chatham, and Dover ...	2	13	9
London and North-Western ...	2	4	6
London, Brighton, and South Coast ...	2	1	6
Midland ...	2	1	5
Great Northern ...	1	15	5
London and South-Western ...	1	12	11
North-Eastern ...	1	12	4
Great Eastern ...	1	7	1
Great Western ...	1	6	7
Caledonian ...	1	6	7
North British ...	1	0	1
Average ...	1	14	6

* These calculations are based upon a comparison of 365 days with the total receipts, but except on the lines connecting Melbourne with its suburbs—where a limited traffic is carried on—the Victorian lines do not run on Sundays. If Sundays be excluded from the computation, the average daily receipts would be £4 12s. 8d. in 1888-9, and £4 5s. 11d. in 1889-90.

† See J. S. Jeans' paper, page 122.

227. Except as regards the United Kingdom and Australasia, the figures in the following table, showing the statistics of railways in the various British possessions during 1889, have been extracted and re-arranged from a return given in the *Colonial Office List*, 1891:—

RAILWAYS IN BRITISH POSSESSIONS, 1889.

Country or Colony.	Number of Miles Open.	Capital Cost.	Receipts.	Working Expenses.	Net Revenue.
EUROPE.					
United Kingdom* ...	19,943	£ 876,595,166	£ 77,025,017	£ 40,094,116	£ 36,930,901
Malta ...	7½	90,000	...	...	...
ASIA.					
India and Burma } Indian Feudatory States	16,108	144,931,384	14,516,345	7,330,754	7,185,591
Ceylon ...	181	2,619,916	251,195	118,853	132,342
Protected Malay States	50	169,938	54,211	21,460	32,751
AFRICA.					
Cape Colony ...	1,785	14,318,502	1,759,832	937,703	822,129
Natal ...	259	3,000,000	848,698	512,698	336,000
Mauritius ...	92	800,000	127,585	92,502	35,083
AMERICA.					
Canada ...	12,628	158,453,426	8,781,170	6,466,259	2,314,911
Newfoundland ...	109	645,833	15,038	14,092	946
British Guiana ...	20	280,000	34,730	19,752	14,978
West Indies—					
Barbados ...	24	201,400	10,430	13,983	−3,553‡
Jamaica ...	64	775,000	55,646	34,356	21,290
Trinidad and Tobago	54¼	602,638	50,504	36,086	14,418
Australasia† ...	11,072	100,782,365	8,738,553	5,572,111	3,166,442
Total ...	62,396¾	1,304,265,568	112,268,954	61,264,725	51,004,229§

228. On the Indian railways (including those of the Native States), the number of passengers carried during the year 1889 was 110,650,472, and the weight of goods carried was 22,249,111 tons. The net earnings of the year 1889 was at the rate of £4 18s. 7d. per £100 invested.

229. From the latest official statistics, the following information respecting the railways of the various Foreign countries throughout the world has been extracted. Germany, France, and the United States are the only countries in the list which have a greater length open than the United Kingdom:—

* For railway statistics of England, Scotland, and Ireland, see table following paragraph 225 *ante*.

† The length of private lines in Australasia (543 miles) is included in the first figure column, but the figures in the subsequent columns relate to Government lines only (10,529 miles). For railway statistics of the different Australasian colonies, see table following paragraph 216 *et seq. ante*.

‡ Excess of expenses over receipts.

§ Net figures.

RAILWAYS IN FOREIGN COUNTRIES.

Country.	Year.	Miles of Railway Open.	Cost of Construction (000's omitted.)	Annual Number of Passengers Carried. (000's omitted.)	Annual Receipts. (000's omitted.)	Annual Expenses. (000's omitted.)
EUROPE.						
			£		£	£
Austria-Hungary ...	1888	15,618	305,042,	68,639,	24,440,	11,928,
Belgium ...	1889	2,776	72,131,	76,277,	7,086,	3,804,
Denmark ...	1888-9	1,048	...	9,120,	861,	725,
France ...	1889	20,440	562,105,	244,165,	46,375,	23,950,
German Empire ...	1888-9	24,845	503,771,	339,864,	58,448,	31,690,
Greece ...	1888	416	...	...	...	...
Holland ...	1889	1,715	31,840,	19,449,	2,291,*	1,277,*
Italy ...	1887	7,197	121,583,	45,519,	9,451,	6,264,
Portugal ...	1886	950	...	2,920,	937,	369,
Russia in Europe ...	1887	16,774	...	36,843,	25,217,	14,453,
Spain ...	1888	5,951	...	...	...	...
Norway ...	1888-9	970	7,078,	3,751,	467,	308,
Sweden ...	1888	4,675	28,415,	10,070,	2,298,	1,378,
Switzerland ...	1888	1,869	36,489,	27,079,	3,291,	1,754,
Turkey in Europe...	1890	904	...	...	...	...
ASIA.						
China ...	1888	86	...	...	...	...
Japan ...	1888-90	1,010	...	17,197,	1,200,	444,
Persia ...	1888	6	...	...	...	...
Turkey in Asia ...	1890	392	...	...	...	...
AFRICA.						
Algeria ...	1890	1,910	...	...	872,*	...
Tunis ...	1889	260	...	...	...	...
AMERICA.						
Argentine Confede- ration	1889-90	5,798	49,981,	...	7,050,	4,884,
Brazil ...	1889	5,582	56,109,	7,315,†	4,391,†	29,247,†
Chile ...	1890	1,700	8,041,	...	...	...
Colombia ...	1890	218	...	...	...	...
Costa Rica ...	1890	180	...	...	...	...
Cuba ...	1890	1,000	...	...	...	...
Guatemala ...	1890	99	...	...	...	...
Hawaii ...	1889	56	...	...	...	...
Honduras ...	1890	69	...	...	...	...
Mexico ...	1890	4,648	...	12,978,‡	1,152,‡	...
Nicaragua ...	1889	99	450,	...	...	...
Paraguay ...	1890	92	...	...	24,	17,†
Peru ...	1889	1,625	...	...	...	...
San Domingo ...	1889	72	...	...	...	...
San Salvador ...	1889	59	...	...	...	...
United States ...	1889	160,544	1,791,267,	495,125,	206,845,	139,931,
Uruguay ...	1889	440	...	...	...	...
Venezuela ...	1889	183	...	...	...	...

* Figures for 1888.

† Figures for 1887.

‡ Figures for 1889.

230. In proportion to population, all the Australasian colonies would appear to be better provided with railway accommodation than any one of the European countries named below; but in proportion to area, worse provided than any except Russia; Victoria, New Zealand, and Tasmania, being in this respect, however, better provided than that country:—

Australasian and European railways in proportion to population and area.

RAILWAYS IN PROPORTION TO POPULATION IN AUSTRALASIAN AND EUROPEAN COUNTRIES.

Countries.	Year.	Number of Inhabitants per Mile of Railway.	Countries.	Year.	Number of Inhabitants per Mile of Railway.
Western Australia...	1889	94	Germany ...	1888-9	1,886
South Australia ...	„	176	United Kingdom ...	1889	1,928
Queensland ...	„	177	Belgium ...	„	2,195
New Zealand ...	„	323	Austria-Hungary	1888	2,624
Tasmania ...	„	380	Spain ...	„	2,949
New South Wales ...	„	481	Italy ...	1887	4,300
Victoria ...	1888-9	502	Portugal ...	1886	4,531
Switzerland ...	1888	1,570	Russia in Europe	1887	5,724
France ...	1889	1,870			

RAILWAYS IN PROPORTION TO AREA IN AUSTRALASIAN AND EUROPEAN COUNTRIES.

Countries.	Year.	Number of Square Miles of Territory per Mile of Railway.	Countries.	Year.	Number of Square Miles of Territory per Mile of Railway.
Belgium ...	1889	4·1	Victoria ...	1888-9	40·0
United Kingdom ...	„	6·2	New Zealand ...	1889	54·5
Germany ...	1888-9	8·4	Tasmania ...	„	70·5
Switzerland ...	1888	8·5	Russia in Europe	1887	124·0
France ...	1889	10·0	New South Wales	1889	137·3
Italy ...	1887	15·9	Queensland ...	„	323·8
Austria-Hungary ...	1888	16·9	South Australia ...	„	509·5
Spain ...	„	33·2	Western Australia	„	1,963·6
Portugal ...	1886	36·4			

231. In proportion to the mileage open, the following figures show the gross railway receipts to be higher in Victoria than in Italy, Ireland, the Cape Colony, or India, and in New South Wales than in the three last-named countries, whilst all the other Australasian colonies, as well as Canada, are below India:—

Receipts per mile open in various countries.

GROSS RAILWAY RECEIPTS PER MILE IN AUSTRALASIAN COLONIES
AND VARIOUS EUROPEAN COUNTRIES.

	Annual Receipts per mile open.		Annual Receipts per mile open.
England and Wales	£4,680	Ireland	£1,090
United Kingdom	3,872	Cape Colony...	986
Scotland	2,664	India and Burma	901
Belgium	2,552	Australia	852
Germany	2,353	Australasia	789
France	2,269	Canada	695
British Dominions	1,799	South Australia	658
Austria-Hungary	1,565	New Zealand (1890)	614
Russia	1,503	Tasmania (1890-91)	424
Victoria (1889-90)	1,344	Queensland (1889-90)...	413
Italy	1,313	Western Australia (1890)	82
New South Wales (1889-90)	1,210		

Receipts per
train mile
in various
countries.

232. By the following figures it would appear that the gross receipts of the railways per train mile are lower in Victoria by 2s. 4d. than in New Zealand, by 1s. 3d. than in New South Wales, and by 1s. 2d. than in South Australia, but are higher than those in Queensland or in any of the European countries named:—

GROSS RECEIPTS OF RAILWAYS OF VARIOUS COUNTRIES PER
TRAIN MILE.*

AUSTRALASIAN COLONIES, 1889-90.

	Receipts per Train Mile.	
	s.	d.
New Zealand	7	8
New South Wales	6	7
South Australia	6	6
Victoria	5	4
Queensland	4	7

EUROPEAN COUNTRIES.

Austria-Hungary—Companies' lines...	5	1
Russia—Companies' lines	4	7
France—Companies' lines	4	3
Austria-Hungary—Private lines worked by the State	4	3
Italy—State lines	4	2
Russia—State lines	3	9
Austria-Hungary—State lines	3	6
Germany—Private lines worked by the State	3	6
„ Companies' lines	3	0
Belgium—Companies' lines	2	9
„ State lines	2	3
France—State lines	2	2

Receipts per
ton on Aus-
tralasian
and
European
railways.

233. The Victorian railways received on the average about 6s. 6d. in 1888-9, and about 6s. 11d. in 1889-90, per ton of goods and live stock carried. According to the following figures, these tonnage rates are 5s. or 6s. lower than those prevailing in Queensland, South Australia, or Russia, and also lower than in New South Wales,

* The figures relating to European countries have been taken from a paper entitled "The Economics of European Railways," by J. S. Jeans, *Bulletin de l'Institut International de Statistique*, tome I., 3ème et 4ème livraisons, page 117, there given in francs per kilomètre.

Roumania, or Italy, but higher than those prevailing in any of the other undermentioned countries. It should be borne in mind, however, that the distances travelled with goods in the Australasian colonies named are greater than those in Victoria; and it may be mentioned in reference to the high position of South Australia that more than one-half of the goods traffic of that colony is with the Broken Hill silver mines:—

AVERAGE AMOUNT OF FREIGHT RECEIVED ON RAILWAYS OF VARIOUS COUNTRIES PER TON OF GOODS CARRIED.*

	Receipts per Ton Carried.			Receipts per Ton Carried.	
	s.	d.		s.	d.
Queensland (1889-90) ...	12	11	Austria-Hungary ...	6	1
South Australia (1889-90)	11	11	Denmark ...	4	7
Russia ...	11	11	Switzerland ...	4	7
New South Wales (1889-90)	8	4	Norway ...	3	6
Roumania ...	8	2	Germany ...	3	3
Italy ...	7	6	Holland ...	3	1
Victoria (1889-90) ...	6	11	Belgium ...	2	8
New Zealand (1889-90) ...	6	6	Luxemburg ...	0	11
France ...	6	3			

234. The following was the number of miles of railway open throughout the world at the end of decennial or quinquennial periods, from 1830 to 1885†, and also for the latest years; also the average annual increase between each period named and the preceding one:—

Railways of
the world,
1830 to
1890.

RAILWAYS OF THE WORLD, 1830 TO 1889-90.

Year.	Total Length at end of years named.	Average Annual Increase between periods named.
	Miles.	Miles.
1830 ...	206	...
1840 ...	5,335	513
1850 ...	23,612	1,828
1855 ...	42,320	3,742
1860 ...	66,376	4,812
1865 ...	90,116	4,748
1870 ...	137,850	9,547
1875 ...	183,681	9,166
1880 ...	221,718	7,607
1885 ...	302,778	16,212
1887-8 ...	354,706	21,000‡
1888-9 ...	370,259	15,553
1889-90 ...	371,877	1,618

* See J. S. Jeans' paper, page 127, receipts there given in francs.

† The figures for 1885 and previous years have been derived from *L'Almanach de Gotha*, 1887, and those for subsequent years from McCarty's *Annual Statistician*. When the length was given in kilomètres it has been reduced to English miles on the assumption that a kilomètre is equivalent to .621 of a mile.

‡ Approximate.

Tramways.

235. By the *Melbourne Tramway and Omnibus Company's Act* 1883 (47 Vict. No. 765), passed on the 12th October, 1883, the company were authorized to construct tramways in the streets of Melbourne and suburbs. It was provided by the fourth schedule of that Act that the option of constructing the tramways should first be given to the twelve municipalities interested,* any two of which were required to notify to the company their intention of doing so before the expiration of three months from the passing of the Act; but in case the municipalities should not elect to construct the tramways, the sole right was then to be vested in the company. All the municipalities, however, decided to exercise the power 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 seven delegates from the Melbourne City Council, and one from each of the other eleven municipalities, received full power to construct tramways, and to borrow money for that purpose, secured on the municipal property and revenues and on the tramways themselves. The Trust was required by the above-mentioned Act, as modified by the Amending Act (51 Vict. No. 952), to complete the tramways by the 31st December, 1890, 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 their part, are 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 thorough order to the Trust at the expiration of the lease, and to pay to the Trust the annual interest on the moneys borrowed, not exceeding 5 per cent.; also to contribute annually a certain varying 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, 1892, are to be 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 to be shared rateably amongst the different municipalities, according to the cost of the tramways within their municipal limits.† The total amount the Trust is empowered to borrow is £1,650,000,‡ of which £1,630,000 has been raised in London by means of debentures bearing interest at 4½ per

* Their names are as follow:—The cities of Melbourne, Prahran, Richmond, Fitzroy, Collingwood, South Melbourne, Hawthorn, and St. Kilda; the towns of North Melbourne and Brunswick; and the boroughs of Port Melbourne and Kew.

† Owing to the machinery provided in the original Act for floating the loan being defective, the *Tramways Trust Act* 1884 (48 Vict. No. 788) was subsequently passed, making the Trust's debentures a joint and several charge on the revenues of the various municipalities represented on the Trust.

‡ Including £150,000 authorized on 22nd September, 1890, under Act 54 Vict. No. 1173.

cent.* The expenditure of the Trust up to the 31st of December, 1890, amounted to £1,588,706. The following account of the tramways, and mode of working them, has been kindly furnished and brought on to the latest date by Mr. T. Hamilton, secretary to the Tramways Trust:—

The total length of tramways to be constructed amounts to 47 miles 3 furlongs, of which 43 miles 5 furlongs are to be worked by cables and stationary steam engines, and the remaining 3 miles 6 furlongs by horses. The last line, along the St. Kilda Esplanade, $1\frac{3}{4}$ mile long, is on the cable system, and was opened on the 27th October, 1891, thus completing the present authorized system.

The cable lines form one of the largest systems of this description of tramway in the world, and the method of construction adopted will combine all the best features and latest improvements of existing lines both in America and Europe.

The following short description will explain the principle of the construction and working:—

A double tunnel of Portland cement concrete extends from end to end of each line under the roadway; in these tunnels are placed, at intervals of about 4 feet apart, strong bent irons, called “yokes,” which have an opening at the top of about 4 inches. On each side of this opening, longitudinal angle-irons, $\frac{7}{8}$ inch apart, are bolted to the yokes, thus forming a continuous open groove or slot, leading into the tunnel and extending from end to end of the tramway. The rails on which the cars run are connected with these angle-irons by means of tie-rods, and are laid on a bed of concrete. In the tunnel are fixed, at intervals of 30 feet, iron pulleys, over which run the steel wire cables which work the cars. At the end of each line large horizontal pulleys are fixed between the two tunnels, over which the cable is placed, which thus runs up one tunnel and down the other. The motive power is supplied by stationary engines, placed in the most convenient spot available on the line.

Each passenger car is accompanied by a “dummy” car, on which the arrangements for working the car are fixed. A mechanical hand, called a “gripper,” fixed on the dummy, passes through the continuous groove above-mentioned, and on working a lever the gripper tightens on the rope, and the car proceeds on its course. To stop, the gripper is released and brakes are applied, by means of which, on level ground, the car may be brought to rest, without shock, in a few feet. The rate of travel of the cable is about 7 miles an hour, which gives a mean rate for the cars, including stoppages, of about $6\frac{1}{2}$ miles. It will be understood that the speed is perfectly uniform, whether on the level or ascending or descending hills. The methods of running round curves, of enabling one cable line to cross another, keeping the tension of the rope uniform, and of taking up automatically the slack caused by stretching, and by the diurnal variation of temperature, necessitate the application of various complicated and ingenious contrivances.

The cable lines are paved with red gum blocks; the horse lines are laid on wooden sleepers and are macadamized.

Great care had to be exercised in seeing that none but cement of the very highest quality was used in the tunnels. The tests prescribed were that not less than 90 per cent. should pass through a sieve with 2,500 meshes to the square inch, and that small bricks of one inch square of pure cement should, after having been immersed in water for 7 days, bear, without breaking, a strain of 350 lbs., applied by means of a testing machine.

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 three half-pence per journey. All

* For further information respecting the Tramways Trust loans, see paragraphs 287 and 288 in Vol. I.

fares will be, by Act No. 765, Section 26, subject to revision by Parliament after the lapse of 10 years from the date of 20 miles of tramway being opened for traffic, viz., on the 31st December, 1897.

The extent of lines open for traffic to the 30th June, 1891, was $45\frac{1}{4}$ miles, consisting of $41\frac{1}{2}$ miles of cable lines and $3\frac{3}{4}$ miles of horse lines.

DATES OF OPENING LINES.

The following are dates of the opening to traffic of the several lines :—

Tram Lines. (c) cable; (h) horse.	Length.				Date of Opening.
	M.	F.	CHS.	FT.	
1. Richmond (c)	3	4	9	10	11th November, 1885
2. Collins-street and Fitzroy (c)...	3	5	4	58	2nd October, 1886
3. Victoria-street East (c)	2	0	5	59	22nd November, 1886
4. Collingwood and Clifton Hill (c) ...	2	1	9	33	10th August, 1887
5. Bourke-street and Nicholson-street (c) ...	3	2	4	53	26th August, 1887
6. Brunswick (c)	4	3	3	19	1st October, 1887
7. Carlton (c)	3	0	0	13	21st December, 1887
8. Kew (incomplete) (h)	1	5	0	0	28th December, 1887
9. St. Kilda (c)	5	0	1	20	11th October, 1888
10. Prahran (c)	3	4	7	23	26th October, 1888
11. North Carlton (c)	1	2	0	0	9th February, 1889
12. Toorak (c)	1	2	8	23	15th February, 1889
13. Hawthorn (h)	2	1	0	0	20th January, 1890
14. North Melbourne (c)	3	5	0	0	25th February, 1890
15. North and West Melbourne (c)					18th April, 1890
16. Port and South Melbourne (c)	4	3	0	0	17th June, 1890
17. St. Kilda Esplanade (c)	1	6	0	0	27th October, 1891

Tramway
passengers
and
receipts.

236. From information furnished by the secretary of the Melbourne Tramway and Omnibus Co., it appears that the number of passengers carried on tramways during the year 1890-91 was about 48 millions, whilst the total receipts amounted to nearly £563,000. The number of persons employed by the Company in September, 1891, was about 2,000. The following are the traffic returns for the last six years, placed side by side with figures showing the average length open :—

TRAFFIC OF MELBOURNE TRAMWAYS, 1885-6 TO 1890-91.

Year ended 30th June.	Average Extent Open (Double Track).	Passengers Carried.	Total Receipts.
	Miles.	No.	£
1886	2·29	16,353,250	188,531
1887	7·60	17,992,047	207,329
1888	19·85	31,133,444	362,581
1889	30·99	45,000,364	526,588
1890	37·21	45,273,578	527,342
1891	45·31	48,044,826	562,541

NOTE.—The first line was opened for traffic on the 11th November, 1885. The following rates of wages are paid by the Company :—First-class, Gripmen, 52s. ; Conductors, 50s. per week. Second class, an average of three-fourths of these amounts, except on special occasions when the men do more work and often earn first-class rates.

Tramway
accidents.

237. During the first eighteen months the Melbourne street tramways were open, viz., from December, 1885, to June, 1887, 30 tramway accidents were recorded, resulting in the death of 7 persons,

and the more or less serious injury of 23 others. In 1888 the number of fatal accidents was also 7, in 1889 there were 3, and in 1890 there were 10. Of the latter, 8 were run over, one came into collision with a car, and one was struck by the gripper. No information has been furnished respecting non-fatal cases. The Company have caused a protector, made of iron, extending round the front and sides, to be fastened to the dummy cars, so as to minimize the number of serious accidents.

238. 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; an electric tramway, about 2 miles in length, between Box Hill and Doncaster; a horse tramway, 7 miles in length, between Sandringham and Cheltenham; and a horse tramway, $1\frac{1}{2}$ mile in length, between Brunswick and Coburg. All these lines are the property of, and are worked by, limited liability companies. Other suburban tramways.

239. The number of vehicles licensed in Melbourne, and for a distance of eight miles beyond the corporate limits, in 1890, was 1981 for the conveyance of passengers, of which 727 were tram cars and dummies; whilst the number of drivers licensed for the conveyance of goods was 1,195. The following are the particulars:— Licensed vehicles in Melbourne.

NUMBER OF LICENSED VEHICLES IN MELBOURNE AND SUBURBS
IN 1890.*

FOR PASSENGER TRAFFIC.						Number.
Cabs (4 wheels) ...	...	...	...	...	...	901
Hansoms ...	...	...	...	...	...	283
Omnibuses ...	...	...	...	...	...	70
Tram cars ...	...	...	...	...	...	370
„ dummies ...	...	...	...	...	...	357
Total						1,981
FOR CONVEYANCE OF GOODS.						
Drivers licensed in 1890-91	...	...	...	...	...	1,195

240. The following table contains a statement of the average rates of wages paid in respect to engagements made in Melbourne, in 1890, and in the first year of each of the two previous quinquennia. It has been compiled from statements obtained from the best authorities, and is believed to be fairly representative of a state of affairs which must always be subject to some fluctuations. Throughout Victoria, the recognized working day for artizans and general labourers is eight hours:— Wages.

* Extending for a distance of 8 miles beyond the corporate limits of the city.

WAGES IN MELBOURNE, 1880, 1885, AND 1890.

Description of Labour.	1880.	1885.	1890.
1.—DOMESTIC SERVANTS.			
<i>Males.</i>			
Coachmen, footmen, } per week, with board grooms, gardeners } and lodging	15s. to 30s.	20s. to 30s.	20s. to 30s.
Butlers ... ..	...	20s. to 40s.	20s. to 40s.
<i>Females.</i>			
Cooks per annum, with board and lodging	£35 to £60	£40 to £75	£40 to £75
Laundresses	£30	£35 to £52	£40 to £52
Housemaids	£25 to £35	£25 to £40	£30 to £40
Nursemaids	£25 to £35	£20 to £40	£30 to £40
General servants	£30 to £35	£26 to £40	£30 to £40
Girls per week,	...	5s. to 8s.	8s. to 10s.
2.—HOTEL SERVANTS.			
<i>Males.</i>			
Barmen per week, with board and lodging	20s. to 40s.	30s. to 45s.	30s. to 45s.
Waiters	25s. to 35s.	20s. to 40s.	25s. to 40s.
Boots	15s. to 20s.	15s. to 20s.	15s. to 25s.
Ostlers	17s. 6d. to 20s.	17s. 6d. to 20s.	20s. to 25s.
Cooks	25s. to 40s.	20s. to 65s.	20s. to 65s.
<i>Females.</i>			
Barmaids per week, with board and lodging	15s. to 25s.	15s. to 25s.	20s. to 30s.
Waitresses	12s. 6d. to 15s.	15s. to 20s.	15s. to 20s.
Housemaids ... per annum,	£30 to £35	£30 to £40	£30 to £40
Cooks	£50 to £80	£50 to £100	£50 to £100
3.—FARM SERVANTS.			
<i>Males.</i>			
Ploughmen ... per week, and found ...	20s. to 21s.	20s. to 25s.	20s. to 25s.
Farm labourers	15s. to 20s.	15s. to 20s.	15s. to 20s.
Milkmen for dairies	15s. to 20s.	15s. to 20s.	15s. to 20s.
Cheesemakers ... ..	...	25s. to 40s.	25s. to 40s.
Reapers* per acre,	7s. 6d. to 15s.	10s. to 15s.	10s. to 15s.
Mowers*	4s. to 6s.	3s. 6d. to 6s.	4s. to 6s.
Threshers* ... per bushel,	5d. to 7d.	5d. to 7d.	5d. to 7d.
Cooks per annum,	£50	£50 to £60	£50 to £60
<i>Females.</i>			
Dairymaids ... per annum, with board and lodging	£30 to £35	£30 to £35	£30 to £35
Cooks	£30 to £35	£30 to £50	£30 to £35
General servants	£30 to £35	£30 to £35	£30 to £35
Hop-pickers ... per bushel ... ..	...	3½d. to 4½d.	3½d. to 4½d.
Maize-pickers ... per bag ... ..	...	6d.	6d.
Married couples } per annum, with board (generally useful) } and lodging	£60 to £70	£60 to £90	£60 to £80
4.—STATION SERVANTS.			
<i>Males.</i>			
Boundary riders ... per annum, with rations	£40 to £60	£40 to £60	£40 to £60
Shepherds	£40 to £50	£36 to £52	£36 to £52
Stockmen... ..	£60 to £70	£55 to £75	£50 to £75
Hutkeepers	£26 to £40	£26 to £40	£30 to £40

* Of late years the greater portion of the reaping, mowing, and threshing has been done by machinery.

WAGES IN MELBOURNE, 1880, 1885, AND 1890—continued.

Description of Labour.	1880.	1885.	1890.
4.—STATION SERVANTS—continued.			
<i>Males.</i>			
Cooks	£45 to £55	£50 to £60	£60 to £70
Labourers	15s. to 20s.	15s. to 20s.	15s. to 20s.
Drovers	25s. to 40s.	25s. to 40s.	25s. to 40s.
Sheepwashers	15s. to 25s.	15s. to 25s.	15s. to 25s.
Shearers	12s. to 15s.	12s. to 15s.	15s. to 16s.
			rations
<i>Females.</i>			
Cooks	£45 to £55	£30 to £50	£30 to £50
General servants	£18 to £40	£20 to £40	£30 to £45
Married couples	£70 to £90	£60 to £90	£70 to £90
			and lodging
5.—WORKERS IN BOOKS, ETC.			
Printers—			
Compositors	1s.	1s. 1d.	1s. 2d.
Machinists	£2 10s. to £4	£2 10s. to £4	£2 10s. to £4
Lithographers	£2 10s. to £3 15s.	£2 10s. to £3 15s.	£2 5s. to £3 15s.
Binders	£2 to £3	£2 to £3	£3 to £3 10s.
Paper rulers	£3 to £3 10s.	£3 to £3 10s.	£3 to £3 10s.
Sewers and folders	15s. to 25s.	15s. to 25s.	15s. to 25s.
(females)			
6.—IN WATCHES, JEWELLERY, AND PRECIOUS METALS.			
Watchmakers	£3 10s. to £5	£3 10s. to £6	£2 to £4 10s.
Manufacturing jewellers	£2 15s. to £3 15s.	£2 15s. to £3 15s.	£2 to £5
Enamellers	£6 to £8	£6 to £8	£3 to £4
7.—IN METALS OTHER THAN GOLD AND SILVER.			
Blacksmiths	10s. to 13s.	10s. to 14s.	10s. to 12s.
Farriers—Firemen	£2 15s.	£2 15s.	£2 10s. to £3 10s.
„ Floormen	30s. to 40s.	30s. to 40s.	30s. to 50s.
Hammermen	7s. to 8s.	7s. to 8s.	6s. to 8s.
Fitters	9s. to 12s.	9s. to 12s.	8s. to 12s.
Turners	10s. to 13s.	10s. to 13s.	9s. to 13s.
Boilermakers and platers	11s. to 13s.	10s. to 14s.	10s. to 14s.
Riveters	9s. to 11s.	9s. to 11s.	10s. to 11s.
Moulders	10s. to 12s.	10s. to 12s.	10s. to 12s.
Brassfinishers, copersmiths	9s. to 12s.	8s. to 12s.	10s. to 12s.
Tinsmiths... ..	£2 to £3	£2 to £3	£2 to £3
Ironworkers	£2 10s. to £3	£2 10s. to £3	£2 to £3 10s.
Galvanizers	£3	£3	£2 to £3 10s.
Plumbers, gasfitters	£3	£2 10s. to £3 10s.	£3
8.—IN CARRIAGES AND HARNESS.			
Smiths	£2 10s. to £3 5s.	£2 5s. to £4	£2 10s. to £3 10s.
Bodymakers	£2 10s. to £3 10s.	£2 10s. to £4 10s.	£2 10s. to £3 10s.
Wheelers	£2 10s. to £3 10s.	£2 10s. to £3 10s.	£2 10s. to £3 10s.
Painters	8s. to 12s.	10s. to 12s. 6d.	6s. 6d. to 11s.

WAGES IN MELBOURNE, 1880, 1885, AND 1890—continued.

Description of Labour.	1880.	1885.	1890.
8.—IN CARRIAGES AND HARNESS—continued.			
Trimmers per week	£2 10s. to £3 10s.	£2 10s. to £3 10s.	£2 to £3 10s.
Vycemen "	25s. to 40s.	30s. to 50s.	£2 10s.
Saddlers "	£2 15s.	£2 to £3	£2 to £5
9.—WORKERS IN SHIPS AND BOATS.			
Sailors—			
Sailing vessels ... per month, and found ...	£4 10s. to £5	£4 10s. to £5	£3 10s. to £5
Steamships "	£6	£6	£7
Ship carpenters, ship-wrights per day	13s.	12s. to 13s.	13s.
Stevedores' men, lumpers per hour	1s. 6d.	1s.3d. to 1s.6d.	1s. 3d.
10.—IN HOUSES AND BUILDINGS.			
Masons per day	10s. to 11s.	10s. to 12s.	10s. to 12s.
Plasterers "	10s.	10s. to 12s.	10s.
Bricklayers "	10s.	10s. to 12s.	10s. 8d.
Slaters "	10s.	12s.	10s.
Carpenters "	10s.	10s. to 12s.	10s.
Labourers "	6s. 6d. to 7s.	6s.6d. to 7s.6d.	7s. to 8s.
Painters and glaziers "	9s.	9s. to 10s.	8s. to 9s.
11.—IN FURNITURE, ETC.			
Cabinetmakers ... per week	£2 10s. to £3 10s.	£2 to £3 10s.	£2 to £3 15s.
Upholsterers "	£2 10s. to £4	£2 10s. to £4	£2 5s. to £3
Polishers "	£2 to £3	£2 to £3	£2 to £3
Coopers per day	10s.	10s.	9s. to 10s.
12.—IN DRESS.			
Tailors per hour	10d. to 1s.	10d.	10d. to 1s.
" per week	£2 10s. to £3	£2 10s. to £3	£2 10s. to £3
" in factories "	£2	£2 to £2 10s.	£2 to £2 10s.
Mantlemakers "	15s. to 20s.	15s. to 30s.	13s. to 30s.
Milliners—			
First class "	£3 10s.	£3 10s.	£3 to £4
Second class "	35s.	35s.	15s. to £2 5s.
Dressmakers "	15s. to 25s.	15s. to 25s.	15s. to 25s.
Needlewomen "	12s. to 20s.	12s. to 20s.	12s. to 20s.
Bootmakers ... riveting children's boots, per pair	6d.	6d.	5d.
" ... riveting boys' boots, per pair	10d.	10d.	9d.
" ... riveting women's boots, per pair	1s.	1s. to 1s. 6d.	1s. to 1s. 3d.
" ... riveting men's boots, per pair	1s. 3d.	1s. 3d.	1s. to 1s. 9d.
" ... making wellingtons to order	10s.	10s.	10s.
" ... making elastics to order...	7s. 6d.	7s. 6d.	6s. to 8s.
" Machinists per week	15s. to 30s.	15s. to 30s.	15s. to 25s.
Hatters—			
Bodymakers ... per dozen	12s. to 20s.	12s. to 22s.	10s. to 22s.
Finishers "	12s. to 24s.	12s. to 24s.	12s. to 24s.

WAGES IN MELBOURNE, 1880, 1885 AND 1890.—*continued.*

Description of Labour.	1880.	1885.	1890.
12.—IN DRESS— <i>continued.</i>			
Hatters—			
Shapers ... per dozen ...	4s. to 12s.	4s. to 12s.	4s. to 12s.
Crown sewers ... „ ...	3s. 6d. to 5s.	3s. 6d. to 5s.	3s. 6d. to 5s.
Trimmers ... „ ...	6s.	6s.	6s. to 9s.
Clothing Factories—			
Tailoresses ... per week ...	20s. to 35s.	12s. 6d. to 35s.	20s. to 35s.
Pressers ... „ ...	£2 to £2 15s.	£2 to £2 15s.	£2 to £3
Shirtmakers ... „ ...	12s. to 20s.	12s. to 25s.	12s. to 25s.
Machinists ... „ ...	15s. to 30s.	20s. to 35s.	20s. to 35s.
Drapers' assistants, carpet salesmen „ ...	£2 10s. to £4	£2 5s. to £4 10s.	£2 10s. to £5 10s.
13.—IN FOOD AND DRINK.			
Bakers—			
Foremen ... per week ...	£3	£3	£3
Second hands ... „ ...	£2 to £2 2s.	£2 10s.	£2 to £2 10s.
Butchers—			
Shopmen ... per week ...	35s. to 40s.	30s. to 40s.	30s. to 40s.
Slaughtermen ... „ ...	£2 to £2 10s.	£2 to £2 10s.	£2 10s. to £3
Boys ... „ with board ...	12s. 6d. to 20s.	15s. to 20s.	15s. to 20s.
Small-goods men ... „ „ ...	£1 10s. to £2	£1 10s. to £2	£1 15s. to £2 5s.
Maltsters ... „ ...	£2 to £2 10s.	£2 5s. to £3	£2 2s. to £2 5s.
14.—IN ANIMAL SUBSTANCES.			
Curriers ... per week ...	£2 10s. to £3 10s.	£2 10s. to £3 10s.	£2 10s. to £3 10s.
Tanners ... „ ...	38s. to 45s.	38s. to 45s.	38s. to 40s.
Beamsmen ... „ ...	£2 to £2 10s.	£2 to £2 10s.	38s. to 45s.
Shedsmen... „ ...	£2 2s. to £2 5s.	£2 2s. to £2 5s.	38s. to 50s.
Fellmongers ... „ ...	£1 16s. to £3	£1 16s. to £3	£1 16s. to £2 10s.
15.—IN STONE, CLAY, ETC.			
Brickmakers ... per 1,000 ...	18s. to 20s.	18s. to 20s.	15s. to 17s.
Navvies ... per day ...	6s. 6d.	6s. to 7s.	6s. 6d. to 8s. 6d.
Quarrymen ... „ ...	8s. to 12s.	8s. to 12s.	8s. 6d. to 12s. 6d.
Labourers... „ ...	6s. to 7s.	6s. 6d. to 7s. 6d.	6s. to 8s.
Stonebreakers ... per cubic yard... „ ...	1s. 6d. to 3s. 6d.	1s. 6d. to 3s. 6d.	2s. to 4s.
16.—IN MINES.			
General managers ... per week ...	£2 10s. to £12	£2 10s. to £12	£3 to £12
Legal „ „ ...	10s. to £5	10s. to £5	5s. to £7
Mining „ „ ...	£2 5s. to £8	£2 5s. to £7	£2 10s. to £10
Engineers ... „ ...	£2 to £6	£2 to £5	£2 5s. to £5.
Engine-drivers ... „ ...	£2 to £3 10s.	£2 to £3 10s.	£2 5s. to £3 10s.
Pitmen ... „ ...	£1 16s. to £4	£2 to £4	£1 7s 6d to £4 10s
Blacksmiths ... „ ...	£2 to £4	£1 15s. to £3	£2 5s. to £3 10s.
Carpenters ... „ ...	£2 2s. to £4	£2 2s. to £4	£2 5s. to £3 12s.
Foremen of shift ... „ ...	£2 2s. to £3 10s.	£2 to £3	£2 5s. to £3
Miners ... „ ...	£2 to £2 10s.	£2 to £2 10s.	£2 to £3
Surfacemen (labourers) „ „ ...	£1 to £2 10s.	£1 10s. to £2 10s.	£1 15s. to £2 10s.
Boys ... „ ...	10s. to £2	15s. to £1 16s.	12s. to £2 5s.
Chinese ... „ ...	10s. to £2	12s. to 36s.	20s. to 30s.

Prices.

241. Prices in Melbourne were quoted as follow at the same three periods. In country districts, the cost of groceries, tobacco, imported wines, coal, etc., is naturally somewhat higher, and that of agricultural and grazing produce, firewood, etc., naturally somewhat lower, than in Melbourne:—

PRICES IN MELBOURNE, 1880, 1885 AND 1890.

Articles.	1880.	1885.	1890.
AGRICULTURAL PRODUCE.			
Wheat per bushel	3s. 4d. to 4s. 9d.	3s. 6d. to 4s. 2d.	3s. 6d. to 5s.
Barley "	2s. to 6s.	2s. 6d. to 4s. 10d.	2s. 9d. to 5s. 10d.
Oats "	1s. 10d. to 3s.	2s. 4d. to 3s. 5d.	2s. 9d. to 4s. 6d.
Maize "	2s. 3d. to 3s. 7d.	4s. to 5s. 2d.	3s. 6d. to 4s. 10d.
Bran "	9d. to 1s.	11d. to 1s. 3d.	7½d. to 1s. 4d.
Hay per ton	£2 10s. to £4	£3 to £7	£3 to £4 15s.
Flour, first quality "	£8 12s. 6d. to £10 15s.	£7 10s. to £9 10s.	£7 10s. to £9 10s.
Bread per 4lb. loaf	5d. to 6d.	5d. to 6d.	4½d. to 6d.
GRAZING PRODUCE.			
Horses—			
Draught each	£14 to £58	£20 to £60	£10 to £43
Saddle and harness "	£5 to £50	£8 to £45	£6 10s. to £13
Cattle—			
Fat each	£6 to £9 17s. 6d.	£7 to £16	£4 10s. to £16 15s.
Milch cows "	£3 to £10 10s.	£5 to £12	£3 to £15
Sheep, fat... .. "	5s. 6d. to 16s. 6d.	7s. 6d. to 19s.	6s. to 18s. 6d.
Lambs, fat "	4s. to 9s. 6d.	5s. 6d. to 13s. 6d.	3s. 6d. to 14s. 6d.
Butchers' Meat—			
Beef, retail per lb.	2½d. to 6d.	4d. to 8d.	3½d. to 10d.
Mutton ,, "	1½d. to 5d.	1½d. to 5d.	2d. to 5d.
Veal ,, "	4d. to 6d.	5d. to 8d.	5d. to 9d.
Pork ,, "	6d. to 8d.	7d. to 9d.	7ā. to 9d.
Lamb ,, per quarter	2s. to 3s. 6d.	2s. to 3s. 6d.	2s. to 3s. 6d.
DAIRY PRODUCE.			
Butter per lb.	6d. to 1s. 8d.	10d. to 2s. 3d.	10d. to 2s. 10d.
Cheese "	5d. to 10d.	5d. to 1s.	6d. to 1s. 6d.
Milk per quart	4d. to 6d.	4d. to 6d.	5d.
FARM-YARD PRODUCE.			
Geese per couple	6s. to 10s.	7s. to 15s.	4s. to 8s. 6d.
Ducks "	5s. to 8s.	5s. to 9s.	3s. 6d. to 7s.
Fowls "	4s. 6d. to 6s.	4s. to 8s.	3s. to 5s. 6d.
Rabbits "	9d. to 1s. 6d.	6d. to 1s.	9d. to 1s. 4d.
Pigeons "	1s. to 3s.	2s. 6d. to 3s. 6d.	1s. to 2s. 6d.
Turkeys each	5s. to 12s. 6d.	7s. to 15s.	5s. to 15s.
Sucking pigs "	10s. to 12s. 6d.	10s. to 14s.	5s. to 15s.
Bacon per lb.	8d. to 1s.	8d. to 1s.	8d. to 1s. 4d.
Ham "	10d. to 1s. 2d.	10d. to 1s. 2d.	10d. to 1s. 6d.
Eggs per doz.	1s. to 2s.	10d. to 2s. 6d.	10d. to 2s. 6d.

PRICES IN MELBOURNE, 1880, 1885, AND 1890.—*continued.*

Articles.	1880.	1885.	1890.
GARDEN PRODUCE.			
Potatoes—			
Wholesale ... per ton	£2 10s. to £6	£2 5s. to £4 5s.	£3 10s. to £8
Retail ... per cwt.	4s. to 8s. 6d.	3s. to 5s.	3s. 6d. to 9s.
Onions, dried ... „	5s. to 14s.	4s. to 8s.	4s. to 12s.
Carrots ... per dozen bunches	6d. to 9d.	6d. to 9d.	6d. to 1s. 6d.
Turnips ... „	3d. to 8d.	4d. to 1s.	9d. to 2s.
Radishes ... „	3d. to 6d.	4d. to 6d.	4d. to 6d.
Cabbages ... per doz.	3d. to 3s.	1s. to 6s.	1s. to 4s.
Cauliflowers ... „	9d. to 4s.	2s. to 7s.	1s. to 5s.
Lettuces ... „	3d. to 1s.	1s. to 2s.	6d. to 2s.
Green peas ... per lb.	1d.	1d. to 3d.	1d. to 3d.
MISCELLANEOUS ARTICLES.			
Tea ... per lb.	8d. to 2s. 3½d.	1s. 6d. to 2s. 6d.	6d. to 2s.
Coffee ... „	8d. to 1s.	1s. 3d. to 1s. 6d.	8d. to 1s. 3d.
Sugar ... „	3d. to 5d.	3d. to 4d.	2d. to 3d.
Rice ... „	3d. to 4d.	2½d. to 4d.	2½d. to 4d.
Tobacco ... „	2s. 6d. to 5s.	3s. to 6s.	1s. 11d. to 5s.
Soap—Colonial .. „	2d. to 3½d.	3d. to 4d.	2½d. to 4d.
Candles—			
Sperm ... „	9d. to 1s.	9d. to 1s.	5d. to 1s.
Salt ... „	1d.	1d.	1d.
Coals ... per ton	28s. to 40s.	25s. to 36s.	26s. to 60s.
Firewood ... „	9s. to 12s.	9s. 6d. to 12s. 6d.	9s. to 16s.
WINES, SPIRITS, ETC.			
Ale ... per doz.	8s. to 11s.	5s. to 12s.	8s. to 11s.
Porter ... „	7s. to 10s. 6d.	5s. to 12s.	8s. to 10s. 6d.
Brandy ... per gall.	21s. to 33s.	22s. 6d. to 35s.	22s. 6d. to 35s.
Rum ... „	15s. to 18s.	15s. to 18s.	15s. to 18s.
Whisky ... „	17s. 6d. to 27s. 6d.	18s. to 28s.	18s. to 28s.
Geneva ... per case 15 bottles	60s. to 62s. 6d.	60s. to 62s. 6d.	60s. to 62s. 6d.
Port wine ... per doz.	35s. to 70s.	33s. to 72s.	35s. to 80s.
Sherry ... „	35s. to 70s.	35s. to 75s.	33s. to 80s.
Claret ... „	30s. to 65s.	32s. 6d. to 70s.	18s. to 95s.
Champagne ... „	75s. to 100s.	70s. to 105s.	33s. to 115s.
Colonial wine ... „	12s. to 28s.	12s. to 30s.	12s. to 30s.

242. The price of gold in 1890 ranged from £3 to £4 5s. per oz. Price of gold. Its purity, and consequently its value, varies in different districts. In the last quarter of 1890 the lowest price quoted (£3 per oz.) was in the Beechworth district, but the great bulk of the gold was stated to have realised from £3 15s. to as much as £4 5s. per oz. The highest averages were in the Ballarat and Castlemaine districts, in which the prices ranged from £3 17s. to £4 3s. and from £3 17s. 6d. to £4 2s. 6d. respectively.

243. The returns of live stock imported overland, made by the Imports of live stock overland. inspectors of stock, always differ more or less from those of the

officers of the Customs. In 1890, the former showed a larger number in regard to horses, about the same number in regard to pigs, but smaller numbers in regard to sheep and cattle than the latter. The following are the imports of these descriptions of stock, according to the returns of both authorities :—

IMPORTS OF LIVE STOCK OVERLAND, 1890.

	Horses.	Cattle.	Sheep.	Pigs.
According to returns of the stock inspectors	... 4,139 ...	151,517 ...	2,081,436 ...	3,069
According to returns of the Customs	... 3,730 ...	152,791 ...	2,212,947 ...	3,062

Value of
live stock
overland.

244. According to the Customs returns, the value of live stock (inclusive of pigs) imported overland in 1890 was £1,943,353. The import duty payable on such stock would be £94,355, equivalent to not quite $4\frac{3}{4}$ per cent. of the value; the rate of duty is 5s. each for horses and cattle (calves being free), 6d. for sheep, and 2s. for pigs.

PART VII.—LAW, CRIME, ETC.

245. The system whereby persons acquiring possession of land, either by transfer, inheritance, or other means, may receive a title thereto direct from the Crown, was introduced into Victoria in the year 1862, and continues in force to the present period.*

*Transfer of
Land
Statute.*

246. All lands alienated from the Crown since the introduction of the system have come at once under its provisions; and lands alienated prior to its inauguration can be brought under them by application, provided a clear title be produced, or a title containing only a slight imperfection. In the latter case the title is given subject to such imperfection, which is noted on the deed.

*Lands under
the Statute.*

247. The assurance and indemnity fund, established under the *Transfer of Land Statute* to secure the Government against possible losses, is formed chiefly by the payment of an amount equal to one half-penny in the pound of the value of all lands which become subject to its operation. The balance to the credit of this fund on the 30th June, 1890, was £78,345,† of which £34,823 had been invested in Government stock. Eighteen claims upon the fund, of which four—for £26, £100, £200, and £1,524 respectively—were satisfied in 1889-90, have been substantiated since its first formation, and sums amounting in the aggregate to £5,383 (including costs) have been paid to claimants.

*Assurance
fund.*

248. In 1890, as compared with 1889, an increase took place in the number of applications to bring land under the *Transfer of Land Act* (54 Vict. No. 1,149); but a decrease of 7 per cent. in the extent, and a decrease of as much as 47 per cent. in the value, of land actually brought thereunder. A considerable decrease also took place in the number of certificates of title issued, of transfers, mortgages, leases, etc., and of miscellaneous transactions, as well as in the fees received. The following were the transactions in the two years:—

*Transac-
tions under
the Land
Statute
1889 and
1890.*

* This system was originated by the late Sir R. R. Torrens, whence it is commonly known as "Torrens's System." He first introduced it into South Australia, but it has since been adopted by all the Australasian colonies.

† Since 1884-5 the Assurance Fund has been reduced by £75,073; that amount having been advanced towards the purchase of land adjoining the Titles Office (under Act 49 Vict. No. 835). On this advance the fund receives 4 per cent. per annum from the general revenue.

TRANSFER OF LAND STATUTE, 1889 AND 1890.

		1889.	1890.
Applications to bring land under the Act	... number	1,176 ...	1,194
Extent of land included	... acres	82,592 ...	111,116
Land brought under the Act—			
By application	... acres	86,384 ...	69,162
"	... value	£5,286,463 ...	£2,648,750
By grant and purchase from the Crown	... acres	258,233 ...	249,568
"	... purchase money	£330,054 ...	£322,946
Certificates of title issued*	... number	19,395 ...	15,909
Transfers, mortgages, leases, releases, surrenders, etc.	"	51,833 ...	47,239
Registering proprietors	"	6 ...	10
Other transactions	"	56,301 ...	52,042
Forms and extras	"	758 ...	459
Fees received	... value	£66,807 ...	£54,173

Proportion of land under the Statute.

249. The total quantity of land under the *Transfer of Land Statute* at the end of 1890 was 12,741,032 acres, the declared value of which, at the time it was placed under the Act, was £48,247,560. The land granted and sold up to the end of 1890 was 16,091,880 acres. It, therefore, follows that at that period nearly four-fifths of the alienated land in the colony was subject to the provisions of this Statute.

Land under Act by application and otherwise.

250. Of the whole extent of land under the Statute, 1,419,445 acres, valued at about $33\frac{3}{4}$ millions sterling, were brought thereunder by application, and the remainder, amounting to 11,321,587 acres, valued at about $14\frac{1}{2}$ millions sterling, came under its provisions by virtue of its having been purchased from or granted by the Crown since the Act was passed.

Transactions in Equity.

251. Since the passing of the *Judicature Act* 1883 (47 Vict. No. 791), which, with certain exceptions, came into operation on the 1st July, 1884, the business in Equity has fallen off materially, as will be seen by the following figures:—

TRANSACTIONS IN EQUITY, 1883 TO 1890.

Number of—	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.
Suits by bill	81	38	1	2	...	...	...	...
Petitions filed	15	8	5	1	...	...	...	...
Commissions issued	4	4	...	...	...	...	...	...
Decrees issued	38	37	14	3	4	...	3	1
Orders issued	132	106	71	51	22	24	27	21
Reports issued	20	20	10	9	7	6	6	2
Recognizances entered into	5	2	...	...	...	...	...	...
Rolls filed	40	29	2	1	...	...	...	...

* Including 2,292 Friendly Societies in 1889, and 1,889 in 1890.

252. In 1890, as compared with 1889, there was an increase of 7 per cent. in the number of probates and letters of administration issued, although there was a decrease of 23 per cent. in the value of property bequeathed. The average value of each estate in 1889 was £3,869, and in 1890 £2,790. The following are the figures for those years :—

PROBATES AND LETTERS OF ADMINISTRATION, 1889 AND 1890.

Year.	Probates.		Letters of Administration.*		Both.	
	Number.	Property sworn under— £	Number.	Property sworn under— £	Number.	Property sworn under— £
1889 ...	1,752	10,077,568	1,156	1,174,528	2,908	11,252,096
1890 ...	1,801	7,747,899	1,306	919,228	3,107	8,667,127
Increase	49	...	150	...	199	...
Decrease	...	2,329,669	...	255,300	...	2,584,969

253. During the twenty-six years ended with 1890, the value of the property respecting which probates and letters of administration were issued amounted to nearly eighty-five millions sterling (£84,719,735). During the same period the total number of deaths in the colony was 339,626, so that the average value of property left by each person who died was £250. The average value in 1886 was £303; in 1887, £325; in 1888, £431; in 1889, £580; and in 1890 £481; or an average of £424 in the last five years.†

254. According to the present law,‡ duties are levied in Victoria on the net value of real and personal estates of deceased persons within the colony upon the following scale. It is now provided that all estates of the net value of under £1,000 shall be exempt from duty, and that estates of the net value of under £5,000 shall be exempt from the payment of duty upon £1,000 of such net value; § also that half duty only shall be paid by widows, children, or grandchildren :—

* Including those granted to the Curator of Estates of Deceased Persons.

† See paragraphs 837 to 844, Vol. I.

‡ The law relating to estates of deceased persons has been consolidated by Act 54 Vict., No. 1,060.

§ Exempted since the 1st January, 1890.

SCALE OF DUTIES ON ESTATES ON DECEASED PERSONS.

Estates of less than	£1,000 in value	...	Exempt.
„ £1,000 to	£5,000	„	* 2 per cent.
„ £5,000 to	£10,000	„	3 „
„ £10,000 to	£20,000	„	4 „
„ £20,000 to	£30,000	„	5 „
„ £30,000 to	£40,000	„	6 „
„ £40,000 to	£60,000	„	7 „
„ £60,000 to	£80,000	„	8 „
„ £80,000 to	£100,000	„	9 „
„ £100,000 and upwards	„	„	10 „

Amount of
probate,
etc., duties.

255. The amount realized by the State in 1890 from duties on estates of deceased persons was nearly £170,000 less than in 1889, slightly larger than in 1888, and considerably larger than in any other previous year. The amounts fluctuate considerably from year to year, as will be observed by the following figures for the last twenty years:—

DUTIES ON ESTATES OF DECEASED PERSONS, 1871 TO 1890.

£			£		
1871	...	17,069	1881	...	78,914
1872	...	37,643	1882	...	78,547
1873	...	39,026	1883	...	96,427
1874	...	67,998	1884	...	125,697
1875	...	50,057	1885	...	85,979
1876	...	33,638	1886	...	129,479
1877	...	82,201	1887	...	151,268
1878	...	45,470	1888	...	219,500
1879	...	47,607	1889	...	391,664
1880	...	48,697	1890	...	221,721

Intestate
estates.

256. The new intestate estates dealt with by the Curator in 1889 numbered 359; those in 1890 numbered 347.† The sums received by the Curator on these estates and on others remaining from former years were £54,924 in 1889, and £51,970 in 1890. In the twenty years ended with 1890, the number of intestate estates dealt with was 4,895. The amount received by the Curator in respect to these estates during the twenty years was £893,634.

Divorce and
matri-
monial.

257. Under the head of Divorce and Matrimonial Causes there were 40 decrees for dissolution of marriage in 1890 as against 22 in 1889. No decrees for judicial separation were pronounced in 1890, but three such decrees were pronounced in 1889. The following was the business done in the two years:—

* The first £1,000 of the value of these estates is exempted from duty.

† These numbers are included in those given in the table following paragraph 252 *ante*.

DIVORCE AND MATRIMONIAL, 1889 AND 1890.

	1889.	1890.
Petitions for dissolution of marriage number	38	14
„ „ judicial separation „	7	4
Decrees for dissolution of marriage „	22	40
„ „ judicial separation „	3	..

258. Since the Act 25 Vict. No. 125—which first conferred upon the Supreme Court of Victoria jurisdiction in matters matrimonial—came into operation in 1861, 348 decrees for dissolution of marriage and 71 decrees for judicial separation have been made. Divorces in twenty-nine years.

259. As the marriages in 1890 numbered 9,187, the petitions for dissolution of marriage were in the proportion of 1 to every 656 marriages, and the decrees for dissolution of marriage were in the proportion of 1 to every 229 marriages. In the 19 years ended with 1889, the marriages numbered, 117,018, the petitions for dissolution of marriage numbered 455, and the decrees for dissolution of marriage numbered 232. Thus, during the 19 years referred to, there was 1 petition to dissolve marriage to every 257 marriages celebrated, and 1 marriage was dissolved to every 504 marriages celebrated. Proportion of divorces to marriages.

260. An act to amend the law of divorce* was passed in Victoria in November, 1889, and received the Royal assent on the 13th May, 1890. Under this Statute it was provided that, in addition to the causes of divorce under the old law, divorce might be granted to persons who had been domiciled in Victoria for two years or upwards on one or more of the following grounds :— Divorce Act, 1889, principal provisions.

(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.

* *Divorce Act* 1889 (53 Vict. No. 1,056), since embodied in the *Consolidated Act* (54 Vict. No. 1166).

Further provisions of new Divorce Act.

261. The *Divorce Act* referred to further provides for simplifying and cheapening the modes of procedure in divorce cases; for the hearing and trying of divorce suits in chambers at the discretion of the Court; for forbidding the publication of evidence in divorce cases if, in the opinion of the Court, it would be prejudicial to the public morals for it to be published; and for the abolition of applications or decrees for the restitution of conjugal rights.

Divorces in Victoria and England.

262. In proportion to the number of marriages, the petitions for dissolution of marriage are about twice as numerous in Victoria as in England and Wales, the annual average per thousand marriages over a series of years being 3·79 in the former and 1·88 in the latter. The decrees for the dissolution of marriage are also, in proportion to the number of marriages, much more numerous in Victoria, the number per 10,000 being 18·21 as against 9·5 in England and Wales. The proportion of decrees to petitions is, however, somewhat higher in England and Wales than in Victoria, being 50 per cent. in the former, but not quite 48 per cent in the latter.

Divorces in France and the United States.

263. The divorce law of France dates from the latter part of 1884. In the five years ended with 1889 there were 20,357 divorces, the marriages in the same five years being 1,393,220. There was thus 1 divorce to about 68 marriages. In some of the American States the proportions are much higher. It is stated that in Rhode Island 1 divorce takes place to every 12 marriages; in Massachusetts 1 to every 21 marriages; and in Ohio 1 to every 26 marriages; whilst in the city of San Francisco, during the 21 years ended with 1887, there was 1 divorce to every 10 marriages, and in the last eight years of that period there was 1 to every 6 marriages.

Fees in Equity, etc.

264. The fees in Equity amounted in the aggregate to £281 in 1889, and to £241 in 1890; those on Probates amounted to £2,353 in 1889, and to £1,882 in 1890; those in Divorce amounted to £94 in 1889, and to £270 in 1890. The total amount of these fees was thus £2,728 in 1889, and £2,393 in 1890.

Collections in Lunacy.

265. The moneys collected and appropriated in the department of the Master-in-Lunacy on behalf of patients (including "percentage" and fees) decreased from £28,094 in 1889 to £26,698 in 1890. It may be mentioned that the total expenditure in 1889-90 on Hospitals for the Insane was £115,109, so that after allowing for the moneys collected from private sources, the net cost to the State on account of lunatic patients in that year was about £88,411.

266. In the twenty-three years ended with 1890, 16,150 insolvencies took place in Victoria, with liabilities amounting to over 17 millions sterling, as against which assets were declared amounting to over 12 millions sterling. The following is a statement of the number of insolvencies in each year, also of the declared liabilities and assets of the estates, and of the amounts by which the latter were exceeded by the former:—

INSOLVENCIES, 1868 to 1890.

Year.	Number of Insolvencies.	As shown by the Insolvents' Schedules.		
		Liabilities.	Assets.	Deficiency.*
		£	£	£
1868	863	617,764	167,226	450,538
1869	818	653,614	194,251	459,363
1870	996	479,491	150,170	329,321
1871	631	444,117	217,841	226,276
1872	804	696,868	222,770	474,098
1873	672	330,337	188,351	141,986
1874	776	543,157	269,130	274,027
1875	773	641,390	389,330	252,060
1876	712	551,814	280,962	270,852
1877	715	462,651	272,720	189,931
1878	781	677,364	408,677	268,687
1879	1,007	1,655,485	1,204,051	451,434
1880	768	526,130	298,384	227,746
1881	620	303,892	161,386	142,506
1882	500	536,194	311,186	225,008
1883	603	782,116	423,528	358,588
1884	495	479,700	264,686	215,014
1885	467	591,957	282,502	309,455
1886	559	830,176	570,867	259,309
1887	619	563,894	1,009,385	+ 445,491
1888	479	347,658	185,871	161,787
1889	697	2,389,731	2,627,182	+ 237,451
1890	795	2,301,271	2,041,200	260,071
Total...	16,150	17,406,771	12,141,656	5,265,115†

267. According to the table, insolvencies in 1890 were more numerous by 98 than in 1889, and were also more numerous than in any other year since 1879. The assets and liabilities in 1890, as shown by the insolvents' schedules, although somewhat less than in 1889, were largely in excess of those in any other year.

268. In 1889 and 1887 it will be noticed that the assets apparently exceeded the liabilities. This resulted in the year under review from the high, and doubtless in many instances fictitious, value placed upon

* The plus sign (+) indicates a surplus.

† Net figures.

land, which formed the principal portion of the assets of a number of the insolvents, but which at the time of their insolvency was almost unsaleable. The surplus shown by the returns of 1887 resulted from the fact that the declared assets of that year were largely made up of a debt of £570,597 set down as due by the Crown to the estate of Mr. W. R. Merry. Had this not been included, the declared assets, as compared with the declared liabilities, would have shown an apparent deficiency of £125,106.

Occupations
of insol-
vents.

269. The following table shows the occupations or callings of the persons who became insolvent in Victoria during the last four years :—

OCCUPATIONS OF INSOLVENTS, 1887 TO 1890.

Occupations.			1887.	1888.	1889.	1890.
GOVERNMENT, EDUCATION,	PROFESSIONS, LITERATURE—	ARTS,				
Architect	...	...	...	...	3	2
Artist	...	...	...	1	...	1
Chemist	...	...	2	1	...	2
Circus proprietor	...	...	...	...	...	1
Civil engineer	...	...	...	...	1	...
Civil servant	...	...	2	1	4	5
Clerk of works...	...	...	...	...	1	...
Comedian, tragedian	...	...	1	2	1	...
Dentist	...	...	1	...	...	...
Draughtsman	...	...	...	...	2	2
Equestrian	...	...	...	...	1	...
Herbalist	...	...	...	...	2	...
Journalist	...	...	2	1	2	...
Medical man	...	...	...	...	1	2
Musician, music teacher	...	...	...	2	1	1
News agent	...	...	1	...	...	...
Photographer	...	...	1	1	2	3
Phrenologist	...	...	...	...	1	...
Police constable	...	...	...	...	1	...
Printer	...	...	1	1	4	3
Reporter	...	...	...	...	1	...
Schoolmaster, teacher	...	...	1	3	1	5
Shire secretary	...	...	...	...	...	1
Solicitor	...	...	1	...	...	2
Theatrical manager, agent	...	...	1	2	1	2
BOARD AND LODGING, ATTENDANCE—						
Billiard-room keeper	...	...	1	...	...	...
Boarding-house keeper	...	...	11	12	14	12
Caterer	...	...	1	...	...	...
Charwoman	...	...	...	...	1	1
Coffee-stall keeper	...	...	1	...	...	...

OCCUPATIONS OF INSOLVENTS, 1887 TO 1890—*continued.*

Occupations.	1887.	1888.	1889.	1890.
BOARD AND LODGING, DOMESTIC DUTIES, ATTENDANCE—<i>continued</i>—				
Cook ... ..	...	...	...	1
Hotel-broker	2	...	...	...
Hotel-keeper	21	17	40	36
Married woman	5	1	8	6
Odd Job Help Company... ..	1	...	...	...
Public entertainer	1	...	...	...
Restaurant-keeper	2	2	3	4
Servants' registry office keeper	1	...	...	...
Spinster	1	...	...	...
Widow	6	1	3	5
COMMERCIAL PURSUITS—				
Accountant	1	4	6	8
Agent, commission agent	16	10	27	23
Auctioneer, estate agent	1	...	9	11
Bellman ... ..	...	1	...	...
Bookkeeper, clerk	11	3	13	9
Commercial traveller, canvasser	5	2	4	6
Dealer (undefined)	10	3	10	7
Debt collector	1	...	...	1
Financier	1	...	...	...
Hawker	4	1	...	...
Ironmonger	2	...	2	1
Machinery merchant	1	...	...	...
Mercantile, stock and share broker ... ..	...	...	5	7
Merchant, importer	3	4	...	12
Salesman	2	...	4	3
Sewing machine importer	1	...	...	...
Stationer, assistant to ditto	2	...	...	1
Storekeeper (undefined)	12	13	15	18
Warehouseman	1	...	1	3
CARRIERS—				
Bullock driver	1	1	...	...
Cabman, driver	3	4	2	4
Carrier, carter	10	12	14	17
Coach proprietor ... ..	...	...	...	1
Gripman ... ..	...	...	...	1
Mail contractor ... ..	...	...	1	...
Mariner	1	...	1	2
Omnibus driver	1	1	...	...
Railway employé	1	...	1	2
Stationmaster	1	...	...	...
Stoker ... ..	...	2	...	1
AGRICULTURAL PURSUITS AND LAND—				
Farmer, selector	53	62	58	86
Freeholder	1	...	1	...
Gardener	5	2	3	4
Labourer on farm ... ..	...	...	...	2
Nurseryman ... ..	...	1	...	...

OCCUPATIONS OF INSOLVENTS, 1887 TO 1890—*continued.*

Occupations.	1887.	1888.	1889.	1890.
AGRICULTURAL PURSUITS AND LAND—				
<i>continued—</i>				
Seedsman ... ..	...	...	1	1
Surveyor	1	1	...	2
Vinegrower ... ..	...	1	...	...
PASTORAL PURSUITS AND ANIMALS—				
Boundary rider	1	...	...	...
Cattle dealer	1	2	5	4
Drover ... ..	...	...	1	2
Fisherman ... ..	...	1	...	1
Grazier	14	6	12	6
Groom	1	...	1	4
Horse proprietor, dealer, trainer, breaker	2	2	4	3
Livery-stable keeper	1	1	3	3
Overseer sheep station ... ..	...	...	1	...
Rabbit trapper	1	...	1	...
Stock and station agent	1	1	2	...
ARTIZANS, MECHANICS, LABOURERS—				
Bellows-maker ... ..	...	1	...	...
Bicycle-maker ... ..	...	...	...	1
Bricklayer	4	3	2	2
Brushmaker ... ..	...	...	...	1
Builder, contractor	55	45	70	70
Carpenter	14	12	10	22
Chairmaker ... ..	...	...	1	1
Coachbuilder	8	1	7	9
Cooper	1	1	...	...
Dyer	1	...	...	...
Engraver	1	1	1	...
Factory employé ... ..	...	...	...	1
Fancy-goods maker	1	...	...	...
Fire-kindler maker	1	...	...	...
Furniture maker, dealer, warehouse- man	3	1	3	7
House decorator ... ..	...	...	1	1
Labourer (undefined)	75	57	52	56
Manufacturer (undefined) ... ..	...	1	3	2
Mason	1	1	4	3
Monumental mason	1	...	...	...
Organ-builder ... ..	...	...	1	...
Painter	6	3	11	5
Pile-driver ... ..	...	...	1	...
Plasterer	4	2	4	6
Plumber	7	3	4	3
Saddler	4	4	9	6
Shipwright	1	...	...	...
Sign writer ... ..	...	...	1	...
Slater ... ..	...	1	1	...
Turner	1	...	...	...
Upholsterer, mattress maker	1	...	4	1
Venetian blind maker	1	...	...	...
Watchmaker, jeweller	6	6	9	5

OCCUPATIONS OF INSOLVENTS, 1887 TO 1890—*continued.*

Occupations.	1887.	1888.	1889.	1890.
ARTIZANS, MECHANICS, LABOUREES—				
<i>continued—</i>				
Wheelwright	1	1	...	3
Whipmaker ... ..	...	...	...	1
Works overseer ... ..	...	...	1	...
DRESS—				
Boot, Shoe-maker, dealer ...	21	14	14	19
Draper—Assistant to ditto ...	5	3	5	7
Dressmaker	2	...	...	3
Hairdresser	3	7	5	11
Hatter ... ..	...	1	...	...
Laundress	1	...	1	...
Laundry proprietor ... ..	...	...	1	1
Seamstress ... ..	...	1	...	...
Shirtmaker ... ..	...	1	...	...
Tailor	6	3	3	13
Underclothing manufacturer ...	...	...	1	...
FIBROUS MATERIALS—				
Flock manufacturer	1	...	...	...
Rope-maker ... ..	...	...	...	1
Tent-maker ... ..	...	1	...	...
ANIMAL FOOD—				
Butcher	18	13	19	25
Dairyman ... ..	...	...	1	5
Fishmonger	2	...	...	...
Ham and beef shop keeper ...	1	...	...	...
Milk-seller	1	...	...	...
Poulterer ... ..	...	1	...	...
VEGETABLE FOOD—				
Baker	5	4	10	3
Confectioner	1	1	3	4
Fruiterer	6	8	5	9
Greengrocer ... ..	...	...	4	4
Miller	1	1	...	2
DRINKS AND STIMULANTS—				
Aërated water, cordial manufacturer	4	...	1	1
Brewer	2	...	...	...
Cellarman ... ..	...	...	1	...
Grocer—Assistant to ditto ...	12	7	10	13
Tea merchant ... ..	...	...	3	...
Tea packer ... ..	...	1	...	...
Tobacconist	3	1	...	1
Wine-hall keeper ... ..	...	...	1	1
Wine-seller, merchant ... ..	...	...	1	1
ANIMAL MATTERS—				
Currier	1	...	...	...
Hide merchant ... ..	...	...	1	1
Leather merchant	1	...	...	...
Skin cleaner ... ..	...	...	...	1
Tanner	1	...	2	...
Wool and skin merchant ... ..	...	...	1	1
Wool presser ... ..	...	1	...	...

OCCUPATIONS OF INSOLVENTS, 1887 TO 1890—*continued.*

Occupations.	1887.	1888.	1889.	1890.
VEGETABLE MATTERS—				
Chaff cutter	1	...	1	1
French-polisher ... ..	...	1	...	...
Hay, corn and produce dealer ...	6	3	6	7
Saw-mill owner, sawyer	7	3	6	3
Timber merchant	2	...	1	7
Wood, coal merchant	3	3	2	3
Wood splitter ... ..	...	5	3	3
MINING, ENGAGED IN—				
Miner	22	20	23	23
Mining explorer ... ..	...	...	1	...
Mining manager	1	1	1	...
Mining speculator	2	1	1	1
Quartz-crusher ... ..	...	1	...	...
Stamper-feeder	1	...	...	...
COAL, STONE, CLAY, ETC.—				
Brickmaker	2	5	2	5
Charcoal burner ... ..	...	...	1	...
Chimney-sweeper ... ..	...	1	...	...
Nightman	1	...	...	...
Quarryman	1	...	...	...
Tile-maker	1	...	...	...
MINERALS AND METALS—				
Blacksmith	5	10	10	9
Boilermaker	1	...	...	...
Brassfounder ... ..	...	...	...	2
Engine-driver (undefined)	3	3	1	2
Engineer	1	4	4	6
Farrier ... ..	...	...	...	1
Gold-broker ... ..	...	...	1	...
Ironfounder, dresser	1	1	4	2
Machinist ... ..	...	...	...	1
Pyrites worker	2	...	...	1
Tinsmith ... ..	...	...	3	1
INDEFINITE AND NON-PRODUCTIVE—				
Bookmaker ... ..	...	...	...	1
Gentleman	3	3	12	10
Gentlewoman	1	...	...	1
Manager (undefined) ... ..	...	...	1	...
No occupation ... ..	...	...	...	18
Out of business	14	12	9	...
Overseer (undefined) ... ..	...	...	1	...
Speculator (undefined) ... ..	...	...	3	...
Watchman ... ..	...	...	...	2
Total	619	479	697	795

270. It will be noticed that the occupations which contributed most largely to the list of insolvents in the four years were those of farmers or selectors, numbering 259; labourers, 240; builders, contractors, 240; hotelkeepers, 114; miners, 88; commission agents, etc., 76; butchers, 75; boot and shoe makers, 68; storekeepers, 58; carpenters, 58; carriers, etc., 53; and boarding-house keepers, 49.

Occupations with most insolvencies.

271. In the last eight years insolvencies have been much more numerous in New South Wales than in Victoria; and in four of the last five years they were even more numerous than in the worst year (1879) named in the table following paragraph 266 *ante*. In 1889 and 1890—which, however, were exceptional years—the liabilities, as shown by the insolvents' schedules, were respectively three times and twice as high in Victoria as in New South Wales, but in all but one of the previous six years the liabilities similarly shown were much higher in New South Wales than in Victoria. The following are the figures for New South Wales:—

Insolvencies in New South Wales.

INSOLVENCIES IN NEW SOUTH WALES, 1883 TO 1890.

Year.	Number of Insolvencies.	As shown by the Insolvents' Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
1883	785	444,594	245,836	198,758
1884	918	836,165	580,195	255,970
1885	929	773,212	589,359	183,853
1886	1,221	989,262	733,127	256,135
1887	1,351	1,081,726	788,941	292,785
1888	851	659,307	459,677	199,630
1889	1,101	794,603	396,723	397,880
1890	1,193	1,203,685	540,726	662,959

272. In 1889, as is shown in the following table, the insolvencies in all the Australasian colonies numbered 3,092, and the total deficiency, according to the insolvents' schedules, amounted to £483,237. It will be observed that in that year the insolvencies in New South Wales exceeded those in Victoria by 404, and whilst there was a deficiency of £398,000 in the former, there was an apparent surplus of £237,000 in the latter:—

Insolvencies in Australasian colonies.

INSOLVENCIES IN AUSTRALASIAN COLONIES, 1889.

Colony.	Number of Insolvencies	As shown by the Insolvents' Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
Victoria	697	2,389,731	2,627,182	+ 237,451*
New South Wales	1,101	794,603	396,723	397,880
Queensland	364	328,175	213,475	114,700
South Australia	95	57,708	31,423	26,285
Western Australia	32	...	...	...
Total Australia	2,289	3,570,217	3,268,803	301,414†
Tasmania	79	57,878	36,214	21,664
New Zealand	724	602,033	441,874	160,159
Total Australasia	3,092	4,230,128	3,746,891	483,237

Failures in the United Kingdom.

273. The figures in the following table, which represent the number of failures‡ in England and Wales in the eleven years ended with 1889, together with the liabilities and assets of the insolvents, and the proportion of the latter to the former, have been taken from official sources :—

FAILURES‡ IN ENGLAND AND WALES, 1879 TO 1889.

Year.	Number of Cases.	Total Amounts of—		Percentage— Assets to Liabilities.
		Liabilities.	Assets.	
		£	£	
1879	13,132	29,678,194	10,193,617	34·3
1880	10,298	16,188,637	4,701,506	29·0
1881	9,727	17,679,347	4,890,899	27·6
1882	9,041	19,108,060	5,492,919	28·7
1883	8,555	21,268,153	5,987,545	28·1
1884§	4,192	14,048,712	4,038,975	28·7
1885	4,354	9,064,456	3,101,323	34·2
1886	4,857	7,995,037	2,877,644	36·0
1887	4,866	8,995,752	2,682,522	29·8
1888	4,859	7,148,950	2,256,379	31·6
1889	4,542	6,380,362	1,998,957	31·3

NOTE.—In 1888 there were also 3,495 deeds of arrangement under the *Deeds of Arrangement Act* 1887, in which the liabilities were set down at £4,803,481, and the assets at £2,416,755, leaving a deficiency of £3,192,311; and in 1889 there were 3,337, the liabilities being £4,773,947, the assets £2,718,721, and the deficiency £2,961,466. See *The Manufacturer and Inventor* (London paper), for 20th October, 1890, page 389.

* Surplus.

† Net figures.

‡ Including besides bankruptcies (proper), liquidations by arrangements, and compositions with creditors.

§ In 1884 the *Bankruptcy Act* of 1869 was repealed, and the Act of 1883 has since been in force.

274. It will be noticed that by far the largest number of failures occurred in 1879, but since then a considerable falling-off has taken place in each year, but most especially in the last six years, when the numbers were fewer by about 50 per cent. than that in any of the five preceding years. It will be noticed that the falling-off mainly dates from the year in which the bankruptcy law was changed (1884), and it is possible there may be some connexion between the two events.

Change of
bankruptcy
law in
United
Kingdom.

275. Important duties in connexion with the registration of deeds and other documents, public companies, bills and contracts for sale; births, deaths, and marriages; and patents, copyrights, and trade-marks, are performed by the Registrar-General. In 1890, as compared with 1889, there was an increase in the number of transactions and in the fees received under most of these heads, but especially under the head of Patents, the only decreases being under the heads of Registry and the *Companies Statute*. The following are the returns for the two years:—

Registrar-
General.

REGISTRAR-GENERAL'S TRANSACTIONS AND FEES, 1889 AND 1890.

Nature of Transaction.	Transactions.		Fees.*	
	1889.	1890.	1889.	1890.
Registry	19,828	17,018	£ 5,595	£ 5,086
<i>Companies Statute</i>	10,318	9,409	2,856	2,056
Bills and contracts of sale	7,318	7,630	366	381
Births, deaths, and marriages certificates	5,326	6,338	1,296	1,366
Patents	1,972	3,236	2,203	2,763
Copyrights	683	688	90	103
Trade-marks	880	1,247	523	761
Searches in connexion with the above	24,361	26,640	1,617	1,732
Miscellaneous fees	3	1	40	52
Total	70,689	72,207	14,586	14,300

276. The number of offences reported to the police or magistrates during 1889 and 1890 is given in the following table; those offences being distinguished:—1. In respect to which persons were brought before magistrates on summons, but were never in custody. 2. In respect to which arrests were made by the police. 3. In respect to which no person had been arrested or brought before magistrates up to the end of the month of March of the year following that in which the offence was reported.† A small increase will be observed in the

Offences
reported.

* These fees are now received by the Collector of Imposts appointed under the *Stamps Act* 1890.

† It does not follow that in these instances the offender escaped altogether. He may have been arrested after the date at which the returns were made up, or on other charges, even prior to that period.

number apprehended, but a decrease under the other heads, resulting in a slight increase during the year in the total number of offences:—

OFFENCES REPORTED, 1889 AND 1890.

Offences in respect to which persons were—	1889.	1890.	Increase.	Decrease.
1. Brought before magistrates on summons	26,678	26,190	...	488
2. Apprehended by the police ...	37,321	38,594	1,273	...
3. Still at large* ...	7,282	6,877	...	405
Total ...	71,281	71,661	380†	...

Summons cases.

277. Forty per cent. of the offences dealt with consist of those in respect to which persons are brought before magistrates on summons, but are not taken into custody. These must obviously be of a lighter character than those for which arrests are made, and therefore do not demand lengthened consideration. The offences in this category classed as against the person are principally assault cases resulting from petty quarrels; those against property are chiefly cases of wilful damage to or illegal detention of property; and the remainder consist for the most part of breaches of the *Education Act*, the clause in the *Public Works Statute* relating to railways and water supply, the *Local Government Act* or municipal by-laws, the *Masters and Servants* or *Wines and Spirits Statutes*, etc. Comparing 1890 with 1889, a decrease in the number of persons summoned is shown under all the heads, but a small increase in the number of such persons summarily convicted. The following are the figures for the two years:—

OFFENCES DEALT WITH BY SUMMONS, 1889 AND 1890.‡

	1889.	1890.	Decrease.
Offences against the person ...	1,485	1,424	61
" " property ...	431	203	228
Minor offences ...	24,762	24,563	199
Total ...	26,678	26,190	488
Cases dismissed by magistrates ...	6,815	6,269	546
Offender summarily convicted or held to bail...	19,863	19,921	+ 58§

* It should be pointed out that the offences for which arrests have and have not been made are not strictly comparable. They are reckoned in the former case according to the individual arrests effected, in the latter according to the offences reported, although in the perpetration of many of these more than one person may have been concerned.

† Net figures.

‡ This table does not embrace cases in which the offender was sentenced to imprisonment or was committed for trial. Although he might in the first instance have appeared before the magistrates on summons, such disposal would place him in custody of the police, and he would therefore be included in subsequent tables.

§ The plus sign (+) indicates increase.

278. Very full details are given of the offences which gave occasion for the apprehensions made by the police; but, in making up the return, a person arrested more than once during the year, or arrested at one time on several charges, is counted as a separate individual in respect to each arrest or charge, and this, except where the contrary is stated, must be borne in mind by those consulting the following paragraphs and tables.*

Charges counted as persons.

279. The persons† who were taken in charge by the Victorian police in 1890 numbered 38,594, as against 37,321 in 1889, showing an increase of 1,273 in the number of arrests.

Arrests, 1889 and 1890.

280. The arrests in 1890, and in the first year of each of the two previous quinquennia, were as follow:—

Arrests, 1880, 1885, and 1890.

PERSONS‡ ARRESTED, 1880, 1885, AND 1890.§

Number of Persons.	1880.	1885.	1890.
Taken into custody	23,983	28,855	38,594
Discharged by magistrates	7,432	9,674	12,971
Summarily convicted or held to bail	15,871	18,413	24,494
Committed for trial	680	768	1,129

281. At the last period, it will be observed, arrests were much more numerous than at either of the two previous periods. This is also the case, if the numbers of the population be taken into account. The estimated average population in 1880 was 850,343; in 1885, 956,880; and in 1890, 1,118,500; the arrests were, therefore, in the proportion of 1 to every 35 persons living at the first, 1 to every 33 persons living at the second period, and 1 to every 30 persons living at the third period.

Arrests: proportion to population.

282. The persons summarily convicted, held to bail, or committed for trial, were, to the whole number arrested, in the proportion of 69 per cent. at the first period, and of 66 per cent. at the second and third periods.

Proportion of times charge was sustained.

283. There was a considerable increase in the prevalence of serious offences at the last as compared with the two previous periods; this

Serious offences

* For 1884, a table was compiled showing the number of charges on which each individual was arrested. See paragraphs 62 to 67, Vol. II., of the edition of this work for 1889-90.

† See preceding paragraph.

‡ See paragraph 278 ante.

§ A statement showing, during a series of years, the numbers taken into custody, the numbers committed for trial, and the number convicted after commitment, will be found in the Statistical Summary of Victoria (first folding sheet) at the beginning of this volume.

may be ascertained by comparing the commitments for trial with the total arrests at the three periods. These were in the proportion of 1 to every 35 arrests at the first period, of 1 to every 38 arrests at the middle period, and of 1 to every 34 arrests at the third period.

Males and females arrested.

284. The sexes of the persons arrested, and of such of them as were discharged by magistrates, summarily dealt with, or sent for trial, were as follow at the same three periods :—

MALES AND FEMALES* ARRESTED, 1880, 1885, AND 1890.

	1880.		1885.		1890.	
	Males.	Females.	Males.	Females.	Males.	Females.
Taken into custody	18,857	5,126	23,155	5,700	31,736	6,858
Discharged by magistrates ...	5,763	1,669	7,717	1,957	10,547	2,424
Summarily convicted or held to bail	12,469	3,402	14,773	3,640	20,189	4,305
Committed for trial	625	55	665	103	1,000	129

Cases in which charge was sustained.

285. The males and females summarily convicted, held to bail, or committed for trial, were, to the whole numbers of the same sexes arrested, in the proportions respectively of 69 per cent. and 67 per cent. in 1880, of 67 per cent. and 66 per cent. in 1885, and of 67 per cent. and 65 per cent. in 1890.

Relative proportions of male and female criminals.

286. The next table shows the relative proportion of males and females arrested, and of those of them who were discharged, summarily dealt with, or committed for trial at the same three periods :—

MALES AND FEMALES.—RELATIVE PROPORTIONS ARRESTED, 1880, 1885, AND 1890.

	Number of Females to 100 Males.		
	1880.	1885.	1890.
Taken into custody	27·19	24·62	21·61
Discharged by magistrates	28·96	25·36	22·98
Summarily convicted or held to bail... ..	27·28	24·64	21·32
Committed for trial	8·80	15·49	12·90

Relative proportions of male and female criminals at three periods.

287. It will be observed that, relatively to the males taken into custody or summarily convicted, the proportion of females similarly dealt with was at the last period much lower than at either of the

* See paragraph 278 *ante*.

former periods; but the proportion of females committed for trial at the last period was larger than at the first period, but was not so large as at the middle period. At all the periods, the proportion of female to male criminals was much lower than the proportion that females bore to males in the total population; for at all the periods the females in the colony were in the proportion of about 90 to every 100 males.

288. A condensed statement of the offences for which arrests were made in the same three years, together with the numbers arrested for each offence, will be found in the following table:—

Causes of arrest.

CAUSES OF ARREST, 1880, 1885, AND 1890.

Offence.	1880.	1885.	1890.
Murder and attempt at murder	26	20	33
Manslaughter	10	11	23
Shooting at or wounding with intent to do bodily harm	65	63	95
Assault	1,767	1,867	2,281
Rape and indecent assault on females	81	57	69
Unnatural offence, and assault with intent to commit	16	9	17
Minor offences against the person	119	139	149
Robbery with violence, burglary, etc.	245	287	465
Horse, sheep, and cattle stealing, etc.	171	149	129
Other offences against property	3,534	3,026	4,239
Forgery and offences against the currency	56	80	87
Drunkenness	10,056	13,580	18,501
Other offences against good order	6,111	8,016	10,810
Offences relating to carrying out laws	329	210	245
Smuggling and other offences against the revenue	79	93	158
Offences against public welfare	1,318	1,248	1,293
Total	23,983	28,855	38,594

289. The causes in respect to which more arrests were made at the last period than at either of the former ones were murder and attempts to murder, manslaughter, shooting with intent, assaults, unnatural offence and minor offences against the person, robbery with violence or burglary, miscellaneous offences against property, forgery, drunkenness and other offences against good order, and smuggling and other offences against the revenue. But for horse, sheep and cattle stealing, there were fewer arrests at the last than at either of the former periods; and for rape and indecent assault, for offences relating to carrying out the laws, and for those against public welfare, there were fewer than at the first period. The most marked

Offences at last period.

increases in 1890, as compared with previous periods, have occurred in the arrests for assaults, robbery and burglary, murder, manslaughter, miscellaneous offences against property, smuggling, etc., and drunkenness, and other offences against good order—most especially the first and last-named offences. It is probable that the increase in the number of assaults and of cases of drunkenness was partly attributable to circumstances arising out of the labour strikes of the year.

Drunken-
ness.

290. The number of arrests for drunkenness affords ample evidence that the efforts of those who are seeking to suppress or mitigate the evil are not uncalled for. In many cases, no doubt, the same individual was arrested over and over again; but supposing each arrest had represented a distinct individual, there would have been taken into custody for drunkenness:—

In 1874, one person in every 71 living in Victoria.					
„	1875,	„	„	68	„
„	1876,	„	„	69	„
„	1877,	„	„	65	„
„	1878,	„	„	69	„
„	1879,	„	„	77	„
„	1880,	„	„	85	„
„	1881,	„	„	79	„
„	1882,	„	„	76	„
„	1883,	„	„	74	„
„	1884,	„	„	73	„
„	1885,	„	„	72	„
„	1886,	„	„	68	„
„	1887,	„	„	65	„
„	1888,	„	„	57	„
„	1889,	„	„	61	„
„	1890,	„	„	60	„

Increase of
drunken-
ness.

291. It will be observed that in the three years 1879 to 1881, during the first eighteen months of which period the colony was in a depressed condition, and the two following years, drunkenness was less rife than at any preceding or subsequent period. Since 1880, however, as the colony became more prosperous, arrests for drunkenness, in proportion to the population, have been steadily increasing, and on this basis were a third more numerous in 1888 than in 1880; but in the following years 1889 and 1890, in which there was a certain amount of depression, they again decreased, but were still higher than in any of the years prior to 1888.

Minor
offences.

292. Drunkenness, “other offences against property,” “other offences against good order,” and “offences against public welfare,” although they may, and probably do—especially the first named—

lead to more serious offences, may be considered as being, in themselves, comparatively speaking, minor offences, hardly amounting to crimes. Arrests for these numbered 21,019 in 1880, 25,870 in 1885, and 34,843 in 1890; and to the whole number of arrests were in the proportion of 88 per cent. at the first period, and 90 per cent. at the two later periods. Thus only 12 per cent. of the arrests at the first period, and 10 per cent. at the middle and last periods were for crimes in the strict sense of the word.

293. It is worthy of remark that, notwithstanding the inducement which high import duties might be supposed to offer to smugglers, offences against the revenue have never led to many arrests in Victoria. Only 158 persons were taken into custody for such offences in 1890, which, however, is larger than the number in 1885, or in 1880.

Smuggling and other offences against revenue.

294. The ages of those taken into custody in 1890, and the degree of instruction possessed by them, are shown in the following table:—

Age and education of arrested persons.

DEGREE OF INSTRUCTION AND AGE OF PERSONS* ARRESTED, 1890.

Ages.	Superior Instruction.	Read and Write well.	Read only or Read and Write imperfectly.	Unable to Read.	Total.
Under 10 years ...	...	2	87	346	435
10 „ 15 „ ...	...	14	543	89	646
15 „ 20 „ ...	3	195	1,932	107	2,237
20 „ 25 „ ...	13	574	5,327	244	6,158
25 „ 30 „ ...	17	666	5,581	294	6,558
30 „ 40 „ ...	53	978	7,155	566	8,752
40 „ 50 „ ...	34	577	4,909	612	6,132
50 „ 60 „ ...	22	359	3,584	562	4,527
60 years and upwards	13	185	2,437	502	3,137
Unspecified ...	...	...	11	1	12
Total ...	155	3,550	31,566	3,323	38,594

295. The returns of those under 15 years of age taken in charge by the police embrace neglected and deserted children as well as criminals. The whole number in 1890, according to the table, was 1,081, and of these not one was possessed of superior instruction; only 16, or one in 68, could read and write well; and 435, or more than a third, were unable to read. The number of children under 15 committed for trial was 6, viz., 5 boys and 1 girl; only one of whom (a boy) could read and write well, while the others could read and write more or less imperfectly.

Education of children arrested.

* See paragraph 278 ante.

Education of
adults.

296. Those over 15 years arrested numbered 37,513, and of these 3,689, or nearly a tenth (including those possessed of superior instruction), could read and write well, whilst 2,888, or a thirteenth, could not read. Those over 15 years of age committed for trial numbered 1,123, of whom 244, or more than a fifth, could read and write well, or were possessed of superior instruction, and 54, or one in 20, were unable to read. According to these figures the persons charged with offences serious enough to call for their commitment for trial were somewhat better educated than the other arrested persons. Those arrested, whether committed for trial or otherwise dealt with, were on the average not nearly so well educated as the general population, for at the census of 1881 all over 15 years of age, except about a tenth, were returned as being able to read and write, and only an eighteenth were returned as entirely illiterate; and it is probable that even better results will be shown by the census of 1891, when the results have been duly tabulated.

Birthplaces
and reli-
gions of
criminals.

297. The following table shows the birthplaces and religions of the persons taken into custody and of those committed for trial in 1890. The proportions to the population are not given, as pending the compilation of the census returns any estimates which might have been made of the total numbers of each nationality and sect would probably have been wide of the mark:—

**BIRTHPLACES AND RELIGIONS OF PERSONS* ARRESTED AND
COMMITTED FOR TRIAL, 1890.**

Birthplace and Religion.	Persons Arrested.	Persons Committed for Trial.
BIRTHPLACE.		
Victoria†	12,429	455
Other Australasian colonies †	2,785	140
Australian Aborigines ...	39	...
England and Wales	8,323	251
Scotland	3,256	58
Ireland	8,930	107
China	236	6
Other countries	2,596	112
Total	38,594	1,129
RELIGION.		
Protestants	21,356	716
Roman Catholics	16,017	369
Jews	167	20
Buddhists, Confucians, etc. ...	266	5
Others	788	19

* See paragraph 278 *ante*.

† Exclusive of aborigines.

298. It is generally assumed that nearly every person sent to trial is guilty of the offence for which he was committed, and, although he may subsequently be acquitted, the probability is that a conviction would have been obtained if sufficient evidence had been available. On the other hand it may be maintained that many of those discharged had been unjustly accused, and should not be classed as criminals. If the latter assumption be correct, it would appear by the following table—which shows the number of the various religions tried and the number convicted, together with the percentage of convictions obtained for different periods—that in the last two years a larger proportion of Roman Catholics were unjustly committed than of Protestants, and a larger proportion of members of both these denominations than of Jews or Pagans. It should, however, be pointed out that the number of Jews and Pagans committed for trial was so small that any proportions based thereon are but of little value:—

Religions of persons convicted and sentenced.

RELIGIONS OF PERSONS* TRIED† AND CONVICTED, 1889 AND 1890.

Religions.	Number tried in 1890.†	Convictions in 1890.		Percentage in Year 1889.
		Total Number.	Percentage of Number Tried.	
Protestants ...	598	413	69·06	72·8
Roman Catholics	343	222	64·72	69·8
Jews ...	16	13	81·25	80·9
Buddhists, Confucians, etc.	5	4	80·00	90·0
Others ...	15	10	66·67	68·4
Total ...	977	662	67·76	72·0

299. The religions of persons taken into custody in 1890 are given in the following table in connexion with their offences:—

Causes of arrest, and religions.

* See paragraph 278 ante.

† Exclusive of those not prosecuted, who numbered 121 in 1890. The number "tried," moreover, differs from the number "committed for trial," since the former is inclusive of those awaiting trial at the beginning, but exclusive of those awaiting trial at the end of the year.

CAUSES OF ARREST, AND RELIGIONS, 1890.

Offence.	Religions.					Total.
	Protestants.	Roman Catholics.	Jews.	Buddhists, Confucians, etc.	Others.	
Murder and attempt at murder	18	11	...	1	3	33
Manslaughter	17	6	...	...	...	23
Shooting at or wounding with intent to do bodily harm	50	44	...	1	...	95
Assault	1,228	962	13	30	48	2,281
Rape and indecent assault on females	44	25	...	...	...	69
Unnatural offence, and assault with intent to commit	10	6	...	...	1	17
Other offences against the person	100	42	3	1	3	149
Robbery with violence, burglary, etc.	259	201	...	2	3	465
Horse, sheep, and cattle stealing, etc.	69	57	...	1	2	129
Other offences against property	2,510	1,549	51	45	84	4,239
Forgery and offences against the currency	66	19	1	...	1	87
Drunkenness	10,080	8,017	16	11	377	18,501
Other offences against good order	5,829	4,578	72	122	209	10,810
Offences relating to the carrying out of laws	148	86	1	1	9	245
Smuggling and other offences against the revenue	73	57	2	23	3	158
Offences against public welfare	855	357	8	28	45	1,293
Total	21,356	16,017	167	266	788	38,594

Causes of arrest of each sect compared.

300. It will be observed that 18 Protestants, 11 Roman Catholics, 1 Buddhist, etc., and 3 of other beliefs, were arrested for murder and attempt at murder; 67 Protestants, 50 Roman Catholics, and 1 Buddhist, etc., were arrested for manslaughter, shooting at, or seriously wounding; 54 Protestants and 31 Roman Catholics, and 1 of other beliefs, were arrested for sexual offences. Over 10,000 Protestants, over 8,000 Roman Catholics, 16 Jews, 11 Buddhists, etc., and 377 of unspecified religions, were arrested for drunkenness. No Jew was arrested during the year for homicide or for a sexual offence.

Religions of drunkards.

301. Arrests for drunkenness and other offences against good order were in the proportion of 74 per cent. of the total arrests of Protestants, of 79 per cent. of those of Roman Catholics, of 53 per cent. of those of Jews, of 50 per cent. of those of Buddhists, Confucians, etc., and of 74 per cent. of those of persons of other beliefs. These proportions vary but little from year to year.

302. The next table shows the occupations of the males and females taken into custody in 1890 :—

Occupations of persons arrested.

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1890.

Occupations.	Males.	Females.
GOVERNMENT, PROFESSIONS, ARTS, EDUCATION, LITERATURE.		
Government officer	17	...
Police, penal officer	4	...
Officer of local body	4	...
Army, navy—officer, man	6	...
Clergyman, etc.	3	...
Lawyer	14	...
Law clerk, law student	4	...
Others connected with law	5	...
Medical man, student	17	...
Dentist	11	...
Chemist, druggist	44	...
Midwife ... ..	...	1
Others connected with medicine	4	...
Author, editor, reporter	29	...
Bookseller, news vendor	17	...
Printer	204	...
Science, connected with	18	...
Education, engaged in	42	4
Fine arts, engaged in	25	...
Photographer	11	...
Music, teacher of, musician	50	10
Theatres and exhibitions, connected with	90	2
BOARD AND LODGING, DOMESTIC DUTIES, ATTENDANCE.		
Hotelkeeper	53	6
Board and lodging, connected with	18	1
Domestic servant, cook	357	841
Hotel, boarding-house, etc., servant	142	9
Charitable institution, servant	2	...
Nurse (not servant) ... ..	...	12
Shoemaker	13	...
Opium shopkeeper	4	...
Attendance, engaged in	8	29
COMMERCIAL PURSUITS.		
Merchant	21	...
Auctioneer, etc.	16	...
Broker, agent, etc.	205	...
Commercial clerk, etc.	579	...
Commercial traveller, salesman	136	...
Other mercantile persons	32	...
Ironmonger	11	...
Shopkeeper	73	3
Hawker, pedlar	584	14
Marine storekeeper	3	...
Rag, bottle gatherer, dealer	31	...
General dealer	409	4

* See paragraph 278 ante.

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1890—*continued.*

Occupations.	Males.	Females.
CARRYING AND MESSAGES.		
Railway service	53	1
Omnibus, cab—driver, owner	333	...
Drayman, carter, carrier	398	...
Others connected with conveyance	7	...
Ship—owner, master, officer, seaman (not navy)	1,251	...
Steamship—engineer, stoker, coal trimmer	81	...
Ship—servant, steward, etc.	44	...
Boatman, waterman, etc.	9	...
Stevedore, or otherwise connected with ships	6	...
Harbour pier, pilot lighthouse—service... ..	1	...
Messenger, porter, errand boy... ..	16	...
Telegraph service	7	...
AGRICULTURAL PURSUITS AND LAND.		
Farmer, market gardener, farm servant, labourer, etc.	837	4
Land, estate—agent, proprietor, etc.	3	...
Land surveyor and assistants	39	...
Others connected with land	7	...
PASTORAL PURSUITS AND ANIMALS.		
Squatter, grazier, station servant, labourer, etc.	68	...
Horse dealer, proprietor, etc.	8	...
Veterinary surgeon, farrier	15	...
Horse-breaker, groom, jockey	445	...
Live stock salesman	5	...
Animal dealer, keeper	1	...
Game, rabbit catcher	5	...
Fisherman	30	...
Drover and others engaged about animals	59	...
ARTIZANS, MECHANICS, LABOURERS.		
Bookbinder	6	...
Musical instrument maker, dealer	8	...
Prints and pictures, connected with	5	...
Carving and figures, connected with	29	...
Watch and clock maker, dealer	47	...
Philosophical instrument maker, dealer... ..	5	...
Gunsmith, etc.	2	...
Mechanical or undefined engineer	266	...
Toolmaker, cutler, etc.	33	...
Carriagemaker, wheelwright	81	...
Saddle, harness, and whip maker, dealer	95	...
Shipwright, rigger, boatbuilder	26	...
Sailmaker, shipchandler, etc.	11	...
Builder, architect	155	...
Carpenter, joiner	857	...
Cooper, turner	59	...
Bricklayer, mason, plasterer, shingler, slater	730	...
Painter, paperhanger, plumber, etc.	489	...
Others connected with buildings	2	...
Cabinet, etc., maker, dealer	104	2

* See paragraph 278 *ante.*

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1890—*continued.*

Occupations.	Males.	Females.
ARTIZANS, MECHANICS, LABOURERS—<i>continued.</i>		
Undertaker	2	...
Chemicals, working or dealing in	14	..
Labourer (undefined)	15,429	1
TEXTILE FABRICS AND DRESS.		
Textile fabrics, manufacturer of, weaver	16	4
Draper and assistants	124	...
Hairdresser, wigmaker, etc.	64	...
Hat and cap maker	21	...
Tailor, tailoress, dealer in clothing	244	59
Milliner, dressmaker ... ..	...	41
Clothing, manufacture, engaged in, machinist	13	23
Boot and shoe maker	700	9
Umbrella—maker, mender	5	...
Washerwoman, laundry man	1	77
FIBROUS MATERIALS.		
Rope, mat, sack, maker	14	...
Tent, tarpaulin, maker, canvas dealer	5	...
ANIMAL FOOD.		
Cowkeeper, dairyman, woman	32	2
Cheesemonger	1	...
Butcher, etc.	307	...
Poulterer, fishmonger	25	...
Other dealers in animal food	1	...
VEGETABLE FOOD.		
Miller, grain and flour dealer, and assistants	22	...
Baker, confectioner	287	...
Greengrocer, fruiterer	27	...
Others dealing in vegetable food	6	...
DRINKS AND STIMULANTS.		
Brewing, connected with	15	...
Wine and spirit merchant	3	...
Distiller, rectifier	1	...
Gingerbeer and sodawater maker	9	...
Grocer and assistants	86	...
Tobacco manufacture, engaged in	45	1
Tobacconist	14	...
ANIMAL MATTERS.		
Soapboiler, candlemaker, tallowmelter	12	...
Tanner, fellmonger, currier	51	...
Leather articles, maker of	7	...
Brush, broom maker	2	...
Wool classer	29	...
Animal matters, working or dealing in	1	...

* See paragraph 278 *ante.*

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1890.—continued.

Occupations.	Males.	Females.
VEGETABLE MATTERS.		
Japanner, French polisher	50	...
Timber merchant and assistant	2	...
Firewood—dealer, chopper, splitter, fencer	47	...
Sawyer, sawmill owner, worker	36	...
Basketmaker	15	...
Papermaker	1	...
Stationer	11	...
Billsticker	8	...
Vegetable matters, others working or dealing in	7	1
MINING, ENGAGED IN.		
Miners, etc.	858	...
COAL, STONE, CLAY, EARTHENWARE, GLASS.		
Coal and charcoal, working or dealing in	23	...
Chimney sweep	2	...
Quarryman, limeburner, etc.	71	...
Brickmaker, potter	66	...
Navvy	51	...
Nightman, scavenger	13	...
Earth, stone, glass, etc., others working or dealing in	14	...
MINERALS AND METALS.		
Goldsmith, silversmith, jeweller	36	...
Engine driver (undefined)	258	...
Ironfounder, blacksmith, locksmith	590	...
Brassfounder, finisher, gasfitter	27	...
Other metals, working or dealing in	137	...
INDEFINITE AND NON-PRODUCTIVE.		
Manager, apprentice, etc.	16	2
Independent means	51	...
Pensioner, inmate of institution, etc.	3	...
Beggar, pauper, vagrant	2	1
Criminal, thief, pickpocket	2	...
Prostitute, brothel-keeper ... ..	...	1,981
Gambler, gaminghouse-keeper	5	...
No stated occupation, over 15 years of age	884	3,479
" " under " "	761	234
Total	31,736	6,858

Chief occupations of persons arrested.

303. It will be observed, that of the males arrested, nearly half were labourers (undefined); and that of other occupations, those most frequently arrested were sailors, miners, carpenters, farmers and gardeners, bricklayers, shoemakers, hawkers, ironfounders and blacksmiths, etc., and clerks, in the order named. No occupation was

* See paragraph 278 ante.

returned in 1,645 cases, but of those 761 were youths or children, and of the others it is probable that most of them belonged to the criminal classes. Of the females arrested, two-sevenths were set down as prostitutes or brothel-keepers. More than one-half, including 234 young girls, were of no specified occupation; and of the few returned as following regular occupations, three-fourths were domestic servants, and the bulk of the remainder were dressmakers, tailoresses, and washerwomen.

304. The results of summary disposal of cases by magistrates in the year 1890 were as follow:—

Results of
summary
disposal.

SUMMARY DISPOSAL BY MAGISTRATES OF ARRESTED PERSONS,*
1890.

Sentence.	Males.	Females.
Imprisonment for 2 years	14	1
„ 1 year and under 2 years	232	92
„ 6 months and under 1 year	351	190
„ 4 months	30	6
„ 3 months	906	332
„ 2 months and under 3 months	314	67
„ 1 month and under 2 months	1,253	395
„ 15 days and under 1 month	78	7
„ 8 days and under 15 days	777	265
„ 7 days and under	5,509	1,390
Fined	9,697	1,214
Ordered to find bail	210	14
Sent to lunatic asylum	308	144
Sent to industrial school or reformatory	331	184
Otherwise dealt with	179	4
Total sentenced	20,189	4,305
Discharged	10,547	2,424
Total summarily disposed of	30,736	6,729

305. Of the persons sentenced by magistrates during 1890, 48 per cent. of the males, and 28 per cent. of the females, were fined; 32 per cent. of the former, and 39 per cent. of the latter, were sentenced to imprisonment for various terms under a month, and 14 and 23 per cent. respectively for periods varying from 1 to 12 months; about 1 per cent. of the males, and 2 per cent. of the females, were sentenced to 1 year's imprisonment or upwards; the balance, or 5 per cent., of the males, and 8 per cent. of the females, were sent to Lunatic Asylums, Industrial and Reformatory Schools, ordered to find bail, or were otherwise disposed of.

Sentences by
magistrates.

* See paragraph 278 ante.

Whipping ordered by magistrates.

306. Corporal punishment to males may be ordered by magistrates for certain offences. In such cases the offender, if an adult, may be sentenced to be whipped with a cat-o'-nine tails once, twice, or thrice, at the discretion of the bench. Only two offenders were so sentenced in 1890—for wilful exposure—one of whom was to receive two whippings of 10 lashes each, and the other one whipping of 20 lashes.

Solitary confinement ordered by magistrates.

307. Fourteen offenders were sentenced to solitary confinement by magistrates in 1890, viz., one for unlawfully wounding, seven for assaults, one for insulting behaviour, and five for larceny. The sentence in 11 cases was three or four days, in 1 case five days, in 1 case seven days, and in 1 case two periods of seven days.

Punishment of juvenile offenders.

308. Under the *Crimes Act* 1890,* magistrates are empowered to order youths under 16 years of age, convicted of any offence punishable on summary conviction with imprisonment, to be privately whipped with a cane or birch rod by a constable, either in addition to, or in lieu of, any other punishment they may be lawfully sentenced to receive. Under this Statute a boy of 14 was sentenced in 1890, for vagrancy, to receive 12 strokes with a cane.†

Results of committals for trial.

309. The results of the commitments for trial at the three periods already referred to were as follow:—

RESULTS OF COMMITMENTS FOR TRIAL,‡ 1880, 1885, AND 1890.

—	1880.	1885.	1890.
Number for trial	664	767	1,098
Convicted and sentenced	398	444	662
Acquitted... ..	208	221	315
Not prosecuted	58	102	121

Proportion of convictions obtained.

310. Of those committed for trial, 606 were eventually tried in 1880, 665 in 1885, and 977 in 1890. At the first period 66 per cent. at the second period 67 per cent., and at the third period 68 per cent. of the trials resulted in convictions.

Sentences in superior courts.

311. The following are the sentences of the prisoners tried and convicted in superior courts during the year under review:—

* 54 Vict. No. 1,079, section 366.

† See also footnote (†) on next page.

‡ Including those who were remaining for trial from the previous year, but excluding those awaiting trial at the end of the year.

SENTENCES OF PERSONS TRIED AND CONVICTED, 1890.

Sentence.	Males.	Females.
Death	6*	1
Hard labour on roads or public works for 10 years and under 15 years	5	...
" " " " 7 years and under 10 years	9	...
" " " " 4 years and under 7 years	45	...
Imprisonment for 2 years and under 4 years	118	7
" 1 year and under 2 years	159	12
" 6 months and under 1 year	140	15
" 1 month and under 6 months	101	10
" under 1 month	8	4
Fined	5	...
Recognizances estreated	2	...
To find bail to appear when called upon	9	5
Sent to lunatic asylum	1	...
Total tried and convicted...	608	54

312. Of males convicted in superior courts in 1890, as many as six were sentenced to death—2 being cases in which death was merely “recorded”; all the rest except 17 were sentenced to terms of imprisonment, with or without hard labour; of those imprisoned, over two-thirds were sentenced for periods of less than two years, and one-tenth to more than four years. Of the females, 19 were sentenced to over one, and 29 to under one, year’s imprisonment. Five males were sentenced to be imprisoned for a longer period than ten years. One female was sentenced to death, but not one was sentenced to a longer period than four years.

Lengths of sentences in superior courts.

313. In addition to terms of imprisonment named in the foregoing table, 77† persons—of whom 5 were females—were ordered to be kept in solitary confinement for periods varying from a few days to 1 month per annum during the sentence. Of these 1 had been convicted of manslaughter; 4 of shooting at or wounding; 1 of assault; 1 of rape or indecent assault on females; 2 of unnatural offence or assault with intent to commit; 24 of robbery under arms or burglary; 2 of sheep stealing, etc.; 29 of other offences against property; 13 of forgery, etc.

Solitary confinement ordered by superior courts.

314. The total number of offenders sentenced by superior courts to be whipped, in addition to terms of imprisonment in all cases, was 3. Rape or indecent assaults on females were the crimes of two of these,

Whippings ordered by superior courts.

* In the case of two of these, sentence of death was only recorded.

† One offender, a boy 13 years of age sentenced to three periods of two days, was respited on probation.

for one of whom two whippings and for the other one whipping of 15 lashes each were ordered. Unnatural offence was the crime of the third offender, who was sentenced to receive two whippings of 12 lashes each. Judges of the Supreme Court and Courts of General Sessions can sentence males to receive corporal punishment, under Act 54 Vict. No. 1,079, for attempts to commit rape, or for rape itself where sentence of death is commuted, for unnatural offences, for attempts to choke in order to commit an offence, for robbery under arms, and, in the case of youths under sixteen, for several other offences. The greatest number of whippings an individual can be sentenced to receive for one offence is 3, and the greatest number of lashes at each whipping is 50.

Whippings
ordered,
1874-1890.

315. The number of individuals sentenced to corporal punishment was 11 in 1874, viz., 6 by magistrates and 5 by superior courts; 5 in 1875, viz., 2 by magistrates and 3 by superior courts; 11 in 1876, viz., 1 by magistrates and 10 by superior courts; 11 in 1877, viz., 5 by magistrates and 6 by superior courts; 17 in 1878, viz., 2 by magistrates and 15 by superior courts; 9 in 1879, viz., 4 by magistrates and 5 by superior courts; 5 in 1880, 17 in 1881, and 8 in 1882—all by superior courts; 14 in 1883, viz., 2 by magistrates and 12 by superior courts; 17 in 1884, 6 in 1885, and 11 in 1886—all by superior courts; 10 in 1887, viz., 4 by magistrates and 6 by superior courts; 29 in 1888, viz., 19 by magistrates and 10 by superior courts; 46 in 1889, viz., 34* by magistrates and 12 by superior courts; and 6 in 1890, viz., 3 by magistrates and 3 by superior courts. The total number of whippings directed to be administered in the seventeen years was thus 233, of which 82 (including 44 to juvenile offenders) were ordered by magistrates and 151 by superior courts. The number of persons sentenced to be whipped in 1890 was thus the same as in 1885, but much smaller than in any other previous year named except 1875 and 1880.

Executions.

316. No execution took place in 1890. Since the first settlement of Port Phillip, 145 criminals have been executed within the colony, of whom only one was a female. No execution took place in 1890, in 1887 or in 1882, 1878, 1874, 1850, 1849, 1846, 1845, 1844, 1843, or any year prior to 1842, but one or more executions took place in all the other years. The following table shows the birthplaces of the persons executed, the religions they professed, and the crimes they expiated on the scaffold :—

* Corrected number.

CRIMINALS EXECUTED, 1842 TO 1890.

Birthplace, Religion, and Offence.							Number.
Total number executed							145
Birthplace—Victoria							5
" Other Australian colonies							6
" England...							60
" Wales							2
" Ireland							41
" Scotland...							8
" Belgium...							1
" France							1
" Switzerland							1
" Germany							1
" Sweden							1
" Sicily							1
" United States of America							5
" West Indies							2
" Philippine Islands							1
" China							8
" At sea							1
Religion—Church of England							34
" Presbyterian							6
" Wesleyan							8
" Baptist							1
" Lutheran							2
" Protestant undefined							30
" Roman Catholic							53
" Buddhist, Confucian, etc.							6
" No Religion							5*
Offence—Murder							109
" Attempt to murder...							17
" Rape...							9
" Unnatural offence on a child							1
" Robbery with violence							9

317. It is stated† that from the accession of Queen Victoria to the period of Her Majesty's jubilee, 840 criminals were executed in the United Kingdom, or an average of 17 per annum. In 1837 there were no less than 13 crimes subject to capital punishment, and no fewer than 671 persons had been condemned to death in twelve months; but since the Queen's accession a more humane code has prevailed, and few have been executed, except for murder. Executions in United Kingdom

318. The offences in respect to which no persons were apprehended numbered 6,877 in 1890 or 405 less than in 1889, but much more numerous than in any of the ten years ended with 1888. Offences against the person show an exceptionally large increase in 1890 as compared with previous years, in consequence probably of the labour strikes, whilst other offences also show some increase, but those against property, which during the previous three years were unusually Undetected crime.

* Aborigines.

† See *Fifty Years of National Progress*, page 107.

numerous, fell off considerably. The following are the undetected offences in the last twelve years:—

UNDETECTED CRIME, 1879 TO 1890.

Year.	Number of Offences.			
	Against the Person.	Against Property.	Other Offences.	Total.
1879	503	3,763	364	4,630
1880	613	3,935	350	4,898
1881	461	3,770	400	4,631
1882	572	3,980	433	4,985
1883	596	4,209	584	5,389
1884	450	3,249	350	4,049
1885	491	3,000	388	3,879
1886	523	3,160	436	4,119
1887	211	5,593	416	6,220
1888	270	5,627	577	6,474
1889	271	6,152	859	7,282
1890	805	5,177	895	6,877

Offender perhaps arrested on other grounds.

319. With reference to the offences set down as undetected, it should be remarked that in all probability the malefactors do not in all such cases escape entirely. The returns are made up in the month of April of the year following that in which the offence is reported, and he who committed it may be arrested after that date, or may even before that date have been arrested, and perhaps punished, for other misdeeds.

Crime in Australasian colonies.

320. The next four tables, giving details of crime in the various Australasian colonies, have been compiled in the office of the Government Statist, Melbourne, from their respective *Statistical Registers*. The first of these gives for each colony, and for the whole of Australasia, during each of the eleven years 1879 to 1889, a statement of the number of offences for which persons were apprehended or summoned, were summarily convicted or held to bail, were committed for trial, and were convicted after commitment. In the returns of the number of cases in respect to which persons were summoned, those so dealt with on account of matters coming under the head of civil jurisdiction are omitted in all the colonies:—

CRIME IN AUSTRALASIAN COLONIES, 1879 TO 1889.

Name of Colony.		Number of Offences for which Persons were—			
		Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.
Victoria...	1879	43,936	28,266	628	397
	1880	41,778	26,950	680	398
	1881	44,730	29,131	591	332

* Not including civil cases.

CRIME IN AUSTRALASIAN COLONIES, 1879 TO 1889—*continued.*

Name of Colony.	Number of Offences for which Persons were—				
	Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.	
Victoria— <i>continued</i>	1882	47,234	31,542	616	402
	1883	48,974	33,480	606	350
	1884	51,397	34,456	695	407
	1885	52,566	34,180	768	444
	1886	54,361	36,599	756	492
	1887	59,036	38,742	820	506
	1888	60,276	41,054	873	557
	1889	63,999	43,161	1,023	680
New South Wales †	1879	53,870	38,828	1,743	1,090
	1880	57,784	42,205	1,717	1,148
	1881	66,600	51,130	1,626	1,058
	1882	65,936	50,126	1,724	1,065
	1883	72,231	55,463	1,606	1,008
	1884	75,680	57,897	1,550	928
	1885	77,092	59,345	1,540	785
	1886	81,503	62,268	1,594	957
	1887	72,119	53,614	1,402	854
	1888	69,052	50,876	1,423	915
	1889	65,568	48,703	1,492	910
Queensland †	1879	9,058	5,762	377	185
	1880	9,133	6,051	316	170
	1881	10,063	7,253	264	126
	1882	11,649	8,025	308	144
	1883	13,804	9,788	427	193
	1884	15,518	11,620	555	274
	1885	15,763	11,451	538	267
	1886	17,640	12,841	611	289
	1887	16,769	12,449	480	247
	1888	18,431	13,730	538	275
1889	19,539	14,787	567	354	
South Australia ...	1879	12,843	10,970	384	223
	1880	15,063	12,814	353	199
	1881	15,347	13,258	342	213
	1882	14,672	12,634	339	211
	1883	13,104	11,378	305	166
	1884	11,988	10,425	293	127
	1885	10,406	8,901	240	133
	1886	8,202	6,850	228	121
	1887	7,122	6,032	208	102
	1888	7,309	6,282	190	91
1889	6,609	5,638	189	78	

* Not including civil cases.

† Cases brought up for lunacy are not included in the returns of New South Wales, Queensland, and Tasmania. In New South Wales, 558 lunatics in 1889, and 5,854 in the previous eleven years; and in Queensland, 307 in 1889, and 4,098 during the previous eleven years; and in Tasmania, 63 lunatics in 1889, and 297 in the previous five years, were admitted to asylums. Probably four-fifths of these were apprehended by the police.

CRIME IN AUSTRALASIAN COLONIES, 1879 TO 1889--continued.

Name of Colony.		Number of Offences for which Persons were—				
		Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.	
Western Australia †	...	1879	6,471	4,853	85	53
		1880	5,577	4,221	50	25
		1881	5,460	4,134	109	61
		1882	5,089	3,683	90	46
		1883	4,739	3,450	72	46
		1884	4,831	3,477	64	40
		1885	4,900	3,436	86	51
		1886	5,703	3,980	95	54
		1887	5,363	3,562	121	75
		1888	4,651	3,144	104	64
	1889	4,378	2,979	102	62	
Tasmania ‡	...	1879	7,184	5,641	110	67
		1880	6,908	5,418	117	73
		1881	6,229	4,799	90	51
		1882	7,615	5,942	93	36
		1883	8,039	5,394	88	33
		1884	6,273	4,843	70	39
		1885	5,983	4,876	71	31
		1886	6,586	5,253	76	46
		1887	5,932	4,806	89	56
		1888	6,164	4,595	99	66
	1889	7,128	5,122	105	42	
New Zealand §	...	1879	22,492	16,088	734||	296
		1880	21,181	15,025	592	370
		1881	19,796	14,079	474	235
		1882	22,659	16,573	467	219
		1883	23,090	16,944	459	231
		1884	23,572	17,968	509	241
		1885	23,103	17,804	428	236
		1886	21,662	16,705	536	286
		1887	20,336	15,557	646	334
		1888	19,167	14,472	516	255
	1889	18,845	14,082	491	219	
Australasia	...	1879	155,854	110,408	4,061	2,311
		1880	157,424	112,684	3,825	2,383
		1881	168,225	123,784	3,496	2,076

* Not including civil cases.

† Of those summarily convicted in Western Australia between 8 and 10 per cent. were aborigines.

‡ See footnote (†) preceding page. It is pointed out by Mr. R. M. Johnston, the Government Statistician of Tasmania, in his report for 1886, page li., that, prior to 1884, a considerable proportion of purely civil cases, such as petty debts, non-payment of rates, etc., were improperly included in the returns of offences for which persons were apprehended or summoned in that colony.

§ Maoris are included. In 1889 the number of cases in which they were concerned was 369—in 221 of which summary convictions were obtained, in 117 cases the prisoner was discharged, and in 31 cases committed for trial.

|| This large increase appears to have been owing to Maori disturbances, as 202 of that race were committed for trial in 1879, as against only 18 in the previous year.

CRIME IN AUSTRALASIAN COLONIES, 1879 TO 1889—*continued.*

Name of Colony.	Number of Offences for which Persons were—				
	Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.	
Australasia— <i>continued</i> ...	1882	174,854	128,525	3,637	2,123
	1883	183,981	135,897	3,563	2,027
	1884	189,259	140,686	3,736	2,056
	1885	189,813	139,993	3,671	1,947
	1886	195,657	144,496	3,896	2,245
	1887	186,677	134,762	3,766	2,174
	1888	185,050	134,153	3,743	2,223
	1889	186,066	134,472	3,969	2,345

321. By this table it would appear that crime is so much more prevalent in New South Wales than in Victoria that, notwithstanding the smaller population,† there has been in every year, under all the heads, larger numbers in the former colony than in the latter. This is particularly observable in regard to serious offences, the commitments for trial and convictions thereafter in New South Wales having been, up to 1886, more than twice as numerous as, and, since 1886, on the average nearly three-fifths more numerous than, in Victoria. In 1889 the apprehensions and summonses in New South Wales exceeded those in Victoria by 2 per cent., and the summary convictions by 13 per cent.

Large amount of crime in New South Wales.

322. The position of the different colonies in respect to crime will be better ascertained by means of the next table, which shows the proportion that the number of apprehensions and summons cases,* of summary convictions, of commitments for trial, and of convictions after commitment, occurring in each colony during the last eleven years, bore to the average population of the same colony; also, the proportion in each colony of summary convictions to apprehensions and summons cases, and of convictions after commitment to commitments:—

Proportion of crime in each colony.

* Not including civil cases.

† It is believed that in all the years the actual population of New South Wales was smaller than that of Victoria.

PROPORTION OF ARRESTS, COMMITMENTS, AND CONVICTIONS IN
AUSTRALASIAN COLONIES TO POPULATION,* ETC., 1879 TO 1889.

Name of Colony.	Proportion per 1,000 of the Population of—		Proportion per 10,000 of the Population of—		Proportion per Cent. of—		
	Apprehensions and Summons Cases.†	Summary Convictions.	Commitments for Trial.	Convictions after Commitment.	Summary Con- victions to Ap- prehensions and Summons Cases.†	Convictions after Commitment to Commitments.	
Victoria‡ ...	1879	52·68	33·89	7·53	4·76	64·33	63·22
	1880	49·13	31·69	8·00	4·68	64·51	58·53
	1881	51·48	33·52	6·80	3·82	65·13	56·18
	1882	53·09	35·45	6·92	4·52	66·78	65·26
	1883	53·81	36·78	6·66	3·85	68·36	57·76
	1884	55·11	36·94	7·45	4·36	67·04	58·56
	1885	54·94	35·72	8·03	4·64	65·02	57·81
	1886	55·20	37·16	7·68	5·00	67·34	65·08
	1887	58·06	38·10	8·06	4·98	65·63	61·71
	1888	57·14	38·91	8·28	5·28	68·11	63·80
1889	58·70	39·58	9·38	6·24	67·44	66·46	
New South Wales ...	1879	78·00	56·23	25·24	15·78	72·08	62·54
	1880	79·63	58·16	23·66	15·83	73·04	66·86
	1881	87·60	67·25	21·39	13·92	76·77	65·07
	1882	82·96	63·07	21·69	13·40	76·02	61·77
	1883	86·59	66·48	19·25	12·08	76·79	62·76
	1884	85·92	65·73	17·60	10·53	76·50	59·87
	1885	82·81	63·75	16·54	8·43	76·98	53·51
	1886	83·17	63·91	16·27	9·77	76·84	60·04
	1887	70·54	52·44	13·71	8·35	74·34	60·91
	1888	64·88	47·90	13·37	8·59	73·68	64·30
1889	59·40	44·12	13·52	8·24	74·27	60·98	
Queensland ...	1879	42·29	26·90	17·60	8·64	63·61	49·07
	1880	41·15	27·26	14·24	7·66	66·25	53·80
	1881	45·53	32·82	11·95	5·70	72·08	47·73
	1882	49·03	33·77	12·96	6·06	68·89	46·75
	1883	51·53	36·54	15·94	7·20	70·90	45·20
	1884	52·64	39·42	18·93	9·29	74·88	49·38
	1885	51·05	37·08	17·42	8·65	72·64	49·63
	1886	53·05	38·62	18·38	8·69	72·79	47·30
	1887	47·27	35·09	13·53	6·96	74·24	51·46
	1888	48·86	36·40	14·26	7·29	74·49	51·12
1889	49·20	37·25	14·28	8·92	75·70	62·43	
South Australia ...	1879	50·50	43·17	15·11	8·77	85·48	58·07
	1880	57·16	48·63	13·40	7·55	85·07	56·43
	1881	53·18	45·94	11·81	7·38	86·39	62·28
	1882	50·61	43·58	11·69	7·28	86·11	62·24
	1883	43·82	38·05	10·20	5·55	86·82	54·43
	1884	38·83	33·78	9·49	4·11	86·96	43·34

* See paragraph 323 *post*.

† Not including civil cases.

‡ Rates per head corrected since last publication in accordance with amended estimates of population. Those for the other colonies are liable to future correction.

PROPORTION OF ARRESTS, ETC., 1879 TO 1889—*continued.*

Name of Colony.	Proportion per 1,000 of the Population of—		Proportion per 10,000 of the Population of—		Proportion per Cent. of—		
	Apprehensions and Summons Cases.*	Summary Convictions.	Commitments for Trial.	Convictions after Commitment.	Summary Convictions to Apprehensions and Summons Cases.*	Convictions after Commitment to Commitments.	
South Australia— <i>continued.</i>	1885	33·23	25·84	7·67	4·25	77·76	55·42
	1886	26·20	21·88	7·28	3·86	83·52	43·07
	1887	22·73	19·25	6·64	3·26	84·70	49·04
	1888	22·99	19·76	5·98	2·86	85·94	47·89
	1889	20·56	17·54	5·88	2·43	85·31	41·27
Western Australia ...	1879	227·72	170·78	29·91	18·65	75·00	62·35
	1880	193·35	146·34	17·33	8·67	75·69	50·00
	1881	182·93	138·50	36·52	20·44	75·71	55·96
	1882	167·46	121·19	29·62	15·14	72·37	51·11
	1883	151·73	110·46	23·05	14·72	72·80	63·89
	1884	149·43	107·55	19·80	12·37	71·97	62·50
	1885	143·81	100·85	25·27	14·97	70·12	59·30
	1886	153·37	107·04	25·55	14·52	69·80	56·84
	1887	128·61	85·42	29·02	17·99	66·42	62·00
	1888	109·92	74·30	24·58	15·13	67·60	61·54
	1889	101·70	69·20	23·69	14·40	68·05	60·78
Tasmania † ...	1879	64·60	50·73	9·89	6·02	81·08	60·91
	1880	60·80	47·69	10·30	6·43	80·19	62·40
	1881	53·11	40·91	7·67	4·35	78·64	56·67
	1882	63·09	49·23	7·70	2·98	78·73	38·71
	1883	64·65	43·37	7·08	2·65‡	80·80	37·50
	1884	48·86	37·72	5·45	3·04	77·20	55·71
	1885	45·27	36·89	5·37	2·35	81·50	43·66
	1886	48·60	38·77	5·61	3·39	79·91	60·53
	1887	42·42	34·37	6·36	4·00	81·02	62·92
	1888	42·71	31·84	6·86	4·57	74·55	66·67
1889	47·89	34·42	7·06	2·82	71·86	40·00	
New Zealand ...	1879	50·19	35·90	16·38§	6·61	71·53	40·33||
	1880	44·66	31·68	12·48	7·80	70·94	62·50
	1881	40·11	28·52	9·60	4·76	71·12	49·58
	1882	44·49	32·54	9·17	4·30	73·14	46·90
	1883	43·62	32·01	8·67	4·36	73·38	50·33
	1884	42·94	32·73	9·27	4·39	76·23	47·35
	1885	40·80	31·45	7·56	4·17	77·06	55·14
	1886	37·21	28·53	9·21	4·91	76·67	53·63
	1887	34·10	26·08	10·83	5·60	76·50	51·70
	1888	31·66	23·91	8·52	4·21	75·50	49·42
1889	30·70	22·93	8·00	3·57	74·69	44·60	

* Not including civil cases.

† See footnote (†) on page 208 *ante.*

‡ This small proportion is in consequence of the large number of cases not prosecuted.

§ See footnote (§) on page 208 *ante.*

|| This small proportion of convictions is owing to the fact that the Maoris committed for disturbances of a political nature were leniently dealt with.

PROPORTION OF ARRESTS, ETC., 1879 TO 1889—*continued.*

Name of Colony.	Proportion per 1,000 of the Population of—		Proportion per 10,000 of the Population of—		Proportion per Cent of—		
	Apprehensions and Summons Cases.*	Summary Convictions.	Commitments for Trial.	Convictions after Commitment.	Summary Convictions to Apprehensions and Summons Cases.*	Convictions after Commitment to Commitments.	
Total Australasia ...	1879	60·39	42·77	15·73	8·94	71·06	56·91
	1880	58·77	42·07	14·28	8·89	71·73	62·30
	1881	60·52	44·53	12·57	7·46	73·68	59·38
	1882	60·86	44·73	12·65	7·38	73·57	58·37
	1883	61·38	45·34	11·88	6·76	74·50	56·80
	1884	60·47	44·97	11·94	6·57	74·33	55·06
	1885	58·51	42·91	11·09	6·00	73·32	54·12
	1886	58·10	42·96	11·57	6·67	74·04	57·62
	1887	53·52	38·64	10·80	6·24	72·20	57·73
	1888	51·21	37·13	10·33	6·15	72·50	59·62
	1889	49·86	36·03	10·64	6·28	72·26	59·07

Crime results too low in all colonies except Victoria.

323. It should be remarked that whilst the population of Victoria for each year since 1881 has been corrected in accordance with the results of the recent census, that of the other colonies has not been so corrected, and as the census showed that all the populations had been over-estimated, which would obviously cause the calculations based thereon to be too low, the proportions shown in the table must understate the truth in the case of all the colonies except Victoria.

Order of colonies in respect to apprehensions, etc.

324. In regard to the proportion of offences for which apprehensions were made or summonses issued, Western Australia and New South Wales have stood at the head of the list throughout the eleven years named, and Tasmania stood next until 1884,† when Victoria and Queensland rose above that colony. New Zealand stood lowest on the list until 1884, since which year that place has been occupied by South Australia, the depression in which colony has been accompanied by a reduction in the amount of crime. The following is the order of the various colonies in this respect in 1889, the colony with the highest proportion of persons apprehended or summoned on criminal charges being placed first, and that with the lowest last:—

* Not including civil cases.

† It is stated that, prior to 1884, some petty debt cases were improperly included in the returns of offences for which persons were apprehended or summoned in Tasmania.

ORDER OF COLONIES IN REFERENCE TO NUMBERS APPREHENDED
OR SUMMONED IN PROPORTION TO POPULATION, 1889.

- | | |
|-----------------------|---------------------|
| 1. Western Australia. | 5. Tasmania. |
| 2. New South Wales. | 6. New Zealand. |
| 3. Victoria. | 7. South Australia. |
| 4. Queensland. | |

325. As regards the persons summarily convicted, in proportion to population, Western Australia and New South Wales have always been at the top of the list. In the three years ended with 1889 Victoria occupied the third place, having risen thereto from the fifth position, which it had occupied during several previous years. The following is the order in which the colonies stood in this particular, the colony with the highest proportion of summary convictions being placed first and the rest in succession:—

Order of colonies in respect to summary convictions.

ORDER OF COLONIES IN REFERENCE TO SUMMARY CONVICTIONS
IN PROPORTION TO POPULATION, 1889.

- | | |
|-----------------------|---------------------|
| 1. Western Australia. | 5. Tasmania. |
| 2. New South Wales. | 6. New Zealand. |
| 3. Victoria. | 7. South Australia. |
| 4. Queensland. | |

326. In every year prior to 1884, Victoria showed, relatively to population, a much smaller number of persons committed for trial than any other colony, but since then the proportion having fallen in some of the other colonies, in the years 1886 to 1888 it was higher in Victoria than in Tasmania or South Australia, and in 1889 also higher than in New Zealand. Western Australia has been at the head of the list throughout the period, and New South Wales stood second until 1884, when Queensland rose above it, and has since, with one intermission, continued to occupy the second place. Tasmania occupied the lowest position in 1887, but in 1888 South Australia fell below it. In respect to the proportion of commitments for trial to population, the colonies stood in the following order in 1889:—

Order of colonies in respect to commitments for trial.

ORDER OF COLONIES IN REFERENCE TO NUMBERS COMMITTED
FOR TRIAL IN PROPORTION TO POPULATION, 1889.

- | | |
|-----------------------|---------------------|
| 1. Western Australia. | 5. New Zealand. |
| 2. Queensland. | 6. Tasmania. |
| 3. New South Wales. | 7. South Australia. |
| 4. Victoria. | |

Order of colonies in respect to convictions in superior courts.

327. In respect to convictions in superior courts, Victoria, which formerly had—with the exception of Tasmania—the smallest number in proportion to population, occupied the fourth position in 1888 and 1889, Western Australia, New South Wales, and Queensland* were still at the top of the list, a position they had occupied during most of the last eleven years :—

ORDER OF COLONIES IN REFERENCE TO CONVICTIONS IN SUPERIOR COURTS IN PROPORTION TO POPULATION, 1889.

- | | |
|-----------------------|---------------------|
| 1. Western Australia. | 5. New Zealand. |
| 2. Queensland. | 6. Tasmania. |
| 3. New South Wales. | 7. South Australia. |
| 4. Victoria. | |

Order of colonies in respect to summary convictions obtained.

328. Either more persons are apprehended unjustly in Victoria than in the other colonies, or punishment for minor offences does not follow their commission with such certainty in the former as in the latter, since the number of summary convictions obtained in proportion to the apprehensions is usually lower in this colony than in any of the others. The following is the order of the colonies in respect to convictions of this kind in 1889, the colony in which the rate of summary convictions to apprehensions is highest being placed first, and that in which it is lowest last :—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF SUMMARY CONVICTIONS TO ARRESTS AND SUMMONSES, 1889.

- | | |
|---------------------|-----------------------|
| 1. South Australia. | 5. Tasmania. |
| 2. Queensland. | 6. Western Australia. |
| 3. New Zealand. | 7. Victoria. |
| 4. New South Wales. | |

Order of colonies in respect to convictions obtained in superior courts.

329. In regard to the proportion of convictions to commitments for trial, Victoria was first on the list in 1889, Queensland, New South Wales, and Western Australia being next below her. In the subjoined statement the colonies are placed in order, the one in which the convictions, in 1889, bore the highest proportion to the commitments being placed first :—

* The colonies are arranged in their usual order. In 1889, however, Queensland stood before New South Wales.

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF CONVICTIONS
IN SUPERIOR COURTS TO COMMITMENTS FOR TRIAL, 1889.

- | | |
|-----------------------|---------------------|
| 1. Victoria. | 5. New Zealand. |
| 2. Queensland. | 6. South Australia. |
| 3. New South Wales. | 7. Tasmania. |
| 4. Western Australia. | |

330. It is to be regretted that the information as to the offences for which persons are arrested or summoned is very incomplete in several of the colonies. In Queensland, the only specific offence mentioned in the returns is drunkenness, the balance being grouped as offences against the person, offences against property, or as other offences. This, except that drunkenness is not separated from "other offences," is likewise the grouping adopted in Western Australia,* as also in Victoria in respect to the summons cases where the offender is never in custody of the police, the exact offence being entered only when an arrest takes place.

Incomplete returns in some colonies.

331. Notwithstanding New South Wales has hitherto possessed a smaller population than Victoria, arrests for most descriptions of offences have for years past been much more numerous in the former colony than in the latter. Thus in 1889, arrests for rape and other sexual offences numbered 107 in New South Wales against 74 in Victoria; for other offences against the person, 8,213 against 3,840; for horse, sheep, and cattle stealing, etc., 307 against 163; for miscellaneous offences against property, 7,209 against 4,528; for drunkenness, 18,355† against 18,068. An exception occurred in the years 1885 to 1887, and 1889, in regard to arrests for robbery, burglary, etc., when they were more numerous in Victoria; also in the last three years in regard to arrests for homicide, which were about equal in the two colonies, and in regard to "other offences," which were slightly the more numerous in Victoria. The following table shows the offences for which apprehensions were made or summonses issued in the various Australasian colonies during the eleven years, 1879 to 1889, so far as the information can be gathered from their respective *Statistical Registers* :—

Arrests, etc., for various offences in Australasian colonies.

* The particulars are available in regard to the convictions, although not in regard to the arrests.

† Contrary to statements which have frequently appeared in the press of an adjacent colony, the law relating to drunkenness is the same in Victoria as in New South Wales. In both colonies a drunken person is liable to be arrested, even although not guilty of disorderly conduct.

APPREHENSIONS AND SUMMONSES FOR VARIOUS OFFENCES IN THE
AUSTRALASIAN COLONIES, 1879 TO 1889.

Colony.	Year.	Number of Arrests or Summonses for—							
		Murder, Attempts at Murder, and Manslaughter.	Rape, and other Offences against Females.	Other Offences against the Person.	Robbery with Violence, Burglary, etc.	Horse, Sheep, and Cattle Stealing, etc.	Other Offences against Property.	Drunkenness.*	Other Offences.
Victoria	1879	29	60	4,174	203	154	4,160	10,859	24,297
	1880	36	81	4,376	245	171	3,880	10,056	22,933
	1881	32	71	4,526	195	153	4,383	11,065	24,305
	1882	33	66	4,340	206	169	4,853	11,749	25,818
	1883	38	52	3,785	262	158	4,146	12,408	28,125
	1884	39	70	3,539	205	130	4,038	12,938	30,438
	1885	31	57	4,071	287	149	3,797	13,580	30,594
	1886	34	51	4,105	282	154	4,340	14,528	30,867
	1887	35	59	3,923	421	131	4,468	15,578	34,421
	1888	57	58	3,723	352	167	4,375	18,526	33,018
1889	42	74	3,840	409	163	4,528	18,068	36,875	
New South Wales	1879	63	85	9,102	266	472	6,126	17,713	20,043
	1880	75	95	9,364	245	469	6,154	18,777	22,605
	1881	68	104	9,031	231	465	6,237	22,560	27,904
	1882	54	110	9,080	274	529	6,643	21,393	27,853
	1883	76	109	10,484	203	348	6,343	23,178	31,490
	1884	98	119	9,842	263	482	6,415	24,438	34,023
	1885	50	115	9,353	230	403	6,576	26,291	34,074
	1886	73	163	9,899	261	307	6,787	26,310	37,703
	1887	36	138	8,729	300	307	7,410	22,706	32,493
	1888	58	125	8,872	374	403	8,357	21,129	29,734
1889	43	107	8,213	336	307	7,209	18,355	30,998	
Queensland	1879	1,238		1,175			2,997	3,648	
	1880	1,320		1,186			2,867	3,760	
	1881	1,304		1,146			3,275	4,338	
	1882	1,532		1,140			3,771	5,206	
	1883	2,369		1,327			4,505	5,603	
	1884	2,543		1,687			5,117	6,171	
	1885	2,230		1,748			5,508	6,277	
	1886	2,091		1,956			5,748	7,845	
	1887	2,587		2,126			6,000	6,056	
	1888	2,460		2,273			6,206	7,492	
1889	2,651		2,468			6,160	8,260		
South Australia	1879	5	29	857	46	15	890	3,840	7,161
	1880	13	37	1,026	52	51	971	4,325	8,588
	1881	7	33	862	45	23	1,009	5,298	8,070
	1882	5	16	934	55	19	963	4,713	7,967
	1883	5	17	767	61	15	652	4,533	7,054
	1884	24	41	711	45	13	653	3,938	6,563
1885	9	36	598	28	19	708	3,361	5,647	

* See footnote (†) on preceding page.

APPREHENSIONS AND SUMMONSES FOR VARIOUS OFFENCES IN THE AUSTRALASIAN COLONIES, 1879 TO 1889—continued.

Colony.	Year.	Number of Arrests or Summonses for—							
		Murder, Attempts at Murder, and Manslaughter.	Rape, and other Offences against Females.	Other Offences against the Person.	Robbery with Violence, Burglary, etc.	Horse, Sheep, and Cattle Stealing, etc.	Other Offences against Property.	Drunkenness.*	Other Offences.
South Australia —continued	1886	8	32	530	27	18	679	2,566	4,342
	1887	8	21	408	36	16	562	2,090	3,981
	1888	13	22	514	25	12	568	2,388	3,767
	1889	10	14	499	31	17	482	2,003	3,553
Western Australia †	1879		462			387		5,622	
	1880		331			355		4,891	
	1881		418			354		4,688	
	1882		365			459		4,265	
	1883		455			372		3,912	
	1884		410			335		4,086	
	1885		403			323		4,174	
	1886		474			414		4,815	
	1887		472			532		4,359	
	1888		517			473		3,661	
1889		379			524		3,475		
Tasmania †	1879	2	54	616	45	35	998	1,504	3,930
	1880	2	14	651	103	37	723	1,543	3,835
	1881	5	8	528	35	17	691	1,446	3,499
	1882	5	20	621	36	27	842	1,827	4,237
	1883	2	17	701	25	28	702	1,890	4,674
	1884	3	21	533	22	25	616	1,577	3,476
	1885	3	13	544	34	22	565	1,470	3,332
	1886	4	18	489	16	20	647	1,507	3,885
	1887	3	19	449	22	18	749	1,192	3,480
	1888	2	17	422	13	20	549	1,145	3,996
1889	1	15	459	10	7	638	1,155	4,843	
New Zealand	1879	14	51	1,869	100	67	2,563	6,672	11,156
	1880	29	56	1,909	99	65	2,272	6,371	10,380
	1881	13	59	1,937	73	85	2,146	5,770	9,713
	1882	10	47	1,920	93	62	2,226	6,996	11,305
	1883	16	46	1,605	71	50	2,358	7,494	11,450
	1884	25	35	1,652	102	66	2,270	7,154	12,268
	1885	21	30	1,734	94	60	2,044	7,012	12,108
	1886	23	49	1,545	122	86	2,185	6,297	11,355
	1887	17	43	1,600	179	54	2,304	5,661	10,478
	1888	18	38	1,459	168	95	2,144	5,692	9,553
1889	14	41	1,496	149	60	2,354	5,456	9,275	

* See footnote (†) on page 215.

† The number of convictions (not arrests) for the principal offences in the last four years were as follow:—Murder and manslaughter, 4 in 1886, nil in 1887, 2 in 1888, and 3 in 1889; rape, etc., 2 in 1889; burglary, etc., 2, 4, nil, nil, respectively; cattle and sheep stealing, 106, 87, 62, and 124, almost all being by aborigines; other offences against property, 163, 225, 228, and 246; drunkenness, 1,165, 502, 557, and 749.

‡ See footnote (†) on page 208 ante.

Ratio of
each group
of offences
to popula-
tion of each
colony.

332. Subjoined is a statement of the proportion of the various offences, grouped under four heads, to the population of each colony during the same eleven years:—

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALASIAN COLONY, 1879 TO 1889.

Colony.	Year.	Arrests or Summonses per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.*	Other Offences.
Victoria ...	1879	5·11	5·42	13·02	29·13
	1880	5·28	5·05	11·83	26·97
	1881	5·33	5·44	12·73	27·97
	1882	4·99	5·88	13·20	29·02
	1883	4·26	5·02	13·63	30·90
	1884	3·91	4·69	13·87	32·64
	1885	4·35	4·42	14·19	31·97
	1886	4·25	4·85	14·75	31·34
	1887	3·95	4·94	15·32	33·85
	1888	3·64	4·64	17·56	31·30
	1889	3·63	4·68	16·99	33·82
New South Wales ...	1879	13·40	9·94	25·65	29·02
	1880	13·14	9·46	25·88	31·15
	1881	12·10	9·12	29·67	36·70
	1882	11·63	9·37	26·91	35·05
	1883	12·79	8·26	27·78	37·74
	1884	11·42	8·13	27·74	38·63
	1885	10·22	7·74	28·24	36·65
	1886	10·34	7·51	26·85	38·47
	1887	8·71	7·84	22·21	31·18
	1888	8·51	8·58	19·85	27·94
	1889	7·58	7·11	16·63	33·40
Queensland ...	1879	5·78	5·49	13·99	17·03
	1880	5·95	5·34	12·92	16·94
	1881	5·90	5·19	14·82	19·63
	1882	6·45	4·80	15·87	21·91
	1883	8·84	4·95	16·81	20·92
	1884	8·63	5·72	17·36	20·94
	1885	7·22	5·66	17·84	20·33
	1886	6·29	5·88	17·29	23·59
	1887	7·29	5·99	16·91	17·07
	1888	6·52	6·03	16·45	19·86
	1889	6·68	6·23	15·52	20·81
South Australia ...	1879	3·54	3·74	15·11	28·14
	1880	4·08	4·08	16·41	32·59
	1881	3·12	3·66	18·36	27·97
	1882	3·29	3·58	16·26	27·48
	1883	2·64	2·44	15·16	23·59
	1884	2·51	2·30	12·76	21·26

* See footnote (†) on page 215 ante.

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALASIAN COLONY, 1879 TO 1889—*continued*.

Colony.	Year.	Arrests or Summonses per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.*	Other Offences.
South Australia— <i>continued</i>	1885	2·10	2·41	10·73	18·03
	1886	1·82	2·31	8·20	13·87
	1887	1·39	1·96	6·67	12·70
	1888	1·73	1·90	7·51	11·85
	1889	1·63	1·65	6·23	11·06
Western Australia	1879	16·26	13·62	197·84	
	1880	11·48	12·31	169·57	
	1881	14·00	11·86	157·06	
	1882	12·01	15·10	140·34	
	1883	14·57	11·91	125·25	
	1884	12·68	10·36	126·39	
	1885	11·83	9·48	122·53	
	1886	12·75	11·13	129·49	
	1887	11·32	12·76	104·53	
	1888	12·22	11·18	86·50	
1889	8·80	12·17	80·71		
Tasmania†	1879	6·04	9·69	13·52	35·35
	1880	5·87	7·60	13·58	33·75
	1881	4·61	6·33	12·32	29·83
	1882	5·35	7·50	15·14	35·10
	1883	5·79	6·07	15·20	37·59
	1884	4·34	5·16	12·28	27·08
	1885	4·24	4·70	11·12	25·21
	1886	3·77	5·04	11·12	28·67
	1887	3·37	5·64	8·53	24·88
	1888	3·06	4·03	7·93	27·69
1889	3·19	4·40	7·76	32·54	
New Zealand	1879	4·32	6·09	14·88	24·89
	1880	4·20	5·13	13·41	21·86
	1881	4·07	4·67	11·68	19·68
	1882	3·88	4·67	13·74	22·19
	1883	3·15	4·68	14·16	21·63
	1884	3·12	4·44	13·03	22·35
	1885	3·15	3·88	12·39	21·39
	1886	2·78	4·11	10·82	19·51
	1887	2·78	4·25	9·49	17·57
	1888	2·50	3·98	9·40	15·78
1889	2·53	4·09	8·89	15·11	

333. It will be observed that, according to population, arrests or summonses for offences against the person were, in all the years, much more numerous in Western Australia and New South Wales than in Order of colonies as to offences against the person.

* See footnote (†) on page 215 *ante*.

† See footnote (†) on page 208 *ante*.

any other colony; in the former of which they were—in the year 1889—nearly two and a half times, and in the latter more than twice, as numerous as in Victoria. The following is the order of the colonies in this respect during 1889—which is the same as in the four previous years—the colony in which the proportion was highest being placed first and that in which it was lowest last:—

ORDER OF COLONIES IN REFERENCE TO ARRESTS OR SUMMONSES
FOR OFFENCES AGAINST THE PERSON, 1889.

- | | | |
|-----------------------|--|---------------------|
| 1. Western Australia. | | 5. Tasmania. |
| 2. New South Wales. | | 6. New Zealand. |
| 3. Queensland. | | 7. South Australia. |
| 4. Victoria. | | |

Order of colonies as to offences against property.

334. In 1889, arrests for offences against property in Western Australia were more than three times, and in New South Wales more than one and a half times, as numerous, in proportion to population, as they were in Victoria, where they were fewer than in any colonies except Tasmania, New Zealand, and South Australia. It should be stated that the proportion in Western Australia would probably be reduced nearly one half, were arrests of aborigines for sheep or cattle stealing excluded,* in which case it would stand lower than New South Wales and on a par with Queensland. In this respect, the order of the colonies was as follows, the colony with the largest proportion of such arrests being placed first, and the rest in succession:—

ORDER OF COLONIES IN REFERENCE TO ARRESTS OR SUMMONSES
FOR OFFENCES AGAINST PROPERTY, 1889.

- | | | |
|-----------------------|--|---------------------|
| 1. Western Australia. | | 5. Tasmania. |
| 2. New South Wales. | | 6. New Zealand. |
| 3. Queensland. | | 7. South Australia. |
| 4. Victoria. | | |

Order of colonies as to drunkenness.

335. In the matter of drunkenness, New South Wales, which for years stood at the head of the colonies of the group in which the offence was distinguished,† has improved considerably since 1886. Victoria, on the other hand, has apparently become more inebriate, as in 1889, according to the figures, arrests for drunkenness within her boundaries were, in proportion to the population, slightly higher than those in New

* Of 370 convictions in Western Australia in 1889, 179 were of aborigines—chiefly for sheep and cattle stealing.

† The only colony in which drunkenness is not distinguished, so far as the total arrests are concerned, is Western Australia. The convictions for that offence, however, are given in footnote (†) on page 217 *ante*.

South Wales.* It should be pointed out, however, that when the population estimates, which have been proved to be too high, have been reduced for the latter colony (as they have already been for the former) in accordance with the results of the recent census, it will be found that even in 1889 drunkenness was really more rife in New South Wales than in Victoria. In the following list, wherein the colony in which the largest proportion of inebriates was brought before magistrates in 1889 is placed first, and that in which the number was smallest last, Victoria for the first time stands above the other colonies :—

ORDER OF COLONIES IN REFERENCE TO APPREHENSIONS FOR DRUNKENNESS IN PROPORTION TO POPULATION, 1889.

- | | |
|---------------------|---------------------|
| 1. Victoria. | 4. New Zealand. |
| 2. New South Wales. | 5. Tasmania. |
| 3. Queensland. | 6. South Australia. |

336. "Other offences," which embrace breaches of corporation by-laws, *Wines and Spirit Statute*, etc., are rather violations of good order than actual crimes, and are consequently generally dealt with by summons. Relatively to population, they were formerly most numerous in New South Wales, but in the three years ended with 1889 they were more numerous in Victoria than in any of the other colonies. In Western Australia drunkenness is included with these offences, and, consequently, the figures are not comparable with those of the other colonies. Omitting Western Australia, therefore, the following is the order of the colonies in respect to irregularities of this description, the colony in which the proportion was highest being placed first, and that in which it was lowest last :—

Order of colonies as to "other offences."

ORDER OF COLONIES IN REFERENCE TO ARRESTS OR SUMMONSES FOR "OTHER OFFENCES," 1889.

- | | |
|---------------------|---------------------|
| 1. Victoria. | 4. Queensland. |
| 2. New South Wales. | 5. New Zealand. |
| 3. Tasmania. | 6. South Australia. |

337. The statistics at hand relating to the United Kingdom give the commitments for trial and convictions in the superior courts, but do not afford any information respecting the cases dealt with in courts of petty sessions. The following table shows the number of commitments and convictions and their respective proportions to the population of each division of the United Kingdom, also the proportion of commitments to convictions during the eleven years ended with 1889 :—

Crime in United Kingdom.

* Both in Victoria and New South Wales, a drunken person is liable to be arrested, even although not disorderly.

CRIME IN THE UNITED KINGDOM, 1879 TO 1889.

Country.	Estimated Population.	Commitments for Trial.	Convictions.	Proportion of—			
				Commitments to Population.	Convictions to Population.	Convictions to Commitments.	
				per 10,000.	per 10,000.	per cent.	
England and Wales	1879	25,371,489	16,388	12,525	6·46	4·94	76·43
	1880	25,714,288	14,770	11,214	5·74	4·36	75·92
	1881	26,061,736	14,786	11,353	5·67	4·36	76·78
	1882	26,413,861	15,260	11,699	5·78	4·43	76·66
	1883	26,770,744	14,659	11,347	5·49	4·24	77·41
	1884	27,132,449	14,407	11,134	5·31	4·10	77·28
	1885	27,499,041	13,586	10,500	4·94	3·82	77·28
	1886	27,870,586	13,974	10,686	5·01	3·83	76·47
	1887	28,247,151	13,292	10,338	4·71	3·66	77·78
	1888	28,628,804	13,750	10,561	4·80	3·69	76·81
	1889	29,015,613	12,099	9,348	4·17	3·22	77·26
Scotland	1879	3,665,443	2,700	2,091	7·37	5·70	77·44
	1880	3,705,994	2,583	2,046	6·97	5·52	79·21
	1881	3,745,485	2,444	1,832	6·53	4·89	74·96
	1882	3,785,400	2,469	1,943	6·52	5·13	78·70
	1883	3,825,744	2,567	1,916	6·71	5·01	74·64
	1884	3,866,521	2,610	2,085	6·72	5·37	79·88
	1885	3,907,736	2,535	1,956	6·49	5·01	77·16
	1886	3,949,393	2,437	1,838	6·19	4·65	75·20
	1887	3,991,499	2,357	1,843	5·91	4·62	78·19
	1888	4,034,156	2,353	1,849	5·83	4·58	78·58
	1889	4,077,070	2,234	1,723	5·48	4·23	77·09
Ireland	1879	5,265,625	4,363	2,207	8·29	4·19	50·58
	1880	5,202,648	4,716	2,383	9·06	4·58	50·53
	1881	5,144,983	5,311	2,698	10·32	5·24	50·80
	1882	5,097,853	4,301	2,255	8·44	4·42	52·43
	1883	5,015,282	3,025	1,740	6·03	3·47	57·52
	1884	4,962,693	2,925	1,546	5·89	3·12	52·85
	1885	4,924,342	2,850	1,573	5·79	3·19	55·19
	1886	4,889,498	3,028	1,619	6·19	3·31	53·47
	1887	4,837,352	2,694	1,411	5·57	2·92	52·38
	1888	4,777,545	2,188	1,220	4·58	2·55	55·76
	1889	4,730,532	2,181	1,225	4·99	2·80	56·17
Total	1879	34,302,557	23,451	16,823	6·83	4·90	71·74
	1880	34,622,930	22,069	15,643	6·37	4·52	70·88
	1881	34,952,204	22,541	15,883	6·45	4·55	70·46
	1882	35,297,114	22,030	15,897	6·24	4·50	72·16
	1883	35,611,770	20,251	15,003	5·69	4·21	74·09
	1884	35,961,663	19,942	14,765	5·54	4·10	74·04
	1885	36,331,119	18,971	14,029	5·22	3·86	73·94
	1886	36,709,477	19,439	14,143	5·30	3·85	72·73
	1887	37,076,002	18,343	13,592	4·94	3·66	74·07
	1888	37,440,505	18,291	13,630	4·89	3·64	74·52
	1889	37,823,215	16,514	12,296	4·37	3·25	74·46

338. Taking the mean of the eleven years given in the table, it will be found that, in proportion to population, the commitments for trial in the United Kingdom, taken as a whole, are a fourth less than in Victoria and Tasmania, and considerably less than in any of the other Australasian colonies; also that those in England were fewer by about one-third; those in Scotland, by one-sixth; and those in Ireland, by one-ninth, than those in Victoria and Tasmania. Convictions after commitment are, relatively to population, on the average about a sixth more numerous in Victoria than in the United Kingdom or England and Wales, and considerably more numerous than in Ireland, but somewhat less numerous than in Scotland.

Crime in United Kingdom and Australasia compared.

339. The convictions obtained in proportion to the commitments are, according to the figures, more numerous in England and Scotland than in any of the Australasian colonies, but the proportion in Ireland in 1889 was smaller than that in Victoria, New South Wales, Queensland, or Western Australia during the same year.

Convictions in United Kingdom and Australasia compared.

340. A phase of crime, respecting which it is difficult to obtain accurate information, is female prostitution. Mr. H. M. Chomley, the Chief Commissioner of the Victorian police, however, by means of the force at his disposal and by correspondence with the police authorities of the neighbouring colonies, a few years since obtained some figures relating to the prostitution existing in Melbourne, Sydney, Brisbane, and Adelaide, which will be found in the following table:—

Prostitution in Australian capitals.

PROSTITUTION IN AUSTRALIAN CAPITALS.

Capital Cities.	Population (Census of 1881).	Estimated Number of Prostitutes, 1883.	Prostitutes per 10,000 of Population.
Melbourne	282,947	597	21.10
Sydney	224,211	613	27.34
Brisbane	31,109	99	31.82
Adelaide	67,954	500	73.58

341. According to the figures in the last column, Melbourne was much freer from prostitution than any one of the other metropolitan cities named. It will be observed that, even in actual numbers, the prostitutes in Melbourne were fewer than in Sydney, although the latter had the smaller population. An enormous amount of prostitution appears to exist in Adelaide, but the figures being given in round numbers must be regarded with suspicion.

Results compared.

Prostitutes
in Mel-
bourne,
1891.

342. From an estimate made in 1891, upon which Mr. Chomley states exceptional care was expended, the number of public prostitutes in Melbourne and suburbs was 536. At the same time the population amounted to 491,400, so that the proportion of prostitutes per 10,000 of the population appears to have fallen from 21 in 1883 to only 11 in the present year.

Police in
Austral-
asian
colonies.

343. The Victorian police force is an admirably organized body of men, and, although smaller in numbers than the police force of New South Wales by 59, smaller also in proportion to population than the police force of either that colony or Queensland, their efficiency, combined with the orderly character of the population, is such that serious offences, as has been already shown,* are usually much less rife in Victoria than in either of those colonies. The following figures show the number of police and their proportion to the population in each colony :—

POLICE IN AUSTRALASIAN COLONIES, 1890.†

1. South Australia	has	389	police,	or	1	to	834	persons.
2. Victoria	„	1,454	„	„	770	„	„	„
3. New South Wales	„	1,513	„	„	742	„	„	„
4. Queensland	„	902	„	„	451	„	„	„

Police in
Austral-
asian
capitals.

344. Mr. Chomley supplies the following figures to show the number of persons one policeman keeps in order and protects in each of the four Australian capitals named :—

POLICE IN AUSTRALIAN CAPITAL CITIES, 1891.

1. Melbourne	has	740	police,	or	1	to	664	persons.
2. Sydney	„	600	„	„	644	„	„	„
3. Adelaide	„	216	„	„	617	„	„	„
4. Brisbane	„	250‡	„	„	406	„	„	„

Supreme
Court
criminal
sittings.

345. The number of criminal cases tried in the Supreme Court at the various places throughout the colony where sittings were held in 1890 was 416, of which 285 were for felony, and 131 for misdemeanors. The convictions for felony numbered 194, and for misdemeanors 82. The number of places where sittings were held was 19, the number of sittings was 65, and the total duration of sittings was 191 days.

Supreme
Court civil
sittings.

346. Sittings may be held at the same number of places to try civil cases, but no causes were entered at 2 out of the 19 places in

* See paragraph 326 *ante*.

† In 1883, the New Zealand police numbered 741, or 1 to every 783 persons living. No later returns are at hand respecting that colony.

‡ Figures for 1890.

1890. The number of causes entered for trial during the year was 535, but the number of causes tried was only 297, of which 46 were tried by juries of six, 9 by juries of twelve, and 242 by a judge alone. All of these were defended. The damages laid in the declarations amounted in the aggregate to £687,503. Verdicts were returned in 294 instances, and there were 2 nonsuits. Of the verdicts 229, or about 78 per cent., were for the plaintiff. The aggregate amount awarded by the juries was £68,592, or 10 per cent. of the damages laid. In the ten years ended with 1889, the damages sued for in these courts amounted to £2,846,125, and the sums awarded by juries to £363,547, or to about 13 per cent. of the damages sued for.

347. Courts of General Sessions have jurisdiction in criminal cases within certain limitations, and have also appellate jurisdiction in civil cases from petty sessions. The places at which such courts were held in 1890 numbered 27, and the number of courts held 73, extending over periods amounting in the aggregate to 170 days. The number of cases tried was 548, in 340 of which, or 62 per cent., convictions were obtained. The number of appeals heard was 79. In the ten years prior to 1890, 2,715 cases were tried in Courts of General Sessions, and 1,839 convictions were obtained; thus the latter were to the former in the proportion of 68 per cent.

348. County Courts have jurisdiction in civil cases up to £250. The number of places at which they were held in 1890 was 63, and the number of courts held was 182, extending over 386 days. The total number of cases tried was 12,365; the amount sued for was £340,028; and the amount recovered £127,433, or only 37 per cent. of the amount sued for. The costs awarded to the plaintiff amounted to £15,363, and the costs awarded to the defendant to £6,072. During the ten years prior to the year under review the aggregate amount sued for in County Courts was £3,044,309, and the aggregate amount awarded was £931,650, or 31 per cent. of the amount sued for.

349. Courts of Mines have jurisdiction concerning all questions or disputes which may arise out of mining on Crown lands. The places at which they were held in 1890 numbered 12, and the courts held numbered 33, occupying 14 days. The total number of suits was 9, and the aggregate amount or value of demand, £144. The gross amount of costs awarded to the plaintiffs was £52, and to the defendants £15. These figures do not include all mining disputes which took place during the year, as those of minor importance are adjudicated on by the wardens of the gold-fields. In the ten years prior to

1890 the value sued for in Courts of Mines amounted in the aggregate to £18,254. The business has fallen off very considerably for several years past.

Courts of
Petty Ses-
sions :
criminal
cases.

350. The cases of indictable offences heard at Petty Sessions during 1890 numbered 2,648, which resulted in 1,096 commitments for trial. Commitments were thus obtained in 41 per cent. of the cases. The offences summarily dealt with numbered 62,136, in 44,515 of which, or 72 per cent., the offender was convicted.

Courts of
Petty Ses-
sions : civil
cases.

351. Courts of Petty Sessions have jurisdiction in ordinary civil cases up to £50, and in master and servant cases also up to £50. Such courts were held at 239 places during the year. The civil cases heard numbered 30,466, in which the total amount of debts or damages claimed was £196,917, and the total amount awarded was £132,663, or 67 per cent. of the amount claimed. In the ten years ended with 1889 the debts or damages claimed in these courts amounted in all to £988,395, and the sums awarded to £618,020, or to 63 per cent. of the amounts claimed.

Debts sued
for and
awarded.

352. The net results of the civil cases tried in 1890 may be gathered from the following table, which shows the total amount of debts and damages sued for in the various courts, and the aggregate value of the awards, also the percentage of the latter to the former, in 1890 and the previous decennium. It will be noticed that the whole amount at stake was £1,224,000, and that rather over one-fourth was recovered; also that whilst the proportion recovered in the Supreme Court appears to have been much less than the average, that in the County Courts and Courts of Petty Sessions was considerably above, the average :—

DEBTS AND DAMAGES CLAIMED AND AWARDED.*

Name of Court.	Amount of Debts and Damages, 1890.		Proportion of Debts and Damages Recovered.	
	Claimed.	Awarded.	1890.	Average of Previous 10 Years.
	£	£	Per cent.	Per cent.
Supreme Court	687,503	68,592	10	13
County Courts	340,028	127,433	37	31
Courts of Petty Sessions ...	196,917	132,663	67	63
Total	1,224,448	328,688	27	28

* The amounts claimed and awarded, especially in the Supreme Court, are not strictly comparable, for whereas the amount claimed is set down for every case entered, whether tried or not, the amount awarded obviously only applies to cases actually tried. In the Supreme Court only about two-thirds of the cases entered are actually tried, whereas in 1890 only a little more than half were tried during the year.

353. The number of writs issued in 1890, in the six bailiwicks Writs. into which the colony is divided, was 2,316, or only 13 less than in the previous year. Of the whole number 13 were Queen's writs against both person and property, 21 were subjects' writs against the person alone, and 2,282 were subjects' writs against property alone.

354. Places for the reception of prisoners in Victoria are of three Gaols and
penal estab-
lishments. kinds: ordinary gaols, police gaols, and penal establishments. The ordinary gaols and the penal establishments are houses of correction. The police gaols are used for the detention of prisoners sentenced to short periods of imprisonment, or awaiting trial or transfer to some other gaol or penal establishment, or to a lunatic asylum.

355. In accordance with recommendations made by the Inspector- Probation
system for
first
offenders. General of Penal Establishments, the probation system for first offenders was introduced into Victoria by the passing of the *Juvenile Offenders Act* 1887, which came into operation on 1st January, 1888. This Act—the provisions of which have since been embodied in the *Crimes Act* 1890 (50 Vict. No. 1079)—gave power to a judge or chairman of the court before which, or any two or more justices before whom the conviction has taken place, in the case of persons under the age of 21 years not previously convicted, to suspend the execution of sentences for any term of imprisonment not exceeding three years for any offence, whether indictable or punishable by summary conviction, and to release the offender from custody upon entering into recognizances, to be settled by the court, for his future good behaviour. Moreover, in the case of prisoners undergoing sentence, who had not been previously convicted and received sentence when under the age of 25 years, the Governor in Council is empowered to extend mercy to such offenders by releasing them from custody upon entering into like recognizances. In both cases, however, a prisoner so released is liable to be re-arrested for misbehaviour, and committed to prison to undergo his sentence or the residue thereof. Under the provisions of the Act, 18 prisoners (including 1 female) were released on probation in 1889, and 96 (including 14 females) in 1890.

356. The gross, distinct, and average number of prisoners detained Gaols and
prisoners. in each description of prison during 1890 will be found in the following table, males and females being distinguished:—

GAOLS AND PENAL ESTABLISHMENTS, 1890.

Description of Prison.	Number of Institutions.	Prisoners Detained during the Year.								
		Gross Number.*			Distinct Individuals.†			Daily Average.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Gaols ..	9	8,279	2,655	10,934	} 8,543	1,733	10,276	{ 762	339	1,101
Penal establishments	1	1,266	...	1,266							{ 742	...	742
Police gaols ..	8	723	35	758	614	30	644‡	19	1	20
Total ...	18	10,268	2,690	12,958	9,157	1,763	10,920	1,523	340	1,863

Increase of distinct prisoners.

357. According to this table, the number of individual prisoners detained during the whole or some portion of 1890 in the gaols and penal establishments of the colony was 10,920, viz., 9,157 males and 1,763 females. In the previous year, the number of distinct prisoners was 10,900, viz., 9,150 males and 1,750 females; thus showing an increase of 20 during the year under review, viz., 7 in the case of the male and of 13 in that of the female prisoners.

Proportion of distinct prisoners to population.

358. Comparing the figures for 1890 with those showing the mean population of that year, it appears that 1 person in every 102 persons in the colony; or 1 male in every 64 males, and 1 female in every 300 females, passed some portion of the year in prison. These proportions differ very slightly from those of the previous year. In the estimates made no account is taken of persons lodged temporarily in watch-houses, etc., pending examination before magistrates, the prisoners here referred to being only those detained in regular gaols or penal establishments.

Proportion of distinct to gross prisoners.

359. If a comparison be made between the gross number of prisoners (exclusive of transfers) and the distinct prisoners, it will be found that 84·27 per cent. of the prisoners dealt with in 1890—viz.,

* Exclusive of prisoners transferred from one institution to another. The numbers here given represent imprisonments, each person being counted afresh every time imprisoned.

† See table following paragraph 361 *post*.

‡ Estimated.

89·18 per cent. in the case of males, and 65·54 per cent. in the case of females—were distinct individuals. In the previous year the proportions were :—Total, 84·98 per cent. ; males, 89·94 per cent. ; females, 65·96 per cent.

360. If the figures in the table showing the average number of prisoners are compared with the mean population, it follows that 1 person in every 600 persons living was constantly in prison during 1890; or, distinguishing the sexes, that, during that year, 1 male in every 387 males living, and 1 female in every 1,556 females living, were constantly in detention. By the following table, which gives the figures for the last twelve years, it will be seen that the proportion of prisoners to the population fell from 1 in every 534 in 1879, to 1 in every 670 in 1885, since which year it has gradually again risen to 1 in every 600 in 1890.

PROPORTION OF PRISONERS TO POPULATION,
1879 TO 1890.

Year.	Of the Total Population one Person was constantly in Prison to every—		
	Males.	Females.	Both Sexes.
1879	351	1,267	534
1880	348	1,274	532
1881	353	1,349	543
1882	391	1,416	596
1883	429	1,346	633
1884	446	1,347	650
1885	466	1,357	670
1886	444	1,380	653
1887	429	1,360	632
1888	434	1,493	650
1889	406	1,456	612
1890	387	1,556	600

361. In the Inspector General's annual reports a return appears showing the number of times each individual was imprisoned during the year. The following are the particulars for 1890,* also the proportions per cent. :—

* See Inspector General's Report for 1890, Parliamentary Paper No. 44, Session 1891.

DISTINCT PRISONERS, 1890.
(Exclusive of those in Police Gaols.)

Number of Times Imprisoned during Year.	Distinct Prisoners, 1890.					
	Number.			Percentage.		
	Males.	Females.	Total.	Males.	Females.	Total.
Once	6,032	1,054	7,086	70·61	60·82	68·96
Twice	962	257	1,219	11·26	14·83	11·86
Three times	216	124	340	2·53	7·16	3·31
Four times	75	46	121	·88	2·65	1·18
Five times	34	24	58	·40	1·39	·56
Six times and upwards*	20	29	49	·23	1·67	·48
Total received	7,339	1,534	8,873	85·91	88·52	86·35
In detention at commencement of year †	1,204	199	1,403	14·09	11·48	13·65
Grand Total	8,543	1,733	10,276	100·00	100·00	100·00

Persons imprisoned more than once.

362. Adding the numbers at the commencement of the year to those in the first line of the table, it is found that $82\frac{1}{2}$ per cent. of the distinct prisoners in 1890 were imprisoned only once during the year, and consequently $17\frac{1}{2}$ per cent. were imprisoned more than once. In the case of males, the proportions were $84\frac{3}{4}$ and $15\frac{1}{4}$ per cent.; and in the case of females, $72\frac{1}{4}$ and $27\frac{3}{4}$ per cent. respectively. The tendency of females to be imprisoned over and over again is greater than that of males; thus, during the year, nearly 13 per cent. of the whole number of females were imprisoned three times or upwards, and nearly 6 per cent. four times or upwards; whereas only 4 per cent. of the males were imprisoned more than twice, and only $1\frac{1}{2}$ per cent. more than three times.

Prisoners previously convicted.

363. Out of a total of 1,862 prisoners in detention on the 31st December, 1890, 1,072, or about 58 per cent., had been previously imprisoned under sentence in the colony—viz., 213, or 11 per cent., once; 164, or 9 per cent., twice; 86, or 5 per cent., three times; and as many as 609, or 33 per cent., four times or oftener. Of the total number, 22 had also been convicted in other countries.

Grounds of imprisonment.

364. The following is a classification of the prisoners in confinement at the end of 1890, according to the grounds in respect to which they were detained. It will be noticed that 118, or $6\frac{1}{4}$ per cent., were

* Four males and six females admitted seven times; one male and five females admitted eight, three females admitted nine, and three females ten times.

† Exclusive of those discharged and re-admitted during the year, who numbered 398, viz., 256 males and 142 females, they being included with the figures in the previous line.

untried; also that more than three-fifths of the males, but less than a fifth of the females, had been convicted of felony:—

GROUNDS FOR DETENTION OF PRISONERS, 1890.

Grounds for Detention.	Gaols.		Police Gaols.		Penal Establishments.	Total.		
	Males.	Females.	Males.	Females.	Males.	Males.	Females.	Total.
Felony, tried... ..	288	55	2	1	617	907	56	963
„ untried ...	62	4	5	...	...	67	4	71
Misdemeanors, tried ...	240	144	7	...	81	328	144	472
„ untried	20	9	5	...	...	25	9	34
Other offences, tried ...	181	103	3	...	47	231	103	334
„ untried	10	1	1	1.	...	11	2	13
Total	801	316	23	2	745	1,569	318	1,887

365. The total number of prisoners (exclusive of transfers) admitted, in 1890, to ordinary gaols and penal establishments, was 10,442, and of these, 618, viz., 483 males and 135 females, were imprisoned on charges of vagrancy, but really for medical attention, and 580, viz., 192 males and 388 females, were received for shelter. There were thus 1,198 persons, as against 1,416 in 1889, who were admitted on account of their destitute condition, and went to swell the ranks of the prison population, instead of being otherwise provided for as objects of charity. If these destitute prisoners be deducted from the total number of admissions, the balance, viz., 9,244 as compared with 8,972 in 1889, will more correctly represent the criminal admissions during the year.*

Destitution a cause of imprisonment.

366. The cases in which prisoners were absent from work during the year on account of sickness, which numbered 2,644, were in the proportion of one case to every 4.1 individual prisoners. The daily average number of prisoners incapacitated from labour by reason of sickness was 103, or 1 in every 14 of the average number constantly employed. The total number of cases of sickness at any one time was 128.

Sickness in prisons.

367. Eighty-nine deaths from natural causes occurred in prisons during 1889, and 86 deaths in 1890; moreover, one death in 1890 resulted from suicide. The deaths from natural causes were in the proportion of 1 to every 122 in the former year, and 1 to every 127 in the latter year, of the estimated individual prisoners; or in the proportion of one to every 20 in the former year, and one to every 22 in

Deaths in prisons.

* See Inspector-General's Report, page 6.

the latter year, of the daily average number of prisoners detained. The death-rate was thus lower in the year under review than in the previous one.

Prisoners
absconding.

368. In the last five years no permanently successful attempt to escape from prison has taken place. In the first of those years one prisoner escaped from the custody of the police whilst being transferred, but was retaken, and two others made unsuccessful attempts to escape from prison; in 1887, one prisoner absconded, and was recaptured during the year; in 1888, no instance is reported of any prisoner having attempted to escape from custody; in 1889, four prisoners, of whom one was unconvicted, absconded, but were recaptured; and in 1890, one convicted prisoner absconded, but was retaken.

Ages of
prisoners.

369. The following were the number of persons of different ages constantly under detention during the year. The census returns of ages not having yet been compiled, the proportions to population at each period of age cannot be given:—

AGES OF PRISONERS, 1890.

Ages.				Average number of Prisoners constantly detained.
Under 20 years	...	...	...	139
20 to 30 "	...	...	...	696
30 " 40 "	...	...	...	414
40 " 50 "	...	...	...	259
50 " 60 "	...	...	...	179
60 years and upwards	...	...	...	176
Total	...	...	...	1,863

Birthplaces
and reli-
gions of
prisoners.

370. The birthplaces and religions of the prisoners were as follow. No comparison with the estimated numbers of each nationality and religion in the total population can be made at present, as the census returns of those subjects have not been compiled:—

BIRTHPLACES AND RELIGIONS OF PRISONERS, 1890.

NATIVE COUNTRY.				Average number of Prisoners constantly detained.
Australasian Colonies	...	...	...	829
England and Wales	...	...	...	419
Scotland	...	...	...	350
Ireland	...	...	...	118
China	...	...	...	16
Other countries	...	...	...	131
Total	...	...	...	1,863

BIRTHPLACES AND RELIGIONS OF PRISONERS, 1890—*continued.*

RELIGION.				
Protestants	...	...	...	1,069
Roman Catholics	...	...	...	753
Jews ...	...	...	...	15
Buddhists, Confucians, etc.	...	...	...	17
Others	...	...	...	9

371. According to the following figures, which show the state of Education of prisoners. education of prisoners at various periods since 1873, the proportion of those able to read and write has considerably increased, and the proportion of the entirely illiterate has largely diminished of late years :—

EDUCATION OF PRISONERS, 1873 TO 1890.

Period.	Numbers in every 100—		
	Able to Read and Write.	Able to Read only.	Unable to Read.
1873 to 1876	64	18	18
1877 to 1880	74	8	18
1881 to 1883	83	6	11
1884 to 1886	84	6	10
1887 to 1889	86	4	10
1890	89	3	8

372. The following cases of punishment for offences committed Gaol punish- within the prison took place in 1890. Of these, 107 were awarded ments. by visiting magistrates, and the balance by the governors of gaols. It will be observed that solitary confinement, which is said to be more dreaded by prisoners than any other punishment, was prescribed in nearly half the cases. The “other punishments” include “separate confinement,” which is gradually taking the place of solitary confinement; but do not include whipping, as corporal punishment is not administered in Victoria for any breach of prison regulations :—

PUNISHMENTS FOR OFFENCES WITHIN PRISONS, 1890.

Nature of Punishment.	Gaols.			Penal Establish-ment.	Total.		
	Males.	Females.	Total.	Males.	Males.	Females.	Total.
Hard labour ...	12	1	13	3	15*	1	16
Solitary confinement ...	385	79	464	199	584	79	663
Other punishments ...	163	47	210	549	712	47	759
Total ...	560	127	687	751	1,311	127	1,438

* With irons in 5 cases.

Proportion
of prisoners
punished.

373. The punishments for offences within the prison, as detailed in the last table, were in the proportion of 1 to every 7 individual prisoners, 1 punishment of a male to every $6\frac{1}{2}$ individual male prisoners, 1 punishment of a female to every 14 individual female prisoners. According to the daily average number of prisoners, there was not quite 1 punishment to every prisoner; or nearly 1 punishment to every male, and about 1 punishment to every 3 females.

Trades of
prisoners.

374. Of the prisoners discharged in 1890, 198 were mechanics or skilled workmen, and of these 79 were set down as having a thorough, and 119 only an imperfect, knowledge of their trade. As many as 91, or 46 per cent., had acquired such knowledge as they possessed during the term of their imprisonment. The following is a statement of the handicrafts followed, and of the number of prisoners who pursued each handicraft whilst under detention:—

MECHANICS AND SKILLED WORKMEN DISCHARGED FROM PRISON
IN 1890.

Trades.	Knowledge of Trade on Discharge.				Total.
	Good.		Imperfect.		
	Learnt Outside.	Learnt in Prison.	Learnt Outside.	Learnt in Prison.	
Bakers	1	1	...	2	4
Blacksmiths and moulders	3	2	3	2	10
Bookbinders	1	...	1	1	3
Carpenters and turners	5	...	3	...	8
Hat and bag makers	1	11	8	15	35
Masons and bricklayers	3	...	...	...	3
Matting and mat makers	...	6	5	9	20
Painters	1	...	4	1	6
Printers	...	1	2	6	9
Shoemakers	20	...	8	4	32
Stonecutters	...	2	3	3	8
Tailors	3	5	10	6	24
Tanners	2	5	3	5	15
Tinsmiths and plumbers	4	...	4	...	8
Weavers	...	2	9	2	13
Total	44	35	63	56	198

Cost and
earnings of
prisoners.

375. In the following statement of the cost* and earnings of prisoners in detention during the year 1890, the value of prison labour

* Including the cost of the head office, but exclusive of any allowance for cost of prisoners in Police Gaols, for interest on the cost of gaol buildings, or for such repair to gaol buildings as were effected by the Public Works Department.

—so far as it was utilized for prison requirements—is added to the cost, as well as accounted for in the earnings of the prisoners:—

COST OF PRISONERS.*

Salaries and wages	...	...	...	...	£40,247	1	10
Contingencies	...	...	...	...	30,139	2	2
Value of prison labour utilized in making up clothing, materials, implements, and other gaol requirements					37,473	15	4
Total cost				...	£107,859	19	4

EARNINGS OF PRISONERS.

Work for other departments, municipalities, etc.—Paid for in cash†...							
	...	...	...	...	£7,108	19	7
Value of time not paid for	...	...	...	...	834	7	10
Value of work in connexion with prison buildings					5,791	16	9
Manufacture of clothing, implements, etc., for gaol purposes							
	...	...	...	...	13,788	9	4
Other gaol requirements	...	...	...	...	17,893	9	3
Total earnings				...	£45,417	2	9

376. The gross cost of prisoners in 1890 (£107,860) was in the proportion of £58 10s. 6d. per head of the average number of prisoners detained (1,843). The difference between the gross cost and the earnings of prisoners, *i.e.* the net cost, was £62,443, or £33 17s. 7d. per head. The earnings of the prisoners in the year (£45,417) amounted to £32 7s. 11d. per head of the average number of prisoners employed (*viz.*, 1,402), which is equivalent to 2s. 1d. per head per diem for the 308 working days the year contained.

377. By the following comparative statement of the number of prisoners detained in the gaols and penal establishments of Victoria and New South Wales at the end of each of the eight years ended with 1890, it appears that in proportion to the population the average number of prisoners in the mother colony exceeds that in Victoria by over 50 per cent. :—

Cost and earnings per head.

Prisoners in Victoria and New South Wales.

* See footnote (*) on page 234.

† This was the amount paid into the Treasury.

PRISONERS IN VICTORIA AND NEW SOUTH WALES,
1883 TO 1890.

Year.	On the 31st December.					
	Estimated Population.*		Number of Prisoners.		Prisoners per 10,000 of the Population.	
	Victoria.	New South Wales.	Victoria.	New South Wales.	Victoria.	New South Wales.
1883 ...	920,694	857,744	1,442	2,168	15·66	25·28
1884 ...	944,564	903,958	1,428	2,464	15·12	27·26
1885 ...	969,202	957,914	1,444	2,559	14·90	26·71
1886 ...	1,000,510	1,001,966	1,550	2,501	15·49	24·96
1887 ...	1,032,993	1,042,919	1,608	2,380	15·57	22·82
1888 ...	1,076,966	1,085,740	1,698	2,353	15·77	21·68
1889 ...	1,103,727	1,122,200	1,820	2,370	16·49	21·12
1890 ...	1,133,266	1,121,732	1,887	2,425	16·65	21·62
Means ...	1,022,740	1,011,772	1,610	2,403	15·74	23·99

Expenditure
on police,
gaols, etc.

378. The following table shows the total amounts and the amounts per head expended in connexion with the police and the penal establishments and gaols of Victoria during the 26½ years ended with 1890-91. The cost of buildings is not included:—

EXPENDITURE ON POLICE, GAOLS, ETC., 1865 TO 1890-91.

Year.	Amount Expended† on—			Amount per head of Population.	
	Police.	Gaols and Penal Establishments.	Total.	s.	d.
1865 ...	£ 187,962	£ 62,629	£ 250,591	8	2
1866 ...	194,189	72,522	266,711	8	6
1867 ...	138,226	52,972	191,198	5	11
1868 ...	201,000	71,285	272,285	8	2
1869 ...	157,563	50,913	208,476	6	1
1870 ...	198,027	56,503	254,530	7	2
1871 (six months) ...	95,363	27,101	122,464	3	4
1871-2 ...	190,711	57,855	248,566	6	8
1872-3 ...	187,101	56,017	243,118	6	5

* The figures for Victoria for all the years and for New South Wales for 1890 have been corrected in accordance with the results of the census of 1891; those for the latter colony for years prior to 1890 are subject to future revision.

† Exclusive of the cost of buildings, which in 1888-9 amounted to £43,190, and in 1889-90 to £51,558.

EXPENDITURE ON POLICE, GAOLS, ETC., 1865 TO 1890-91—
continued.

Year.	Amount Expended* on—			Amount per head of Population.	
	Police.	Gaols and Penal Establishments.	Total.	s.	d.
	£	£	£		
1873-4 ...	194,329	61,787	256,116	6	8
1874-5 ...	198,312	60,469	258,781	6	7
1875-6 ...	199,738	61,051	260,789	6	7
1876-7 ...	197,371	60,008	257,379	6	5
1877-8 ...	207,119	58,132	265,251	6	6
1878-9 ...	209,041	58,442	267,483	6	5
1879-80 ...	233,732	56,636	290,368	6	11
1880-81 ...	207,674	53,565	261,239	6	1
1881-2 ...	201,063	53,032	254,095	5	9
1882-3 ...	204,561	57,128	261,689	5	9
1883-4 ...	216,973	55,836	272,809	5	10
1884-5 ...	217,684	57,311	274,995	5	9
1885-6 ...	224,237	60,644	284,881	5	9
1886-7 ...	233,173	59,894	293,067	5	10
1887-8 ...	240,840	65,385	306,225	5	11
1888-9 ...	261,329	66,163	327,492	6	1
1889-90 ...	265,149	71,146	336,295	6	1
1890-91 ...	287,415	73,232	360,647	6	4
Total ...	5,549,882	1,597,658	7,147,540	6	3

379. By the figures in the last column it will be observed that the police and gaols expenditure ranged from 8s. 6d. per head in 1866 to about 5s. 9d. in the six years 1881-2 to 1886-7. In 1890-91 it was 6s. 4d., or 5d. more than the average during the previous 5 years. Expenditure per head.

380. The inquests held in 1890 numbered 1,805, as against 1,795 in 1889. In 908 instances the death was found to have resulted from disease or natural causes; in 32 cases, from intemperance; in 799 cases, from violence; in 59 cases, from doubtful causes; and in 7 cases a verdict of "still-born" was returned. Of the deaths set down to violence, the verdict in 556 cases was to the effect that the death had resulted from accident; in 19, from homicide; in 126, from suicide; and in 98, that the cause of the violent death was doubtful. Although the proportion is higher in 1890 than in the previous three years, the practice of holding inquests in cases of other than violent deaths are, as a rule, not so common of late years as formerly. In 1880, the proportion which verdicts of "death from disease or natural causes" Inquests.

* Exclusive of the cost of buildings, which in 1888-9 amounted to £43,190, and in 1889-90 to £51,558.

bore to the total number of verdicts given was 52 per cent. ; in 1881, 51 per cent. ; in 1882, 53 per cent. ; in 1883, 49 per cent. ; in 1884 and 1885, 55 per cent. ; in 1886, 51 per cent. ; in 1887, 49 per cent. ; in 1888, 46 per cent. ; in 1889, 47 per cent. ; and in 1890, 50 per cent. Inquests in cases of death occurring under suspicious circumstances are held at the discretion of the coroner of the district within which the death takes place, subject to instructions issued by the Governor in Council under the 4th section of the *Coroners Act* 1890 (54 Vict. No. 1,077).

Fire
inquests.

381. Two fire inquests were held in 1890, as against 6 in 1889, none in 1888, 5 in 1887, 4 in 1886, and 9 in both 1885 and 1884. The verdicts returned in 1890 were to the effect that there was not sufficient evidence to show how they took place. Under the *Coroners Act* (54 Vict. No. 1077), fire inquests may be held at the request of any individual who lodges with his application a fee of £5 5s., or in pursuance of Ministerial authority, which is only given when circumstances appear sufficiently suspicious to warrant action being taken.

PART VIII.—PRODUCTION.

382. The mode of disposing of Crown lands in Victoria has undergone numerous changes, a full description of which has been given in previous issues of this work.* The present system dates from the 29th December, 1884, when the *Land Act* 1884—which, with subsequent amendments, was consolidated by the *Land Act* 1890†—came into operation.‡ Its main features are to restrict the further alienation of the public estate by limiting the extent which may be sold by auction, and by substituting for the previously existing method of selecting agricultural land a system of leasing such lands in certain defined areas, at the same time conserving to the lessee the privilege of acquiring from his leasehold the fee-simple of 320 acres by means of deferred payments. The Act classifies the whole of the unalienated Crown lands—exclusive of the “Mallee country,” which is dealt with separately, as follows:—Pastoral lands, grazing and agricultural lands, auriferous lands, lands which may be sold by auction, swamp lands, State forest reserves, timber reserves, and water reserves. The area of land comprised within each of the above classes respectively is delineated by projections bearing a distinguishing colour or shading on maps of the several counties in which such land is situated. These maps are deposited with the Clerk of Parliaments. The Governor in Council may, however, by proclamation increase or diminish the area comprised in any of the above-mentioned classes, except those relating to lands which may be sold by auction.

Alienation
of Crown
lands.

* See *Victorian Year-Book* 1889-90, Vol. II., paragraphs 375 to 381.

† 54 Vict. No. 1,106.

‡ Towards the close of 1891 an *Amending Land Act* was passed, the principal features of which are as follow, viz. :—The areas, which may be leased as pastoral allotments, are from 7,500 to 40,000 acres. The right to select a homestead is restricted. The shape of the block must be approved by the Minister of Lands. No land which it is undesirable to alienate can be selected, and, if thought necessary, a condition may be inserted in the lease denying the power of selection altogether. Two or more grazing areas (Section 32 *Land Act* 1890) may be taken up, providing that the total area do not exceed 1,000 acres. More than one agricultural allotment may be selected, if the total area do not exceed 320 acres. Agricultural allotments may be applied for direct, if the blocks do not exceed 320 acres each, the applicant not being required to first obtain a grazing area lease. Licences to graze on auriferous lands (Section 67 *Land Act* 1890) may be renewed for a period of seven years, expiring, however, not later than 29th December, 1898. Land is to be sold, leased, or licensed as regards the surface only, and to such depth below the surface as the Governor-in-Council may direct. Isolated blocks, not exceeding 20 acres in extent, which it is thought advisable to sell, or land required for church or charitable purposes, not exceeding 3 acres in extent, may be sold. Where the value of land is enhanced by railway or irrigation works, the price to be paid for such land may be increased by Order-in-Council. Auriferous lands, which are found on inquiry to be “worked out,” may be licensed for a period of seven years for residence, business purposes, or cultivation, in blocks not exceeding 5 acres each. At expiration of term, if conditions of licence have been complied with, and purchase-money to the value of the land (less the amount paid as rent) be paid, Crown grant may be issued.

Pastoral
occupation.

383. Under the *Land Act* 1890, the pastoral lands are leased in "pastoral allotments," capable of carrying from 1,000 to 4,000 sheep, or from 150 to 500 head of cattle, for any term not exceeding 14 years from the 29th December, 1884,* at the end of which the land, together with all improvements thereon—taken at a valuation as below mentioned—reverts to the Crown, the right to the lease being granted to the first person who applies for the land after it has been first publicly notified as available; but if there should be two or more applicants, the lease must be offered at auction. The annual rent payable for pastoral allotments is computed according to the grazing capability of the land, at the rate of 1s. per head of sheep and 5s. per head of cattle, upon a basis of not more than 10 acres to a sheep, and the equivalent number of acres for cattle. The principal conditions of the lease are that all "vermin" (rabbits, native dogs, etc.) upon the land shall be destroyed within the first three years, and that all buildings and improvements shall be kept in good condition and repair. Upon the expiration of the lease, the lessee is to be paid by any incoming tenant the value of all improvements effected and calculated to increase the carrying capability of the land, at a price not exceeding the sum expended thereon, but in no case to exceed 2s. 6d. per acre. Alienation of pastoral lands is not permitted, except in the case of a lessee of a pastoral allotment, who has the right to purchase 320 acres as a homestead at any time during the currency of his lease.

Agricultural
and grazing
lands.

384. The agricultural and grazing lands are also leased in "grazing areas," varying in size, but not exceeding 1,000 acres, for any term not exceeding 14 years from the 29th December, 1884,* at the end of which term the land, together with all improvements—to be allowed for at a valuation limited to 10s. per acre—reverts to the Crown. The annual rent of a grazing area is appraised by valuers, but must in no case be less than 2d. or more than 4d. per acre, any improvements that may happen to be on the land at the commencement of the lease to be charged for in addition at the rate of 5 per cent. per annum on the capital value thereof. The only important conditions imposed on the lessee of a grazing area are that he shall, within the first three years, fence the land and destroy all "vermin" thereon. Any person over the age of 18 years is entitled to take up a grazing area; selectors, under former Acts, however, being limited to an area which, together with the land previously selected, must not exceed

* The date when the *Land Act* 1884 came into operation.

1,000 acres. Residence is not required of the holder of a grazing lease, unless he should select portion of his holding under the terms and conditions specified in the next paragraph.

385. Persons desirous of selecting an agricultural allotment cannot do so without first taking up a grazing area, but the lessee of a grazing area is at liberty, after the issue of his lease, to select out of the area leased a block or "agricultural allotment" not exceeding 320 acres in extent; but should he have selected under a previous Act or Acts, he is only entitled to increase his selection to such an extent as not to exceed 320 acres in all.* The selector then occupies the agricultural allotment (which is thereafter no longer considered portion of the grazing area) under licence during the first six years, within which period the licensee is obliged to reside on his selection at least five years, to enclose it, to cultivate 1 acre out of every 10, and generally to effect substantial improvements to the value of 20s. per acre. The rent payable during this period is 1s. per acre per annum, which is credited to the selector as part payment of the principal, viz., 20s. per acre without interest.† At the expiration of the six years' licence, the selector, if he obtains a certificate from the Board of Land and Works that he has complied with these conditions, can either purchase his holding at once by paying up the balance of 14s. per acre, or may convert his licence into a lease extending over fourteen years, at an annual rental of 2s. per acre, which is also credited to the selector as part payment of the fee-simple. On the expiry of such lease, and due payment of the rent, the land becomes the freehold of the selector. Other important features of the Act are that every selector—subject to certain conditions and restrictions—is entitled to a Crown grant of portion of his allotment not exceeding 20 acres, if planted as a vineyard or an orchard, upon payment of the balance of the purchase-money due in respect of such portion;‡ that the licensee of an agricultural allotment may, after the expiration of two years, obtain an advance of money (by giving a "licence lien") secured up to one-half of the improvements effected;‡ that married women are permitted to take up land as pastoral or grazing lessees, but are not allowed to select an agricultural allotment out of the grazing area leased to them; and that facilities are given to allow of a non-resident selector becoming a resident selector, and *vice versa*.‡

Selection of
agricultural
allotments.

* The law relating to selection was in some respects altered whilst these pages were passing through the press. See footnote (†) to paragraph 382 *ante*. † See paragraph 413 *post*.

‡ These privileges, although not previously enacted, are also to be allowed to selectors under previous Acts.

Non-residence
selections.

386. Provision is also made in this Act for grazing area lessees to take up agricultural allotments as non-residence licensees. In such cases the rent is 2s per acre, and the total price payable for the land £2 per acre. Improvements to the value of £2 per acre, moreover, must be made during the six years licence, of which at least half must be made before the expiration of the third year. The area for which licences may be issued during any year for non-resident selection is limited to 50,000 acres.

Only one
selection
may be
made.

387. Only one grazing area can be taken up by one person, and, consequently, if the area so taken up should be less than 1,000 acres in extent, the lessee is not allowed by any further selection to make up this quantity.* In like manner, if the agricultural allotment he selects from his grazing area is less than 320 acres, he cannot by any further selection add to it or make it up to 320 acres. This provision, does not, however, apply to selectors under former Acts, who if they have not selected as much as 320 acres, may, out of a new leasehold, convert into an agricultural allotment, and eventually into a freehold, as much as will, with their old selection, make up 320 acres.

Auriferous
lands.

388. Auriferous lands not required for mining purposes, and not situated within a city, town, or borough, may be occupied under annual licence for purposes of residence or cultivation in areas not exceeding 20 acres; and for purely pastoral purposes, under licences renewable annually for periods not exceeding five years, in blocks not exceeding 1,000 acres.* No auriferous land is permitted to be alienated in fee-simple.

Swamp
lands.

389. Swamp lands are to be first drained and may then be leased in areas not exceeding 160 acres for a term of twenty-one years.

Sales by
auction.

390. The Statute, moreover, contains provision for the sale of Crown lands by auction at an upset price of £1 per acre, or such higher sum as the Governor in Council may direct, the whole extent to be sold in any one year not to exceed 200,000 acres.

Mallee
pastoral
leases.

391. Prior to the consolidation of the various Land Acts under the *Land Act* 1890, the occupation of the unalienated land situated in the north-western portion of the colony, comprising about one-fifth of its extent, or some 11½ million acres wholly or partially covered with the various species of stunted trees of which the "Mallee scrub" is composed, was specially provided for by the *Mallee Pastoral Leases Act* 1883, the provisions of which were repealed, and re-embodied in the Consolidated Act referred to, forming Part II. of that Act.

* See account of provisions of *Amending Act* 1891, footnote (‡) to paragraph 382 *ante*.

It divides the country just described into two main divisions—the larger division containing about ten million acres, being known as the “Mallee country”; and the other containing about one and a half million acres, situated along the southern and eastern borders of the Mallee country, being called the “Mallee border.”

392. The Act directs that the “Mallee country” be divided into blocks of various sizes, each block to be subdivided into two parts. For either of these, at the option of the applicant, a lease may be granted under certain conditions, the lessee being also bound to occupy the other division. The principal conditions are that the lessee destroy all vermin (native dogs, rabbits, etc.) upon the whole block within the first three years, surrender to the Crown the unleased portion at the end of five years, and keep in good condition and repair all improvements made upon the land. A lease for a Mallee block may be granted for any term of years not longer than 20 from the commencement of the Act of 1883, at the end of which term (viz., on the 1st December, 1903) the land, with all improvements, reverts to the Crown. Every person who had occupied under pastoral or grazing licence any portion of the Mallee country for two years prior to the 1st December, 1883, was entitled to take up one Mallee block comprising the whole or any portion of the area occupied by him; but, in the event of his not applying for this privilege within one month of the passing of the Act, the right of lease was to be sold by auction to the highest bidder. The annual rent to be charged for the leased portion of the block is fixed at 2d. for each sheep or 1s. for each head of cattle depastured during the first five years, 4d. for each sheep or 2s. for each head of cattle during the second five years, and 6d. for each sheep or 3s. for each head of cattle during the remainder of the term; and for the unleased portion of the block 2d. for each sheep or 1s. for each head of cattle; but in no case is the annual rent for the whole block to be less than 2s. 6d. per square mile. Any Mallee block may be divided into allotments and occupied as Mallee allotments as described in the next paragraph, provided that applications have been received for all the allotments into which the block may be divided. No lessee of a Mallee block can acquire any portion thereof in fee-simple.

393. The “Mallee border” is subdivided into “Mallee allotments,” varying in size but not in any case exceeding 20,000 acres. These are available for lease on the same terms and conditions as in the case of the leased portions of a Mallee block; but the annual rent is fixed by regulations issued by the Governor in Council. It is

also provided that at any time within three years of the passing of *Mallee Act* 1889 (25th November, 1889), a lessee or his assignee of a Mallee allotment might select out of such allotment an area, the total extent of which, together with that of any other land previously selected by him, should not exceed 320 acres; the land so selected to be subject to the same conditions as selections under Part I. of the *Land Act* 1890. In case of this provision being taken advantage of, however, the Crown reserves to itself the right to resume as much of the leased portion as is in excess of 1,000 acres.

Systems of
land selec-
tion in
Austral-
asian
colonies.

394. The laws and regulations under which land for agricultural purposes passes from the Crown into the hands of private individuals differ in the various Australasian colonies.* In almost all, however, provision is made for any person of 18 years of age or over,† and not a married woman,‡ desirous of settling on the land to select a certain limited area, and to pay the purchase-money by instalments, the compliance with certain conditions of residence and improvement being also required before the selector becomes entitled to a Crown grant.§ The principal features of this portion of each system, corrected to the middle of 1891, is detailed under nine heads in the following table:—

CONDITIONS OF LAND SELECTION IN AUSTRALASIAN COLONIES, 1890-91.

Conditions of Selections.	Victoria.	New South Wales.	Queensland.		South Australia.	Western Australia.	Tasmania.	New Zealand.
			Home-steads.	Other Selections.				
1. Maximum area allowed Acres	320	640 and 2,560	160	320 to 1,280	..	1,000	320	640 and 2,000
2. Price per acre	£1	£1	2s. 6d.	£1	||	10s.	£1	7s. 6d. to £1
3. Time over which purchase may extend Years	20	33	5	upwards ¶	||	20	14	14
4. Minimum time in which fee-simple may be acquired Years	6	5	5	5 ¶	6	5	anytime	6**
5. Annual payment per acre ..	1s.	1s.	6d.	¶	||	6d.	2s.	6d. to 4s.
6. Value of necessary improvements per acre	20s.	10s.	10s.	Fencing	Fencing.	10s. and Fencing	..	20s.
7. Time allowed for making improvements Years	6	5	5	5	5	20	..	6
8. Acres in every 100 to be cultivated	10	..	..	..	..	..	..	20
9. Period of residence necessary § Years	5	5	5	¶	..	5	14	6**

NOTE.—See also further information in following paragraphs. In New Zealand selections may also be bought outright for cash, or may be taken up on a perpetual lease, with option of purchase, on the same conditions as in the case of deferred payments.

* A complete account of the land system of each colony, as it existed in 1884, was published in an Appendix to the *Victorian Year-Book*, 1884-5.

† In New South Wales persons of 16 years of age may select.

‡ In Tasmania and Western Australia married women, and in New South Wales married women judicially separated and living apart from their husbands, may select land.

§ In all the colonies, as soon as the purchase-money is paid in full, the residence clause is no longer enforced. || See account of South Australian land system, following paragraph 398 *post*.

¶ See paragraph 397 *post*.

** In New Zealand, the fee simple may be acquired, and residence may be dispensed with, on double the quantity of improvements being effected.

395. In Victoria the land is taken up in the first instance in blocks not exceeding 1,000 acres, under lease, at a rental of from 2d. to 4d. per acre, out of which leasehold a "selection," not exceeding 320 acres, may be taken up under the conditions named in the preceding table.* See also paragraphs 385 to 387 *ante*.

Land system
of Victoria.

396. In New South Wales a territorial division of the colony is made into three zones, viz., the eastern, the central, and the western division. The maximum area allowed in the eastern division is 640, and in the central 2,560 acres. In addition to the selection, a leasehold of an additional area, limited to three times that of the selection (the area of the selection and lease together not to exceed 1,280 acres in the eastern, or 2,560 acres in the central division), may be granted to the selector at an appraised annual rental,† with the right of conditional purchase at any time during the currency of the lease. The price per acre does not include interest, for which 4 per cent. per annum is charged and collected out of the annual instalments paid. The first payment is 2s. per acre in advance, with an interval of 3 years before the next instalment of 1s. is payable. On non-residential land purchases the deposit is 4s. per acre, and the instalments 2s. per acre. Upon certain lands proclaimed "special areas," higher prices are payable, and the deposits and instalments are increased in proportion varying in different cases. Persons of 16 years of age, and married women judicially separated and living apart from their husbands, may select.

Land
system of
New South
Wales.

397. In Queensland, within the limits named in the table, the maximum area allowed to be selected may be varied in any district by the Government. In that colony the system of leasing has partly supplanted that of alienating the fee-simple of the land by means of deferred payments. The selector first occupies the land under licence, at an annual rental of not less than 3d. per acre, and subsequently, if the condition as to fencing (or improvements of equal value) has been complied with, may obtain a lease for 50 years; the annual rental for the first 10 years being not less than 3d. per acre, but for every succeeding period of 5 years to be fixed by the Land Board. The selector has the right to purchase at not less than 20s. per acre, at any time during the currency of the lease on proving personal residence for 5 years. Rents paid during periods of personal occupation are reckoned as purchase-money. The foregoing remarks relate

Land
system of
Queens-
land.

* The law relating to selections was altered in some important respects whilst these pages were passing through the press. See footnote (†) on page 239 *ante*.

† Formerly there was a minimum rental of 2d. per acre, but this has been altered, the rent now being determined by the Local Land Board, subject to appeal to the Land Court.

to agricultural farms; in the case of grazing farms, leases of areas up to 20,000 acres are granted for 30 years at a minimum rental of $\frac{3}{4}$ d. per acre per annum for the first 10 years, but liable to be increased every subsequent 5 years.

Land
system of
South
Australia.

398. In South Australia credit selection was abolished by the *Crown Lands Act* 1888, and in lieu thereof "leases with right to purchase" are now issued for periods of 21 years at certain gazetted rentals, with right of renewal for a further period of 21 years at freshly assessed rentals. The right to purchase may be exercised at any time after the first six years, at a price fixed by the Land Board of not less than 5s. per acre. The following account of the new system has been kindly furnished for this work by Mr. G. S. Wright, Secretary for Crown Lands, South Australia:—

LAND SYSTEM OF SOUTH AUSTRALIA.

On the passing of the *Crown Lands Act* of 1888, the system of credit selection was abolished, and the following mode of obtaining land introduced. Crown lands can be taken up on leases with right of purchase, or perpetual leases. Small blocks not exceeding 20 acres in area, for working men, are also taken up on leases with right of purchase, or on perpetual leases. The province has been divided into five land districts, and a Land Board appointed for each, by which the lands are classified and allotted, and the rents and prices fixed, subject to the approval of the Commissioner of Crown Lands. Lands are gazetted open to lease at rents and prices fixed, and applications for same, accompanied by a deposit of 20 per cent. of the first year's rent, are made to the Commissioner, who refers them to the Land Boards for the districts in which the lands applied for are situated. Upon the successful applicants receiving their leases for signature, they are to forward the balance of the first year's rent and the lease fees to the Land Office. Leases with a right of purchase are allotted for a term of 21 years, with a right of renewal for a further term of 21 years, and with a right of purchase exercisable at any time after the first 6 years of the term, at the price fixed by the Land Board, the minimum price being five shillings per acre. The annual rent for the first term of 21 years is as gazetted, and the annual rent for the renewed term will be fixed by the Land Board at least twelve months before the expiration of the first term. Perpetual leases will be revalued every 14 years. The rent for the first 14 years is as gazetted, and for subsequent terms of 14 years will be fixed by the Land Board at least twelve months before the expiration of every period of 14 years. The lands allotted are to be fenced within 5 years from the date of lease, and in the case of working men's blocks the condition of personal residence by the lessee, or any member of his family, is enforced.

Land
system of
Western
Australia.

399. In Western Australia, the particulars given in the table relate to the South-Western (or Home) District only. In the five other land divisions of the colony, land may be taken up in specially declared areas only by selectors, who need not reside upon the land, in areas of from 100 to 5,000 acres at not less than 10s. per acre, payable in 10 yearly instalments, the conditions required being fencing and the expenditure on improvements of an amount equal to purchase-money. Besides selections under the system of deferred payments, with residence, in the south-west divisions selections may

be made, without residence, by paying double the amount of purchase-money, *i.e.*, 1s. per acre per annum—the other conditions remaining the same; and there is also a method of selecting land by direct payment under certain conditions, the extent of a selection being limited to 1,000 acres in a declared area, and to 5,000 acres outside such area, at a price of not less than 10s. per acre—the conditions being fencing within 3 years, and an expenditure of 5s. per acre on improvements within 7 years from date of survey. Moreover, pastoral lessees, excepting those in the eastern division, have the privilege of selecting a certain proportion of their leasehold adjoining the homestead prior to the 1st March, 1892, under similar conditions, except in regard to residence, as in the case of other selectors in the respective districts; thus, in the south-western division, the proportion allowed to be selected is 5 per cent. with a maximum of 3,000 acres, and in the other divisions, excepting the eastern, 1 per cent. with a maximum of 5,000 acres; provided, also in the latter case, the runs are stocked with 10 sheep or 1 head of large stock to every 1,000 acres leased.

400. In Tasmania, $33\frac{1}{3}$ per cent. is added to the price named in the table (£1 per acre) as interest for the period of 14 years. In mining districts in Tasmania selection is allowed in lots ranging from 10 to 100 acres, the price being £1 per acre, with one-fourth in addition added for credit for a term of 7 years. Residence and improvement is compulsory, and fee-simple cannot be obtained until the expiration of seven years. These lots are sold, reserving to the Crown the right of mining at a distance of not less than 50 feet from the surface. In 1890, a Land Act was passed consolidating the twelve Acts previously in operation.

Land
system of
Tasmania.

401. In New Zealand, the price per acre varies with the quality of the land, from 5s. an acre to about 40s. The distinguishing features of the land laws at present are, that blocks of land are declared open for selection either before or after survey on the "optional system," which means that the selector can take up a section not exceeding 640 acres of first class or 2,000 acres of second class land, on cash payment, deferred payment spread over 14 years, or on perpetual lease for a term of 30 years, with right of renewal for other terms of 21 years at a rental of 5 per cent. on the upset cash price. Deferred payment lands are sold at 25 per cent. advance on cash prices. The freehold of either deferred payment or perpetual lease may be obtained at any time, if not within a goldfield, so soon as the

Land
system of
New
Zealand

conditions of cultivation have been complied with. Nearly all Crown lands are dealt with under this system now, but a bill is before Parliament which, if passed, will take away the right of purchase in perpetual lease, though leaving the optional system still in force. Residence is compulsory on deferred payment or perpetual lease, unless in bush lands, where it may be dispensed with if twice the amount of improvements are made.

Ambiguity
of the term
"aliena-
tion," as
applied to
Crown
lands

402. In dealing with the figures relating to the alienation of the public estate, it is customary in Victoria to consider Crown lands as sold or alienated—only when the right to the title in fee-simple has been acquired. Consequently a large proportion of the land set down as alienated in any year, having been originally selected with right of purchase under certain conditions, the purchase-money being payable by annual instalments without interest, may have been virtually parted with many years previously. The land set down as alienated in any year, therefore, consists of the area sold by auction, that granted without purchase, and that selected or conditionally purchased—of which the purchase had been completed during the year. Some of the neighbouring colonies, however, adopt a different principle, for, in their statements of land alienated, that sold conditionally—which, of course, is liable to revert to the Crown should the conditions of sale not be complied with—is included with that of which the fee-simple has been obtained. Both methods are useful in their way, the Victorian plan giving the more accurate account of the present condition of the public estate, and the other giving the better indication of the progress of settlement. In the following paragraphs it may perhaps be sometimes necessary to use the term "alienated" in connection with land which is only conditionally purchased, but, when this occurs, such explanation will be given as will prevent a mistake.

Crown lands
alienated
to end of
1890.

403. The total extent of Crown lands sold and finally parted with in Victoria up to the end of 1890 was 16,076,720 acres, and the extent granted without purchase was 15,160 acres. The whole area alienated in fee-simple was thus 16,091,880 acres, of which 6,628,159 acres, or 41 per cent., were sold by auction, and nearly the whole of the remainder was originally acquired by selection under the system of deferred payments.

Crown lands
selected.

404. The selected lands, of which the purchase had not been completed up to the end of the year, amounted to 10,430,182 acres. Of this extent it is estimated that 4,163,008 acres had been forfeited or abandoned, and had reverted to the Crown. The remainder,

representing approximately the whole area in process of alienation under deferred payments, amounted to 6,267,174 acres.

405. The total area of the colony is 56,245,760 acres; and if from this be deducted the sum of the land granted, sold, and selected, amounting—less the extent forfeited—to 22,359,054 acres, it will follow that the residue, representing the Crown lands neither alienated nor in process of alienation, amounted at the end of 1890 to 33,886,706 acres. Crown lands unalienated.

406. The whole of this residue, however, is not available for settlement, for it embraces lands occupied by roads, the unsold portions of the sites of towns, and beds of rivers and lakes; the State forests; water, timber, education, and other reserves. Deducting these lands—amounting in the aggregate to 7,679,438 acres, also that portion of the colony known as the Mallee country, containing 11,572,000 acres, leased for pastoral purposes under special provisions of the Act, and 6,644,118 acres occupied under lease or licence for various terms of years—from the extent unalienated and unselected, already stated to have been 33,886,706 acres, it will be found that the available area is narrowed to 7,991,150 acres. This will be at once seen by the following table, which shows the position of the public estate at the end of 1890:— Public estate, 1890.

PUBLIC ESTATE OF VICTORIA ON 31ST DECEMBER, 1890.

Condition of Land.	Approximate Number of Acres.
Land alienated in fee-simple	16,091,880
Land in process of alienation under deferred payments	6,267,174
Roads in connexion with the above	1,327,000*
Water reserves	288,530
Reserves for agricultural colleges and experimental farms	137,013†
Timber reserves and State forests	2,079,550
Other reserves	2,127,030‡
Unsold land in towns, beds of rivers, etc., etc.	1,720,315
Mallee country	11,572,000§
Land in occupation under—	
Pastoral leases	1,490,812
Grazing area leases	4,719,624
Grazing licences for auriferous lands	432,439
Swamp leases	1,243
Available for occupation at end of 1890	7,991,150||
Total area of Victoria	56,245,760

* Calculated at 5 per cent. of the gross extent sold and selected up to the end of 1890.

† Only 13,393 acres of this area is for the sites of colleges and experimental farms, the balance being intended as an endowment in aid. Of this balance 125,226 acres was leased for agricultural and grazing purposes, and return an annual revenue of £6,312.

‡ Including 1,907,400 acres reserved in 1889 as an endowment for State education.

§ Occupied for pastoral purposes, under Part II. of the *Land Act* 1890, for terms not exceeding 20 years. See paragraph 426 *post*. It has recently been thrown open to selection.

|| Of this area 5,033,921 acres is temporarily held under grazing licences, renewable annually; only 76,079 acres of it may be sold by auction.

Crown lands available for settlement.

407. The area of the colony, exclusive of the Mallee country, is 44,673,760 acres, of which, at the end of 1890, 22,359,054 acres, or 50 per cent., were already alienated or in process of alienation; 7,679,438 acres, or 17 per cent., were occupied by reserves, etc.; 6,644,118 acres, or 15 per cent., were occupied under lease* for pastoral purposes; and 7,991,150† acres, or 18 per cent., were available for immediate occupation.

Classification of available land.

408. Following the classification provided for under the existing *Land Act*, the estimated available area of Crown lands, exclusive of the Mallee country, at the end of 1890, may be divided as follows:—

CLASSIFICATION OF LAND AVAILABLE FOR SETTLEMENT AT
END OF 1890.

	Acres.
Pastoral lands	2,142,658
Agricultural and grazing lands	4,596,727
Auriferous lands	1,089,277
Swamp lands	86,409
May be sold by auction	76,079
Total	7,991,150

Crown lands alienated, 1890.

409. The land finally alienated from the Crown in fee-simple during 1890 amounted to 249,568 acres, of which 249,373 acres were sold, and 195 acres were granted without purchase. The total extent was less by 8,665 acres than in 1889, and was also much smaller than in any of the ten years ended with 1888, during which period the extent alienated annually usually exceeded 400,000 acres, and only once (in 1879) did it fall below 300,000 acres.

Crown lands sold by auction.

410. Of the area sold, 12,201 acres, or 5 per cent., were disposed of by auction, and 682 acres under pre-emptive rights, private contracts, etc., whilst the remainder had been in the first instance selected in previous years under the system of deferred payments. The extent sold by auction in 1890 was 1,479 acres less than in 1889, and from 5,500 to 6,500 acres less than in any of the three preceding years, also much less than in any of the sixteen years ended with 1885, during which period the annual average extent so sold was 63,700 acres, and the maximum over 150,000 acres.

* Including a small proportion under licence for periods of five years.

† Of this area 5,033,921 acres is temporarily held under grazing licences, renewable annually; only 76,079 acres of it may be sold by auction.

411. The amount realized for Crown lands finally alienated in 1890 was £322,946, or at the rate of £1 5s. 11d.* per acre. Of this sum, only part was received during the year, nearly all the remainder having been paid in former years as rents and licence fees. The proportion sold by auction realized £84,533, or an average of £6 18s. 7d. per acre; and the proportion sold otherwise than at auction realized £238,413, or an average of £1 0s. 1d. per acre.

Amount realized on Crown land alienated in 1890.

412. The principle of deferred payments in connexion with sales of Crown lands by auction was introduced for the first time in the *Land Act* 1884,† it being necessary to pay one-fourth of the price bid at the time of sale, the remaining three-fourths being, at the option of the purchaser, spread over three years, payable quarterly, in instalments of equal amounts, bearing interest at the rate of 6 per cent. per annum. The majority of purchasers do not avail themselves of this concession, as only £114,981, out of a total of £679,992 during the last six years, was left unpaid at the time, the amount received being £565,011, as well as £19,740 for interest.

Deferred payments on land sold by auction.

413. From the period of the first settlement of the colony to the end of 1890 the amount nominally realized by the sale of Crown lands was £24,634,531, or at the rate of £1 10s. 8d. per acre. It must, however, be remembered that payment of a considerable portion of this amount extended over a series of years without interest, allowance for which, at the current rate, would, it is evident, materially reduce the amount the State actually obtained for the land. It may be calculated that, with interest at 5 per cent., if the payment of the £1 per acre by equal annual instalments be extended over 10 years without interest, the amount of purchase-money is really equivalent to only 15s. 6d. per acre, and if it be extended over 20 years, it is reduced to 12s. 6d. per acre.

Amount realized, 1836 to 1890.

414. During the year 1890, 551 applications were granted for the selection of 99,307 acres under the deferred payment system.‡ The whole of this area was selected out of grazing areas leased in allotments limited to 320 acres, nominally for agricultural purposes. The following is a summary of the selectors, the number of acres selected, and the amount of purchase-money payable under each authority during the year 1890:—

Selection of public lands, 1890.

* In view of the fact that payment for the greater portion extended over a term of years without interest, the actual average price was much less than this. See paragraph 413 *post*.

† 48 Vict. No. 812, Section 71.

‡ See paragraphs 385 and 386 *ante*.

SELECTORS AND AMOUNT SELECTED, 1890.

Selections of Crown Lands, 1890, for purpose of—	Legalization— <i>Land Act</i> 1884.	Number of Selectors.	Area Selected.	Purchase money payable, (Nominal.)
Agriculture, with residence	Sec. 42	518	Acres. 94,898	£ 94,898
” without resi- dence }	Sec. 49	33	4,409	8,818
Total ... ..	... ..	551	99,307	103,716

Number of
selectors,
1870 to 1890.

415. The number of selectors approximates closely to the number of approved applications. The following are the numbers in each of the years named in the last table, those applying according to the different purposes allowed by the Land Act in force at the time of application being distinguished:—

APPROVED APPLICATIONS (SELECTORS), 1870 TO 1890.

Year.	Number of Selectors of Land.				Total.
	For Purposes of Cultivation.		For Residence and Cultiva- tion near Goldfields.	For Resi- dence.	
	With Resi- dence.	Without Residence.			
1870	3,017	...	131	...	3,148
1871	4,575	...	673	...	5,248
1872	7,771	...	1,408	...	9,179
1873	6,689	...	1,455	...	8,144
1874	9,578	...	1,493	...	11,071
1875	6,320	...	771	...	7,091
1876	5,785	...	697	...	6,482
1877	6,240	...	777	...	7,017
1878	7,524	...	1,534	...	9,058
1879	5,726	75	887	...	6,688
1880	4,036	67	1,054	56	5,213
1881	3,110	42	1,151	106	4,409
1882	4,383	51	837	47	5,318
1883	4,453	58	1,070	22	5,603
1884	3,918	71	1,002	11	5,002
1885	3,930	68	714	83	4,795*
1886	943	25	173	49	1,190*
1887	147	...	39	15	201
1888	317	...	...	10	327
1889	418	41	...	2	461
1890	518	33	...	...	551
Total	89,398	531	15,866	401	106,196

* The great majority of the applications approved in the years 1885 and 1886 were lodged in 1884, under the provisions of the *Land Act* 1869.

416. The extent of Crown lands absolutely or conditionally alienated during each year since the passing of the *Land Act* 1869 is shown in the following table, which distinguishes the extent sold by auction and that granted without purchase from that conditionally alienated or selected:—

Progress of settlement on public lands, 1870 to 1890.

CROWN LANDS ABSOLUTELY AND CONDITIONALLY ALIENATED, 1870 TO 1890.

Year.	Area Granted, Sold, and Selected.			Total.
	Granted without Purchase.	Sold by Auction.*	Conditionally Alienated.† (Selected).	
	Acres.	Acres.	Acres.	Acres.
1870	21	148,685	322,592	471,298
1871	118	118,440	487,436	605,994
1872	320	146,611	797,176	944,107
1873	1,575	19,929	1,063,066	1,084,570
1874	44	49,655	1,831,698	1,881,397
1875	...	83,395	1,183,520	1,266,915
1876	546	150,628	1,040,356	1,191,530
1877	260	76,006	1,126,498	1,202,764
1878	57	47,376	1,415,129	1,462,562
1879	503	56,430	1,032,214	1,089,147
1880	461	27,272	752,639	780,372
1881	3,237	24,753	588,922	616,912
1882	666	31,386	851,402	883,454
1883	159	20,085	843,971	864,215
1884	74	35,446	734,092	769,612
1885	3,099	26,900	723,523	753,522
1886	1,120	19,281	188,196	208,597
1887	487	19,565	23,092	43,144
1888	522	22,413*	53,738	76,673
1889	531	15,639*	71,251	87,421
1890	195	12,883*	99,307	112,385
Total	13,995	1,152,778	15,229,818	16,396,591

417. Dividing the total number of acres selected by the total number of selectors, as shown in the last two tables, it is found that throughout the whole period of twenty-one years the average number of acres taken up by each selector has been 154.

Average size of selections.

418. Of the land which had been selected in former years, 20,065 acres during 1890 were abandoned or forfeited to the Crown in consequence of non-fulfilment of conditions.

Selected land forfeited, 1890.

* Including 2,389 acres in 1888, 1,959 acres in 1889, and 682 in 1890 sold by private contract.

† A large proportion of the land referred to in this column may revert, and, as a matter of fact, a considerable quantity has reverted, to the Crown in consequence of non-fulfilment of conditions, etc., and may subsequently be included in re-adjustments of selections, re-licensed, sold by auction, or retained by the Crown. "Gold-fields" selections are included in this column. See paragraph 404 ante.

Leases of
grazing
areas, 1890.

419. The *Land Act* 1890 prescribes that any one wishing to select for agricultural purposes must first acquire the lease of a grazing area.* The number of applications for such leases received in 1890 was 4,714; but the number approved during that year was only 1,612, the extent for which approval was granted being 606,185 acres, at an annual rental of £6,314. The applications approved were 736 fewer, and the area granted 319,754 acres less, than in the preceding year.

Selections
under the
Lands Acts
1884 and
1890.

420. The number of lessees of "grazing areas" who made application during the year 1890 for the issue of licences of agricultural allotments (selections) was 661, for an area of 115,876 acres. The number of approved applications, however, was 551, and the area licensed 99,307 acres, as compared with 71,245 acres in 1889. The annual fees, which form part of the purchase-money payable on these selections, amount in the aggregate to £5,186. Of the area licensed in 1890, 4,409 acres, averaging 134 acres in each selection, were granted to non-resident selectors.

Licence
liens.

421. Licensees of agricultural allotments (or selectors) under the *Land Act* 1869 and subsequent acts are empowered to register licence liens for advances of money up to half the value of improvements effected. The number of such licence liens registered, the extent of land on which such liens were granted, and the amount secured were as follow in the last five years:—

LICENCE LIENS, 1886 TO 1890.

Year.	Liens Registered.		
	Number.	Area on which Liens were Granted.	Amount Secured.
		Acres.	£
1886	326	79,099	38,924
1887	305	68,968	34,634
1888	405	95,294	48,098
1889	267	58,705	30,039
1890	216	46,467	25,244

Pastoral
occupation
1890.

422. Under the present land system, it is intended that the purely pastoral lands of the colony, the whole of which are marked off as "pastoral allotments," should be occupied under lease for periods not exceeding fourteen years from the 29th December,

* See paragraphs 384 and 385 *ante*. This provision was changed whilst these pages were passing through the press. See footnote (†) on page 239 *ante*.

1884. But it has been provided, in case all the allotments should not be applied for, that temporary grazing licenses, renewable annually, may be granted for the occupation of such lands and of unoccupied agricultural lands, so long as they may not be required for leasing under the principal sections of the Acts 1884 and 1890. Moreover, agricultural lands, which are not occupied for agricultural purposes, are leased in grazing areas as already stated;* auriferous lands, in blocks not exceeding 1,000 acres, may be licensed for grazing purposes for periods of five years; and special provision is made for the occupation of the Mallee country. The following table shows the area of the Crown lands under the *Land Act* 1890 held under lease or license for pastoral or grazing purposes, including Mallee pastoral leases, at the end of 1890, also the number of leases and licenses, and the annual rental payable:—

PASTORAL OCCUPATION, 1890.†

(Under *Land Act* 1890.)

Description of Tenure.	Number of Licences or Leases.	Extent of Crown Lands.	Annual Rental.
		Acres.	£
Pastoral leases (sec. 21) ...	89	1,490,812	5,216
Grazing area leases (sec. 32) ...	11,816	4,719,624	31,172
Grazing licences (secs. 3 and 123)...	2,813	5,033,921	16,728
" " (auriferous lands, secs. 65 and 67)‡	3,220	432,439	6,953
Mallee pastoral leases (Part II.) ...	1,283	9,912,971	7,125
Total ...	19,221	21,589,767	67,194

423. By these figures it may be ascertained that the average extent of land embraced in a pastoral lease was 16,751 acres, in a grazing area lease 399 acres, in a grazing licence (secs. 3 and 123) 1,790 acres, and in a Mallee pastoral lease 7,726 acres. The areas are exclusive of those of any purchased land attached thereto.

Average area of runs and grazing rights.

424. According to the table, the average rent per acre of pastoral allotments was about $3\frac{1}{2}$ farthings; of land held under grazing licence a fraction more than a penny (1·04d.); and of Mallee pastoral lands two-thirds of a farthing (·17d).

Rent of runs and grazing rights.

* See paragraph 384 *ante*.

† Including Mallee pastoral leases, which are not now dealt with under a separate Act.

‡ Including licences for residences or cultivation limited to 20 acres each. At the end of 1890 the number of these was 2,211, but the area was only 41,301 acres.

Assessment
of pastoral
lands.

425. The rental of pastoral lands (exclusive of agricultural lands used for pastoral purposes, and of the Mallee pastoral lands) available at the end of 1885, viz., 7,078,100 acres, was assessed in 1886 at £24,717 per annum. Since 1885, however, the area has been considerably reduced, which will naturally reduce the assessment referred to.

Mallee
pastoral
leases.

426. The Mallee country is divided into blocks and allotments.* The number of leases and of lessees of these, together with their approximate area, and the annual rental payable therefor, are shown in the following table:—

MALLEE PASTORAL LEASES ON 31ST DECEMBER, 1890.

Description of Leaseholds.	Number of Leases.	Number of Lessees.	Area.	Annual Rental.†
			Acres.	£
Mallee blocks	66	45	7,259,018	3,400
„ allotments	1,217	1,217	2,653,953	3,725
Total	1,283	1,262	9,912,971	7,125

Surrender
and re-
leasing of
Mallee
blocks.

427. On the 1st January, 1889, the occupied portions of most of the Mallee blocks were surrendered to the Crown.‡ The greater number of these were re-leased for the remainder of the term allowed under the Act, which expires on the 1st December, 1903, but some were subdivided into allotments and made available for selection with others which were subsequently surrendered. In all 17 blocks have thus been subdivided into 770 allotments, each having an area of about 640 acres. Not only will the revenue be very substantially increased by this means (as the annual rental will range from £2 to £4 for each allotment), but the settlement of the country will much more rapidly progress and the destruction of vermin be more effectual than was possible when it was, as previously, held under ten leases, and was practically unsettled.

Mallee areas
still unoc-
cupied,
1890.

428. At the end of 1890 the following areas were still available for occupation in the Mallee country:—Mallee blocks, 1,511,040 acres; Mallee allotments, 147,984 acres.

Past and
present
occupation
of Mallee
country.

429. In 1883, prior to the passing of the *Mallee Pastoral Leases Act*, the Mallee country was held under pastoral licences or grazing rights. The number of such licences and rights was 147, held by 58 individual occupiers; the area over which the right of occupation was given was 7,727,360 acres, and the annual rental payable was £8,076.

* See paragraphs 391 to 393 *ante*.

† Approximate only.

‡ See paragraph 392 *ante*.

From a comparison of these figures with those in the above table, it appears that since 1883, whilst the occupiers of the Mallee country have increased twenty-two times, and the extent occupied by nearly one-third, the annual rental has fallen off by £951, or by 12 per cent. As a set-off against this reduced rental, however, it should be pointed out that the present lessees have to comply with certain conditions* to which the licensees under the former Act were not subject.†

430. According to the figures in the last table, the average rental per 100 acres payable for the Mallee country is 1s. 5¼d., or 11d. for the Mallee blocks, and 2s. 9½d. for the Mallee allotments. In 1883, prior to passing of the first Mallee Act, the average rental in the Mallee country was 2s. 1d. per 100 acres.

431. The revenue from the sale and occupation of Crown lands may be divided into—(1) receipts from the alienation of lands in fee-simple, including the price realized from land sales and from rents which count towards the purchase-money; (2) receipts on account of temporary occupation, which include payment for pastoral leases and grazing licences, rents for business, factory, and hotel sites, etc., and rents of land which do not count towards the purchase-money; (3) penalties, interest and fees for grants, leases, licences, etc. The gross receipts show an increase of about £7,300 as compared with the previous year, as will be seen by the following figures:—

LAND REVENUE, 1889 AND 1890.

Heads of Land Revenue.	Amounts Received.		Increase (+). Decrease (-).
	1889.	1890.	
	£	£	£
Alienation in fee-simple and progressive ...	461,009	449,744	-11,265
Temporary occupation ...	97,911	117,088	+19,177
Penalties, fees, etc. ...	32,846	32,221	-625
Total ...	591,766	599,053	+7,287†

432. The agricultural statistics of Victoria are collected by the municipal bodies, which, under the *Local Government Act 1874* (38 Vict. No. 506), and the *Local Government Act Amendment Act 1883* (47 Vict. No. 786), are required each year to furnish to the Government Statist, on or before the 1st March, such agricultural

* See paragraph 392 ante.

† Mallee lands may now be selected. See paragraph 393 ante.

‡ Net figures.

and other statistics relating to their districts on such forms and in such manner as the Governor in Council may direct. All persons are required to give correct information to the best of their knowledge and belief; and, should they fail to do so, they render themselves liable to a penalty not exceeding £10. Collectors divulging or making extracts from the information they receive, except under the special direction or authority of the Government Statist, also render themselves liable to a penalty of £10.

Bonuses for
collecting
statistics.

433. In assigning the duty of collecting statistics to the local bodies, the law did not provide that they should receive any payment therefor; and thus, although under the provision of the Act whereby the Governor in Council had power to prescribe the manner as well as the form of the statistics, elaborate instructions for the guidance of the persons employed had each year been supplied them, the Government had practically but little control over the work, and hence many of the returns were not sent in until long after the appointed time, and some were generally furnished in anything but a satisfactory condition. This being the case it was decided by the Government—for the first time in 1883-4—to offer bonuses, ranging, according to the nature of the country, from £6 to £3 per 100 schedules collected, to such municipalities as should furnish authentic and complete returns punctually at the appointed time—the amount to be reduced one-half if the returns were delayed for five days, three-quarters if they were delayed for ten days, and forfeited altogether if ten days should be exceeded. These bonuses have now been given for eight years with excellent effect, as the measures taken have resulted in the statistics being sent in at such a date that it has become possible to publish nearly complete returns fully two months earlier than such a result had been achieved in previous years.

Agricultural
statistics,
1890-91.

434. The agricultural statistics to which reference will now be made are those for the year ended 1st March, 1891.* Tables embodying the final results of these statistics will be found in the *Government Gazette* of the 14th September last,† and these, with additional tables, form portion of the *Statistical Register of Victoria*.

Number of
cultivators.

435. The total number of farm holdings visited in the year under notice was 36,013, of which 35,066 were in shires, and 947 in cities,

* A summary of the agricultural statistics of each year, since the first settlement of the colony, is published at the commencement of this volume (second folding sheet).

† This year tables containing a statement of the extent of land under crop, and yield of wheat, oats, potatoes and hay, were published in the Melbourne daily journals of the 4th April.

towns, or boroughs. In the previous year the number of farms visited was 36,497, there being thus a decrease of 484.

436. The extent of land returned as under cultivation amounted to 2,652,768 acres, as against 2,627,262 acres in 1889-90. The increase shown by the figures was, therefore, 25,506 acres. Land under tillage.

437. The average area returned as in cultivation to each person in the colony was $2\frac{1}{3}$ acres in the year under review as against nearly $2\frac{1}{2}$ acres five years previously, and $2\frac{1}{3}$ acres ten years previously. The exact proportions at the three periods were as follow :— Area cultivated per head of population.

AVERAGE AREA CULTIVATED TO EACH PERSON IN THE COLONY.

	Acres.
1880-81	2·32
1885-6	2·48
1890-91	2·34

438. The following table shows the area per head cultivated in each Australasian colony during the nine seasons ended with that of 1889-90, also the mean of those seasons, the colonies being placed in order according to the average extent of land per head that each cultivates :— Area cultivated per head in Australasian colonies.

CULTIVATION PER HEAD IN AUSTRALIAN COLONIES, 1882 TO 1890.*

Colony.	Acres under Tillage per Head of Population.									
	1881-2.	1882-3.	1883-4.	1884-5.	1885-6.	1886-7.	1887-8.	1888-9.	1889-90.	Mean.
1. S. Australia† ...	8·91	8·08	9·05	8·91	...	...	...	...	9·05	8·80
2. Tasmania ...	3·15	3·08	3·12	3·26	3·12	3·25	3·21	3·29	3·30	3·20
3. New Zealand...	2·63	2·68	2·61	2·39	2·20	2·33	2·39	2·41	2·52	2·46
4. Victoria ...	2·06	2·25	2·38	2·42	2·42	2·41	2·49	2·35	2·35	2·34
5. W. Australia...	1·78	1·84	1·94	2·42	2·19	2·18	2·49	2·52	2·47	2·20
6. N. S. Wales ...	·83	·90	·91	·92	·90	1·02	1·01	·92	1·05	·94
7. Queensland ...	·56	·64	·58	·64	·66	·65	·56	·55	·65	·61

439. It will be observed that South Australia cultivates much more, and New South Wales and Queensland cultivate much less, per head than any of the other colonies ; also that over a series of years Results in different colonies compared.

* For the population and number of acres under tillage in each Australasian colony during the eighteen years ended with 1890-91, see Summary of Australasian Statistics (third folding sheet) ante; also Appendix A. post.

† The colony of South Australia did not collect agricultural statistics in the four years ended with 1888-9 ; the mean is, therefore, for five years.

Victoria has in this respect occupied a middle place, being below South Australia, Tasmania, and New Zealand, but above the other three colonies, viz., Western Australia, New South Wales, and Queensland. In the four years ended with 1887-8, however, Victoria, in proportion to population, had more land in cultivation than New Zealand.

Land under principal crops.

440. The principal crops grown in Victoria are wheat, oats, barley, potatoes, hay, and green forage. In 1890-91 the area under wheat was less by 33,600 acres than in 1889-90, also less by 72,000 and 88,000 acres respectively than in 1888-9 and 1887-8, but was larger than in any previous year; the area under oats was smaller by 15,000 acres, and that under barley smaller by 3,000 acres, than in 1889-90, but both were larger than in any previous year; the area under potatoes, although larger than in 1889-90 by 6,700 acres, was exceeded in 1887-8 and in 1886-7; that under hay was smaller by 38,000 acres than that in 1889-90, and also smaller than in any previous year since 1884-5, except 1888-9; the area returned under green forage, although larger by 90,000 acres than that in 1889-90, and also considerably larger than in 1888-9 and 1887-8, was below the area returned for 1886-7 by nearly 40,000 acres, and by more than that extent when compared with other previous years. The large falling-off since 1886-7 in the last-named item is accounted for by the fact that in the last four years the collectors have been instructed not to visit holdings on which there was no other cultivated land than that laid down under permanent artificial grass, which is included under the head of green forage. The following table shows the extent of land under each of these crops in the last two seasons:—

LAND UNDER PRINCIPAL CROPS, 1890 AND 1891.

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Green Forage.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1890 ...	1,178,735	236,496	90,724	47,139	451,546	155,596
1891 ...	1,145,163	221,048	87,751	53,818	413,052	245,332
Increase ...	...	...	...	6,679	...	89,736
Decrease ...	33,572	15,448	2,973	...	38,494	...

Produce of principal crops.

441. The last two seasons—1889-90 and 1890-91—were both fairly productive. In the latter, the gross yields of wheat and potatoes were larger than in the former one by $1\frac{1}{4}$ million bushels

and 47,000 tons respectively; but the yields of oats and barley were smaller by 725,000 and 260,000 bushels, whilst the crop of hay was less by nearly 100,000 tons. The wheat crop in 1890-91—12,751,000 bushels—was the third largest ever raised in the colony; still it was 2,800,000 bushels below the crop produced in 1883-4. The gross yield of oats and barley was exceeded only in 1889-90, that of potatoes was by far the largest ever produced, whilst that of hay was exceeded in only two previous seasons. The following is a statement of the gross produce of each of the principal crops in 1889-90 and 1890-91:—

GROSS PRODUCE OF PRINCIPAL CROPS, 1890 AND 1891.

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Bushels.	Bushels.	Bushels.	Tons.	Tons
1890 ...	11,495,720	5,644,867	1,831,132	157,104	666,385
1891 ...	12,751,295	4,919,325	1,571,599	204,155	567,779
Increase ...	1,255,575	...	...	47,051	...
Decrease ...	...	725,542	259,533	...	98,606

442. The following table shows the area under and gross produce of wheat in each county during the year ended 1st March, 1891, also the average produce of wheat per acre in each county during that and the preceding year:—

Area under and produce of wheat.

WHEAT IN EACH COUNTY.—AREA UNDER CROP AND GROSS AND AVERAGE PRODUCE.

Counties.	Year 1890-91.		Average Produce per Acre.	
	Area under Crop.	Gross Produce.	1890-91.	1889-90.
	Acres.	Bushels.	Bushels.	Bushels.
Anglesey ...	492	5,901	11·99	11·35
Benambra ...	976	21,000	21·52	14·81
Bendigo ...	52,493	721,334	13·74	14·15
Bogong ...	23,426	301,476	12·87	6·59
Borong ...	301,400	3,168,538	10·51	10·23
Bourke ...	535	10,031	18·74	11·38
Buln Buln ...	145	3,267	22·53	18·11
Croajingolong ...	18	275	15·28	17·65
Dalhousie ...	1,664	27,874	16·74	12·62
Dargo ...	114	352	3·08	6·59
Delatite ...	6,776	95,040	14·03	8·73

WHEAT IN EACH COUNTY.—AREA UNDER CROP AND GROSS
AND AVERAGE PRODUCE—*continued.*

Counties.	Year 1890-91.		Average Produce per Acre.	
	Area under Crop.	Gross Produce.	1890-91.	1889-90.
	Acres.	Bushels.	Bushels.	Bushels.
Dundas	6,812	88,555	13·00	9·92
Evelyn	19	333	17·53	13·70
Follett	1,424	16,278	11·43	10·32
Gladstone	59,226	679,525	11·47	10·20
Grant	1,240	26,845	21·65	15·54
Grenville	547	7,552	13·81	14·71
Gunbower	36,942	387,880	10·50	11·76
Hampden	224	4,369	19·50	15·78
Heytesbury	202	5,296	26·22	16·85
Kara Kara	107,069	1,151,202	10·75	9·57
Karkaroc	23,137	289,327	12·50	10·64
Lowan	224,425	1,767,865	7·88	6·33
Moira	192,057	2,655,572	13·83	9·09
Mornington	62	857	13·82	16·00
Normanby	2,222	28,412	12·79	12·21
Polwarth	127	1,674	13·18	29·02
Ripon	3,418	58,061	16·99	15·73
Rodney	60,093	753,032	12·53	12·02
Talbot	4,082	71,088	17·41	12·45
Tambo	23	630	27·39	24·88
Tanjil	1,095	22,845	20·86	15·32
Tatchera	31,017	343,779	11·08	11·10
Villiers	1,659	35,150	21·19	17·21
Wonnangatta	2	80	40·00	12·57
Total	1,145,163	12,751,295	11·13	9·75

Wheat-yield
in ten
counties
1889-90 and
1890-91
compared.

443. A reference to the table will show that nearly twelve million out of the twelve and three-quarter million bushels of wheat raised in Victoria in the year under notice were raised in ten counties, which, for the most part, lie between the 36th and 37th parallels of south latitude, and which have been mentioned in previous issues of this work as, above all others, the wheat producing counties of Victoria. It will be noticed that the largest increase—nearly 1,000,000 bushels—was in Moira, and the next largest in Lowan; also that in as many as five of the counties there was a decrease amounting to nearly 600,000 bushels, the falling-off in two cases, however, being due to a smaller area being placed under wheat. In the following table these counties are arranged in order, according to the yield of wheat

in 1890-91; the increase or falling-off, as compared with the previous year, being also shown:—

YIELD IN TEN WHEAT PRODUCING COUNTIES,
1890 AND 1891.

Counties.	Bushels of Wheat Produced.		
	1889-90.	1890-91.	Increase + Decrease -
Borong	3,122,711	3,168,538	+ 45,827
Moira	1,673,578	2,655,572	+ 981,994
Lowan... ..	1,312,320	1,767,865	+ 455,545
Kara Kara	1,066,397	1,151,202	+ 84,805
Rodney	853,939	753,032	- 100,907
Bendigo	867,758	721,334	- 146,424
Gladstone	730,594	679,525	- 51,069
Gunbower	581,119	387,880	- 193,239
Tatchera	424,921	343,779	- 81,142
Bogong	112,098	301,476	+ 189,378
Total	10,745,435	11,930,203	+ 1,184,768*

444. As regards the acreable yield of wheat, it will be noticed that in 1890-91, taking the colony as a whole, it was $1\frac{1}{3}$ bushel higher than in 1889-90. In 8 of the 35 counties, however, the yield per acre was less in 1890-91 than in the previous year, viz.:—Bendigo, Croajingolong, Dargo, Grenville, Gunbower, Mornington, Polwarth, and Tatchera; but with the exception of Bendigo, Gunbower, and Tatchera, only a very small quantity of the wheat grown in Victoria is obtained from these counties.

445. It will be observed that in several of the countries in which the average yield of wheat is high a very small quantity is grown, which is probably raised on a patch of choice land, and does not afford an indication of the general productiveness of the county. Thus in 1890-91 only 2 acres were placed under wheat in Wonnangatta, 19 in Evelyn, 23 in Tambo, 145 in Buln Buln, and 202 in Heytesbury; and in all these counties the yield per acre was much above the average of the colony.

* Net increase.

Area under other principal crops in each county.

446. The following table gives a statement of the number of acres under oats, barley, potatoes, and hay, in each county during 1890-91:—

OATS, BARLEY, POTATOES AND HAY IN EACH COUNTY.
AREA UNDER CROP.

Counties.	Area under Crop, 1890-91.			
	Oats.	Barley.	Potatoes.	Hay.
	Acres.	Acres.	Acres.	Acres.
Anglesey	1,461	172	345	2,114
Benambra	2,029	10	272	2,043
Bendigo	18,058	1,657	19	26,481
Bogong	8,243	404	630	11,312
Borong	4,292	1,252	49	38,606
Bourke	7,133	1,890	6,673	27,896
Buln Buln	2,738	192	3,174	5,095
Croajingolong	128	3	85	273
Dalhousie	14,984	510	4,658	10,721
Dargo	77	99	220	880
Delatite	10,019	193	1,205	6,920
Dundas	3,238	421	110	3,770
Evelyn	402	11	843	4,173
Follett	1,523	151	88	879
Gladstone	16,180	1,715	4	19,247
Grant	8,784	1,867	7,858	29,781
Grenville	5,767	2,184	875	11,918
Gunbower	6,182	2,090	5	12,649
Hampden	888	862	852	3,329
Heytesbury	1,948	327	1,151	2,161
Kara Kara	12,500	1,051	111	24,627
Karkaroc	104	61	4	2,128
Lowan	4,829	1,136	25	30,913
Moira	26,931	48,670	20	31,481
Mornington	581	37	919	4,969
Normanby	3,195	415	744	5,033
Polwarth	1,579	1,688	3,114	3,788
Ripon	9,672	155	1,272	14,157
Rodney	16,492	10,622	1	15,973
Talbot	20,981	1,120	8,271	43,142
Tambo	72	9	153	462
Tanjil	3,421	1,901	1,085	4,324
Tatchera	859	723	12	5,065
Villiers	5,183	4,151	8,765	6,241
Wonnangatta	575	2	206	501
Total	221,048	87,751	53,818	413,052

Gross produce of other principal crops in each county.

447. By the next table, which shows the gross produce of oats, barley, potatoes, and hay in each county, it will be seen that in 1890-91 most oats was grown in Talbot, Moira, and Bendigo, in the order

named ; more than half the barley in Moira ; most potatoes in Villiers, Grant, Bourke, and Talbot ; and most hay in Talbot, Grant, Bourke, Borung, Moira, and Bendigo :—

GROSS PRODUCE OF OATS, BARLEY, POTATOES, AND HAY, IN EACH COUNTY, 1890-91.

Counties.	Gross Produce, 1890-91.			
	Oats.	Barley.	Potatoes.	Hay.
	Bushels.	Bushels.	Tons.	Tons.
Anglesey ...	30,697	2,455	1,152	3,337
Benambra ...	64,008	272	1,239	3,265
Bendigo ...	429,353	30,853	50	30,484
Bogong ...	172,687	8,071	2,300	13,385
Borong ...	68,397	13,718	77	42,304
Bourke ...	198,037	55,615	23,825	48,275
Buln Buln ...	70,819	4,702	16,322	9,925
Croajingolong ...	3,158	55	378	447
Dalhousie ...	337,011	9,656	10,958	15,918
Dargo ...	2,535	3,330	1,209	1,741
Delatite ...	217,530	3,855	4,771	8,584
Dundas ...	60,708	7,382	331	5,980
Evelyn ...	8,856	205	3,290	6,817
Follett ...	28,930	2,289	217	1,237
Gladstone ...	356,081	24,770	2	21,264
Grant ...	280,430	53,524	26,444	54,795
Grenville ...	141,779	57,210	2,062	19,748
Gunbower ...	150,137	27,808	...	11,164
Hampden ...	18,558	15,670	4,517	6,856
Heytesbury ...	40,618	6,125	4,585	3,481
Kara Kara ...	213,413	14,402	213	25,893
Karkaroc ...	2,380	786	8	2,376
Lowan ...	64,104	9,668	38	24,461
Moira ...	540,615	796,358	22	33,106
Mornington ...	15,281	645	4,888	8,184
Normanby ...	53,383	6,899	2,597	7,627
Polwarth ...	31,913	38,747	15,332	7,317
Ripon ...	232,255	3,697	2,708	27,329
Rodney ...	268,504	169,837	1	16,592
Talbot ...	626,591	28,891	22,269	78,333
Tambo ...	1,945	240	909	889
Tanjil ...	65,112	62,305	4,650	7,687
Tatchera ...	14,783	8,569	10	5,035
Villiers ...	97,530	102,950	46,015	13,081
Wonnangatta ...	11,187	40	766	862
Total ...	4,919,325	1,571,599	204,155	567,779

448. The average produce per acre of oats, barley, potatoes, and hay in each county during the last two seasons is given in the following table :—

Average yield of other principal crops in each county.

AVERAGE PRODUCE OF OATS, BARLEY, POTATOES, AND HAY IN
EACH COUNTY, 1889-90 AND 1890-91.

Counties.	Average Produce per Acre of—							
	Oats. (Bushels.)		Barley. (Bushels.)		Potatoes. (Tons.)		Hay. (Tons.)	
	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.	1889-90.	1890-91.
Anglesey ...	18·68	21·00	17·03	14·27	2·56	3·34	1·54	1·58
Benambra ...	31·05	31·54	22·32	27·20	3·87	4·56	1·48	1·60
Bendigo ...	29·90	23·78	22·62	18·62	2·43	2·63	1·48	1·15
Bogong ...	14·57	20·94	13·32	19·98	2·41	3·65	·90	1·18
Borong ...	21·26	15·93	16·40	10·96	3·48	1·57	1·23	1·10
Bourke ...	24·57	27·76	26·17	29·43	3·57	3·57	1·97	1·73
Buln Buln ...	27·38	25·86	27·94	24·49	4·87	5·14	1·93	1·95
Croajingolong	29·90	24·67	34·00	18·33	3·66	4·45	1·49	1·64
Dalhousie ...	21·48	22·49	23·08	18·93	2·23	2·35	1·48	1·49
Dargo ...	25·88	32·92	26·16	33·64	4·03	5·49	2·09	1·98
Delatite ...	16·82	21·73	15·92	19·97	2·09	3·97	1·08	1·24
Dundas ...	20·16	18·75	21·33	17·53	2·39	3·00	1·58	1·59
Evelyn ...	20·88	22·03	12·34	18·64	3·63	3·90	1·70	1·63
Follett ...	23·28	19·00	24·54	15·16	2·79	2·47	1·57	1·41
Gladstone ...	25·09	22·01	18·17	14·44	2·69	·50	1·36	1·10
Grant ...	29·22	31·93	32·92	28·67	3·04	3·37	2·08	1·84
Grenville ...	28·99	24·58	36·67	26·20	2·22	2·36	1·76	1·66
Gunbower ...	30·71	24·29	20·18	13·25	2·00	...	1·45	·88
Hampden ...	25·84	20·90	35·20	18·18	4·06	5·30	1·90	2·06
Heytesbury...	23·44	20·85	37·13	18·73	3·32	3·98	1·72	1·61
Kara Kara ...	19·28	17·07	13·88	13·70	1·73	1·92	1·26	1·05
Karkaroc ...	15·67	22·88	19·80	12·89	5·00	2·00	1·81	1·12
Lowan ...	15·76	13·28	8·62	8·51	3·08	1·52	·86	·79
Moira ...	19·71	20·07	14·83	16·36	1·08	1·10	1·14	1·05
Mornington	23·90	26·30	18·51	17·43	4·91	5·32	1·59	1·65
Normanby ...	22·50	16·71	25·69	16·62	2·95	3·49	1·72	1·52
Polwarth ...	30·34	20·21	37·56	22·95	4·84	4·92	2·29	1·93
Ripon ...	25·21	24·01	20·54	23·85	2·09	2·13	1·89	1·93
Rodney ...	23·89	16·28	18·25	15·99	·90	...	1·44	1·04
Talbot ...	26·12	29·82	24·55	25·80	2·41	2·69	1·88	1·82
Tambo ...	37·09	27·01	23·50	26·67	4·67	5·94	2·04	1·92
Tanjil ...	25·76	19·03	32·39	32·77	3·79	4·29	2·06	1·78
Tatchera ...	25·81	17·21	16·64	11·85	1·33	·83	1·57	·99
Villiers ...	27·72	18·82	38·70	24·80	4·15	5·25	2·08	2·10
Wonnangatta	17·76	19·46	28·00	20·00	3·34	3·72	1·31	1·72
Total ...	23·87	22·25	20·18	17·91	3·33	3·79	1·48	1·37

Yield of oats,
barley,
potatoes,
and hay,
1890-91.

449. It will be noticed that in the year ended 1st March, 1891, the highest acreable yield of oats was in Dargo, Grant, Benambra, Talbot, Bourke, and Tambo, in the order named; that the average yield of barley was highest in Dargo and Tanjil, Bourke, Grant, Benambra, Tambo, and Grenville; that potatoes yielded the largest crop per acre in Tambo, Dargo, Mornington, Hampden, Villiers, Buln Buln, Polwarth, Benambra, Croajingolong, and Tanjil, where the average was over 5 tons; that the highest yields of hay were in Villiers and

Hampden, in which this crop averaged over 2 tons to the acre; and in Dargo, Buln Buln, Polwarth, Ripon, Tambo, Grant, Talbot, and Tanjil, in which it exceeded $1\frac{3}{4}$ ton to the acre.

450. Comparing the averages of 1890-91 with those of the previous season, an increase is observed in the acreable yield of oats in 14 counties, the principal being Talbot, Moira, Dalhousie, Grant, Delatite and Bourke; of barley in eleven counties, the principal being Moira, which produces half the barley grown in the colony; of hay in thirteen counties; and in potatoes in all but nine counties. Yield of other principal crops in past two seasons.

451. In the past season, over the colony as a whole, the acreable yield of wheat and barley was below, but that of the other crops was above, the average; the yield per acre of wheat, however, exceeded that in all but three of the twelve years immediately preceding, although it was lower than in any of the seven years prior to that period, but the yield of barley was exceeded in all but five of the nineteen other years named in the following table:— Yield of principal crops, 1872 to 1891.

AVERAGE PRODUCE OF PRINCIPAL CROPS, 1872 TO 1891.

Year ended March.	Average Produce per Acre of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1872	13.45	18.76	20.00	3.22	1.40
1873	16.51	19.55	20.86	3.45	1.32
1874	13.58	15.69	19.84	2.86	1.27
1875	14.57	18.46	21.01	3.53	1.32
1876	15.49	21.92	22.20	3.37	1.33
1877	13.15	19.91	21.18	3.31	1.22
1878	12.41	19.39	19.81	3.11	1.17
1879	8.76	17.60	18.24	2.71	1.21
1880	13.29	24.00	24.67	4.04	1.45
1881	9.95	17.62	15.57	2.81	1.20
1882	9.40	24.57	19.07	3.43	1.13
1883	9.03	26.17	17.35	3.78	1.06
1884	14.10	25.07	22.84	4.01	1.43
1885	9.52	23.40	17.38	4.16	1.09
1886	8.99	21.72	17.58	3.83	1.05
1887	11.49	22.91	22.36	3.41	1.09
1888	10.81	22.92	23.34	4.11	1.41
1889	7.10	14.20	13.55	3.04	.75
1890	9.75	23.87	20.18	3.33	1.48
1891	11.13	22.25	17.91	3.79	1.37
Mean	11.62	21.00	19.75	3.47	1.24

452. In the last seven years the statistics of malting barley were distinguished from those of other descriptions of the same Malting and other barley.

cereal. The following is the result of this division for the year under review :—

MALTING AND OTHER BARLEY, 1890-91.

Description of Barley.	Area under Crop.	Gross Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
Malting	72,348	1,200,688	16·60
Other	15,403	370,911	24·08
Total	87,751	1,571,599	17·91

453. Of the total area under barley 82 per cent. was under malting barley ; and of the produce of barley, 76 per cent. was of malting barley. In the previous year these proportions were respectively 78 per cent. and 66 per cent. It will be noticed that this description of barley is by far the less prolific of the two kinds, the average in 1890-91 being only 16½ bushels to the acre, as against 24 bushels of the other barley.

454. In the following table the average yield of wheat, oats, barley, potatoes, and hay in Victoria is placed side by side with the average of the same crops in the other Australasian colonies* during each of the eighteen years ended with 1890 :—

AVERAGE PRODUCE PER ACRE OF THE PRINCIPAL CROPS IN AUSTRALASIAN COLONIES, 1873 TO 1890.

Year ended March.	Victoria.	New South Wales.	Queensland.*	South Australia.*	Western Australia.	Tasmania.	New Zealand.
WHEAT.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1873 ...	16·51	16·32	...	11·50	6·02	18·62	24·19
1874 ...	13·58	13·43	...	7·87	13·44	16·17	25·61
1875 ...	14·57	12·87	...	11·75	12·00	18·51	28·15
1876 ...	15·49	14·66	...	11·95	11·00	16·38	31·54
1877 ...	13·15	16·43	...	5·40	12·00	19·30	28·63
1878 ...	12·41	13·84	10·63	7·76	11·00	18·12	26·03
1879 ...	8·76	14·74	13·56	7·15	9·97	16·10	22·94
1880 ...	13·29	15·48	8·11	9·78	14·94	23·22	28·16
1881 ...	9·95	14·69	20·40	4·96	14·94	14·99	25·07
1882 ...	9·40	15·35	8·41	4·57	7·00	18·88	22·69
1883 ...	9·03	16·35	13·89	4·21	11·00	20·27	26·28
1884 ...	14·10	15·00	4·34	7·94	13·00	17·74	26·02
1885 ...	9·52	15·27	16·17	7·53	13·00	19·20	25·43
1886 ...	8·99	10·32	5·11	...	11·50	17·32	24·40
1887 ...	11·49	17·38	3·13	...	12·00	17·91	24·89
1888 ...	10·81	12·06	22·10	...	9·14	16·67	26·37
1889 ...	7·10	4·76	·89	3·85†	10·50	20·16	24·22
1890 ...	9·75	15·65	15·88	7·91	14·00	15·42	25·15
Mean ...	11·55	14·14	10·97	7·61	11·47	18·05	25·88

* The produce of crops in Queensland was not given prior to 1878. No agricultural statistics were collected in South Australia in the four years ended with 1888-9.

† Estimated.

AVERAGE PRODUCE PER ACRE OF THE PRINCIPAL CROPS IN AUSTRALASIAN COLONIES, 1873 TO 1890--continued.

Year ended March.	Victoria.	New South Wales.	Queensland.*	South Australia.*	Western Australia.	Tasmania.	New Zealand.
OATS.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1873 ...	19.55	19.94	...	16.39	13.24	25.85	27.00
1874 ...	15.69	18.71	...	10.61	19.22	20.98	29.81
1875 ...	18.46	16.31	...	14.61	16.00	26.82	35.22
1876 ...	21.92	18.72	...	16.69	15.00	25.40	37.79
1877 ...	19.91	21.16	...	10.65	15.00	24.21	31.24
1878 ...	19.39	19.31	10.11	11.96	14.00	22.32	31.68
1879 ...	17.60	20.24	9.65	12.01	18.02	24.82	30.11
1880 ...	24.00	21.64	24.74	15.02	19.00	28.61	36.53
1881 ...	17.62	19.87	17.94	11.50	19.00	22.13	32.05
1882 ...	24.57	21.81	12.74	10.66	10.00	28.44	28.45
1883 ...	26.17	24.88	16.58	11.13	15.00	27.34	32.89
1884 ...	25.07	21.15	8.90	14.65	17.00	27.39	35.11
1885 ...	23.40	21.87	15.17	12.20	18.00	28.65	34.84
1886 ...	21.72	19.77	4.84	...	14.50	26.82	26.11
1887 ...	22.91	25.09	10.42	...	16.14	25.95	30.92
1888 ...	22.92	20.35	24.26	...	15.05	18.20	31.24
1889 ...	14.20	13.77	5.65	...	23.42	27.97	29.89
1890 ...	23.87	24.30	19.41	12.77	20.00	28.60	32.09
Mean ...	21.05	20.49	13.88	12.92	16.53	25.58	31.83
BARLEY.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1873 ...	20.86	18.96	...	14.31	14.00	22.44	21.25
1874 ...	19.84	18.61	...	10.69	17.22	19.33	27.41
1875 ...	21.01	17.33	...	15.18	16.00	24.46	29.39
1876 ...	22.20	20.46	...	14.12	14.00	27.84	35.91
1877 ...	21.18	23.69	...	10.64	15.00	23.58	28.95
1878 ...	19.81	19.68	16.86	11.97	13.00	20.28	25.40
1879 ...	18.24	21.47	15.87	11.82	12.23	24.22	24.77
1880 ...	24.67	21.46	24.68	13.38	18.00	27.91	30.47
1881 ...	15.57	20.35	20.97	11.62	18.00	20.39	26.05
1882 ...	19.07	21.04	12.53	11.47	10.00	22.29	22.28
1883 ...	17.35	20.55	17.82	11.03	14.00	27.79	26.19
1884 ...	22.84	20.96	13.24	14.01	16.00	25.57	29.31
1885 ...	17.38	21.16	24.73	13.48	16.50	29.58	30.37
1886 ...	17.58	16.16	24.20	..	14.50	25.83	25.92
1887 ...	22.36	21.87	24.07	...	15.97	22.40	25.94
1888 ...	23.34	19.20	27.03	...	11.75	13.87	27.26
1889 ...	13.55	11.08	22.94	...	14.70	23.55	31.15
1890 ...	20.18	20.79	21.24	12.54	17.00	23.75	31.67
Mean ...	19.83	19.71	20.47	12.59	14.88	23.62	27.76
POTATOES.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1873 ...	3.45	2.98	...	3.28	2.34	3.92	4.92
1874 ...	2.86	2.98	...	3.41	2.67	3.16	4.46
1875 ...	3.53	2.83	...	3.72	3.00	3.75	5.24
1876 ...	3.37	2.98	...	4.52	3.00	3.54	4.89
1877 ...	3.31	3.03	...	2.84	3.00	3.43	5.36
1878 ...	3.11	2.52	1.91	2.51	2.00	3.25	5.38
1879 ...	2.71	3.20	2.33	2.67	2.49	3.37	4.98

* See footnote (*) on page 268.

AVERAGE PRODUCE PER ACRE OF THE PRINCIPAL CROPS IN
AUSTRALASIAN COLONIES, 1873 TO 1890—*continued.*

Year ended March.	Victoria.	New South Wales.	Queens- land.*	South Australia.*	Western Australia.	Tasmania.	New Zealand.
POTATOES.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1880 ...	4·04	3·23	3·03	3·80	3·50	3·18	5·62
1881 ...	2·81	2·73	2·65	2·89	3·50	3·12	4·94
1882 ...	3·43	2·78	2·36	2·96	2·00	3·47	5·41
1883 ...	3·78	3·00	2·90	3·05	2·50	3·88	5·10
1884 ...	4·01	2·47	2·60	4·22	3·00	3·59	5·36
1885 ...	4·16	2·52	2·92	4·10	3·00	4·37	5·78
1886 ...	3·83	2·55	2·82	...	2·50	4·83	4·58
1887 ...	3·41	2·64	3·74	...	3·01	4·71	4·88
1888 ...	4·11	2·94	3·52	...	2·38	2·59	5·45
1889 ...	3·04	2·39	2·84	...	4·10	4·88	5·08
1890 ...	3·33	2·85	3·60	3·74	3·00	4·25	5·22
Mean ...	3·46	2·81	2·86	3·41	2·83	3·74	5·15
HAY.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1873 ...	1·32	1·61	...	1·21	1·51	1·39	1·25
1874 ...	1·27	1·54	...	1·02	2·00	1·08	1·43
1875 ...	1·32	1·37	...	1·26	1·50	1·35	·84
1876 ...	1·33	1·15	...	1·21	1·00	1·42	1·46
1877 ...	1·22	1·43	...	1·95	1·00	1·21	1·31
1878 ...	1·17	1·22	1·30	1·13	1·00	1·13	1·30
1879 ...	1·21	1·66	1·33	·97	1·00	1·19	1·22
1880 ...	1·45	1·45	1·96	1·12	1·25	1·52	1·51
1881 ...	1·20	1·33	1·95	·96	1·25	1·13	1·27
1882 ...	1·13	1·35	1·16	·72	·75	1·29	1·30
1883 ...	1·06	1·35	1·67	·75	1·00	1·30	1·24
1884 ...	1·43	1·28	1·39	1·06	1·00	1·29	1·39
1885 ...	1·09	1·24	1·40	·93	1·00	1·24	1·41
1886 ...	1·05	·88	1·06	...	1·00	1·24	1·14
1887 ...	1·09	1·57	1·92	...	1·00	1·06	1·36
1888 ...	1·41	1·35	2·02	..	·94	1·14	1·49
1889 ...	·75	·64	1·54	...	1·00	1·11	1·41
1890 ...	1·48	1·73	1·93	1·20	1·00	1·45	1·43
Mean ...	1·22	1·34	1·59	1·11	1·12	1·25	1·32

NOTE.—All the calculations in this table were made in the office of the Government Statist, Melbourne. For the land under and total produce of each crop in the respective colonies during the eighteen years ended with 1890-91, see summary of Australasian Statistics (third folding sheet) *ante*; and for average yields per acre in 1890-91, see Table XVI. of Appendix A., *post*.

455. It will be observed that, according to the mean of the whole period, the average produce of wheat, oats, barley, and potatoes is much the highest in New Zealand, and that of hay is highest in Queensland. The lowest average yield of wheat, oats, barley, and hay is in South Australia; and the yield of potatoes is lowest in New South Wales, Western Australia, and Queensland, in which the

Colonies
with
highest and
lowest
average
yields.

* See footnote (*) on page 268.

difference in the average yield is very slight. Victoria stands third in regard to the average per acre of oats and potatoes, fourth in regard to wheat and barley, and fifth in regard to hay.

456. It will further be noticed that in 1889-90, with the exception of wheat in Victoria, Tasmania, and New Zealand; oats and barley in South Australia; potatoes in Victoria and Queensland; and hay in Western Australia, the average produce of all the crops named was above the mean of the eighteen years to which reference is made.

Average produce 1889-90 and previous years compared.

457. The next table shows the acreage under various crops in the United Kingdom, Australasia, British North America, the Cape of Good Hope, the principal countries on the continent of Europe and the United States of America. All the information has been taken from official documents :—

Land under crop in British and Foreign countries.

LAND UNDER CERTAIN CROPS IN SOME BRITISH AND FOREIGN COUNTRIES (000'S OMITTED).

Country.	Year.	Number of Acres under—				
		Wheat.	Oats.	Barley.	Rye.	Potatoes.
The United Kingdom ...	1890	2,484,	4,138,	2,301,	69,	1,321,
Australasia ...	1889-90	3,870,	738,	169,	...	126,
Canada—						
Ontario ...	1889	1,220,	1,923,	875,	...	146,
Quebec, Nova Scotia, and New Brunswick	1881	305,	...	...	...	235,
Manitoba ...	1889	623,	219,	80,	...	12,
Prince Edward Island, British Columbia, and the Territories	1885	67,	35,	12,	...	4,
Cape of Good Hope ...	1875	188,	115,	29,	...	9,
Austria ...	1888	2,929,	4,629,	2,795,	4,994,*	2,734,
Belgium ...	1883	811,	616,	99,	686,	492,
Denmark ...	1881	138,	991,	781,	660,	110,
France ...	1888	17,235,*	9,224,	2,207,	4,023,	3,571,
Germany ...	1889	4,832,	9,600,	4,162,	14,331,	7,207,
Holland ...	1887	210,	285,	111,	504,	364,
Hungary ...	1889	7,190,	2,514,	2,486,	2,673,	1,085,
Italy ...	1883	11,700,	1,100,	856,	397,	173,
Norway ...	1875	11,	224,	138,	37,	86,
Russia in Europe ...	1887	28,882,	34,887,	12,443,	64,612,	3,713,
Sweden ...	1888	1,096,†	2,767,‡	...	...	380,
United States ...	1889	38,124,	27,462,	...	...	...

458. The official returns of the various countries contain statements of produce, and these are given in the following table. The

Gross yield of crops in British and Foreign countries.

* Including spelt (*Triticum spelta*).
 † Including also barley and mixed corn.

‡ Including also rye.

produce of potatoes is not returned in tons, as in the Australasian colonies, but in bushels :—

GROSS PRODUCE OF CERTAIN CROPS IN SOME BRITISH AND FOREIGN COUNTRIES (000's OMITTED).

Country.	Year.	Number of Bushels* of—				
		Wheat.	Oats.	Barley.	Rye.	Potatoes.
The United Kingdom	1890	76,075,	171,146,	80,714,	...	184,880,
Australasia ...	1889-90	42,480,	21,198,	3,759,	...	19,613,
Canada—						
Ontario ...	1889	18,699,	64,346,	23,386,	...	14,355,
Quebec, Nova Scotia, and New Brunswick	1881	3,070,	25,161,	2,064,	...	29,213,
Manitoba ...	1889	7,201,	3,415,	1,051,	...	1,393,
Prince Edward Island, British Columbia, and the Territories	1885	1,147,	1,046,	257,	...	480,
Cape of Good Hope ...	1890	1,983,	942,	520,	...	844,
Austria ...	1888	50,245,	101,972,	55,578,	79,274,†	319,385,
Belgium ...	1889	18,970,	27,443,	3,536,	17,561,	114,074,
Denmark ...	1889	4,791,	25,577,	19,187,	16,680,	16,794,
France ...	1888	271,537,†	233,634,	43,453,	61,016,	407,153,
Germany ...	1889	87,146,	231,511,	85,445,	236,419,	1,047,056,
Holland ...	1887	6,677,	11,750,	5,077,	13,350,	74,393,
Hungary ...	1889	90,637,	42,291,	33,450,	35,655,	110,277,
Italy ...	1888	101,033,	13,722,	6,567,	3,536,	24,613,
Norway ...	1875	276,	8,896,	4,285,	1,016,	19,591,
Russia in Europe ...	1889	172,909,	474,044,	112,030,	534,322,	293,605,
Sweden ...	1889	3,594,	48,057,	13,665,	20,279,	68,554,
United States ...	1889	475,254,	728,067,	...	...	...

459. Until 1884 no official return was made of the produce of crops in the United Kingdom. Estimates more or less reliable have frequently been made by private persons, especially of the wheat yield. The London *Statist's* Annual Supplement of the 31st January, 1885, gives a statement originally taken from *The Times*, and evidently prepared with great care, of the assumed yield per acre of this crop in the eighteen years ended with 1883, and this has been supplemented by the official figures for the seven years ended with 1890, published by the Agricultural Department of the Privy Council Office:—

* The produce was originally given in Imperial bushels, except in the case of Germany, where it was stated in cwts., and the United States in Winchester bushels. Moreover, the potato crop of Austria, Belgium, France, and Italy was stated in cwts., and that of Australasia in tons. All these have been converted into Imperial bushels upon the assumption that 60 lbs. of wheat, 40 lbs. of oats, 50 lbs. of barley or rye, and 56 lbs. of potatoes are in each case equal to an Imperial bushel; also that a Winchester bushel is equivalent to about .9688 of an Imperial bushel.

† Including also spelt (*Triticum spelta*).

AVERAGE PRODUCE PER ACRE OF WHEAT IN THE UNITED KINGDOM, 1866 TO 1890.

Bushels per Acre.		Bushels per Acre.		Bushels per Acre.	
1866	27	1875	23	1883	26
1867	25	1876	27	1884	30
1868	34	1877	22	1885	31
1869	27	1878	30	1886	27
1870	32	1879	18	1887	32
1871	27	1880	26	1888	28
1872	23	1881	27	1889	30
1873	25	1882	28	1890	31
1874	31				

460. The average produce in the 25 years was about 27 bushels per acre, which is much above the yield in any of the Australasian colonies except in New Zealand. The yield in 1890 (31 bushels to the acre) was, it will be observed, equalled in two and exceeded in three previous seasons. Wheat yield in United Kingdom and colonies.

461. The acreable produce for the latest year in the countries named in a previous table has been calculated in the office of the Government Statist, Melbourne, and is given in the following table:— Average yield of crops in British and Foreign countries.

AVERAGE PRODUCE PER ACRE OF SOME BRITISH AND FOREIGN COUNTRIES.

Country.	Bushels* per Acre of—				
	Wheat.	Oats.	Barley.	Rye.	Potatoes.
The United Kingdom	30.6	41.4	35.0	...	140.0
Australasia	11.0	28.7	22.2	...	155.7
Canada—					
Ontario	15.3	33.5	26.7	...	98.3
Quebec, Nova Scotia, and New Brunswick	9.9	...	...	...	124.3
Manitoba	11.6	15.6	13.1	...	116.0
Prince Edward Island, British Columbia, and the Territories	17.1	29.9	21.4	...	120.0
Cape of Good Hope	20.3	10.7	25.8	...	83.2
Austria	17.2	22.0	19.9	14.0	116.8
Belgium	23.3	44.5	35.7	25.8	231.8
Denmark	34.7	25.8	24.4	25.4	152.8
France	18.0	25.3	19.7	15.2	114.0
Germany	18.0	24.1	20.7	16.1	149.1
Holland	31.8	41.2	45.7	26.5	204.7
Hungary	12.6	16.8	13.4	13.4	101.6
Italy	8.6	12.5	7.7	8.9	142.3
Norway	25.1	39.7	31.0	27.5	227.8
Russia in Europe	5.9	13.6	9.0	8.3	79.0
United States	12.4	26.4	...	...	...

* See footnote (*) to table following paragraph 458 ante.

Yield of wheat in Foreign countries and Australasia.

462. It will be observed that the yield of wheat per acre was 35 bushels in Denmark, 32 bushels in Holland, $30\frac{1}{2}$ bushels in the United Kingdom, 25 bushels in Norway, 23 bushels in Belgium, 20 bushels in the Cape of Good Hope, 18 bushels in France and Germany, 17 bushels in Austria and British Columbia, 15 bushels in Ontario, 13 in Hungary, 12 in the United States and Manitoba, all of which were above the average of Australasia; but the wheat yields of Quebec, Italy, and European Russia were below the average of that group of colonies.

Yield of oats, barley, and potatoes in Foreign countries and Australasia.

463. According to the figures, the yield per acre of oats is higher in Australasia than in Manitoba, the Cape of Good Hope, Austria, Denmark, France, Germany, Hungary, Italy, European Russia, or the United States, but lower than in any other of the countries named. The yield of potatoes in Australasia is above that in any of the other countries named except Belgium, Holland, and Norway.

Wheat crop of the world.

464. The following table contains a statement of the wheat crop in various countries of the world in the three years ended with 1890. The figures for the first two years have been taken from a carefully prepared paper on "The World's Wheat Crop and Wheat Values," read by Mr. J. W. Rush before the National Association of British and Irish Millers at the convention held in Edinburgh, on the 30th July, 1890*, and those for 1890 from the Report of the Department of Agriculture, Washington, U.S., for April, 1891:—

WHEAT CROP OF THE WORLD, 1888 TO 1890
(000's OMITTED).

Countries.	Bushels.		
	1888.	1889.	1890.
EUROPE.			
Austria ...	49,584,	36,400,	49,835,
Hungary ...	137,664,	91,856,	160,186,
Belgium ...	16,000,	18,000,	18,927,
Bulgaria ...	36,000,	35,200,	35,200,†
Denmark ...	3,840,	5,000,	5,595,
France ...	275,344,	314,000,	328,328,
Germany ...	92,024,	85,000,	91,938,
Greece ...	10,000,	11,000,	11,991,
Holland ...	4,800,	6,000,	6,000,†
Italy ...	101,040,	100,640,	122,659,
Portugal ...	6,800,	8,000,	7,994,
Roumania ...	56,480,	43,496,	61,958,

* See *The Miller* (London Journal) of the 4th August, 1890, page 219.

† Figures for 1889 repeated.

WHEAT CROP OF THE WORLD, 1888 TO 1890
(000's OMITTED)—*continued.*

Countries.	Bushels.		
	1888.	1889.	1890.
<i>EUROPE—continued.</i>			
Russia (including Poland) ...	312,000,	190,000,	213,215,
Servia ...	8,600,	6,000,	9,973,
Spain ...	65,760,	73,600,	67,954,
Sweden...	3,696,	3,704,	4,231,
Norway ...	400,	400,	
Switzerland ...	2,000,	2,400,	2,397,
Turkey (Europe) ...	40,000,	36,000,	35,975,
United Kingdom...	74,488,	75,880,	75,862,
Total for Europe ...	1,296,520,	1,142,576,	1,310,218,
Algeria ...	21,960,	15,760,	21,984,
Argentine Republic ...	12,000,	24,000,	39,301,
Australasia*	26,200,	42,480,	32,840,
Asia Minor ...	36,000,	36,000,	35,975,
Canada ...	32,000,	30,000,	38,006,
Cape Colony ...	4,000,	4,400,	3,590,
Chile ...	12,000,	15,000,	17,987,
Egypt ...	8,000,	7,000,	7,994,
India ...	260,368,	237,144,	228,002,
Persia ...	22,400,	22,000,	21,984,
Syria ...	14,000,	12,000,	11,991,
United States ...	415,864,	490,560,	386,805,
Total out of Europe ...	864,792,	935,544,†	846,459,
Grand Total ...	2,161,312,	2,078,120,	2,156,677,

465. Supposing these figures to be correct, and the wheat to be worth four shillings per bushel, the total value of the world's wheat crop would be over four hundred and thirty-two millions sterling in 1888, nearly four hundred and sixteen millions sterling in 1889, and four hundred and thirty-one millions sterling in 1890. Value of world's wheat crop.

466. 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, as well as 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 a Government Experimental farm, Dookie.

* Corrected by Australasian final returns.

† This total is 800, less than the sum of the above figures.

Experimental Farm.* The following account of the present state of the farm has been furnished for this work by Mr. D. Martin, Secretary for Agriculture:—

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.

The total receipts for the year 1890 were £2,280 and the expenditure £2,662. Of the amount expended £286 was paid for additional plant, £861 for live stock, and £454 for labour. So far as possible, the provisions necessary for the students at the Agricultural College, and the staff thereof, were obtained from the farm.

Since the erection of the new dairy, and the use of the De Laval Cream Separator, there has been no trouble in obtaining a sufficient supply of good butter. The farm is now fairly equipped as regards implements and machinery.

During the year the rain-fall recorded was 28·33 inches.

40 acres of Lucerne are doing well.

40	„	Ensilage	... ..	yielded	280 tons.
84	„	Hay	... ..	„	90 tons.
50	„	Steinwedel wheat	... ..	„	14 bus. per acre.
18	„	Frampton	„	„	14 „ „
34	„	W. Essex	„	„	15 „ „
15	„	Ward's prolific	„	„	12 „ „
70	„	Farmers' friend	„	„	18 „ „

The other cultivation paddocks were too wet for sowing, and much of the crop was damaged by locusts.

Numerous experiments were conducted with varieties of wheat, barley and oats, peas, grasses, clovers, sorghums, etc.

Various manures were tested at their monetary value, as compared with stable manure; also various methods of putting a crop of wheat in and sowing at different depths, and quantity of seed per acre.

There are 25 acres under vines, and the vintage of this year gave 405 gallons wine per acre. Of the above there are 5 acres of various wine grapes, planted in 1880; 7 acres of various table grapes, planted in 1887; 5 acres of Gordo Blanco and Zante Currants, planted in 1888; and 8 acres of Red Hermitage, planted in 1889.

A variety of medicinal and other plants is also grown on the farm for educational purposes.

The valuation of the farm and its belongings at the end of 1890 was as follows:—

Farm and improvements	... ..	£20,991
Buildings	... ..	4,456
Horse stock	... ..	476
Cattle, Shorthorn	... ..	476
„ Hereford	... ..	380
„ Ayrshire	... ..	140
„ Common	... ..	479
Pigs	... ..	140
Sheep	... ..	972
Implements and machinery	... ..	1,657
Bees	... ..	35
Wine	... ..	203
Furniture, etc.	... ..	90
Dairy	... ..	150
		£30,645

The average cost of maintenance of 40 students per head per annum is £25 2s. 6d.

* For further particulars relating to the establishment and development of the farm, see *Victorian Year Book*, 1888-9, Vol. II., paragraph 448.

467. An Act for the establishment of Agricultural Colleges* was passed towards the close of 1884. The following particulars respecting this Act and its operations have been supplied by Mr. D. Martin, the Secretary for Agriculture :—

Agricultur
colleges.

This Act provides for the permanent reservation from sale of 150,000 acres of Crown lands by way of endowment of State Agricultural Colleges and Experimental Farms, which, together with other lands reserved as sites for such institutions prior to the passing of the Act, are to be vested in three trustees to be appointed by the Governor in Council. The Act also provides for the appointment of a Council of Agricultural Education, consisting of eleven members, three of whom are to be the trustees just mentioned, one to be the Secretary for Agriculture (who is to be the treasurer of the council), five to be elected annually by the governing bodies of Agricultural Societies in Victoria, and two to be appointed by the Governor in Council. The trustees, subject to regulations made by the Council of Agricultural Education, may lease lands for building purposes for periods not exceeding 33 years, and for other purposes for periods not exceeding 14 years, and upon a requisition of the same council may dedicate, as sites for Agricultural Colleges and Experimental Farms, any lands purchased by them or described in the Act. All moneys received by the council from the sale of stock or farm produce, or as fees from students at Agricultural Colleges and Experimental Farms, together with all other money coming to the council, are to form a fund to be called the Agricultural College Fund, which is to be expended in providing instruction for students, or in purchasing stock, seed, agricultural implements, and all other necessaries for the education of the students and the proper working of the Experimental Farms, etc. The council, subject to Ministerial approval, have the appointment of professors, teachers, officers, and servants for the Colleges and Experimental Farms. Most of the proceedings of the trustees and of the council have to be approved by the Governor in Council before coming into effect. The Act was amended in 1885, so as to provide for five members being elected by members of Agricultural Societies in lieu of by the governing bodies of such societies; also for the elections to be held once in every three years, instead of being held annually.

Of the land intended as endowment, 137,537 acres have been reserved and vested in the trustees, and 125,226 acres of the land so vested have been leased for agricultural and grazing purposes. The total of the annual rents payable amount to £6,312. The areas reserved under section 4 of Act No. 825, as sites for Colleges and Experimental Farms, amounted to 13,393 acres.

DOOKIE AGRICULTURAL COLLEGE.

The first school was erected on the Dookie Experimental Farm Reserve. The buildings comprise lecture hall, dining hall, class rooms, teachers' quarters, sleeping accommodation for forty pupils, baths, out offices, etc. The school was opened on the 1st October, 1886. The full number of pupils for which there is accommodation is forty.

The course of instruction comprises chemistry, botany, entomology, geology, advanced English, arithmetic, mensuration, surveying, book-keeping, practical work on the farm, instruction in field operations, the use of farm implements and machinery, and the management of live stock.

No fee is charged for instruction, but a payment of £25 per annum has to be made for each pupil to cover the cost of maintenance.

LONGERENONG AGRICULTURAL COLLEGE.

The Longereng Agricultural College was established in March, 1889, upon the Longereng Experimental Farm Reserve, 7½ miles north-east of Horsham. The reserve comprises 2,386 acres of good agricultural land, and the farm fairly represents, in regard to both soil and climate, the Wimmera district and the north-western division of the colony. The college is a handsome building, providing

* The *Agricultural Colleges Act* 1884 (48 Vict. No. 825). This and subsequent amending Acts were consolidated by 54 Vict. No. 1062.

accommodation for 35 students, and additions are now in progress which will provide for a total of 40 students. The additions will make a large room available for a library, and a suitable building is also being erected for a chemical laboratory. The course of instruction is the same as at the Dookie Agricultural College, and the teaching staff consists of the principal, who lectures upon agriculture, a science master and an English master, while upon the farm students receive practical instruction from the farm foreman, the gardener, the ploughman, the stockman, and the mechanic.

Upon the farm 250 acres are under cultivation, and the stock consists of heavy and light draught horses, shorthorn and Hereford cattle, crossbred dairy cows, merino and crossbred sheep, Berkshire pigs, and poultry of various kinds. The crops are wheat, oats, barley, rye, rape, lucerne; and the making of ensilage receives special attention, a large brick silo having been provided. In addition to the ordinary farm crops there are 15 acres devoted to the carrying out of various experiments. There are 24 varieties of wheat being tried on the experimental plots, and tests are being made of various methods of sowing and cultivating, in addition to testing the efficacy of different manures. An area of 25 acres has been successfully planted with vines, fruit trees, forest trees, and ornamental shrubs. The plantations of forest trees are being extended every season, while the vine planting has been completed for the present by adding to the previously established vineyard of table and raisin grapes 5 acres of wine grapes, so as to gain experimental knowledge concerning the suitability of the north-western district for the various branches of the viticultural industry.

The dairy, which has been especially built to serve the requirements of a warm climate, is furnished with a De Laval cream separator, Lawrence cooler, and butter workers, and the management of the dairy is entirely in the hands of the advanced students.

The water supply of the farm is provided for by two large dams and two excavated tanks. A branch channel of the Doon pumping scheme runs through several of the paddocks, so that in case of drought the tanks and dams could be filled from this source. It has also been arranged that irrigation shall be carried out upon a fairly extensive scale whenever a supply of water for that purpose is provided by the district Irrigation Trust.

The rainfall for 1890 was 18.85 inches, but the season was an exceptionally wet one, the average being about 16 inches.

468. The following table shows, for 1840 and each subsequent year, the quantity of wheat grown in Victoria, and the quantity of wheat, flour, and biscuit imported after deducting exports, or exported after deducting imports; also the residue of breadstuffs left for consumption during each of those years:—

BREADSTUFFS AVAILABLE FOR CONSUMPTION, 1840 TO 1890.

Year.	Wheat grown in Victoria.	Wheat, Flour, and Biscuit.*		
		Imported after deducting Exports.	Exported after deducting Imports.	Available for Consumption.
	Bushels.	Bushels.	Bushels.	Bushels.
1840	12,600	57,771	...	70,371
1841	50,420	116,350	...	166,770
1842	47,840	119,004	...	166,844
1843	55,360	58,616	...	113,976
1844	104,040	98,581	...	202,621
1845	138,436	74,699	...	213,135

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles.

Breadstuffs
available
for con-
sumption.

BREADSTUFFS AVAILABLE FOR CONSUMPTION, 1840 TO 1890

—continued.

Year.	Wheat grown in Victoria	Wheat, Flour, and Biscuit.*		
		Imported after deducting Exports.	Exported after deducting Imports.	Available for Consumption.
	Bushels.	Bushels.	Bushels.	Bushels.
1846	234,734	43,928	...	278,662
1847	345,946	36,871	...	382,817
1848	349,730	64,726	...	414,456
1849	410,220	76,092	...	486,312
1850	525,190	55,564	...	580,754
1851	556,167	216,811	...	772,978
1852	733,321	1,208,006	...	1,941,327
1853	498,704	1,499,994	...	1,998,698
1854	154,202	1,385,465	...	1,539,667
1855	250,091	1,985,496	...	2,235,587
1856	1,148,011	2,236,406	...	3,384,417
1857	1,858,756	1,958,905	...	3,817,661
1858	1,808,439	1,504,760	...	3,313,199
1859	1,563,113	1,957,610	...	3,520,723
1860	2,296,157	1,565,423	...	3,861,580
1861	3,459,914	1,522,517	...	4,982,431
1862	3,607,727	183,106	...	3,790,833
1863	3,008,487	191,107	...	3,199,594
1864	1,338,762	1,868,990	...	3,207,752
1865	1,899,378	1,800,932	...	3,700,310
1866	3,514,227	1,754,699	...	5,268,926
1867	4,641,205	15,190	...	4,656,395
1868	3,411,663	162,038	...	3,573,701
1869	4,229,228	719,589	...	4,948,817
1870	5,697,056	...	95,654	5,601,402
1871	2,870,409	1,179,583	...	4,049,992
1872	4,500,795	389,963	...	4,890,758
1873	5,391,104	...	138,088	5,253,016
1874	4,752,289	...	40,714	4,711,575
1875	4,850,165	200,369	...	5,050,534
1876	4,978,914	258,931	...	5,237,845
1877	5,279,730	...	384,118	4,895,612
1878	7,018,257	...	1,005,968	6,012,289
1879	6,060,737	...	957,384	5,103,353
1880	9,398,858	...	3,578,733	5,820,125
1881	9,727,369	...	3,892,974	5,834,395
1882	8,714,377	...	3,321,532	5,392,845
1883	8,751,454	...	2,376,530	6,374,924
1884	15,570,245	...	8,232,605	7,337,640
1885	10,433,146	...	3,745,985	6,687,161
1886	9,170,538	...	2,226,907	6,943,631
1887	12,100,036	...	3,897,987	8,202,049
1888	13,328,765	...	4,373,959	8,954,806
1889	8,647,709	...	1,357,334	7,290,375
1890	11,495,720	...	2,185,644	9,310,076

NOTE.—In 1890 the imports of breadstuffs amounted to 192,958 bushels, valued at £35,345, but the exports of breadstuffs amounted to 2,378,602 bushels, valued at £507,482. The balance in favour of exports was, therefore, 2,185,644 bushels, valued at £472,137.

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles.

Population
and bread-
stuffs.

469. It will be observed that in the last fourteen years and three previous ones, viz., 1870, 1873, and 1874, the colony has raised enough breadstuffs for the consumption of its own inhabitants. In each of these seventeen years there was a surplus of Victorian-grown wheat remaining for export, the quantity in 1884, however, being more than twice as large as that in any of the other years, except 1888; whilst, owing to the drought, the quantity in 1889 was much less than in any other year since 1879. The following table shows, for each year, the mean population of Victoria, the quantity of breadstuffs available for consumption, and the probable manner of consumption, distinguishing the estimated quantity of wheat used for seed, or for the feeding of live stock, poultry, etc., from the wheat, flour, and biscuit used for food, the total quantity of the latter being shown as well as the quantity per head:—

POPULATION AND BREADSTUFFS, 1840 TO 1890.

Year.	Mean Population.	Wheat, Flour, and Biscuit.*			
		Quantity Available for Con- sumption.	Probable Manner of Consumption.		
			For Seed, etc.	For Food.†	
			Total.	Per Head.	
1840	8,056	Bushels. 70,371	Bushels. 3,880	Bushels. 66,491	Bushels. 8·25
1841	15,353	166,770	3,404	163,366	10·64
1842	22,107	166,844	4,864	161,980	7·33
1843	23,951	113,976	9,348	104,628	4·37
1844	25,418	202,621	13,839	188,782	7·43
1845	29,007	213,135	22,933	190,202	6·56
1846	34,807	278,662	31,604	247,058	7·10
1847	40,635	382,817	35,359	347,458	8·55
1848	47,163	414,456	38,775	375,681	7·97
1849	58,805	486,312	48,494	437,818	7·45
1850	71,191	580,754	57,020	523,734	7·36
1851	86,825	772,978	59,247	713,731	8·22
1852	132,905	1,941,327	33,646	1,907,681	14·35
1853	195,378	1,998,698	15,107	1,983,591	10·15
1854	267,371	1,539,667	25,654	1,514,013	5·66
1855	338,315	2,235,587	85,372	2,150,215	6·36
1856	380,942	3,384,417	160,310	3,224,107	8·46
1857	430,347	3,817,661	174,460	3,643,201	8·47
1858	483,827	3,313,199	156,468	3,156,731	6·52
1859	517,390	3,520,723	214,185	3,306,538	6·39
1860	534,055	3,861,580	322,503	3,539,077	6·62
1861	539,824	4,982,431	393,844	4,588,587	8·50
1862	548,080	3,790,833	324,018	3,466,815	6·33
1863	562,960	3,199,594	298,784	2,900,810	5·15

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles.

† Including stocks in store or retained by the farmers.

POPULATION AND BREADSTUFFS, 1840 TO 1890—*continued.*

Year.	Mean Population.	Wheat, Flour, and Biscuit.*				
		Quantity Available for Consumption.	Probable Manner of Consumption.			
			For Seed. etc.	For Food.†		
			Total.	Per Head.		
		Bushels.	Bushels.	Bushels.	Bushels.	
1864	...	586,450	3,207,752	250,080	2,957,672	5·04
1865	...	611,218	3,700,310	357,256	3,343,054	5·47
1866	...	629,038	5,268,926	417,176	4,851,750	7·71
1867	...	644,276	4,656,395	433,978	4,222,417	6·55
1868	...	663,092	3,573,701	519,608	3,054,093	4·61
1869	...	687,202	4,948,817	577,028	4,371,789	6·36
1870	...	713,195	5,601,402	568,334	5,033,068	7·06
1871	...	737,005	4,049,992	669,218	3,380,774	4·59
1872	...	753,198	4,890,758	653,128	4,237,630	5·63
1873	...	765,511	5,253,016	699,952	4,553,064	5·95
1874	...	777,656	4,711,575	665,872	4,045,703	5·20
1875	...	787,337	5,050,534	642,802	4,407,732	5·60
1876	...	796,558	5,237,845	802,834	4,435,011	5·57
1877	...	808,605	4,895,612	1,129,128	3,766,484	4·66
1878	...	821,466	6,012,289	1,383,244	4,629,045	5·64
1879	...	834,030	5,103,353	1,414,376	3,688,977	4·42
1880	...	850,343	5,820,125	1,954,570	3,865,555	4·55
1881	...	868,942	5,834,395	1,853,458	3,980,937	4·58
1882	...	889,720	5,392,845	1,938,724	3,454,121	3·88
1883	...	910,130	6,374,924	2,208,784	4,166,140	4·58
1884	...	932,630	7,337,640	2,192,708	5,144,932	5·52
1885	...	956,880	6,687,161	2,040,164	4,646,997	4·86
1886	...	984,860	6,943,631	2,105,370	4,838,261	4·91
1887	...	1,016,750	8,202,049	2,465,886	5,736,163	5·64
1888	...	1,054,980	8,954,806	2,434,382	6,520,424	6·18
1889	...	1,090,350	7,290,375	2,357,470	4,932,905	4·52
1890	...	1,118,500	9,310,076	2,290,326	7,019,750	6·28

470. The estimated average quantity of breadstuffs available for food to each individual of the population is shown in the last column of the table. This will be found to vary in different years, ranging from over 14 bushels in 1852, between 10 and 11 bushels in 1841 and 1853, to between 4 and 5 bushels in 1843, 1868, 1871, 1877, and in seven of the twelve years since 1878; but in only one year, viz., 1882, to less than 4 bushels per head. The proportion per head reached $5\frac{1}{2}$ bushels in 1884, which was the year of an exceedingly bountiful harvest, and to as high as $5\frac{2}{3}$, $6\frac{1}{6}$, and $6\frac{1}{4}$ bushels in 1887, 1888, and 1890 respectively, the low price of wheat in England having, probably, acted as a check upon exportations in those years; whereas in 1889 it fell, owing to the drought, to $4\frac{1}{2}$ bushels.

Consumption of breadstuffs per head.

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles.

† Including stocks in store or retained by the farmers.

Average consumption of breadstuffs.

471. The quantity of breadstuffs available for annual food-consumption per head has averaged $5\frac{2}{3}$ bushels over the whole period of fifty-one years, but during the ten years ended with 1890 it averaged about 5 bushels, or two-thirds of a bushel less. In the present state of the Victorian population, it may be fair to assume that from $4\frac{1}{2}$ bushels to 5 bushels per head, irrespective of the quantity required for seed, is amply sufficient to supply the wants of any given year.

Breadstuffs available for consumption in United Kingdom.

472. In the United Kingdom, animal food, in consequence of its high price, is used much more sparingly than it is in this country, especially by the working classes, and therefore, as a natural consequence, the consumption of breadstuffs in proportion to the numbers of the population is, on the average, somewhat higher than it is here. The following table shows the estimated mean population of the United Kingdom during each of the twenty-two harvest years (or periods extending from 1st September to the 31st August) ended with 1887-8; also the total number of bushels, and number of bushels per head, of grown and imported wheat available for consumption, after deducting seed, in each of the same years:—

BREADSTUFFS AVAILABLE FOR CONSUMPTION IN THE UNITED KINGDOM, 1867 TO 1888.

Year ended 31st August.	Mean Population.	Bushels of Wheat* available for Food.	
		Total number (000's omitted).	Number per Head.
1867	30,248,936	152,320,	5.03
1868	30,523,478	155,200,	5.08
1869	30,814,914	189,360,	6.14
1870	31,108,133	176,560,	5.68
1871	31,410,776	176,400,	5.61
1872	31,728,316	170,320,	5.37
1873	32,028,317	174,640,	5.45
1874	32,325,778	174,240,	5.39
1875	32,641,568	202,720,	6.21
1876	32,978,682	184,512,	5.59
1877	33,329,099	174,568,	5.24
1878	33,681,904	191,480,	5.68
1879	34,036,546	209,936,	6.17
1880	34,364,077	179,120,	5.21
1881	34,775,970	201,992,	5.81
1882	35,410,040	210,592,	5.95
1883	35,517,510	241,568,	6.80
1884	35,838,516	191,520,	5.37
1885	36,179,000	208,000,	5.75
1886	36,519,700	206,887,	5.67
1887	36,900,486	204,000,	5.53
1888	37,453,574	206,000,	5.50

* The total number of bushels of wheat available for consumption has been taken from articles in the Supplement to the *Statist* (London journal). The calculations have been made in the office of the Government Statist, Melbourne.

473. As a result of calculations derived from the figures in the table, it appears that in the twenty-two years named the average quantity of wheat available for consumption in the United Kingdom was 5·65 bushels per head, or nearly a bushel per head more than is apparently found sufficient for the requirements of the Victorian population.

Average consumption of wheat in United Kingdom.

474. According to the Government Statistician of New South Wales,* the consumption of wheat per head is considerably greater in that colony than in Victoria, and even greater than in the United Kingdom, the quantity consumed per head being in 1887 as much as 8·1 bushels; in 1888, 7·8; in 1889, only 5·6; and in 1890, 7·2 bushels; the average quantity in the five years ended with 1890 being 7·0 bushels. According to the same authority, New South Wales has never grown nearly enough wheat for her own consumption, the quantity imported in 1890, after deducting the exports, being about 1,867,381 bushels, whilst 6,570,335 bushels were grown in the colony. It should be noted, however, that the latter quantity was larger than usual; in the previous five years the average quantity grown was little over $3\frac{3}{4}$ million bushels.

Consumption of wheat in New South Wales.

475. From somewhat similar calculations taken from the official returns of the United States, the estimated consumption of wheat per head of the population of that country averaged, during the five years ended with 1887-8, 5·48 Winchester bushels,† or about 5·31 Imperial bushels. As no deduction appears to have been made for the wheat required for seed in the United States returns, the quantity available for food consumption is considerably less than that shown by the figures, and is probably about the same as in Victoria.

Consumption of breadstuffs per head in United States.

476. The quantity and declared value of the Victorian imports and exports of breadstuffs during the fifty-four years, 1837 to 1890, are set down in the following table:—

Imports and exports of breadstuffs, 1837 to 1890.

IMPORTS AND EXPORTS OF BREADSTUFFS,‡ 1837 TO 1890.

Wheat, Flour, and Biscuit.	Quantity.	Value.
	Bushels.	£
Imported, 1837 to 1890	33,852,650	14,078,609
Exported, " " " "	48,852,228	11,863,312
Imports in excess of exports ... ..	...	2,215,297
Exports in excess of imports	14,999,578	...

* See *Statistical Register of New South Wales* for 1890, Part VI. Agriculture, Minerals, Manufactories, and Works: Chapman, Sydney, 1891.

† The Winchester bushel is smaller than the Imperial bushel by one thirty-second ($\frac{1}{32}$) part.

‡ The quantity and value of breadstuffs imported and exported during each year will be found in the *Statistical Summary of Victoria* (first folding sheet), *ante*.

Excess of quantity exported, of value imported.

477. It will be observed that the quantity of breadstuffs exported from the colony from the period of its first settlement to the end of 1890 exceeded that imported during the same period by 15 million bushels; but, in consequence of the prices of wheat and flour during the earlier years, in which the imports invariably exceeded the exports, being much higher than in the later years, in which the exports exceeded the imports, the declared value of the breadstuffs received has exceeded that of those sent away by over $2\frac{1}{5}$ millions sterling.

Breadstuffs imported into and exported from Australasian colonies, 1890.

478. The net export of breadstuffs from the Australasian Colonies, in 1890, amounted to nearly 14 million bushels, the principal wheat exporting colonies being South Australia, New Zealand, and Victoria, in the order named. The following were the imports and exports of breadstuffs by each colony during the year:—

BREADSTUFFS IMPORTED AND EXPORTED IN AUSTRALASIAN COLONIES, 1890.

Colony.	Wheat, Flour, and Biscuit.*		Excess of—	
	Imported.	Exported.	Exports over Imports.	Imports over Exports.
	Bushels.	Bushels.	Bushels.	Bushels.
Victoria	192,956	2,378,601	2,185,645	...
New South Wales	2,809,864	1,249,499	...	1,560,365
Queensland	2,158,090	4,744	...	2,153,346
South Australia	917	10,739,743	10,738,826	...
Western Australia	130,217	...	...	130,217
Total	5,292,044	14,372,587	9,080,543	...
Tasmania	241,069	8,498	...	232,571
New Zealand	624	4,968,963	4,968,339	...
Grand Total	5,533,737	19,350,048	13,816,311	...

Net imports of agricultural products.

479. The following are the values of the net imports—*i.e.*, the values of imports after the values of the exports have been deducted—of certain vegetable productions during each of the six years ended with 1890. All the articles named are capable of being produced, and all, or nearly all, are to a certain extent now produced, in the colony:—

* The quantities have been reduced in all cases to their equivalent in bushels of wheat.

NET IMPORTS* OF CERTAIN ARTICLES OF AGRICULTURAL
PRODUCE, 1885 TO 1890.

Articles.	Balance of Imports over Exports in—					
	1885.	1886.	1887.	1888.	1889.	1890.
	£	£	£	£	£	£
Oats	86,474	69,669	126,990	147,989	296,207	54,862
Barley and pearl barley	15,359	4,183	44,564	29,148	95,357	...
Malt ... ..	...	9,903	2,056	7,565	...	1,927
Maize	13,853	18,956	1,500	10,118	38,961	815
Maizena and corn flour	5,289	13,642	7,498	8,801	7,908	22,260
Beans, peas, and split peas	...	1,667	1,843	415	2,987	...
Arrowroot	2,790	558	1,105	1,872	1,455	1,587
Macaroni and vermi- celli	2,441	2,066	686	2,271	2,295	1,428
Starch	8,544	14,517	3,569	6,070	9,372	1,439
Fruit—fresh, bottled, dried, currants, and raisins	152,967	146,678	226,888	212,868	234,800	295,750
Jams, jellies, and pre- serves	...	...	3,068	...	3,964	3,912
Nuts, almonds, walnuts	9,429	7,033	6,076	8,973	10,071	4,381
Peanuts	474	689	2,129	1,615	1,439	1,816
Ginger	3,845	3,322	2,286	3,064	1,552	1,009
Opium	28,728	32,713	29,955	33,493	38,886	33,998
Hops	6,185	13,500	28,579	18,557	38,856	14
Chicory	2,269	...	...	...	...	186
Pickles	5,570	9,386	7,620	7,005	7,853	10,285
Mustard	9,789	17,920	13,872	16,160	19,261	14,539
Oil, olive and salad ...	18,496	15,204	8,953	18,642	13,557	12,074
„ linseed	31,484	31,404	31,144	38,040	47,581	23,825
„ castor... ..	10,797	31,700	34,485	24,445	35,766	46,178
Linseed meal	446	...	459	602	...	...
Tobacco, cigars, and snuff	116,212	179,955	128,618	233,221	258,191	227,451
Flax (Phormium) ...	8,312	5,215	3,595	8,752	7,314	11,233
Hemp	29,927	17,994	33,098	43,636	49,793	53,198
Jute	3,449	1,126	...	2,636	1,165	1,640
Broom corn and millet	6,959	7,447	4,632	4,932	7,469	4,376
Bark	20,905	2,287	2,955	...	...	...
Cork	13,867	19,811	1,403	935	758	884
Vegetables (preserved)	427	897	...	1,063	269	1,609
Canary seed	2,008	1,314	1,571	2,181	1,817	1,924
Grass and clover seed	14,667	11,333	13,390	10,901	16,538	16,993
Seeds, undescribed ...	...	11,310	15,402	8,831	10,928	6,010
Tares	109	31	81	267	185	372
Total ...	632,071	703,430	790,070	915,068	1,262,555	857,975

480. It will be observed that barley and beans and peas are absent from the list for the last year; also that linseed meal is absent from the list in the last two years, and bark in the last three years.

Decreased imports of agricultural products.

* The total imports and total exports of these articles during 1890 will be found in the first table in Part VI. "Interchange," ante, under Orders 14, 22, 23, 25, and 26.

Net import
of eggs.

481. In addition to the articles named in the above table, eggs, of which it might reasonably be supposed that Victoria would produce sufficient for her own consumption, were imported in 1890 to the number of 10,140,000, and to the value of £34,403; and exported to the number of only 88,146, and the value of only £235, the difference in favour of the former being 10,051,854 in number, and £34,168 in value. The value of the imports of eggs in 1889 exceeded that of the exports by £39,907, in 1888 by £34,745, in 1887 by £30,498, in 1886 by £15,020, and in 1885 by £10,200.

Proportion
of land
under each
crop.

482. Of every thousand acres cultivated during the past season, 432 acres were placed under wheat, 83 under oats, 33 under barley, 20 under potatoes, 156 under hay, and 276 (including 145 in fallow) under other tillage. The following table shows the proportion that the land under different crops has borne to the total area under tillage during each of the last eleven years:—

PROPORTION OF LAND UNDER EACH CROP TO TOTAL UNDER
CULTIVATION, 1881 TO 1891.

Year ended March.	Proportion to the Total Land under Tillage of that under—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Tillage.*
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1881	48·97	6·72	3·43	2·25	12·51	26·12
1882	50·87	8·07	2·67	2·15	11·65	24·59
1883	47·50	8·32	2·14	1·68	15·16	25·20
1884	49·84	8·49	2·11	1·81	13·67	24·08
1885	47·19	8·08	2·68	1·66	14·62	25·77
1886	42·41	8·98	3·08	1·77	17·51	26·25
1887	43·49	7·67	1·53	2·07	18·39	26·85
1888	47·86	7·72	1·59	1·87	17·15	23·81
1889	47·46	7·70	3·26	1·68	16·04	23·86
1890	44·87	9·00	3·45	1·79	17·19	23·70
1891	43·17	8·33	3·31	2·03	15·57	27·59

Minor crops.

483. In addition to the principal crops of which mention has been made, various descriptions of minor crops are also raised. It is not, however, presumed that the whole of such crops, or the full measure to which they are grown, is recorded by the collectors. It is certain that they are often raised in gardens, in which case the different kinds would not be distinguished in the returns. It is also probable that they may be sometimes grown upon allotments of one acre in extent, or even less, which are not taken account of. The following list must, therefore, be looked upon as indicating the nature of certain

* Including land in fallow, the proportion in 1891 being 14·54.

minor crops grown in Victoria rather than the extent to which those crops have been cultivated during the last six years :—

MINOR CROPS,* 1886 TO 1891.

Nature of Crop.		1885-6.	1886-7.	1887-8.	1888-9.	1889-90.	1890-91.
Amber cane	acres	...	...	12	34	3	2
	cane, tons	...	...	90	104	...	...
	seed, lbs.	...	...	280	120	750	300
Arrowroot	acres	3	...	...	...	...	...
	tons (root)	41	...	...	...	...	...
Artichokes	acres	...	...	3	...	...	3
	tons	...	...	55	...	...	5
Beet, carrots, parsnips	acres	386	467	485	269	396	315
	tons	4,300	4,411	4,672	2,250	4,111	4,057
Broom-millet	acres	3	...	5	12	7	3
	fibre, cwt.	5	...	72	72	41	100
	seed, bush.	20	...	28	384	64	...
Buckwheat	acres	3	...	...	...	2	3
	bushels	30	...	...	...	40	75
Canary seed	acres	...	9	...	...	...	3
	bushels	...	124	...	...	...	60
Cauliflowers and cabbages	acres	27	114	164	133	27	25
	dozens	18,500	27,360	68,345	62,830	11,800	14,928
Chicory	acres	216	204	249	148	229	258
	tons	1,239	1,472	1,375	811	1,376	1,859
Durrah	acres	...	2	...	...	...	...
Flax	acres	7	...	1	3	138	63
	fibre, cwt.	9	...	5	...	3,550	307
	linseed, bush.	18	...	7	5	507	640
French beans	acres	...	...	2	2	7	...
	tons	...	...	3	4	4	...
Garden seeds	acres	7	43	83	46	...	...
	cwt.	14	215	196	66	...	...
Gooseberries	acres	3	2	4	4	14	1
	cwt.	28	23	140	135	130	9
Grass and clover seeds	acres	2,942	4,667	4,638	1,541	3,390	2,587
	bushels	39,793	61,490	61,177	17,444	54,547	36,415
Green peas	acres	92	80	152	85	11	150
	tons	141	98	234	117	7	167
Hops	acres	896	730	685	761	829	789
	lbs.	616,112	562,576	605,360	618,128	639,632	888,272
Kail (thousand headed)	acres	...	...	...	...	9	6
	tons	...	...	...	...	225	210
Maize	acres	4,530	4,901	6,031	5,789	8,447	10,357
	bushels	181,240	231,447	318,551	267,155	357,047	574,083
Mangel-wurzel	acres	1,346	1,257	1,191	897	984	892
	tons	24,129	19,142	20,590	13,974	15,604	14,676
Medicinal herbs	acres	...	3	...	...	3	5
Melons, vegetable marrows, cucumbers, etc.†	acres	...	...	...	10	6	18
	dozens	...	...	...	3,040	560	1,871
Mulberry trees	acres	4	1	1	1	1	1
	number	...	...	1,000	1,000	1,000	1,000

* Exclusive of those grown in gardens.

† Previous to the year 1889, pumpkins, melons, vegetable marrows, and cucumbers were shown in one line.

MINOR CROPS,* 1886 TO 1891—continued.

Nature of Crop.		1885-6.	1886-7.	1887-8.	1888-9.	1889-90.	1890-91.
Mustard	{ acres ...	7	20	16	34	28	8
	{ cwt. ...	15	100	80	112	105	7
Olives	{ acres ...	14	1	18	17	17	15
Onions	{ acres ...	1,740	1,996	2,437	1,768	1,957	2,238
	{ tons ...	10,209	11,625	11,774	4,430	10,815	13,961
Opium poppies	{ acres ...	16	11	11	8	10	14
	{ lbs. of opium	200	139	178	86	169	242
Oranges and lemons†	{ acres ...	6	2	34	7	33	67
	{ cases ...	...	...	...	...	270	801
Osiers	{ acres ...	5	8	...	6	5	3
	{ tons ...	...	5	...	11	13	8
Peas and beans	{ acres ...	35,460	28,672	26,692	31,222	22,784	25,992
	{ bushels ...	761,351	583,269	732,060	361,724	528,074	739,310
Pumpkins‡	{ acres ...	153	69	107	158	252	196
	{ tons ...	1,447	536	850	959	1,251	1,273
Pyrethrum cineraria folium	{ acres ...	...	...	...	...	6	6
	{ cwt. ...	...	...	...	...	12	12
Rape for seed	{ acres ...	...	44	70	42	1	...
	{ bushels ...	...	...	940	597	14	...
Raspberries	{ acres ...	271	239	218	224	179	230
	{ cwt. ...	6,470	4,499	5,384	5,249	3,337	5,010
Red currants	{ acres ...	...	...	...	...	9	...
	{ cwt. ...	...	...	...	...	30	...
Rhubarb	{ acres ...	11	20	10	22	3	7
	{ tons ...	31	169	85	132	20	81
Rumax	{ acres ...	...	...	...	...	8	3
Rye	{ acres ...	654	762	1,069	1,109	1,089	948
	{ bushels ...	8,278	11,286	14,900	10,744	16,707	17,583
Seeds (agricultural & garden)	{ acres ...	...	...	...	...	71	82
	{ cwt. ...	...	...	...	...	252	548
Strawberries	{ acres ...	55	35	68	66	40	117
	{ cwt. ...	941	243	616	613	267	1,085
Sunflowers for seed	{ acres ...	...	6	8	...	...	6
	{ bushels ...	...	140	128	...	...	105
Teazles	{ acres ...	...	...	...	...	...	...
Tobacco	{ acres ...	1,866	2,031	1,966	1,685	955	618
	{ cwt. ...	13,734	12,008	11,853	13,355	4,123	326
Tomatoes	{ acres ...	34	26	45	42	28	43
	{ cwt. ...	4,800	2,280	6,914	3,240	960	3,370
Turnips	{ acres ...	253	443	303	379	424	393
	{ tons ...	2,179	2,767	4,102	4,560	4,984	4,499
Vetches and tares for seed	{ acres ...	1	...	1	3	11	3
	{ bushels ...	40	...	20	45	116	60
Vines	{ acres ...	9,775	10,310	11,195	12,886	15,662	20,686
	{ wine, galls. ...	1,003,827	986,041	1,167,874	1,209,442	1,578,590	2,008,493
Walnuts	{ brandy, ,, ...	3,875	3,233	3,352	2,994	5,285	5,934
	{ acres ...	...	...	4	2	7	8

* Exclusive of those grown in gardens.

† It is estimated there are over 100 acres planted with oranges and lemons, but such plantations are seldom distinguished separately, being included under orchards.

‡ Previous to the year 1889, pumpkins, melons, vegetable marrows, and cucumbers were shown in one line.

484. In 1890-91, as compared with the previous year, an increase will be observed in the area under crop, and in the produce, of chicory, maize, melons and cucumbers, onions, pease and beans, tomatoes and vines, but a falling-off of both area and produce of beet, carrots and parsnips, mangel-wurzel and turnips. In the case of the following crops there was a falling-off in the area under crop, but an increase in the yield:—Cauliflowers and cabbages, hops, pumpkins, and rye. The other minor crops named in the table are not of much account at present, and the figures fluctuate from year to year.

Increase or
decrease of
minor
crops.

485. Hops but little inferior to Kentish are grown in Victoria, and the comparative failure for several successive seasons of this crop in the United Kingdom gave a considerable stimulus to that industry, commencing about 1882-3. The maximum was reached in the following year, when 1,760,000 lbs. were produced, but in 1884-5 there was a slight, and in 1885-6 a further considerable decline, both in the area under hops and the quality produced; a gradual improvement, however, has taken place since 1887-8, and although in the year under notice, the area under crop was slightly less than in the previous year, the yield was larger not only than in that, but than in any other year since 1884-5.

Hops.

486. Raspberries as a field crop are extensively grown in the more elevated parts of the colony, especially about the ranges in which the River Yarra and its tributaries have their source. The quantity returned as raised in 1890-91 was 5,010 cwt., or about 1,673 cwt. more than in 1889-90, but less than in any of the previous four years, with the exception of 1886-7. Since the establishment of jam factories, the fruit is in great demand, and much more would be purchased were it forthcoming.

Raspberries.

487. At a very early period of the colony's history, it was the custom of the pastoral occupiers of the soil to cultivate tobacco in small quantities for the purpose of making a decoction wherein to dip their sheep for the cure of the disease called "scab." That complaint has ceased to exist amongst the Victorian flocks; but of late years tobacco has been grown for the purpose of manufacture into an article suitable for the use of man. The tobacco industry, however, appears to be on the decline, as only 618 acres were returned as under it in the year under notice as against 955 acres in the previous year. The crop, moreover, was a comparative failure, only 326 cwt. having been obtained. It was stated that 505 acres under this crop produced nothing.

Tobacco.

Tobacco
crop in
various
countries.

488. In 1888, the tobacco crop of the United States is estimated to have amounted to 5 million cwt., which, with the exception of the crop of 1885, which slightly exceeded it, is the largest tobacco crop ever raised in that country. The average crop during the five years ended with 1887 was 4,418,862 cwt., which figures, together with the figures for several European countries and for Australasia during the latest year for which information is obtainable, were as follow:—

TOBACCO CROP IN VARIOUS COUNTRIES.

	cwt.		cwt.
United States (1883-7) ...	4,418,862	Italy ...	120,748
Austria-Hungary ...	1,277,218	Holland (1884) ...	58,583
Russia (1884) ...	1,500,000	Australasia (1889-90) ...	*34,480
Germany ...	758,373	Turkey ...	70,000
France... ..	421,731		

Consump-
tion of
tobacco
in various
countries.

489. The annual consumption of tobacco in Victoria ranges from 2·61 lbs. to 3·55 lbs. per head of the population, the average during a series of years being nearly three (2·93) lbs.† This is a larger average than that obtaining in fourteen of the following countries, the information respecting which, except that relating to the Australasian colonies, has been derived from a paper read by Dr. O. J. Broch before the Statistical Society of Paris, on the 15th June, 1887, and since supplemented by some figures given by M. Paul Leroy-Beaulieu.‡ Attention is called to the very high average consumption of tobacco in Holland and the United States of America:—

AVERAGE ANNUAL CONSUMPTION OF TOBACCO PER HEAD IN VARIOUS COUNTRIES.

	lbs.		lbs.
Holland	6·92	Denmark	2·24
United States	4·40	Canada	2·11
New South Wales	3·53	France	2·05
Queensland	3·49	Sweden	1·87
Western Australia	3·26	Tasmania	1·85
Switzerland	3·24	Russia	1·82
Belgium	3·15	New Zealand	1·75
Germany	3·00	United Kingdom	1·38
Victoria	2·93	South Australia	1·32
Austria-Hungary	2·73	Italy	1·28
Finland	2·73	Spain	1·10
Norway	2·29		

* In the previous year the yield was 70,486 cwt.

† In 1887, the proportion was 2·61 lbs., in 1888, 3·31 lbs., and in 1889, 3·55 lbs. per head.

‡ See *Journal de la Société de Statistique de Paris*, vingt-huitième année, page 237; Berger-Levrault, Paris, 1887. The consumption is there given in kilogrammes, which have been turned into lbs., on the assumption that 1 of the former is equal to 2·204 of the latter.

490. Beet for the manufacture of sugar has been as yet only grown in Victoria experimentally, and upon a small scale; but ordinary beet, mangolds, and root crops generally, which have for years past been cultivated to a considerable extent, succeed so well that there is every reason to believe sugar beet could be grown to advantage, did not the low price of sugar, consequent upon the heavy subsidies by which the industry is fostered in several European countries, prevent sugar-making from being carried on at a profit. The following statement, however, of the quantity of beet sugar made annually during the five years 1886 to 1890 in the different European countries in which that product is manufactured may be useful and interesting at the present time:—

Beet sugar
in European
countries.

**BEET-ROOT SUGAR PRODUCED IN VARIOUS EUROPEAN COUNTRIES,
1886 TO 1890.***

Countries.	1885-6.	1886-7.	1887-8.	1888-9.	1889-90.
	Tons.	Tons.	Tons.	Tons.	Tons.
Germany... ..	812,011	934,987	943,998	974,949	1,240,088
France	294,668	492,098	386,616	459,390	762,752
Austria-Hungary ...	371,042	516,703	421,842	514,973	738,147
Russia and Poland...	532,057	467,493	434,367	518,068	467,493
Belgium	47,635	78,736	138,518	143,500	196,839
Holland and other countries	36,907	49,210	117,375	130,937	137,788
Total	2,094,320	2,539,227	2,442,716	2,741,817	3,543,107

491. The manufacture of beet sugar is now carried on in the United States, where, on the authority of the *Statistical Journal of Paris*, the production during the five years ended with 1884 averaged 337,000 tons per annum. According to Mr. McCarty,† two of the largest manufactories are at Philadelphia, and Watsonville (California), and the manufacturers state that within the next five years the United States will export 1,000,000 tons of this sugar annually.

Beet sugar
in the
United
States.

492. The following statement of the annual production of cane sugar in most of the countries in which this description of sugar is grown has been derived from various sources:—

Cane sugar.

* Taken from a table published in the Report (No. 73) of the Department of Agriculture of the United States, dated May, 1890, page 209. The figures are there given in metric tons of 2,204.6 lbs. These have been turned into Imperial tons of 2,240 lbs.

† The *Annual Statistician*, 1890, page 599. San Francisco and New York.

CANE SUGAR PRODUCED ANNUALLY IN VARIOUS COUNTRIES.

	Tons.		Tons.
Argentine Republic ...	60,000	Réunion ...	32,200
Australia ...	70,000	Sandwich Islands ...	60,000
Brazil ...	202,000	United States ...	110,400
China ...	100,000	West Indies—British Barbadoes	58,600
Egypt ...	32,600	„ „ Jamaica	27,000
Guiana (British) ...	110,800	„ „ Trinidad	65,400
„ (French and Dutch)	8,300	„ „ Other Islands	60,000
India (British) ...	220,000	„ French Guadeloupe	49,600
Java ...	316,000	„ „ Martinique	45,000
Manilla ...	180,600	„ Spanish Cuba ...	598,000
Mexico ...	30,000	„ „ Porto Rico	77,800
Mauritius ...	120,200		
Natal ...	12,000	Total ...	2,676,500
Peru ...	30,000		

Consumption of sugar in Victoria and other countries.

493. According to the following figures, Victoria, although not consuming so much sugar per head as three of the other Australasian colonies, would appear to consume much more per head than any European country, the average quantity being $90\frac{3}{4}$ lbs., or nearly 22 lbs. more per head than the United Kingdom, which consumes more than twice as much per head as any country on the European Continent. It must, however, be remembered that in Victoria 15 million pounds of sugar annually, or nearly 15 lbs. per head, are used in the manufacture of beer, which is very much more than many countries consume altogether:—

AVERAGE ANNUAL CONSUMPTION OF SUGAR (CANE AND BEET) PER HEAD IN VARIOUS COUNTRIES.*

	lbs.		lbs.
New Zealand ...	118·77	Sweden ...	17·52
South Australia ...	102·11	Belgium ...	15·74
Western Australia ...	93·51	Germany ...	15·01
Victoria ...	90·75	Austria-Hungary ...	13·23
Tasmania ...	90·49	Norway ...	11·37
United Kingdom ...	68·99	Finland ...	11·22†
Queensland ...	62·93	Portugal ...	9·56
New South Wales ...	60·95	Roumania ...	7·71
Argentine Republic ...	50·04	Russia ...	7·69
Denmark ...	29·69	Spain ...	5·11
Holland ...	28·37	Servia ...	4·41
Switzerland ...	22·81	Italy ...	3·20
France ...	22·61		

Vines.

494. In 1890-91 the area under vines (20,686 acres) exceeded that returned in 1889-90 by 5,024 acres, and was much larger than in any previous year. The quantity of wine returned was 2,008,493 gallons,

* For countries out of Australasia, see Dr. Broch's paper, page 233, there given in kilogrammes, each equal to 2·204 lbs.

† Mr. K. F. Ignatius, of Helsingfors, in the *Statistical Journal of Paris* for February, 1889, page 72, points out that Dr. Broch has understated the consumption of sugar in Finland, by assuming that a leiviskâ is the equivalent of a kilogramme; whereas the former is equal to $8\frac{1}{2}$ times the latter. Therefore the average consumption of sugar per head in Finland is 11·22 lbs. as here stated, instead of 1·32 lbs. as stated by Dr. Broch and quoted in the issue of this work for 1887-8, Volume II., paragraph 1,145.

or more than that in 1889-90 by nearly 430,000 gallons, and was also much larger than that in any previous year. The wine industry received a temporary check some years since, in consequence of an outbreak of the disease called *phylloxera vastatrix*, but this was found to be confined to one district in the colony (Geelong), where it was promptly stamped out by the eradication of all vines for a distance ranging from 20 to 30 miles from the centre of that district. Replanting has not yet been allowed, as investigation from time to time showed that the insects were present among the vine rootlets which still remained in the ground. A careful search, however, made quite recently, has failed to discover any insects, and it may therefore be assumed that the pest has been exterminated. An account of the visitation of the phylloxera in Victoria, and of the measures taken for its suppression, will be found in the *Victorian Year-Book*, 1888-9.*

495. Several years since an outbreak of phylloxera occurred in the Camden district of New South Wales. The disease soon spread and extended into the district of Seven Hills. At an early period the Government of Victoria urged the Government of New South Wales to take steps to prevent the phylloxera from spreading, and an Act was accordingly passed with that object. This Act having been found to be ineffective, an amending Act was passed, with the result that the work of destruction of the diseased vineyards was proceeded with. The total area found to be infected was 54a. 0r. 34p., viz.:—31a. 2r. 33p. in the Camden district and 22a. 2r. 1p. in the Seven Hills district. The vines have been cut down and burnt, and the roots have been taken out and also burnt; the ground has been trenched and any particles of root found were destroyed by fire. It is alleged that no trace of phylloxera can now be found in the vineyards dealt with.

Phylloxera
in New
South
Wales.

496. The phylloxera undoubtedly came originally from the United States, where it was first discovered in 1854 by Mr. Asa Fitch upon some vines in the State of New York. It did not, however, spread much until 1863, when it made its appearance in France, and rapidly extended over the vineyards of that country. It is calculated by M. François Bernard that vineyards covering 1,000,000 hectares (2,470,000 acres) have been entirely destroyed by it, and that 200,000 hectares (494,000 acres) in addition are doomed to a like fate; moreover, large areas not yet invaded by the disease are in imminent danger of being so. The disease reached Austria-Hungary in 1875, Australia in 1877, Italy in 1879, the Crimea and Bessarabia in 1880, Turkey and Algeria in 1885, and the Cape of Good Hope in 1886.

Phylloxera
in France
and other
countries.

In the United States the ravages of the phylloxera were for a long time confined to the country situated to the east of the Rocky Mountains, but the insect has now penetrated to the westward, and attacked the vineyards of California. Persistent efforts have been made in France to cope with the evil, and numerous so-called "specifics" have been tried. Vines, moreover, have been extensively uprooted and replaced by vines of other species, which it is hoped may prove impervious to the attacks of the insects. These measures appear to have been attended with some success, as the wine-crop which, from an average of 1,200,000,000 gallons prior to the existence of the phylloxera, had fallen to 600,000,000 gallons in 1885, rose to 800,000,000 gallons in 1889.

497. The following is a statement of the area under vines, and the quantity of wine produced annually in the various wine producing countries of the world. The figures have been partly taken from a paper entitled *Statistique Vinicole Universelle*, read before the Statistical Society of Paris,* on the 10th August, 1889, by M. François Bernard:—

ANNUAL PRODUCTION OF WINE IN VARIOUS COUNTRIES.

Country.	Year.	Area under Vines.	Wine Produced. (000's omitted.)
		Acres.	Gallons.
Algeria	1888	217,716	72,073,
Australasia	1888-9	27,046	2,692,
Austria-Hungary... ..	1888	1,562,127	277,379,
Azores, Canaries, Madeira ... ..	...	...	3,300,
Cape of Good Hope	1888	...	4,491,
Chile and La Plata ... ..	...	...	44,000,
France	1889	4,801,680	809,512,
Germany	1886	180,310	99,000,
Greece	1888	185,250	38,720,
Holland	1885	...	81,994,
Italy	1882-1888	4,759,275	607,838,
Portugal	1887	503,880	94,160,
Roumania	1886	253,629	33,000,
Russia ... ..	...	...	66,000,
Servia ... ..	...	...	44,000,
Spain ... ..	...	4,310,404	350,000,
Switzerland ... ..	...	110,656	24,200,
Tunis	1888	8,151	308,
Turkey and Cyprus ... ..	...	222,300	57,200,
United States	1887	98,800	33,000,
Total ... ..	...	...	2,742,867,

* See Journal of that Society for 1889, page 257. The figures are there given in hectares and hectolitres, the former of which have been reduced to acres, on the assumption that 1 hectare is equivalent to 2.47 acres, and the latter to gallons, on the assumption that 1 hectolitre is equivalent to 22 gallons.

498. The wine made in Victoria, added to that imported after deducting that exported, amounts in the average to rather over a gallon annually per head. This shows a larger consumption of wine in this colony than in the United Kingdom, where it is less than half a gallon per head, but smaller than that in Germany, Switzerland, Austria-Hungary, and France, the wine consumption in the last named of which amounts to as much as 16½ gallons per head. The following are the figures for these and some other countries :—

Wine consumed in various countries.

ANNUAL CONSUMPTION OF WINE PER HEAD IN VARIOUS COUNTRIES.

	Gallons.		Gallons.
France ...	16.52	Queensland ...	.69
Austria-Hungary ...	4.84	Holland ...	.49
Western Australia ...	2.52	United Kingdom ...	.43
Switzerland ...	2.11	United States ...	.39
South Australia ...	1.47	New Zealand ...	.27
Germany ...	1.32	Tasmania ...	.24
Victoria ...	1.01	Sweden ...	.20
New South Wales ...	.83	Canada ...	.14

499. No attempt has yet been made to grow tea in Victoria for commercial purposes, although the tea plant flourishes in gardens around Melbourne, and the Government Botanist has given it as his opinion that many parts of the colony—especially the fern tree gullies—are well suited for its cultivation. The following statement, taken from *Mulhall's Dictionary of Statistics*,* shows the average annual exportation of tea from various countries during the two years 1887 and 1888 :—

Exports of tea from various countries.

TEA EXPORTED ANNUALLY FROM VARIOUS COUNTRIES.

	Millions of lbs.
China ...	290†
India ...	90
Japan ...	40
Ceylon ...	19
Paraguay ...	10
Java ...	7
Total ...	456

500. The following figures showing the annual consumption of tea in various countries have been gathered from the best authorities :—

Consumption of tea in various countries.

* Page 566, Routledge & Sons Limited, London, 1891.

† In 1889 the exports of tea from China were 2,049,083 piculs, amounting, on the assumption that a picul is equal to 133½ lbs., to 273,211,067 lbs.

ANNUAL CONSUMPTION OF TEA PER HEAD IN VARIOUS
COUNTRIES.

	Annual Consumption of Tea per Head. lbs.		Annual Consumption of Tea per Head. lbs.
Western Australia	... 10·70	Russia	... ..61
Victoria	... 10·01	Denmark	... ..37
Queensland	... 8·96	Persia	... ..13
Australia	... 8·68	Portugal	... ..12
New South Wales	... 7·55	Switzerland	... ..10
South Australia	... 7·24	Norway	... ..09
New Zealand	... 7·23	Germany	... ..07
Tasmania	... 5·35	Belgium	... ..03
United Kingdom	... 4·70	Sweden	... ..03
Canada	... 3·69	France	... ..03
United States	... 1·40	Austria-Hungary	... ..02
Holland	... 1·16	Spain	... ..01

Consumption of tea in Australasia and elsewhere.

501. From these figures it appears that the average consumption of tea is much larger in British than in Foreign Countries, and that the Australasian colonies stand at the head of the list with an annual consumption varying from $5\frac{1}{3}$ to $10\frac{3}{4}$ lbs. per head of the population. It will also be observed that after British dominions the United States is the largest tea consumer, and next to it Holland, after which no country has so large a consumption as 1 lb. per head.

Gardens and orchards.

502. No return is made of the nature of the crops grown or the quantity of produce raised in gardens and orchards. The following, however, is the extent of land returned under this description of culture in the last two years. Market gardens are included as well as gardens attached to farms, but not gardens or orchards kept merely for pleasure or private use:—

LAND UNDER GARDENS AND ORCHARDS, 1890 AND 1891.

	Acres.
1889-90	29,243
1890-91	33,864
Increase	4,621

Ensilage.

503. Ensilage was returned as having been made on 225 farms situated in 73 shires and 3 boroughs in 1890-91, the principal crops used being maize, oats, and grass, but returns were obtained besides of ensilage made from rye, peas, beans, lucerne, carrots, cabbage, thistles, weeds, and "orchard rubbish." The total quantity made was set down as 9,878 tons, as against 8,294 tons in the previous year. The largest returns of ensilage were obtained from the following shires:—Lilydale, where 2,524 tons were made on 7 farms; Marong, 836 tons on 6; Buln Buln, 689 tons on 16; Gordon, 440 tons on 13;

Lowan, 365 tons on 19; Benalla, 293 tons on 7; Rodney, 269 tons on 8; Korong, 255 tons on 7; Traralgon, 215 tons on 5; Arapiles, 200 tons on 1 farm. The number and capacity of the silos were not given.

504. Land in fallow is included in the area under tillage. The number of acres in this condition in 1891 was 385,572, or 5,871 more than in the previous year. Land in fallow.

505. The extent of land subjected to irrigation in the season under notice, although larger than in 1889-90 or 1887-8, was less in the other three years named in the following table. The extent fluctuates from year to year, and is doubtless smaller in seasons of abundant rainfall than it is in years of drought:— Irrigation, 1886 to 1891.

IRRIGATION, 1885-6 TO 1890-91.

Crops subjected to Irrigation.	Number of Acres subjected to Irrigation.					
	1885-6.	1886-7.	1887-8.	1888-9.	1889-90.	1890-91.
Wheat	8,109	14,034	7,206	16,403	60	2,916
Oats	502	1,416	297	1,899	58	1,304
Barley	237	349	...	863	27	218
Maize	10	1	...	75	37	22
Peas and Beans	11	3	1	2	...	11
Potatoes	22	93	12	46	98	85
Turnips	5	7	1	...	5	1
Mangel-wurzel	13	6	1	9	3	1
Beet, Carrots, etc.	15	11	...	7	11	9
Onions	...	1	1	...	...	4
Chicory	28	30	20	30	31	18
Grass and Clover seeds	...	...	...	...	...	8
Hay	3,939	4,633	1,172	4,004	58	1,175
Green Forage...	89	155	37	483	123	315
Artificial Grasses	206	251	108	171	570	1,866
Hops	254	60	48	116	387	215
Tobacco	...	52	...	...	...	...
Pumpkins	...	4	...	...	...	...
Tomatoes	2	2	1	...	...	...
Vines { Productive { Non-productive }	...	56	37	55	34	{ 340 { 111
Gardens and Orchards	37	178	51	411	596	882
Total	13,479	21,342	8,993	24,574	2,098	9,501

506. In 46 municipalities, in 1890-91, certain crops covered 161,950 acres, of which 9,501 acres, or nearly 6 per cent., were subjected to irrigation. The following table shows the extent of land under these crops, and their gross and average produce; the tillage and produce on unirrigated and on irrigated land being distinguished:— Crops irrigated.

IRRIGATION IN CERTAIN MUNICIPALITIES, 1890-91.

Crops.	In Municipalities practising Irrigation.					
	Extent under Crop on Land—		Gross Produce on Land—		Produce per Acre on Land—	
	Unirrigated.	Irrigated.	Unirrigated.	Irrigated.	Unirrigated.	Irrigated.
GRAIN CROPS.	acres.	acres.	bushels.	bushels.	bushels.	bushels.
Wheat	52,647	2,916	594,050	34,359	11·28	11·78
Oats	6,169	1,304	147,709	30,373	23·94	23·29
Barley, malting...	1,898	205	23,675	2,456	12·47	11·98
„ other	230	13	3,534	280	15·36	21·54
Maize	599	22	20,533	1,630	34·28	74·09
Peas and Beans ..	192	11	3,658	385	19·05	35·00
ROOT CROPS.	acres.	acres.	tons.	tons.	tons.	tons.
Potatoes... ..	606	85	2,344	481	3·87	5·66
Mangel-wurzel ...	7	1	110	10	15·72	10·00
Carrots	306*	9	3,883*	174	12·69	19·33
Onions	14	4	90	36	6·43	9·00
Chicory	240*	18	1,679*	180	7·00	10·00
Grass and Clover Seeds	62	8	325	120	5·24	15·00
Turnips	392*	1	4,479*	20	11·43	20·00
HAY, GRASS, ETC.	acres.	acres.	tons.	tons.	tons.	tons.
Hay	74,512	1,175	31,903	1,602	1·30	1·36
Green Forage ...	707	315	...	...	...	...
Artificial Grasses	8,063	1,866	...	...	...	...
OTHER TILLAGE.	acres.	acres.	cwt.	cwt.	cwt.	cwt.
Hops	245	215	2,026	2,884	8·27	13·41
Vines, productive	678	111	11,367	1,152	16·77	10·38
„ non-productive	573	340	...	...	...	...
Market Gardens	742	112	...	...	...	...
Gardens and Orchards	3,567	770	...	...	...	...

Yield of
crops on
irrigated
land.

507. An examination of the last two columns will show that irrigation was attended with beneficial results in the case of all the crops named in the table except oats, malting barley, mangel-wurzel, and grapes. The improved yield of many of the other crops was considerable; thus, whilst in certain shires the yield per acre of maize was $34\frac{1}{4}$ bushels; barley (not malting), $15\frac{1}{3}$ bushels; peas and beans, 19 bushels; turnips, $11\frac{2}{5}$ tons; carrots, $12\frac{3}{5}$ tons; potatoes, $3\frac{4}{5}$ tons; chicory, 7 tons; and hops, $8\frac{1}{4}$ cwt., on unirrigated land; in the same shires on irrigated land the yield per acre of maize was 74 bushels; barley (not malting), $21\frac{1}{2}$ bushels; peas and

* There being no crop of this kind returned as grown on unirrigated land in the shires in which irrigation was practised, these figures relate to other parts of the colony.

beans, 35 bushels; turnips, 20 tons; carrots, $19\frac{1}{3}$ tons; potatoes, $5\frac{3}{5}$ tons; chicory, 10 tons; and hops, $13\frac{2}{5}$ cwt. The yield per acre of grapes was $16\frac{3}{4}$ cwt. on unirrigated, but only $10\frac{1}{3}$ cwt. on irrigated land. This is contrary to the experience of previous years, when the crop of grapes obtained from irrigated land has always been the heavier. In the past season the proportion of wine to grapes was larger by over a gallon to the cwt. on irrigated than on unirrigated land, the proportions being 6.92 gallons to the cwt. of grapes grown on the former, and 5.80 gallons to the cwt. of grapes grown on the latter.

508. The *Water Act* 1890 (54 Vict. No. 1,156) repealed all previous Acts for the conservation, management, and distribution of water, and consolidated their provisions. It is divided into seven parts as follow* :—

Water Act
1890.

PART I.—PRELIMINARY.

Repeals to the extent indicated the operation of previous Acts mentioned in the first schedule of the *Water Act*.

PART II.—WATER SUPPLY BY WATERWORKS TRUSTS.

Waterworks trusts are constituted for the purpose of controlling the stock and domestic supply within the area of their respective districts, and are distinct from irrigation trusts in the manner of their constitution and the duties they are called on to administer.

They are appointed by the Governor-in-Council upon the application of the municipal councillors of one or more municipal districts, and are bodies corporate. The commissioners are elected by the municipal councils whose districts are directly benefited by the proposed waterworks, with an additional commissioner appointed by the Governor-in-Council.

Whenever a waterworks district is wholly within one municipality, its council may be appointed in a body by the Governor-in-Council, together with one or more persons not members of such municipal council. One or more ridings of a municipal district may also be formed into a waterworks district. Machinery for the election of commissioners, filling up vacancies in their number, and conduct of business is provided. Any two or more of these waterworks districts may be united on the application of the waterworks trusts of all districts affected, and provision is made for the appointment of officers and servants.

The powers and duties of the trusts and persons within their districts are defined, and power is also given to hold, purchase, mortgage, or lease property and to effect loans and levy rates for the maintenance of works and payment of interest; also to form a sinking fund for the repayment of principal, the formation of which may be deferred for five years by Governor-in-Council.

Any city, town, borough, or populous place comprising the whole or any part of a waterworks district, may, by Order in Council, be proclaimed an urban district, and special provision is made for reticulating the streets, levying rates, and making regulations for governance of the trust's business.

PART III.—WATER SUPPLY FOR IRRIGATION AND MANUFACTURING PURPOSES.

For the purposes of this part of the Act, the right to use the waters of the rivers, streams, etc., of the colony shall be deemed to be vested in the Crown until the contrary is proved by establishing any other right.

* This account was written for this work by an officer of the Victorian Water Supply Department.

Any municipal council or waterworks trusts, or any two or more together of any such councils or trusts, or the majority in number of the ratepayers in any proposed irrigation and water supply district, or the majority in numbers of landowners therein, if the latter hold at least half the land in the proposed district, may petition the Governor-in-Council to constitute an irrigation and water supply district. Upon receipt of this petition, careful departmental investigation is made into the merits of the scheme, and a report furnished. The Minister may then settle particulars of scheme by declaration in *Government Gazette*. Ample time and publicity are given for adverse petitions or objections, and directions are laid down for their careful consideration, and for carrying out the wishes of the majority of the landowners. Should the scheme or any amendment thereof after minute investigation appear feasible, and a petition be lodged from the majority of landowners owning at least half the land in the proposed district, the Governor-in-Council may approve of the appointment of an irrigation and water supply trust. Provision is made for the constitution of such trusts, which are bodies corporate, and the constituting Order-in-Council determines the boundaries of the trust's district, assigns a corporate name, describes the scheme and principal works to be constructed, allots quantity of water and source of supply, fixes rates of payment by trusts for water, states proposed expenditure on works, declares the amount of Government loan to be advanced, determines the number, period of office, etc., of trust commissioners, declares the rating powers, makes provision for certain other minor matters.

Subsequent sections provide for action to be taken where trusts have common headworks; for trusts being charged proportionately only for loans on joint works; that municipal councillors may be commissioners, or that the latter may be elected by the landowners; provides for the creation and management of urban divisions in irrigation and water supply districts; also enacts that the Governor-in-Council may declare any irrigation district, not exceeding 10,000 acres in extent, a special district with enlarged franchise.

Machinery is provided for the election of commissioners, the conduct of business, and control of officers.

The rights and duties of trusts are defined, and the property to be held by them particularised. Power is conferred upon municipalities to sell waterworks to trusts, and to the latter to exchange land. Trust works are exempted from municipal rates.

Power is given to confer certain limited powers on private persons to construct waterworks.

Provision is made for the granting of pumping leases, licenses for water easements, and their revocation.

The Board of Land and Works has power to construct and maintain national works for the conservation of water and its sale to the trusts. Directions are laid down that the rivers and streams of Victoria shall be systematically gauged, and that water-boring shall not be neglected. The general powers and rights of the board as regards national works are defined.

Provision is made for the supply of water to and by trusts, who, when the quantity is insufficient, may be supplied proportionately from national works, and may so supply their constituents with water for any period not exceeding fourteen years.

The rating and borrowing powers of the trusts are defined, and the machinery therefor provided. The payment of interest upon Government loans, or for water, may be deferred for five years. The Supreme Court may, upon the petition of the senior Audit Commissioner, appoint a receiver in the event of a trust making default, and in such case such receiver would exercise the same functions as the trust, under the direction of the Supreme Court. Provision is made for the formation of a sinking fund to pay off the Government loan, which may, however, be postponed for twelve years by Governor-in-Council.

Compensation for loss or damage caused by violation of riparian or other rights to easements, or for injury, loss, or damage by flooding, may be paid if claimed within two years, and machinery is provided for settlement of disputes.

Penalties for offences named are stated.

The Minister has power to refer differences to a County Court judge, and, finally, the Governor-in-Council may make additional orders, which must, however, be laid before Parliament.

PART IV.—DRAINAGE OF THE LAND FOR THE PURPOSE OF ITS IMPROVEMENT.

Provides that the Governor-in-Council may extend the powers of irrigation and water supply trusts to the drainage of land for its improvement, subject to the requirements and restrictions laid down in such part.

PART V.

Deals with the water supply to towns by the Board of Land and Works.

Division 1 deals with the water supply to Melbourne and Geelong.

Division 2 gives the Board of Land and Works power to construct waterworks for the supply of towns mentioned in the seventh schedule of the Act, and provides the necessary machinery for supply, rating, inflicting penalties for offences enumerated, sale or leasing of works, and other necessary matters.

PART VI.—SUPPLY OF TOWNS BY LOCAL GOVERNING BODIES.

Provides necessary machinery and (in Division 2) gives special directions for the appointment of Ballarat Water Commissioners, their election, payment, term of office, meetings, officers, etc.; the powers and duties of the Ballarat Commissioners, and (in Division 3) of them and local governing bodies to make regulations is laid down.

PART VII.

Contains general provisions as to penalties and procedure.

509. On the 30th June, 1891, there were 28 Irrigation and Water Supply Trusts—many of which draw their main supply of water from the National Works—with jurisdiction over 2,711,949 acres of land, having an irrigable area of 1,818,304 acres, of which 353,662 acres are capable of being irrigated annually from the works constructed or in course of construction. The present value of the irrigable lands, on a low basis of calculation, is set down as £6,888,076, and the annual rateable value of the same as £295,932. Of the 28 schemes 3 have been completed, 19 are in progress, and 6 had not been commenced. Of those completed or in progress, 13 are reported to be satisfactory. The aggregate borrowing power of the Trusts is limited to £1,450,958, of which the Government have agreed to advance £1,284,147, the balance to be obtained in the open market; whilst the amount actually advanced to the 30th June, 1891, was £679,682. There are, at present, two storage reservoirs under the control of Trusts, viz., the Wartook Reservoir, near Horsham, with a capacity of 1,035 million cubic feet, and Murphy's Lake, near Kerang, with one of 51 million cubic feet.

Irrigation
and Water
Supply
Trusts.

510. The more important irrigation works, or those connected with the principal rivers which will form the main supply in some cases for several local schemes, are undertaken by, and are under, the entire control of the State. These are known by the name of National Works. The total expenditure from loans to the 30th June 1891, on three of the principal works, in which considerable progress had been made, was about £552,600. The following is an account of such works as given in the last report of the Victorian Water Supply

National
Irrigation
Works.

Department, and of the progress already made in their construction:—

GOULBURN NATIONAL WORKS.

General Description.—The National Irrigation Works constructed and proposed in the Goulburn District are the most important of the schemes contemplated by the Government, and are briefly as follow:—

1. A weir on the Goulburn River, designed to raise the level of surface of water to a sufficient height to command the irrigation districts by gravitation.

2. Twenty-four miles of main channel westwards, of which fifteen miles are constructed to convey 100,000 cubic feet of water per minute to the proposed Waranga Reservoir.

3. The proposed Waranga Reservoir, to impound about 7,500,000,000 cubic feet of water, available for irrigation.

4. Forty and a half miles of main channel, from the proposed Waranga Reservoir to the Campaspe River, to carry 50,000 cubic feet of water at the head and about 25,000 cubic feet per minute across the river.

5. Thirty-three miles of main channel on the east side of the Goulburn River, to convey 20,000 cubic feet of water per minute.

Goulburn Weir.—The site was selected as being the nearest point to the Irrigation District at which a rock foundation was obtainable near the surface suitable for carrying a masonry structure. The summer level of the river is raised 45 feet by the weir, viz., from 363·00 to 408·00 R.L., the depth of water from raised water-level to the bed of the river being 50 feet. The weir is of concrete, composed of Portland cement, sand, and broken stone, backed with granite blocks in steps. The lower portion across the channel-way was constructed in four sections within cofferdams; six tunnels, each of 44 square feet, carrying the ordinary flow of the river while the superstructure was in progress. These tunnels are closed at the face by cast-iron gates, which were permanently shut down on the 11th December, 1890, and the river has since been flowing over the weir. The water-way over the weir for the passage of floods is occupied by 21 gates, each 20 feet wide and 10 feet high, lowering into recesses or chambers in the body of the structure as may be required to accommodate the flow of the river, and to maintain the water-level as far as possible at 408·00 R.L. To lower the gates into chambers was considered the best arrangement with regard to the conditions of the river, and to keep the works as compact as possible. The flood conditions might have been modified by increasing the depth or length of flood water-way, but the provision made was considered adequate, sufficient land being taken to cover the heading. The power for working the flood-gates is obtained from three 30½-in. "Leffel" turbines. Hand-gearing is also provided over each gate. The turbines can be worked together or separately, and any turbine can be brought into gear with any gate or gates. The head under which the turbines will be worked will vary from 3 feet to 13 feet, according to the state of the river below the weir, giving from 3 horse-power and 78 revolutions per minute, to 27·3 horse-power and 163 revolutions per minute, according to the varying conditions. An electric lighting plant of five arc lamps, driven by a 23-in. "Leffel" turbine, is provided for night-work.

The weir is now entirely finished, as well as some protection works it was found desirable to add in the river bed immediately below. A heavy flood occurred in the middle of July, 1891, the volume being about 1,423,000 cubic feet per minute. The works were found in good condition after the floods subsided.

The offtake channels have head-gates, each 10 feet by 7 feet, pivoted vertically, and worked by worm and worm-wheel gearing. The western offtake has 14 and the eastern 4 of these gates.

Western channel.—The general section is 110 feet wide at bed, with slopes of 1½ to 1 in cutting and 2 to 1 where embanked. Depressions are crossed by timber flumes, five in number, and of an aggregate length of about fifteen chains on the upper seven miles of the fifteen miles constructed. Syphons for surface drainage consist of wells of brick and earthenware pipes jointed with cement. Relief works are provided at Flume No. 5., near the seventh mile, to admit of the channel being emptied quickly in event of a breach. Bridges are at each road-crossing. The channel is designed to carry 7 feet depth of water, on a grade of 6 inches per mile,

and is calculated to convey fully 100,000 cubic feet per minute. Two offtakes are provided on the fifteen miles now constructed, one at the eighth and another near the fifteenth mile. These consist of a series of gates across the channel to maintain the full depth of water, the supplies being delivered over measuring weirs.

The channel is excavated to a depth to provide sufficient material for embankments, where practicable. Embankments are made at least 15 feet wide on top, and not less than $2\frac{1}{2}$ feet above top water-level of channel. Overflow escapes are provided at the flumes and at two other points where the channel is close to the river.

On the 14th December, 1890, or three days after the gates of the weir had been shut down, the water level above the weir rose to the beds of the offtake channels, and was allowed to flow along the course of the western channel for the seven miles which had then been completed, to an accommodation off-take for a supply to the main channel of the Echuca and Waranga Trust. The channel has since been almost completed to the fifteenth mile, where the Rodney Irrigation Trust's principal offtake will be, and it is fully expected that the Rodney Trust and the Echuca and Waranga Waterworks Trust will obtain a continuous supply from national works next season.

The permanent surveys beyond the proposed Waranga Reservoir are completed to the Wanalta Creek, and a trial survey has been carried on to the Campaspe River. The country to the north of the channel line, from the meridian of Moora to Lake Cooper, is much flooded in the winter season, and it may be advisable to divert the flood water to Lake Cooper and embank the lake so as to convert it into a storage, if the cost be not prohibitive. Probably a scheme for the diversion of part of the flood water may be found to be the best, in the interest of the irrigators as well as of the owners of lands affected by the floods. Extensive trial survey is being made to test the question.

Eastern Channel.—Nothing further has been done in connexion with the survey of the national channel on the east side of the Goulburn River during the past year.

Cost of Works.—The Goulburn Weir has cost about £100,000, and the amount paid for compensation for land, and construction of roads and bridges in connexion therewith, will be about of equal amounts. The cost of channel works constructed is about £150,000, and land required for same about £15,000. To these sums about £10,000 has to be added for surveys, engineering, and sundries, making the total cost of the completed works about £375,000.

LODDON DISTRICT.

The regulating reservoir for the Loddon River is situated about half-a-mile above Laanecoorie. It is a compound structure of concrete masonry, with automatic tilting gates, the extension on the left bank being in the form of an earthen dam, with a berm or banquette in rear, of materials not liable to scour. The capacity of the reservoir, to the full supply level, is 610,000,000 of cubic feet, equal to 3,812,000,000 of gallons, or rather more than 25 per cent. greater than the Malmsbury reservoir. All the work is completed with the exception of the automatic gates, foot-bridge, and gear for lifting the valves. It is expected that these will be erected by the end of November, 1891. The greater part is constructed ready for erection; the delay has been caused by some of the iron having to be specially imported. On the 15th July, 1891, about one foot of water was running over the crest of the weir. The reservoir up to the masonry crest, and exclusive of the flood-gates, contains about 351,000,000 of cubic feet. The expenditure to 30th June, 1891—all on the Laanecoorie Weir—was £100,846, viz., £63,313 on works, £29,258 on land compensation, £4,217 on roads and bridges, and £4,058 on engineering expenses. The estimated cost of the weir which has since been completed is £130,500.

KOW SWAMP.

It having been found inexpedient for various reasons to push these works forward as rapidly as was at one time intended, the anticipation that the whole would be completed early in the winter of 1891 has not been realized. About one-half of the scheme is, however, practically finished, and a partial supply will be available during the approaching summer. The expenditure on this scheme to 30th June, 1891, has been £76,727, viz., £71,868 on works, £526 on land, and £4,333 on engineering management.

Waterworks
and water-
works
trusts.

511. There were 46 Waterworks Trusts in existence on the 30th June, 1891, including five which had been recently formed, but excluding two which had been transferred during the year to Irrigation Trusts. The Waterworks Trusts consist of 12 rural and 34 urban trusts, 6 of the former also providing urban supplies to 10 towns; several of them are almost identical with the municipal councils. The rural schemes have numerous weirs, dams, and tanks, supplying an area of 4,034,200 acres, of an annual rateable value of £590,000; whilst the estimated cost of the works was £456,982. The urban works completed have a storage capacity of over 297 million gallons, and were estimated to cost £350,738; they supply a population of 46,800, who possess property of the annual rateable value of £260,000. The amount of loans authorized to be advanced to these bodies was £794,424, of which £716,088 had been paid up to the 30th June, 1891. The interest due, but remaining unpaid at that date, was £45,494; but £10,976 of this had only just become due, and £7,519 was paid within the subsequent three months. Of the total amount, as much as £30,000 was due on account of only three trusts. From the report furnished by the inspecting engineer, it appears that of the rural works 3 were in a satisfactory, 5 in a fair, 3 in an unsatisfactory, and 1 in a most unsatisfactory condition; whilst of 24 urban Trusts, which had completed their works, as many as 22 were in a satisfactory condition, and had paid all interest on loans at the date of the report of the Minister for the year 1890-91.

Waterworks
under Go-
vernment.

512. Prior to the constitution of the Waterworks Trusts extensive works for the storage and supply of water for domestic, mining, and, to a limited extent, for irrigation purposes, had been constructed by the Government and by Local Bodies in various parts of the colony. The most important of these is the Yan Yean reservoir, together with the subsidiary reservoirs at Jack's Creek, Morang, Preston, Essendon, Caulfield, and Kew, by means of which Melbourne is provided with a supply of fresh water at a high pressure. The Yan Yean is an artificial lake situated 22 miles from the city, and 595 feet above its level, which covers an area of 1,360 acres, or rather more than two square miles, and has a drainage area of 56,000 acres. The length of aqueduct and mains from this reservoir is 213 miles, and of reticulation pipes (under 12-inch diameter) 980 miles.* To meet the increased demand for water consequent upon the growth of the city and suburbs, a new channel has been formed for the

* For an interesting account of this reservoir by the Inspector-General of Public Works (Mr. W. Davidson, C.E.), see *Victorian Year-Book*, 1889-90, vol. II., paragraph 515.

purpose of turning into the reservoir other considerable streams of pure water, by which means all fear of the supply becoming exhausted in seasons of drought is at an end. The following table contains a list of such of these works as were under Government control in 1890; also a statement of the estimated storage capacity, and the total cost of each scheme. The Melbourne Waterworks have since been transferred to the newly constituted Melbourne and Metropolitan Board of Works:—

WATERWORKS UNDER GOVERNMENT CONTROL.

Scheme—Name of Town or District supplied.	Reservoir or Source of Supply.		Cost.
	Where situated.	Storage Capacity.	
		Gallons.	£
Melbourne and Suburbs*	Yan Yean ...	6,400,000,000	3,378,247
	Jack's Creek ...	60,000,000	
	Morang (pipe head) ...	3,000,000	
	Preston (storage) ...	15,000,000	
	Essendon (storage 1) ...	6,000,000	
	" " 2) ...	1,000,000	
	Caulfield (") ...	10,000,000	
Kew ...	3,000,000		
COLIBAN SCHEME.			
Taradale ...	Malmsbury ...	3,255,000,000	1,069,255
	Taradale ...	65,000	
Castlemaine and Chewton	Expedition Pass ...	120,000,000	
	Red Hill ...	1,250,000	
	Old Post Office Hill ...	2,000,000	
	Barker's Creek ...	629,135,000	
	Specimen Gully ...	2,618,000	
Fryerstown ...	Crocodile Gully ...	5,407,000	
Maldon ...	Green Gully ...	1,500,000	
Bendigo	Big Hill ...	68,000,000	
	Big Hill Tank ...	300,000	
	Crusoe Valley ...	320,000,000	
	New Chum Tank ...	23,000	
	Solomon's Gully ...	1,250,000	
Bendigo District	Spring Gully ...	150,000,000	
	Upper Grassy Flat ...	58,860,000	
	Lower Grassy Flat ...	26,800,000	
Eaglehawk ...	Sparrow Hawk ...	1,500,000	
Raywood	Lightning Hill ...	7,000,000	
	Raywood ...	2,500,000	
Sebastian ...	Sebastian ...	239,200	
Lockwood and Marong	Green Gully ...	3,500,000	
	Upper Stony Creek ...	354,000,000	
Geelong and suburbs	Lower Stony Creek ...	143,000,000	
	Anakie (pipe head) ...	900,000	
	Lovely Banks ...	6,000,000	
	Newtown Tank ...	500,000	
	Total ...	11,659,347,200	4,804,840

* Now under the control of the Melbourne and Metropolitan Board of Works.

Revenue and
expendi-
ture of
Melbourne

513. The total expenditure to the 30th June, 1891, on the construction of the Melbourne Water Works was £3,378,247. The gross revenue received since the opening of the works at the end of 1857* has amounted to £3,150,055, whilst the expenses of maintenance and management amounted to only £420,834. During 1890-91 the revenue of the waterworks amounted to £200,745 as against £193,274 in the previous year; and the expenditure on maintenance and management to £27,574, as against £26,128 in the previous year. The net revenue in 1890-91 was thus £173,171, being equivalent to 5·34 per cent. of the mean capital cost,† as compared with £167,146, or 5·73 per cent. in 1889-90. A reference to a previous table‡ will show that the loans borrowed (£2,122,866) for the construction of the works now bear an average nominal rate of only 3·93 per cent.

Water con-
sumption
in towns.

514. The average daily consumption of water per head throughout the year in the districts reached by the water supply of Melbourne and suburbs is 59§ gallons, or more than the average daily consumption in eight, and less than in eight of the following towns:—

WATER CONSUMPTION IN VARIOUS TOWNS.

	Average daily consumption of water, per head|| (gallons).		Average daily|| consumption of water, per head (gallons).
Rome	160	Paris	36
Marseilles	158	London	31
Washington	143	Sydney	25
Chicago	102	Dresden	15
Ottawa	102	Naples	15
Boston	73	Berlin	13
New York	61	Madrid	3
Hobart	60	Calcutta	2¶
Melbourne	59		

Coliban
scheme.

515. The Coliban Scheme provides water for domestic and mining purposes, as well as for irrigation to a limited extent, to the Bendigo and Castlemaine districts. The chief reservoir of this scheme, which is near Malmsbury, has a capacity of 3,255 million gallons. The cost of the works to 30th June, 1891, was £1,069,255; whilst the gross revenue during the year 1890-91 was £21,250; and the expenses of maintenance and supervision, £10,502. The net revenue

* Although the works were commenced in 1853, they were not opened until the 31st December, 1857. The information in this paragraph is compiled from a statement furnished by the Melbourne and Metropolitan Board of Works, which has now assumed control of the works. See paragraph 524, *post*.

† Or the mean of the capital cost at the beginning and end of the year.

‡ See table following paragraph 236 in Vol. I.

§ Figures supplied by the Melbourne and Metropolitan Board of Works. Mr. W. Davidson, however, who had charge of the Melbourne Water Supply prior to its being taken over by the Board, sets down the daily consumption at 56 gallons per head.

|| Figures, except as regards Melbourne, Sydney, and Hobart, taken from Blyth's *Manual of Public Health*, 1890, page 143.

¶ The residents of Calcutta, and probably also of other towns situated on the banks of rivers, use river water in addition to that derived from the house to house supply. Rain water is also largely used where such supply is limited.

was thus £10,748, being equivalent to 1·005 per cent. of the capital cost, as compared with £9,640, or ·901 per cent., in 1889-90; and £9,236, or ·863 per cent., in 1888-9. The deficiency in 1890-91, after allowing interest on the capital cost at the rate of 4½ per cent., was £37,368.

516. The Geelong Waterworks provide water for domestic supply to Geelong and suburbs. The chief storage works in this scheme are the Upper and Lower Stony Creek reservoirs, having a capacity of 497 million gallons, and the whole scheme has cost up to the 30th June, 1891, £357,338. The gross revenue for 1890-91 was £10,118, and the cost of maintenance, £3,275. The net revenue was thus £6,843, or 1·915 per cent. of the capital cost, as against £6,487, or 1·815 per cent., in 1889-90, and £6,600, or 1·846 per cent., in 1888-9. After allowing interest on capital at 4½ per cent., the deficiency for 1890-91 was £9,237. It is proposed to transfer these works to a local Trust, and negotiations with that view are now proceeding.

Geelong
Water-
works.

517. There are 24 goldfields reservoirs, having an aggregate capacity of nearly 492 million gallons, the largest, at Beaufort, containing about 86 million gallons. These cost £59,653, and were originally constructed by the Government chiefly for mining purposes. They are for the most part leased to municipal councils at a nominal rental, but it appears that, in many cases, those bodies do not keep them in proper repair. The question of the sale of the works to the municipalities has been under the consideration of Parliament.

Goldfields
reservoirs.

518. Prior to the establishment of Waterworks Trusts, advances were made from the Government loan account to various municipalities to enable them to construct waterworks for their respective districts—the principal to be gradually repaid into a sinking fund. The number of such municipalities was 22, which possessed 21 reservoirs, having a total capacity of nearly 1,578 million gallons, as well as other sources of supply. The expenditure from loans on these works was £632,802, of which £610,944 remained unpaid on the 30th June, 1891; the works supply a population of about 77,600. The chief of these reservoirs are the Ballarat reservoirs, now under the Ballarat Water Commission, having an aggregate capacity of nearly 842 million gallons. The Gong Gong reservoir alone contains 427 million gallons; the Beechworth reservoir at Lake Kerferd, 191 million gallons; the Clunes reservoir at Newlyn, 207 million gallons; and the Talbot reservoir at Evansford, 200 million gallons.

Waterworks
under Local
Bodies.

Capacity
and cost of
reservoirs.

519. By the following summary of the total storage capacity of reservoirs and the total cost of these and other works for the conservation of water referred to in the forgoing tables and paragraphs, it is shown that the former amounts to over fourteen thousand million gallons, and the latter to over six and one-third millions sterling:—

CAPACITY OF RESERVOIRS AND COST OF WATERWORKS SCHEMES.

(Exclusive of National and other Irrigation Works).

Waterworks under—	Storage Capacity of Reservoirs.	Cost of Schemes.	Expenditure from Loans to 30th June, 1891.
	Gallons.	£	£
Government—			
Melbourne	6,498,000,000	3,378,247	1,646,455
Coliban	4,656,947,200	1,069,255	1,069,255
Geelong	504,400,000	357,338	357,338
Goldfields	492,000,000	59,653	Nil.
Local Bodies	1,578,000,000	688,081	632,802
Waterworks Trusts—			
Urban Works*	297,000,000	350,738*	} 716,088
Rural ,,	†	456,982	
Total	14,026,347,200	6,360,294	4,421,938

Rainfall in
Victoria,
1890.

520. According to the fifth annual general report of the Minister of Water Supply, the average rainfall over the whole surface of Victoria during the year 1890 was 29·20 inches, representing a volume of water of about 40 cubic miles, that for 1889 and 1888 being about 46 and 36 cubic miles respectively. The lowest and highest monthly averages for the year were:—January, 1·1 inch; June, 4·10 inches.

Boring for
water.

521. The report of the Victorian Water Supply Department states that four drills were engaged during the year in boring for water, one at Ballyrogan (in the Ararat Shire), and three in the mallee district. At Ballyrogan, the bore commenced in the previous year was completed, and two fresh bores were put down, the bed rock in each case being struck at comparatively shallow depths, without tapping any artesian water. The boring in this locality has been discontinued, and the drill stored. In the mallee, three bores commenced last year were completed, and three fresh bores were commenced. The depth

* Inclusive of works in progress. See also paragraph 511 *ante*.

† Rural works consist mainly of weirs, dams, and tanks.

of the bores varied from 54 to 103 feet at Ballyrogan, and from 60 to 852 feet in the mallee district; in the latter the water tapped was nearly always salt. The total amount expended in 1890-91 was £10,000, but no water of any practical value was tapped. During the last five years, £52,700 has been spent in boring for water.

522. The Mildura Irrigation Colony, established by the Messrs. Chaffey under the *Waterworks Construction Encouragement Act* 1886,* which is the most important private irrigation work in Victoria, has been several times referred to in previous issues of the *Victorian Year-Book*. An interesting account of the progress of this settlement, taken from the Fifth Annual Report of the Minister of Water Supply, is published in an appendix to this volume.

Chaffey
Irrigation
colony.

523. Intimately connected with the subject of the water supply of Melbourne is that of its sewerage. Although some years since sewers were constructed under two of the principal streets (Swanston and Elizabeth streets) for the purpose of carrying off the storm and other waters which had previously been allowed to flow along the open street channels, no complete system of sewerage for the metropolitan area has yet been adopted. Recognizing the necessity of making provision for the disposal of the sewage of Melbourne other than that afforded by the Yarra and Saltwater rivers, which had become so polluted as to be a menace to the health of the inhabitants, the Government in 1889 engaged Mr. James Mansergh, C.E., an eminent English engineer who had made the drainage of towns his special study, to make a complete examination of Greater Melbourne, and to formulate a scheme for its efficient drainage. After nearly two months' stay, Mr. Mansergh returned to England, and was long engaged in considering the subject and drawing up his report thereon. That report, which was completed on the 1st August, 1890, and laid before Parliament in the following month, deals with a district around Melbourne, embracing 18 urban municipalities, viz., 8 cities, 5 towns, and 5 boroughs, besides the greater portion of 6 shires, and containing an area of 80,500 acres, and a population of 430,600 inhabitants, whilst the scheme submitted is capable of providing for a future population of nearly 1,700,000. In the course of his investigations Mr. Mansergh came to the conclusion "that there is no spot within a practicable distance of the metropolis where its sewage can be got rid of into its natural outfall—the river or the sea—without being so treated as to

Sewerage of
Greater
Melbourne.

* 50 Vict. No. 910.

remove the solid impurities which it contains"—*i.e.*, either on land or by chemical treatment. Mr. Mansergh recommends the construction of certain main sewers, the more important of which will convey the sewage to two pumping stations, wherefrom it will be forced to high levels and allowed to flow by gravitation to two sewage farms situated on opposite coasts of Port Phillip Bay, at some distance from the city, where, after the solid matter has been deposited, and rendered fit for use in cultivation, the effluent water will become clarified in percolating through the soil, and ultimately by means of subsoil drainage pipes find its way into the Bay. Mr. Mansergh calculates the capital cost of the scheme within the first eight years at about 5 millions sterling, and the ultimate cost at £5,816,500, and that it would take five years to execute the main works, and at least eight years to completely sewer the whole district. The gross annual charge, including an allowance of £191,651 for repayment of principal and interest in 50 years, is set down at £223,192 at the end of the fifth year, of which at least £81,140 will be defrayed from the water revenue, leaving a net charge of £142,052 to be provided for from the proceeds of a rate of 4·86d.* in the £ levied on all rateable property. It is also estimated that after the payment of the principal in the time stated, the water revenue will alone be sufficient to pay the whole of the working cost.

524. The proposed scheme of sewerage will be carried out under the direction of the Melbourne and Metropolitan Board of Works.† The district over which the Board exercises control consists of 18 cities, towns, and boroughs, and 6 shires, embracing a total area of 98,900 acres, and containing a population, on the 5th April, 1891, of 477,891 inhabitants. The annual value of rateable property in the district was £6,598,451 in 1890, which at 1s. in the £1, the maximum rate the Board is empowered to levy in any one year, would yield a revenue of £329,922. It is probable, however, that it will be unnecessary at any time to levy a higher rate than 6d., which, on the present valuation, would yield £164,900; and if to this be added the net revenue from waterworks (after paying interest and expenses), averaging about £90,000,‡ the total income at present available for the maintenance and management of sewerage works, and for the payment of interest

* At the end of the eighth year the rate will apparently be at a maximum, *viz.*, 5½d.

† For particulars of the constitution and functions of the Board, see Vol. I., paragraph 69.

‡ See also paragraph 513 *ante*.

and instalments towards a sinking fund for the redemption of loans, will amount to £254,900 per annum. The Board, whilst adopting generally the recommendations contained in Mr. Mansergh's scheme, has decided to concentrate all the sewage on one farm near the Werribee River, for which purpose it is in treaty for the purchase of 8,400 acres of red loamy soil averaging 30 feet deep overlying basalt. The sewers are to be designed to carry 30 cubic feet of sewage matter per head per diem, and will generally follow the lines of drainage as sketched by Mr. Mansergh. To enable them to commence the works, the Board is about to raise a loan of £2,000,000 at 4 per cent. with a currency of 30 years. The total amount it is authorized to borrow is £5,000,000, exclusive of loans amounting to £2,389,934 outstanding at the present time (October, 1891), which were originally contracted by the Government and taken over by the Board. Besides its annual income, works, buildings,* etc., constructed at a cost of £3,378,247, and 67,450 acres of land, have been handed over to the Board by the Government.

525. Throughout Victoria, the duration of leases of farms from private persons was returned in 1890-91 as averaging from $2\frac{1}{2}$ to $5\frac{1}{2}$ years; the extreme figures being 1 year and 10 years. The average rental of agricultural land per acre was stated to be from 6s. 3d. to 19s. 6d.; the extreme figures being 2s. 6d. and 50s. The average rental of pastoral land per acre was stated to be from 2s. 3d. to 8s. 3d.; the extreme figures being 1s. and 25s. It may be mentioned that 3s. 6d. per annum for as much land as will carry one sheep to the acre is considered a fair rental; thus land capable of carrying two sheep to the acre ought to be let for 7s. per acre per annum.†

526. Each collector of statistics is required to furnish a statement of the price of the principal articles of agricultural produce in his district at the time he makes his rounds. The prices, being those prevailing in the place where the crops are grown, are generally lower than those obtaining in Melbourne, which are quoted at the end of Part Interchange, *ante*. The following is an average deduced from the returns of all the districts during each of the last 22 years:—

* See also paragraph 69, Vol. I.

† In certain parts of the colony, where the soil is of especially good quality—especially in the Western District—much higher rentals have sometimes been obtained.

PRICES OF AGRICULTURAL PRODUCE, 1870 TO 1891.

During February and March.	Wheat.		Oats.		Barley.		Maize.		Hay.	Potatoes.		Turnips.		Mangolds	
	per bushel.		per bushel.		per bushel.		per bushel.		per ton.	per ton.		per ton.		per ton.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	s.	d.	s.	d.	s.	d.
1870	4	3	3	7	4	0	4	10	77	75	0	...	40	0	
1871	5	4	3	9	4	11	5	3	76	70	0	...	36	0	
1872	4	8	2	11½	3	6¼	4	2	64	65	6	...	28	1	
1873	4	9	3	5	4	1	3	10	81	67	4	...	24	5	
1874	5	9	5	6	5	3	5	9	88	118	3	...	31	4	
1875	4	5	4	3	4	6	4	8	89	89	0	...	28	0	
1876	4	7	3	3	3	10	4	8	82	87	0	...	23	8	
1877	5	10	3	7	3	10	4	4	93	114	0	...	31	6	
1878	5	1	4	6	4	4	5	4	87	115	0	...	37	3	
1879	4	2	3	6	4	1	4	2	75	92	4	...	25	6	
1880	4	0½	2	3½	4	8	3	6½	63	69	11	...	24	11	
1881	4	1¾	2	3	4	11¼	5	0	60	46	3	...	24	0	
1882	5	0	3	3	3	6	5	4	76	70	0	...	25	4	
1883	4	9	3	1	4	1	4	7	81	75	4	...	30	5	
1884	3	8	2	8	3	6	4	8	67	74	8	35 5	29	5	
1885	3	4	3	0	3	6	4	5	74	80	0	40 0	34	0	
1886	3	10	2	10	3	3	4	1	74	100	0	48 6	24	6	
1887	3	9	2	9	3	3	4	4	73	80	0	54 0	28	4	
1888	3	4	2	7	3	6	4	2	59	65	0	27 0	24	0	
1889	4	7	3	10	4	2	4	10	102	163	2	46 6	30	7	
1890	3	8	2	10	3	2	4	1	62	83	4	58 3	28	5	
1891	3	5	2	4	2	9	3	6	55	77	10	32 6	28	7	

Prices of
agricultural
produce,
1890-91 and
previous
years.

527. The drought which occurred in 1888, together with the failure of crops in other parts of the world, caused the prices of all articles of agricultural produce to rise considerably in 1889, but the promise of improved yields, consequent upon the plentiful rainfall which took place in that year, caused a fall in price in 1890, and a further fall in the early part of 1891, until the prices were in all cases extremely low, and in some cases the lowest during the last 22 years.

Years of
highest and
lowest
prices.

528. It will be observed that the price of wheat was highest in 1877, that of oats, barley, and maize in 1874, that of turnips in 1890, that of mangolds in 1870, and that of hay and potatoes in 1889; also, that the price of wheat was lowest in 1885, 1888, and 1891, that of barley, maize, and hay in 1891, that of oats and potatoes in 1881, that of mangolds in 1876, and that of turnips in 1888.

Price of
wheat in
London.

529. The wholesale price of wheat per Imperial quarter* in London during 1890 varied from 29s. 9d. in April to 36s. 3d. in August—the average for the year being 32s. Although the price has fallen off considerably since 1883, when it averaged 41s. 7d., in 1890 it was higher than that in 1886, 1888 or 1889—that in the last-named

* The Imperial quarter is equal to 8 bushels.

year being the lowest recorded since 1761, when it was 26s. 9d.* The following statement of the average *Gazette* prices (wholesale) during the six years ended with 1889 has been taken from an official source,† and that of the average prices in 1890 and the first eight months of 1891 has been taken from the *London Statist* :—

AVERAGE PRICE PER QUARTER OF WHEAT IN LONDON.

Month.	1884.		1885.		1886.		1887.		1888.		1889.		1890.		1891.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
January ...	38	7	33	7	29	10	35	8	31	1	30	2	30	0	32	7
February ...	37	3	32	8	29	5	33	3	30	4	29	6	29	11	32	5
March ...	37	7	31	10	29	10	32	10	30	4	30	1	29	10	33	1
April ...	37	5	34	1	30	7	32	9	30	4	29	10	29	9	37	6
May ...	37	9	36	8	31	10	33	9	31	5	29	9	32	0	40	5
June ...	37	2	33	6	31	7	35	1	31	6	28	6	32	10	40	0
July ...	37	0	33	8	31	2	34	4	31	10	29	2	33	2	38	7
August ...	36	11	33	5	32	5	32	6	35	0	30	9	36	3	38	8
September ...	33	9	31	3	31	10	29	1	35	10	29	11	34	0	...	...
October ...	32	3	30	11	29	11	29	2	31	5	29	8	31	1	...	...
November ...	31	5	30	11	31	2	30	5	31	10	30	1	32	3	...	...
December ...	31	1	30	6	33	2	31	0	31	0	30	0	32	4	...	...
The Year ...	35	8	32	10	31	0	32	6	31	10	29	9	31	11	...	...

530. Another official authority‡ gives the highest, lowest, and average *Gazette* price of wheat, barley, and oats in England and Wales as follows, during each of the eleven years ended with 1889 :—

Price of wheat, barley, and oats in England.

AVERAGE PRICE OF WHEAT, BARLEY, AND OATS IN ENGLAND AND WALES.

Year.	Average Price per Quarter.																	
	Wheat.			Barley.			Oats.											
	Highest Weekly.	Lowest Weekly.	The Year.	Highest Weekly.	Lowest Weekly.	The Year.	Highest Weekly.	Lowest Weekly.	The Year.									
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.		
1879	50	5	37	7	43	10	43	2	24	0	34	0	26	7	19	2	21	9
1880	48	4	39	5	44	4	37	7	25	7	33	1	28	2	20	2	23	1
1881	52	2	40	9	45	4	35	8	26	11	31	11	24	6	19	5	21	9
1882	51	3	39	2	45	1	36	11	25	10	31	2	25	9	19	1	21	10
1883	43	10	39	0	41	7	35	0	25	6	31	10	24	1	19	1	21	5
1884	39	0	30	5	35	9	32	8	27	1	30	8	23	5	18	10	20	3
1885	38	1	30	2	32	10	32	6	24	10	30	2	23	6	18	1	20	7
1886	33	11	29	0	31	1	29	7	22	4	26	7	21	4	16	7	19	0
1887	36	4	28	5	32	6	29	7	20	5	25	4	17	9	14	7	16	3
1888	38	1	30	0	31	11	32	5	18	8	27	10	20	9	15	5	16	9
1889	31	2	27	11	29	10	31	3	19	5	25	10	20	6	16	2	17	9

* See Supplement to *The Statist* for 1887.

† Giffen's Statistical Abstract for the United Kingdom, 1875 to 1889.

‡ Report on the Agricultural Returns of Great Britain, dated November, 1890, issued from the Privy Council Office, page 100.

Value of
agricultural
produce.

531. The value of the agricultural produce raised in Victoria during the year ended 1st March, 1891, may be estimated at 7 $\frac{4}{5}$ millions sterling. The following table shows the means whereby such an estimate is arrived at:—

VALUE OF AGRICULTURAL PRODUCE,* 1890-91.

Name of Crop.	Gross Produce and Price.				Estimated Value.	
			£	s.	d.	£
Wheat	12,751,295	bushels @	0	3	5	2,178,346
Oats	4,919,325	„ @	0	2	4	573,921
Barley	1,571,599	„ @	0	2	9	216,095
Other cereals	1,330,976	„ @	0	3	6	232,921
Grass and clover seed	36,415	„ @	0	4	0	7,283
Potatoes	204,155	tons @	3	17	10	794,503
Onions	13,961	„ @	3	15	0	52,354
Chicory	1,859	„ @	10	0	0	18,590
Other root crops	23,232	„ @	1	10	0	34,848
Hay	567,779	„ @	2	15	0	1,561,392
Green forage	245,332	acres @	2	10	0	613,330
Tobacco	326	cwt. @	2	16	0	913
Grapes, not made into wine	63,535	„ @	0	10	0	31,767
Raisins	123,802	lbs. @	0	0	9	4,692
Currants	3,317	„ @	0	0	4 $\frac{1}{2}$	62
Wine	2,008,493	gallons @	0	4	0	401,699
Brandy	5,934	„ @	0	10	0	2,967
Hops	7,931	cwt. @	6	0	0	47,586
Other crops	1,095	acres @	10	0	0	10,950
Garden and orchard produce	33,864	„ @	30	0	0	1,015,920
	Total ...					7,800,139

Value of
agricultural
produce in
various
countries.

532. The following figures, showing the annual value of agricultural produce in some of the principal countries of the world, have been re-arranged from those contained in a table published in the report of the United States Department of Agriculture for the month of April, 1890†:—

ANNUAL VALUE OF AGRICULTURAL PRODUCE IN VARIOUS COUNTRIES.

	Millions of £.
United States	604
Russia	509
Germany	456
France	444
Austria	322
United Kingdom	266
Italy	178
Spain	136
Australia	76
Canada	58
Argentine Republic	19 $\frac{1}{2}$

* For a summary of the estimated value of agricultural produce during a series of years, see table, "Value of Agricultural, Pastoral, and Mining Produce," *post*.
† Page 168.

533. The standard weight of crops in Victoria is reckoned to be 60 lbs. to the bushel for wheat, 40 lbs. for oats, 50 lbs. for barley, and 56 lbs. for maize. The actual weight, however, differs in different districts. The wheat, during 1890-91, ranged from 50 lbs. to 67 lbs.; oats, from 36 lbs. to 45 lbs.; barley, from 40 lbs. to 60 lbs.; and maize, 50 lbs. to 64 lbs. In the same year, taking the districts as a whole, the average weight per bushel of wheat was 61 lbs.; of oats, 41 lbs.; of barley, 51 lbs.; and of maize, 57 lbs.

Specific weight of crops.

534. The following figures show the average rates paid for agricultural labour in the last two years. Rations are allowed in all cases in addition to the wages quoted, except in the case of threshers, hop-pickers, and maize-pickers:—

Rates of agricultural labour.

RATES OF AGRICULTURAL LABOUR,* 1890 AND 1891.

Description of Labour.	1889-90.		1890-91.	
	s.	d.	s.	d.
Ploughmen, per week	22	1	21	11
Farm labourers, „	19	9	18	10
Married couples, „	25	8	26	4
Females—Dairymaids „	11	11	12	2
„ Others „	11	7	11	6
Mowers, „	32	6	28	7
„ per acre	5	2	5	2
Reapers, per week	30	4	28	7
„ per acre	14	9	12	6
Threshers, per bushel (without rations) ...	0	9	0	8
Hop-pickers, „ „	0	3½	0	3½
Maize-pickers, per bag „	0	5	0	4¾

535. The number and power of steam engines used on farms, and the value of farming plant and improvements, were returned as follows for the year under review and the previous one:—

Plant and improvements on farms.

STEAM ENGINES, IMPLEMENTS, AND IMPROVEMENTS ON FARMS, 1890 AND 1891.

	1889-90.	1890-91.
Steam engines, number	654	667
„ horse-power	4,870	5,041
Value of farming implements and machines	£2,779,309	£2,837,023
„ improvement on farms	£15,729,676	£15,603,515

536. The following figures, which have been obtained by means of averages struck from the returns of the collectors in all the districts, show the rates paid for machine labor in the last two years:—

Machine labour.

* See also table of Wages at the end of Part "Interchange," ante.

MACHINE LABOUR, 1890 AND 1891.

Average Rates paid for—		1889-90.		1890-91.	
		s.	d.	s.	d.
Machine reaping, per acre	{ With binding ...	8	2	7	9
	{ Without binding	4	7	4	10
„ mowing, „ ...	...	3	9	4	7
„ threshing, per 100 bushels :—					
	With winnowing ...	19	6	18	7
	Without winnowing ...	16	6	14	3

Live stock,
1881 and
1891.

537. Information as to the numbers of live stock kept was obtained at the recent census, and these are compared in the following table with the numbers returned at the census taken ten years previously:—

LIVE STOCK, 1881 AND 1891.

Date of Enumeration.	Horses.	Cattle.			Sheep.	Pigs.
		Milch Cows.	Exclusive of Milch Cows.	Total.		
3rd April, 1881 ...	275,516	329,198	957,069	1,286,267	10,360,285	241,936
5th April, 1891 ...	436,459	395,091	1,387,887	1,782,978	12,692,843	282,457
Increase ...	160,943	65,893	430,818	496,711	2,332,558	40,521

Goats, asses,
and mules.

538. Besides the live stock returned, as shown in the table, 68,426 goats, 135 asses, and 78 mules were enumerated in 1881; and 44,482 goats, 139 asses, and 224 mules in 1891.

Stock per
square
mile.

539. There are now in Victoria 5 horses, 20 head of cattle, 144 sheep, and 3 pigs, or, taking the different kinds together, 172 head of stock of these descriptions, large and small, to the square mile. At the census of 1881 there were 3 horses, 15 head of cattle, 118 sheep, and 3 pigs, or, altogether, 139 head of stock to the square mile.

Dairy
produce.

540. No complete returns of dairy produce have ever been obtained in Victoria, but in 1889-90 it was ascertained that 31,775 milch cows produced on the average 42,285 gallons of milk daily, or about 15½ million gallons annually, from which over 2,200,000 lbs. of butter and 1,790,000 lbs. of cheese were made in the year. Victorian butter is now being exported to the United Kingdom under the supervision

of the Victorian Department of Agriculture. The following estimate of the value of the dairy produce of the colony has been compiled according to the method adopted by Mr. D. Wilson, Government Dairy Expert, in his paper on "The Dairy Industry," published in *Bulletin* No. 9 of the Victorian Department of Agriculture:—

VALUE OF DAIRY PRODUCE OF VICTORIA, 1890-91.

Nature of Produce.	Value.
	£
Milk consumed, at $\frac{3}{4}$ -pint per head, per diem, 39,283,600 gallons at 8d.	1,309,453
Butter made from 87,437,200 gallons of milk, at an average of $2\frac{1}{2}$ gallons to 1 lb. butter, 34,974,880 lbs. at 8d.	1,165,829
Cheese made from 17,487,400 gallons of milk, at an average of 1 lb. per gallon of milk, 17,487,400 lbs. at 6d.	437,185
Total	2,912,467

NOTE.—The total milk yield is estimated—allowing 1 gallon of milk per diem to each milch cow in the colony—at 144,208,200 gallons, and it is reckoned that, after taking into account the human consumption, five-sixths of the remainder is made into butter and one-sixth into cheese.

541. The following is a statement of the numbers of the different Poultry kinds of poultry kept according to the returns of the censuses of 1881 and 1891:—

POULTRY, 1881 AND 1891.

Year of Census.	Number of Owners of Poultry.	Geese.	Ducks.	Fowls.	Turkeys.	Pea Fowls.	Guinea Fowls.
1881 ...	97,152	92,654	181,698	2,328,521	153,078	1,701	2,307
1891 ...	142,797	89,145	303,520	3,476,751	216,440	3,423	7,815
Increase ...	45,645	...	121,822	1,148,230	63,362	1,722	5,508
Decrease ...	...	3,509	...	...	...	...	...

542. It is seen that in ten years an increase of 45,645 took place in the number of keepers of poultry, also a considerable increase in all the different kinds of poultry except geese, which were fewer in 1891 than in 1881 by 3,500. Increase or decrease of poultry.

543. The live stock in the United Kingdom and any British Possessions, respecting which the information is available, is officially stated to have been as follows in the years named:— Live stock in British Possessions.

LIVE STOCK IN BRITISH POSSESSIONS.

Possessions.	Year.	Number of—			
		Horses.	Cattle.	Sheep.	Pigs.
The United Kingdom ...	1891	2,026,170	11,343,686	33,533,988	4,272,764
Malta ...	1887	7,171	10,673	14,609	...
Cyprus ...	1886	53,243	54,658	289,837	...
India* ...	1887-8	888,039	46,089,178	25,880,571	518,700
Ceylon ...	1889	5,891	1,037,216	75,373	...
Mauritius ...	1884	12,000	15,000	30,000	30,000
Cape of Good Hope ...	1888	295,370	1,502,845	14,463,445	166,835
Natal ...	1889	61,224	745,931	625,506	40,950
Canada ...	1881	1,059,358	3,514,989	3,048,678	1,207,619
Newfoundland ...	1884	5,436	19,884	40,326	...
Jamaica ...	1889	68,040	112,767	15,044	...
Falkland Islands ...	1889	3,025	6,521	589,772	67
Australasia† ...	1890-91	1,697,051	10,799,060	114,078,977	1,260,716
Fiji ...	1890-91	695	6,988	6,800	2,000

Live stock
in Foreign
countries.

544. The following table contains a statement of the number of horses, cattle, sheep, and pigs in the principal Foreign countries. The information has been derived entirely from official documents:—

LIVE STOCK IN FOREIGN COUNTRIES (000's OMITTED).

Country.	Year.	Number of—			
		Horses.	Cattle.	Sheep.	Pigs.
EUROPE.					
Austria ...	1880	1,463,	8,584,	3,841,	2,721,
Belgium ...	1880	272,	1,383,	365,	646,
Bulgaria ...	1887	...	...	6,872,	394,
Denmark ...	1888	376,	1,460,	1,225,	771,
France ...	1888	2,892,	13,377,	22,631,	5,847,
Germany ...	1883	3,522,	15,787,	19,190,	9,206,
Greece ...	...	108,	164,	3,465,	180,
Holland ...	1887	274,	1,526,	804,	490,
Hungary ...	1884	1,749,	4,879,	10,595,	4,804,
Italy ...	1881-2	660,	4,783,	8,596,	1,164,
Norway ...	1875	152,	1,017,	1,686,	101,
Portugal ...	1870	...	625,	2,977,	971,
Roumania ...	1888	554,	2,260,	4,807,	770,
Roumelia (Eastern) ...	1883	44,	371,	1,859,	107,
Russia (European) ...	1888	19,663,	24,609,	44,465,	9,243,
Servia ...	1882	123,	827,	3,621,	1,068,
Spain ...	1878	310,	2,353,	16,939,	2,349,
Sweden ...	1888	482,	2,349,	1,350,	610,
Switzerland ...	1886	98,	1,211,	338,	394,

* There are also in India 12 million buffaloes, and nearly 1 million mules. Goats are included with the sheep, as given above.

† For particulars relating to each colony, see third folding sheet *ante*, and Appendix A. *post*.

LIVE STOCK IN FOREIGN COUNTRIES (000's OMITTED)—*continued.*

Country.	Year.	Number of—			
		Horses.	Cattle.	Sheep.	Pigs.
ASIA.					
Japan ...	1885	1,548,	1,060,	...	...
Java and Madura ...	1885	518,	4,530,	...	...
Russia in Asia ...	1874-83	1,070,	3,716,	10,612,	...
AFRICA.					
Algeria ...	1886	175,	1,198,	9,358,	87,
Egypt ...	1887	21,	462,	958,	...
Orange Free State ...	1881	132,	465,	5,056,	...
AMERICA.					
Argentine Republic ...	1888	5,000,	23,000,	80,000,	300,
Brazil ...	...	...	30,000,	...	...
Costa Rica ...	1884	...	206,	...	...
Guadaloupe ...	1880	6,	10,	14,	14,
Guatemala ...	1885	118,	494,	460,	...
Nicaragua ...	1884	...	400,	...	...
Paraguay ...	1887	62,	730,	32,	12,
United States ...	1889	14,214,	52,802,	44,336,	51,603,
Uruguay ...	1885	635,	5,924,	17,050,	100,
Venezuela ...	1883	292,	2,927,	3,491,	977,

545. The following summary of the live stock of the world was published by Mr. J. R. Dodge, statistician to the Department of Agriculture of the United States* :— Live stock of the world.

LIVE STOCK OF THE WORLD (000's OMITTED).

Countries.	Horses.	Cattle.	Sheep.	Pigs.	Mules and Asses.	Goats.
Europe ...	33,253,	97,240,	186,557,	44,719,	3,727,	19,513,
Asia ...	4,195,	70,402,	36,649,	519,	1,182,	1,227,
Africa ...	656,	4,018,	28,959,	304,	600,	5,340,
North America ...	14,918,	55,093,	46,174,	51,530,	2,311,	15,
South America ...	5,992,	57,659,	101,090,	1,388,	1,512,	3,017,
Australasia ...	1,440,	8,966,	97,912,	1,208,	...	25,
Oceania ...	1,	3,	3,	20,	...	1,
Total ...	60,455,	293,381,	497,344,	99,688,	9,332,	29,138

546. The numbers of live stock slaughtered in Victoria are furnished by the local bodies, but it is probable the returns do not in every case include the animals slaughtered by private persons, and on Live stock slaughtered.

* See Report No. 59 (new series) for January and February, 1889, Government Printing Office, Washington.

farms and stations, and, therefore, that more were really slaughtered than the figures show. The following were the numbers returned for 1889 and 1890, those for the latter year being smaller than those for the former in the case of sheep and lambs, but larger in the case of other descriptions of stock:—

LIVE STOCK SLAUGHTERED, 1889 AND 1890.

Year.	Cattle and Calves.	Sheep and Lambs.	Pigs.
1889	250,822	2,383,946	145,724
1890	267,693	2,215,876	163,362
Increase	16,871	...	17,638
Decrease ... ..	...	168,070	...

Purposes for which stock was slaughtered.

547. The purposes to which the carcasses of the slaughtered animals were appropriated in 1890 were returned as follow:—

PURPOSES FOR WHICH LIVE STOCK WAS SLAUGHTERED, 1890.

Description of Live Stock.	Numbers Slaughtered for—			Total.
	The Butcher and Private use.	Preserving or Salting.	Boiling down for Tallow or Lard.	
Cattle and Calves	266,819	740	134	267,693
Sheep and Lambs	2,187,365	26,525	1,986	2,215,876
Pigs	85,668	77,694	...	163,362
Total	2,539,852	104,959	2,120	2,646,931

Stock slaughtered for preserving.

548. In the 10 years ended with 1889, the returns show the average number slaughtered annually for preserving and salting to have been of cattle 735, of sheep and lambs 75,066, and of pigs 54,499. These numbers, as regards pigs, are much below, but as regards sheep, are much above, the numbers slaughtered for the same purposes in 1890, the numbers of cattle slaughtered being about the same.

Wool produced, 1889 and 1890.

549. The quantity of wool produced in Victoria during the year 1890 may be set down as 55,558,930 lbs.* valued at £2,862,125. These figures represent the excess of exports over imports during the year, to which is added the quantity and value of wool used in Victorian woollen mills. In the previous year, the quantity produced, similarly estimated, was 56,954,721 lbs., valued at £2,449,368.

* The quantity of *Victorian* wool, including Angora wool, exported in 1890, according to the Customs returns, was 114,652,242 lbs., or considerably more than the total quantity given above as produced in Victoria.—(See footnotes on pages 28 and 29, *ante*.)

550. The following is a statement of the quantity and value of wool produced in the various Australasian colonies in 1889 and the three preceding years. The estimate for each of the other colonies has been made upon the same principle as that for Victoria, viz., by substituting the difference between the imports and the exports for the entry as to the origin of the wool made at the Customs, to which has been added an estimate for the quantity used for manufacturing purposes during each of the years :—

Wool produced in Australasian colonies, 1886 to 1889.

WOOL PRODUCED IN THE AUSTRALASIAN COLONIES, 1886 TO 1889.*

Colony.	1886.	1887.	1888.	1889.
QUANTITY.	lbs.	lbs.	lbs.	lbs.
Victoria ...	57,439,634	48,420,119	54,143,961	56,954,721
New South Wales ...	171,228,430	216,650,129	236,638,426	258,233,636
Queensland ...	28,700,546	47,482,926	50,675,289	59,228,753
South Australia ...	40,991,388	42,198,632	41,650,088	39,352,984
Western Australia ...	6,139,917	6,675,713	8,475,240	9,501,695
Tasmania ...	8,300,180	9,846,830	7,134,438	6,383,921
New Zealand ...	92,741,733	90,776,881	87,291,513	105,779,923
Total ...	405,541,828	462,051,230	486,008,955	535,435,633
DECLARED VALUE.	£	£	£	£
Victoria ...	2,778,160	2,400,515	2,577,107	2,449,368
New South Wales ...	6,947,526	8,925,516	9,167,534	10,501,664
Queensland ...	1,413,908	2,368,711	2,258,365	2,680,134
South Australia ...	1,227,007	1,323,879	1,334,589	1,354,377
Western Australia ...	332,519	333,785	423,762	395,903
Tasmania ...	319,227	422,531	317,423	292,770
New Zealand ...	3,200,499	3,453,278	3,386,504	4,213,358
Total ...	16,218,846	19,228,215	19,465,284	21,887,574

551. It appears by the figures that Victoria, in 1889, produced considerably less than a fourth as much wool as New South Wales, and rather more than half as much as New Zealand. She, however, produced only a little less than Queensland, and half as much again as South Australia. Western Australia, notwithstanding the immense extent of her territory, produced only half as much again as the island of Tasmania. The wool clip was much larger in 1889 than in any of the other years in New South Wales, Queensland, Western Australia, and New Zealand, but was exceeded in one or more of the previous years in the other colonies.

Wool produced in each colony.

552. The figures also show that the wool produced in the Australasian colonies, in 1889, was more by 49½ million pounds than in 1888,

Wool produce of four years compared.

* For later figures see Table XVIII. in Appendix A., *post*.

by nearly $73\frac{1}{2}$ million pounds than in 1887, and by nearly 130 million pounds than in 1886; and, further, that the value of such wool was greater in 1889 than in 1888 by £2,422,000; than in 1887 by £2,660,000; and than in 1886 by nearly £5,670,000.

Exports of
Austral-
asian wool,
1890-91.

553. According to returns obtained from brokers and others connected with the wool trade in Melbourne, 1,618,052 bales of wool were exported from the Australasian Colonies in 1890-91, and of this about four-fifths was sent from the Australian continent. The following are the quantities from each colony given in bales* :—

EXPORTS OF WOOL FROM AUSTRALASIAN COLONIES,
1890-91.

Colony.	Bales of Wool exported therefrom.	Colony.	Bales of Wool exported therefrom.
Victoria ...	419,989	Tasmania ...	20,273
New South Wales ...	566,465	New Zealand ...	308,489
Queensland ...	121,669		
South Australia ...	155,603	Grand Total ...	1,618,052
Western Australia ...	25,564		
Total ...	1,289,290		

Destination
of Austral-
asian wool,
1890-91.

554. According to the same authority 83 per cent. of Australasian wool in 1890-91 was sent to London, 15 per cent. to the continent of Europe, nearly 2 per cent. to America, and a fraction to Japan. The following are the figures :—

DESTINATION OF AUSTRALASIAN WOOL, 1890-91.

Country.	Bales of Wool sent thereto.	
	Number.	Proportion per cent.
London ...	1,346,122	83·2
Continent of Europe ...	240,737	14·9
America ...	29,235	1·8
Japan ...	1,958	·1
Total ...	1,618,052	100·0

Wool pro-
duced in
various
countries.

555. The following statement of the wool produced in one year in various countries has been computed, except as regards Australasia,

* The weight of a bale of wool is about 250 lbs. for washed and 350 to 360 lbs. for greasy wool. Only about 10 per cent. of the wool being washed, the average weight of a bale may be set down as 349 lbs.

from figures given in the Third Annual Report of the Statistical Institute of Holland* :—

WOOL PRODUCED IN VARIOUS COUNTRIES.

	lbs.		lbs.
Australasia (1889) ...	535,436,000	Italy (1874) ...	21,378,800
Russia (1878) ...	390,548,800	Asiatic Turkey and Persia ...	13,224,000
Argentine Republic (1882) ...	244,666,040	Natal (1881) ...	12,496,680
United States (1882) ...	233,073,000	Austria (1881) ...	10,909,800
United Kingdom (1882) ...	127,942,200	Portugal ...	10,358,800
France (1879) ...	90,319,920	Belgium (1865) ...	4,408,000
Spain (1878) ...	66,120,000	British North America (1881) ...	3,570,480
Germany (1881) ...	54,879,600	Sweden (1870) ...	3,306,000
Cape Colony (1881) ...	42,427,000	Other countries ...	96,976,000
Uruguay (1880) ...	41,369,080		
Hungary (1880) ...	35,682,760		
British India (1881-2) ...	21,400,840	Total	2,060,493,800

556. The average price per lb. of Victorian wool in 1890, based upon its declared value before leaving this colony, as obtained from the Customs returns of exports, was not quite $10\frac{3}{4}$ d., as against nearly $10\frac{1}{2}$ d. in 1889, not quite $10\frac{1}{8}$ d. in 1888, nearly $10\frac{5}{8}$ d. in 1887, $11\frac{3}{8}$ d. in 1886 and 1885, and $12\frac{7}{8}$ d. in 1884. There was thus a rise of about $\frac{1}{4}$ d. per lb. as compared with 1889, of $\frac{5}{8}$ d. as compared with 1888, and of $\frac{1}{8}$ d. as compared with 1887, but a fall of $\frac{5}{8}$ d. per lb. as compared with 1886 or 1885, and of $2\frac{1}{8}$ d. per lb. as compared with 1884. This would appreciate the wool produced in Victoria during 1890 by nearly £60,000 as compared with the average price in 1889, by £144,700 as compared with the price in 1888, and by less than £29,000 as compared with that in 1887; but depreciate it by £144,700 as compared with the average price in 1886 or 1885, and by £490,000 as compared with the price in 1884.†

557. In the foregoing paragraph, the price given is the average for all descriptions of wool included in the one total, so that it is possible that a variation in the quality or condition may to a certain extent account for the difference in the declared value. The variation in the price of wools of like quality will, however, be readily recognised by means of the figures in the following table, which have been kindly supplied for this work by Messrs. Goldsbrough, Mort and Co. (Limited), Melbourne:—

* See *Bijdragen van het Statistisch Instituut*, Amsterdam, 1887, page 19; there given in kilogrammes, each of which has been assumed to be equal to 2·204 lbs.

† See also Part "Interchange," *ante*, where the export value of all wool—not Victorian wool only—is dealt with.

AVERAGE PRICE PER LB. OF WOOL (FLEECE) IN MELBOURNE,
1885 TO 1891.

Year.	Greasy.		Clean.*	
	Merino.	Crossbred.	Fleece Washed.	Scoured.
	d.	d.	d.	d.
1884-5	10½	9	20	19
1885-6	8½	8	16	15
1886-7	10½	9	17	18
1887-8	9½	8	15½	16
1888-9	10½	10	18	17½
1889-90	11½	11	18½	19½
1890-91	10	9	15	16½

Average price of wool sold in Victoria, 1890 and 1891.

558. According to returns obtained from the selling brokers, the average price per bale† of all wool sold in Melbourne and Geelong was £11 8s. in the season 1890-91, as compared with £14 17s. 11d. in 1889-90, thus showing a falling-off of 23½ per cent. in the average value.

Price of Australian wool in London.

559. The average price in 1889 of Australian wool in London, as officially computed from the returns of imports by the Agricultural Department of‡ the Privy Council, was the same as in 1888, ¼d. lower than in 1885 and 1887, 1d. higher than in 1886, and much lower than in any other previous years. The following are the results obtained for the twenty-one years ended with 1889:—

AVERAGE PRICE OF AUSTRALIAN WOOL IN LONDON,
1869 TO 1889.

		per lb.				per lb.	
		s.	d.			s.	d.
1869	...	1	3	1880	...	1	2¾
1870	...	1	3¼	1881	...	1	2½
1871	...	1	2¼	1882	...	1	0½
1872	...	1	3	1883	...	1	0½
1873	...	1	3¼	1884	...	1	0½
1874	...	1	2¾	1885	...	0	10½
1875	...	1	4¼	1886	...	0	9¼
1876	...	1	3¼	1887	...	0	10½
1877	...	1	3	1888	...	0	10¼
1878	...	1	2½	1889	...	0	10¼
1879	...	1	2½				

Value of pastoral produce.

560. The following is an estimate of the gross value of pastoral produce raised on holdings of all descriptions in 1890-91:—

* Comprising both merino and crossbred.

† For average weight of a bale of wool see footnote to paragraph 553 ante.

‡ Report dated November, 1890, page 101.

VALUE OF PASTORAL PRODUCE, 1890-91.

Nature of Produce.	Value.
	£
Milk, butter, and cheese, from 395,091 milch cows kept, @ £8 10s. ...	3,358,273
Estimated value of stock produced in 1890 :—	
Cattle, 395,091, viz., 263,394, @ £8, and 131,697 (calves), @ 30s.	2,304,698
Sheep, 3,184,036, @ 7s. 6d.	1,194,013
Pigs, 84,737, @ £2 10s.	211,842
Horses, 21,823, @ £8	174,584
Excess of exports over imports of wool, Customs value	2,743,364
Estimated value of wool used in the colony for manufacturing purposes, 1,780,859 lbs., @ 1s. 4d.	118,724
Total	10,105,498

NOTE.—The principle on which the numbers of “stock produced” have been estimated is as follows :—It has been assumed that the increase of cattle amounted to one to every milch cow, and that one-third of the calves born were slaughtered, the remainder taking the place of the older cattle slaughtered. The increase of sheep has been reckoned at 25 per cent. on the total number of both sexes over six months old in the colony, that being the proportionate increase ascertained by Mr. A. J. Skene, the late Surveyor-General of Victoria, to have taken place during a series of years on nearly 3½ millions of sheep on 34 stations situated in various parts of the colony. The increase of pigs and horses has been arbitrarily estimated at 30 and 5 per cent. respectively upon the total numbers of such stock. The value per head set down for the different kinds of stock is intended to represent the average value per head of all the stock of each kind in the colony, young and old ; for although the stock born in the year would be only six months old, on the average, when the year terminated, and would, consequently, not be of so high a value as the figures indicate, yet all the growing or fattening stock may be considered to have become more valuable during the year, and the increase of bulk, and consequently of value, of such stock may fairly be set down as part of the year’s produce as much as the stock actually born therein, the numbers of the latter being taken as a basis whereto such values may be applied. The quantity of wool manufactured in Victoria has been ascertained from the various woollen mills. No estimate has been made of the value of meat, tallow, lard, hides, skins, horns, hoofs, bones, etc., as this is supposed to be included in the value of stock produced.

561. Australian-killed fresh meat was delivered in London for the first time in the year 1880, when the supply consisted of 60 carcasses of beef and 555 of mutton. New Zealand fresh meat was first delivered in 1882. The following, according to the Agricultural Department of the Privy Council,* are the quantities delivered from Australasia in the nine years ended with 1889 :—

Australasian fresh meat in London.

AUSTRALIAN AND NEW ZEALAND KILLED FRESH MEAT DELIVERED IN LONDON, 1881 TO 1889.

	Cwt.		Cwt.
1881	11,300	1886	294,220
1882	34,540	1887	302,140
1883	93,420	1888	398,960
1884	222,560	1889	533,680
1885	230,400		

562. In the same nine years the average prices of beef and mutton in London, by the carcass, are quoted as follow† :—

Price of meat in London.

* Report dated November, 1890, page 84.

† *Ibid.*, pages 96 and 97.

AVERAGE WHOLESALE PRICE OF BEEF AND MUTTON IN LONDON,
1881 TO 1889.

—	Beef per lb.	Mutton per lb.
1881	4½d. to 7¼d.	5d. to 9d.
1882	4¾d. „ 8d.	5½d. „ 9½d.
1883	5d. „ 8d.	5¾d. „ 9¾d.
1884	4¼d. „ 7¾d.	5d. „ 8¾d.
1885	3¾d. „ 6¾d.	4¼d. „ 7½d.
1886	3½d. „ 6¼d.	4d. „ 8d.
1887	3d. „ 5¾d.	3¼d. „ 7d.
1888	3¼d. „ 6¼d.	3¾d. „ 7¾d.
1889	3½d. „ 7¼d.	5d. „ 9d.

Rabbits.

563. Tame rabbits were kept in Victoria during the early years of the colony, but rabbits were first turned out upon an extensive scale by a landed proprietor in the Western district. They bred rapidly, and for several years there was a demand for specimens in most districts of the colony for breeding purposes. At that time no one seems to have thought of the nuisance they might eventually become, and of the large expenditure which would be necessary to keep down their numbers. There are now few parts of Victoria which are not infested with them, although, in consequence of the vigorous efforts which have been made by the Government, by Shire Councils, and by private individuals, to suppress the evil, there are not so many as formerly. It is found, however, that if efforts are relaxed they breed so rapidly that they soon become as numerous as ever. Some persons have advocated the introduction of animals hostile to rabbits, such as ferrets, weasels, or the mangouste (Indian ichneumon*), but where this has been tried it has been found that the introduced animals have been so destructive to poultry that the rabbits were the lesser evil of the two; it was also discovered that, as a rule, these animals only attack rabbits when hungry, and cease to do so as soon as they become satiated, consequently it would have been necessary to introduce immense numbers to cope with the multitude of rabbits with which the colony is infested. The most successful way of destroying rabbits has been found to be poisoning either with phosphorized oats or wheat, or with arsenic mixed with bran or chaff, or else with the fumes of bisulphide of carbon, which, being placed in their burrows, speedily effects the desired object if all the entrances are properly stopped. They are also largely trapped and shot, in which case their

* *Herpestes mangos* of Desmarest.

flesh is available for food. In 1890-91, the amount expended by the State on rabbit extermination was about £37,000, as compared with £24,860 in the previous year; the total amount in the last 12 years has been £204,800.

564. Active operations for the destruction of rabbits on Crown Lands were first undertaken by the Government in 1880, and from that date to the middle of 1891 sums amounting to £204,823 had been expended with that object. The following are the amounts spent in each year:—

STATE EXPENDITURE ON RABBIT EXTERMINATION, 1880-1891.

£			£		
1879-80	...	1,280	1885-86	...	24,833
1880-81	...	2,600	1886-87	...	21,065
1881-82	...	12,890	1887-88	...	20,551
1882-83	...	9,883	1888-89	...	17,621
1883-84	...	10,063	1889-90	...	24,860
1884-85	...	22,177	1890-91	...	37,000*

NOTE.—These amounts include expenditure on labour, inspectors' salaries, material, cartage, etc., and for working unoccupied Crown lands.

565. With the view of keeping the rabbits and wild dogs on the South Australian side of the border from crossing into Victoria, a fence of wire netting has been erected by the Victorian Government, commencing at about 36° 45' south latitude and extending north to the Murray, a distance of 150 geographical miles. From the commencing point of this fence the Government of South Australia has fenced south for about 36 miles along the Victorian frontier, but it is not known whether it intends to continue the fencing to the sea. As the distance from the Murray to the sea is 282 miles, the portion undertaken by Victoria covers more than one-half of that length.

566. An Act was passed in 1889† to amend and consolidate the law providing for the destruction and suppression of rabbits and other vermin. This Act is administered by the Government, instead of by shire councils as previously under former Acts. It renders owners and occupiers liable for the destruction of all vermin on their lands, the Crown being responsible for all unoccupied Crown lands; and provides for the appointment by the Governor in Council of inspectors acting under the control of the chief inspector, who are empowered to take legal

* Approximate figures.

† *The Vermin Destruction Act* 1889 (53 Vict. No. 1028), repealed and re-enacted by the *Consolidated Act* (54 Vict. No. 1153).

proceedings against defaulters, and to enter land and destroy vermin, or any harbours for vermin which it is desirable to remove, such as log or brush fences, etc. If the owners and occupiers neglect to do so after due notice, all charges and expenses so incurred to be recovered before a court of law. It also provides for the supply of wire netting to the settlers wherewith to erect rabbit proof fences, the amount to be paid back in ten annual instalments, without interest. All the settlers have to do is to apply to the shire councils for the wire netting, the estimated cost per mile being £18 or £20. The councils will be held responsible for the repayment, and are to collect the moneys advanced and account for the same to the Government. It has been suggested that the applicants should join in groups to fence in their holdings, it being relatively cheaper to fence in a large block than a number of small ones. In introducing the measure, the then Minister of Lands, the Hon. J. L. Dow, stated that whilst the annual expenditure of Victoria on rabbit destruction was about £20,000, that of New South Wales was about £90,000, and that of South Australia was over £40,000; but that the magnitude of the evil was not disclosed by these figures, which simply represented what was spent on Crown lands. In addition, there was the large expenditure incurred by private individuals in attempting to keep their land clear. In 1889-90 the sum of nearly £150,000 was lent by the Government for the purchase of wire netting in accordance with the provisions of the Act. The following account of the measures adopted during the year 1890 to exterminate the rabbits has been taken from the report of the chief inspector* :—

EXTERMINATION OF RABBITS AND OTHER VERMIN.

Provision having been made in the present Act for the Government taking the administration of same, thereby relieving the shire councils of an annual expenditure of fully £14,000, operations were commenced on the 1st January, and the results have so far proved fairly successful.

I may state that of late years the extent of infested country has increased very much, especially in the Midland and North-Eastern districts, where the pest has obtained a firm hold in the localities favourable for burrowing, and where log and brush fences which provide harbour are to be found in the timbered districts.

Little or no action was taken by the shire councils in these districts to carry out the provisions of the former Act so as to check the pest; the task of enforcing the present Act has consequently been a difficult and arduous one.

In the Northern districts, where the rabbits were so great a plague some years ago, the number is now greatly reduced, and very seldom is a complaint made of the destruction of crops; whereas previously such complaints were very numerous, and the damage done was ruinous to the farmers.

* For an account of the steps taken in previous years, see last edition of this work, Vol. II., paragraph 559.

The area more or less infested throughout the colony I estimate at 37,750,000 acres. A staff of 68 inspectors has been appointed to carry out the provisions of the Act; 20,800 notices under section 14 have been served on owners and occupiers to destroy rabbits; 152 convictions under the penal clauses of the Act have been obtained; the fines and costs awarded amount to £1,210, and for charges and expenses the sum of £700 has been received.

Two thousand five hundred notices, as required by the Act, have been served on owners and occupiers to destroy log and brush fences, stone walls, and live hedges, and I am pleased to state that many holders have complied with the notices. No steps have yet been taken by any of the inspectors to destroy fences in accordance with section 19. It is to be hoped, however, that all such fences will soon be destroyed, and replaced by post and wire fences, for until this be done the rabbits cannot be kept down.

The unoccupied Crown lands have received all necessary attention, and where practicable, with a view to economy, the work of rabbit extirpation has been let by contract. A large saving has thereby been effected; but, in consequence of the inspectors having to enforce the provisions of the Act, lands held as commons, and under leases, grazing licences, and mallee lands are being relinquished, owing to the great expense of keeping the land clear of rabbits. The expenditure, therefore, is increasing every month, and a much larger sum will be required next year for the work on Crown lands.

During the year the sum of £150,000, voted by Parliament for loans to shire councils to purchase wire netting, has been allocated amongst 54 shires. The majority of the shires have delivered the wire netting to farmers and others, and no doubt the erection of wire netting will tend to confine the rabbits within limited areas, where they can be more easily destroyed. It is satisfactory to report that a large majority of the shire councils are well satisfied with the working of the Act, and I have no doubt but that, with the aid of wire netting and vigorous administration, the rabbit plague will, in a few years, be reduced to a minimum. The South Australian border fence (150 miles in length) has been periodically inspected, and is in good order.

A large number of schemes and inventions for the destruction of rabbits have been submitted, principally from America, Germany, Great Britain, and India, but none of them are of any practical value.

The means of destruction carried out have been the same as heretofore, viz., poisoning, trapping, impregnating the burrows with bisulphide of carbon or other gases, and digging out. Poisoning and trapping no doubt cause a large percentage of rabbits to be destroyed, but unless the work is followed up by the burrows being dug out, and all cover, such as log and brush, fallen timber, etc., being destroyed, there is very little hope of the pest being effectively kept down.

One thousand one hundred and sixty-five wild dogs and 1,247 foxes have been destroyed during the year, at a cost of £1,550, the shire councils and vermin boards paying one-half of the amount.

567. In the fourteen years ended with 1890, nearly 44 millions of rabbit skins, valued at nearly £284,000, have been exported from Victoria. In addition to these, many have been used in the colony by hat manufacturers* and others, and large numbers have doubtless been destroyed or allowed to decay. The following are the exports of rabbit skins in the period referred to:—

Exports of
rabbit
skins.

* Mr. E. Shaw, the manager of the Denton Mills Hat Factory, reports that about 600 dozen rabbit skins weekly, or 374,400 yearly, are used in that establishment.

EXPORTS OF RABBIT SKINS, 1877 TO 1890.

Year.	Rabbit Skins Exported.		Year.	Rabbit Skins Exported.	
	Number.	Value.		Number.	Value.
1877	700,565	£ 5,790	1885	3,424,259	£ 23,548
1878	711,844	6,206	1886	910,609	6,800
1879	1,036,372	7,322	1887	2,663,314	16,294
1880	3,309,408	21,674	1888	3,967,533	20,759
1881	4,473,108	32,217	1889	3,429,015	12,303
1882	4,929,432	37,538	1890	4,913,351	25,667
1883	4,245,596	30,364			
1884	4,963,371	37,243	Total	43,677,777	283,725

Rabbits sent to market in Melbourne.

568. The number of couples of rabbits received at the Melbourne fish market, the number sold, and the number condemned, during the last five years, were as follow:—

RABBITS SENT TO MELBOURNE MARKET.

Year.	Number of Couples of Rabbits.		
	Sold.	Condemned.	Total.
1886-7	346,856	4,460	351,316
1887-8	418,618	2,272	420,890
1888-9	474,384	13,458	487,842
1889-90	606,568	11,567	618,135
1890-91	676,796	5,955	682,751
Total	2,523,222	37,712	2,560,934

Flour mills.

569. In 1891, as compared with 1890, whilst a decrease of 3 occurred in the number of mills, of 32 in the number of pairs of stones, and of 7 in the number of hands employed, there was an increase of 32 in the horse-power of machinery, and of 29 in the sets of rollers in use. The wheat operated upon increased by 2,674,000 bushels, and the flour made by nearly 63,000 tons*; but, on the other hand, the other grain operated upon decreased by 127,000 bushels. An increase of £39,737 took place in the estimated value of machinery, lands, and buildings:—

* A ton of flour is considered to be equivalent to 2,000 lbs.

FLOUR MILLS, 1890 AND 1891.

Year ended March.	Number of Mills.	Mills employing—		Amount of Horse-power of Machinery.	Number of Pairs of Stones.	Number of Sets of Rollers.
		Steam-power.	Water-power.			
1890 ...	107	100	7	3,585	269	427
1891 ...	104	99	5	3,617	237	456
Increase	...	...	...	32	...	29
Decrease	3	1	2	...	32	...

Year ended March.	Number of Hands employed.	Grain operated upon.		Flour made.	Approximate total Value of—		
		Wheat.	Other.		Machinery and Plant.	Lands.	Buildings.
		bushels.	bushels.	tons.*	£	£	£
1890 ...	807	7,203,602	376,280	146,828	303,232	122,007	226,406
1891 ...	800	9,877,840	249,071	209,773	368,386	108,096	214,900
Increase	...	2,674,238	...	62,945	65,154	...	...
Decrease	7	...	127,209	...	...	13,911	11,506

570. The following was set down as the value of grain operated upon, and of flour, meal, etc., produced in flour mills, in 1891, and in the previous census year, 1881:—

Value of materials used and produced.

FLOUR MILLS, 1881 AND 1891.

	1880-81.	1890-91.
Value of materials operated upon	£1,412,099	£1,620,125
„ articles produced	1,651,351	2,043,604
Increased value	£239,252, or 17 per cent.	£423,479, or 26 per cent.

571. The breweries returned were fewer by 2, the hands employed in breweries by 67, and the horse-power of machinery by 21, in 1891 than in 1890; decreases also took place in the materials used and beer brewed, the latter being less by over 1,493,000 gallons than in the previous year. A higher value, however, by over £245,000 was set down for the machinery, plant, and buildings:—

Breweries.

BREWERIES, 1890 AND 1891.

Year ended March.	Number of Breweries.	Breweries employing—				Amount of Horse-power of Machinery.	Number of Hands employed.	Materials used.		
		Steam-power.	Gas.	Water-power.	Manual Labour only.			Sugar.	Malt.	Hops.
1890 ...	70	57	...	1	12	773	1,252	lbs. 15,975,568	bushels. 841,841	lbs. 1,038,073
1891 ...	68	54	1	1	12	752	1,185	13,966,624	796,982	908,456
Increase	...	...	1	...	...	...	...	...	...	...
Decrease	2	...	...	...	...	21	67	2,008,944	44,859	129,617

Year ended March.	Beer made.	Approximate Total Value of—		
		Machinery and Plant.	Lands.*	Buildings.
1890 ...	gallons. 20,051,346	£ 206,233	£ 702,406	£ 399,851
1891 ...	18,557,931	254,206	900,660	399,156
Increase	...	47,973	198,254	...
Decrease	1,493,415	...	...	695

Value of materials used and produced.

572. The value of the sugar, malt, and hops used, and of the beer made, were returned for the last two census years. The following are the figures given :—

BREWERIES, 1881 AND 1891.

	1880-81.	1890-91.
Value of materials used ...	£442,885	£491,932
„ beer made ...	780,501	971,489
Increased value ...	£337,616, or 76 per cent.	£479,557, or 97 per cent.

Consumption of beer per head.

573. The beer made in Victoria during 1890-91 amounted to 18,557,931 gallons ; and the quantity imported, after deducting exports, was 1,502,706 gallons. These numbers gave a total consumption of 20,060,637 gallons, or an average of $17\frac{2}{3}$ gallons per head. The consumption of beer per head in 1889-90 was as much as $19\frac{2}{5}$ gallons, in 1888-9 20 gallons, in 1887-8 $18\frac{2}{3}$ gallons, in 1886-7 $17\frac{1}{2}$ gallons, and in the two previous years no more than 16 gallons.

Beer brewed in various countries.

574. The following is a statement of the quantity of beer brewed in one year in the United Kingdom, four countries of Europe, and the United States :—

* The figures in this column apply to purchased lands only. One brewery in 1890 was upon Crown lands ; in this case no valuation of the land has been given.

BEER BREWED IN VARIOUS COUNTRIES* (000's OMITTED).

United Kingdom (1885)	gallons.	989,890,	Austria-Hungary (1884)	gallons.	272,624,
Holland (1884)	...	932,228,	Belgium (1885)	...	206,074,
United States (1888)	...	819,640,	France (1883)	...	189,618,

575. The average annual consumption of malt liquor per head in various countries may be set down as follows, the figures being generally calculated over a series of years :—

Consumption of beer in various countries.

ANNUAL CONSUMPTION OF BEER PER HEAD IN VARIOUS COUNTRIES.

United Kingdom	gallons.	28.74	Tasmania	gallons.	10.02
South Australia	...	20.04	New Zealand	...	9.59
Germany	...	19.38	Switzerland	...	8.15
Victoria	...	19.36	Austria-Hungary	...	6.83
Holland	...	19.05	France	...	4.53
New South Wales	...	11.94	Canada	...	3.05
United States	...	10.74	Sweden	...	2.52
Queensland	...	10.23			

576. The number of brickyards and potteries was the same as that returned in 1890, and whilst the hands employed were fewer by 121, the horse-power of the machinery employed was increased by 514. The number of bricks made was smaller than in the previous year by nearly 34 $\frac{3}{4}$ millions, and there was also a decrease of nearly £2,100 in the value of pottery made. The plant, land, and buildings show an increased value of about £115,600. The following are the comparative figures for the two years :—

Brickyards and potteries.

BRICKYARDS AND POTTERIES, 1890 AND 1891.

Year ended March.	Number of Brick-yards and Potteries.	Number of Machines in use.		Brickyards employing—			Amount of Horse-power of Machinery.	Number of Hands employed.
		For tempering or crushing Clay.	For making Bricks or Pottery.	Machines worked by—		Manual Labour.		
				Steam.	Horses.			
1890	233	237	117	78	82	73	2,384	3,243
1891	233	251	146	78	99	56	2,898	3,122
Increase	...	14	29	...	17	...	514	...
Decrease	...	...	...	...	...	17	...	121

* Computed, in most cases, from figures given in the *Bijdragen van het Statistisch Instituut*, 1887, page 15, there stated in hectolitres, each of which has been assumed to be equal to 22 Imperial gallons.

BRICKYARDS AND POTTERIES, 1890 AND 1891—continued.

Year ended March.	Number of Bricks made.	Approximate Total Value of—			
		Pottery made.	Machinery and Plant.	Lands.*	Buildings.
1890 ...	276,650,844	£ 70,240	£ 293,560	£ 406,462	£ 222,206
1891 ...	241,928,340	68,160	335,766	449,766	252,315
Increase ...	...	...	42,206	43,304	30,109
Decrease ...	34,722,504	2,080	...	...	...

Tanneries,
fellmongeries,
etc.

577. The establishments for tanning and wool-washing were less numerous by 5, and the tanpits by 138, in 1891 than in 1890, although an increase of 93 took place in the number of hands employed. The returns also show an increase of over £74,200 in the value of plant, lands, and buildings connected with that industry. Notwithstanding the decrease in the number of establishments, the work done as a whole was in excess of that in the previous year; the hides tanned being more numerous by 17,427, the skins tanned by 154,283, the skins stripped by 13,796, and the wool washed other than that stripped from skins, by 251,393 lbs. The following are the particulars for the two years:—

TANNERIES, FELLMONGERIES, AND WOOL-WASHING ESTABLISHMENTS, 1890 AND 1891.

Year ended March.	Number of Establishments.	Establishments employing—					Amount of Horse-power of Machinery.	Number of Hands employed.	Number of Tan Pits.
		Steam-power.	Wind-power.	Water-power.	Horse-power.	Manual Labour only.			
1890 ...	137	68	...	1	11	57	825	1,576	3,644
1891 ...	132	68	2	1	9	52	824	1,669	3,506
Increase	...	...	2	...	...	...	...	93	...
Decrease	5	...	...	...	2	5	1	...	138

Year ended March.	Number Tanned of—		Number of Skins Stripped of Wool.	Other Wool Washed.	Approximate Total Value of—		
	Hides.	Skins.			Machinery and Plant.	Lands. †	Buildings.
1890 ...	348,144	1,768,574	2,441,968	lbs. 9,443,197	£ 107,535	£ 105,607	£ 138,296
1891 ...	365,571	1,922,857	2,455,764	9,694,590	153,055	115,240	157,358
Increase	17,427	154,283	13,796	251,393	45,520	9,633	19,062

* The figures in this column apply to purchased lands only. Thirty-one of the brickyards in 1890, and thirty-four in 1891, were on Crown lands.

† The figures in this column apply to purchased land only. Seven of the establishments in 1890, and five in 1891, were on Crown lands. In these cases no valuation of land is given.

578. An estimate of the value of the materials used and articles produced in tanneries, fellmongeries, and wool-washing establishments was obtained in the last two census years. The following are the figures:—

TANNERIES, FELLMONGERIES, AND WOOL-WASHING ESTABLISHMENTS,
1881 AND 1891.

	1880-81.		1890-91.
Value of materials used ...	£1,008,531	... ..	£793,679
„ articles produced	1,406,274	... ..	1,226,853
Increased value ...	£397,743, or 39 per cent.		£433,174, or 55 per cent.

Value of materials used and produced.

579. An Act* to encourage the growth of the several species of acacia, locally known as “wattle,” the bark of which is of great value for tanning purposes, was passed on the 25th November, 1889. The Act allows selections of 1,000 acres each for wattle cultivation, to be taken up on a 21 years’ lease at a rental of not less than 2d. per acre per annum for the first seven years, not less than 4d. for the next seven years, and not less than 6d. for the third period of seven years, the right being given to select 320 acres of the area as a freehold. It is stipulated that the planting of one-fifth of the area must be made each year after the first, so that the whole may be covered by the end of the sixth year. The tree being of exceedingly quick growth, the bark is fit for stripping in 5 or 6 years. It is a peculiarity of the wattle that whilst its timber, which is valueless, becomes finer on good land, its bark producing qualities are said to be greatest on poor arid soils. Large areas of land suitable for the growth of the wattle have been thrown open for selection under this Act.

Wattle Cultivation Bill.

580. The forest saw mills, or those established for the purpose of cutting native timber at or near the place at which it is grown were separated from the town saw mills for the first time in 1890-91. The following are the statistics of the industry referred to:—

Forest sawmills.

FOREST SAW MILLS, 1890-91.

Number of forest saw mills	202
Number using steam power	195
Number using water power	7
Horse-power of steam engines	3,149
Hands employed	2,767
Superficial feet of timber produced	152,434,583
Value of timber produced	£608,759
„ machinery and plant	£231,603
„ lands	£52,071†
„ buildings	£61,082

* *The Wattle Trees Cultivation Act 1889* (53 Vict. No. 1,037); repealed and re-enacted by 54 Vict. No. 1,157.

† These figures apply to purchased land only. Thirteen of these establishments were on Crown Lands. In these cases no valuation of the land is given.

Woollen
mills.

581. The number of woollen mills returned was the same in 1891 as in 1890, a decrease of 19 occurred in the number of hands employed. There was an increase of £31,077 in the value of plant, lands, and buildings, of 41,930 lbs. in the quantity of wool used, of 86,488 in the number of yards of tweed, cloth, and flannel made, of 1,988 in the number of spindles used, and substantial increases in the number of blankets and shawls manufactured :—

WOOLLEN MILLS, 1890 AND 1891.

Year ended March.	Number of Woollen Mills.	Number of Spindles.	Horse- power of Machinery.	Quantity of Wool used.	Goods Manufactured : Quantity of—		
					Tweed, Cloth, Flannel, etc.	Blankets.	Shawls.
1890 ...	7	23,190	775	lbs. 1,738,929	yards. 1,039,168	pairs. 2,362	number. 658
1891 ...	7	25,178	760	1,780,859	1,125,656	3,430	1,000
Increase	...	1,988	...	41,930	86,488	1,068	342
Decrease	...	...	15	...	...	...	...

Year ended March.	Hands employed.		Approximate Total Value of—		
	Males.	Females.	Machinery and Plant.	Lands.	Buildings.
1890 ...	423	387	£ 129,109	£ 7,481	£ 52,108
1891 ...	408	383	153,436	7,731	58,608
Increase	...	...	24,327	250	6,500
Decrease	...	15	4	...	...

Value of
articles
used and
produced.

582. The value of the raw material used in woollen mills, and of the articles produced, was returned in 1881 and 1891. The following are the figures :—

WOOLLEN MILLS, 1881 AND 1891.

	1880-81.	1890-91.
Value of materials used ...	£89,412	£94,932
„ articles produced ...	168,710	170,687
Increased value ...	£79,298, or 89 per cent.	£75,755, or 80 per cent.

Cotton
manufac-
ture in
various
countries

583. The manufacture of cotton has not yet been introduced into Australia, but statistics of its manufacture elsewhere may not be uninteresting. The following is a statement of the number of spindles in use in the United Kingdom, the Continent of Europe, the United States, and India, in each of the four years ended with 1888 :—

SPINDLES FOR MANUFACTURING COTTON IN USE IN VARIOUS COUNTRIES, 1885 TO 1888.

(000's omitted.)

Countries.	Number of Spindles.			
	1885.	1886.	1887.	1888.
United Kingdom ...	43,000,	42,700,	42,740,	42,740,*
Continent of Europe ...	22,750,	22,900,	23,180,	23,380,
United States ...	13,250,	13,350,	13,500,	13,525,
India ...	2,145,	2,260,	2,420,	2,490,
Total ...	81,145,	81,210,	81,840,	82,135,

584. The following are the quantities of cotton consumed in the same countries during the ten years ended with 1887-8. The figures express substantially the world's consumption of that staple in the years named:—

World's consumption of cotton.

WORLD'S CONSUMPTION OF COTTON, 1879 TO 1888.

(00,000's omitted.)

Years.	Quantity of Cotton Consumed in—				
	United Kingdom.	Continent of Europe.	United States.	India.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
1878-9 ...	1,137,2	1,038,4	713,6	104,9	2,994,1
1879-80 ...	1,340,0	1,100,0	792,4	120,6	3,353,0
1880-81 ...	1,428,8	1,182,4	847,2	148,6	3,607,0
1881-2 ...	1,456,0	1,279,2	878,8	155,8	3,769,8
1882-3 ...	1,497,6	1,352,0	950,0	179,0	3,978,6
1883-4 ...	1,466,4	1,352,0	897,6	208,3	3,924,3
1884-5 ...	1,373,2	1,302,0	763,6	233,9	3,672,7
1885-6 ...	1,451,2	1,386,0	911,2	252,1	4,000,5
1886-7 ...	1,477,6	1,456,0	969,2	284,7	4,187,5
1887-8 ...	1,536,4	1,508,0	1,012,0	300,0	4,356,4

585. Thirty-three soap and candle works were returned in both 1890 and in 1891, but the hands employed increased by 28. The weight of soap made in the year under review was less by 11,327 cwt. than that in the previous year, but the weight of candles made was greater by 982 cwt. than in 1890, whilst the valuation placed upon the machinery, lands, and buildings was higher by £41,110 than in that year:—

Soap and candle works.

* According to a return published in *The Manufacturer and Inventor* (a London industrial newspaper), of the 20th October, 1890, the number of textile factories in the United Kingdom is 7,190, in which 48,409,733 spinning spindles or throwing spindles, 5,231,329 doubling spindles, and 822,489 power looms are used; whilst the number of hands employed is 1,084,631, viz., 428,082 males and 656,549 females.

SOAP AND CANDLE WORKS, 1890 AND 1891.

Year ended March.	Number of Establishments.	Establishments employing—			Amount of Horse-power of Machinery.	Number of Hands employed.	Soap made.	Candles made.	Approximate Total Value of—		
		Steam-power.	Gas power.	Manual Labour only.					Machinery and Plant.	Lands.*	Buildings.
1890 ...	33	24	...	9	532	399	cwt. 159,570	cwt. 50,999	£ 70,090	£ 76,560	£ 51,060
1891 ...	33	21	1	11	386	427	148,243	51,981	95,710	84,410	58,700
Increase	...	...	1	2	...	28	...	982	25,620	7,850	7,640
Decrease	...	3	...	...	146	...	11,327	...	...	...	..

NOTE.—In addition to the other manufactures, 8,880 cwt. of soda crystals were made in 1890, and 10,120 cwt. in 1891.

Value of articles used and produced.

586. The value of the raw material used, and of the articles produced, in soap and candle factories was returned for the twelve months preceding the last two censuses, with the following result:—

SOAP AND CANDLE WORKS, 1881 AND 1891.

	1880-81.	1890-91.
Value of raw materials used ...	£288,340	£229,903
„ articles produced ...	450,924	348,316
Increased value ...	£162,584, or 56 per cent.	£118,413, or 52 per cent.

Tobacco manufactories.

587. The tobacco manufactories returned were 3 less in 1891 than in 1890, and the hands employed decreased by 64, viz., 29 males and 35 females. The tobacco manufactured, however, increased by 128,171 lbs., and the snuff manufactured by 586 lbs.; on the other hand there was a falling off of over a million in the number of cigars made, and of 1 $\frac{2}{5}$ million in the number of cigarettes made. The value of lands, buildings, and plant in use was set down as less by £16,421 in 1891 than in 1890:—

TOBACCO MANUFACTORIES, 1890 AND 1891.

Year ended March.	Number of Establishments.	Establishments employing—			Amount of Horse-power of Machinery.	Number of Hands employed.		Quantity of—		Number of Cigars Manufactured.	Approximate Total Value of—		
		Steam-power.	Gas-power.	Manual Labour.		Males.	Females.	Tobacco Manufactured.	Snuff Manufactured.		Machinery and Plant.	Lands.	Buildings.
1890 ..	16	4	1	11	59	593	247	lbs. 1,067,455	lbs. 1,533	14,320,340	£ 38,550	£ 74,250	£ 53,700
1891 ..	13	4	1	8	79	564	212	1,195,626	2,119	13,255,000	41,365	48,814	59,900
Increase ..	..	..	..	..	20	..	..	128,171	586	..	2,815	..	6,200
Decrease ..	3	..	..	3	..	29	35	..	..	1,065,340	..	25,436	..

NOTE.—In addition to the other manufactures, 6,266,000 cigarettes were made in 1890, and 4,854,000 in 1891.

* The figures in this column apply to purchased land only. Two of these establishments in both years were on Crown lands. In these cases no valuation of the land is given.

588. According to the returns of the last two censuses the value of the materials used and articles produced in tobacco manufactories was as follows in 1881 and 1891 :—

Value of raw and manufactured materials.

TOBACCO MANUFACTORIES, 1881 AND 1891.

	1880-81.	1890-91.
Value of materials used ...	£126,450	£118,070
„ articles produced ...	199,320	239,627
Increased value ...	£72,870, or 58 per cent.	£121,557, or 103 per cent.

589. Six distilleries were returned both in 1891 and 1890. An increase took place of 39 in the number of hands employed, of nearly 94,000 gallons in the quantity of spirits made, and of £14,640 in the value of plant, lands, and buildings. The following are the figures for the two years :—

Distilleries.

DISTILLERIES, 1890 AND 1891.

Year ended March.	Number of Distilleries.	Amount of Horse-power of Machinery.	Number of Hands employed.	Spirits made.	Approximate Value of—		
					Machinery and Plant.	Lands.	Buildings and Improvements.
1890 ...	6	127	93	gallons. 425,431	£ 76,500	£ 52,500	£ 43,000
1891 ...	6	109	132	519,078	57,000	70,140	59,500
Increase ...	...	...	39	93,647	...	17,640	16,500
Decrease ...	...	18	...	...	19,500	...	...

590. According to the following figures, which (except those for the Australasian colonies) have not been got from an official source, and therefore must be taken only for what they may be worth, the average consumption of spirits per head appears to be much the greatest in Denmark and Sweden. Moreover, the consumption in Victoria is less than in New South Wales (slightly), Western Australia, or Queensland, but greater than in New Zealand, Tasmania, or South Australia, the latter two of which colonies stand at the very bottom of the list :—

Consumption of spirits in various countries.

ANNUAL CONSUMPTION OF SPIRITS PER HEAD IN VARIOUS COUNTRIES.

Denmark ...	Gallons. 4.30	Holland ...	Gallons. 2.08
Sweden ...	4.20	Russia* ...	1.65
Scotland ...	2.10	Queensland ...	1.59

* It is believed that the actual consumption in Russia is larger, and that much privately distilled spirits are consumed which are not taken into account.

ANNUAL CONSUMPTION OF SPIRITS PER HEAD IN VARIOUS COUNTRIES—*continued.*

	Gallons.		Gallons.
Western Australia ...	1·46	Germany ...	·95
United States ...	1·34	France ...	·85
Ireland ...	1·33	New Zealand ...	·78
Canada ...	1·19	England ...	·77
New South Wales ...	1·15	Austria-Hungary ...	·63
Victoria ...	1·12	Tasmania ...	·59
Switzerland ...	1·04	South Australia ...	·49
United Kingdom ...	1·00		

Other manu-
factories,
works, etc.

591. The manufactories and works, exclusive of those of which mention has already been made—viz., flour mills, breweries, distilleries, brickyards, potteries, tanneries, fellmongeries, wool-washing establishments, woollen mills, soap and candle works, and tobacco manufactories—were less numerous by 20 than those returned in 1890. It will be observed that the establishments employing water-power decreased by 1, those employing horse-power also by 1, and those employing only manual labour by 46; whilst there was an increase of 28 in those worked with the aid of steam and gas. The males employed decreased by 1,391, and the females employed increased by 446; whilst the value of lands, buildings, and plant shows an increase of £615,875. The totals of the two years are subjoined:—

MANUFACTORIES, WORKS, ETC., 1890 AND 1891.

(Exclusive of Flour Mills, Breweries, Distilleries, Brickyards, Potteries, Tanneries, Fellmongeries, Wool-washing Establishments, Woollen Mills, Soap and Candle Works, and Tobacco Manufactories.)

Year ended March.	Number of Manufactories, Works, etc.	Manufactories, etc., employing—						Horse-power of Machinery
		Steam.	Water.	Gas.	Wind	Horse-power.	Manual Labour only	
1890 ...	2,528	1,071	19	301	2	24	1,111	18,623
1891 ...	2,508	1,080	18	320	2	23	1,065	19,749
Increase	...	9	...	19	...	...	...	1,126
Decrease	20	...	1	...	...	1	46	...

Year ended March.	Number of Hands employed.		Approximate Total Value of—		
	Males.	Females.	Machinery and Plant.	Lands.*	Buildings.
1890 ...	40,719	7,693	£ 4,637,043	£ 3,937,624	£ 3,078,688
1891 ...	39,328	8,139	5,035,493	4,033,656	3,200,081
Increase	...	446	398,450	96,032	121,393
Decrease	1,391	...	...	...	...

NOTE.—Exclusive of stone-breaking and tar-pavement works, which numbered 19 in 1890 and 23 in 1891. These works being carried on in connexion with quarries, it is found impossible to separate them therefrom. See table following paragraph 596 *post*.

* In the case of establishments standing upon Crown lands no estimate of the value of the land is given. The number of such establishments was 197 in 1890 and 204 in 1891.

592. By summarizing the returns of manufactories and works of all descriptions, including not only such as are embraced in the foregoing table, but also those excluded therefrom—viz., flour mills, breweries, distilleries, brickyards, potteries, tanneries, fellmongeries, wool-washing establishments, woollen mills, soap and candle works, and tobacco manufactories—it is found that during 1890-91 the total number of establishments decreased by 33, and the hands employed by 1,063; those of them which use steam or gas increased by 23, the amount of horse-power by 1,491, and the value of machinery, lands, and buildings by £1,161,384. The returns of the two years are contained in the following table:—

MANUFACTORIES, WORKS, ETC., 1890 AND 1891.

(Including Flour Mills, Breweries, Distilleries, Brickyards, Potteries, Tanneries, Fellmongeries, Wool-washing Establishments, Woollen Mills, Soap and Candle Works, and Tobacco Manufactories, as well as all other Manufactories, Works, etc.)

Year ended March.	Total Number of Establishments.	Number of Establishments using Steam or Gas Engines.	Horse-power of Machinery.	Number of Hands employed.	Approximate Value of Lands,* Buildings, Machinery, and Plant.
1890 ...	3,137	1,717	27,683	57,432	£ 15,612,064
1891 ...	3,104	1,740	29,174	56,369	16,773,448
Increase ...	...	23	1,491	...	1,161,384
Decrease ...	33	..	...	1,063	...

593. The manufacturing establishments of all kinds respecting which returns are obtained are named in the following table, and their numbers are given for 1891 and for the first year of each of the two previous quinquennia; also the number of hands employed, and the approximate value of materials used and produced, and of plant, lands, and buildings, during 1891. The establishments are generally of an extensive character, the exceptions being in cases where the existence of industries of an unusual or interesting nature might seem to call for notice, or where machinery worked by steam, gas, or water is used. No attempt is made to enumerate mere shops, although some manufacturing industry may be carried on thereat. Were this done, the “manufactories” in the colony might be multiplied to an almost indefinite extent:—

* In the case of establishments standing upon Crown lands no estimate of the value of the land is given. The number of such establishments was 238 in 1890 and 245 in 1891.

MANUFACTORIES, WORKS, ETC., 1881, 1886, AND 1891.

Description of Manufactory, Work, etc.	Number of Establishments.			Number of Hands employed.	1890-91.		
	1880-81.	1885-86.	1890-91.		Approximate Value of—		
					Materials used.	Articles produced.	Lands, Buildings, Machinery, and Plant.
BOOKS AND STATIONERY.							
Account-book manufactories, manufacturing stationers	7	7	11	1,027	£ 152,360	£ 248,900	£ 234,270
Printing and lithographic printing establishments*	89	139	162	4,003	459,858	1,363,086	1,198,051
Photo-lithographic works ...	...	...	1	...	...	...	...
MUSICAL INSTRUMENTS.							
Organ-building establishments ...	2	4	3	35	6,300	10,100	7,000
Pianoforte manufactories ...	5	4	3	12	750	1,900	2,500
CARVING FIGURES, ETC.							
Wood carving and turnery works ...	10	18	15	59	3,595	9,710	17,122
DESIGNS, MEDALS, AND DIES.							
Die-sinkers, engravers, medalists, trademark makers	6	6	8	130	5,635	14,149	32,795
Indiarubber stamp manufactories † ...	2	...	...	...	...	...	...
Type foundry ...	1	...	...	...	...	...	...
PHILOSOPHICAL INSTRUMENTS, ETC.							
Electric-lighting apparatus manufactory	...	1	3	18	1,420	3,450	6,850
Philosophical instrument manufactories	1	4	2	9	540	900	3,350
SURGICAL INSTRUMENTS.							
Surgical instrument, truss—manufactories	6	4	4	23	1,056	4,806	11,125
ARMS, AMMUNITION, ETC.							
Blasting powder, dynamite, etc.—manufactories	3	6	6	66	14,804	27,070	48,655
Fuze manufactory ...	1	1	1	...	...	...	...
Shot manufactories ...	...	2	2	4	1,600	2,184	5,443
MACHINES, TOOLS, AND IMPLEMENTS.							
Agricultural implement manufactories	54	55	71	1,090	263,714	692,125	198,159
Boiler and pipe-covering manufactories	...	...	1	...	...	...	...
Cutlery, tool—manufactories ...	3	5	9	55	10,350	26,110	29,935
Domestic implement‡ manufactories ...	2	8	6	56	4,500	14,400	9,380
Iron foundries and engineering establishments §	147	148	190	8,019	1,166,516	2,480,941	1,598,865
Nail manufactories ...	...	2	4	36	15,810	22,692	18,000

* Including paper-bag manufactories.

† Indiarubber stamps are now generally made by manufacturing stationers. See Books and Stationery above.

‡ Including bellows, churn, washing-machine, etc., makers.

§ Including brass-founders.

MANUFACTORIES, WORKS, ETC., 1881, 1886, AND 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.			Number of Hands employed.	1890-91.		
	1880-81.	1885-86.	1890-91.		Approximate Value of—		
					Materials used.	Articles produced.	Lands, Buildings, Machinery, and Plant,
MACHINES, TOOLS, AND IMPLEMENTS— <i>continued.</i>					£	£	£
Pattern-makers ... ..	...	5	5	16	1,000	5,470	9,275
Sheet-iron and tin works	61	50	53	749	119,644	240,000	201,090
CARRIAGES AND HARNESS.							
Carriage lamp manufactories	3	2	2	15	1,500	3,800	5,000
Coach, waggon, etc.—manufactories ...	132	174	205	2,781	238,096	506,625	439,527
Perambulator manufactories	3	4	2	10	620	1,869	3,560
Saddle, harness—manufactories	47	63	73	637	80,423	154,076	121,404
Saddle-tree, etc., manufactories	4	4	3	31	1,350	4,400	10,780
Whip manufactories	3	2	3	19	2,610	7,400	3,835
SHIPS AND BOATS.							
Ship, boat—builders	10	12	10	61	3,999	10,957	10,370
Ships' wheels, blocks, etc.—manufactories	3	1	1	...	...	...	...
Floating-dock	1	} 7	7	193	...	...	426,875
Graving-docks	3						
Patent slips	2						
HOUSES, BUILDINGS, ETC.							
Architectural modelling works*	13	10	13	88	4,557	11,788	35,220
Enamelled mantelpiece manufactories ...	...	2	5	54	8,820	18,800	9,490
Lime and cement works	21	35	34	333	14,361	46,868	27,700
Roof-covering composition manufactories	2	...	...	...	...	...	...
Venetian blind manufactories	12	12	9	116	16,293	21,866	20,955
Earth-closet manufactories	1	3	2	22	2,200	7,495	7,050
FURNITURE.							
Bedding, flock, and upholstery manufactories	15	25	33	378	89,532	118,859	99,655
Bedstead manufactory ... ..	...	1	1	...	...	...	...
Cabinet works, including billiard-table makers	63	75	71	1,473	141,589	321,892	275,166
Iron-safe manufactories	2	2	2	25	1,600	4,800	8,800
Looking-glass manufactories	2	2	4	43	13,968	21,200	29,000
Picture-frame makers, etc.	13	7	9	55	13,582	17,248	16,915
CHEMICALS.							
Chemical works	6	10	15	253	57,080	151,362	125,195
Dye works	6	12	5	15	238	1,397	4,430
Essential oil manufactories	4	7	12	139	6,660	19,090	18,050
Ink, blacking, blue, washing-powder, etc.—manufactories	12	7	7	150	43,658	79,950	19,560
Japanning works ... ..	...	1	1	...	...	...	...

* Including ventilator manufactories.

MANUFACTORIES, WORKS, ETC., 1881, 1886, AND 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.			1890-91.			
	1880-81.	1885-86.	1890-91.	Number of Hands employed.	Approximate value of—		
					Materials used.	Articles produced.	Lands, Buildings, Machinery, and Plant.
CHEMICALS—continued.							
Paint, varnish—manufactories ...	1	1	2	11	£ 6,990	£ 17,000	£ 19,250
Printing ink manufactories...	...	3	2	22	4,000	8,500	12,100
Salt works ...	8	5	4	32	250	1,500	4,230
TEXTILE FABRICS.							
Woollen mills ...	10	9	7	791	94,932	170,687	219,775
DRESS.							
Boot manufactories ...	105	91	92	3,787	476,366	844,202	226,950
Clothing factories ...	63	73	105	5,536	621,671	1,127,887	419,650
Fur manufactories ...	3	5	8	56	20,470	37,665	13,175
Hat, cap—manufactories ...	22	23	17	471	44,569	93,058	73,089
Hosiery manufactories ...	...	3	3	63	6,160	10,145	8,490
Oilskin, waterproof-clothing—manufactories	5	5	5	115	24,620	48,800	19,780
Umbrella and parasol manufactories	9	8	10	158	37,542	59,620	18,030
Wig manufactory ...	1	...	...	...	...	...	...
FIBROUS MATERIALS.							
Rope, twine, mat, bag, sack—manufactories	18	14	13	396	161,356	227,122	121,058
Sail, tent, tarpaulin—manufactories ...	12	13	9	81	70,162	85,431	23,515
ANIMAL FOOD.							
Butter factories ...	...	...	32	108	80,549	118,486	83,285
Cheese factories* ...	28	22	20	82	23,595	43,856	41,511
Meat-curing establishments ...	16	24	24	328	200,530	281,100	125,570
VEGETABLE FOOD.							
Biscuit manufactories ...	13	7	7	627	157,816	283,716	143,190
Confectionery works ...	8	12	13	362	79,920	147,450	98,450
Flour mills ...	144	134	104	800	1,620,125	2,043,604	691,382
Jam, pickle, vinegar, sauce—manufactories	25	30	17	404	77,624	137,069	98,114
Macaroni works ...	2	1	1	...	...	...	...
Maizena, oatmeal, starch—manufactories†	5	1	4	176	129,200	153,800	146,310
Milk condensing ..	...	...	1	...	...	...	...
DRINKS AND STIMULANTS‡							
Aërated waters, gingerbeer, liqueur, etc.—works	114	139	160	1,056	195,997	365,930	364,382

* A large quantity of cheese and butter is made on dairy farms which are not returned as factories, and therefore are not included in this table. Some of these have steam engines, and use cream separators and other machinery. It was ascertained that in 1890 as many as 14,112 hands were employed in such establishments exclusively on dairy work.

† Some of these factories also make coffee, cocoa, spice, etc.

‡ Places where wine is made are not included. The number of wine-presses returned in 1890-91 was 571.

MANUFACTORIES, WORKS, ETC., 1881, 1886, AND 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.			Number of Hands employed.	1890-91.		
	1880-81.	1885-86.	1890-91.		Approximate value of—		
					Materials used.	Articles produced.	Lands, Buildings, Machinery, and Plant.
DRINKS AND STIMULANTS*—							
<i>continued.</i>							
Breweries	81	74	68	1,185	£ 491,932	£ 971,489	£ 1,554,022
Coffee, chicory, cocoa, mustard, spice—works†	12	14	13	126	35,587	60,322	115,020
Distilleries	6	7	6	132	41,469	106,937	186,640
Malthouses	14	15	16	125	166,515	217,596	146,325
Sugar, treacle—refineries	1	2	3	264	435,000	575,000	190,500
Tobacco, cigars, snuff—manufactories	16	12	13	776	118,070	239,627	150,079
ANIMAL MATTERS.							
Boiling-down, tallow-rendering—establishments	15	20	14	80	70,578	92,252	32,290
Bone mills and bone manure manufactories	15	12	11	73	27,955	53,380	28,955
Brush manufactories	8	8	8	162	23,680	47,750	20,265
Comb manufactory	1	...	...	...	...	...	...
Catgut manufactories	2	1	1	...	...	...	...
Curled hair manufactories	3	1	4	27	5,000	10,400	8,890
Glue, oil—manufactories	7	6	3	29	3,221	5,246	11,350
Leather belting (machinery) manufactory	...	1	2	14	11,372	14,972	8,060
Morocco, fancy leather—manufactories	3	4	5	39	6,925	16,700	4,100
Ostrich feather factory ... ..	...	1	...	...	...	...	...
Portmanteau, trunk—manufactories ...	7	8	7	33	3,620	7,498	12,612
Soap, candle—works	38	33	33	427	229,903	348,316	238,820
Tanneries, fellmongeries, and wool-washing establishments	151	152	132	1,669	793,679	1,226,853	425,653
VEGETABLE MATTERS.							
Bark mills	8	3	6	46	26,700	37,100	6,082
Basket-making works	9	12	11	85	4,940	18,182	16,275
Broom manufactories†	2	2	3	40	16,200	20,100	8,860
Chaff-cutting, corn-crushing—works§	165	201	220	1,027	544,314	738,941	303,019
Cooperage works	24	26	30	181	23,667	47,405	59,860
Cork manufactories	2	1	3	11	4,400	9,164	7,330
Fancy-box, hat-box—manufactories ...	5	6	6	89	7,940	16,763	21,820
Paper manufactories	3	2	2	160	27,500	61,000	105,000
Sawmills, moulding, joinery, etc.—works	174	256	321	5,440	1,127,857	2,600,298||	1,198,675
Straw board manufactories ... ..	...	...	1	...	...	...	...

* Places where wine is made are not included. The number of wine presses returned in 1890-91 was 571.

† See footnote (†) on previous page.

‡ See also Brush factories under Animal Matters, *ante*.

§ All these establishments used machinery worked by steam, wind, or horse power. They must not be confounded with chaff-cutting and grain-crushing machines in use on farms, which numbered 18,860.

|| Including £608,759, value of timber sawn from Victorian logs.

MANUFACTORIES, WORKS, ETC., 1881, 1886, AND 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.			Number of Hands employed.	1890-91.		
	1880-81.	1885-86.	1890-91.		Approximate value of—		
					Materials used.	Articles produced.	Lands, Buildings, Machinery, and Plant.
COAL AND LIGHTING.							
Gasworks	19	21	30	858	£ 288,967	£ 628,867	£ 1,841,134
Electric-light works ... ..	...	1	4	48	4,100	18,500	45,670
Ironfounders' charcoal factory ... ..	...	1	1	...	...	...	...
STONE, CLAY, EARTHENWARE, AND GLASS.							
Artificial stone manufactory ... ..	...	1	...	...	...	...	...
Asphalt paving material works ... ..	...	...	2	27	3,690	8,250	3,140
Asbestos works ... ..	...	1	1	...	...	...	...
Brickyards and potteries	165	227	233	3,122	...	534,284	1,037,847
Cement tile works ... ..	...	...	1	...	...	...	...
Filter manufactories	1	3	2	11	2,000	4,000	4,350
Glass manufactories, works	9	4	6	224	7,190	42,000	43,870
Stone-breaking, asphalt, tar-pavement—works*	9	...	...	...	...	...	...
Stone and marble sawing, polishing—works	43	43	54	895	109,558	228,187	117,213
WATER.†							
Ice manufactories	2	3	6	41	4,536	8,354	43,845
GOLD, SILVER, AND PRECIOUS STONES.							
Goldsmiths, jewellers, and electroplaters (manufacturing)	28	22	26	404	142,447	190,675	113,295
Royal mint	1	1	1	54	...	...	‡ 68,000
METALS OTHER THAN GOLD AND SILVER.							
Bell foundry	1	...	...	...	...	...	...
Brass and copper works—gasalier manufactories	...	18	26	373	29,446	65,885	105,805
Lead, pewter, and zinc—works	5	2	4	27	24,688	47,032	37,420
Pyrites works	1	1	1	...	...	...	...
Smelting works	7	3	3	47	14,122	18,300	29,000
Wire-working establishments	10	9	12	103	9,670	24,256	27,780
Total where only one return was received§	...	...	...	135	11,163	22,007	72,889
Total	2,468	2,813	3,104	56,369	12,006,233	22,390,251	16,773,448

* Now included under the head of Stone Quarries—*post*.

† Works for the storage and supply of water are not included in the manufacturing tables. For information relating to these, see paragraph 508 *et seq*.

‡ Exclusive of land, estimated at £85,000.

§ The particulars of these have been combined in accordance with a promise made that the contents of individual schedules would not be published.

594. In 1891, which was the year of the census, an enquiry was made respecting the value of the materials used and articles produced in all manufactories. These enquiries were responded to in most instances, and in cases where the information was not given the values have been estimated upon the same proportions as obtained in similar works respecting which information was supplied. The result is given in the two columns preceding the final one of the last table. The totals and difference between them—to which has been added an estimate for the value of the bricks and pottery made—together with similar results for the previous census year are as follow:—

Value of materials used and produced.

VALUE OF RAW AND MANUFACTURED MATERIALS, 1881 AND 1891.

	1880-81.		1890-91.
	£		£
Value of materials operated upon	7,997,745	...	12,006,233
" articles produced	13,370,836	...	22,390,251
<hr/>			
Increased value ...	5,373,091, or 67 per cent.		10,384,018, or 86 per cent.
Bricks at £1 per 1,000	53,566	...	241,928
Value of pottery	34,600	...	68,160
<hr/>			
Total value of manufactured articles, less cost of raw material	5,461,257	...	10,694,106
<hr/>			

595. By comparing the particulars respecting these manufactories, as returned in 1891 and in the first year of each of the two previous quinquennia, considerable increases at each successive period will be found in all the columns. The number of establishments increased by 14 per cent. between 1881 and 1886, and by 10 per cent. between 1886 and 1891; the hands employed increased by 29 per cent. and 14 per cent. in those intervals respectively; and the value of machinery, plant, lands, and buildings increased by 46 per cent. in the first, and by 54 per cent. in the second, interval. The following is the comparison referred to:—

Summary of manufactories at three periods.

SUMMARY OF MANUFACTORIES, WORKS, ETC., 1881, 1886, AND 1891.

Year ended March.	Total Number of Establishments.	Number of Establishments using Steam or Gas Engines.	Horse-power of Engines.	Number of Hands employed.	Approximate Value of Lands, Buildings, Machinery, and Plant.
					£
1881 ...	2,468	1,048	14,502	38,141	7,465,328
1886 ...	2,813	1,409	20,160	49,297	10,907,885
1891 ...	3,104	1,740	29,174	56,369	16,773,448

Stone
quarries.

596. The stone quarries, stone-crushing, and tar-pavement works returned in 1891 were greater by 21 than in 1890, and the hands employed were greater by 57. The output of stone increased by 285,837 cubic yards, and a substantial increase also appears in the power of steam engines, and in the value of plant, lands, and buildings. The following are the figures for the two years:—

STONE QUARRIES,* ETC., 1890 AND 1891.

Year ended March.	Number of Quarries, etc.	Cubic Yards of Stone raised.					Steam Engines in use.	
		Bluestone.	Slate and Flagging.	Sandstone and Freestone.	Granite.	Other.	Number.	Horse-power.
1890	171	749,656	3,476	29,556	600	...	26	864
1891	192	1,051,890	2,200	13,025	510	1,500	27	904
Increase	21	302,234	...	...	...	1,500	1	40
Decrease	...	...	1,276	16,531	90	...	...	...

Year ended March.	Number of Hands employed.	Approximate Total Value of—			
		Stone raised.	Machinery and Plant.	Lands.†	Buildings.
		£	£	£	£
1890	1,749	208,410	78,118	88,785	14,843
1891	1,806	297,990	109,905	109,686	36,864
Increase	57	89,580	31,787	20,901	22,021
Decrease	...	...	...	...	...

Manufactory,
works,
etc., in Vic-
toria and
New South
Wales.

597. According to the official returns, the manufactories and works (including stone quarries) in Victoria exceeded those in New South Wales by 677, and the hands employed were also more numerous by 11,650. The number of works and hands employed therein in the two colonies are placed side by side in the following table:—

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1891.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands Employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
BOOKS AND STATIONERY.				
Manufacturing stationers, including rubber-stamp makers	12	18	1,063	674
Printing and lithographic printing establishments	163	113	4,022	3,393

* Including stone-crushing and tar-pavement works.

† The figures in this column apply to purchased land only. 47 of the stone quarries in 1891, and 39 in 1890, were on Crown lands, and in these cases no valuation of the land has been given.

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands Employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
MUSICAL INSTRUMENTS, ETC.				
Organ builders	3	...	35	...
Pianoforte makers	3	...	12	...
CARVING, ENGRAVING, ETC.				
Wood-carving, turnery works	15	...	59	...
Die-sinkers, engravers	8	7	130	28
PHILOSOPHICAL INSTRUMENTS, ETC.				
Philosophical and surgical instrument makers	9	8	50	67
ARMS, AMMUNITION, ETC.				
Blasting-powder, dynamite, and fuze makers	7	...	84	...
Shot manufacturers	2	...	4	...
MACHINES, TOOLS, AND IMPLEMENTS.				
Agricultural implement makers	71	17	1,090	304
Domestic implement manufactories	6	...	56	...
Engine and machine makers, iron and brass founders	217	159	8,395	3,550
Sheet, galvanized iron, tin, lead, zinc, pewter, type works	57	74	776	869
Nail manufacturers	4	...	36	...
Cutlery, tool makers	9	...	55	...
Pattern makers	5	...	16	...
CARRIAGES AND HARNESS.				
Carriage lamp, etc., manufactories	2	...	15	...
Coach, waggon, perambulator builders	207	156	2,791	5,632
Saddle, saddle-tree, whip makers	79	42	687	483
SHIPS AND BOATS.				
Ship, boat builders, block makers	11	22	62	518
Graving docks, patent slips, etc.	7	5	193	463
HOUSES AND BUILDINGS.				
Architectural modellers, etc.	13	9	88	47
Lime and cement works	34	8	333	125
Venetian blind makers	9	8	116	81
Enamelled mantelpiece makers	5	...	54	...
FURNITURE.				
Bedding manufacturers	33	5	378	103
Furniture, cabinet works	72	72	1,476	938
Picture frame makers	9	9	55	47
Earth-closet makers	2	...	22	...
Iron safe makers	2	...	25	...
Looking-glass makers	4	...	43	...

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands Employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
CHEMICALS.				
Chemical works	15	8*	253	114
Dye works	5	8	15	46
Ink, printing ink, blacking, blue, washing powder, baking powder manufactories	9	2	172	15
Essential oil factories	12	...	139	...
Paint, varnish, japanning works	3	3	17	17
Salt works	4	...	32	...
TEXTILE FABRICS AND DRESS.				
Woollen mills	7	4	791	155
Boot factories	92	60	3,787	2,806
Clothing factories	105	21	5,536	2,698
Fur manufactories	8	2	56	10
Hat, cap factories	17	10	471	74
Oil-skin, waterproof clothing makers	5	7	115	257
Umbrella, parasol makers	10	1	158	5
Hosiery manufacturers	3	...	63	...
FIBROUS MATERIALS.				
Rope, twine, mat, bag, sack makers	13	11	396	175
Sail, tent, tarpaulin makers	9	14	81	94
ANIMAL FOOD.				
Meat, fish, curing, preserving works	24	6	328	320
Butter and cheese factories (steam)	53	142	200	778
„ „ „ (hand or other power) ... ..	...†	149	...†	785
VEGETABLE FOOD.				
Maizena, oatmeal, starch, macaroni makers, rice dressers, etc.	5	2	179	28
Biscuit manufactories	7	10	627	544
Confectionery works	13	16	362	359
Flour mills	104	74	800	541
Fruit preserving, jam, pickle, sauce, condiment, vinegar works	17	18	404	314
DRINKS AND STIMULANTS.				
Aërated waters, liqueur, cordial works	160	104	1,056	897
Breweries	68	41‡	1,185	784
Distilleries	6	1	132	11
Coffee, chocolate, mustard, spice works	13	6	126	249
Sugar refineries	3	1	264	300
Sugar (raw) works ... ..	...	33	...	1,621
Tobacco, cigars, snuff manufacturers	13	9	776	678
Malthouses	16	...	125	...

* Including 2 poudrette and ammonia factories.

† In Victoria a large quantity of cheese and butter is made on dairy farms (which are not returned as factories); of which 1,052 are returned as using machinery, in many cases worked by steam power. The machines in use consist of 238 cream-separators, 495 butter workers, 240 cheese-making, and 810 cheese presses. It was ascertained that in 1890 as many as 14,112 hands were employed in such establishments exclusively on dairy work. See also paragraph 540 *ante*.

‡ Including bottling works.

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1891—continued.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands Employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
ANIMAL MATTERS.				
Boiling down, tallow melting, glue making works	18	28	121	283
Bone mills, bone manure works	11	3	73	24
Brush, broom factories	8	5	162	39
Curled hair, flock manufactories	4	4	27	23
Portmanteau, trunk makers	7	3	33	31
Leather belting, morocco, fancy leather, catgut factories	7	3	53	12
Soap, candle works	33	27	427	194
Tanneries, fellmongeries, woolwashing works	132	125	1,669	1,739
VEGETABLE MATTERS.				
Bark mills	6	1	46	8
Basket makers	11	6	85	47
Broom (millet) factories	3	3	40	29
Chaff cutting, corn crushing works	220	49	1,027	250
Cooperage works	30	10	181	143
Fancy box, hat box manufactories	6	...	89	...
Paper manufactories	2	1	160	65
Saw mills, moulding, joinery, packing case, cork cutting works	324	410	5,451	4,804
COAL AND LIGHTING.				
Electric light works	4	11	48	43
Gas, coke works	31	35	866	1,188
Kerosene, oil works ... ..	...	3	...	314
STONE, CLAY, AND GLASS.				
Stone quarries,* stone crushing, dressing works, asphalt, pavement works	194	49	1,833	486
Brickyards, potteries	233	208	3,122	2,341
Glass works	6	9	224	126
Stone, marble—sawing, polishing, monumental works	54	39	895	320
Artificial stone, asbestos, cement tile, filter works	4	...	22	...
WATER.				
Ice manufactories, refrigerating works	6	9	41	195
GOLD, SILVER, AND PRECIOUS STONES.				
Goldsmiths, jewellers, gold beaters, electroplaters, mother-of-pearl workers	26	29	404	186
Mint	1	1	54	42
METALS OTHER THAN GOLD AND SILVER.				
Smelting, pyrites works	4	20	52	1,222
Wire working establishments	12	9	103	170
Other works ... ..	...	24	...	204
Total	3,296	2,619	58,175	46,525

* In making comparisons it has been found impossible to separate stone quarries from the other works carried on in connexion therewith. They are, therefore, necessarily included in this table.

Royal Commission on gold mining.

598. A Royal Commission was appointed on the 15th July, 1889, to inquire into and report as to the best mode in which assistance could be rendered to develop the auriferous resources of the colony; and, accordingly, there were presented to Parliament in due course two progress reports and a final report, dated respectively 17th December, 1890, April, 1890, and 30th September, 1891*. At the outset, the commission proposed to consider the question under three heads of inquiry:—(1) What are the causes that have led to the decline in the production of gold? (2) What steps should be taken to place the administration of the auriferous areas on a better footing? and (3) what general principles should be observed in promoting the success of gold mining? They attribute the gradual decline in the gold yield—viz., from 2,985,735 oz. in 1856 to 614,839 oz. in 1889—to the working out of the shallow but rich alluviums in the early days, first by armies of eager, energetic, industrious and intelligent men from all parts of the world, and afterwards by large numbers of Chinese, who re-worked the abandoned gold-fields; to the difficulties and expense of quartz-mining, and the limited employment that could be given owing to lack of capital; to the spread of agricultural settlement; and, as subsidiary causes, to the “shepherding” of mining lands, and the gambling in shares. It is pointed out, however, that nearly as much is earned now per miner at work as in 1856, notwithstanding the decrease in the total yield, the figures being £105 18s. in 1856 and £101 2s. in 1889. The following is a summary of the recommendations embodied in the final report:—

RECOMMENDATIONS OF ROYAL COMMISSION ON GOLD MINING, 1891.

1. That the mining and prospective boards, as at present constituted, should be abolished.

2. That bodies, to be called “Mining Councils,” should be established; and that, in addition to their exercising the powers and functions now performed by mining and prospecting boards, they should take cognisance of, and exercise a general oversight regarding, all matters affecting mining, such as the conservation and growth of timber in the mining areas, the observance of labour covenants, and to inquire into and report to the Minister in all cases where “shepherding” is suspected.

3. That the basis of the election of such councils should be:—Every male adult interested in mining to be entitled to the issue of an electoral miner’s right, cost not to exceed sixpence. All persons desiring to obtain such rights to apply in person, and the right to vote not to be exercised except by persons who have held their electoral miners’ rights for a term of at least three months. Persons holding miners’ rights to be entitled to vote without other qualification.

4. That the present boundaries of the seven mining districts be revised.

* Parliamentary Papers, Nos. 2, 41, and 151; Session 1891.

5. That the Forest Department be associated with the Mining Department, and the cultivation of forests be undertaken over all mining areas where practicable.

6. That all auriferous areas (including worked-out diggings) be permanently reserved for mining, forest culture, or for cultivation by persons willing to take such lands on lease. No such lands to be leased by the Minister except by the advice of the local mining council.

7. That the geological survey of the colony be completed with all possible expedition, and that the survey of the land yet remaining in the hands of the Crown be proceeded with first.

8. That the acceptance of rent by the Crown should not be a bar to forfeiture.

9. That the Minister should have power to protect any area of ground on the lessees proving to his satisfaction that it was their intention to float the mine on some British or foreign market.

10. That the State should continue to assist prospecting on the lines indicated in our report.

11. That the *Mining on Private Property Act* should be amended in the direction indicated at length in our second progress report.

12. That mining managers should be certificated.

13. That *The Drainage of Mines Act* should be amended as indicated. (See Report.)

14. That steps should be at once taken to enforce the provisions of section 309 of the *Companies Act* 1890, No. 1,074, which provides that five per cent. of the capital of such companies shall be subscribed before registration.

15. That in any application for a lease or water-right licence to which an objection is made, or in any application for forfeiture of any such lease or licence, on receipt of the warden's report, the Minister of Mines shall name a day when any appeal shall be heard by him, and that such cases shall be dealt with in open court, and the decisions given on the same principle as appeals are heard and dealt with under the *Land Act* 1890.

16. That alluvial mining areas of a depth of 100 feet and less shall not be leased in blocks exceeding ten acres, such blocks to be marked off according to the rules provided in the *Mines Act* 1890.

17. That the tribute system may be materially improved in two ways, viz.:— (1) By extending the tenure; and (2) By simplifying the mode of recording agreements between tributers and leaseholders.

18. That negotiations should be opened with the Secretary of State for the Colonies, with the view of obtaining Imperial authority to coin silver at the Melbourne Mint.

19. That a sum of money should be offered for the best system of gold extraction.

20. That precautions should be taken to secure health in mines, as set out in the Report in detail under various heads.

21. That the creation of reserve funds should be provided for in all mines paying dividends.

22. That a perfect mineralogical and lithological collection should be made up, and exhibited as a means of education and for reference.

23. That promoters and directors should be made responsible "for statements contained in prospectuses, and other documents drawn up under their authority."

24. That provision should be made for the storage and conveyance of water by races for mining purposes, and that the drainage of mines in certain cases be provided for out of the prospecting vote.

25. That double-cylinder engines should in all cases be used for winding.

26. That compound condensing engines should be used more extensively to economise fuel.

27. That stone-breakers should be more generally employed.

28. That the State should establish a system of paying premiums for inventions, new appliances, new discoveries, and new marketable products in mining, similar to the system in vogue for the encouragement of agriculture.

29. That the geological survey should be completed at as early a date as possible of all lands yet remaining in the hands of the Crown.

30. That the methods of assisting prospecting should be based on national principles.

31. That careful attention should be paid to the examination of those places indicated in our report as affording good fields for exploration.

Gold raised,
1889 and
1890.

599. According to the estimate of the Mining Department, the gold raised in Victoria in 1890 was 588,561 oz., which is less than the quantity obtained in 1889 by 26,278 oz., representing, at £4 per oz., a decreased value of £105,112. The following are the figures for the two years :—

QUANTITY AND VALUE OF GOLD RAISED IN 1889 AND 1890.

Year.	Gold raised in Victoria.	
	Estimated Quantity.	Value, at £4 per oz.
1889	oz. 614,839	£ 2,459,356
1890	588,561	2,354,244
Decrease	26,278	105,112

Gold raised
1871 to
1890.

600. From 1871 to 1879 the quantity of gold raised from year to year had been steadily diminishing, but in the next three years an improvement took place, which, however, has not since been sustained, the yield having again gradually fallen off since 1882, and being less in the last four years than it had been previously since 1851. The subjoined figures give an estimate of the quantity of gold raised in 1871 and each subsequent year :—

ESTIMATED QUANTITY OF GOLD RAISED, 1871 TO 1890.

1871	oz. 1,355,477	1881	oz. 858,850
1872	1,282,521	1882	898,536
1873	1,241,205	1883	810,047
1874	1,155,972	1884	778,618
1875	1,095,787	1885	735,218
1876	963,760	1886	665,196
1877	809,653	1887	617,751
1878	775,272	1888	625,026
1879	758,947	1889	614,839
1880	829,121	1890	588,561

Gold raised
1851 to
1890.

601. Carrying on to the end of 1890 the calculations given in previous years, the following may be estimated as the total quantity and value of the gold raised in Victoria from the period of its first

discovery about the middle of 1851. The figures give an average per annum during the whole period of about 1,421,000 oz., which is nearly two and a half times the quantity raised in 1890 :—

ESTIMATED TOTAL QUANTITY AND VALUE OF GOLD RAISED IN VICTORIA, 1851 TO 1890.

Gold raised in Victoria.	Estimated Quantity.	Value, at £4 per oz.
	oz.	£
Prior to 1890 ...	56,250,798	225,003,192
During 1890 ...	588,561	2,354,244
Total ...	56,839,359	227,357,436

602. Since the first discovery, in 1851, of gold in Australasia, 87 million ounces have been raised in the various colonies, two-thirds of which was got in Victoria. The following is a statement of the quantity recorded as having been raised in the respective colonies during each year. No column is assigned to Western Australia, as, although during the last four or five years gold has been raised in that colony, chiefly in the Kimberley district, no reliable information as to the quantity has ever been obtained :—

Gold raised in Australasian colonies.

GOLD PRODUCE IN AUSTRALASIAN COLONIES, 1851 TO 1890.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Tasmania.	New Zealand.
	oz.	oz.	oz.	oz.	oz.	oz.
1851	145,137	144,121	...	...	...	...
1852	2,738,484	818,752	...	...	...	...
1853	3,150,021	548,053	...	...	...	...
1854	2,392,065	237,911	...	...	...	...
1855	2,793,065	170,146	...	...	...	...
1856	2,985,735	183,946	...	...	...	...
1857	2,761,567	161,043	...	...	...	10,437
1858	2,528,227	280,558	...	...	...	13,534
1859	2,280,717	323,984	...	...	...	7,336
1860	2,156,700	381,614	4,127	...	...	4,538
1861	1,967,453	459,879	1,077	...	...	194,031
1862	1,658,281	616,910	190	...	...	410,862
1863	1,627,105	467,399	3,937	...	...	628,450
1864	1,545,437	341,954	22,037	...	...	480,171
1865	1,543,188	364,541	25,339	...	...	574,574
1866	1,478,280	287,534	22,916	...	348	735,376
1867	1,433,246	269,407	49,092	...	1,363	686,905
1868	1,634,200	258,774	165,801	...	692	637,474
1869	1,337,296	252,130	138,221	...	137	614,281
1870	1,222,798	240,402	136,773	...	964	544,880
1871	1,355,477	321,469	171,937	...	6,005	730,029
1872	1,282,521	424,100	186,019	2,494	6,969	445,370
1873	1,241,205	360,850	194,895	98	4,661	505,337

GOLD PRODUCE IN AUSTRALASIAN COLONIES, 1851 TO 1890

—continued.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Tasmania.	New Zealand.
	oz.	oz.	oz.	oz.	oz.	oz.
1874	1,155,972	270,710	375,586	8,351	4,651	376,388
1875	1,095,787	229,386	391,515	13,742	3,010	355,322
1876	963,760	155,166	374,776	9,857	11,107	322,016
1877	809,653	122,629	428,104	11,811	5,777	371,685
1878	775,272	117,978	310,247	10,746	25,249	310,486
1879	758,947	107,640	288,556	14,250	60,155	287,464
1880	829,121	116,751	267,136	13,246	52,595	305,248
1881	858,850	145,532	270,945	16,976	56,693	270,561
1882	898,536	129,233	224,893	15,669	49,122	251,204
1883	810,047	122,257	212,783	15,939	46,577	248,374
1884	778,618	105,933	307,804	21,455	42,340	229,946
1885	735,218	100,667	310,941	18,327	41,241	237,371
1886	665,196	98,446	340,998	26,315	31,014	227,079
1887	617,751	108,101	425,923	36,569	42,609	203,869
1888	625,026	85,296	481,643	16,763	39,610	201,219
1889	614,839	118,948	739,103	20,833	32,333	203,211
1890	588,561	127,289	610,587	29,738	23,451	193,193
Total	56,839,359	10,177,439	7,483,901*	303,179	588,673	11,818,221

Gold produce of Australasia, 1851 to 1890.

603. According to the above figures the total quantity of gold raised in each colony from 1851 to 1890 has been as follows:—

SUMMARY OF GOLD PRODUCE OF AUSTRALASIA, 1851 TO 1890.

Victoria	...	Oz.	56,839,359	South Australia	...	Oz.	303,179
New Zealand	...	11,818,221		Western Australia	...	158,298†	
New South Wales	...	10,177,439					
Queensland	...	7,483,901		Total	...	87,369,070	
Tasmania	...	588,673					

Value of gold raised in Australasia.

604. The average value of the gold raised varies in the different colonies. If it be estimated at £4 per ounce, the total value would be £349,476,280, or if at £3 15s. per ounce, it would be £327,634,012‡.

Gold produce of the world, 1886 to 1889.

605. By the following table—which, with the exception of the figures for Australasia, has been taken from the report for 1890 of Mr. Edward O. Leech, director of the United States Mint—it appears that during the four years ended with 1889 the world's annual production of gold has averaged rather more than 5½ million ounces, and appears to be increasing by about 370,000 ounces per

* The estimate for Queensland is higher by 45,426 ounces than that furnished by the Registrar-General of Queensland and published in the "Australasian Statistics, 1890," for which see Table XIX. in Appendix A., at end of this volume.

† For Western Australia, the yield prior to 1889 has been estimated roughly at 100,000 oz., and to this has been added the quantities which have since appeared in the export returns. This, however, is admittedly considerably below the actual production.

‡ Pure gold is worth £4 4s. 11½d., and standard gold (22 carats fine) £3 17s. 10½d.

annum; the largest quantity produced in 1889 being in Australasia, the next largest in the United States, and the next in Russia:—

GOLD PRODUCE OF EACH COUNTRY, 1886 TO 1889.*

Countries.	1886.	1887.	1888.	1889.
	oz.	oz.	oz.	oz.
Australasia ...	1,389,048	1,434,822	1,499,556	1,745,570
Europe—				
Great Britain ...	...	64	7,071	3,118
Russia ...	992,288	971,717	1,030,215	1,120,695
Sweden ...	2,154	2,700	2,443	2,379
Germany ...	34,231	72,352	57,599	62,934
Austria-Hungary ...	53,484	60,331	60,331	70,648
Turkey ...	321	321	321	321
Italy ...	6,268	6,268	4,757	4,757
Asia—				
British India ...	20,378	15,460	33,171	73,059
China ...	176,524	459,437	435,267	435,267
Japan ...	10,703	18,128	19,478	19,478
Africa ...	69,523	92,826	217,633	390,686
America—				
Canada ...	64,895	56,988	53,774	61,681
United States ...	1,692,694	1,595,979	1,604,432	1,586,304
Mexico ...	29,699	39,856	47,088	43,777
Salvador & Costa Rica ...	4,211	7,264	7,264	7,264
Colombia ...	120,918	145,088	145,088	145,088
Venezuela ...	161,353	95,140	68,463	68,463
Guiana (British) ...	...	11,893	14,464	22,082
Guiana (Dutch) ...	...	22,885	15,653	15,653
Brazil ...	48,277	31,628	21,535	21,535
Peru ...	5,464	5,078	5,078	5,078
Bolivia ...	3,504	4,596	2,893	2,893
Chile ...	16,071	76,466	94,915	94,915
Argentine Republic ...	964	1,446	1,511	1,511
The World ...	4,902,972	5,228,733	5,450,000	6,005,156

606. According to the figures, the gold raised in the world during 1889, if valued at £4 per ounce, would be £24,020,624; or if at £3 15s. per ounce, it would be £22,519,335. During the four years the value of the whole quantity raised (21,586,861 oz.) would be £86,347,444 at the former, or £80,950,729 at the latter valuation.

Value of the world's gold produce, 1886-1889.

607. Of the gold which was raised during 1890 in Victoria, 382,401 oz. was obtained from quartz reefs, and 206,160 oz. from alluvial deposits. These figures, as compared with those of the previous year, show a decrease of 2,583 oz. in the yield of quartz reefs, and one of 23,695 oz. in that of alluvial workings. The respective proportions

Gold derived from alluvial and quartz workings.

* See U.S. Mint Report, 1890, pages 188 and 189, where the quantities are given in kilogrammes, which have been converted into ounces on the assumption that a kilogramme is equal to 32.142 oz. troy. When the figures for any year were not given by Mr. Leech, those for a previous year have been inserted. For 1890, the world's production of gold was estimated by the same authority at 5,610,579 ozs.

of quartz and alluvial gold raised were 63 and 37 per cent. in 1889, and 65 and 35 per cent. in 1890.

608. The value of gold raised in Victoria in proportion to the number of miners at work* fell to its lowest point in 1879, when it only amounted to £76 ls. 2d. per head; and reached its highest point in 1885, when it was £108 15s. 9d. per head. In 1890 it was £98 15s. 7d., or £2 6s. 8d. lower than in 1889, but higher than in any years since 1870, except 1874, 1875, 1884, 1885, and 1886. The following figures, which have been derived from returns supplied by the Secretary for Mines, express this proportion for the last twenty years :—

VALUE OF GOLD PER MINER,† 1871 TO 1890.

	£	s.	d.		£	s.	d.
1871	93	6	1½	1881	95	11	9½
1872	93	17	1½	1882	95	19	7¾
1873	93	16	2½	1883	95	6	3½
1874	99	8	3	1884	106	14	6¼
1875	104	4	4	1885	108	15	9¼
1876	89	19	6¾	1886	104	18	4
1877	82	6	1¾	1887	96	17	2
1878	82	12	11½	1888	97	8	7
1879	76	1	2¼	1889	101	2	3
1880	81	18	11¼	1890	98	15	7

609. In proportion to the number of miners engaged in alluvial and quartz mining, the yield of gold from the latter has frequently been more than twice as large as that from the former. The following are the figures for the last thirteen years :—

VALUE OF GOLD PER ALLUVIAL AND QUARTZ MINER, 1878 TO 1890.

Year.	Alluvial Miners.			Quartz Miners.		
	£	s.	d.	£	s.	d.
1878	47	3	6¾	138	7	7¼
1879	48	10	1½	118	8	7
1880	49	14	2	129	11	7¾
1881	62	0	9¾	141	19	2½
1882	68	14	1½	131	19	5½
1883	66	4	4	132	13	2
1884	76	4	2	144	9	10
1885	75	17	2	148	19	11
1886	72	11	2½	144	13	11½
1887	68	5	4	125	12	0
1888	76	17	7	121	8	11
1889	78	13	11	124	11	7
1890	74	10	10	120	18	6

* For the number of gold miners at work in 1890, see paragraph 343, Volume I.

† These amounts are sometimes incorrectly spoken of as the "average earnings" of the miners. It has been pointed out on former occasions that, as a very large proportion of the miners are working on wages, the gold they raise no more represents their individual earnings than do the products of a manufactory represent the earnings of its operatives. For wages of miners, see Part "Interchange" ante.

610. The estimated yield of gold in the first nine months of 1891 was 428,210 oz. as against 435,743 oz. in the first nine months of 1890.* One-third added to the first quoted amount would give 570,947 oz. as the estimate for the whole of 1891, or 17,614 oz. less than the quantity actually raised in 1890, and 43,892 oz. less than the quantity raised in 1889. Estimated gold yield, 1891.

611. Exclusive of the amounts paid by a few private companies, respecting which the Mining Department was unable to obtain information, the following are the dividends paid by gold mining companies in Victoria, in the last two quarters of 1890 and the first two quarters of 1891 :— Dividends of gold mining companies.

DIVIDENDS OF GOLD MINING COMPANIES, 1890-91.

Quarter ended September, 1890	...	...	...	£126,532
" December, 1890	...	...	...	139,416
" March, 1891	...	...	...	102,843
" June, 1891	...	...	...	127,328
Total in 12 months				£496,119

612. Of the steam engines employed in connexion with gold mining, about a sixth are used on alluvial and five-sixths on quartz workings. The following is the number of engines in use and their horse-power in each of the last seventeen years :— Steam engines used in mining.

STEAM ENGINES USED IN GOLD MINING, 1874 TO 1890.

Year.	Number.	Horse-Power.	Year.	Number.	Horse-Power.
1874	1,141	24,866	1883	1,087	25,933
1875	1,101	24,224	1884	1,104	26,228
1876	1,081	23,947	1885	1,085	26,627
1877	1,067	23,416	1886	1,072	26,920
1878	1,036	22,711	1887	1,080	27,218
1879	1,024	22,509	1888	1,119	27,472
1880	1,030	22,499	1889	1,123	26,680
1881	1,034	23,379	1890	1,104	27,153
1882	1,074	24,692			

613. The value of gold-mining machines of all descriptions, as estimated by the Department of Mines, increased from £1,845,862 in 1889 to £1,849,112 in 1890. In the latter year, the value of those used in quartz mining was £1,587,937, whilst that of those used in alluvial mining was only £261,175. Mining machinery.

* See Mining Registrars' Reports for first three quarters of 1890 and 1891. Whilst these pages were being printed, the gold yield of the year 1891 was estimated at 577,630 ounces, or 10,931 ounces less than in 1890.

Average
yield of
quartz.

614. It is impossible to obtain an exact statement of the yield of auriferous quartz in any year, owing to the fact that many of the owners of machines for crushing quartz are unable to give, or are precluded from giving, information respecting their operations. The officers of the Mining Department, however, succeeded in obtaining particulars respecting the crushing of 732,461 tons in 1889, and 752,399 tons in 1890. The average yield per ton of these crushings was 9 dwt. 19 gr. in the former, and 9 dwt. 4 gr. in the latter year. From similar estimates, extending over a long series of years, and embodying information respecting the crushing of nearly 25,606,000 tons of quartz, an average is obtained of 10 dwt. 9 gr. of gold to the ton of quartz crushed.

Gold from
various
matrices.

615. The following is the estimate of the Mining Department* of the gross and average yield of over 44½ millions of tons of the various minerals and drifts from which gold is obtained in Victoria. The quantity of gold included in the estimate is about a fourth of the total yield of the Victorian gold-fields from the period of the first gold discoveries to the end of 1890:—

GOLD FROM VARIOUS MATRICES.

Matrix.	Quantity Treated.	Yield of Gold.	
		Total.	Average per ton.
<i>From Quartz Reefs.</i>			
	tons.	oz.	oz. dwt. gr.
Quartz	25,606,109	13,297,044	0 10 9
Tailings and mullock	2,304,679	351,608	0 3 1
Pyrites	135,085	294,891	2 3 15
<i>From Alluvial Workings.</i>			
Washdirt	16,210,212	1,219,864	0 1 12
Cement	429,761	98,616	0 4 14
Total	44,685,846	15,262,023	0 6 20

Deep shafts.

616. The ten deepest shafts in the colony are those of Lansell's 180 mine, 2,640 feet; Magdala Company, 2,409 feet; North Old Chum, 2,310 feet; New Chum and Victoria, 2,309 feet; Victoria Reef Quartz, 2,302 feet; Victory and Pandora, 2,300 feet; Old Chum, 2,208 feet; Victoria Consols, 2,162 feet; Lazarus Company, 2,150 feet; Ironbark Company, 2,140 feet. It thus appears that the greatest depth to which the earth's crust has been pierced in this

* *Mineral Statistics* 1890, Statement No. 6.

colony by a shaft is a little over 2,600 feet.* The second mine mentioned is at Stawell, all the others are at Bendigo.

617. Since the first issue of gold-mining leases, the total number granted has been 17,132, giving the right to mine over an area amounting in the aggregate to 332,145 acres. Of these leases, 429, for 10,977 acres, were granted in 1890; and 1,458, for 35,402 acres, were in force at the end of that year. Gold-mining leases.

618. Some years ago a silver mine was worked at St. Arnaud, in Victoria, but after a time it ceased to be remunerative, and the workings were abandoned. Since the establishment of a branch of the Royal Mint in Melbourne, a certain quantity of silver has been extracted annually from the crude gold lodged there for coining, and latterly the whole quantity of silver produced in Victoria has been from that source. It is difficult to obtain reliable information respecting silver produce, as in consequence of the silver being generally associated with lead and other metals, it is found economical to send the ore in a concentrated form to Europe for smelting. For Queensland and South Australia† no definite returns are available; and but little silver has been raised in Western Australia. The following, so far as is known, are the quantities raised in Victoria, New South Wales, Tasmania, and New Zealand during the twenty-eight years ended with 1890:— Silver raised in Australasian colonies.

SILVER PRODUCE IN AUSTRALASIAN COLONIES, 1863 TO 1890.

Year.	Victoria. †	New South Wales.	Tasmania.	New Zealand. †
	oz.	oz.	oz.	oz.
1863	1,098	...	...	...
1864	5,688	...	...	...
1865	3,379	...	...	...
1866	2,348	...	...	...
1867	78	...	...	...
1868	5,761	...	...	...
1869 ... ..	...	753	...	11,063
1870 ... ..	...	13,868	...	37,123
1871 ... ..	...	71,311	...	80,272
1872	8,011	49,544	...	37,064
1873	14,347	66,997	...	36,187

* See Report of Mining Registrars for the quarter ended 30th June, 1891, page 61.

† It is known that in Queensland 1,913 tons of silver-lead ore, valued at £56,639, were raised in 1890; 1,104 tons, valued at £61,500, in 1889; 1,190 tons, valued at £44,015, in 1888; 2,183 tons, valued at £80,092, in 1887; 1,631 tons, valued at £52,797, in 1886; 2,377 tons, valued at £49,922, in 1885; and 15,519 tons, valued at £224,669, in the previous six years; also that in South Australia 1,620 tons of silver-lead ore, valued at £23,349, were raised in the ten years ended with 1884.

‡ In Victoria and New Zealand, nearly all the silver produced has been extracted from crude gold.

SILVER PRODUCE IN AUSTRALASIAN COLONIES, 1863 TO 1890

—continued.

Year.	Victoria.*	New South Wales.	Tasmania.	New Zealand.*
	oz.	oz.	oz.	oz.
1874 ...	11,906	78,027	...	40,566
1875 ...	21,842	52,553	...	29,085
1876 ...	26,355	69,179	...	12,683
1877 ...	19,717	31,409	...	33,893
1878 ...	22,995	60,563	...	23,018
1879 ...	23,728	83,164	...	20,645
1880 ...	23,247	91,419	...	20,005
1881 ...	20,957	57,254	...	18,885
1882 ...	20,343	38,618	...	5,694
1883 ...	22,121	77,065	...	16,826
1884 ...	27,070	93,660	...	24,914
1885 ...	28,951	794,174	...	16,624
1886 ...	26,422	1,015,433	...	12,108
1887 ...	26,321	3,137,800†	...	20,809
1888 ...	28,971	6,427,000†	25,000	403
1889 ...	28,630	9,067,500†	30,000	24,105
1890 ...	25,966	11,105,500†	113,500	32,637
Total ...	446,252	32,482,791	168,500	554,609

Value of silver raised in Australasia.

619. The total quantity of silver raised in the four colonies, according to the table, was 33,652,152 oz., which would represent a value at 4s. per ounce of £6,730,430; or, at 3s. 6d. per ounce, of £5,889,127.

Broken Hill silver mines.

620. The bulk of the silver raised in Australasia is from the Broken Hill mines, situated in New South Wales, at or near the Barrier Ranges, close to the eastern frontier of South Australia. The principal mine is that of the Broken Hill Proprietary Company, which has a capital of £384,000 in 960,000 shares of 8s. each, fully paid up.† From the time of the formation of this company on the 13th August, 1885, to the 31st May, 1891, the ore treated amounted to 656,024 tons, the total yield of which was 107,038 tons of bullion (chiefly lead) containing 25,728,591 ounces of silver, of which 8,790,670 ounces of silver and 38,563 tons of lead were produced in the year 1890-91. The dividends and bonuses paid, together with profits resulting from sales of outlying portions of the company's

* See footnote (†) on previous page.

† No official statement having been published in New South Wales of the quantity of silver raised in that colony in the last four years, these quantities have been estimated in the office of the Government Statist, Melbourne, from information supplied by the manager of the Broken Hill Proprietary mine, and that obtained from other sources.

‡ Prior to the 12th February, 1890, the share capital was £320,000, divided into 160,000 shares of £2 each. Of the present shares 160,000 are registered in London.

property, allotted to shareholders since the commencement, have amounted to a total value of £5,064,000. For the six months ended with May, 1891, the mine has paid dividends to the amount of £576,000. The number of men permanently employed at and in connexion with the mine on 31st May, 1891, was 2,545.

621. The next table, with the exception of the figures for Australasia, has also been taken from Mr. Leech's Mint Report for 1890, and shows that the world's production of silver during the four years ended with 1889 averaged $109\frac{1}{3}$ million oz. per annum, and has been increasing at the rate of about $10\frac{1}{2}$ million ounces per annum; the largest quantities raised in 1889 being in the United States and Mexico, and the next largest in Australasia, Bolivia, and Chile:—

SILVER PRODUCE* OF EACH COUNTRY, 1886 TO 1889.

Countries.	1886.	1887.	1888.	1889.
	oz.	oz.	oz.	oz.
Australasia ...	1,053,963	3,184,930	6,481,374	9,150,235
Europe—				
Russia ...	408,428	434,624	466,798	462,491
Sweden ...	99,030	187,324	149,396	137,150
Norway ...	231,422	165,435	165,435	165,435
Germany ...	856,584	1,014,530	1,030,183	1,029,830
Austria-Hungary ...	1,617,064	1,716,094	1,716,094	1,692,309
Turkey ...	42,524	42,524	42,524	42,524
Italy ...	940,443	1,087,653	1,125	1,125
France ...	1,639,242	1,745,761	1,587,686	1,587,686
Spain ...	1,746,436	1,887,089	1,655,377	1,655,377
Great Britain ...	325,406	320,263	290,789	280,728
Asia—				
Japan ...	798,889	1,030,633	1,363,592	1,363,592
Africa ...	101,729	13,885	...	...
America—				
Canada ...	161,674	349,319	297,763	297,763
United States ...	39,442,766	41,265,667	45,780,686	49,996,431
Mexico ...	25,521,809	29,056,368	31,997,361	42,936,184
Central America ...	...	1,546,770	1,546,770	1,546,770
Colombia ...	309,367	773,369	773,369	773,369
Brazil ...	4,532	...	...	...
Peru ...	3,093,539	2,419,103	2,419,103	2,419,103
Bolivia ...	12,374,188	4,418,496	7,407,445	7,407,445
Chile ...	6,749,820	6,412,843	5,973,623	5,973,623
Argentine Republic ...	46,413	23,207	328,684	328,684
The World† ...	97,565,268	99,095,887	111,475,177	129,247,854

* See U.S. Mint Report, 1890, pages 188 and 189, where the quantities are given in kilogrammes, which have been converted into ounces on the assumption that a kilogramme is equal to 32.142 oz. troy. For 1890, the world's production of silver was estimated by the same authority at 128,906,005 ozs.

† British India, which, according to another authority, produced silver to the value of £914,367 in 1883, does not appear to be included.

Value of
the world's
silver
produce
1886-1889.

622. At 4s. per ounce the quantity of silver raised in the world during 1889 would be worth £25,849,571; or, at 3s. 6d. per ounce, it would be worth £22,618,375. The quantity raised in the four years ended with 1889 would be worth £87,476,837 at the former, or £76,542,233 at the latter valuation.*

Relative
values of
gold and
silver.

623. The relative values of silver and gold have always been variable. Until comparatively recent years, however, the fluctuations have been but slight. In the 102 years, 1687 to 1789, the ratio of the former to the latter was as high as 15·39 to 1, viz., in 1734; and as low as 14·14 to 1, viz., in 1760. After 1789 the ratio was never below 15 to 1, but until 1874 only twice rose above 16 to 1, viz., in 1812, when it rose to 16·11 to 1, and in 1813, when it rose to 16·25 to 1. Since 1873, the depreciation of silver and consequent difference in value between the two metals had been growing each year up to 1889, when it took 22·1 parts of silver to be equivalent to 1 part of gold—the greatest difference yet reached; but in 1890 the proportion fell suddenly to 19·2, owing, it is believed, to the increased but artificial demand caused by large purchases of bullion by the United States Treasury. The following figures show the relative values of the two metals in each of the 20 years, 1871 to 1890:—

RELATIVE VALUES OF GOLD AND SILVER, 1871 TO 1890.†

In 1871	1 part of gold was worth	15·57	parts of silver.
„ 1872	„ „	15·63	„
„ 1873	„ „	15·92	„
„ 1874	„ „	16·17	„
„ 1875	„ „	16·59	„
„ 1876	„ „	17·88	„
„ 1877	„ „	17·22	„
„ 1878	„ „	17·94	„
„ 1879	„ „	18·40	„
„ 1880	„ „	18·05	„
„ 1881	„ „	18·16	„
„ 1882	„ „	18·19	„
„ 1883	„ „	18·64	„
„ 1884	„ „	18·57	„
„ 1885	„ „	19·41	„
„ 1886	„ „	20·78	„
„ 1887	„ „	21·13	„
„ 1888	„ „	21·99	„
„ 1889	„ „	22·09	„
„ 1890	„ „	19·18	„

* In 1890, according to the 21st Annual Report of the Deputy-Master of the Royal Mint, London, page 18, the average price per ounce paid for silver bullion for coinage (standard silver) was rather less than 4s. 0½d., or 6d. higher than the average price for 1889. The silver in the table, taken as a whole, was probably considerably below the standard.

† The relative values for the years prior to 1890 have been taken from the U.S. Mint Report, 1890, page 184.

624. Silver, tin, copper, antimony, lead, iron, and coal have been mined for at different times in Victoria, but with the exception of black and brown coal, and small quantities of tin and antimony, no minerals of importance were raised in 1890. The silver obtained in that year was, as has already been stated, extracted at the Mint during the process of refining the gold. Large deposits of tin have recently been discovered at Mount Wills, where over 200 men were employed during the latter part of 1891, and great expectations are entertained respecting the future of the mines in that locality. The following metals also exist in Victoria, but up to this date have not been discovered in paying quantities:—Bismuth, cobalt, cadmium, manganese, molybdenite, osmiridium, and zinc-blende. Various limestones and marbles, as well as kaolin and other clays, also exist, and have been worked to a certain extent.

Minerals
other than
gold exist-
ing in
Victoria.

625. Many attempts have been made to mine for coal, but the seams hitherto worked have been too thin to yield a profit;* the reported discovery of thicker seams, however, and of large deposits of brown coal, chiefly in South Gippsland, led to the appointment, in July, 1889, of a Royal Commission, which was instructed “to inquire into and report as to the best means of developing the coal mining industry of Victoria.” This commission has brought up a progress report,† in which several seams of true coal situated in different localities are referred to, varying in thickness from 2 feet to 4 feet 6 inches; and in the Annual Report of the Secretary for Mines for 1890 it is stated that, by means of 5 diamond drills which were employed during the year, a seam of 3 feet 2 inches was discovered at Boolarra, and six seams at Korumburra varying from 2 feet 6 inches to 4 feet 11 inches in thickness of good coal; and early in 1891 the continuance of the Jumbunna seam of nearly 5 feet in thickness, and the discovery of a seam said to be over that thickness at Korumburra, were reported, and coal mining at the two places named was being actively carried on.

Coal.

626. The deposits of brown coal or lignite in Victoria are practically unlimited, and are thought to represent the largest supply of fossil fuel known in the world. The Coal Commissioners, in their first progress report‡, mentioned one mine in which the thickness of

Brown coal.

* So far as is known, only 57,962 tons of coal have been raised, chiefly from Crown lands, in Victoria up to the present time. Of this, 26,805 tons were obtained during the last six years by the Moe Coal Mining Company on private lands.

† See last edition of this work, Vol. II., paragraphs 622 and 624.

‡ Parliamentary Paper No. 168, Session 1890

the deposits ranged from 60 to 200 feet. They say that "the brown coal differs materially from the black both in appearance and character. It belongs to the tertiary formation, and represents only a partial degree of mineralization. It is comparatively light, burns freely when dry, gives off a strong heat without smoke, and leaves a very small percentage of ash. Its principal drawback arises from the quantity of moisture it contains, and the fact that the gas extracted from it is of low luminosity." A second progress report,* dated 9th December, 1890, gives the results of a series of practical experiments with a view of ascertaining the value of brown coal for manufacturing, domestic, and other economic purposes. In regard to its illuminating power, as compared with good gas coal, a ton of which should yield from 10,000 to 11,000 cubic feet of gas of from 15 to 17 candle power, and a residue of 12 cwt. of good marketable coke, it was found that, although from 6,447 to 15,083 cubic feet of gas was obtained per ton from the brown coal, the highest degree of luminosity was only 9·3 candle power, and in some cases it was *nil*. For steaming purposes it required from 2·16 to 2·42 tons to do as much work as 1 ton of small Newcastle coal, whilst it required more stoking; and its comparative value for heating purposes was estimated at 8s. 4 $\frac{3}{4}$ d. per ton, as compared with 15s. 7 $\frac{1}{2}$ d. for Newcastle slack. These experiments were made on the crude coal as it was taken from the mine, and it sometimes contained from 36 to 56 per cent. of water, the average being about 40 per cent. In the form of briquettes, however, there was evidence leading to the belief that it would be well adapted for domestic use; and with a view of placing the brown coal industry on a sound and permanent footing, the Commissioners recommended "that a qualified gentleman should be despatched at once to Europe for the purpose of acquainting himself with, and reporting upon, the methods adopted in Germany and other countries in Europe for raising and sending the coal to market, manufacturing the raw material into briquettes, and the application of the fuel to the industrial arts, to locomotive, domestic, and economic purposes." In accordance with this recommendation, Mr. J. Cosmo Newbery, C.M.G., was despatched to Europe by the Government, with instructions to inquire into and report upon the whole subject.

* Parliamentary Paper No. 213, Session 1890.

627. At the present time, the coal-producing colonies of Australasia are, practically, New South Wales, New Zealand, and Queensland, whilst small quantities have been found in Tasmania and Victoria. In these over 4 million tons of coal were raised in 1890, but three-fourths of this quantity came from New South Wales. The following are the quantities returned as brought to the surface in each of those colonies during a series of years:—

Coal raised in Australasian colonies.

COAL RAISED IN AUSTRALASIAN COLONIES, 1876 TO 1890.

Year.	Tons of Coal raised in—				
	New South Wales.	Queensland.	Tasmania.	New Zealand.	Victoria.
1876	1,319,918	50,627	6,100	...	1,095
1877	1,444,271	60,918	9,470	...	2,420
1878	1,575,497	52,580	12,311	162,218	Nil.
1879	1,583,381	55,012	9,514	231,218	Nil.
1880	1,466,180	58,052	12,219	299,923	3
1881	1,769,597	65,612	11,163	337,262	Nil.
1882	2,109,282	74,436	8,803	378,272	10
1883	2,521,457	104,269	8,872	421,764	428
1884	2,749,109	129,980	7,194	480,831	3,280
1885	2,878,863	209,698	5,334	511,063	800
1886	2,830,175	228,656	10,391	534,353	86
1887	2,922,497	238,813	27,763	558,620	3,357
1888	3,203,444	311,412	41,577	613,895	8,573
1889	3,655,632	265,507	40,300	586,445	14,596
1890	3,060,876	338,344	53,812	637,397	14,601

628. The following is a statement of the quantity of coal raised in various countries during one year, the returns being generally those for 1884, 1885, or 1886:—

Coal raised in various countries.

ANNUAL PRODUCTION OF COAL IN VARIOUS COUNTIES.*

	Tons.		Tons.
United Kingdom	157,518,482	Canada	2,091,976
United States (1887) ...	124,015,255	Spain	1,000,000
Germany	58,020,612	Japan	900,000
France	20,014,597	Sweden	250,600
Belgium	17,253,144	Italy	220,000
Austria-Hungary	17,191,500	Chile	50,000
Russia	4,500,000	Other Countries (estimated)	8,000,000
Australasia (1890) ...	4,105,030		
British-India	4,000,000	Total	423,131,196
China	4,000,000		

* The figures in this table, except those for Australasia and Canada, have been derived from the *American Almanac and Treasury of Facts*, 1888, p. 40, by Ainsworth R. Spofford, Librarian of Congress.

Leases for
other
minerals.

629. During 1890, 41 leases—of which 17 were for tin and 17 for coal mining—of Crown lands were issued, conferring the privilege of working for minerals and metals other than gold; whilst at the end of the year the number and area of leases in force in Victoria were as follow:—

LEASES FOR MINERALS AND METALS OTHER THAN
GOLD, 1890.

Metals and Minerals.	Leases in force at end of 1890.			
	Number.	Area.		
		a.	r.	p.
Antimony and the Ores of Antimony ...	3	281	0	1
Carbonate of Lime ...	1	594	0	36
Calcite and Silicate of Alumina ...	2	64	1	21
Coal ...	31	14,740	1	7
Copper and the Ores of Copper ...	6	892	1	16
Infusorial Earth and Kaolin ...	1	9	1	26
Iron and the Ores of Iron ...	2	779	0	0
Lead and the Ores of Lead ...	3	449	0	9
Lead and Silver ...	2	481	2	27
Lignite, or Brown Coal ...	2	434	2	10
Silver and the Ores of Silver ...	3	220	0	13
Silver, Lead, and Copper ...	4	539	3	12
Slate and Slate Flagging ...	10	546	1	30
Tin and the Ores of Tin ...	87	5,974	3	13
Turquoise ...	2	82	0	12
Total ...	159	26,089	0	33

Leases for
other
minerals,
1889 and
1890.

630. The leases in force at the end of 1890, as shown in the table, were greater by 20, and the area comprised therein was greater by 7,098 acres, than at the end of 1889. The leases for tin mining increased from 70 to 87, and those for coal mining from 19 to 31, while those for silver and lead mining fell from 11 to 7. It should also be mentioned that, besides leases, several licences were issued during the year to search for metals and minerals other than gold.

Minerals
other than
gold raised.

631. According to the estimate of the Mining Department, the following are the values of metals and minerals other than gold raised in Victoria from 1851 to the end of 1890:—

VALUE OF MINERALS AND METALS OTHER THAN GOLD,
1851 TO 1890.

Name.	Estimated Value.		
	1851 to 1889.	Year 1890.	Total.
	£	£	£
Silver* ...	83,729	5,193	88,922
Tin ...	670,183	3,836	674,019
Copper and copper ore ...	191,107	100	191,207
Antimony ...	169,452	3,120	172,572
Calcite ...	...	300	300
Lead ...	5,360	50	5,410
Iron ...	12,540	...	12,540
Coal† ...	39,756	13,899	53,655
Lignite... ..	2,333	2,500	4,833
Kaolin ...	7,444	...	7,444
Flagging ...	72,228	} 1,212	82,369
Slates ...	8,929		
Gypsum ...	7	...	7
Magnesite ...	12	...	12
Ores, mineral earthy clays, etc. ...	10,901	...	10,901
Diamonds ...	108	...	108
Sapphires, etc. ...	630	...	630
Total ...	1,274,719	30,210	1,304,929

632. The following, according to the estimate of the Mining Department, is the number of men engaged in searching for various kinds of minerals or metals other than gold ‡ at the end of 1890. The figures show an increase of 157 in the tin, and of 67 in the antimony miners; but a falling-off of 49 in the coal, 38 in the slate and flag, and 20 in the silver and lead miners, the net increase being 103 as compared with 1889 :—

Miners for minerals other than gold.

MINERS FOR MINERALS OTHER THAN GOLD, 1890.

	Number of Miners.		Number of Miners.
Antimony ...	79	Silver and lead ...	16
Coal ...	205	Slate and flag ...	36
Infusorial earth ...	5	Tin ...	238
Kaolin ...	6		—
Turquoise ...	6		597
Lignite ...	6		—

633. Quicksilver, which is largely used in the recovery of gold, especially from crushed quartz, has not yet been found in Australia in payable quantities. In 1880 and 1881 rather more was produced

Quicksilver—produce of the world.

* Of late years the silver produced has been extracted from gold in the process of refinement at the Melbourne branch of the Royal Mint.

† The quantity of coal raised was 57,962 tons, inclusive of 26,805 tons raised by the Moe Coal Mining Company on private lands from 1885 to 1890.

‡ For number of gold miners see paragraph 343, Volume I.

in the United States than in all the rest of the world, but since 1881 there has been a gradual falling off in the quantity raised there, whilst in 1889 the other quicksilver producing countries—viz., Spain, Austria, and Italy—in which the production of quicksilver has been steadily increasing, produced nearly three times as much as the United States. The following figures, which show the world's production of quicksilver in each of the ten years ended with 1889, were prepared for the coming report of the census of the United States by Dr. David T. Day, of the United States Geological Survey :—

WORLD'S PRODUCTION OF QUICKSILVER, 1880 TO 1889.

Year.	United States.	Spain, Austria, and Italy.	Total.
	Flasks.	Flasks.	Flasks.
1880	59,926	59,242	119,168
1881	60,851	60,082	120,933
1882	52,732	62,489	115,221
1883	46,725	68,394	115,119
1884	31,913	69,915	101,828
1885	32,073	66,281	98,354
1886	29,981	73,070	103,051
1887	33,760	75,027	108,787
1888	33,250	76,664	109,914
1889	26,464	74,772	101,236
Totals	407,675	685,936	1,093,611

634. The revenue derived from the goldfields amounted to £18,408 in 1888-9, and £18,204 in 1889-90. The amount in the latter year was made up of the following items :—

REVENUE FROM GOLDFIELDS, 1889-90.

Miners' rights	£5,705
Business licences	230
Rents for leases of auriferous and mineral lands	9,727
„ mining on private property	1,403
Water-right and searching licences	1,139
Total	£18,204

635. The State aid to the mining industry during the year 1889-90 was £137,291, as compared with £119,139 in 1888-9.* The former sum is made up of £27,154, cost of the Mining Department and Mining Boards; £88,080 to assist miners in prospecting operations, and to defray the cost and working expenses of diamond drills;

* See page 97 of the first volume of this work.

Revenue
from gold-
fields.

State aid to
mining.

£10,937 for prospecting and boring for coal; and £11,120 for geological and underground surveys, cutting tracks in unexplored regions, etc. Under the second of these items, usually known as the "Prospecting Vote," the expenditure was only £20,000 a few years since; but it has latterly amounted to £80,000 or more.

636. During the period from 1875-6 to 1879-80, the sum of £21,050 was lent to mining companies, but only £1,237 has since been repaid. Of the balance (£19,813) as much as £15,813 has been written off as non-recoverable. Loans to mining companies.

637. In 1890, inclusive of the cost of wear and tear of diamonds, £21,716 was spent on the working of diamond drills, of which £16,766 was expended in gold prospecting, and £4,950 in coal prospecting. The average cost of boring with diamond drills was 12s. 6d. per foot, and with other machines on contract, 7s. 11½d. per foot. Diamond drills.

638. Of the sixteen diamond drills belonging to the Mining Department, ten were engaged in alluvial prospecting, five in coal prospecting, and one used by the Water Supply Department, in boring for water, at the end of June, 1891. The number of bores made in 1890 was 145, viz., 132 in search of gold, and 13 in search of coal; the aggregate depth bored was 30,160 feet for gold, and 7,978 for coal. Operations of diamond drills.

639. An Act to legalise mining for gold and silver on private property, and to compensate the owner and occupier thereof for the damage sustained by reason of the land being taken, or of their being deprived of possession of the surface thereof, in consequence of mining operations, came into force on the 24th November, 1884. This Act has since been subjected to certain amendments, which are embodied in the present Consolidated Act, 54 Vict. No. 1120. Between that date and the 31st December, 1889, 771 leases were issued under it, covering an area of 146,071 acres, and during the year 1890, 82 leases were issued covering an area of 7,482 acres. Mining on private property.

640. The estimated value of the produce raised from Victorian mines and quarries in 1890 is summarized as follows:— Value of mining produce.

VALUE OF MINING PRODUCE, 1890.

	£
Gold	2,354,244
Other metals and minerals	30,210
Stone from quarries	297,990
Total	2,682,444

Agricultural,
pastoral,
and mining
produce.

641. The estimated value of the agricultural, pastoral, and mining produce raised in Victoria, during each of the last seventeen years, is given in the following table. It should be borne in mind that the prices of agricultural and pastoral produce, on which the value mainly depends, fluctuates from year to year.* In several of the years the value of the pastoral produce was greater than that of the other two industries combined:—

VALUE OF AGRICULTURAL, PASTORAL, AND MINING PRODUCE,
1874 TO 1890.

Year.	Estimated Value of—			Total.
	Agricultural Produce.	Pastoral Produce.†	Mining Produce.‡	
	£	£	£	£
1874 ...	4,410,436	9,840,562	4,740,679	18,991,677
1875 ...	4,835,894	9,541,551	4,475,876	18,853,321
1876 ...	5,574,239	10,069,570	3,949,135	19,592,944
1877 ...	5,792,898	8,652,471	3,322,264	17,767,633
1878 ...	4,912,745	8,360,265	3,211,990	16,485,000
1879 ...	5,875,313	6,375,965	3,136,527	15,387,805
1880 ...	5,395,021	9,855,800	3,397,661	18,648,482
1881 ...	5,893,874	8,684,218	3,533,658	18,111,750
1882 ...	6,439,972	9,297,812	3,681,245	19,419,029
1883 ...	7,372,143	10,203,914	3,357,252	20,933,309
1884 ...	6,565,527	9,887,229	3,228,738	19,681,494
1885 ...	7,118,388	9,049,679	3,091,244	19,259,311
1886 ...	7,260,735	8,911,336	2,839,120	19,011,191
1887 ...	7,078,653	8,651,599	2,661,625	18,391,877
1888 ...	6,601,601	9,016,573	2,711,024	18,329,198
1889 ...	7,845,739	9,063,910	2,687,098	19,596,747
1890 ...	7,800,139	10,105,498	2,682,444	20,588,081

Agricultural,
pastoral,
mining,
and manufacturing
produce.

642. An approximate return was made of the value of articles manufactured in the twelve months ended with February, 1891, and the net result has already been stated to be £10,694,106.§ If this amount be added to the figures in the lowest line of the last column in the above table, a total of the gross value of the agricultural, pastoral, mining, and manufacturing produce will be obtained for the year 1890, amounting in the aggregate to £31,282,187.

Patents.

643. The patents for inventions applied for in 1890 numbered 1,017, or 66 more than in 1889, and a larger number than in any previous year. Since 1854 the total number of patents applied for has been 8,416.

* For prices of agricultural produce in different years, see table following paragraph 526 *ante*.

† The pastoral produce referred to is that derived from the live stock kept by farmers as well as that kept by graziers and squatters.

‡ Including the value of stone raised from quarries.

§ See paragraph 594 *ante*.

644. The first *Victorian Copyright Act** came into force in December, 1869. Copyrights—especially those for literary productions—have been increasingly numerous during the last six or seven years, during which period they averaged about 597 per annum; whereas prior to 1883 the largest number registered was 347. The following copyrights have been registered since the passing of the original Act:—

COPYRIGHTS, 1870 TO 1890.

Subject of Copyright.	Copyrights Registered.		
	Prior to 1890.	During 1890.	Total.
DESIGNS.			
Articles of manufacture, chiefly of—			
Metals	323	23	346
Wood, stone, cement, or plaster ...	71	24	95
Glass	14	3	17
Earthenware	11	10	21
Ivory, bone, papier-mâché, etc. ...	65	8	73
Woven fabrics	18	...	18
Miscellaneous	19	1	20
LITERARY PRODUCTIONS.			
Literary works	4,021	494	4,515
Dramatic „	126	6	132
Musical „	110	2	112
WORKS OF ART.			
Paintings	8	1	9
Drawings	32	6	38
Engravings	1,302	25	1,327
Photographs	1,132	53	1,185
Sculpture	5	...	5
Total	7,257	656	7,913

645. Provision for the registration of trade-marks was established under the *Trade Marks Registration Act* 1876, which came into operation on the 22nd September of that year. The law has since been amended, and is now embodied in the Consolidated Act (54 Vict. No. 1146). The registration of a person as the proprietor of a trade-mark is *primâ facie* evidence of his right to its exclusive use, subject to the provisions of the Act as to its connexion with the good-will of a business. From the period of the commencement of the Act to the end of 1890, 2,577 trade-marks were submitted for registration, and 1,724 were registered. During the year 1890, the number submitted was 267—or 30 less than in 1889; and the number registered was 170—or 34 less than in 1889.

* 33 Vict. No. 350, repealed and re-enacted by 54 Vict. No. 1076.

PART IX.—DEFENCES.

Land forces.

646. The Land Forces of Victoria consist of Permanent Forces, Militia, and Auxiliary Forces. The Permanent Forces are made up of the Head Quarters Staff, the Victorian Artillery, and the Permanent Section of the Engineer Corps; the Militia embrace the Cavalry, Horse Artillery, Field and Garrison Artillery, Engineers, Infantry, Ambulance, Commissariat, and Medical Staff; and the Auxiliary Forces comprise the Mounted Rifles and Victorian Rangers. At the end of 1890 the strength of the various corps in all cases approximated closely to the establishment, which is as follows:—

LAND FORCES.—ESTABLISHMENT, 1890.

Corps.	Officers.	Warrant Officers.	Non-commissioned Officers.	Rank and File.	Total Establishment.
Permanent Forces—					
Head Quarters Staff	5	...	1	...	6
Victorian Artillery	11	1	56	218	286
Permanent Section Victorian Engineers	2	3	4	22	31
„ Staff, Militia and Auxiliary Forces	10	14	59	...	83
Militia—					
Head Quarters Staff	3	...	...	...	3
Cavalry... ..	3	...	8	60	71
Horse Artillery	3	...	13	74	90
Field Artillery (3 Batteries) ...	16	1	47	204	268
Garrison Artillery (8 Batteries) ...	33	...	68	622	723
Victorian Engineers (Submarine Mining Company and Field Company)	8	1	18	157	184
Infantry (4 Regiments)	114	4	220	2,578	2,916
Ambulance Corps	1	...	7	32	40
Commissariat and Transport Corps ...	5	...	11	63	79
Medical Staff	15	...	...	...	15
Total Permanent and Militia Forces	229	24	512	4,030	4,795
Auxiliary Forces—					
Mounted Rifles	87	...	132	990	1,209
Victorian Rangers	63	...	92	1,201	1,356
Total all ranks	379	24	736	6,221	7,360

647. The naval force of the colony consists of a Permanent Naval Force and a Naval Brigade, with an establishment as follows:—

Establishment of naval forces.

NAVAL FORCES—ESTABLISHMENT, 1890.

Permanent Force	...	...	...	236 Officers and Men.
Naval Brigade	...	...	...	379

648. The naval flotilla consists of eight ships and torpedo boats, but, in addition to these, three vessels belonging to the Harbor Trust—viz., the *Batman*, *Fawkner*, and *Gannet*—are armed with breech-loading guns as auxiliaries. Provision has also been made to arm two steamers as scouts when required for active service, which have accordingly been fitted so as to carry quick-firing guns. The following are the particulars of the ships and torpedo boats:—

Ships of naval forces.

WAR VESSELS, 1890.

<i>Cerberus</i> .—Armour-plated turret ship.	|	<i>Childers</i> .—First-class torpedo boat.
<i>Victoria</i> } Steel gunboats.		<i>Nepean</i> }
<i>Albert</i> }		<i>Lonsdale</i> } Second-class torpedo boats.
<i>Nelson</i> .—Wooden frigate.		<i>Gordon</i> }

649. The following account of the present system of Defence in Victoria has been furnished for this work by the Defence Department:—

Victorian system of defences.

Important changes in the system of Victorian defences were made in 1883 and 1884.

The Volunteer Force was disbanded, and corps of paid militia were raised *in lieu*, and enrolled under the *Discipline Act* 1883 (47 Vict. No. 777), which came into operation on the 3rd November of that year.

This Act provided for a Minister of Defence, the establishment of a Council of Defence, and a special appropriation of £110,000 per annum for 5 years.

Officers from the Active List of the Imperial Navy and Army were engaged for terms of service in the colonial forces to carry out the discipline and instruction necessary. Two gunboats and four torpedo boats were added to the strength of the Naval force.

The laws relating to defences and discipline have since been consolidated under the *Defences and Discipline Act* 1890 (54 Vict. No. 1083).

A further appropriation of £145,000 was, on the expiration of the previous one, provided for Naval and Military purposes for 2½ years, that is, from 1st July, 1889, to 31st December, 1891.

The practice inaugurated of engaging officers from the Imperial Navy and Army for terms of service has been continued.

Colonial officers have also been sent to England to undergo special courses of instruction, and it is proposed to adopt a scheme by which certain selected officers of both the Naval and Military forces shall be annually seconded for courses of instruction in the Imperial Service. The consent of the Imperial authorities to such a scheme has already been obtained.

Permission has also been granted by the Admiralty for officers of the Colonial Navy to be borne on board H.M. ships on the station for periods of training.

In order to enable these officers to undertake responsible duties, the Admiralty has agreed, on representations being made by this colony, to grant acting commissions to them as officers of the Royal Naval Reserve.

The following are the rates of pay of the petty officers, stokers, seamen, stewards, servants, etc., attached to the Victorian Naval Forces:—

PETTY OFFICERS, SEAMEN, AND OTHERS.

Rating.	Daily Pay.				Increment per Diem.
	Mini- mum.		Maxi- mum.		
	s.	d.	s.	d.	
Chief Engine-room Artificer	11	0	12	0	1s. after 5 years
Engine-room Artificers	9	0	10	0	"
Chief Leading Stokers	6	6	7	0	6d. after 5 years
Leading Stokers	6	0	6	6	"
Torpedo Artificers	5	6	7	6	6d. annually
Stokers	5	6	5	6	Nil
Stokers	5	0	5	0	Nil
Chief Petty Officers	6	6*	7	0	6d. after 5 years
1st Class Petty Officers	6	0*	6	6	"
Leading Seamen	5	6*	5	6	Nil
Able Seamen	5	0*	5	0	Nil
Training Seamen	3	6	3	6	Nil
Boys	2	0	2	0	Nil
Chief Ship's Corporal	6	6*	7	0	6d. after 5 years
Ship's Corporal	6	0*	6	6	"
Chief Armourer	8	0	9	0	"
Chief Painter	6	6	8	6	6d. annually
Chief Carpenter's Mate	7	6	8	0	6d. after 1 year
Carpenter's Mate	6	6	7	0	6d. after 5 years
Carpenters and Joiners	5	6	5	6	Nil
Officers' Cook	5	6	6	0	6d. after 5 years
Ship's Cook	5	6	5	6	Nil
Cooks	5	0	5	0	Nil
Chief Ship's Steward	7	0	8	6	6d. annually
Chief Sick-berth Attendant	6	6	8	6	"
Officers' Steward	5	6	5	6	Nil
Officers' Stewards	5	0	5	0	Nil
Officers' Stewards (2nd Class)	4	0	4	0	Nil
Officers' Servants†	5	0	5	0	Nil
Naval Storekeeper	6	0	6	6	6d. annually
Hulkkeeper	7	6	7	6	Nil

NOTE.—In every case where a salary in the above table has an annual increment attached to it, such increment is payable when the officer, warrant officer, petty officer, or man has been in receipt of the salary for a period of 12 months.

SPECIAL DUTY PAY.

- 1 Yeoman of signals, for making flags, 30s. a month.
- 7 Carpenters, tool money, 3d. a day each.
- 12 Torpedo instructors, 6d. a day each.
- 36 1st class seamen—gunners and torpedo-men, 4d. a day each.
- 4 Divers, 3d. a day each.
- 3 Buglers, 3d. a day each.
- 5 Leading signalmen, 4d. a day each.
- 15 Signalmen, 2d. a day each.

* Including 6d. deferred pay.

† These servants are held in accordance with special agreement with Lieutenants of the Royal Navy for the term of their engagement.

RIFLE CLUBS.

These clubs were first established in the colony in 1883 for the encouragement of rifle practice. Members have the privilege of buying rifles and ammunition from the Ordnance Stores at reduced rates, and are also allowed to travel free over the railways when proceeding to take part in rifle matches. The clubs are now divided into six districts, and members in each district are required to meet once a quarter for practice in field firing. As an incentive to individual practice, an allowance is paid annually to the clubs for each effective marksman, the money being devoted to the maintenance of ranges and purchase of ammunition.

MOUNTED RIFLES.

A volunteer force of Mounted Infantry Detachments being established in all districts of the colony, the regiment is a thoroughly representative one, and is very popular. Each company receives an effective and capitation allowance to cover the cost of uniform and certain incidental expenses. Members who attend the annual Easter Encampments also receive compensation based on the rates of pay for corresponding ranks in the Militia. The men, on being passed into the ranks, get M.-H. rifles and all accoutrements and horse gear free, with the exception of saddle, which each member supplies. Engagement is for a period of three years, but members may be re-engaged. After passing into the ranks, members must undergo a minimum of 12 daylight drills per annum. An annual course of musketry is carried out. Officers and non-commissioned officers, on passing the required examination, are appointed on probation for six months, when those who pass the final practical and theoretical test are confirmed in their appointments.

RANGERS.

An Infantry Volunteer force recruited chiefly from members of Rifle Clubs. Each company receives an effective and capitation allowance to cover cost of uniforms, etc., and members are granted compensation on the same basis as the Mounted Rifles for attending Easter Encampments.

CADET CORPS.

The encouragement of drilling and rifle-shooting in the schools of the colony has led to the establishment of Cadet Corps. Cadet companies may be formed in any school in detachments of not less than 20. The Cadets are principally armed with Francotte B.L. rifles lent by the Government, and ammunition is issued at half price, the same as to the Rifle Clubs.

The uniform is khaki, with a soft felt hat, and all the battalions of Junior Cadets wear the same.

The Drill Instructors of the Victorian Military Forces are permitted, at such times as they are not required for their ordinary duties, to drill Cadet companies, for which they are paid 2s. 6d. for each drill.

To stimulate the movement, Colonel Sir Frederick Sargood presented a handsome shield for competition by the Cadets. This trophy was to be won three times before becoming the property of the winners. It was shot for eight times, and was finally won in 1891 by the Kensington State School corps.

The encouragement of drill and rifle practice in the schools of the colony led to the establishment of Cadet Corps in the year 1884. Since then detachments have been formed in the larger schools in all districts, and the force is now over 4,000 strong. Annual encampments are held for the instruction of the Cadets, and are largely attended. In addition to the ordinary meetings for drill, held at regular intervals, masters and teachers have the privilege of attending classes of instruction in certain district towns chosen for the purpose, and thus qualify themselves to teach drill in their schools, as well as to obtain commissions in the Force.

In addition to the Cadet Corps proper, there is a battalion of about 400 Senior Cadets, consisting of boys who have left school, and are engaged in various occupations. This is a well-drilled body, and forms a valuable link between the junior Cadets and the Militia.

The whole of the Cadet Corps are now provided with uniforms; the junior cadets wearing khakis, the seniors Lincoln green. An effective allowance is paid to each company in order to assist the boys to purchase this clothing.

Defence
works.

650. Batteries for the defence of Melbourne were constructed in 1861-2 at Williamstown, Sandridge, and Queenscliff; but the battery at Sandridge is now set aside as unsuited to the requirements of modern warfare, which rendered it absolutely necessary to make the first line of defence of Port Phillip at the Heads. Lieutenant-General Sir W. F. D. Jervois, R.E., G.C.M.G., C.B., who visited the colony in 1877, suggested a plan for defending the channel between the Heads of Port Phillip, which he modified in March, 1879, in consequence of his having found when in England, during the year 1878, that great improvements had been made in the manufacture of, and modes of mounting, ordnance.

Progress of
the works.

651. The Government adopted the plan of Sir W. Jervois, and the construction of the works, commenced under the supervision of the late Major-General Sir P. H. Scratchley, R.E., has been carried out in accordance with this scheme.

Expenditure
on defences
1890-91.

652. The following table shows the expenditure of all kinds on military and naval defences for the financial year ended 30th June, 1891. The amounts expended under the heads "Victorian Artillery" and "Militia" give an average cost per man per annum in each division respectively as £94 16s. and £15 9s.* :—

MILITARY AND NAVAL EXPENDITURE, 1890-91.

MILITARY EXPENDITURE.							£	£
Head Office	...	...	...	...	...	...	6,946
Head Quarters Staff—Salaries	...	...	...	...	...	5,425	
" " Allowances	...	...	...	...	...	1,603	
							7,028	
Victorian Artillery—Salaries and working pay	...	...	...	...	...	20,696	
" " Allowances	...	...	...	...	...	6,423	
							27,119	
Militia—Effective allowance	...	...	...	...	...	10,377	
" Pay of Cavalry	...	...	...	...	...	398	
" " Field Artillery	...	...	...	...	...	3,316	
" " Garrison Artillery	...	...	...	...	...	7,258	
" " Victorian Horse Artillery	...	...	...	...	...	816	
" " Rifles	...	...	...	...	...	22,001	
" " Engineers	...	...	...	...	...	1,012	
" Torpedo Corps—Pay and incidentals	...	...	...	...	...	6,735	
" Medical Department	...	...	...	...	...	1,351	
" Ambulance Corps	...	...	...	...	...	459	
" Commissariat department	...	...	...	...	...	416	
" Drill instructors—Salaries and allowances	...	...	...	...	...	6,298	
" Horsing guns and forage	...	...	...	...	...	3,628	
" Travelling expenses	...	...	...	...	...	322	

* These calculations have been based on the establishment, viz.: 286 Victorian Artillery, and 4,389 Militia.

MILITARY AND NAVAL EXPENDITURE, 1890-91—*continued.*

MILITARY EXPENDITURE— <i>continued.</i>		£	£
Militia—Allowance for bands		200	
„ Incidentals		3,245	
			67,832
Auxiliary Forces—Cadet Corps—Salaries, effective allowance, etc.	£3,310		
„ Annual parade	881		
„ Free ammunition	832		
„ Capes, accoutrements, etc....	1,414		
		6,437	
„ Mounted Rifles—Pay and contingencies ...		9,557	
„ Victorian Rangers		9,027	
„ Rifle Clubs		1,386	
			26,407
Ordnance Branch—Fitter and inspector machinery ...		310	
„ Warlike stores		16,639	
„ Great coats, accoutrements, etc. ...		1,964	
„ Railway transport		1,837	
			20,750
Purchase of Ammunition		5,000	
„ Rifles and warlike stores		4,000	
			9,000
Easter Encampment, etc.			8,758
Grant to Victorian Rifle and Artillery Association ...		1,000	
Prizes to Rifle Clubs and Queen's Prize (£100) ...		600	
„ Encouragement drill and shooting—Naval and military forces		899	
			2,499
Expenses in connexion with despatch of officers to England for course of naval and military instruction		2,413	
Amount granted in aid of a team of Victorian Mounted Rifles to take part in Royal Military Tournament		600	
Bonus to Colonial Ammunition Company		5,000	
Refund to Colonial Ammunition Company of additional duty		882	
Compensation, gratuities, etc.		2,024	
Miscellaneous		73	
			10,992
Defence works and buildings			57,983
			245,314
NAVAL EXPENDITURE.			
Naval Forces—Salaries and wages		29,167	
„ Stores, clothing, fuel, etc....		8,491	
„ Repairs, machinery, etc., and expenses docking vessels		684	
			38,342
Naval Brigade—Salaries and pay		5,725	
„ Effective allowances		933	
„ Clothing and incidentals... ..		287	
			6,945
			45,287
			290,601

Expenditure
on defences
1854 to 1891.

653. A statement of the expenditure on the establishment and maintenance of defences during the last thirty-seven years and a half will be found in the following table :—

EXPENDITURE ON THE ESTABLISHMENT AND MAINTENANCE OF
DEFENCES, 1854 TO 1890-91.

Year.	Military Expenditure (including Buildings and Works of Defence).	Naval Expenditure.	Total.*
	£	£	£
1854 and 1855	287,973	...	287,973
1856 to 1864	758,000	123,000	881,000
1865	38,434	7,743	46,177
1866	47,647	14,453	62,100
1867	64,606	17,243	81,849
1868	58,873	19,061	77,934
1869	34,200	12,672	46,872
1870	37,102	10,570	47,672
1871 (6 months)	21,014	6,305	27,319
1871-2	38,634	19,604	58,238
1872-3	35,367	18,641	54,008
1873-4	41,050	17,643	58,693
1874-5	37,847	17,135	54,982
1875-6	40,698	17,536	58,234
1876-7	54,599	19,421	74,020
1877-8	62,842	58,424	121,266
1878-9	82,917	35,205	118,122
1879-80	60,420	33,359	93,779
1880-81	57,117	21,616	78,733
1881-2	59,589	21,845	81,434
1882-3	145,064	41,344	186,408
1883-4	205,596	25,442	231,038
1884-5	157,929	29,639	187,568
1885-6	281,092	37,886	318,978
1886-7	272,682	38,324	311,006
1887-8	281,206	40,913	322,119
1888-9	306,589	46,578	353,167
1889-90	292,129	58,692†	350,821
1890-91	245,314	45,287	290,601
Towards cost of <i>Cerberus</i> and <i>Nelson</i> ‡	...	101,966	101,966
Total ...	4,106,530	957,547	5,064,077
Arms, ammunition, and stores for defences generally§	...	...	47,408
Value of land certificates granted to Volunteers, including Naval Brigade, computed at £1 per acre	...	...	139,683
Grand Total ...	...	...	5,251,168

* These figures, which are derived from the Departmental accounts, do not exactly agree in all cases with those taken from the Treasurer's Finance Statement and shown on page 105, Vol. I., owing to the closing of the accounts not being exactly simultaneous.

† Including £14,500 for purchase of a torpedo boat.

‡ The figures in this line do not represent the total cost of the vessels, but only so much of it as cannot now be apportioned to particular years.

§ The figures in this line do not represent the total cost of the arms, ammunition, and stores, but only so much of it as cannot now be apportioned to particular years.

654. It is to be specially noted that the total expenditure recorded includes not only the cost of establishing the military and naval defences but also the annual outlay incurred for their maintenance, which annual outlay was estimated by the late General Scratchley to represent close upon seven-eighths of the total expenditure. The annual expenditure from 1854 to 1864 was unusually large, in consequence of Imperial troops serving in the colony; the last detachment of these was withdrawn in 1870. During the last six years the military expenditure was considerably larger than in any previous one, and of those the smallest was in 1890-91, in which it was £50,000 or £60,000 lower than in either of the two preceding years. The naval expenditure in 1890-91 was about £13,400 less than in 1889-90, slightly lower than in 1888-9, and larger than in any other year, except 1877-8. The total expenditure on defences during the last six years has averaged about £324,000 per annum; although during the previous three years it was only about £200,000, and prior to 1882-3 it rarely exceeded £100,000.

Expenditure on defences in various years compared.

655. The land forces of the Australasian colonies at the end of 1890 numbered 33,136, of which 25,382 were upon the Australian Continent. The largest number were in Victoria, and nearly one-half of these were militia, an arm which neither New South Wales, Western Australia, Tasmania, nor New Zealand appears to possess. New South Wales has, however, about twice as many volunteers as Victoria, which may, perhaps, be accounted for by the fact that the men there are partially paid. She also has 132 more regular troops, and 2,171 more men attached to reserves, than Victoria. In South Australia, however, all adult males under 45 years of age, and in New Zealand, all under 55, are liable to be called out in case of necessity. The following is a statement of the land forces in each colony of the group:—

Land forces in Australasian colonies.

LAND FORCES IN AUSTRALASIAN COLONIES, 1890.

Colony.	Regular Troops.	Militia.	Volunteers.	Reserves (including rifle clubs).	Total.
Victoria	406	4,389	2,191	2,430	9,416
New South Wales	538	...	4,146*	4,601	9,285
Queensland	134	2,844	846	...	3,824
South Australia	52	1,425	777	...	2,254
Western Australia ... ..	...	...	603	...	603
Total	1,130	8,658	8,563	7,031	25,382

* Partially paid.

LAND FORCES IN AUSTRALASIAN COLONIES, 1890—*continued.*

Colony.	Regular Troops.	Militia.	Volunteers.	Reserves (including rifle clubs).	Total.
Tasmania	33	...	588	1,421	2,042
New Zealand	204	...	5,508	...	5,712
Grand Total*	1,367	8,658	14,659	8,452	33,136

NOTE.—In South Australia—where the male population is, with a few necessary exceptions, divided into three classes—and in New Zealand—where there is no regular militia—all males between certain ages (18 to 45 in the former, and 17 to 55 in the latter) are liable to be called out in time of necessity. In New Zealand, such males numbered approximately 154,000.

Naval forces in Australasian colonies.

656. Four of the Australasian colonies—viz., Victoria, New South Wales, Queensland, and South Australia—possess regular naval forces, and of these nearly two-thirds are in the service of Victoria. Victoria, also, as well as New South Wales, Queensland, and South Australia, possesses a few irregular naval forces, who generally receive a small payment for their services, and are sometimes called the naval reserve. The largest force of this description belongs to Victoria. New South Wales possesses 281, Queensland 51, and New Zealand as many as 1,192 Naval Volunteers, but no other colony has an arm so designated. The following table contains a statement of the number of such forces in each of the colonies from which particulars have been received:—

NAVAL FORCES IN AUSTRALASIAN COLONIES, 1890.

Colony.	Regular Forces.	Forces only casually employed.†	Volunteers.	Total.
Victoria	236	379	...	615
New South Wales	14	338	281	633
Queensland	46	331	51	428
South Australia	66	90	...	156
Total	362	1,138	332	1,832
New Zealand ... ..	...	...	1,192	1,192
Grand Total	362	1,138	1,524	3,024

Additional naval defences for Australasian colonies.

657. According to an agreement entered into with the Imperial Government, and embodied in Acts passed by the several Legislatures (the Victorian Act being 54 Vict. No. 1,083), an additional naval force,

* Exclusive of cadets, who numbered 4,000 in Victoria, 673 in Queensland, and 2,112 in New Zealand.

† Partially paid in some of the colonies.

consisting of 5 fast cruisers and 2 torpedo boats, has been provided for the protection of the floating trade in Australasian waters. The agreement, which is to remain in force for 10 years, provides for the payment by the Australasian colonies of interest on the prime cost at 5 per cent., but not exceeding £35,000 per annum, and a sum not exceeding £91,000 towards annual maintenance, or a total contribution of £126,000. The first annual contribution, which was payable in advance on the 1st March, 1891, is thus apportioned amongst the various colonies on a population basis:—Victoria, £37,723; New South Wales, £37,340; New Zealand, £20,821; Queensland, £13,018; South Australia, £10,624; Tasmania, £4,836; Western Australia, £1,638.

658. The figures in the following table, which show the number of local troops of all arms in the self-governing possessions of the British Empire—embracing the Australasian, Canadian, and South African colonies—have been taken from a paper by Colonel J. F. Owen, R.A., read before the Royal Colonial Institute, London, on the 19th May, 1890:—

Local forces
in British
colonies.

LOCAL FORCES OF BRITISH SELF-GOVERNING COLONIES, 1889.

Branch of Service.	Australasia.	Canada.	South Africa.	Total.
<i>Permanent Forces.</i>				
Mounted troops	32	150	819	1,001
Artillery	1,060	387	...	1,447
Infantry	...	463	...	463
Engineers and Torpedo Corps	247	...	...	247
Police*	...	1,050	887	1,937
Staff	164	...	...	164
Total	1,503	2,050	1,706	5,259
<i>Partially Paid Forces.</i>				
Mounted Troops	2,618	1,944	1,314	5,876
Artillery	3,010	3,408	436	6,854
Infantry	13,429	30,657	2,920	47,006
Engineers and Torpedo Corps	1,244	179	249	1,672
Naval Brigade	2,893	...	85	2,978
Total	23,194	36,188	5,004	64,386
<i>Volunteer Forces.</i>				
Mounted troops	860	...	...	860
Artillery	307	...	...	307
Infantry	6,001	...	...	6,001
Engineers and Torpedo Corps	129	...	...	129
Total	7,297	...	...	7,297
Grand Total	31,994	38,238	6,710	76,942

* Only those used for military service.

Relative proportions of various forces.

659. According to this table the local troops in the self-governing colonies of the Empire number 77,000, and half of these are in Canada, whilst 41 per cent. are in Australasia, and 9 per cent. in South Africa. The partially paid forces amount to five-sixths of the whole, whilst the permanent forces and the volunteer forces—the latter of which exist only in Australasia—amount to only a fifteenth and a tenth of the whole respectively.

Defence expenditure in Australasian colonies.

660. In 1890-91 Victoria spent over £290,000 on defences, or about two-fifths of the amount so expended by all the colonies on the Australian continent, whilst New South Wales spent over £317,000, or about three-sevenths of that amount. The Australasian colonies, as a whole, spent over £840,000 on defences in the same year, as is shown in the following table:—

EXPENDITURE ON DEFENCES IN AUSTRALASIAN COLONIES,
1890-91.

Colony.	Ordinary Expenditure.		Expenditure on Fortifications.	Grand Total.
	Military.	Naval.		
	£	£	£	£
Victoria	187,331	45,287	57,983	290,601
New South Wales	216,624	11,419	89,391*	317,434
Queensland	60,884	15,519	5,994	82,397
South Australia	34,283	13,514	4,393	52,190
Western Australia	4,013	...	...	4,013
Total	503,135	85,739	157,761	746,635
Tasmania	12,699	...	5,200	17,899
New Zealand	73,375	...	2,477	75,852
Grand Total	589,209	85,739	165,438	840,386

NOTE.—The figures for New South Wales, Western Australia, and Tasmania are for the calendar year 1890; those for the other colonies for the financial year 1890-91.

Inspection of Australasian troops.

661. The military forces of the Australasian colonies were inspected in 1889 by Major-General J. B. Edwards, a distinguished officer in the Imperial service, specially sent by the Horse Guards to perform that duty. General Edwards reported (9th October, 1889) in regard to Victoria that the troops were in a satisfactory condition, and capable of fulfilling the duty for which they are maintained, viz., the defence of the colony. He, however, strongly recommended that, for the

* There was an error in the figures furnished to the Government Statist for 1889-90, and published in the *Victorian Year-Book* of that year, Vol. II., page 467; the amount expended on fortifications should have been £72,979 instead of £207,175 as stated.

general defence of Australasia, there should be a federation of the forces of the different colonies.*

662. One cadetship at the Royal Military College, Sandhurst, England, is allocated annually to students of each university in the Australasian colonies to which a charter by letters patent has been granted. This includes the Melbourne University, as well as the universities of Sydney, Adelaide, and New Zealand. A candidate who is recommended for a cadetship must be within the limits of 17 and 22 years of age at the date of his joining the Royal Military College; he is required to enter the college within six months of his passing the requisite qualifying examination, otherwise his claim to a cadetship will lapse; and at least one month before the date of his entering, certificates of his age and moral character, together with a recommendation by the proper university authority, must be forwarded to the Military Secretary at the Horse Guards.†

Military
cadetships.

663. In the case of colonial candidates for commissions in the army who are not members of any university, an arrangement has been made whereby the ordinary preliminary examination held in London by the Civil Service Commissioners is dispensed with (except as regards geometrical drawing), upon the candidate producing a certificate of his having passed an equivalent examination in the colonies.†

Colonial
candidates
for the
army.

664. Commissions in the cavalry or infantry of the line will be granted to officers who are *bonâ fide* colonists under specified conditions as to age, physical and moral fitness, length of service, etc. The candidate will be required to undergo a qualifying literary examination in mathematics, French, German, or other modern language, geometrical drawing, a second more advanced examination, and finally a military examination, the text-books in this latter being those at the time in use at the Royal Military College, Sandhurst. Sets of examination papers in both literary and military subjects will be sent to the Governors of the respective colonies, and boards for the proper conduct of the examinations are to be held. The Governor of the colony to notify the War Office each year whether he has any qualified candidates to nominate. Till further notice, two army

Commis-
sions to
colonial
military
officers.

* See Report by Major-General Edwards, Parliamentary Paper No. 139, Session 1889.

† For despatches respecting military cadetships and colonial candidates for army commissions see *Government Gazettes* of the 22nd October, 1880, and 26th June, 1890. Representations are now being made to induce the Imperial authorities to allot 4 cadetships to university candidates in Victoria, 2 being available for the engineers or artillery, and 2 to regiments of the line, instead of as at present, 1 to university candidates, and 2 to candidates from the local military forces, as particularized in the next paragraph but one.

commissions will be allotted annually to Victoria, New South Wales, South Australia, Queensland, New Zealand, and the Cape of Good Hope. In the event of the number of candidates nominated by the Governor in a colony at any time exceeding the allotted number of commissions, the selection will be decided by competition in the military portion of the prescribed examination.*

Naval
cadetships.

665. Four nominations to naval cadetships are placed annually at the disposal of the Secretary of State for distribution to sons of gentlemen in certain colonies.† The Governor in any of such colonies has the right of submitting an application in favour of a candidate, with any recommendation he may think fit.‡ The qualifications of a candidate are—that he must be a colonist in the strict sense of the term, must not be less than 13 or more than $14\frac{1}{2}$ years of age, must be in good health and perfectly free from any physical defect or disease, and must be able to pass a preliminary examination in English, Arithmetic, Elementary Algebra, Elementary Geometry, French, and Scripture History, obtaining not less than two-fifths of the whole number of marks assigned in each subject; and a second examination of any two of the following subjects, viz., Elementary Mathematics, Latin, Geography, and the outlines of English History. When a cadet is entered, he will be required to pay annually the sum of £75 for a period of two years, to be spent on board the “*Britannia*” training ship, besides expenses of outfit and of all necessary books or instruments, during which time he must pass four examinations in seamanship and study. He is subsequently to pay £50 per annum until he passes his final examination for the rank of lieutenant. The Lords of the Admiralty have decided to allow colonial candidates, who fail to pass at their first trial, the opportunity of being examined again in about six months’ time, provided they are still within the limits of age. Colonial candidates for cadetships were previously under a disadvantage in this respect, and the decision of the Admiralty is the consequence of their recognition of this fact.

* See footnote (†) to paragraph 663 *ante*.

† The colonies from which nominations will, in the first instance, be received, are—each of the Australasian colonies, Canada, Newfoundland, Jamaica, Antigua, Barbados, British Guiana, Trinidad, Cape Colony, Natal, Malta, Ceylon, and Mauritius; but should all the four nominations not be applied for by the end of the first quarter in each year, the balance will be made available for applications which may be received from other colonies.

‡ Revised regulations respecting naval cadets are published in the *Government Gazette* of 2nd September, 1887 (No. 83), and the Premier’s memo. dated 14th March, 1889, notifies a further revise of the Admiralty dated December, 1888.

PART X.—SOCIAL CONDITION.

666. It was provided by the *Constitution Act* that, for the advancement of the Christian religion in Victoria, the sum of £50,000 should be set apart each year from the general revenue to promote the erection of buildings for public worship and the maintenance of ministers of religion, which sum should be apportioned to each denomination according to the number of its members at the preceding census. This provision was, however, repealed by an Act (34 Vict. No. 391) which came into operation on the 31st December, 1875. Since that date no further State assistance to religion has been given.

Abolition of State aid to religion

667. The following table contains a statement of the number of clergy in 1890, and the approximate number of religious services performed in connexion with each denomination during the last two years:—

Clergy and services.

CLERGY AND SERVICES PERFORMED.*

Religious Denominations.	Number of Clergy, Ministers, etc., 1890.	Approximate Number of Services Performed.		
		1889.	1890.	Increase (+) Decrease (-)
Church of England	231	51,828	53,950	+ 2,122
Presbyterians	218	54,668	54,540	- 128
Methodists	221	108,046	106,282	- 1,764
Bible Christians	47	15,345	16,754	+ 1,409
Independents...	54	6,135	6,135	...
Baptists	50	6,614	7,090	+ 476
Church of Christ	22	7,600	7,860	+ 260
Evangelical Lutherans...	17	2,751	2,754	+ 3
Moravians	2	810	156	- 654
Welsh Calvinists	3	490	364	- 126
Society of Friends	2	344	344	...
Salvation Army	405	35,568	41,679	+ 6,111
Unitarians	1	104	104	...
Seventh Day Adventists	5	400	700	+ 300
Protestants unattached	8	1,000	1,032	+ 32
Roman Catholics	180	29,716	35,587	+ 5,871
New Church (Swedenborgians)	1	134	136	+ 2
Catholic Apostolic	29	1,236	1,070	- 166
Christian Israelites	1	157	157	...
Spiritualists	...	40	45	+ 5
Jews	11	1,077	1,450	+ 373
Total	1,508	324,063	338,189	+14,126

* The information in this and the next two tables was obtained from the heads or clergy of the different denominations. In the cases where blanks occur in the column for increase or decrease, no returns have been received for 1890, and the figures for the previous year have been repeated.

668. In 1890, as compared with 1889, increases in the number of services performed will be observed in the case of the Church of England, the Bible Christians, the Baptists, the Lutherans, the Church of Christ, the Protestants unattached, the Roman Catholics, the New Church, the Seventh Day Adventists, the Salvation Army, the Spiritualists, and the Jews; and decreases in the case of the Presbyterians, the Methodists, the Welsh Calvinists, the Moravians, and the Catholic Apostolic Church.

669. The next table shows for the same two years the number of churches or other buildings used for public worship, the number of persons they can accommodate, and the number of persons usually attending at the principal Sunday services:—

CHURCHES, ACCOMMODATION, AND ATTENDANCE.*

Religious Denominations.	Churches and other Buildings used for Public Worship.			Persons for whom there is Accommodation.			Distinct Individuals Attending Sunday Services.		
	1889.	1890.	Inc. + Dec. -	1889.	1890.	Inc. + Dec. -	1889.	1890.	Inc. + Dec. -
Church of England	1,001	997	-4	113,849	115,568	+1,719	60,004	58,981	-1,023
Presbyterians ...	933	933	...	97,030	97,490	+460	70,260	70,480	+220
Methodists ...	1,314	1,230	-84	173,166	134,346	-38,820	78,239	125,262	+47,023
Bible Christians ...	171	176	+5	17,592	19,690	+2,098	7,485	10,643	+3,158
Independents ...	105	105	...	19,466	19,466	...	13,154	13,154	...
Baptists ...	101	109	+8	18,770	20,940	+2,170	10,922	12,682	+1,760
Church of Christ	74	77	+3	9,500	10,000	+500	4,500	5,000	+500
Evangelical Lu- therans	49	53	+4	4,800	5,150	+350	2,660	2,700	+40
Moravians ...	2	2	...	330	232	-98	100	100	...
Welsh Calvinists	4	4	...	879	860	-19	578	610	+32
Society of Friends	4	4	...	230	230	...	67	67	...
Salvation Army ...	259	309	+50	56,318†	57,385	+1,067	64,008	60,950	-3,058
Unitarians ...	1	1	...	500	500	...	100	120	+20
Seventh Day Ad- ventists	7	8	+1	500	550	+50	400	300	-100
Protestants unat- tached	13	12	-1	4,430	4,780	+350	3,270	3,045	-225
Roman Catholics	539	551	+12	114,869	123,588	+8,719	108,214	124,699	+16,485
New Church (Swedenborgians)	2	2	...	230	230	...	85	80	-5
Catholic Apostolic	4	2	-2	510	480	-30	200	180	+20
Christian Israelites	1	1	...	200	200	...	100	120	-20
Spiritualists ...	1	1	...	400	400	...	100	100	...
Jews ...	7	6	-1	2,700	2,850	+150	855	805	-50
Total ...	4,592	4,583	-9	636,269†	614,935	-21,334	425,301	490,078	+64,777

670. It will be seen that the Bible Christians, the Baptists, the Lutherans, the Church of Christ, the Roman Catholics, the Seventh Day

* See footnote (*) on previous page.

† Figures revised since last publication.

Adventists, and the Salvation Army returned more, and the Church of England, the Methodists, the Protestants unattached, the Catholic Apostolic Church, and the Jews returned fewer, church edifices in 1890 than in 1889; that the only denominations which returned less accommodation were the Methodists, the Welsh Calvinists, the Moravians, and the Catholic Apostolic Church, and the only denominations which returned a smaller attendance at their principal service were the Church of England, the Protestants unattached, the New Church, the Catholic Apostolic Church, the Seventh Day Adventists, the Salvation Army, and the Jews. The fact of some sects returning fewer buildings and less accommodation in the latter year than in the former may perhaps be accounted for by the circumstance that halls, schoolhouses, and even private dwellings in which services are held, are sometimes returned as church buildings, but disappear from the totals on such services being discontinued.

671. In the householder's schedule of the census taken on the 5th April, 1891, provision was made for ascertaining the number of children attending Sunday schools, and the number of Sunday school teachers. From the results of this enquiry the following table has been compiled:—

Sunday school teachers and scholars.

SUNDAY SCHOOL TEACHERS AND SCHOLARS, 1891.

(CENSUS RETURN.)

Religious Denomination.	Number of Teachers.			Number of Scholars.		
	Males.	Females.	Total.	Males.	Females.	Total.
Church of England, Episcopalians	1,082	2,206	3,288	19,141	20,595	39,736
Protestants(not otherwise defined)	31	60	91	669	667	1,336
Presbyterian Church of Victoria	944	1,485	2,429	8,800	9,507	18,307
Free Presbyterian Church of Victoria	16	22	38	149	271	420
Other Presbyterians...	2	15	17	...	4	4
Wesleyan Methodists	2,225	2,031	4,256	12,799	13,283	26,082
Primitive Methodists	295	192	487	1,232	1,285	2,517
Bible Christians	259	253	512	980	972	1,952
United Methodist Free Church	49	84	133	270	226	496
Independents, Congregationalist-Baptists	335	403	738	1,845	2,090	3,935
Baptists	436	481	917	2,226	2,376	4,602
Disciples of Christ, Church of Christ	165	152	317	813	766	1,579
Christians (not otherwise defined)	10	11	21	120	56	176

SUNDAY SCHOOL TEACHERS AND SCHOLARS, 1891—*continued.*

(CENSUS RETURN.)

Religious Denomination.	Number of Teachers.			Number of Scholars.		
	Males.	Females.	Total.	Males.	Females.	Total.
Christian, Plymouth Brethren	16	9	25	73	77	150
Lutherans, German Protestants	33	18	51	250	307	557
Moravians, United Brethren ...	3	1	4	5	2	7
Calvinists, Calvinistic Methodists Welsh Church	26	30	56	59	51	110
Society of Friends ...	3	3	6	14	11	25
Salvation Army	99	114	213	585	717	1,302
Unitarians ...	...	6	6	36	24	60
Other Protestants ...	12	23	35	98	111	209
Roman Catholics ...	229	610	839	4,734	5,076	9,810
Catholics (not otherwise defined)	8	12	20	164	179	343
Greek Church ...	1	1	2	...	...	...
Catholic Apostolic Church ...	...	1	1	1	1	2
Israelites, Christian Israelites ...	...	...	...	8	3	11
New Church (Swedenborgians)	...	1	1	8	24	32
Spiritists, Spiritualists ...	6	4	10	15	19	34
Jews*	9	8	17	88	54	142
Mohammedans ...	...	...	...	...	1	1
Other denominations ...	4	...	4	13	17	30
No denomination ...	27	28	55	255	189	444
No religion ...	1	3	4	35	20	55
Unspecified ...	13	19	32	158	140	298
Object to state their religious belief	44	19	63	267	243	510
Total ...	6,383	8,305	† 14,688	55,910	59,364	‡ 115,274

religious
sects of
teachers
and
scholars.

672. It should be pointed out that both teachers and scholars have necessarily been tabulated according to the religious denominations placed against their names in the census schedule, but it does not follow that the Sunday school with which they were connected was of that denomination. It will be remarked that 1 of the Sunday school scholars was returned as a Mohammedan, also that 55 of the teachers and 444 of the scholars were returned as of "No Denomination," 4 of the teachers and 55 of the scholars as of "No Religion," and 63 teachers and 510 scholars objected to state their religious belief.

ages of
Sunday
school
scholars.

673. The following table shows the ages of the Sunday school scholars as returned at the census :—

* Schools held on Saturday.

† Including 5 Chinese and 7 Aborigines.

‡ Including 134 Chinese and 70 Aborigines.

AGES OF SUNDAY SCHOOL SCHOLARS, 1891.

Ages.	Males.	Females.	Total.
Under 4 years	1,276	1,488	2,764
4 to 5 "	2,564	2,597	5,161
5 to 6 "	3,835	3,794	7,629
6 to 7 "	4,542	4,604	9,146
7 to 8 "	4,885	4,688	9,573
8 to 9 "	4,783	4,848	9,631
9 to 10 "	4,933	4,772	9,705
10 to 11 "	5,035	4,950	9,985
11 to 12 "	4,508	4,817	9,325
12 to 13 "	4,625	4,727	9,352
13 to 14 "	4,299	4,425	8,724
14 to 15 "	3,442	3,831	7,273
Unspecified children	14	9	23
15 to 16 years	2,499	2,958	5,457
16 to 17 "	1,670	2,194	3,864
17 to 18 "	1,095	1,548	2,643
18 to 19 "	702	1,071	1,773
19 to 20 "	514	819	1,333
20 and upwards	689	1,224	1,913
Total	55,910	59,364	115,274*

674. Including those whose ages were not specified in the census schedules, 33,325 of the male, and 33,415 of the female Sunday school scholars were at the school age (6 to 12 both inclusive). These numbers, compared with the numbers at that age in the population—viz., 87,466 boys and 85,633 girls—show that 38 per cent. of the boys, and 39 per cent. of the girls, at the school age attended Sunday schools.

Sunday school scholars at school age.

675. In almost all cases, the Sunday school teachers and scholars returned at the census were considerably fewer than those returned by the heads of the respective denominations in the previous year, the total difference being 3,295 in the case of the former, and 28,297 in that of the latter. This must have arisen either from those connected with Sunday schools having omitted to enter that fact in the census schedule, or else from the different denominations having generally over-estimated the numbers. As regards the teachers, the census figures were less than those supplied by the denominations in the case of all the important sects except the Baptists; and as regards

Difference between census and denominational returns.

* Including 134 Chinese and 70 Aborigines.

the scholars, in the case of all except the Church of England. The excess of the denominational over the census return was much the greatest in the case of the Roman Catholics, the former being greater than the latter by 594, or 70 per cent., in the teachers, and by 11,927, or 117 per cent., in the scholars. In the following table, the numbers according to the census and the return furnished by the denominations in 1890 have been placed side by side for the purpose of comparison :—

SUNDAY SCHOOL TEACHERS AND SCHOLARS, 1890 AND 1891.

Religious Denominations	Number of Sunday School Teachers.		Number of Sunday School Scholars.	
	According to the Census of 1891.	As Returned by the Denominations, 1890.	According to the Census of 1891.	As Returned by the Denominations, 1890.
Church of England	3,379	3,744	41,072	30,426
Presbyterians	2,484	3,118	18,731	30,698
Methodists	4,876	6,421	29,095	37,531
Bible Christians	512	795	1,952	3,741
Independents	738	810	3,935	5,740
Baptists	917	700	4,602	5,594
Church of Christ	338	379	1,755	3,080
Lutherans	51	48	557	437
Moravians	4	3	7	26
Welsh Calvinists	56	40	110	250
Society of Friends	6		25	...
Salvation Army	213	250	1,302	1,860
Unitarians	6		60	...
Seventh Day Adventists*		55	...	269
Other Protestants	60	128	359	1,455
Total Protestants	13,640	16,491	103,562	121,107
Roman Catholics	859	1,453	10,153	22,080
New Church (Swedenborgians)	1	6	32	25
Spiritualists	10	14	34	112
Jews*	17	19	142	247
Residue	161	...	1,351	...
Total	14,688	17,983	115,274	143,571

676. It was not possible to ascertain the number of Sunday schools by means of the census, but it probably differs but little from that returned at the beginning of the previous year by the heads of the different denominations, which was as follows :—

Sunday schools.

* Schools held on Saturday

SUNDAY SCHOOLS, 1890.

Number of Sunday Schools.		Number of Sunday Schools.	
Church of England	482	Salvation Army	54
Presbyterians	455	Seventh Day Adventists*	9
Methodists	667	Protestants unattached	11
Bible Christians	107	Roman Catholics	294
Independents	69	New Church (Swedenborgians)	1
Baptists	58	Spiritualists	2
Church of Christ	47	Jews*	6
Lutherans	17		
Moravians	2	Total	2,284
Welsh Calvinists	3		

677. The Melbourne University was established under a special Act of the Victorian Legislature (16 Vict. No. 34), which was assented to on the 22nd January, 1853. This Act, as amended by 44 Vict. No. 691 (the two consolidated under 54 Vict. No. 1151), provides for the endowment of the University by the payment of £9,000† annually out of the general revenue; also, that no religious test be administered to any one to entitle him to be admitted to the rights and privileges of the institution; also for the constitution of a senate, to consist of all male persons who had been admitted to the degree of master or doctor, and for the election by them annually, or after the occurrence of a vacancy, of one of their body as warden; also for the election by the senate of a council consisting of twenty members (all males), each elected for five years, of whom not more than three may be members of the teaching staff, and for the election by them out of their own body of a chancellor and a vice-chancellor. The council are empowered by these Statutes to grant, in any faculty except divinity, any degree, diploma, certificate, or licence which can now be conferred in any University in the British dominions.

Melbourne University.

678. Royal letters patent, under the sign manual of Her Majesty Queen Victoria, were issued on the 14th March, 1859, declaring that the degrees of Bachelor and Master of Arts, and Bachelor and Doctor of Medicine, Laws, and Music, which had been granted or might thereafter be granted by the Melbourne University, should be recognised as academic distinctions and rewards of merit, and should be entitled to rank, precedence, and consideration in the United Kingdom, and in British colonies and possessions throughout the world, just as fully as if they had been granted by any University in the United Kingdom.

University ranks with British Universities.

* Schools held on Saturday.

† Besides this amount, an additional annual subsidy of £2,000 was voted by Parliament for the years 1883 and 1884; £5,500 for the years from 1885 to 1887; and £7,500 for the years 1888 to 1890. The total subsidy at the present time is thus £16,500 per annum. Moreover, since 1884, various sums, amounting in the aggregate to £42,500, have been granted for buildings and apparatus.

Admission
of Victorian
medical
graduates
to practise
in the
United
Kingdom.

679. Although, in accordance with this patent, the degrees of the Melbourne University have long been nominally recognized in the United Kingdom, it was not until May, 1890, that medical and surgical graduates of that University were permitted to practise there. At that date, however, owing to representations made by the Melbourne University authorities, the matter was satisfactorily decided by the Privy Council, the result being that, in future, the name of any person holding a degree in medicine and a degree in surgery of the University of Melbourne will be placed on the British Register on personal application to the registrar, and payment of the prescribed fee of £5; and, after registration, he will enjoy all the privileges possessed by persons registered in respect of degrees granted in the United Kingdom.* The following is a copy of the resolution adopted by the Privy Council:—

“That the evidence afforded in the preceding statement, and in the *Melbourne University Calendar*, is such as to satisfy the committee that the said degrees in medicine and surgery are a sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of medicine, surgery, and midwifery, and the committee recommend to the Council that the holders of these conjoint degrees of the Melbourne University be registrable in the separate list of practitioners in the Colonial Register.”

Date of
founding
University.

680. The foundation stone of the Melbourne University was laid on the 3rd July, 1854, by His Excellency Sir Charles Hotham, K.C.B., the then Governor of Victoria, and the building was opened on the 3rd October of the following year.

University
thrown
open to
females.

681. On the 22nd March, 1880, the University was thrown open to females. For some years afterwards they were not allowed to study medicine, but this prohibition has been removed, and they are now admitted to all the same corporate privileges as male students.

University
fees.

682. The following is a statement of the fees payable at the Melbourne University:—

	£	s.	d.
UNIVERSITY FEES.			
For admission to examination at any matriculation examination	0	10	0
For each subject at matriculation selected by the candidate	0	5	0
For matriculation and certificate thereof	1	1	0
For the degree of Bachelor of Arts—For each year of not more than five courses	12	12	0
For the degree of Bachelor of Science—For each year	21	0	0
For the degree of Bachelor of Laws—For each year	25	4	0
For the degrees of Bachelor of Medicine and Bachelor of Surgery—			
For the first year	18	18	0
For the second year	21	0	0
For any subsequent year	25	4	0

* See First General Report on recognition of Melbourne University degrees, etc., by Professor H. B. Allen, M.D., Parliamentary Paper No. 37, Session 1891.

UNIVERSITY FEES—*continued.*

	£	s.	d.
For the degree of Bachelor of Engineering—			
For the first and second years	12	12	0
For the third and fourth years	25	4	0
For a course of Surveying, Levelling, and Practical Mensuration	6	6	0
For the Certificate of Engineer under the old regulations	5	5	0
For the degree of Bachelor of Music—			
For each year of not more than five courses	12	12	0
Choral class, per annum	1	1	0
Orchestral Class, per annum	1	1	0
Chamber Music Class, per annum	1	1	0
For any certificate, not for completion of a year's course for a degree, either of attendance upon lectures or of Examination, or of both	1	1	0
For any admission <i>ad eundem statum</i>	2	2	0
For any degree of Bachelor, whether direct or <i>ad eundem</i>	5	5	0
For any higher degree when direct	10	10	0
For any higher degree when <i>ad eundem</i>	5	5	0

Note.—Besides the above amounts, special fees are charged for different departments. Any yearly fee may be paid in three equal terminal instalments.

683. The memorial stone of the University Hall, called the Wilson Hall. "Wilson Hall," was laid on the 2nd October, 1879, in the presence of His Excellency the Marquis of Normanby and a large concourse of spectators, by Sir Samuel Wilson, Knt., then a member of the Legislative Council, now a member of the British House of Commons, who, by his munificent gift of £30,000 (which by interest had increased to £37,000 before the University authorities were in a position to expend it), was the means of the Hall being erected. The building, which, except the organ loft, is now completed, is of the perpendicular Gothic style of architecture; in length, 140 feet; breadth, 47 feet; height of walls, 45 feet; and of apex of roof, 84 feet. Its cost has exceeded £40,000.

684. Provision had been made in the Act of Incorporation for the Affiliated colleges. establishment of affiliated colleges in connexion with the four principal religious denominations, and ground for the erection of such colleges was reserved near the University. Up to the present period this privilege has been taken advantage of by the Anglicans, Presbyterians, and Wesleyans; their colleges being named respectively Trinity, Ormond, and Queen's. The Roman Catholics have not yet commenced to erect a college on the site reserved for their body.

685. The following information respecting Trinity College has been Trinity College. supplied for this work:—

Trinity College stands in a section of the University reserve facing the Sydney road. It was for several years the only University College in Victoria. From the time of its affiliation to the University, in 1876, the progress of the college was rapid and uninterrupted. Before the end of 1877 a considerable increase in the accommodation for students was required, and a large pile of buildings was consequently erected. In a short time the additional rooms thus provided were all occupied, and the building of another wing was rendered necessary. Through the munificence of Sir W. J. Clarke, Mr. Joseph Clarke, and other friends of the college,

the council was in the year 1882 placed in a position to erect the new structure. These additional rooms were speedily occupied, and the buildings were further extended in 1887. The existing buildings, in addition to apartments for the warden, tutors, and students, contain a chapel, dining hall, lecture rooms, billiard room, chemical and biological laboratories, libraries, etc. The college, while maintaining its primary character as a place of residence and education, both religious and secular, for University students belonging to the various professional schools, has also, since the year 1878, contained the Theological Training-school for the Diocese of Melbourne.

Lectures on a large number of subjects of the Arts, Law, Science, Engineering, and Medical courses are regularly delivered at the college during term. Most of these lectures are given in the evening or early morning, in order to meet the requirements of bank clerks, teachers, and others who may be prevented, by the nature of their employment, from attending lectures at the University. The college lectures are intended to be ancillary to those delivered in the University, and are given with a view to preparing students for both the Ordinary and Honour University Examinations. The college provides students, at moderate rates, with extra private tuition in any subject in which they may require special assistance. All the lectures are open to women students (whether men or women), and a large number have already availed themselves of the privilege.

The college offers exceptional facilities for the study of the subjects of the University Medical course and the course for the degree of Bachelor of Science in its Chemical and Biological Laboratories.

Special attention is devoted by the Science Lecturers to the preparation of First Year Medical Students in the subjects of Natural Philosophy, Biology, and Chemistry.

Practical demonstrations are regularly given in Biology, Botany, Physiological Chemistry, Histology, and Materia Medica, and form an important feature of the college teaching. The use of microscopes and other apparatus is allowed to the students without extra charge.

Abundant means for recreation have been provided, including two asphalted tennis courts, a billiard room, and a reading room supplied with newspapers and periodicals. A special feature of the college is its libraries, containing about six thousand volumes, which comprise many rare and valuable works. The buildings of the college represent an outlay of about £30,000, the whole of which has been derived from the liberality of Victorian churchmen. Several hundred names have already been entered on the college books. Each student is provided with a separate bedroom. The sitting-rooms are for the most part jointly occupied by two students, but a separate sitting-room can be arranged for if desired.

A hall or hostel, forming an integral part of Trinity College, for the residence of women students, was established by the present warden, Dr. Leeper, in the year 1886, and the work of the institution was carried on in a hired house until 1889, when a permanent building was erected in the college grounds, mainly through the liberality of Lady Clarke. The women students are admitted to all the educational advantages of the college equally with the men students.

Ormond
College.

686. Ormond College was erected at a total cost to the present date (including furniture, fencing, etc.) of £47,850, of which amount £41,780 was contributed during his lifetime by its generous founder, the late Hon. Francis Ormond, M.L.C., after whom the college has been named. Mr. Ormond died on the 2nd June, 1889, and bequeathed to the college a sum which will ultimately amount to upwards of £67,000, part of which will be used to complete and extend the present building, and the remainder will be reserved as a permanent endowment for the institution. It is estimated that when completed in its quadrangular form the total cost of the building, including the dining hall, will be at least £75,000. A portion of the north-east side was completed in 1888. This is to be called the Victoria

wing, in commemoration of the jubilee of Her Most Gracious Majesty. The sum of £15,000 has already been obtained from the public towards the maintenance of the institution and the foundation of scholarships. Although allied to the Presbyterian body, it is open to members of all religious denominations. The following account of this institution has been supplied by the Master of the college:—

The foundation stone of the college, which is built on a section of the University reserve, was laid by the Marquis of Normanby on the 14th November, 1879; and the college was opened by His Excellency on the 18th March, 1881, and affiliated to the University on the 17th May of the same year. In 1884, owing to the number of applicants for admission, it was found necessary to enlarge the buildings. A new wing, containing students' bedrooms, sitting-rooms, bathrooms, students' common room, etc., was erected and formally opened by Mrs. Ormond on the 23rd December, 1885. At the opening of the session, 1886, this additional accommodation was all taken up, and when a fourth side was added to the quadrangle and opened at the beginning of the University session, 1889, it was immediately filled with students, and the number of applicants for admission is now greater than the present building can accommodate.

Tutorial assistance is provided by the college for students in preparing for the University lectures and examinations in Arts, Law, Medicine, and Engineering, and the college lectures are open to both resident and non-resident students.

Many of the college lectures take place in the early morning and in the evening, so that those who are engaged at other employments throughout the day have an opportunity of preparing themselves for the University examinations, and of ultimately taking a degree, as the University does not make attendance at its own lectures compulsory, except in the case of Medical students.

All the classes in Arts and Medicine are open to ladies.

A chemical laboratory has been fitted up by the Council with all the necessary appliances, and the college has also a supply of microscopes for the use of students in the Biology Class.

A reading room, billiard room, swimming bath, and lawn tennis court have been provided by the college, and handed over to the management of the students, who have lately built a college gymnasium, and laid down a second asphalt tennis court.

A flourishing debating society meets in the college once a fortnight, and is open to all members of the University.

During the session 1891, there were in all upwards of 90 students attending the college lectures.

An examination for entrance scholarships and exhibitions, each of which is of the value of either £10, £25, £50, or £60, is held at the beginning of December in each year, and is open to all, irrespective of age, sex, or creed. The total cost for tuition and residence varies from 84 to 69 guineas per annum; these sums cover all the necessary college charges during the University year. Special arrangements are made either in the case of clergymen's sons or in the case of students studying for the ministry of the Presbyterian Church—these pay about half fees for residence. Breakfast, luncheon, and dinner are provided in hall by the college, so that a student need have no extra expenses except his laundry bill. The lectures in connexion with the Theological Hall of the Presbyterian Church are delivered in Ormond College by two Professors and two Lecturers appointed by the General Assembly. The students attending these classes are candidates for the ministry of the Presbyterian Church, and they are required to take a three years' course in the Hall after graduating in Arts either in Melbourne or in some other recognised University.*

687. The following account of Queen's College † has been supplied by the Master:—

Queen's
College.

* For further particulars respecting Ormond College, see *Melbourne University Calendar*.

† For information relating to the building of the college, and for the House Regulations, see last edition of this work, Vol. II., paragraph 632.

Queen's College is built in the section of the University reserve granted by the Government to the Wesleyan Church in the Act of Incorporation of 1853. It was formally opened on the 14th March, 1888, and is available for students of either sex, without regard to their religious belief.

All the rooms have been furnished by the Council, and each student is provided with a separate bedroom and sitting-room.

Two lawn tennis courts and a reading room have also been provided, and handed over to the management of the students.

Lectures are delivered in the college on the chief subjects of the University examinations. The lectures are given in the evening, so as not to interfere with the attendance of students at the University classes, and are open to non-resident as well as resident students. For the present the lectures in Chemistry, Biology, and Histology will be given in the laboratory of Trinity.

A first-rate microscope has been expressly constructed for the College, under the personal direction of the Rev. Dr. Dallinger, F.R.S., late President of the Microscopical Society of Great Britain.

The college library is furnished with all necessary books of reference for the use of students, and all the leading scientific periodicals.

An examination will be held at Queen's College, in the early part of December, 1891, at which six scholarships will be offered for competition. Each of these is of the value of not less than £50 per annum, tenable for one year only; but scholars will, on the expiry of their tenure, be again eligible as candidates. Scholars are required to reside in the College. Three minor scholarships and a number of exhibitions will also be awarded.

Exhibitioners may be resident or non-resident in the College.

There are no restrictions as to age, sex, or religion for either scholarships or exhibitions. The scholarships and exhibitions will be awarded on condition that the holders thereof obtain first or second class honours at the close of the year.

Graduates in Arts who intend to read for any University scholarship examination, or to study for degrees in medicine, law, or engineering, may be elected scholars or exhibitioners of this college without examination, provided they have taken first or second class honours or a scholarship at any final honour examination.

Examination entry forms should be filled up and sent in not later than 1st December of each year. Candidates are required to state the subjects in which they wish to be examined, and generally the extent of their reading. They must forward at the same time testimonials of good character. An entrance fee of ten shillings will be charged to each candidate for the examination. This must be forwarded with the entry form.

A students' society has been founded, under the name of 'The William Quick Club,' for the purpose of reading essays, holding debates, and in general encouraging social intercourse amongst the students. The ordinary meetings are held on alternate Wednesday evenings at eight o'clock. Membership is open to all members of the University or affiliated colleges. A sports committee has also been appointed for the arrangement of cricket, tennis, football, and rowing contests.

Fellowships may be granted (1) to students obtaining first-class honours in the final examination for their degree; (2) to any other persons distinguished for special original work in any department of science or literature. The following are the present Fellows of the College:—The Master (Rev. E. H. Sugden, B.A., B.Sc.); A. H. S. Lucas, M.A., B.Sc.; A. Dendy, M.Sc.; E. F. J. Love, M.A.; J. R. Harcourt, B.A.; the Rev. L. Fison, M.A.; A. S. Way, M.A.; A. W. Howitt, F.L.S.; R. T. A. Bernard, M.A. The number of Fellows is limited to 12. Rooms and commons may be granted to any Fellow who is engaged in original research approved by the Fellows' Meeting.

688. A Chair of Music has been established in connexion with the University, for the endowment of which the late Hon. Francis Ormond contributed the sum of £20,000. Besides this about £5,000 has been

raised by public subscription and concerts for the endowment of musical scholarships in connexion with the Ormond Professorship of Music. The following information respecting the recent appointment of a professor has been supplied by the Chancellor of the University, Dr. A. C. Brownless, C.M.G.:—

On the 1st of September, 1890, the Council of the University elected Mr. G. W. L. Marshall Hall as Ormond Professor of Music in the University, and he commenced his duties early in January, 1891, by preparing draft statutes and regulations for the degrees of bachelor and doctor of music; for the diploma of musical associate; for musical exhibitions open both to candidates for the degree of bachelor of music and to candidates for the diploma of musical associate; and for a travelling scholarship, open only to candidates for the degree of bachelor of music at the end of their third year. These statutes and regulations were, with some alterations, passed by the Council and Senate, and were allowed by His Excellency the Governor, thus enabling the Professor to commence his lectures early in the first term of the present academic year.

1. Candidates for the degree of bachelor of music, and also those for the diploma of musical associate, must first pass an easy elementary examination, conducted by the Professor, to show their preparedness to benefit by professorial teaching.

2. Those proceeding to degrees must have also matriculated before commencing the course of lectures.

3. Those desirous of obtaining the diploma of musical associate need not be matriculated students, but must undergo the same course of study as those proceeding to degrees, whilst they will be permitted to compete with candidates for degrees for the exhibitions to be awarded at the end of the first and second years of the course.

4. The scholarship of £150 at the end of the third year can only be competed for by candidates for the degree of bachelor of music.

Besides delivering the courses of lectures for the first, second, and third years, the Professor of Music will conduct the following classes:—

- Choral Class.
- Orchestral Class.
- Chamber Music Class.

All the lectures and classes will be open to persons not candidates for degrees or diplomas upon payment of the prescribed fees.

689. The matriculation examination of the Melbourne University is at present held twice a year, viz., at the end of the first term, and at the end of the fourth term. The subjects of examination are fourteen in number, viz., Greek, Latin, English, French, German, algebra, geometry,* history, arithmetic, geography, chemistry, physics, physiology, and botany. In all these subjects, with the exception of arithmetic and geography, honour as well as pass papers are set, but the candidate must decide before entering for the examination which he intends to present himself for. The last four are called science subjects, any two, but not more, of which may be selected. To pass the matriculation course it is necessary, at one and the same examination, either to pass in six subjects, or obtaining honours in one subject to pass in four others, or obtaining honours in two subjects to pass in two others.

Matricula-
tion exami-
nation.

* Trigonometry as well as geometry is set in the honour papers, but geometry only in the pass papers.

Matricula-
tion class
lists.

690. In addition to the lists published after every matriculation examination, containing a record of honours, pass, or failure in each subject presented by the various candidates, six class lists are published of those who have passed creditably the honour papers set in—(a) Classics (Greek and Latin); (b) Mathematics (algebra, geometry, and trigonometry); (c) English and history; (d) Modern languages (French and German); (e) Physics and chemistry; (f) Physiology and botany. In these lists the names of candidates are arranged in three classes—those in the first and second classes being placed in order of merit, those in the third in alphabetical order.

Exhibitions
at matricu-
lation.

691. At the matriculation examination in the fourth term in each year, six exhibitions, two of the value of £25 each; one in classics, and one in mathematics, and four of the value of £20 each; one in English and history, one in French and German, one in physics and chemistry, and one in physiology and botany, are open for competition, and may be awarded to the candidates under twenty-one years of age who severally stand highest in the first class of the six class lists of that examination.

Candidates
at matricu-
lation ex-
amination.

692. During the year 1890 the total number of candidates who presented themselves for the matriculation examination was 1,415. Of these 144 entered for fewer subjects than the number required for passing the examination, leaving 1,271 who attempted to pass. Of this number 631, or 50 per cent., were successful.

Matricu-
lated
students.

693. A large majority of those who pass the matriculation examination have no intention of pursuing a University career any further and therefore do not matriculate, to do which it is necessary to pay a fee of one guinea and to go through a formal ceremony, which involves making a declaration and signing the matriculation book—the matriculation examination being, as a matter of course, passed beforehand. Although 631 persons passed the matriculation examination in 1890, only 154 matriculated, as against 192 in the previous year. From the date of its opening to the end of 1890, the total number who matriculated was 3,062.

Attendance
at lectures.

694. In 1890, 570 students, of whom all but seven had matriculated, attended lectures, as against 537 in 1889, and only 301 ten years previously. Of the number in 1890, 246 attended lectures in Arts, 85 in Laws, 15 in Engineering, 217 in Medicine, and 7 in Science.

Degrees.

695. The number of degrees taken in 1890 was 109, of which 99 were direct and 10 *ad eundem*. The direct graduates numbered

129 in 1889, and 117 in 1888. The *ad eundem* degrees numbered 15 in 1889, and 16 in 1888. The following table shows the number of degrees conferred at the University between the date of its first opening and the end of 1889, also those in the year 1890:—

MELBOURNE UNIVERSITY GRADUATES.* 1855 TO 1890.

Degrees.	Prior to 1890.			During 1890.			Total.		
	Direct.	<i>Ad eundem</i>	Total.	Direct.	<i>Ad eundem</i>	Total.	Direct.	<i>Ad eundem</i>	Total.
Bachelor of Arts	372	83	455	31	4	35	403	87	490
Master of Arts ...	199	122	321	18	5	23	217	127	344
Bachelor of Medicine	233	11	244	16	1	17	249	12	261
Doctor of Medicine	36	83	119	2	...	2	38	83	121
Bachelor of Surgery	185	2	187	17	...	17	202	2	204
Master of Surgery	2	...	2	...	...	...	2	...	2
Bachelor of Laws	145	7	152	7	...	7	152	7	159
Master of Laws	25	...	25	...	...	...	25	...	25
Doctor of Laws ...	9	18	27	1	...	1	10	18	28
Bachelor of Engineer- ing	7	2	9	4	...	4	11	2	13
Master of Engineer- ing	24	...	24	2	...	2	26	...	26
Bachelor of Science	1	2	3	1	...	1	2	2	4
Doctor of Science	...	2	2	...	...	...	...	2	2
Bachelor of Music	...	1	1	...	...	...	...	1	1
Doctor of Music ...	...	1	1	...	...	...	...	1	1
Total	1,238	334	1,572	99	10	109	1,337	344	1,681

696. The following is a statement of the receipts and expenditure of the University in the last two years, including the amounts received for and expended on buildings. A slight decrease will be observed in the revenue, and a decrease of £733 in the expenditure:—

University receipts and expenditure.

MELBOURNE UNIVERSITY.—RECEIPTS AND EXPENDITURE, 1889 AND 1890.

Year.	Receipts from—				Expenditure.
	Government.†	College Fees.	Other Sources.	Total.	
1889	£ 16,500	£ 14,983	£ 816	£ 32,299	£ 32,652
1890	16,500	14,959	816	32,275	31,919
Decrease ...	...	24	...	24	733

* The figures in this table do not always refer to distinct individuals. The total number of graduates was about 1,050.
† See footnote to paragraph 677 ante.

State
schools.

697. The *Education Act 1872* (36 Vict. No. 447), providing free instruction of a secular character to all willing to accept it, but prescribing that, whether willing to accept State education or not, all children must be educated up to a certain standard, came into operation on the 1st January, 1873. The following is a statement, based upon returns supplied by the Education Department, of the number of schools aided or supported by the State, and of the instructors and scholars in such schools, for the year prior to and for each of the years which have elapsed since that period:—

STATE SCHOOLS, 1872 TO 1890.

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
1873	1,107	3,149	209,406	99,536	174,236
1874	1,167	3,715	221,164	106,886	184,010
1875	1,320	3,826	220,583	101,495§	183,484
1876	1,498	3,772	231,560	106,758§	192,658
1877	1,626	3,860	234,519	116,015	194,994
1878||	1,664	3,906	231,169	116,608	189,455
1879	1,713	4,130	227,775	119,259	193,588
1880	1,810	4,215	229,723	119,520	195,736
1881	1,757	4,303	231,423	121,250	195,526
1882	1,762	4,162	222,945	118,279	187,390
1883	1,777	4,169	222,428	118,328	188,949
1884	1,803	4,199	222,054	120,701	188,238
1885	1,826	4,050	224,685	119,488	189,637
1886	1,870	4,175	230,576	123,550	190,223
1887	1,911	4,294	230,882	123,563	192,565
1888	1,933	4,234	242,046	128,958	197,115
1889	2,062	4,586	250,429	130,859	202,822
1890	2,170	4,708	250,097	133,768	204,497

Schools,
teachers,
and
scholars,
1889 and
1890.

698. In 1890, as compared with the previous year, the number of schools increased by 108, the number of distinct scholars by 1,675, the number of scholars in average attendance by

* In accordance with the principle followed in the Education Department, each night school as well as each day school (although both kinds of schools may be carried on in the same building) is considered as a separate school, and is included as such in this column. There was only 1 night school in 1872, there were 29 in 1873, 56 in 1874, 117 in 1875, 181 in 1876, 216 in 1877, 208 in 1878, 180 in 1879, 186 in 1880, 41 in 1881, 35 in 1882, 27 in 1883, 30 in 1884, 23 in 1885, 24 in 1886, 19 in 1887, 17 in 1888 and 1889, and 18 in 1890.

† Including workmistresses, who numbered 485 in 1890.

‡ The figures in this column are derived from estimates formed by the Education Department, the reductions made for multiple enrolments in the last two years being as follow:—In 1889, 18.58 per cent. for day schools, and 49.78 per cent. for night schools; in 1890, 18.01 per cent. for day schools, and 36.84 per cent. for night schools.

§ The average attendance was affected in 1875, and to a certain extent also in 1876, by the prevalence of epidemics of scarlatina and measles.

|| With the commencement of 1878 capitation grants were abolished, the consequence being that 30 schools, which in 1877 had been receiving such grants, ceased to be connected with the State.

2,909, and the number of instructors by 122; but the number of scholars on the rolls decreased by 332.

699. The net increase of schools during the year, amounting to 108, as just stated, is made up of 124 new schools opened, less 16 schools closed.

Net increase of schools.

700. By comparing the figures on the lowest and uppermost lines in the table following paragraph 697 *ante*, it will be ascertained that, during the period the present *Education Act* has been in force,* the following increases have taken place in and in connection with, the schools supported by the State:—

Increase in State schools, 1872-90.

STATE SCHOOLS.—INCREASE BETWEEN 1872 AND 1890.

	Number.	Percentage.
Schools ...	1,121	106·87
Instructors ...	2,292	94·87
Scholars on the rolls ...	114,042	83·82
„ in average attendance ...	65,312	95·41
Distinct children attending (estimated) ...	91,300	80·66

701. The instructors referred to consist of masters and mistresses, male and female assistant and pupil teachers, and workmistresses. According to the following table, there was an increase during the year of 36 male and 85 female teachers:—

Teachers, 1889 and 1890.

TEACHERS IN STATE SCHOOLS, 1889 AND 1890.

Year.	Males.				Females.				
	Masters†	Assistants.	Pupil teachers.	Total.	Mistresses.†	Assistants.	Work-mistresses.	Pupil teachers.	Total.
1889...	1,445	178	186	1,809	631	651	496	1,000	2,778
1890...	1,421	203	221	1,845	700	669	485	1,009	2,863
Increase	...	25	35	36	69	18	...	9	85
Decrease	24	...	...	...	...	...	11	...	...

702. In every one of the Australasian colonies the State system of education is compulsory and undenominational (or secular). Western Australia, however, grants some assistance to private denominational schools. Public instruction is free in Victoria, Queensland, and New Zealand; but fees are charged in the other colonies, although they are partially or entirely remitted in cases where the parents are

State education systems of Australasian colonies.

* During this period the number of children at the present school age (6 to 13) in the colony increased by about 22 per cent., and the total population by 49 per cent.

† Including 80 relieving teachers in 1889, and 81 such teachers, viz. 41 males and 40 females, in 1890.

unable to pay them. The prescribed school age varies in the different colonies—in Victoria, it is from 6 to 13 years; in New South Wales and Western Australia, from 6 to 14 years; in Queensland, from 6 to 12 years; in South Australia, Tasmania, and New Zealand, from 7 to 13 years.*

Schools,
teachers,
and
scholars in
Austral-
asian
colonies.

703. The following table shows the number of State schools, teachers, and scholars in each Australasian colony during the year 1890; also the proportion of scholars in average attendance to population:—

STATE SCHOOLS, TEACHERS, AND SCHOLARS IN AUSTRALASIAN COLONIES, 1890.

Colony.	Number of Schools.	Number of Teachers. †	Scholars in Average Attendance.	
			Number.	Number per 100 of the Population.
Victoria	2,170	4,708	133,768	11·96
New South Wales	2,423	4,181	116,665	10·58
Queensland	621	1,539	40,836	10·58
South Australia	551	1,067	27,551	8·71
Western Australia	101‡	179	3,818	7·96
Total	5,866	11,674	322,638	10·86
Tasmania	240	469	8,898	6·19
New Zealand	1,200	2,978	94,632	15·24§
Grand Total	7,306	15,121	426,168	11·41

Order of
colonies in
respect to
State
school
scholars.

704. It will be observed that, in proportion to population, the average attendance at State schools is largest in New Zealand, where, however, the proportion is swelled by Maori children being included amongst the scholars, whereas they are not included in the population. Victoria, however, stands above any of the other colonies. The following is the order of the colonies in this respect, Tasmania being at the bottom of the list, which, however, may be explained by the circumstance that in Tasmania the proportion of children to the population is smaller than in the other colonies:—

ORDER OF THE COLONIES IN REFERENCE TO PROPORTION OF STATE SCHOOL SCHOLARS TO POPULATION.

- | | |
|-----------------------|-----------------------|
| 1. New Zealand. | 4. South Australia. |
| 2. Victoria. | 5. Western Australia. |
| 3. { New South Wales. | 6. Tasmania. |
| { Queensland. | |

* For a full account of the education systems of the various colonies, see *Victorian Year-Book*, 1888-9, Volume II., Appendix B.

† It is believed that workmistresses are included in the returns of all the colonies.

‡ Including 19 assisted schools.

§ This high proportion is partly accounted for by the circumstance that Maoris are included amongst the scholars, but excluded from the population.

705. By the figures in the last column of the following table it is shown that, in proportion to the total number of children enrolled in State schools, the average number attending is greater in Victoria than in New South Wales or Tasmania, but lower than in any of the other Australasian colonies:—

School attendance in Australasian colonies.

STATE SCHOOL ATTENDANCE IN AUSTRALASIAN COLONIES, 1890.

Colony.	Number of Scholars.		Percentage of Average Attendance to Gross Enrolment.
	Enrolled during the Year.	In Average Attendance.	
1. Western Australia ...	5,014	3,818	76·15
2. New Zealand ...	157,026	94,632	60·27
3. South Australia ...	49,193	27,551	56·01
4. Queensland ...	73,275	40,836	55·73
5. Victoria ...	250,097	133,768	53·49
6. New South Wales ...	221,864	116,665	52·58
7. Tasmania ...	18,156	8,898	49·01

706. Of the gross number of children on the rolls of Victorian State schools in 1890, 247,223, or 99 per cent., were in day, and 2,874, or a little over 1 per cent., were in night, schools. The following is a statement of the numbers of such children, at each age:—

Ages of State school scholars.

AGES OF STATE SCHOOL SCHOLARS ENROLLED, 1890.

Ages.	Number of Children Enrolled.		
	In Day Schools.	In Night Schools.	Total.
3 Years	3,084		3,084
4 "	10,617		10,617
5 "	18,109		18,109
6 "	24,165		24,165
7 "	25,250		25,250
8 "	25,710		25,710
9 "	25,483		25,483
10 "	25,510		25,510
11 "	24,432		24,432
12 "	22,618		22,618
13 "	18,728	248	18,971
14 "	13,172	584	13,756
15 "	6,397	567	6,964
16 to 18 Years	3,240	439	3,679
Unspecified	708	1,041	1,749
Total	247,223	2,874	250,097
Total, 6 to 13 years	173,168		173,168

Ages of
distinct
children in
State
schools.

707. Grouping the numbers in this table so as to distinguish the scholars below, at, and above the school age (6 to 13) and adopting the correction applied by the Education Department—already alluded to*—to allow for children who attended more than one school in the year, the following results, showing the probable number of distinct children who attended State schools in the year, are obtained:—

AGES OF DISTINCT CHILDREN ATTENDING STATE SCHOOLS, 1890.

Ages.	Distinct Children Attending.					
	Day Schools.		Night Schools.		Total.	
	Number.	Per-centage.	Number.	Per-centage.	Number.	Per-centage.
Under 6 years	26,154	12·90	...	...	26,154	12·79
6 to 13	142,376	70·25	...	...	142,376	69·62
13 years and upwards	34,151	16·85	1,816	100·00	35,967	17·59
Total	202,681	100·00	1,816	100·00	204,497	100·00

Sexes of
scholars in
State
schools.

708. In the State schools, boys exceed girls. In the last two years, the proportion was 91 of the latter to every 100 of the former. In 1890 there was an improvement in the average attendance of both sexes, as is shown in the following table:—

SEXES OF SCHOLARS IN STATE SCHOOLS, 1889 AND 1890.

Year.	Scholars in Average Attendance.		
	Boys.	Girls.	Total.
1889	68,210	62,649	130,859
1890	69,891	63,877	133,768
Increase	1,681	1,228	2,909

State
school
attendance.

709. The 13th section of the *Education Act* 1890 prescribes that the parents of children between the ages of 6 and 13 shall cause such children to attend school for at least 40 days in each quarter of a year,† unless there is some valid reason to prevent them from so doing. The returns, which are made up quarterly, show that, of the whole number set down as attending State schools in 1890, the highest

* See footnote (†) to table following paragraph 697 *ante*.

† The *Education Act* 1889 (53 Vict. No. 1023), which was passed on the 4th November and gazetted on the 8th November of that year, altered the school age to that between 6 and 13 years, also increased the period of compulsory school attendance from 60 to 80 days each half-year. The provisions of this Act have been re-enacted by the *Education Act* 1890.

proportion which completed a 40 days' attendance (71 per cent.) was in the September quarter: the next highest (58 per cent.) was in the December quarter; the next (55 per cent.) was in the June quarter; and the lowest proportion (only 35 per cent.) was in the March quarter, the mean 40 days' attendance for the whole year being 55 per cent., as compared with 72½ per cent. in the previous year, when, however, the school age was 6 to 15, and the period of compulsory attendance per quarter was only 30 days.* The following are the figures for the four quarters of 1890; also the average for the year:—

STATE SCHOOL ATTENDANCE IN EACH QUARTER OF 1890.

Quarter ended—	Number	Percentage	Number who Attended School.		Percentage who completed 40 days' Attendance
			Total in each Quarter.	For at least 40 days in each Quarter.	
31st March	187,389	100.00	187,389	66,451	35.46
30th June	193,594	100.00	193,594	105,742	54.62
30th September	193,631	...	193,631	137,691	71.10
31st December	190,086	...	190,086	109,892	57.81
Average	191,075	...	191,075	104,944	54.89

710. It should be mentioned that a considerable proportion of those who attended less than 40 days in all the quarters were exempt or excusable for various reasons. During the last quarter of the year, for example, 80,194 of the enrolled children attended less than 40 days; but to 16,826 of these the compulsory provisions of the Statute did not apply, as they were either above or below the school age; 6,284 were also exempt on account of living beyond the prescribed distance (from two to three miles) from a State school, and 5,030 on account of having been educated up to the standard; whilst 10,427 were excusable on account of sickness, and 16,068 entered late in the quarter or left before its termination; thus the number of actual defaulters was reduced to 9,774, or to 5.1 per cent. of the number enrolled. Taking the year as a whole, the defaulters who had no reasonable excuse averaged only 6.79 per cent.

Reasons for non-attendance.

711. In 1890, the children who passed the examination qualifying for a certificate of exemption from further attendance at school numbered 11,431, or more by 3,432 than in 1889. During the eighteen years which have elapsed since the passing of the present

Pupils who have passed the standard.

* See footnote (†) on page 406.

Education Act, 120,657 children passed this examination; some of these, however, were above the school age.

Prosecution
for non-
attendance
at school.

712. In order to carry out the compulsory portion of the system, 9,150 prosecutions against parents were instituted in 1890, with the result that 7,686 convictions were obtained, whilst in 1,248 other instances the case was withdrawn or not proceeded with, and in 216 instances the case was dismissed. The total amount of fines inflicted was £2,087, also costs amounting to £62. More than three-fourths of the prosecutions were instituted by the Boards of Advice.

Free
subjects.

713. In 1890, military drill was taught in 250 schools to an average attendance of 16,053 pupils, and in 13 of these schools instruction in gymnastics was also given to 752 pupils; singing was taught in 346 schools, in 103 of which instruction was given by members of the ordinary staff to 39,913 pupils; and drawing was taught, in 295 schools, to 24,999 pupils. All these are free subjects.

Kindergarten
instruction.

714. It is reported that there has been a growing demand for kindergarten instruction, introduced in the early part of 1887, which, it is believed, tends to foster intelligence, to promote manual dexterity, and to stimulate the constructive powers of the mind. The plan adopted has been to give lectures in certain commercial centres, where teachers of neighbouring schools could attend; and the result is that upwards of 120 teachers have been more or less trained in the system, many of whom are now teaching it in their several schools.*

Instruction
in cookery

715. The Education Department reports that, though technical instruction is not formally allied in any way to the State School programme, it has yet been judged advisable to continue the instruction on cookery; and that in 1891, two or three courses were given, in 12 schools, to 500 or 600 girls, in addition to female students of the Training College.†

Extra
subjects.

716. The number of schools in which extra subjects were taught in 1890 was 109, as against 101 in 1889, and 104 in 1888; the amount paid by pupils for instruction in such subjects was £2,361 in 1890, as against £2,042 in 1889. As compared with the previous year, there was a marked increase in the pupils seeking instruction in all the subjects except English, book-keeping, physics, and physical geography; whilst 178 pupils were specially instructed, apparently for the first time, in science. There is no doubt the number taught extra subjects would be larger but for the circumstance that several subjects which were

* See Education Report, 1890-91, Parliamentary Paper No. 73, Session 1891, page xxi.

† *Ibid*, page xxii.

formerly taught as extra subjects are now embraced in the ordinary course under the revised programme, whilst pupils who have gained exhibitions or scholarships now generally pursue their studies at secondary schools.* The following is a list of the subjects, and the number of pupils instructed in each subject in 1889 and 1890:—

EXTRA SUBJECTS TAUGHT IN STATE SCHOOLS, 1889 AND 1890.

	1889. Pupils.	1890. Pupils.
Advanced English	26	14
French	467	541
German	14	26
Latin	398	444
Euclid	364	443
Algebra	591	670
Mensuration	81	218
Bookkeeping	1,160	1,036
Physiology		8
Physics	8	5
Physical Geography	26	11
Shorthand	14	20
Painting	32	38
Fancy work	13	30
Science		178
Geometry		6

717. To enable them to continue their education at the best grammar schools, two hundred scholarships have been annually awarded since 1886, to the most clever and industrious pupils of State schools, selected in accordance with the results of competitive examinations, the conditions being that all must be under 15 years of age and in the sixth class. Each scholarship is of the value of £10, tenable for three years, on condition that the scholar attends at, and obtains favourable reports annually from the authorities of, one of the public grammar schools, one of the Schools of Mines, one of the Agricultural Colleges, or some other school approved by the Minister. If the scholar does not live within three miles from the approved place of education, the Minister may allow him such sum as will cover his cost of transit to and fro, or may commute the scholarship for one of £40 tenable for one year. The holders of commuted scholarships, at the end of a year, may compete among themselves for renewed scholarships offered to 30 of the best students. In the following year these 30 students may present themselves for a further renewal offered to the best 15. The subjects for competitive examination are solely those taught in State schools, except in the case of competitions for a renewal of commuted scholarships, when the

State school scholarships.

* See Education Report, 1890-91, page xviii.

examination is partly upon the State school subjects, but chiefly upon the new subjects they have been learning at the grammar schools. Up to the end of 1890 one thousand of these scholarships had been awarded. It has, however, been decided in future to reduce the number of scholarships to 100, as the number of candidates competing has been found insufficient to warrant the larger number.

Candidates
for scholar-
ships.

718. The number of candidates who presented themselves at the initial examinations for these scholarships in 1890 was 516, as compared with 466 in 1889, 694 in 1888, 527 in 1887, and 313 in 1886.

State
school
exhibitions.

719. Twelve exhibitions, each of the yearly value of £40, are annually awarded for competition to the holders of State school scholarships who have passed the matriculation examination. These exhibitions, which are for the purpose of enabling the abler scholars to finish their education at the University, are each tenable for four years, but in the case of candidates for a degree of law or medicine they may be continued for another year. The subjects upon which the candidates are examined are those taught in grammar schools, namely, English, history, algebra, geometry, and two languages as prescribed for the matriculation examination. In October, 1891, there were 60 exhibitioners, viz., 44 attending at the University, 7 at various approved grammar schools, and 9 had their exhibitions suspended for a year.

School
books and
requisites.

720. The regulations and practice of the Education Department relative to the supply of school books, apparatus, and other requisites are as follow:—Such books and apparatus as may be regarded as indispensable to the efficient working of the school are supplied by the department for the teacher's use free of charge. It is expected that the children will generally supply themselves with books, slates, and other articles required to enable them to take part in the work of their class, but free grants of school requisites are made for children who are unprovided with them for use in the school. The Minister reports that, "though there may be some cases in which well-to-do parents apply for free stock for their children, and others in which the teacher gives it without due discrimination, children generally purchase their own requisites; and when it is considered that the total cost of free stock amounted in 1890 to no more than £3,522 12s. 11d., or, on the average, about £1 12s. 8d. for each school, it will be acknowledged that this expense is reduced almost to a minimum."*

* See Education Report, 1890-91, page xv.

721. The following is a statement of the expenditure from all sources on State education during the financial years 1889-90 and 1890-91. The amounts set down for extra subjects were paid by parents, all the remainder by the State:—

Expenditure on State education.

EXPENDITURE ON PRIMARY EDUCATION, 1889-90 AND 1890-91.

Heads of Expenditure.	Amounts Expended.		Increase.	Decrease.
	1889-90.	1890-91.		
GENERAL EXPENDITURE.	£	£	£	£
Office staff*	22,195	22,619	424	
Inspection†	22,435	23,048	613	
Teachers' salaries...	392,920	406,825	13,905	
payments on results	149,891	156,130	6,239	
Singing ...	7,497	8,019	522	
Drawing ...	5,065	5,473	408	
Drill and gymnastics	3,858	4,385	527	
Bonuses ...	5,359	6,339	980	
Training Institute‡	4,520	4,315		205
Stores, books, and requisites	6,255	6,555	300	
Maintenance expenses of schools	36,300	36,680	380	
Compulsory clause	3,098	3,120	22	
Purchase of carbines and encouragement of rifle shooting	22	14		8
Boards of Advice ...	709	481		228
Compensation, retiring allowances, gratuities, etc.	22,206	33,229	11,023	
Other expenditure§	5,321	6,052	731	
Extra subjects||	2,042	2,361	319	
Total exclusive of buildings	689,693	725,645	35,952¶	
EXPENDITURE ON BUILDINGS.				
Maintenance ...	30,790	31,304	514	
Rent ...	4,341	4,615	274	
Cost of erection ...	93,340	76,390		16,950
Grand total ...	818,164	837,954	19,790¶	

* Including non-clerical division, and temporary clerical assistance.

† Including salaries of Training Institute, £1,840 in 1889-90, also Inspectors' travelling expenses.

‡ Including allowance for board of students and prizes for students in training, but excluding salaries; see previous footnote.

§ Including teachers' travelling expenses and expenses of examiners in singing, drawing, and science, which amounted in 1889-90 to £4,949 and £269 respectively, and in 1890-91 to £4,674 and £422.

|| This is the only item paid by parents. The amounts are for the calendar years 1889 and 1890.

¶ Net increase.

State ex-
penditure
on primary
education,
1880 to 1891.

722. It will be observed that the total expenditure on public instruction in 1890-91 was £837,954, of which only £2,361 was paid by parents. The amount paid by the State (£835,593) was made up of £723,284, cost of management, inspection, instruction, etc.; of £35,919 for maintenance, and rents of private buildings; and of £76,390—provided from the general revenue—for the erection of buildings. The following are the amounts expended under each of these heads during the last twelve years:—

STATE EXPENDITURE ON PRIMARY EDUCATION, 1880-91.

Financial Year.	General Expenditure (Exclusive of Buildings).	Expenditure on Buildings, Rents, etc.			
		From Revenue.			From Loans (Cost of Erection of Schools).
		Maintenance.	Rents.	Cost of Erection of Schools.	
£	£	£	£	£	
1879-80	512,861	10,000	5,899	...	66,085
1880-1	521,006	14,930	4,864	...	84,828
1881-2	533,225	19,604	4,487	2,127	50,693
1882-3	525,405	20,000	3,725	...	58,501
1883-4	530,135	19,887	2,970	...	38,953
1884-5	535,347	19,900*	2,400	...	81,935
1885-6	575,799†	19,949	2,700	...	53,602
1886-7	584,195	15,449	2,981	...	49,748
1887-8	610,520	17,995	8,408	54,281	...
1888-9	641,993	30,075	3,622	68,000	...
1889-90	687,651	30,790	4,341	6,455	86,885‡
1890-91	723,284	31,304	4,615	76,390	...

Amount paid for extra subjects.

723. In view of the large sum the State expends upon elementary education, the amount parents are willing to pay to have extra subjects taught their children appears extremely small. If the whole sum so expended in 1890-91 be divided by the number of children in average attendance, the proportion per child would be about 4¼d. per annum; and if it be divided by the number of distinct children enrolled, the proportion per child would be only 2¾d.

Education Endowment Bill.

724. A Bill to vest certain Crown Lands for educational purposes and to provide for the control and management thereof was introduced into the Legislative Assembly on the 16th July, 1891, and read a first time. The lands proposed to be so set apart embrace an area of 1,754,235 acres, the rents and profits arising wherefrom were to be paid to a special account to be called "The Education Endowment

* Approximate.
† The Public Service Act 1883 came into operation at the commencement of 1885, which partly accounts for the increased cost in and since that year.
‡ This amount was expended from revenue, with a view of being afterwards recouped from a loan.

Account," to be applied towards the advancement and maintenance of the State School System of Victoria. Of the area referred to 218 acres is on Coode Island, situated at Fisherman's Bend, near to the mouth of the River Yarra; 517 acres in South and Port Melbourne; 1,195,000 acres in the Mallee District; and the remainder in other parts of the colony. It was proposed that the management and control of such lands should be (subject to the Minister) under a committee consisting of the Secretary for Lands, the Surveyor-General, and the Secretary for Agriculture for the time being. Owing to pressure of more urgent business, it was found necessary to abandon the Bill at the close of the session.

725. The following table shows the cost of public instruction in all the Australasian colonies during the year ended 31st December, 1890, the amount paid by scholars being given separately from that contributed by the State. The expenditure on the construction, maintenance, and rent of school buildings is excluded; but the departmental expenses are, in all cases, included:—

Cost of primary instruction in Australasian colonies.

COST OF PUBLIC PRIMARY EDUCATION* IN AUSTRALASIAN COLONIES, 1890.

Colony.	Amount contributed by the State.	Fees paid by Scholars, etc.	Total.
	£	£	£
Victoria† ...	705,467	2,361	707,828
New South Wales ...	481,992	71,827	553,819
Queensland ...	167,139	...	167,139
South Australia ...	89,454‡	24,491	113,945
Western Australia ...	10,311	1,377	11,688
Total ...	1,454,363	100,056	1,554,419
Tasmania ...	33,226	9,825	43,051
New Zealand ...	354,089‡	3,003	357,092
Grand Total ...	1,841,678	112,884	1,954,562

726. Exclusive of expenditure on erecting and keeping in repair or renting State school buildings, the total cost in 1890 per scholar in average attendance at State schools ranged from £5 5s. 10d. in Victoria to £3 1s. 3d. in Western Australia. Of the total cost £1 2s. 1d.

Cost of primary instruction per scholar in each colony.

* Total cost, exclusive of expenditure (either for erection, maintenance, or repairs) on buildings and rent. In the case of New Zealand, however, rent is included, as the amount could not be ascertained.

† The figures relate to the calendar, not the financial, year.

‡ Including amounts derived from Education reserves. In South Australia it was about £10,400, and in New Zealand £33,772.

per head was derived from school fees in Tasmania, 17s. 10d. in South Australia, 12s. 4d. in New South Wales, and 7s. 3d. in Western Australia; on the other hand, in Victoria, Queensland, and New Zealand practically the whole amount was provided from public funds. In New Zealand about one-eleventh, and in South Australia over one-ninth, of the State expenditure on education was derived from Education reserves. The following table shows the average cost per scholar, distinguishing the proportions defrayed by the State and by parents or otherwise, in each colony:—

COST OF PRIMARY INSTRUCTION PER SCHOLAR IN AUSTRALASIAN COLONIES, 1890.*

Colony.	Cost per Scholar in Average Attendance.		
	Paid by State.	Paid by Parents, etc.	Total.
	£ s. d.	£ s. d.	£ s. d.
1. Victoria	5 5 6	0 0 4†	5 5 10
2. Tasmania	3 14 8	1 2 1	4 16 9
3. New South Wales	4 2 7	0 12 4	4 14 11
4. South Australia ...	3 4 11†	0 17 10	4 2 9
5. Queensland ...	4 1 10	...	4 1 10
6. New Zealand	3 14 10†	0 0 8†	3 15 6
7. Western Australia§	2 14 0	0 7 3	3 1 3

Order of colonies in respect to cost per head.

727. In regard to the total cost (including contributions by parents) of State primary instruction per head of population, Victoria stands at the head of the list, the amount being 12s. 8d., and Western Australia stands at the bottom with about 5s. The following is the order of the colonies in this respect:—

ORDER OF COLONIES IN REFERENCE TO COST OF STATE PRIMARY EDUCATION PER HEAD OF POPULATION.*

Colony	Amount paid per Head of Population.	Colony	Amount paid per Head of Population.
	£ s. d.		£ s. d.
1. Victoria	12 8 0	5. South Australia	7 4 0
2. New Zealand	11 6 0	6. Tasmania	6 0 0
3. New South Wales	10 1 0	7. Western Australia	4 11 0
4. Queensland	8 8 0	Total	

* See footnote (*) on preceding page.
 † In South Australia about 7s. 6d., and in New Zealand about 7s. 2d., of the amounts entered in this column was derived from Education reserves.
 ‡ For extra subjects only. In the figures for New Zealand amounts received by boards from local sources, and sums raised locally by School Committees, are also included.
 § Government schools only. The average amount paid by the State to assisted schools was £1 7s. 7½d.

728. In Australia, taken as a whole, the cost per scholar in average attendance was £4 16s. 4d., and the cost per head of population 10s. 6d. In Australia, with the addition of Tasmania and New Zealand, the cost per scholar was £4 11s. 9d., and the cost per head of population 10s. 6d.

Cost per scholar and per head in Australia and Australasia.

729. The following figures show that the amounts expended on the higher education in 1890-91 was less by £617 than that so expended in 1889-90, but exceeded by £16,916 that expended in 1888-9, the increase being chiefly under the head of technical schools, schools of mines, and University buildings:—

Expenditure on secular education.

EXPENDITURE ON SECONDARY EDUCATION.

	1888-9.	1889-90.	1890-91.
	£	£	£
Exhibitions and Scholarships	9,077	9,899	9,973
Technical Schools and Schools of Mines ...	24,093	33,804	38,613
Melbourne University Endowment and Subsidy ...	16,500	16,500	16,500
" " Buildings	3,500	10,500	5,000
Total	53,170	70,703	70,086

730. About the middle of 1891 the Department of Education possessed 2,032 school-houses, having accommodation for 195,482 children; also 1,457 teachers' residences.*

State school buildings held in fee.

731. The method of classifying the schools and teachers, and of assessing the salaries of the latter, was fully explained in the last issue of this work.† The following is a statement of the number of male and female teachers of each class at the end of 1890, and their classification under the *Public Service Act 1883*:—

Teachers of each class.

TEACHERS OF EACH CLASS, 1890.

Classification.	Head Teachers.		Assistants.		Pupil Teachers.	
	Males.	Females.	Males.	Females.	Males.	Females.
First class	39	...	...	...	50	338
Second class	45	...	...	36	43	214
Third class	92	...	37	40	44	198
Fourth class	301	5	46	87	84	259
Fifth class	790†	459§	76	321	...	...
Juniors ... ..	...	...	44	185	...	...
Total	1,267	464	203	669	221	1,009

NOTE.—In addition to the above, there were 485 sewing-mistresses; also 154 male and 236 female temporary unclassified head teachers. The grand total was 4,708, viz. 1,845 males and 2,863 females.

* For particulars of the materials of which State Schools are built, see last edition of this work, Vol. II., paragraph 708.

† See *Victorian Year-Book*, 1889-90, Vol. II., paragraphs 709 and 710.

‡ Including 41 relieving teachers. § Including 40 relieving teachers.

Training college for teachers.

732. The new Training College, which will eventually form a handsome block of buildings, has during the last few years been in course of erection on the south-east corner of the University Reserve. The central portion of the college was occupied in December, 1889; the western wing, for 26 female students, on the 11th June, 1891; and the eastern wing, for 25 male students, on 18th January, 1892. The cost, inclusive of fittings and furniture, of the central portion was £13,349, of the western wing £11,722, and of the eastern wing £9,267. It is considered that the advantage of thus having all the students housed close to their work under conditions of collegiate life are sufficiently evident, and must be productive of good results. The college contains a good library and an educational museum, available for State school teachers.

Private schools, 1873 to 1891.

733. The following table gives the number of private schools, and of the teachers and scholars connected therewith, according to the returns of the nineteen years, 1873 to 1891:—

PRIVATE SCHOOLS, 1873 TO 1891.

Year.*	Number of Schools.	Number of Instructors.	Number of Scholars.†
1873	888	1,841	24,781
1874	653	1,446	18,428
1875	610	1,509	22,448
1876	565	1,511	27,481
1877	645	1,646	28,847
1878	530	1,457	28,422
1879	585	1,656	35,873
1880	568	1,587	34,824
1881 (Census)	643	1,516	28,134
1882	645	1,553	34,062
1883	655	1,551	34,443
1884	670	1,638	35,773
1885	655	1,635	35,115
1886	665	1,645	34,787
1887	691	1,680	35,811
1888	749	1,812	37,823
1889	753	1,878	40,291
1890	782	1,967	40,181
1891	791	2,037	40,181

* The statistics of private schools are generally collected in February and March. See next footnote.
 † The numbers for 1881 are those returned by the census sub-enumerators as actually attending school on the 4th April of that year. The numbers given for other years are, or ought to be, those upon the school rolls at the time of the collector's visit, which is generally in February or March.
 ‡ The Education report for 1890-91 gives a return of only 778 private schools, but in these there were said to be 48,095 scholars, or 7,914 more than in the returns furnished to the Government Statist. With reference to the scholars, however, it is stated that the figures in the Report represent the whole number which appeared on the school rolls during any portion of the year, whilst those furnished to the Government Statist represent the number on the rolls at the time of the collectors' visits.

734. The figures in the first line of the table relate to the early part of the year in which *The Education Act* came into operation. Since then there appears to have been a falling-off of 99 in the number of private schools, but an increase of 196 in the number of instructors, and of 15,400 in the number of scholars.

Private schools. 1873 and 1891 compared.

735. For the last fifteen years a column has been placed in the schedule used for collecting the returns of private schools for the purpose of ascertaining to what religious denomination, if any, each school was attached. This column was, on each occasion, filled, in a considerable number of instances, with the name of some denomination; but it is believed that this entry was frequently meant to indicate merely the religion of the principal teacher or proprietor of the school, and perhaps the principles on which the establishment was conducted, not that it was recognised as connected with his church, or was subordinate to the clergy thereof. The exceptions to this are believed to be most of the schools returned as Roman Catholic, Lutheran, and Jewish, and a few as of the Church of England, but scarcely any connected with other denominations. The following are the returns of the fifteen years:—

Denominations of private schools.

RELIGIOUS SECTS OF PRIVATE SCHOOLS, 1877 TO 1891.

Year ended March.	Total.	Religious Denomination.									
		Church of England.	Presbyterian.	Wesleyan.	Independent.	Lutheran.	Protestant (undefined).	Roman Catholic.	Jewish.	Other Sects.*	Not any or not stated.
SCHOOLS.											
1877	645	41	4	2	1	3	9	111	2	...	472
1878	530	47	4	7	...	3	7	115	4	...	343
1879	585	62	7	6	1	4	1	179	3	2	320
1880	568	75	6	5	1	3	1	163	2	2	310

* Including, in 1879, 2 Baptist schools, with 2 teachers and 30 scholars; in 1880, 1 Unitarian school, with 2 teachers and 16 scholars, and 1 Moravian school, with 2 teachers and 40 scholars; in 1881, 1 school, connected with the "Brethren," with 3 teachers and 26 scholars; in 1882, 1 school connected with the "Brethren," with 2 teachers and 52 scholars, and 1 school connected with the Moravians, with 1 teacher and 13 scholars; in 1883, 2 Baptist schools, with 4 teachers and 45 scholars, 1 school connected with the "Brethren," with 2 teachers and 52 scholars, and 1 school connected with the Moravians, with 1 teacher and 16 scholars; in 1884, 1 Baptist school, with 2 teachers and 18 scholars; 1 school connected with the "Brethren," with 4 teachers and 55 scholars, and 1 school connected with the Moravians, with 1 teacher and 14 scholars; in 1885, 1 school connected with the "Brethren," with 4 teachers and 77 scholars, and 1 school connected with the Moravians, with 1 teacher and 16 scholars; in 1886, 1 school connected with the Bible Christians, with 1 teacher and 5 scholars, 1 school connected with the "Brethren," with 3 teachers and 95 scholars, and 1 Moravian school, with 1 teacher and 18 scholars; in 1887, 1 school connected with the "Brethren," with 3 teachers and 83 scholars; and 1 with the Moravians, with 1 teacher and 22 scholars; in 1888, 1 school connected with the "Brethren," with 3 teachers and 74 scholars; and 1 with the Moravians, with 1 teacher and 15 scholars; in 1889, 1 school connected with the "Brethren," with 3 teachers and 91 scholars; and 1 with the Moravians, with 1 teacher and 9 scholars; in 1890, 1 school connected with the Moravians, with 1 teacher and 11 scholars; in 1891, 1 school connected with the Moravians, with 1 teacher and 10 scholars.

RELIGIOUS SECTS OF PRIVATE SCHOOLS, 1877 TO 1891—continued.

Year ended March.	Total.	Religious Denominations									
		Church of England.	Presbyterian.	Wesleyan.	Independent.	Lutheran.	Protestant (undefined).	Roman Catholic.	Jewish.	Other Sects.*	Not any or not stated.
SCHOOLS—											
<i>continued.</i>											
1881 (Census)	643	57	10	5	1	10	17	187	3	1	352
1882	645	58	8	3	...	3	14	180	2	2	375
1883	655	61	8	4	...	5	...	175	2	4	396
1884	670	56	13	2	1	5	...	182	2	3	406
1885	655	48	11	3	2	4	...	172	2	2	411
1886	665	40	5	3	2	4	...	182	2	3	424
1887	691	27	5	3	1	4	...	175	2	2	472
1888	749	30	5	3	1	6	...	185	2	2	515
1889	753	27	3	3	...	6	...	186	2	2	524
1890	782	30	4	2	...	7	...	195	4	1	539
1891	791	28	2	2	...	7	...	203	4	1	544
TEACHERS.											
1877	1,646	159	46	12	1	4	27	338	10	...	1,049
1878	1,457	210	32	19	...	4	10	345	13	...	824
1879	1,656	242	43	18	1	4	1	539	11	2	795
1880	1,587	270	50	18	2	3	2	473	7	4	758
1881 (Census)	1,516	146	50	18	1	9	33	544	13	3	699
1882	1,553	161	43	12	...	3	25	537	8	3	761
1883	1,551	185	46	22	...	5	...	527	10	7	749
1884	1,638	177	52	20	2	5	...	555	9	7	811
1885	1,635	154	51	22	2	4	...	514	11	5	872
1886	1,645	162	35	24	4	4	...	527	11	5	873
1887	1,680	97	40	26	2	5	...	536	6	4	964
1888	1,812	124	37	25	2	6	...	568	4	4	1,042
1889	1,878	127	31	25	...	6	...	592	4	4	1,089
1890	1,967	119	35	25	...	7	...	633	10	1	1,137
1891	2,037	107	27	23	...	8	...	677	9	1	1,185
SCHOLARS.											
1877	28,847	1,491	612	221	20	68	338	13,450	270	...	12,397
1878	28,422	1,730	638	333	...	142	123	15,631	293	...	9,532
1879	35,873	2,055	744	314	22	183	57	23,225	231	30	9,012
1880	34,824	2,200	793	327	23	108	69	22,514	190	56	8,544
1881 (Census)	28,134	1,582	836	248	13	206	449	16,430	276	26	8,068
1882	34,062	1,596	947	199	...	121	380	20,377	196	65	10,181
1883	34,443	2,061	914	319	...	170	...	20,340	178	113	10,348
1884	35,773	1,996	1,010	288	18	142	...	21,019	180	87	11,033
1885	35,115	1,728	1,019	363	28	126	...	20,369	173	93	11,216
1886	34,787	1,466	799	387	39	129	...	20,315	133	118	11,401
1887	35,811	1,301	751	389	33	128	...	20,854	93	105	12,157
1888	37,823	1,504	761	404	26	196	...	21,461	59	89	13,323
1889	40,291	1,425	691	437	...	194	...	22,696	79	100	14,669
1890	40,181	1,554	738	447	...	210	...	22,075	229	11	14,917
1891	40,181	1,442	562	358	...	213	...	21,623	229	10	15,744

* See footnote on page 417.

736. By the figures relating to 1891 it may be ascertained that, in that year, 247 private schools or 31 per cent., employing 852 instructors or 42 per cent., and educating 24,437 children or 61 per cent., of the total numbers, claimed to be connected with some religious denomination; also that 21,623 children, or about 54 per cent. of the total number attending private schools, or 88 per cent. of the number attending schools connected with some religious sect, were being educated in schools claiming connexion with the Roman Catholic church.

Proportion of denomi-national schools.

737. The male teachers in private schools returned in 1891 were more numerous by 21, and the female teachers by 49, than those in 1890, the result being a total increase of 70. The number and sexes of the teachers returned in the year under review and the previous one are compared in the following table:—

Teachers in private schools.

TEACHERS IN PRIVATE SCHOOLS, 1890 AND 1891.

Year.		Males.	Females.	Total.
1890	...	458	1,509	1,967
1891	...	479	1,558	2,037
Increase		21	49	70

738. In private schools connected with religious bodies the number of scholars entrusted to each teacher is generally larger than in purely secular institutions. The following are the proportions as derived from the returns of 1891:—

Scholars to each teacher in denomi-national and other schools.

In schools attached to religious bodies there was 1 teacher to 29 scholars.
 " not attached " " " 13 "

739. The authorities of the different religious bodies vary greatly in regard to the number of scholars they deem it expedient to entrust to each instructor. Thus, whilst in the Church of England schools the average is 13 scholars to each teacher, in the Roman Catholic schools it is as high as 32 to each. The following are the proportions of scholars to each teacher in the schools attached to the different denominations:—

Scholars to each teacher in schools of different denomina-tions.

In schools of the Church of England there was 1 teacher to 13 scholars.

Wesleyans	...	16	"
Presbyterians	...	21	"
Jews	...	25	"
Lutherans	...	27	"
Roman Catholics	...	32	"

Scholars to each teacher in public and denominational schools

740. In State schools the mean number of scholars in average attendance committed to the charge of each teacher is 28.* This is higher than the number so committed in the schools of any of the religious denominations except the Roman Catholics.

Sexes of scholars in private schools.

741. In 1891, as compared with 1890, there was an increase of 361 in the number of boys, but a decrease of 361 in the number of girls, in private schools. The following are the numbers according to the returns of the years referred to:—

SEXES OF SCHOLARS IN PRIVATE SCHOOLS, 1890 AND 1891.

Year.	Boys.	Girls.	Total.
1890	19,825	20,356	40,181
1891	20,186	19,995	40,181
Increase	361	...	...
Decrease ... ..	...	361	...

Proportion of male to female scholars.

742. In 1890, the number of girls educated in private schools was greater than that of boys, the proportion being 103 to 100, but in 1891 the reverse was the case, the proportion being 99 girls to 100 boys. It has been already shown† that, in State schools, the scholars are in the proportion of 91 girls to 100 boys.

Ages of scholars

743. The age prescribed by law as that at which children are to attend school, unless there might be some reasonable excuse for their not doing so, is from 6 to 12 years last birthday, both inclusive.‡ The following are the numbers in both descriptions of schools at, above, and below those ages during the past year:—

AGES OF SCHOLARS, 1890.

Ages.	State Schools (distinct children).	Private Schools.	Total.
Under 6 years	26,154	5,237	31,391
6 to 12 years (school age)†	142,376	23,528	165,904
13 years and upwards ...	35,967	11,416	47,383
Total	204,497	40,181	244,678

* If workmistresses be excluded, this number would be increased to 32.

† See paragraph 708, *ante*.

‡ The school age was changed in November, 1889. Prior to that date it had been 6 and under 15.

744. In public schools, 69½ per cent. of the scholars were at the school age, whilst 17½ per cent. were above, and 13 per cent. were below it. In private schools, only 59 per cent. of the scholars were at the school age, whilst 28 per cent. were above, and 13 per cent. were below it.

Proportion of scholars at school age.

745. The number of children of all ages receiving education in Victoria during any portion of the year 1890 may be stated as follows:—

Scholars, 1890.

CHILDREN OF ALL AGES RECEIVING EDUCATION, 1890.

Being educated—

In State schools (distinct children) ...	204,497
In private schools ...	40,181
At home (census figures, 1891) ...	13,901
Total ...	258,579

746. Of these children the following were at the school age (6 and under 13):—

Scholars at school age.

CHILDREN AT SCHOOL AGE RECEIVING EDUCATION, 1890.

Being educated—

In State schools ...	142,376
In private schools ...	23,528
At home (census figures, 1891) ...	6,430
Total ...	172,334

747. According to the census of 1891, the total number of children at the school age (6 and under 13) living in Victoria on the 5th April of that year was 173,099.* The following, therefore, would be the number and percentage receiving and not receiving education:—

Children receiving and not receiving instruction.

CHILDREN AT SCHOOL AGE	Private Schools	State Schools (distinct children)	AGES RECEIVING AND NOT RECEIVING EDUCATION.	Per Cent.
Being educated	11,411	172,334	172,334	99.56
Not being educated	40,181	765	765	.44
Total at school age	173,099	173,099	173,099	100.00

* According to the census of 1881, the number between 6 and 13 years of age was 153,554. The school age was changed in November, 1889. Prior to that date it had been 6 and under 13.

Proportion
of children
being
educated.

748. By the foregoing figures it would appear that practically the whole of the children at the school age (6 and under 13) living in Victoria were being educated during some portion of the year, and that about 83 per cent. of these were at State schools. The scholars referred to are the "distinct children," whose number it will be remembered has not been ascertained by actual counting but by an estimate made by the Education Department. If the number of children in average attendance be used in the computation instead of the estimated distinct children, the number of State school children at the school age would be reduced to about 93,700,* and the total number at that age receiving education in the whole colony would be reduced to 123,800, whilst the number of children not receiving education would be increased to 49,300.

Proportion
of children
not attend-
ing full
time.

749. If the distinct children have been accurately estimated, the total number receiving education during some portion of the year would be correct also, but it should be clearly understood that the stay of some of these in the schools is so short that practically they are not being educated at all. It has already been shown that the prescribed number of days in each quarter, viz., 40, was not reached in the case of 45 per cent. of the children who attended State schools during some portion of one or more of the quarters of 1890.†

Colleges,
grammar
schools, etc.

750. Six of the schools included with the private schools are called colleges or grammar schools. Five of these at some former period received sums of money and grants of land from the Government for the erection of school buildings, but no State assistance has been given them of late years. They receive male pupils only, and are all attached to some religious denomination; and in connexion with several of them there are exhibitions, chiefly with the view of assisting the ablest scholars to complete their education at the University. The following is a return, derived from statements furnished by the authorities, of these institutions for the year under review:—

* Seventy per cent. of the whole average attendance have been assumed to be at the school age. This was about the proportion of distinct children at the school age as estimated by the Education Department.

† See paragraph 709 *ante*.

COLLEGES AND GRAMMAR SCHOOLS,* 1890.

Name of Institution.	Religious Denomination.	Amount received towards Building in former years.	Number of Masters.	Number of Scholars.
Grammar School, Melbourne	Church of England	£ 13,784	18	293
Scotch College, „	Presbyterian Church	6,445	14	350
Wesley „ „	Wesleyan Methodist	2,769	9	175
St. Patrick's „ „	Roman Catholic	10,002	12	137
St. Francis Xavier College, Kew	„	„	16	166
Grammar School, Geelong	Church of England	7,000	7	104
	Total	40,000	76	1,225

751. Through the instrumentality, and mainly owing to the liberality, of the late Hon. Francis Ormond, M.L.C.—whose name has been already mentioned in connexion with the Ormond College and the Chair of Music—a Working Men's College was established in Melbourne four years since.† The following account of this institution has been supplied for this work by Mr. F. A. Campbell, C.E. (Melb.), F.R.G.S., F.R.Hist.S., Secretary to the College:—

Working
Men's
College.

“The college is centrally situated, in Latrobe Street, opposite the Public Library. There are now two buildings, facing Latrobe and Bowen Streets respectively. The Bowen Street building has been erected on a half-acre of ground, granted by the Government, and is intended mainly for the extension of trade classes, but will also accommodate the classes in drawing and modelling, while the Latrobe Street block has been erected by private subscription, and is occupied by class rooms, offices, etc.

* At the Melbourne Grammar School there are three Council Scholarships of the annual value of £21 for boys under 14, open only to members of the school, and tenable at it for three years; and two exhibitions of the annual value of £20, tenable for two years, open to the competition of boys proceeding to the Melbourne University, whose names have been for the two previous years on the school register, and who have passed the matriculation examination with credit; the head master also offers every year for open competition two scholarships of the annual value of £30 and £25 respectively, four exhibitions—two of the value of £15 and two of £10; and there is a Witherby scholarship, which entitles the holder to exemption from school fees for three years. In connexion with the Scotch College, the following scholarships were announced to be competed for:—(1) Scholarships of the value of 10 or 20 guineas each, tenable for one year, to students who gain a satisfactory position in the class honour lists at the matriculation examination; (2) Scholarships of 20 guineas or 10 guineas each (according to merit), tenable for one year, open to all boys who have passed the ordinary matriculation examination, to be awarded for excellence in any one or more of the four groups of subjects, Classics, Mathematics, French and German, English and History. In connexion with the Wesley College, there is a scholarship called the “Draper Scholarship” established in memory of the late Rev. D. J. Draper, who perished in the *London*—of the value of £25, tenable for one year; two “Walter Powell Scholarships” founded by Mrs. Powell, in memory of her late husband, of the value of £10 each, payable in two annual instalments of £20; also the “Waugh,” for boys below the matriculation form, the “Eggleston” and “Corrigan” entrance scholarships, each of the value of 16 guineas, tenable for two years. At the Geelong Grammar School there is an exhibition, given by Mrs. F. W. Armytage, of the value of £60, tenable for two years on condition that the holder shall be a resident student of Trinity College, Melbourne, and shall have been for two years previously a pupil of the Grammar School; the head master also receives one son of a clergyman of the Church of England as a resident boarder, exempt from all school fees and cost of residence.

† The total amount contributed by the late Mr. Ormond to the three institutions during his lifetime was £60,700; moreover, a further sum of £113,500 was bequeathed by him to various charitable and religious purposes. For further particulars, see the *Victorian Year-Book*, 1888-9, Vol. II footnote (†) to paragraph 807.

"The initiation of the college is due to the late Mr. Ormond, who subscribed £5,500 towards the building, a like sum being obtained by public subscription. The sites were granted by the Government, who have also subsidized the institution by grants, both for buildings and maintenance.

"The college is governed by a Council of 16 members, consisting of representatives of the Founder, the Government, the University, the Public Library, the Trades' Hall Council, subscribers of £1 and upwards, and subscribers of from 2s. 6d. to £1. A subscription of from 2s. 6d. upwards annually gives the privilege of a vote for members of the Council. The President of the Council for the present year is Prof. Kernot, M.A., C.E., F.R.G.S.

"The college is intended to improve the general and technical education of the working classes; but is open to all, women as well as men. The class work is carried on almost entirely in the evening, between the hours of 7 and 10.15 p.m. Saturday morning lectures in science for the special benefit of State school teachers are also held.

"Courses of study extending over 3 years are laid down for students in the various trade classes, and the four following certificates are issued:—

- "1. Class Ordinary Certificate, to those students who pass the annual examination in any class.
- "2. Class Credit Certificate, to those students who pass the examination with credit.
- "3. Technical Certificate, to those students who pass all the examinations in the 2 years' course.
- "4. Expert Certificates, to those students who have passed all the examinations in the 3 years' course.

"Before gaining Expert and Technical Certificates, the students must produce evidence of having been engaged in practical work for some time.

"The progress of this institution since 1888 is shown in the following table:—

The Working Men's College.	1888.	1889.	1890.
Average per term of—			
Enrolments (individual students) ...	1,767	2,064	2,178
Females ...	225	358	460
Juniors under 18 and apprentices under 21...	671	...	...
Males under 21—Apprentices ...	...	236	253
„ „ Others ...	...	810	811
Fees received ...	£ 1,753	2,455	2,747
Average fees per student ...	19s. 10d.	23s. 4d.	...
Number of classes ...	74	93	101
Number of instructors ...	29	37	44
Salaries paid instructors... ..	£ 1,855	2,849	3,443

"The following is a list of subjects taught:—

Algebra.	Elementary Drafting.
Applied Electricity.	Elementary Mechanics.
Applied Mechanics—Construction.	Elocution.
„ Design.	Freehand Drawing.
„ Machines.	French.
Architectural Drawing.	Geography.
Arithmetic.	Geology and Mineralogy.
Book-keeping.	Geometry.
Botany.	German.
Building Construction.	Graining.
Carpentry.	Grammar.
Coach Making and Carriage Drafting.	Grammar of Music.
Cookery.	Harmony.
Dress Cutting.	History.
Dressmaking.	Latin.

Logic.
Marbling.
Mechanical Drawing.
Mensuration.
Mental Philosophy.
Modelling.
Photography.
Physics.
Physiology.
Plaster Casting.
Plumbing.
Practical Plane Geometry.
Shorthand.

Sign Writing.
Singing.
Solid Geometry.
Steam and the Steam Engine.
Surveying and Levelling.
Tailor's Cutting and Fitting.
Telegraphy.
Tonic Sol Fa.
Trigonometry.
Turning and Fitting.
Violin.
Voice Production.
Writing and Correspondence.

"The largest number of individual students enrolled for any one term was 2,400. The average enrolment for 1890 was 2,178, and the average attendance 1,586. 811 students were examined for first and second year certificates in 39 subjects; 551, or 68 per cent., passed, and 252, or 31 per cent., passed with credit."

752. The following account of the Gordon Technical College, Geelong, which is an institution of which the objects are in many respects identical with those of the Melbourne Working Men's College, has been supplied for this work:—

Gordon
Technical
College.

The college is splendidly situated both for town and country students, occupying a portion of that area in Fenwick Street formerly known as Johnstone Park. It is almost adjoining the central railway station, which is found very convenient for students travelling to and from the college by rail, of whom there is a large number on the class rolls.

The workshops for practical instruction in carpentry, plumbing, and other trade subjects, are now open and promise to be a great success.

The total number of students attending the college for the quarter ending 30th June, 1891, was 266. This number is made up chiefly of the artizan class.

The total amount received in students' fees, to date, is £1,005 17s., and in public subscriptions, £1,200. This is exclusive of the Ormond bequest (£1,000 less probate duty). The Government grants to date amount to £7,000. The total expenditure on buildings has been £7,907.

The subjects taught are:—Building construction, bookkeeping, chemistry, carpentry (practical), electrical engineering, English, French, freehand and model drawing, German, Latin, mathematics, mechanical drawing, modelling, physics, phonography, painting, practical geometry, perspective, plumbing (practical), telegraphy, writing and correspondence, and wool-sorting. The fees range from 3s. 3d. to 21s.

Through the liberality of the publishers, a large number of scientific and other useful publications are sent to the college gratis. These are well used and appreciated by students.

The Field Science, Photographic, and Sketching Clubs, associated with the College, are all in a flourishing condition and doing excellent work.

753. The Ormond and Gordon Working Men's Colleges, as well as other technical schools, schools of art and design, and schools of mines—are now under the direct control of the Education Department, which has been devising a scheme to provide for the best method of promoting and directing secondary education generally, by

Technologi-
cal schools.

which schools will be recognized in certain authorized centres only, and payments will be provided in accordance with amounts raised locally. Hitherto, schools of design have been under the control of a Royal Technological Commission, which was dissolved on the 30th June, 1890; the other technical schools were practically independent, and were not subject to Government supervision, although receiving State aid, which was given without regard to the merits of the different institutions. In the schools of art and design, the subjects taught comprise practical geometry, mechanical and architectural drawing, perspective, model, and freehand hand 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 1890, there were altogether 26 technological schools in the colony, viz., 3 working men's or technical colleges—two of which have been just described, 11 schools of art, and 12 schools of mines. One of the last-named, the Ballarat School of Mines, was affiliated to the Melbourne University by a statute passed by the senate in April, 1887, which, however, restricts the privileges conferred by the affiliation to matriculated students. The schools, as a whole, possess 195 lecturers, and had, during 1890, an enrolment of 6,899 pupils, of whom 3,818 attended eight or more times during the last quarter of the year; whilst the fees per quarter range, in the different schools, from 2s. to £3 3s. The local South Kensington examinations, which are conducted under the supervision of the Education Department, were attended by 339 students, of whom nearly 200 were successful in obtaining the Science and Art Department's certificate of merit†; moreover, the Working Men's College (Melbourne) issued 551, and the Gordon Technical College 78, prizes or certificates. The Government expenditure on all the institutions in 1890-91, amounted to £38,613, viz., £19,113 for maintenance, and £19,500 for building purposes; and of the total amount the Working Men's College (Melbourne) received £7,000; the Sandhurst School of Mines, £6,350; and the Ballarat School of Mines, £5,000.‡

* For detailed descriptions of the principal of these institutions, see last edition of this work, Vol. II, paragraphs 748 to 751.

† The South Kensington examinations are to be henceforth discontinued, and the Education Department will establish its own examinations in their stead.

‡ A digest of some of the evidence taken before the Royal Commission on Technical Instruction in Great Britain, 1881 to 1884, together with valuable comments thereon by the Hon. C. H. Pearson, LL.D., M.P., Minister of Public Instruction in Victoria, was laid before the Parliament of Victoria in 1888, and will amply repay perusal. (See Parliamentary Paper B. 570, Session 1888.)

754. The buildings of the Melbourne Public Library have cost from first to last £147,604, and are still unfinished. These funds were provided by Government, as also were further moneys, amounting, with the sum just named, to a total of £530,105, of which £65,508 was received by the trustees during the year under review. The private contributions, consisting of books, pamphlets, maps, newspapers, etc., have amounted in all to 506,503, of which 264,695 were presented to the institution, and the remainder were deposited under the *Copyright Statute*. The estimated value of these contributions is £26,276. At the end of 1890 the library contained 122,834 volumes, and 153,548 pamphlets and parts. It is open to the public, without payment, on week days between the hours of 10 a.m. and 10 p.m., and was visited during the year by 474,435 persons. The trustees report that, of 4,278 volumes added to the institution in 1890, 1,142 were donations; these embrace a valuable donation of 467 volumes from the British Government, which also presented 3,075 pamphlets and 1,568 maps; also a gift of 181 volumes, besides 427 maps, from the Government of the United States. It is, moreover, reported that, although the new dictionary catalogue has not yet been completed, the cards upon which it has been written will soon be made available to the public, and will prove of great value to the researches of readers in enabling them to ascertain with the least possible delay the resources of the library on any given subject. The erection of the new reading-room, the funds for which the trustees expect will be soon provided, and which is the next work to be undertaken, will afford ample space for a long time to come for the storage and shelving of a very large number of volumes.

755. The National Gallery, at the end of 1890, contained 15,769 works of art, viz., 171 oil paintings, 2,573 objects of statuary, etc., and 13,025 drawings, engravings, and photographs. It is opened at 10 a.m. and closed at 5 p.m. daily, Sundays and certain holidays excepted. The school of painting in connexion with this institution was attended in the year by 12 male and 19 female students, and the school of design by 48 male and 101 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 which the subjects are purely Australian. The most important contribution to the National Gallery during 1890 was Mr. Longstaff's copy of the "Æsop" of Velasquez in the Royal Gallery of Madrid, as his second year's work under the terms of the travelling scholarship awarded to him in 1887. Mr. Aby Altson succeeds Mr. Longstaff

in this scholarship, the latter gentleman's tenure having expired during the year.

756. The Industrial and Technological Museum joins the National Gallery, and was opened on the 7th September, 1870. It now contains 617 publications, 51,275 specimens, of which 2,300 were added during 1890, and 261 drawings. It is open on the same days and during the same hours as the National Gallery. During the year a fine exhibit of prize wools was presented to the Museum by Messrs. Goldsbrough, Mort & Co.; moreover, the whole foreign mineral collection was re-arranged, and 655 specimens were received either as donations, exchanges, or purchases; the section of economic botany was also largely added to by donations from private sources, and from agricultural societies.

757. The collections of the National Museum are kept in a building situated on the grounds of the Melbourne University. They consist of stuffed animals and birds, insects, specimens of minerals, and other objects of curiosity. The cost of the edifice was about £8,500. It is open to the public free of charge on all week days throughout the year, except Christmas Day and Good Friday, between the hours of 10 a.m. and 5 p.m., and in 1890 was visited by 129,253 persons. During the same year, besides presentations of value and interest made to the institution, purchases were made to the extent of £1,402. The payments for salaries and wages amounted to £1,877. The total amount of aid from Government during the year 1889-90 was £1,836. The Director again complains of the delay which is taking place in the completion of the buildings, for which the sum of £12,000 has been voted but not appropriated.

758. There is a free library attached to the Patent Office, Melbourne. This contains about 5,530 volumes, consisting of the patent records of Great Britain, Victoria, New South Wales, New Zealand, Canada, the United States, Italy, Germany, &c., and other works. Here also are on view about 333 models of patented or protected inventions, and 220 models of designs under the *Copyright Act*. The approximate value of the books is £4,000, and of the models £250. 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.

759. 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,

Industrial
Museum.

National
Museum.

Patent
Office
Library.

Supreme
Court
Library

when it closes at noon. It is supported by fees paid under rules of court for the admission of barristers and attorneys. The number of volumes at the end of 1890 was 20,148. The expenditure from the commencement has amounted to £30,090, of which £1,668 was spent in 1890.

760. There are free libraries, athenæums, or scientific, literary, or mechanics' institutes, in most of the suburban and country towns of the colony. Some of these institutions receive books on loan from the Melbourne Public Library. Three hundred and seventy-nine furnished returns for 1890 to the Government Statist. Their statements show that the cost of erection of the buildings was £302,111; that their total receipts in 1890 amounted to £55,048, of which £16,195 was contributed by the Government, and £38,853 by private individuals; that the number of volumes in all the institutions amounted to 445,900; and that during the year about 2,405,056 visits were paid to 338 of them which furnished returns. If visitors attended the others in the same proportion, the total number of visits during 1890 must have amounted to fully 2,690,000.

Free libraries, etc.

761. A full account of the late Melbourne Centennial International Exhibition, 1888, was published in the edition of this work for 1889-90.* The accounts have since been closed and audited, and the final cash statement of the Commission shows—after allowing for £21,788 repaid, and £15,508, for which credit is taken as the value of permanent improvements effected—the net cost of the Exhibition to be £239,702. To this, however, the Audit Commissioners consider £7,694—the authorized cost of restoring the buildings and grounds—should be added.†

Net cost of Centennial International Exhibition.

762. Greater Melbourne is amply supplied with public reserves and parks, the total area of which is 5,314 acres. Of these reserves 1,723 acres are in Melbourne City, 634 in Kew, 482½ in South Melbourne, 446½ in Williamstown, 190 in Richmond, 180½ in Port Melbourne, 166½ in Brighton, 250 in St. Kilda, 23 in Prahran, 45¾ in Footscray, 41 in Fitzroy, 39 in Collingwood, 65½ in Essendon, 14½ in Northcote, 15 in Hawthorn, 9½ in North Melbourne, 306¾ in Flemington and Kensington, and 782 in extra-urban municipalities.

Public reserves in Greater Melbourne.

763. The following list of these reserves, together with a statement of their respective areas, has been supplied by the Lands Department:—

Public reserves.

* Vol. II., paragraph 760.

† See Parliamentary Paper, No. 102, Session 1891.

PUBLIC RESERVES IN MELBOURNE AND SUBURBS,* 1891.

Municipality.	Name of Reserve.	Area.
		Acres.
Melbourne City	Royal Park	444
"	Yarra	155
"	Prince's	97
"	Fawkner	102
"	Flinders	24
"	Park (Model Farm)	81
"	Botanic Garden and Domain	235
"	Zoological	55
"	Carlton	63
"	Fitzroy	64
"	Spring	21
"	Flagstaff	18
"	Argyle Square	3 $\frac{1}{4}$
"	Curtain	3 $\frac{1}{2}$
"	Darling	2
"	Lincoln	3 $\frac{1}{4}$
"	Macarthur	1
"	Murchison Square	1
"	University	3 $\frac{1}{2}$
"	University Grounds	106
"	Friendly Societies' Grounds	33
"	Industrial Schools and Board of Health Depôt	47
"	Melbourne Cricket Ground...	9 $\frac{1}{2}$
"	East Melbourne	7†
"	Scotch College	7
"	Richmond	6
"	Carlton	5
"	Parliament Reserve	10
"	Ornamental Plantations	1 $\frac{1}{2}$
"	General Cemetery	101
"	Old Cemetery	8 $\frac{1}{2}$
"	Military Parade Ground	5
North Melbourne Town	Recreation	9 $\frac{1}{2}$
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	150
"	Horticultural Gardens	33
"	Barkly Square	7
Northcote Town	Jika Park	14 $\frac{1}{2}$
South Melbourne City	Albert Park (part of)	464
"	St. Vincent Gardens	7 $\frac{7}{8}$
"	Ornamental Plantations	2 $\frac{1}{4}$
"	Cricket and Recreation (Warehousemen's)	8
Port Melbourne Borough	Cricket Ground	7 $\frac{1}{4}$
"	Park and Garden	56
"	Ornamental Plantations	17
Prahran City	Recreation	23

* A description of the most important of these reserves, as well as of the Botanic and other public gardens in several of the country towns, was published in the *Victorian Year-Book*, 1883-4, following paragraph 1,315.

† Vested in Victorian Railways Commissioners, but still used for cricket.

PUBLIC RESERVES IN MELBOURNE AND SUBURBS,* 1891—continued.

Municipality.	Name of Reserve.	Area.
		Acres.
St. Kilda City	St. Kilda Gardens	16
"	Albert Park (part of)	106
"	Recreation	54
"	"	4 $\frac{3}{4}$
"	"	11
"	"	15 $\frac{3}{4}$
"	" (Dandenong Road)	22 $\frac{1}{2}$
"	Cemetery	20
Brighton Town	Elsternwick Park...	85
"	Recreation (Elsternwick)	14 $\frac{1}{2}$
"	Beach Park	67
Essendon Town	Recreation	10 $\frac{1}{2}$
"	"	5 $\frac{1}{4}$
"	Agricultural Society's Yards	30
"	Ornamental Plantations	8 $\frac{1}{4}$
"	Water Reserve	11 $\frac{1}{2}$
Flemington and Kensington Borough	Racecourse	301
"	Recreation	5 $\frac{3}{4}$
Hawthorn City	"	15
Kew Borough	Studley Park	203
"	Lunatic Asylum	384
"	Cemetery	31
"	Recreation	16
Footscray City	Public Gardens	26
"	"	2 $\frac{1}{4}$
"	Cricket Ground, etc.	5
"	Recreation (Yarraville)	5
"	" (Brown's Hill)	7 $\frac{1}{2}$
Williamstown Town	Park	36
"	"	20
"	Beach Park	20
"	Cemetery	15
"	Rifle Range	332
"	Cricket Ground	6 $\frac{3}{4}$
"	Public Garden	3 $\frac{1}{2}$
"	Recreation (Newport)	13
"	Yarra Bend Asylum	350
"	Malvern Recreation	5
"	"	8
Outside urban municipalities	" Park and Garden	16
	Caulfield Park	62
	" Racecourse	144
	Camberwell Gardens	7
	Williamstown Racecourse	190
	Total	5,314

764. The Melbourne Botanic Garden is situated on the south side of the River Yarra, at a distance of about a mile and a half from the heart of the city. The area of the garden proper is 83 acres, and is as large as the Botanic Gardens of Sydney, Adelaide, and Brisbane

Botanic Garden.

* See footnote (*) on page 430.

combined; but with the Domain and Government House grounds adjoining it covers about 300 acres. This garden, although nominally in existence for some 48 years, was virtually created by Dr. (now the Baron Sir Ferdinand von) Mueller, who was for 16 years its director, but retired from that post in 1873. It was early extremely rich in rare plants, these being in very many instances then new to the colony. The garden under the present director, Mr. W. R. Guilfoyle, F.L.S., still maintains its beauty. An interesting description of it from his pen appears in the *Victorian Year-Book*, 1888-9*.

765. The gardens of the Zoological and Acclimatisation Society of Victoria are situated in the centre of the Royal Park, on the northern side of the city, and distant nearly two miles from the Post Office, and can be reached by the Brunswick tramcars starting from Elizabeth Street South, close to the Hobson's Bay Railway Station, every few minutes. A transfer has to be made at the south entrance to the Royal Park to a short horse tram running from the Sydney Road to the Society's gardens, but only one fare of 3d. for adults and half-price for children is made. The gardens can also be reached from Spencer Street by the Coburg, Fitzroy, or Heidelberg trains, all of which stop at the Royal Park Station, close to the railway gates on the north side of the gardens. 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. An interesting account of the operations of this society, contributed for this work by the Director of the Gardens, Mr. A. A. C. Le Souef, was published in the edition of this work for 1889-90.†

766. On the 18th March, 1890, a Royal Commission, consisting of 11 members, was appointed to enquire into and report upon the condition and management of the charitable institutions of the colony. The Commission made a progress report‡ on the 11th November, 1890, and a final report towards the end of 1891§ embodying the following recommendations:—

RECOMMENDATIONS OF THE ROYAL COMMISSION ON CHARITABLE INSTITUTIONS.

1. Removal of the depôts of the Immigrants' Home on St. Kilda Road, Melbourne.
2. Establishment of a casual ward on the north bank of the Yarra, near Prince's Bridge.
3. Transfer of the permanent inmates now in the buildings on the St. Kilda Road to the Royal Park.
4. Removal of the Benevolent Asylum to Cheltenham.
5. Removal of the Melbourne Hospital.
6. Erection of the Melbourne Hospital on the site known as the "Pig Market."

* Vol. II., paragraph 89'.

† Vol. II., paragraph 764.

‡ Parliamentary Paper, No. 203, Session 1890.

§ Parliamentary Paper, No. 210, Session 1891.

7. The immediate establishment of infectious diseases hospitals.
8. The employment of female nurses in hospitals wherever practicable.
9. The establishment of a board, from which nurses should obtain a certificate of competency.
10. The provision of a better accommodation for nurses, relief from menial work, and the raising of their status.
11. Calling upon persons in good circumstances to show cause why they should not contribute to the support of their indigent relations who are burdens on the charitable institutions. Magistrates to hear cases privately at discretion.
12. Regular inspection of all the charitable institutions of the colony by competent firemen, and the enforcement of methods for the safety of the inmates of charitable institutions in case of fire.
13. The printing of all the reports of the Inspector of Charities as Parliamentary papers.
14. Removal of the Blind Asylum to a country site.
15. Removal of the Deaf and Dumb Institution to a country site.
16. Amalgamation of the Benevolent Asylum and Immigrants' Home; receiving house only being left in the city.
17. Amalgamation of metropolitan refuges for fallen women, other than Abbotsford; removal of them to a country site or distant suburb; proper classification of inmates; and establishment of receiving-houses in town.
18. Appointment of duly qualified medical men of junior standing to the positions of resident medical officers in all cases where the services of consulting medical men can be obtained.
19. Provision for the appointment of honorary medical officers to be made by the District Boards.
20. Division of the colony into charitable districts administered by District Boards, the members of which shall be elected by the municipalities within the several districts, to have full powers in the allocation of the Government grant and other funds.
21. The appointment of a Central Board of Charity to allocate the Government grant to the various districts and have general control of all charities within the colony.
22. Such Central Board to consist of nine honorary members, four appointed by the Government and five elected by the District Boards. The Board to choose its own chairman, and to have control of the present office of the Inspector of Charities.
23. The Central Board to have powers to transfer inmates from and to any benevolent asylum or hospital in any part of the country.
24. That half the expense of supporting charitable institutions be borne by the Government grant; that, if necessary funds for the other half cannot be obtained by private subscription, the balance be paid by the municipalities out of the general rate upon the precept from the District Board.*
25. The transformation of some of the country hospitals into benevolent asylums by agreement of the various committees of the different institutions within the districts, or in the event of the committees not agreeing, by order of the District Board.†
26. The extension of the time during which ship-owners shall be compelled to give bonds to the Central Board to indemnify the State for introducing into the colony persons, who, within three months after their arrival, become a burden upon the State.
27. The classification of the various ladies' benevolent societies, throughout the colony, and more equal distribution of the grant to them.
28. The establishment of dispensaries in the suburbs of Melbourne, to relieve the pressure on existing charitable institutions.
29. The establishment of a more extensive ambulance service.

* Two Commissioners did not approve of this, considering it undesirable to place the burden upon ratepayers who are possessors of one kind of property, or to tax occupants of small homesteads, or, in other words, to tax thrift; whilst they were of opinion that the obnoxious imposition of a poor tax should be deferred as long as possible.

† One Commissioner considered it an unwise policy to close hospitals and multiply benevolent asylums. If some of the former were no longer required as hospitals, they should be closed altogether, whilst the latter might well be amalgamated into two or three institutions with financial gain to the country.

30. The abolition of special pay wards provided out of charitable funds in any charitable institution in the colony. All patients to be compelled to contribute according to their means.

31. The boarding-out system to be adopted for orphans in country homes wherever practicable, adequate provision being made for inspection and for the protection of religious faith.*

32. The proceeds of the sites of any institutions which may be sold to be invested as endowments for charitable purposes, unless required for building purposes.

FURTHER RECOMMENDATION (SIGNED BY THREE COMMISSIONERS).

Where racing and other clubs are permitted by the State to occupy valuable reserves and other Crown lands in the metropolitan district free of charge, in all cases where payment is demanded for admission to such reserves and Crown lands, a percentage of all such receipts should be paid over to the treasurer of the proposed Central Board of Charity.

767. The following is a list of the principal Charitable Institutions in Victoria, and a statement of the accommodation which, according to the returns of the year ended 30th June, 1890, was available for indoor patients:—

CHARITABLE INSTITUTIONS. †—AMOUNT OF ACCOMMODATION, 1889-90. ‡

Description of Institution.	Number of Institutions.	Dormitories.		Number of Beds for Inmates.	Number of Cubic Feet to each Inmate.
		Number.	Capacity in Cubic Feet.		
General hospitals § ...	39	355	3,135,562	2,421	1,295
Women's Hospital ...	1	21	118,000	70	1,686
Children's Hospital ...	1	9	59,176	70	845
Eye and Ear Hospital ...	1	6	33,322	43	775
Hospitals for the Insane ...	5	982	2,151,871	3,457	622
Idiot Asylum || ...	1	12	43,999	89	494
Benevolent asylums ...	5	145	1,061,627	1,423	746
Immigrants' Home ¶ ...	1	24	390,256	683	571
Blind Asylum ...	1	6	82,764	111	746
Deaf and Dumb Asylum ...	1	4	73,765	74	997
Orphan asylums ...	7	61	532,566	988	539
Industrial Schools ...	5	16	184,752	326	567
Reformatory Schools ...	4	20	226,522	210	1,079
Infant Asylum ...	1	9	34,482	61	565
Female refuges ...	7	127	317,078	487	651
Total ...	80	1,797	8,445,742	10,513	803

NOTE.—Besides the hospitals above referred to, there were two Convalescent Homes, with accommodation for 64 inmates. Particulars of these institutions will be found in a subsequent paragraph.

* With reference to the relative merits of the "boarding-out" and "barracks" systems, one Commissioner dissented from the view that, under the latter, when boys are brought up to the knowledge of a trade, or when girls are carefully trained for domestic service, they are not so well fitted to fight the battle of life, or to become as good citizens as those children who are boarded out.

† Only three of the kinds described are Government institutions, viz., the Hospitals for the Insane, the Idiot Asylum, and four of the Industrial and Reformatory Schools.

‡ Except in the case of the Industrial and Reformatory Schools, for which the returns, both in this and the following tables, are for the year ended 31st December, 1890.

§ A list of the general hospitals is given in the table following paragraph 697 in Volume I.

|| The Idiot Asylum is under the same control as the Hospitals for the Insane.

¶ The name of this institution is misleading; it is really a benevolent asylum.

768. According to regulations issued by the Central Board of Health in Melbourne, not less than 1,200 cubic feet in the wards of a hospital or other institution of a like nature, should be allowed for each individual. It will be observed by the figures in the last column of the foregoing table that this amount of space for inmates is not attained in the case of any of the institutions, except the general hospitals and the Women's Hospital. It may be remarked that one important authority considers so large an amount of space unnecessary. The late Dr. Paley, in his report on the Hospitals for the Insane for 1878,* mentioned 500 feet for each patient in ordinary wards, and 1,000 feet in hospital wards, as a sufficient allowance; but, on the other hand, Dr. McCrea, the late Chief Medical Officer, in a paper contributed by him to a "Précis of Information concerning the Colony of Victoria," prepared some years since, under the editorship of the present writer, for the Intelligence Department of the Imperial War Office, gave it as his opinion that, whilst 600 feet of cubic space is sufficient for each person in a well-ventilated sleeping room, as much as from 1,500 to 2,000 cubic feet ought to be allowed in hospital wards.

Cubic space in wards.

769. The following table shows the total and average number of inmates in the same institutions during the year ended 30th June, 1890; also the number of deaths and the proportion of deaths to inmates:—

Inmates and deaths in charities.

CHARITABLE INSTITUTIONS.—INMATES AND DEATHS, 1889-90.

Description of Institution.	Number of Inmates.		Number of Deaths.	Proportion of Deaths to Total Number of Inmates.
	Total during the Year.	Daily Average.		
General hospitals	18,440	1,902·7	2,118	11·49
Women's Hospital†	1,162	50·0	26	2·24
Children's Hospital	880	48·0	72	8·18
Eye and Ear Hospital	373	40·5	3	·80
Hospitals for the Insane	4,413	3,605·0	254	5·76
Idiot Asylum	110	93·0	10	9·09
Benevolent asylums	2,093	1,336·0	272	13·00
Immigrants' Home	2,364	718·2	109	4·61
Blind Asylum	124	109·5	1	·81
Deaf and Dumb Asylum	69	59·0		
Orphan asylums	1,444	1,170·6	6	·42
Industrial and Reformatory Schools‡	3,807	3,330·0	38	1·00
Infant Asylum §	110	52·0	22	20·00
Female refugees	902	432·0	6	·67
Total	36,291	12,946·5	2,937	8·09

* Parliamentary Paper No. 36, Session 1879.

† Exclusive of infants.

‡ Including those boarded-out and sent to service as well as the inmates of the institutions.

§ Exclusive of mothers, of whom 59 were admitted during the year, and 17 remained at its end.

Inmates in
excess of
beds.

770. With reference to the overcrowding of some of the institutions, a comparison of the last two tables will show that the daily average of inmates in the year under review was greater than the number of beds in the Hospitals for the Insane, the Idiot Asylum, the Immigrants' Home, and the Orphan Asylums. The children attached to the Industrial and Reformatory Schools greatly outnumber the beds, but as the majority of these are boarded out, the institutions are not overcrowded.*

Birthplaces
of inmates.

771. Nearly all the institutions give returns of the birthplaces of their inmates. These are summarized in the following table, and the totals are compared with the numbers of the same birthplaces in the population as enumerated at the census of 1891:—

CHARITABLE INSTITUTIONS.—BIRTHPLACES† OF INMATES, 1889-90.

Description of Institution.	Australasian Colonies.	England and Wales.	Scotland.	Ireland.	China.	Other Countries & Unknown.	Total.
General hospitals	7,162	4,797	1,312	3,232	353	1,584	18,440
Women's Hospital	852	152	28	102	...	28	1,162
Eye and Ear Hospital	170	98	25	64	1	15	373
Hospitals for the Insane	904	976	371	1,184	98	990	4,523
Idiot Asylum							
Benevolent asylums	176	900	246	569	61	141	2,093
Immigrants' Home	407	731	481	657	...	88	2,364
Blind Asylum	109	9	1	3	...	2	124
Deaf and Dumb Asylum	60	6	...	...	...	3	69
Orphan asylums	1,352	18	8	31	...	35	1,444
Industrial and Reformatory Schools‡	218	6	...	1	...	7	232
Total ...	11,410	7,693	2,472	5,843	513	2,893	30,824
Proportions per 1,000 of population § ...	14.38	47.22	48.79	68.49	60.71	72.74	27.03

Religions of
inmates.

772. The same institutions which furnish returns of the birthplaces furnish also returns of the religions of their inmates, and the result is given in the following table. The figures in the lower line express the proportions to the living population of each sect as enumerated at the recent census:—

* See paragraphs 796 to 798 *post*.

† Particulars relating to the Children's Hospital, Infant Asylum, and Female refuges, are not given in this table.

‡ The figures in this line represent the number of inmates of Industrial and Reformatory Schools (exclusive of those boarded-out, etc.) at the end of the year. The total number under the control of the institution during some portion of the year was 3,807.

§ For numbers of each birthplace, according to the census of 1891, on which these proportions are based, see Appendix D., Table I., *post*.

CHARITABLE INSTITUTIONS.—RELIGIONS* OF INMATES, 1889-90.

Description of Institution.	Protestants.	Roman Catholics.	Jews.	Bud- dhists, Confu- cians, etc.	Of other Sect, of no Sect, and Unknown.	Total.
General hospitals ...	12,035	5,577	56	346	426	18,440
Women's Hospital ...	768	387	5	..	2	1,162
Eye and Ear Hospital ...	258	111	1	1	2	373
Hospitals for the Insane } Idiot Asylum ...	2,510	1,437	22	84	470	4,523
Benevolent asylums ...	1,423	584	4	45	37	2,093
Immigrants' Home ...	1,618	736	1	7	2	2,364
Blind Asylum ...	100	23	1	..	..	124
Deaf and Dumb Asylum ...	58	10	1	..	..	69
Orphan asylums ...	740	704	..	..	..	1,444
Industrial and Reformatory Schools †	126	105	..	..	1	232
Total ...	19,636	9,674	91	483	940	30,824
Proportions per 1,000 of } population †	23·46	38·92	14·09	71·60	22·51	27·03

773. The ages of the inmates of most of the institutions are given as follow; also the proportion of the numbers at each age period to the numbers at the same age in the population as returned at the recent census:—

Ages of inmates of charities.

CHARITABLE INSTITUTIONS.—AGES OF INMATES, 1889-90.

Description of Institution.	Ages.									Total.	
	Under 5.	5 to 10.	10 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 and upwards.		Unknown.
General hospitals ...	222	513	844	4,158	3,471	2,151	2,314	2,385	2,337	45	18,440
Women's Hospital ...	..	..	..	700	368	71	17	5	1	..	1,162
Eye and Ear Hospital ..	..	46	35	62	53	33	35	78	31	..	373
Hospitals for the Insane ..	..	20	25	403	856	784	971	635	310	409	4,413
Idiot Asylum ..	..	18	36	49	4	..	..	..	..	3	110
Benevolent asylums ..	67	..	..	68	30	48	110	362	1,404	4	2,093
Immigrants' Home ...	139	59	16	85	264	345	390	433	633	..	2,364
Blind Asylum ...	..	7	21	52	32	9	2	1	..	..	124
Deaf and Dumb Asylum ...	..	7	34	28	..	..	..	..	..	..	69
Orphan asylums ...	118	619	627	79	1	..	..	..	..	..	1,444
Industrial and Reforma- tory Schools †	6	15	93	113	..	..	..	..	..	..	232
Infant Asylum ..	110	..	..	..	..	..	..	..	..	..	110
Female refuges ..	..	..	6	327	235	123	133	37	..	41	902
Total ...	662	1,304	1,737	6,129	5,314	3,564	3,972	3,936	4,716	502	31,836
Proportions per 1,000 } of population †	4·43	10·12	14·90	25·43	25·79	34·35	47·34	55·04	120·01	..	27·92

* See footnote (†) on page 436.
 † See footnote (†) to table following paragraph 771 ante.
 ‡ For numbers of each sect, according to the census of 1891, on which these proportions are based, see Appendix D., Table III., post.

Receipts and expenditure.

774. The total receipts of all the institutions in 1889-90 amounted to £429,756, of which £250,294, or about four sevenths, was contributed by Government; and the expenditure amounted to £388,506. Of the Government contribution, £138,542 was expended on the Hospitals for the Insane, the Idiot Asylum, and the Industrial and Reformatory Schools, which are Government institutions; and the balance (£111,752) was distributed as grants in aid to the other institutions. A statement of the receipts and expenditure for the year of the Charitable Institutions is given in the following table:—

CHARITABLE INSTITUTIONS.—RECEIPTS AND EXPENDITURE, 1889-90.

Description of Institution.	Receipts.			Expenditure.
	From Government.	From other Sources.	Total.	
General hospitals	£62,698	£83,774	£146,472	£134,750
Women's Hospital	2,500	4,319	6,819	6,917
Children's Hospital	100	4,560	4,660	5,438
Eye and Ear Hospital	800	1,983	2,783	2,653
Hospitals for the Insane	98,860	11,205*	110,065	110,065
Idiot Asylum	23,586	17,679	41,265	32,862
Benevolent asylums	6,724	2,348	9,072	9,651
Immigrants' Home	2,100	8,906	11,006	6,857
Blind Asylum	1,600	6,464	8,064	3,280
Deaf and Dumb Asylum	9,474	22,769	32,243	19,458
Orphan asylums	39,682	1,740†	41,422	41,422
Industrial and Reformatory Schools	250	961	1,211	1,214
Infant Asylum	1,920	12,754	14,674	13,939
Female refugees				
Total	250,294	179,462	429,756	388,506

Average cost per inmate.

775. The following table gives a statement of the average number of inmates of the respective institutions during the year ended with June, 1890, the total cost of their maintenance, and the average cost per annum of each inmate:—

* This represents the amount paid into the Treasury in 1890 by the Master-in-Lunacy on account of the maintenance of lunatic patients; and it is entered in this table as being a set-off against the total cost to Government of these institutions.
 † Of this amount, £1,454 was received and paid into the Treasury during the year from parents and others for the maintenance of Industrial and Reformatory School children, and £286 was derived from the sale of articles produced, making a total of £1,740. No information is furnished of the amounts received from private sources by the assisted Industrial and Reformatory Schools.

CHARITABLE INSTITUTIONS.—AVERAGE COST OF EACH INMATE, 1889-90.

Description of Institution.	Daily Average Number of Inmates.	Total Cost of Maintenance.*	Average Cost of each Inmate per annum.		
			£	s.	d.
General hospitals	1,902.7	114,139	59	19	7
Women's Hospital	50.0	6,599	131	19	7
Children's Hospital	48.0	5,087	105	19	6
Eye and Ear Hospital	40.5	2,147	53	0	3
Hospitals for the Insane	3,605.0	110,065	29	15	3
Idiot Asylum	93.0				
Benevolent asylums	1,336.0	24,442	18	5	11
Immigrants' Home...	718.2	8,867	12	7	0
Blind Asylum	109.5	6,723	61	2	4
Deaf and Dumb Asylum	59.0	3,080	52	4	1
Orphan asylums	1,170.6	18,522	15	16	5
Industrial and Reformatory Schools	3,330.0	41,422†	12	8	9
Infant Asylum	52.0	1,145	22	0	4‡
Female refuges	432.0	13,404	31	0	6
Total	12,946.5	355,642	27	9	5

776. In 1889-90 the average cost per inmate was greatest in the Women's Hospital (£132), the next in the Children's Hospital (£106), the next in the Blind Asylum (£61), and next in the General Hospitals (£60). The Eye and Ear Hospital followed with an average per inmate of £53; then the Deaf and Dumb Asylum, with £52. The institutions in which the relative cost was least were the Immigrants' Home, and the Industrial and Reformatory Schools, with an average of nearly £12 10s.; the Orphan Asylums, with an average of less than £16; and the Benevolent Asylums, with an average of a little over £18 per inmate. The children of the Industrial and Reformatory Schools, and Orphan Asylums, are, however, for the most part not a tax on the institutions, being boarded-out or licensed.

777. In the following table the ordinary occupations or callings of persons who were inmates of Hospitals and Benevolent Asylums during the year ended 30th June, 1891, are specified under various heads:—

* The amounts in this column represent the expenditure of the institutions less the cost of building and repairs and of out-door relief.

† Cost to the State only. The assisted schools, which receive annually about £1,480 out of the Government grant, are also partly supported by private contributions.

‡ If, however, allowance be made for an average of 18 mothers who accompanied their children, the cost per head would be reduced to £16 7s. 2d.

OCCUPATIONS OF INMATES OF CHARITABLE INSTITUTIONS.

Occupations.	General Hospitals.		Benevolent Asylums and Immigrants' Home.	
	Males.	Females.	Males.	Females.
GOVERNMENT, PROFESSIONS, ARTS, EDUCATION, LITERATURE.				
Actor, actress, theatre employé	8	4		
Architect, draftsman	2		4	
Army officer, soldier	5		43	
Artist, engraver, photographer	8		3	
Bailiff, rabbit inspector	3			
Clergyman, missionary, Salvation Army officer, sexton	3	1	1	
Journalist, reporter, book agent, librarian	7	1	2	
Lawyer	6		2	
Medical man or student, chemist, dentist, midwife	20		11	3
Musician, music teacher, singer	24			
Police constable, warder	25		5	
Postmaster, mistress, letter carrier, sorter	9	1		
Printer, compositor	97		27	
Schoolmaster or mistress, teacher, truant inspector	12	21	9	12
Student (undefined)	6			
BOARD AND LODGING, DOMESTIC DUTIES, ATTENDANCE, ETC.				
Billiard marker	9			
Boarding-house keeper, registry office keeper	2	1	2	
Caretaker, gatekeeper, watchman	9	1	4	
Cook	164	54	109	60
Domestic duties, married woman, widow		1,788		58
Domestic servant	76	1,111	2	618
Hospital attendant, nurse, wardsman	17	7		
Hotel-keeper	19		8	35
Hotel servant	25	13	1	
Laundress, washerwoman		74		90
Waiter, waitress, sculleryman	13	12	24	2
COMMERCIAL PURSUITS.				
Actuary, auctioneer, accountant	8			
Book-keeper, clerk, commercial traveller	178		74	
Broker, agent, canvasser, collector	46		8	
Dealer, hawker, pawnbroker	99	1	54	2
Ironmonger and assistant	6		3	
Merchant, financier	1		3	
Office boy	1			
Shopkeeper, storekeeper	14	3	14	9
Shop—man, woman; sales—man, woman	15	16	2	
Warehouse—man, woman, storeman, bellman, packer	34	1	8	
CARRYING AND MESSAGES.				
Bullock driver	6		2	
Cab driver, owner, coachman, carman	85		16	
Carrier, carter, drayman	300		12	

OCCUPATIONS OF INMATES OF CHARITABLE INSTITUTIONS—continued.

Occupations.	General Hospitals.		Benevolent Asylums and Immigrants' Home.	
	Males.	Females.	Males.	Females.
CARRYING AND MESSAGES—continued.				
Errand boy, messenger ...	8	...	3	...
Lumper, stevedore ...	12	...	...	...
Pilot, sailor, seaman, mariner ...	214	...	97	...
Steward, stewardess ...	1	...	20	1
Porter ...	31	...	2	...
Railway service ...	59	...	...	...
Tram service ...	15	...	...	...
Telegraph operator, messenger ...	7	...	...	...
AGRICULTURAL PURSUITS AND LAND.				
Farmer, selector ...	224	...	45	...
Farm labourer, ploughman, servant ...	41	...	10	...
Florist, nurseryman, gardener ...	213	...	101	...
Vinegrower ...	5	...	2	...
Surveyor, chainman ...	5	...	2	...
PASTORAL PURSUITS AND ANIMALS.				
Cattle dealer, drover, cowboy ...	29	...	11	...
Fisherman, opossum hunter, rabbit catcher ...	24	...	3	...
Farrier ...	6	...	7	...
Grazier, squatter ...	7	...	...	...
Horse dealer, trainer, jockey, veterinary surgeon ...	35	...	1	...
Livery stable keeper, groom, stable boy ...	199	...	47	...
Poundkeeper ...	1	...	...	...
Station manager, shearer, shepherd, stockman, herdsman, boundary rider ...	75	...	34	...
ARTIZANS, MECHANICS, LABOURERS.				
Apprentice (undefined) ...	6	...	...	...
Barometer maker, watchmaker ...	20	...	3	...
Bookbinder ...	7	...	4	3
Brushmaker ...	1	...	1	...
Builder, contractor, bricklayer, plasterer, slater ...	157	...	42	...
Cabinet maker, carpenter, joiner, carver and gilder, frenchpolisher, turner ...	374	...	103	...
Coachbuilder, painter, trimmer, smith, wheelwright ...	31	...	12	...
Cooper ...	9	...	3	...
Cutler, filemaker, sawmaker, sharpener ...	13	...	2	...
Dyer ...	2	...	1	...
Engineer, engine fitter, machinist, millwright, smith, gas stove maker, gunsmith ...	73	...	19	...
Labourer (undefined) ...	5,672	...	1,029	...
Marble, stone—cutter, mason ...	72	...	16	...
Modeller ...	2	...	...	...
Painter, plumber, paperhanger, signwriter ...	180	...	95	...
Powder manufacturer ...	1	...	...	...
Saddler, harness, collar, whip—maker ...	24	...	6	...

OCCUPATIONS OF INMATES OF CHARITABLE INSTITUTIONS—continued.

Occupations.	General Hospitals.		Benevolent Asylums and Immigrants' Home.	
	Males.	Females.	Males.	Females.
ARTIZANS, ETC.—continued.				
Saltmaker	...	...	2	...
Ship, boat—builder	7	...	5	...
Tradesman, mechanic (undefined)	7	...	...	...
Undertaker, upholsterer, mattress maker	17	1	1	...
Wire fencer	2	...	...	...
TEXTILE FABRICS AND DRESS.				
Boot and shoe maker	153	64	4	...
Clothmaker, weaver, spinner	5	1	3	...
Draper, clothier	35	2	13	...
Dressmaker, milliner, seamstress	...	215	82	...
Hairdresser	29	...	3	...
Hat and cap maker	3	...	2	1
Tailor, tailoress, clothes presser	55	46	18	44
FIBROUS MATERIALS.				
Ropemaker	2	...	...	...
Sailmaker	3	...	2	...
ANIMAL FOOD.				
Butcher, slaughterman	142	3	1	...
Dairy—man, woman, milkman	28	...	2	...
Fishmonger	2	...	...	...
VEGETABLE FOOD.				
Baker, biscuit maker	115	...	36	...
Confectioner, pastrycook	10	...	9	...
Fruiterer, greengrocer, produce merchant	3	7	...	...
Miller	5	...	12	...
DRINKS AND STIMULANTS.				
Aërated water, cordial manufacturer	2	...	...	...
Brewer, maltster, distiller	11	...	3	...
Cellarman, bottler	5	...	1	...
Cigar, tobacco—manufacture, engaged in	12	...	...	...
Grocer, tea packer	45	1	15	1
Wine merchant	2	...	...	...
ANIMAL MATTERS.				
Carrier, fellmonger, leather dresser, parchment maker, tanner	12	...	5	...
Soap, candle, tallow—maker	1	...	...	...
Wool—classer, sorter	6	...	2	...
VEGETABLE MATTERS.				
Axeman, bushman, wood cutter, splitter, sawyer, sawmill worker	143	...	32	...
Basket maker	...	...	1	...
Chaff, cork—cutter	...	...	2	...
Paper—engaged in the manufacture of articles made of	12	...	...	...

OCCUPATIONS OF INMATES OF CHARITABLE INSTITUTIONS—continued.

Occupations.	General Hospitals.		Benevolent Asylums and Immigrants' Home.	
	Males.	Females.	Males.	Females.
MINING, ENGAGED IN.				
Miner	1,309	...	318	...
Mining manager	2	...	...	...
COAL, STONE, CLAY, EARTHENWARE, AND GLASS.				
Brickmaker, potter	41	...	10	...
Charcoal burner, lime burner	...	...	...	...
Chimney sweep, nightman	6	...	2	...
Glassblower	7	...	...	...
Lamplighter	4	...	...	...
Platelayer, line repairer	74	...	...	...
Quarryman, stonebreaker, asphalt	8	...	19	...
MINERALS AND METALS.				
Blacksmith, whitesmith, locksmith	137	...	41	...
Boilermaker, hammerman	6	...	...	...
Brass founder, finisher	4	...	1	...
Coppersmith	7	...	4	...
Engine driver, cleaner, furnaceman, stoker	65	...	4	...
Gasfitter	4	...	...	...
Goldsmith, jeweller, plater, silversmith	4	...	11	...
Iron—moulder, founder, dresser, rivetter	57	...	2	...
Tinsmith, tinker	24	...	5	...
Wire worker, nailmaker	1	...	1	...
INDEFINITE AND NON-PRODUCTIVE.				
Boy, girl, under 15 years of age	949	592	127	132
Fireman	30	...	34	...
Gentleman, speculator	5	...	...	...
Inspector, ganger, overseer	2	...	1	...
No stated occupation (including single women)	387	1,207	14	172
Pensioner	2	...	1	...
Pugilist	1	...	...	...
Traveller (undefined)	17	...	24	...
Total	13,247	5,193	3,430	1,327

778. In Melbourne and suburbs, during the month of October of each year, the last Saturday and Sunday are set apart for making collections in aid of the charitable institutions. The movement is taken up warmly by the clergy of all denominations, who, on Sunday, preach sermons in aid thereof, and devote thereto all the offerings collected in their churches. Superintendents of Sunday and head masters of State schools, and the proprietors and persons employed in many places of business, also render important assistance

in the collection of funds. The following are the amounts collected in each year since the movement was inaugurated:—

HOSPITAL SATURDAY AND SUNDAY, AMOUNTS COLLECTED, 1873 TO 1890.

£		£	
1873	4,219	1883	7,091
1874	5,542	1884	8,253
1875	5,493	1885	9,516
1876	5,171	1886	9,222
1877	6,195	1887	10,289
1878	6,203	1888	14,416
1879	5,583	1889	11,459
1880	6,053	1890	11,248
1881	6,984		
1882	7,022	Total	£139,959

Distribution of moneys collected.

779. The following table shows the distribution of the amounts collected and the extent to which the respective charitable institutions have profited thereby:—

DISTRIBUTION OF HOSPITAL SATURDAY AND SUNDAY FUND, 1873 TO 1890.

Institution.	Amount Distributed.		
	1873 to 1889.	1890.	Total.
	£	£	£
Melbourne Hospital	42,262	3,165	45,427
Alfred Hospital	18,120	1,557	19,677
Benevolent Asylum	13,097	920	14,017
Women's Hospital	10,901	1,041	11,942
Hospital for Sick Children	12,985	1,306	14,291
Eye and Ear Hospital	6,350	576	6,926
Homœopathic Hospital	5,319	869	6,188
Immigrants' Aid Society	5,060	341	5,401
Richmond Dispensary	850	50	900
Collingwood Dispensary	1,185	100	1,285
Austin Hospital for Incurables	4,372	562	4,934
Convalescent Home for Women	190	150	340
Men	175	100	275
Total distributed	120,866	10,737	131,603
Total collected	128,711	11,248	139,959

Lunatics in Australasia and England compared.

780. In his report for 1890, the Inspector of Lunatic Asylums, Dr. Dick, states that in that year the registered insane as compared with the entire population bore the proportion of 1 to 304, or rather less than in the previous year, when it was 1 to 300. He adds that in New South Wales there is 1 insane person in every 377, in South Australia, 1 in 410, and in England 1 in 344, of the general population.

Dr. Dick suggests the following influences as perhaps explaining the comparatively high rate in Victoria:—(1) The facilities afforded by the Victorian lunacy system for safely and cheaply disposing of weak-minded persons who may have become a burden to their proper guardians. (2) The poor-house system of Great Britain having no equivalent here. (3) The standard of mental unsoundness in use, which leads to many persons suffering only from old age, and harmless as regards themselves or others, being certified to as insane. (4) The mortality amongst patients being low, which results in an accumulation of the old and incurable. (5) The nomadic tendencies of the population, whereby they become exposed to some of the most potent causes of mental disease.

781. The proportion of recoveries of patients in the Victorian Lunatic Asylums (Hospitals for the Insane) was not so high in 1890 as in most previous years, the proportion having been 3,925* per 10,000 admitted as against a proportion of 4,423 in 1889, 4,737 in 1888, and an average during the ten years ended with 1887 of 4,451. The proportion of recoveries was higher than in two of the other Australasian colonies, or than in England and Wales, as is shown by the following figures:—

Recoveries of lunatics, Australia and England.

RECOVERIES OF LUNATIC ASYLUM PATIENTS IN AUSTRALASIAN COLONIES AND ENGLAND.†

Colonies	Recoveries per 10,000 Admissions.	England and Wales	Recoveries per 10,000 Admissions.
1. New South Wales	4,676	4. England and Wales	3,856
2. Queensland	4,163	5. South Australia	3,847
3. Victoria (1890)	3,925	6. New Zealand	3,766

782. It has been noticed that in South Australia, England and Wales, Victoria and New Zealand, the proportion of recoveries of female patients is greater than that of male patients; but in Queensland and New South Wales the reverse has been the case, the proportion of recoveries of males in these colonies having been greater than that of females.

Recoveries of male and female lunatics.

783. In proportion to the numbers resident, the mortality in the Victorian asylums during 1890 was higher than that during the year 1886 in the asylums of the other countries named, except England and Wales, as is thus shown:—

Deaths of lunatics, Australasia and England.

* Males, 3,835; females, 4,051 per 10,000 admissions of either sex.
 † Figures for the neighbouring colonies, and for England and Wales, taken from page 14 of Reports of the Inspector of Lunatic Asylums for 1886 and 1888.

MORTALITY OF LUNATIC ASYLUM PATIENTS IN AUSTRALASIAN COLONIES AND ENGLAND.

Country.	Deaths per 10,000 Patients Resident.*		
	Males.	Females.	Both Sexes.
1. England and Wales ...	1,070	824	937
2. Victoria (1890) ...	824	648	745
3. New South Wales ...	761	497	658
4. Queensland ...	712	572	657
5. South Australia ...	700	560	640
6. New Zealand ...	756	416	636

Deaths of male and female lunatics.

784. It will be noticed that the proportion of deaths of female patients was in all cases smaller than that of male patients; also that the order of the colonies was not the same for males as for females.

Causes of insanity.

785. The following are stated to have been the probable or predisposing causes of insanity in the male and female patients admitted into the Lunatic Asylums of Victoria in the last four years:—

CAUSES OF INSANITY OF LUNATIC ASYLUM PATIENTS, 1887 TO 1890.

Probable Causes.	Number of Admissions.									
	Males.					Females.				
	1887.	1888.	1889.	1890.	Total.	1887.	1888.	1889.	1890.	Total.
MORAL.										
Domestic trouble (including loss of relatives and friends)	3	8	3	9	23	21	18	14	14	67
Adverse circumstances (including business anxieties and pecuniary difficulties)	15	21	12	15	63	...	3	5	2	10
Mental anxiety and worry (not included under the above two heads), and overwork	18	11	18	10	57	14	5	13	9	41
Religious excitement	7	7	8	13	35	10	8	6	12	36
Love affairs (including seduction)	1	2	1	3	7	3	10	5	4	22
Fright and nervous shock	1	1	1	3	6	9	2	10	4	25
PHYSICAL.										
Intemperance in drink	69	71	60	52	252	27	14	20	13	74
" sexual	1	...	1	1	3	2	3	...	...	5
Venereal disease	1	...	1	3	5	...	2	...	1	5
Self-abuse	17	22	20	18	77	...	...	...	...	...
Sunstroke	14	19	9	13	55	5	2	1	4	12

* Figures for the neighbouring colonies, and for England and Wales, taken from page 14 of Reports of the Inspector of Lunatic Asylums for 1886 and 1888.

CAUSES OF INSANITY OF LUNATIC ASYLUM PATIENTS, 1887 to 1890
—continued.

Probable Causes.	Number of Admissions.									
	Males.					Females.				
	1887.	1888.	1889.	1890.	Total.	1887.	1888.	1889.	1890.	Total.
PHYSICAL—continued.										
Accident or injury (including surgical operations)	14	16	8	8	46	2	1	2	5	10
Pregnancy	..	..	..	..	..	..	1	..	1	2
Parturition and the puerperal state	..	..	..	..	..	18	10	15	25	68
Lactation...	..	..	..	..	..	..	4	1	4	9
Uterine and ovarian disorders	..	..	..	..	..	9	3	10	5	27
Typhoid fever	..	..	..	1	1	..	..	..	..	..
Change of life	..	..	..	..	..	4	2	1	9	16
Fevers	3	4	5	9	21	1	2	2	8	11
Privation and starvation	3	4	4	..	11	..	2	2	2	6
Old age	9	23	23	10	65	10	15	18	7	50
Epilepsy	1	2	..	1	4	..	..	..	1	1
Convulsions	..	..	..	..	..	..	..	..	..	..
Other bodily diseases or disorders	8	16	37	17	78	6	8	15	14	43
Previous attacks	36	49	55	33	173	17	51	42	10	120
Hereditary influences ascertained (direct and collateral)	4	12	15	7	38	11	15	1	10	37
Congenital defect ascertained	9	10	10	6	35	12	8	14	1	35
Habitual use of opium	..	..	..	1	1	..	..	..	..	..
Other ascertained causes	4	4	1	6	15	10	..	5	22	37
Unknown	129	73	110	198	510	101	78	56	124	359
Not Insane	..	..	..	1	1	..	..	..	..	..
Total	367	375	402	438	1,582	290	263	264	311	1,128

786. An Act was passed in 1888* authorising the establishment of Inebriate Asylums, where persons addicted to the excessive use of alcohol could be received either as voluntary patients or under legal compulsion, the general direction and control of these establishments being vested in the Lunacy Department. There are two of these asylums in Victoria, one at Beaconsfield for both men and women, and the other at Northcote, for women only. The number of patients admitted during the year to these institutions was 57, viz., 38 males and 19 females. Of those admitted, 45 entered voluntarily; 25 had been constant, and 20 had been periodical drinkers; 11 had had *delirium tremens*; 28 had been accustomed to the use of tobacco, and thirteen were known to have had intemperate parents. Forty patients were discharged during the year, and 18 remained in the institutions at its close. The following particulars

Inebriate asylums.

* The Inebriate Asylums Act 1888, now embodied in Consolidated Act (54 Vict. No. 1,101.)

respecting these institutions have been taken from the report of the Inspector of Lunatic Asylums for 1890 :—

BEACONSFIELD.

The buildings, having been originally intended for objects other than the accommodation of inebriate patients, do not afford the conditions to be desired in a complete institution of the kind. The building of a new Asylum, however, having been so long delayed, and there being no immediate prospect of its commencement, it would now appear desirable to carry out some improvements at Beaconsfield, where accommodation has more than once been taxed to the utmost, and the safety of patients strongly inclined to escape cannot be guaranteed. Additional single rooms and one or more strong rooms should be added, and it would also be advantageous to have a portion of the ground securely fenced. The regulations have been modified so as to reduce the minimum rate of maintenance from £2 to £1 per week, patients being now charged from £1 to £5 weekly, according to their circumstances.

RESULTS.

As far as we have any reliable knowledge the results of the first 46 cases are that 19 were cured, 10 improved,* 4 not known, 1 was sent to another asylum, 2 died since discharge (of ovarian dropsy and ulcer of stomach respectively), and 10 relapsed. The remaining cases (about as many more) are either too recent to form an opinion as yet, or are still connected with the house. The diseases, other than those caused by drunkenness, treated in the asylums were:—Scabies, herpes circinatus, pemphigus, chronic hepatitis, diarrhœa, dysentery, Bright's disease, gout, chronic rheumatism, and conjunctivitis. Of these hepatitis, diarrhœa, and dysentery are very common when patients are first admitted. The others mentioned are only occasional, and there were a number of prescriptions for minor or temporary ailments not worth recording. The skin diseases named were on some of the patients when they came in, and were, of course, discovered at once, showing how careless people even of good position will get in their habits when they give way to intemperance. Notwithstanding the weak condition of many of the patients when they first come in not a single death has yet occurred in the asylum.

It is specially recommended that, if there is any additional legislation for the asylums, it would be advisable to have some clause inserted under which patients who are physically fit for it could be put to some light labour, and principally such as are sent in at the lowest rate, as these are obviously the worst cases, having lost all habits of industry and application. The better paying patients, of course, may be supposed to purchase some immunity from work, but, moreover, as a rule, they are persons sincerely desirous of a cure. It is painful at present to see able-bodied men of all classes spending the entire day in total idleness. There is always enough work that no man may be ashamed to do here, but very few will take to it. Those who have worked hitherto have all, as far as we know, turned out well. The others go out in good bodily health, but with scarcely any improvement in habit of thought.

NORTHCOTE.

The Inebriate Retreat at Northcote, for many years conducted by Dr. McCarthy, was taken over by the Government on the 1st July, 1890. The services of Dr. McCarthy and a few subordinate officers were retained; and the institution was opened for female inebriates unable to contribute towards their maintenance, and its existence and objects made known through the press. Only a few persons have responded by seeking admission. Under the circumstances, the original object having failed, it may be necessary to convert the buildings to another use.

787. The Victorian Asylum and School for the Blind, henceforth to be known as "The Royal Victorian Institute for the Blind," occupies

* "Improved" means that the patient, though not a total abstainer, has, to the best of our knowledge, been temperate up to the present, and continued to work at his profession or business.

a site on the St. Kilda Road, Melbourne, which is valued by the Royal Commission on Charitable Institutions at £13,325. The Commission was of opinion that proximity to the metropolis results in an injurious effect upon discipline and morals, and that the purposes of the institution would be better served if it were removed into the country. The following information respecting this Asylum has been taken from the report of the Committee for the year ending 30th June, 1891:—

At the commencement of the year the number of inmates was 111, and 4 former pupils were then employed as journeymen, making a total of 115. During the year 24 have been admitted, 8 have been discharged, and 2 died. At the close of the year there were 123 inmates and 4 journeymen, making a total of 127 then enjoying the benefits of the institution. The total number received into the institution since its establishment is now 352.

The year commenced with an overdraft of £650 against the maintenance account, and at its close the amount was increased to £1,051. Considering the crisis that the institution has passed through, this may be considered fairly satisfactory. The income of the building fund for the year was £1,273, inclusive of the sum of £833, being a further distribution of the surplus funds in the estate of the late Hon. Francis Ormond, M.L.C., which, with the sum brought forward from the previous year, amounted to £4,773. The disbursements for the year were £7,361, thus leaving an overdraft of £2,588, which, together with that on the maintenance account, makes the total indebtedness £3,639.

The number of pupils in the school at the close of the year was 49, viz., 26 boys and 23 girls. The subjects taught in all the classes by means of the Braille System are reading, writing, arithmetic, geography, spelling, history, grammar, composition, and lessons in the Old and New Testament. A promising matriculation class is in existence, in which, in addition to the ordinary subjects, the following are taught, viz., French, Greek, history, botany, algebra, and physical geography. It is with pleasure that we report that one of the female pupils of this class, aged 17, has been successful in passing the matriculation examination at the Melbourne University. Having been entirely taught in the institution, this achievement reflects great credit on the teaching staff as well as on the pupil herself. By the kind exertions of the members of the Austral Salon, as well as a number of her friends, a special fund has been raised to enable her still further to pursue her studies.

It is intended shortly to send up other pupils for matriculation examinations. The pupils display considerable intelligence, and their progress and general conduct during the year has been very satisfactory.

The number of music pupils under tuition is 56, 5 of whom assist in teaching; 40 are learning the piano, 10 string instruments, 12 wind instruments (who, together with the two drummers, form the brass band), 9 piano tuning, and 7 the organ; 26 also receive special vocal training. The senior choir consists of 23 members, and the junior choir of 24. During the past year 22 concerts and 16 band performances have been given in aid of the funds of the institution, and the aggregate net profit amounted to £427 3s. 1d.

In the Industrial Department 16 of the inmates are taught basket-making, 7 brush-making, 7 mat-making, and almost all the elder female inmates are engaged to some extent with wool-work, etc. The domestic work also is carried on largely by them. The total proceeds of sales for the year were £1,291 5s. 8d. This amount would also doubtless be largely increased had the projected concerts taken place.

788. The Deaf and Dumb Institution also occupies a site on the St. Kilda Road, which is valued by the Commission on Charities at £22,000, and that Commission considers that it might be advantageously removed to the country, where the deaf mutes might and should be taught garden and farm work. The following information

Deaf and
Dumb
Institution.

relating to the institution has been taken from its report for the year 1890-91 :—

The number of pupils on the 1st July, 1890, was 55. Since then 17 have been admitted and 13 discharged, leaving on the roll on 30th June, 1891, 59—viz., 33 boys and 26 girls. The total number of deaf mutes received into the institution since its commencement in the year 1860 is now 308.

Of the 59 pupils now in the institution, 21 are in the oral and 38 in the manual departments. Seven pupils, who have been receiving oral instruction for some time, have been transferred to the manual school on account of their inability to be successfully taught the oral system. The committee have decided that in case of new pupils the advice of the honorary medical officer be obtained as to whether they should be instructed under the manual or oral system.

The health of the inmates has been fairly good. About November last three girls were taken ill, one with rheumatism, one with bronchitis, and the third with hæmorrhage from a lung (this girl died some months after her removal from the institution). In April last a small outbreak of diphtheria occurred, affecting one child very severely, and two or three others but slightly.

The receipts for the past year, including the Government grant of £1,600, amounted in the aggregate to £3,612. The expenditure for the same period was £3,441, viz. :—Building account, £517; maintenance account, £2,924. The liabilities at the close of the year were £269. The endowment fund, which was reported at the last annual meeting to amount to £7,478, has been increased by further bequests received during the year, and now amounts to £8,718. Of this sum, £7,428 has been invested in Victorian Government 4 per cent. stock, £1,000 deposited in the bank, and the balance (£290) is awaiting investment. The interest received from this account during the year amounted to £294, and has been paid over to the maintenance fund.

Eye and Ear
Hospital.

789. The Victorian Eye and Ear Hospital was established with the object of treating a class of diseases which not only are the cause of extreme suffering, but also, where unchecked, produce much helplessness and poverty, arising from deafness and blindness, thus 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. It received 333 in-patients during the year ended 30th June, 1890, making, with 40 in the institution at its commencement, a total of 373 treated. The patients discharged numbered 332, of whom 311 were stated to be cured or relieved, and 10 to be incurable. The number of out-patients during the year was 22,934.

Children's
Hospital.

790. The Melbourne Free Hospital for Sick Children had 55 in-door patients at the beginning of the financial year. During the year ended 30th June, 1890, 825 patients were admitted; and 767 were discharged, 72 died, and 41 remained at its close.

Victorian
Infant
Asylum.

791. The objects of the Victorian Infant Asylum 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 the year ended 30th June, 1890, the number of infants admitted was 58, besides which 52 were under the care of the institution at the commencement of the year. The number who died during the year was 22, and 36 were discharged; thus the number remaining under the control of the institution at the end of the year was 52, of whom 27 were boarded out. Besides the infants, there were 78 mothers in the institution during the year, of whom 61 were discharged, and 17 remained at the close of the year. The receipts during the year amounted to £1,211, of which £250 was from Government, and £961 from private sources; and the expenditure was £1,214.

792. A Humane Society was established in 1874, under the name of "The Victorian Humane Society," for the purpose of circulating information respecting the most effectual methods of, and providing suitable apparatus for, restoring persons apparently drowned or dead, also of bestowing rewards on those who risk their own lives to save those of their fellow-creatures. In April, 1883, Her Majesty's permission having been first obtained, the society assumed the title of "The Royal Humane Society," and in 1885 it was incorporated as "The Royal Humane Society of Australasia." Its objects are stated to be—(1) To bestow rewards on all who promptly risk their own 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 rewards all who, through skill and perseverance, are, under Providence, successful. (4) To collect information regarding the most approved methods and the best apparatus to be used for such purposes. The following information respecting the operations of this society has been supplied by its secretary, Mr. William Hamilton:—

"In 1881, the Hon. Sir W. J. Clarke, Bart., generously presented to the society the sum of £250 for the purpose of founding a gold or silver medal, to be awarded annually to the best case that comes before the society. Since its establishment, it has dealt with 1,017 cases, and made 720 awards. During the year ended 30th June, 1891, 103 applications for awards were investigated, with the result that 58 certificates, 22 bronze medals, 1 silver medal, and the Clarke silver medal, were granted. The receipts during the year amounted to £1,342 6s. 8d., and the expenditure to £610 0s. 2d. The institution has placed and maintains 366 life-buoys at various places on the coast, rivers, lakes, and reservoirs throughout all the Australasian colonies—(its operations extend throughout the Australasian colonies)—and Fiji. Of the honorary awards distributed in 1891, 56 were for deeds of bravery performed

Royal
Humane
Society of
Austral-
asia.

in Victoria, 20 for similar acts in New South Wales, 7 in Queensland, 11 in New Zealand, 4 in Tasmania, and 4 in South Australia. The society has 184 honorary correspondents, residing as follows, viz. :—37 in New South Wales, 30 in New Zealand, 33 in Queensland, 10 in Tasmania, 3 in South Australia, 6 in Western Australia, and 65 in Victoria. Owing to the appointment of these gentlemen and to the awards made by the society appearing to give complete satisfaction throughout the colonies, there is no urgency for forming local branches of the society in the other colonies. The exertions of the society to induce both the Imperial and Australasian Governments to amend the law for the protection of life and property at sea induced the Board of Trade to appoint a Special Committee to consider the subject. The Hon. the Premier, Mr. Duncan Gillies, on the 3rd March, 1887, at the request of the directors, telegraphed to the Hon. the Colonial Secretary to ask him to lay the question before the Imperial Conference. The matter was accordingly brought under the notice of the conference by a memorandum from the Colonial Office, and was ably discussed by the conference. A Select Committee was appointed by the House of Commons, to enquire into the existing laws and regulations regarding boats, life buoys, and other life-saving apparatus to be carried by British merchant ships, and to report what amendments are required, etc. Their report fully endorsed the views which the directors of this society have persistently advocated for the last ten or twelve years. On the 22nd March, 1888, Lord Onslow, the Under Secretary of State for the Colonies, introduced a bill entitled *The Merchant Shipping (Life-saving Appliances) Bill* into the House of Lords, which was passed and sent to the House of Commons, and on the 10th August, 1888, received Her Majesty's assent. The title of the Act is *The Merchant Shipping Act 1888 (Life-saving Appliances)*. Instructions for saving life from drowning, sunstroke, snake-bite, etc., are taught in the State schools throughout the colony, but the directors of this society are urging that something more is now required; and, to give practical effect to their views, the society offers annually the "Queen's Medallion" to the best in any competing school for proficiency in swimming exercise, with reference to saving life; the competition to be open to the scholars at all public and private schools throughout Australasia. Efforts are still being made to induce the Education departments of the other colonies to adopt the plan followed in Victoria by making the instructions for saving life, etc., a part of the curriculum in the public schools."

Health
Society.

793. An Australian Health Society was established in Melbourne in 1875, and still maintains a vigorous existence. It consists of about 400 members, and is managed by a president, two vice-presidents, a treasurer, two secretaries (one being a lady), and fifteen members of council. Its objects are—(1) To create and educate 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 the recognized laws whereby health is maintained and disease is prevented; (3) to seek removal of all noxious influences deleterious to public health, and to influence and facilitate legislation in that direction. To effect these objects, the society issues (*gratis*) pamphlets, tracts, and wall sheets, bearing upon the subject of health and disease; maintains a lending library of specially selected works for the use of members; and arranges for the delivery of public lectures, the annual recurrence of which is considered by many a welcome event, as is evidenced by the large audiences they succeed in attracting. Recently the ladies' committee organized a weekly class

for ladies at Prahran, at which, during seven weeks, lectures were given by Dr. Godfrey Howitt on hygiene generally, including also domestic economy and the abuse of drugs. About fifty attended the class, and thirteen passed a rather severe subsequent examination, and were presented with certificates at the society's half-yearly public meeting. It is intended to hold similar classes and examinations in other suburbs. The receipts of the society for 1889-90 amounted to £153, and the expenditure to about the same amount. No pecuniary aid is received from the Government, the work of the society being carried on by subscriptions ranging from 5s. per annum upwards.

794. A Charity Organization Society has been established in Melbourne, its objects being—(1) Promotion of co-operation in charitable work; (2) direction of the stream of charity to the deserving; (3) discouragement of indiscriminate giving; (4) exposure of sturdy beggars and professional impostors; (5) adequate inquiry before relief, and compilation of records; (6) distribution of immediate relief *in kind* pending arrangements with existing charities; (7) inquiry upon the request of any charitable institution; (8) fostering the establishment of provident dispensaries; (9) encouragement of charitable effort in localities where no suitable societies are in existence. The business of the society is managed by a council empowered to make rules and regulations for the management of the business of the society and for their own government. This council consists of a representative of each of the charities, and of twenty members to be elected at an annual meeting of subscribers of the society. The number of subscribers during the fourth year of the society's existence, which ended on the 30th June, 1891, was 315. The income of the year, excluding an amount of £336 brought forward, was £671, the expenditure £643, and the balance on hand at the end of the financial year was £359. The new cases investigated by the society during the year numbered 501, the result of the inquiry being that 180 were set down as satisfactory, 177 as unsatisfactory, and 144 as doubtful. The society claims to have prevented a large amount of imposture, to have relieved subscribers of the annoying feeling that their benevolence was wasted on unworthy objects, and to have stimulated and 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 recognize natural claims in a community where no legal

Charity Organization Society.

obligation is entailed by relationship other than that of husband to wife, and of parent to infant. The society has rendered important service by organizing intercolonial conferences on charity, which have proved highly successful, both in point of number of delegates attending, in the merit of the papers contributed, and in the value of the suggestions made to the Colonial Legislatures. The society was also prominently before the public last year in connexion with the "unemployed" agitation. It investigated the whole question, at the invitation of the Hon. the Premier of the colony, and claims to have reduced the difficulty to its true dimensions. The principles of the society are spreading, and efforts are being made to establish similar associations in the up-country centres.

795. Since 1873 a society has been in existence in Melbourne 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 necessaries, 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 colony. The society also takes charge of and distributes the sums earned by the prisoners whilst under detention. The number of individuals relieved in 1890-91 was 334. The receipts in the same year amounted to £1,251—viz., £100 grant from Government, £626 from the Penal Department, and £525 from private sources; and the expenditure to £1,233.

796. There are 5 Industrial Schools in the colony, of which 2 are wholly, and 3 partly, maintained by the State; 2 of the latter are in connexion with the Roman Catholic denomination, and 1 is a Servants' Training School. The two Government schools are merely Receiving Depôts, it being the long-established policy of the department to send the children, as soon as possible after they are committed, to foster-homes. The Government Experimental Farm at Dookie* and the Macedon State Nursery were formerly, but are not now, included with the Industrial Schools. The wards of the Department for Neglected Children at the end of 1890 numbered 3,063, viz., 1,749 males and 1,314 females. Of these, only 45 were in the Government Receiving Depôts, and 60 in assisted schools; of the remainder, 1,761 were boarded-out or adopted, 544 were placed with relatives on probation, and 653 were at service. The children committed to the Industrial Schools in 1890 numbered 377, viz.,

* For particulars of this farm, see paragraph 466 *ante*.

Victorian
Discharged
Prisoners'
Aid
Society.

Industrial
Schools.

217 boys and 160 girls. They were placed in the schools for the following reasons:—

	Boys.	Girls.
Neglected	198	159
Having committed a punishable offence	17	1
Uncontrollable	2	...
Total	217	160

797. The number of distinct children who left the control of the Department during the year was 219. These were discharged as follow:—

	Boys.	Girls.
From schools, and boarded-out homes	35	27
From situations, on expiration of term	75	47
Died (in schools, 8; while boarded out, 25; in hospital, 2)	18	17
Total	128	91

Discharges from Industrial Schools.

798. Children, however young, are boarded-out from the Receiving Depôts after a detention of only a few days, the welfare of the boarded-out children being cared for by honorary committees, who send in reports to the Department. The rate paid by the Government to persons accepting charge of the boarded-out children is five shillings per week for each child. The number of such children at the end of 1890 was 1,761, or 111 fewer than at the end of the previous year; and there were besides 544 in 1890, as against 421 in 1889, who were placed with friends on probation, without wages. In addition to these, 653 children at the end of 1890, as against 513 at the end of 1889, were at service or apprenticed.

Children boarded-out, etc., from Industrial Schools.

799. Under the same management and control as the Industrial Schools, there are also 4 Reformatory Schools, 2 of which are Protestant institutions, and 1 a Roman Catholic institution. The other (boys) receives both Protestant and Roman Catholic inmates. These schools are intended for children who have been convicted of crime; and criminal children committed by magistrates to Industrial Schools may be transferred thereto, and, in like manner, children not found to need reformatory restraints may be transferred to the care of the Department for Neglected Children. The number of children belonging to reformatories at the commencement of the year 1890 was 354, and during the year there were 171 new committals, etc., thus making a total of 525. Of these 187 were discharged, viz., 34 at the request of relatives, 150 on expiration of term, and 3 died.

Reformatories.

Inmates of reformatories.

At the end of the year 338 children—208 boys and 130 girls—remained in connexion with the institutions. Of the boys, 67 were in the reformatory at Ballarat, 88 were at service, and 53 were placed with relatives on probation; and of the girls, 18 were in the reformatory at Coburg, 20 were in the assisted reformatory school maintained under the supervision of the nuns at Oakleigh, 22 in the Brookside Protestant school, 67 were at service, and 3 were placed with relatives on probation.

Cost of maintenance of industrial and reformatory children.

800. The Government expenditure for the maintenance of neglected and offending children amounted in 1890 to £41,422, as against which £1,454 was received for maintenance from parents, and £286 was derived from the sale of farm produce, etc., or £1,740 in all, which leaves £39,682 as the net amount expended by Government. The mean number of children maintained was 3,330; and the average net cost of each to the State was thus £11 18s. 4d.

Refuges for fallen women.

801. Of the 902 females who were inmates of Refuges during the year ended 30th June, 1890, 114 were at the Temporary Home at Collingwood; 425 were at the Magdalen Asylum, Abbotsford; 84 at the Melbourne Refuge; 34 at the Ballarat Home; 20 at the Geelong Refuge; 114 at the South Yarra Home; and 111 at the Elizabeth Fry Retreat. Moreover, 58 children were allowed to accompany their mothers to the Melbourne Refuge, 13 to the Ballarat Home, and 5 to the Geelong Refuge, but of the total number 3 died during the year. Five women from the Magdalen Asylum, 10 from the South Yarra Home, and 10 from the Elizabeth Fry Retreat, were discharged for misconduct; and 6 in the Magdalen Asylum died. Besides these numbers, 272 from all the institutions were placed in service or restored to friends, 115 left voluntarily, 18 were sent to other institutions, 1 at the Melbourne Refuge was married, and 24 were otherwise discharged. At the end of the year, the number remaining in the institutions was 441, of whom 309 were in the Magdalen Asylum. The objects of these institutions are (1) To provide a refuge for women who have fallen into vice, and who are desirous to return to the paths of virtue; (2) To reclaim such women from evil courses, and fit them to become useful members of society; (3) To assist in procuring situations for such women, or in otherwise providing for them on leaving the institution. The late Commission on Charities, in their final report, drew attention to the waste of energy and funds, by the existence of sister institutions of this class, as various refuges might readily be worked together with economy and efficiency.

The Commission also considered that the site of the Melbourne Refuge, valued at £10,400, was too prominent and valuable for such a purpose, and that the inmates ought to be removed to the country, where there would be no necessity to place women within prison-like walls, and where an institution might be conducted on home principles, which would tend far more to the reformation of the inmates than the present system.

802. In addition to the hospitals referred to in previous paragraphs, there were two Convalescent Homes, with accommodation for about 64 inmates. The number of inmates at the beginning of the year 1889-90 was 16; 476 were admitted, and 474 were discharged, during the year; and 18 remained at its close. The receipts in 1889-90 amounted to £3,287, of which £300 was from Government; and the expenditure to £9,518, of which £1,439 was for maintenance, and £8,079 for buildings.

803. The Governesses' Institute and Melbourne Home contains 12 sleeping-rooms, having 27,354 feet of cubic space, and makes up 35 beds. The inmates in 1890 numbered 128, of whom 69 were needle-women and servants, and 59 were governesses. The receipts during the year, all from private sources, amounted to £829, and the expenditure to £830.

804. The Melbourne Sailors' Home contains 3 wards, divided into 96 separate rooms, each containing one bed. The total number of cubic feet in the wards is 42,156. The total number of inmates in 1889 was 1,310. No aid was received from Government during the year. The receipts from private sources amounted to £4,497, and the expenditure to £5,371. The objects of the institution are to provide seamen frequenting the port of Melbourne with board and lodging at moderate charges, to encourage them in provident habits, and to promote their professional improvement.

805. Three free dispensaries furnished returns for 1889-90. One of these was a homœopathic institution. The individuals treated during the year ended 30th June, 1890, numbered 5,099, viz., 2,290 males and 2,809 females. The visits to or by these persons numbered 17,941. The total receipts amounted to £722, of which £250 was from Government and £472 from private sources. The total expenditure was £794.

Benevolent
Societies.

806. Forty-six benevolent or philanthropic societies furnished returns for the year ended 30th June, 1890. These associations are for the relief of distressed or indigent persons, and are generally managed by ladies. The names of three of the societies indicate their connexion with the Jewish body, but no distinctive denomination is perceptible in the titles of the others. The persons relieved during the year numbered about 14,800;* the receipts amounted to £16,119, of which £5,683 was from Government and £10,436 from private sources; and the expenditure to £16,118.

Night
Shelters.

807. At Dr. Singleton's Night Shelters, Collingwood, 20,968 cases were accommodated during the year 1890-91, viz., 8,757 of men, 11,599 of women, and 612 of children. The receipts during the year, partly in kind and partly in cash, were equivalent to £800, and the expenses to £689.

Society for
the Protec-
tion of
Animals.

808. The Victorian Society for the Protection of Animals has been established for about 19 years, its object being to prevent cruelty to animals by enforcing the existing laws, by procuring such further legislation as may be found expedient, and by exciting and sustaining an intelligent public opinion regarding man's duty to the lower animals. In 1889-90 the cases dealt with by the society numbered 684, of which 531 were for cruelty to horses; whilst there were 210 prosecutions, which resulted in 194 persons being fined, 5 sent to prison without the option of a fine, and 11 dismissals. The receipts during the year amounted to £435, and the expenditure to £442.

Pauperism
in England
and Wales.

809. There is no poor law in Victoria, nor is one required, as happily pauperism does not exist here in the same sense as in the countries of the old world. The official returns of paupers in England and Wales are stated to be those showing the number of persons relieved exclusive of vagrants, and of pauper inmates of lunatic asylums, registered hospitals, and licensed houses. By the following figures, taken from a return ordered by the House of Commons to be printed, it would appear that, although the proportion of paupers to the population is still large in England and Wales, it has materially diminished of late years:—

* In the case of one Society, the number of families only was returned, viz., 350, and these have been reduced to individuals on the assumption that there were 5 persons to a family.

PAUPERISM IN ENGLAND AND WALES, 1857 TO 1890.

Year.	Estimated Population.	Paupers Relieved in last week of each year.	
		Total Number.	Number per 1,000 of the Population.
1857	19,256,516	936,815	48·6
1862	20,371,013	1,105,234	54·3
1867	21,677,525	980,421	45·2
1872	23,096,495	838,636	36·3
1877	24,699,539	685,218	27·7
1882	26,413,861	740,907	28·0
1887	28,247,151	758,146	26·8
1888	28,628,804	738,388	25·8
1889	29,015,613	715,587	24·7
1890	29,407,649	703,951	23·9

810. Friendly Societies are associations chiefly of working men, whose object is, by means of small periodical payments, to provide for medical and monetary relief in sickness, and for payments to the families of members at the death of themselves and their wives. The following is an abstract of the particulars furnished respecting the Victorian societies for 1878 and the last three years :—

Friendly Societies.

FRIENDLY SOCIETIES.

	1878.	1888.	1889.	1890.
Number of Societies	34	32	32	32
„ Branches	756	930	969	1,003
Average number of members	45,552	75,586	81,710	86,450
Number of members sick	8,207	11,227	12,243	14,806
Weeks for which aliment was allowed	55,289	89,602	99,230	115,906
Deaths of members	467	790	883	925
„ of registered wives	291	383	437	434
Income of sick and funeral fund	£78,863	£149,838	£161,922	£172,434
„ incidental fund*	£83,016	£132,090	£140,085	£147,729
Total income	£161,879	£281,928	£302,007	£320,163
Expenditure of sick and funeral fund	£59,325	£96,027	£101,712	£121,068
„ incidental fund	£80,725	£131,715	£139,929	£147,639
Total expenditure	£140,050	£227,742	£241,641	£268,707
Amount to credit of sick and funeral fund	£372,598	£727,918	£788,128	£839,494
„ „ incidental fund	£16,310	£40,329	£40,485	£40,575
Amount invested—Sick and funeral fund ... ..	...	£675,220	£738,117	£787,775
„ „ Incidental fund ... ..	...	£29,662	£29,997	£30,647
Total invested	£348,703	£704,882	£768,114	£818,422

* This fund is applied to the payment of medical attendance and medicines, and expenses of general management.

Growth of
Friendly
Societies.

811. From the figures in this table it may be ascertained that, whilst during the twelve years ended with 1890 the number of members increased by 90 per cent., and the total annual expenditure by 92 per cent., the total annual income of the sick and funeral fund increased by as much as 119 per cent. ; also that no less a sum than £466,896 was added to the sick and funeral fund in the same period, or an increase of 125 per cent. on the amount (£372,598) standing to its credit at the end of 1878.

Sickness
and Death
Rates.

812. In proportion to the number of effective members of Friendly Societies, the average amount of sickness remains tolerably steady from year to year. The days per effective member for which aliment was allowed numbered 9·9 in 1890, as compared with 8·9 in 1889, and an average of 9·0 during the eight years ended with 1890. The death rate in 1890 was slightly below the average, the deaths per 1,000 members having numbered 10·70 in 1890, as compared with 10·81 in 1889, and 10·93 on an average during the ten years ended with 1890.

Valuations
of Friendly
Societies.

813. Friendly Societies are regulated under the *Friendly Societies Act* 1890 (54 Vict. No. 1,094), as amended by the Act of 1891 (55 Vict. No. 1,232), which, amongst other provisions, prescribes that each society shall furnish returns annually to the Government Statist, and once in every five years shall cause its assets and liabilities to be valued to the satisfaction of the same officer. As, in the event of the valuations being made outside the department of the Government Statist, which was originally contemplated under the Statute, it would probably have been necessary to reject some of them, which would have occasioned delay and caused trouble and expense to the societies, a qualified actuary was some years since appointed to that department, and the valuations are effected by him. 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 very rarely do so, and all the valuations are now made by the departmental actuary, an arrangement which has worked in a most satisfactory manner.*

* For full particulars relating to the valuation and operations of Friendly Societies in Victoria, see Annual Reports of the Government Statist of the Proceedings in connexion with Friendly Societies, published by the Government Printer, Melbourne.

814. In all the Australasian colonies the number of members of Friendly Societies is about 223,000, and they possess funds to the value of over 2 millions sterling, or about £9 13s. per head. The following is a statement of the number of societies, branches, and members, also the total amount of funds to the credit of such societies, in the several colonies, at the latest date for which particulars have been supplied:—

Friendly Societies in Australasia.

FRIENDLY SOCIETIES IN THE AUSTRALASIAN COLONIES.

Colony.	Year.	Number of separate Societies.	Number of Branches.	Number of Members.	Amount of Funds.	Capital per Member.
					£	£ s. d.
Victoria ...	1890	32	1,003	88,134	909,504	10 6 5
New South Wales *	1890	10	652	53,795	394,620	7 6 9
Queensland ...	1889	15	203	15,165	102,914	6 15 9
South Australia ...	1888	9	344	30,289	249,832	8 5 0
Western Australia *	1888	4	17	771	9,301	12 0 2
Tasmania ...	1889	17	89	8,692	59,523	6 17 0
New Zealand ...	1889	13	364	26,013	430,544	16 11 0
Total ...	...	...	2,672	222,859	2,156,238	9 13 5

* Approximate.

APPENDICES

APPENDICES.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

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TABLE II.—Foreign-Born and Foreign-Born in 1891.

District	Foreign-Born		Total
	1881	1891	
Adelaide	1,200	1,500	2,700
Bendigo	800	1,000	1,800
Bremer	500	600	1,100
Geelong	1,000	1,200	2,200
Goldfields	1,500	1,800	3,300
Launceston	600	700	1,300
Melbourne	2,000	2,500	4,500
Perth	400	500	900
Tasmania	300	400	700
Traffalgar	200	300	500
Warrnambool	100	150	250
Wimmeria	100	150	250
Total	10,000	12,000	22,000

The figures in these two columns of the table are the number of persons recorded in the census in 1881 and 1891 respectively.

APPENDIX A.

AUSTRALASIAN STATISTICS, 1890.

TABLE I.—POPULATION, 1890.

(Exclusive of Aborigines, except a few in Victoria and New South Wales.)

Colony.	Area in Square Miles. ¹	Estimated Population ² on 31st December.			Females to 100 Males.	Persons to the Square Mile.
		Males.	Females.	Total.		
Victoria ..	87,884	596,064	537,202	1,133,266	90·12	12·895
New South Wales ..	309,175	609,650	512,210	1,121,860	84·01	3·628
Queensland ..	668,224	222,280	168,800	391,080	75·94	·585
South Australia ³ ..	903,425	166,197	152,948	319,145	92·03	·353
Western Australia ..	975,920	29,459	19,741	49,200	67·01	·050
Total ..	2,944,628	1,623,650	1,390,901	3,014,551	85·66	1·024
Tasmania ..	26,375	76,843	68,447	145,290	89·07	5·509
New Zealand ⁴ ..	104,235	332,557	292,951	625,508	88·09	6·001
Grand Total ..	3,075,238	2,033,050	1,752,299	3,785,349	86·15	1·231

¹ The areas here given, except in the case of New Zealand, are the results of planimetric calculations made in the office of the Surveyor-General, Melbourne. Except in the case of Western Australia, the area of which differs from the official estimate by 84,000 square miles, these results agree closely with the figures furnished officially by the various colonies. The latest official statement of the area of New Zealand, including all islands, is 104,471 square miles. See also *Victorian Year-Book*, 1889-90, Vol. I., page 6.

² The populations in all the colonies have been corrected in accordance with the results of the census taken on 5th April, 1891. The figures for Queensland and Western Australia have been estimated in the office of the Government Statist of Victoria. On the 30th September, 1891, the estimated population of Victoria was 1,153,481, viz., 603,730 males and 549,751 females; that of South Australia, 318,049; and on the 30th June that of New Zealand was 626,830.

³ The population of South Australia is inclusive of that of the Northern Territory, viz., 4,610 males, 340 females, total 4,950, on 31st December; and 4,585 males, 340 females, total 4,925, mean for year. These numbers are estimated from the numbers returned at the census of 5th April, 1891, as follows:—Males 4,615, females 343, total 4,958. In subsequent tables, however, the Northern Territory is, as a rule, not included.

⁴ Maoris are not included. On the 5th April, 1891, these numbered 41,523, viz., 22,633 males and 18,890 females.

TABLE II.—BIRTHS, DEATHS AND MARRIAGES, 1890.

Colony.	Births of—			Deaths of—			Marriages. ¹	Per 1,000 of Mean Population— Number of—			Excess of Births over Deaths.	
	Males.	Fe-males.	Total.	Males.	Fe-males.	Total.		Births.	Deaths.	Mar-riages. ¹	Numeri-cal.	Per cent.
Victoria ..	19,175	18,403	37,578	10,369	7,643	18,012	9,187	33·60	16·10	8·21	19,566	108·63
New South Wales ..	19,887	19,073	38,960	8,282	5,936	14,218	7,876	35·36	12·90	7·15	24,742	174·02
Queensland ..	7,788	7,619	15,407	3,566	2,072	5,638	3,195	39·93	14·61	8·28	9,769	173·27
South Australia ..	5,222	5,142	10,364	2,187	1,736	3,923	2,235	33·27	12·59	7·17	6,441	164·19
Western Australia ..	761	800	1,561	346	194	540	278	32·55	11·26	5·80	1,021	189·07
Total ..	52,833	51,037	103,870	24,750	17,581	42,331	22,771	35·03	14·27	7·67	61,539	145·39
Tasmania ..	2,466	2,347	4,813	1,216	902	2,118	954	33·49	14·74	6·64	2,695	127·24
New Zealand ..	9,293	8,985	18,278	3,474	2,520	5,994	3,797	29·44	9·66	6·12	12,284	204·94
Grand Total ..	64,592	62,369	126,961	29,440	21,003	50,443	27,522	34·04	13·56	7·40	76,518	151·70

¹ The numbers in these two columns doubled give the total number of persons married and the number married in proportion to every 1,000 of the mean population.

TABLE III.—IMMIGRATION AND EMIGRATION BY SEA, 1890.
(As Recorded.)

Colony.	Number of Immigrants.			Number of Emigrants. ¹			Excess of Immigrants over Emigrants. ²		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Victoria.. ..	52,171	27,606	79,777	42,740	21,080	63,820	9,431	6,526	15,957
New South Wales	48,338	22,575	70,913	30,100	15,139	45,239	18,238	7,436	25,674
Queensland ..	17,181	7,283	24,464	13,659	5,158	18,817	3,522	2,125	5,647
South Australia ..	7,432	2,472	9,904	5,060	2,054	7,114	2,372	418	2,790
Western Australia	2,815	752	3,567	1,502	494	1,996	1,313	258	1,571
Total ..	127,937	60,688	188,625	93,061	43,925	136,986	34,876	16,763	51,639
Tasmania ..	18,905	10,612	29,517	16,699	10,371	27,070	2,206	241	2,447
New Zealand ..	9,753	5,275	15,028	10,809	6,001	16,810	-1,056	-726	-1,782
Grand Total	156,595	76,575	233,170	120,569	60,297	180,866	36,026	16,278	52,304 ³

NOTE.—The numbers of assisted and free immigrants were as follow :—Victoria, *nil*; New South Wales, 376; Queensland, 3,253; South Australia, *nil*; Western Australia, 82; Tasmania, 3; New Zealand, 144; total, 3,858.

¹ The figures in these columns generally understate the truth. Many persons leave the colonies by sea without their departure being noted. It is stated, however, that in New Zealand a complete account is now kept.

² In consequence of the emigration returns being defective, as stated in the last footnote, the figures in these columns are too high, except where the minus sign (—) appears, indicating that the emigrants exceeded the immigrants by the number against which it is placed, when the figures are too low.

³ According to Imperial returns, the number of persons who left the United Kingdom for the Australasian colonies in 1890 was 21,570, and the number who returned to the United Kingdom from these colonies was 10,385. The excess in favour of departures was thus 11,185, or little more than one-fifth of the excess of immigrants over emigrants shown in the table.

TABLE IV.—PUBLIC REVENUE, 1890.

(Exclusive of Revenue from Loans.)

Colony.	Public Revenue derived from—					Total Revenue.
	Taxation. ¹	Crown Lands.	Railways.	Post and Telegraphs.	Other Sources.	
	£	£	£	£	£	£
Victoria	3,630,814 ²	579,776	3,134,066	526,400 ²	648,103	8,519,159
New South Wales ..	2,748,339	2,243,039	3,003,728 ³	629,894	873,620	9,498,620 ⁴
Queensland	1,471,983	576,868	799,243	216,605	195,609	3,260,308
South Australia ..	790,177	246,427	1,080,104	212,243	228,821	2,557,772
Western Australia ..	204,405	107,636	45,814	15,787	40,672	414,314
Total	8,845,718	3,753,746	8,062,955	1,600,929	1,986,825	24,250,173
Tasmania	454,431	79,965	102,642	60,101	60,961	758,100
New Zealand	2,173,985 ²	330,956 ⁵	1,143,989	338,315 ²	220,784	4,208,029
Grand Total ..	11,474,134	4,164,667	9,309,586	1,999,345	2,268,570	29,216,202

NOTE.—The figures of revenue and expenditure for Victoria are for the twelve months ended 30th June, but those for the other colonies are for the calendar year. Refunds of revenue, drawbacks, and such similar entries are rigidly excluded from the accounts of revenue and expenditure of Victoria and New Zealand, but are included in those of New South Wales and Queensland, also in those of some of the other colonies. See also Note 4.

¹ The amounts in this column are made up of Customs and Excise duties, including licences imposed for revenue purposes; duties on bank notes; stamps, other than those for fees of office; legacy, succession, and probate duties; property and income taxes; and any other impost, payable to the General Government, levied distinctly as a tax; but excluding fees, and charges for special services rendered. Nearly three-fourths of the taxation in Australasia as a whole is levied by means of Customs duties.

² The proportion of the revenue of Victoria and New Zealand derived from "Taxation" and "Post and Telegraphs" has been roughly estimated, there being no means of obtaining the exact figures.

³ Inclusive of tramways, £277,777; but exclusive of revenue collected for Victoria for traffic beyond Albury, etc., £10,193.

⁴ Including revenue returned to the extent of at least £195,283—viz., £20,686, being repayments to credit of votes; £31,918, for drawbacks and refunds of duty; £10,193, railway revenue collected for the Victorian Government, etc.; and about £132,486 being other revenue returned, etc.

⁵ Inclusive of revenue from gold-fields, £17,616.

TABLE IV.—PUBLIC REVENUE, 1890—continued.

(Exclusive of Revenue from Loans.)

Colony.	Proportion of Revenue derived from—					Amounts per Head.	
	Taxation.	Crown Lands.	Railways.	Post and Telegraphs.	Other Sources.	Total Revenue.	Taxation.
	per cent.	per cent.	per cent.	per cent.	per cent.	£ s. d.	£ s. d.
Victoria ..	42·62	6·81	36·79	6·18	7·60	7 14 5	3 5 10
New South Wales ..	28·93	23·62	31·62	6·63	9·20	8 12 4	2 9 10
Queensland ..	45·15	17·69	24·52	6·64	6·00	8 9 0	3 16 4
South Australia ..	30·89	9·63	42·23	8·30	8·95	8 4 3	2 9 11
Western Australia	49·34	25·98	11·06	3·81	9·81	8 12 10	4 5 3
Total ..	36·48	15·48	33·25	6·60	8·19	8 4 1	2 19 10
Tasmania ..	59·94	10·55	13·54	7·93	8·04	5 5 6	3 3 3
New Zealand ..	51·66	7·86	27·19	8·04	5·25	6 15 7	3 10 0
Grand Total	39·27	14·26	31·87	6·84	7·76	7 17 0	3 1 8

TABLE V.—PUBLIC EXPENDITURE, 1890.

(Exclusive of Expenditure from Loans.)

Colony.	Public Expenditure on—					Total Expenditure.
	Railways (Working Expenses).	Post and Telegraphs.	Interest and Expenses of Public Debt.	Immigration.	Other Services.	
	£	£	£	£	£	£
Victoria ..	2,511,106	709,328	1,548,145	..	4,877,158	9,645,737
New South Wales ..	2,037,168 ¹	648,993	1,895,656	5,916	4,815,829	9,403,562 ²
Queensland ..	631,246	318,951	1,139,035 ³	7,569	1,648,416	3,745,217
South Australia ..	567,663	181,996	753,289	20	1,076,290	2,579,258
Western Australia ..	62,270	36,609	57,614	1,948	243,310	401,751
Total ..	5,809,453	1,895,877	5,393,739	15,453	12,661,003	25,775,525
Tasmania ..	110,227	67,754	223,652	..	321,113	722,746
New Zealand ..	725,332	257,684	1,640,289 ⁴	..	1,458,261	4,081,566
Grand Total ..	6,645,012	2,221,315	7,257,680	15,453	14,440,377	30,579,837

NOTE.—For periods to which the figures relate in each colony, also for remarks in reference to the practice of swelling the returns of some of the colonies by including refunds of revenue, etc., on both sides of the account, see Note to last table on previous page.

¹Inclusive of Tramways, £164,032.

²See footnote (*) to last table on previous page. Treasury Bills repaid, £150,000, are not included.

³Interest only.

⁴Exclusive of charges for the sinking fund (viz., £288,000), formerly charged to revenue, but now met by debentures raised for the purpose.

TABLE V.—PUBLIC EXPENDITURE, 1890—continued.
(Exclusive of Expenditure from Loans.)

Colony.	Proportion of Total Expenditure expended on—					Total Expenditure per Head.
	Railways.	Post and Telegraphs.	Interest and Expenses of Public Debt.	Immigration.	Other Services.	
	per cent.	per cent.	per cent.	per cent.	per cent.	£ s. d.
Victoria ..	26·03	7·36	16·05	..	50·56	8 14 9
New South Wales ..	21·67	6·90	20·16	·06	51·21	8 10 8
Queensland ..	16·86	8·52	30·41	·20	44·01	9 14 2
South Australia ..	22·01	7·06	29·20	..	41·73	8 3 0
Western Australia ..	15·50	9·11	14·34	·49	60·56	8 7 7
Total ..	22·54	7·35	20·93	·06	49·12	8 14 5
Tasmania ..	15·25	9·37	30·95	..	44·43	5 0 7
New Zealand ..	17·77	6·31	40·19	..	35·73	6 11 6
Grand Total ..	21·73	7·27	23·73	·05	47·22	8 4 5

TABLE VI.—EXPENDITURE FROM LOANS, 1890.

Colony.	Expenditure from Loans on—						Total Expenditure from Loans.
	Railways.	Water Supply.	Roads and Bridges.	Harbours, Rivers, Light-houses, etc.	Immigration.	Other Services.	
	£	£	£	£	£	£	£
Victoria ..	2,933,087	796,271	..	9,377	..	15,270	3,754,005
New South Wales ..	1,190,502 ¹	227,401	21,971	220,764	..	480,581	2,141,219 ²
Queensland ..	1,026,665	30,356	8,825	129,094	70,049	213,280	1,478,269
South Australia ..	475,638	189,651 ³	58,561	..	..	168,417	892,267
Western Australia ..	1,353	1,756	..	2,434	..	10,363	15,906
Total ..	5,627,245	1,245,435	89,357	361,669	70,049	887,911	8,281,666
Tasmania ..	1,394,483	..	161,285 ⁴	.. ⁴	..	72,513	1,628,281
New Zealand ..	187,229	1,038	71,371	238	791	138,150	398,817
Grand Total ..	7,208,957	1,246,473	322,013	361,907	70,840	1,098,574	10,308,764

Colony.	Proportion Expended from Loans on—						Expenditure from Loans per Head.
	Railways.	Water Supply.	Roads and Bridges.	Harbours, Rivers, Light-houses, etc.	Immigration.	Other Services.	
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	£ s. d.
Victoria ..	78·13	21·21	..	·25	..	·41	3 8 0
New South Wales ..	55·60	10·62	1·03	10·31	..	22·44	1 18 10
Queensland ..	69·45	2·05	·60	8·73	4·74	14·43	3 16 8
South Australia ..	53·31	21·25	6·56	..	..	18·88	2 16 5
Western Australia ..	8·51	11·04	..	15·30	..	65·15	0 6 8
Total ..	67·95	15·04	1·08	4·37	·84	10·72	2 16 0
Tasmania ..	85·64	..	9·91	..	..	4·45	11 6 7
New Zealand ..	46·95	·26	17·89	·06	·20	34·64	0 12 10
Grand Total ..	69·93	12·09	3·12	3·51	·69	10·66	2 15 5

NOTE.—The figures for Victoria and South Australia relate to the year ended 30th June, and those for the other colonies to that ended 31st December.

¹ Inclusive of Tramways, £56,592.

² Exclusive of £718,000 loans paid off.

³ Including expenditure on Sewerage.

⁴ In Tasmania, the expenditure on harbours, etc., is included with that on roads and bridges.

TABLE VII.—PUBLIC DEBT, 1890.

(On the 31st December.)

Colony.	Public Debt contracted for—							
	Railways and Tramways	Electric Telegraphs.	Water Supply and Sewerage.	Roads and Bridges.	Harbours Rivers, Light-houses, Docks, etc.	School Buildings	Defence Works.	Other Public Works.
	£	£	£	£	£	£	£	£
Victoria	32,156,128	..	6,580,562	108,042	626,019	1,105,557	100,000	766,908
New South Wales	32,571,007	735,493	4,574,848	625,955	2,883,476	148,906	864,581	1,142,289
Queensland	16,401,085	806,824	251,526	853,735	1,822,197	.. ¹	151,584	2,107,908 ²
South Australia*	11,374,903	848,081	3,307,300	1,428,284	1,389,562	680,300 ³	250,645	471,425
West'n Australia	832,498	234,741	7,725	49,680	69,620	..	..	154,262
Total	93,335,621	2,625,139	14,721,961	3,065,696	6,790,874	1,934,763	1,366,810	4,642,792
Tasmania	3,282,252	102,471	..	..⁴	1,655,288 ⁴	120,428	120,868	590,988
New Zealand ⁵	14,104,093	606,648	561,101	3,598,163	881,818	..	429,719 ⁶	2,132,955
Grand Total	110,721,966	3,334,258	15,283,062	6,663,859	9,327,980	2,055,191	1,917,397	7,366,735

Colony.	Public debt contracted for—		Total Public Debt.			Proportion of Total Debt contracted for Railways and Telegraphs. per cent.
	Immigration.	Other Services. ⁷	Amount. ⁸	Average per Head.	Years' Revenue equal to—	
	£	£	£	£ s. d.		
Victoria	..	..	41,443,216	36 11 5	4.86	77.59
New South Wales	569,930	4,308,848	48,425,333	43 3 4	5.11	68.78
Queensland	2,691,775	3,019,050	28,105,684	71 17 4	8.62	61.23
South Australia*	..	1,301,000	21,151,500	66 5 6	8.27	57.79
Western Australia	..	18,918	1,367,444	27 15 10	3.30	78.05
Total	3,261,705	8,747,816	140,493,177	46 12 1	5.79	68.30
Tasmania	235,714	324,791	6,432,800	44 5 6	8.48	52.62
New Zealand ⁵	2,145,150	14,372,703	38,832,350	62 1 8	9.23	37.88
Grand Total	5,642,569	23,445,310	185,758,327	49 1 6	6.36	61.40

NOTE.—The amounts set down are inclusive of Treasury Bills, viz. :—£2,373,884 for New South Wales, £397,336 for Queensland, £750,000 for South Australia, and £403,850 for Tasmania. The figures for New Zealand relate to the 31st March, 1891. On the 30th June, 1891, the Public Debt of Victoria was £43,610,265. Moreover, since the end of 1890, New South Wales has increased her debt by £150,000; Queensland by £2,500,000; South Australia by £481,800; Western Australia by £250,000; and Tasmania by £287,150.

* Including the Northern Territory.

¹ Included with other public works.

² Including £1,265,588, loans to local bodies, chiefly for Waterworks, Roads and Bridges.

³ Including other buildings.

⁴ The amount for Roads and Bridges is included with that for Harbours, etc.

⁵ The figures set down as showing the objects for which the Public Debt of New Zealand was contracted represent the net expenditure out of the "Public Works Fund" since 1870—the date of the first Immigration and Public Works Loan—which is the only existing record of the loan expenditure; it is, however, stated that, besides loan moneys, receipts in aid from Stamp Duties, etc., contributed somewhat towards the total sum so expended. The balance required to make up the total debt at the end of 1890 has been included under "Other Services."

⁶ In New Zealand, a portion of the expenditure on "Defences" is included under the head of "Harbours," etc., and a portion is under the head of "Other Services."

⁷ Included in this column, besides the Treasury Bills referred to in the note *supra*, are the following items :—New South Wales, £49,855 on account of public works in Queensland, when it formed part of New South Wales; South Australia, £591,000 for public works for Northern Territory; New Zealand, £1,254,493 for land purchases (presumably from the Maoris) and rates on native lands, and £1,021,472 for charges and expenses of raising loans; also the following amounts, which had been unapportioned or unexpended :—New South Wales, £1,885,109; Queensland, £2,621,714; Western Australia, £14,620; New Zealand, £11,853,068. The last amount includes the old provincial loans of New Zealand (prior to the abolition of provinces in 1876), and loans not accounted for, as well as the unspent balance of loan moneys.

⁸ As a set-off against the public debt, New Zealand possesses an accrued sinking fund amounting, on the 31st March, 1891, to £1,473,193; the net liability of that colony was, therefore, £37,359,157, or £59 14s. 6d. per head of population, equal to 9 times the revenue. The sinking funds possessed by the other colonies are comparatively small, consisting of the following amounts :—Victoria, £156,000; Western Australia, £85,106; Tasmania, £124,804.

TABLE VIII.—IMPORTS AND EXPORTS, 1890.

Colony.	Total Value of—		Value per Head of—		Exports of Home Produce.	
	Imports.	Exports.	Imports.	Exports.	Value per Head.	Percentage of Total Exports.
	£	£	£ s. d.	£ s. d.	£ s. d.	
Victoria	22,954,015	13,266,222	20 10 5	11 17 3	9 4 0	77·58
New South Wales	22,615,004	22,045,937	20 10 6	20 0 2	15 12 10	78·17
Queensland ..	5,066,700	8,554,512	13 2 8	22 3 6	21 16 1	98·34
South Australia ..	8,262,673	8,827,378	26 10 6	28 6 9	14 3 2	49·96
Western Australia	874,447	671,813	18 4 9	14 0 3	13 15 2	98·19
Total	59,772,839	53,365,862	20 3 1	17 19 11	13 16 7	76·84
Tasmania	1,897,512	1,486,992	13 4 0	10 6 11	9 19 1	96·22
New Zealand ..	6,260,525	9,811,720	10 1 8	15 16 1	15 3 9	96·10
Grand Total	67,930,876	64,664,574	18 4 3	17 6 9	13 18 1	80·21

Colony.	Proportion of Total Imports from—			Proportion of Total Exports to—		
	The United Kingdom.	The Australasian Colonies.	Other Countries.	The United Kingdom.	The Australasian Colonies.	Other Countries.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Victoria	41·86	37·14	21·00	51·63	30·64	17·73
New South Wales	38·15	48·56	13·29	30·04	51·19	18·77
Queensland ..	41·84	50·62	7·54	27·65	71·37	·98
South Australia ..	30·06	58·14	11·80	48·67	40·02	11·31
Western Australia	47·48	41·38	11·14	49·89	28·05	22·06
Total	38·90	45·57	15·53	38·36	47·17	14·47
Tasmania	35·88	60·83	3·29	21·74	78·22	·04
New Zealand ..	67·43	17·37	15·20	75·43	16·66	7·91
Grand Total	41·45	43·40	15·15	43·60	43·26	13·14

NOTE.—There is reason to believe that both imports and exports are over-valued in most of the colonies. See Report to *Australasian Statistics*, 1884.

TABLE IX.—SHIPPING, 1890.

Colony.	Inwards.		Outwards.		Total.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Victoria	2,474	2,178,551	2,459	2,184,790	4,933	4,363,341
New South Wales	2,889	2,413,247	2,777	2,348,625	5,666	4,761,872
Queensland ..	616	468,607	606	442,172	1,222	910,779
South Australia ..	1,041	1,075,133	1,081	1,115,309	2,122	2,190,442
Western Australia	281	484,534	267	420,327	548	904,861
Total	7,301	6,620,072	7,190	6,511,223	14,491	13,131,295
Tasmania	746	475,618	763	475,629	1,509	951,247
New Zealand ..	744	662,769	745	649,705	1,489	1,312,474
Grand Total	8,791	7,758,459	8,698	7,636,557	17,489	15,395,016

TABLE X.—GOVERNMENT RAILWAYS, 1890.

Colony.	Gauge.	Capital Cost ¹ of Lines Open for Traffic at End of Year. Derived from—			
		Loans.	General Revenue.	Total.	
				Amount.	Average per Mile Open.
	ft. in.	£	£	£	£
Victoria	5 3	29,690,520	2,897,855	32,588,375	13,188
New South Wales	4 8½	30,555,123	..	30,555,123	14,003
Queensland	3 6	13,606,385	320,300	13,926,685	6,594
South Australia ²	{ 5 3 } { 3 6 }	9,826,964	475,508	10,302,472	6,399
Western Australia	3 6	832,498	69,000	901,498	4,553
Total .. .. .	..	84,511,490	3,762,663	88,274,153	10,297
Tasmania ³	3 6	2,886,058	14,304	2,900,362	8,263
New Zealand	3 6	14,278,586	?	14,278,586	7,752
Grand Total .. .. .	..	101,676,134	3,776,967	105,453,101	9,795

Colony.	Gross Receipts.				Net Receipts.	
	Percentage Derived from—		Total.		Total.	Percentage of Capital Cost. ⁵
	Coaching Traffic. ⁴	Goods and Live Stock Traffic.	Amount.	Average per Train Mile.		
			£	d.	£	
Victoria	53·68	46·32	3,131,866	63·84	999,708	3·24
New South Wales	40·25	59·75	2,633,086	78·90	967,251	3·20
Queensland	38·53	61·47	849,868 ⁶	54·57	231,070	1·71
South Australia ²	30·31	69·69	1,043,878	75·82	514,873	5·03
Western Australia	*	*	45,814	*	-14,430 ⁷	-1·60 ⁷
Total	44·20*	55·80*	7,704,512	68·93*	2,698,472	3·15
Tasmania ³	63·38	36·62	106,232	46·13	20,012	1·04
New Zealand	35·00	65·00	1,121,701	93·00	420,998	2·99
Grand Total	43·26*	56·74*	8,932,445	70·45*	3,139,482	3·09

Colony.	Working Expenses.							
	Percentage expended on—					Total. ⁸		
	Traffic.	Locomotive Power.	Carriages and Waggon.	Maintenance of Way and Works.	General.	Amount.	Percentage of Receipts.	Per Train Mile.
					£		d.	
Victoria	35·82	35·82	6·04	20·32	5·18	2,132,158	68·08	43·46
New South Wales	27·32	27·32	9·52	26·53	4·68	1,665,835	63·27	49·92
Queensland	21·68	21·68	8·50 ⁹	45·92	1·97	618,798	72·81	39·73
South Australia ²	26·27	26·27	6·80	27·53	4·38	529,005	50·68	38·42
Western Australia	48·54	48·54	8·44 ⁹	18·23	3·04	60,244	131·50	*
Total	30·39	30·39	7·61	26·29	4·50	5,006,040	64·97	44·79*
Tasmania ³	20·31	20·31	9·46 ⁹	40·83	5·00	86,220	81·16	37·44
New Zealand	27·61	27·61	9·45	34·44	3·94	700,703	62·47	58·09
Grand Total	29·90	30·30	7·86	27·49	4·45	5,792,963	64·84	45·45*

NOTE.—For footnotes, see page 475 post.

TABLE X.—GOVERNMENT RAILWAYS, 1890—continued.

Colony.	Miles Open.			Rolling Stock.				
	At End of Year.		Average.	Loco- motives.	Coach- ing Vehicles	Goods and Live Stock Vehicles.	Total.	
	Total.	Per 1,000 Inha- bitants.					Number	Average per Mile Open.
Victoria	2,471	2·21	2,329	430	1,119	7,336	8,885	3·60
New South Wales ..	2,182	1·98	2,177	489	1,064	9,304	10,807	4·96
Queensland	2,112	5·47	2,060	230	376	3,565	4,171	1·97
South Australia ² {	503	5·17	1,587	202	300	5,160	5,662	3·52
	1,107							
Western Australia ..	198	4·02	198	*	*	*	*	*
Total	8,573	2·89	8,351	1,301	2,859	25,365	29,525	3·44
Tasmania ³	351	2·41	250½	42	179	820	1,041	2·97
New Zealand	1,842	2·90	1,826	270	614	8,068	8,952	4·86
Grand Total	10,766	2·88	10,427½	1,613*	3,652*	34,253*	39,518*	3·67*

Colony.	Traffic.							
	Train Mileage.		Passenger Journeys.			Goods and Live Stock.		
	Total.	Per Head.	Number. ¹⁰	Average per—		Tons Carried.	Average Ton- nage per—	
				Mile Open.	Train Mile.		Mile Open.	Train Mile.
Victoria	11,773,152	10·67	58,951,796	25,313	5·01	4,170,436	1,790	·35
New South Wales ..	8,008,826	7·40	16,505,451	7,582	2·06	3,788,950	1,740	·47
Queensland	3,738,004	9·82	4,050,739	1,966	1·08	855,001 ¹¹	415	·23
South Australia ² ..	3,304,364	10·62	5,069,743	3,195	1·53	1,229,955	775	·37
Total *	26,824,346	9·32	84,577,729	10,374	3·15	10,044,342	1,232	·37
Tasmania ³	552,689	3·71	499,590	1,998	·90	141,327 ¹¹	565	·26
New Zealand	2,894,776	4·65	4,664,353	2,554	1·61	2,134,023	1,169	·74
Grand Total *	30,271,811	8·31	89,741,672	8,774	2·97	12,319,692	1,204	·41

NOTE.—The figures for all the colonies, except Western Australia, Tasmania, and New Zealand, relate to the year ended 30th June, 1890; those for the two former being for the calendar year 1890, and those for the latter for the year ended 31st March, 1891. For footnotes, see next page.

TABLE X.—GOVERNMENT RAILWAYS, 1890—continued.

* Exclusive of Western Australia, for which the figures are not available.

¹ The amounts included in these columns generally represent the actual expenditure on construction, irrespective of the cost of floating loans, and without regard to the deficiencies below or the premiums received above the nominal amounts of loans contracted for railway purposes by the different colonies.

² Exclusive of Palmerston Line, Northern Territory, 146 miles, on a 3 ft. 6 in. gauge, opened for traffic on the 1st October, 1889. The returns for the nine months were as follow:—Cost (including interest during construction and expenses of floating loans), £1,081,480; working expenses, £14,880, or £1,943 in excess of gross receipts; number of passengers, 4,567; goods and live stock, 2,120 tons; train mileage, 28,446; rolling stock, 147 (including 7 locomotives). Of the receipts for South Australia (Proper), as much as £383,681 was derived from the Broken Hill Line.

³ Including the Tasmanian Main Line, 122 miles, from the 1st October, 1890, when it was obtained by the Government at a total cost (including purchase money, expenses of litigation, etc.) of £1,135,968. The returns for this line, therefore, relate to only three months, during which period the gross earnings were £23,279, working expenses £16,508, and net earnings £6,771. For the whole year, however, the gross earnings amounted to £87,308, the working expenses to £82,481, and the net earnings to only £4,827.

⁴ Including Passengers, Parcels, Horses, Carriages and Dogs, Mails, Rents, and Miscellaneous.

⁵ The calculations in this column are based on the average capital cost, as follows:—Victoria, £30,857,000; New South Wales, £30,197,100; Queensland, £13,488,800; South Australia, £10,234,750; Western Australia, £900,320; Tasmania, £1,941,100; New Zealand, £14,089,270.

⁶ Including £71,032, which, although not actually received, is credited for non-paying traffic, viz., £66,314 under "Coaching," and £4,718 under "Goods"—£46,373 being for services rendered to the Post and Telegraph Department.

⁷ The minus sign (–) indicates a net loss, or excess of working expenses over receipts.

⁸ Including compensation, paid as follows:—Victoria, £26,718; New South Wales, £10,885.

⁹ Estimated.

¹⁰ The number of passenger journeys have been carefully computed for all the colonies on the following uniform basis:—There has been allowed 720 journeys for each yearly, 360 for each half-yearly, 180 for each quarterly, 60 for each monthly, 2 for each return, and 1 for each single ticket issued to adults and youths; and one-half of those numbers respectively for tickets issued to boys and girls. No allowance has been made for free passes issued, nor have 533,790 free journeys made by school children in New Zealand been included; whilst the figures for South Australia are also exclusive of journeys on yearly and half-yearly *contract* tickets available for all lines. The numbers given differ in many cases from those returned by the various colonies, which are not compiled in a uniform manner. From the Victorian Railway figures 12,107,144, added for journeys on single tickets over more than one system, have been deducted. In comparing the traffic in Victoria and New South Wales the large metropolitan tramway traffic in these colonies must also be taken into account.

¹¹ Exclusive of live stock.

PRIVATE RAILWAYS.—In addition to Government lines, there were also private lines, as follow, in the colonies named:—New South Wales, 81 miles; South Australia, 18; Western Australia, 326; Tasmania, 48; New Zealand, 114 miles.

TRAMWAYS.—These are not included in the foregoing table. On the 30th June, 1891, there were in Victoria 45½ miles of metropolitan and suburban street tramways (chiefly cable), constructed by a municipal trust at a cost of £1,588,706, but leased to a company, which works the lines, the receipts from which in 1890-91 amounted to £562,540, and the passengers carried thereon numbered 48,045,000; there were also 13 miles of other suburban tramways, belonging to public companies; in New South Wales, 42½ miles of street tramways (chiefly steam), constructed by the Government at a cost of £1,004,212, the gross receipts for the year being £292,850, the working expenses £239,679, and the estimated number of passengers carried (allowing 2½d. for each) 22,033,000; in Queensland, 23½ miles, including 8¼ of street lines; and in Western Australia, 8 miles of Government lines, and about 100 constructed by timber companies. There are other lines in the colonies named, but of less importance.

GOVERNMENT RAILWAYS, 1890-91.

Colony.	Length Open.	Capital Cost.	Gross Receipts.	Working Expenses	Net Receipts.	Percentage of Net Revenue to Mean Capital Cost
	Miles.	£	£	£	£	£
Victoria	2,763	35,518,871	3,298,567	2,310,645	987,922	2.90
New South Wales	2,182	31,768,617	2,974,121	1,831,371	1,143,050	3.67
Queensland	2,195	14,226,070	908,704	645,597	263,107	1.87
S. Australia (Proper)	1,666	11,398,839	1,223,999	617,179	606,820	5.59
„ (Northern Territory)	146	1,145,540	15,310	13,910	1,400	.13

TABLE XI.—POSTAL RETURNS, 1890.

Colony.	Number of Post Offices.	Number passing through the Post Office (counted once).				Revenue. ²	Expenditure ³ (Post and Telegraph).
		Letters and Post Cards.		Newspapers. ¹			
		Total.	Per Head of Population.	Total.	Per Head of Population.		
Victoria	1,671	62,526,448	55·90	22,729,005	20·32	£ 488,278 ⁴	£ 626,984
New South Wales ..	1,338	57,707,900	52·37	40,597,200	36·84	637,795	648,993
Queensland	892	14,709,504	38·13	11,463,726	29·71	223,980	326,453
South Australia ..	609	16,794,679	53·92	9,460,075	30·37	212,243	181,996
Western Australia ..	186	3,175,651	66·23	2,135,906	44·54	27,157	36,609
Total	4,696	154,914,182	52·12	86,385,912	29·13	1,589,453	1,821,035
Tasmania	315	5,172,824	35·99	4,941,571	34·38	72,553	64,920
New Zealand	1,058	22,877,320	36·85	11,137,846	17·94	338,315	257,684
Grand Total	6,069	182,964,326	48·92	102,465,329	27·47	2,000,321	2,143,639

NOTE.—The Postal returns do not appear to have been previously compiled in a uniform manner. Great care has, however, been taken on the present occasion to render the figures as comparable as possible. The numbers given for newspapers and packets represent those posted in the colony (counted once—some colonies having previously counted them twice), added to those received from abroad. Owing to the difficulties of distinguishing telegraphic from postal revenue and expenditure, they are now, for the first time in these Statistics, shown in a combined form.

¹ Subject to certain regulations and restrictions, newspapers posted in New South Wales, Queensland, and Tasmania, travel free to any of the Australasian Colonies, and in Western Australia they travel free to places within the colony itself. In the other colonies a small postage fee is charged on newspapers.

² Including commission on money orders. The revenue for New South Wales also includes £25,477 for postage on letters, and £22,195 for telegrams O.H.M.S.; but the values of Government correspondence, apparently not charged for in the case of some of the other colonies, were as follow:—Victoria, about £64,000 for letters, and £5,891 for telegrams; Queensland, £46,342 for telegrams; New Zealand, £33,000 for letters, and £26,071 for telegrams. In other cases the information was not available.

³ Exclusive of interest on Savings' Banks Deposits.

⁴ The revenue is made up of Postal revenue (roughly estimated), £290,000; Parcels Post, £8,238; Commission on Money Orders, £14,263; Telegraph and Telephones, £175,777. The expenditure includes cost of printing books, forms, and stamps by the Government Printer; but is exclusive of expenditure on buildings and on construction and maintenance of telegraph lines, which, it is believed, is also excluded in the case of all the other colonies.

TABLE XII.—ELECTRIC TELEGRAPHS AND TELEPHONES, 1890.

Colony.	Telegraphs.				
	Number of Miles open at end of the Year. ¹		Telegrams Transmitted.		
	Line.	Wire.	Paid.	Unpaid.	Total.
Victoria	6,958	13,499	3,032,892	81,891	3,114,783
New South Wales	11,231	25,880	3,592,519	..	3,592,519
Queensland	9,830	17,437	985,190	212,430	1,197,620
South Australia	5,526	10,208	*	*	1,061,756 ²
Western Australia	2,921	3,469	*	*	177,364
Total	36,466	70,493	*	*	9,144,042
Tasmania	2,104	3,060	247,731	55,865	303,596
New Zealand	5,060	12,771	1,734,381	226,780	1,961,161 ³
Grand Total	43,630	86,324	*	*	11,408,799

Colony.	Telegraphs (contd.).	Telephones and Private Wires.			
	Net Amount Received.	Number of Public Exchanges.	Miles of Wire.	Number of Subscribers—Exchange and Other.	Amount Received.
Victoria	£ 138,969	9	7,898 ⁴	2,307	£ 36,808
New South Wales	186,425	*	5	*	7,282
Queensland	88,574	*	*	*	4,406
South Australia	100,752 ⁵	*	1,970	*	* ⁵
Western Australia	10,891	2	517	106	806
Total	525,611	*	*	*	49,302
Tasmania	27,615	3	382	646	3,179
New Zealand	89,508 ³	14	2,036	2,384	21,189
Grand Total	642,734	*	*	*	73,670

NOTE.—The form of this Table differs from that adopted in previous years, as it has been discovered that the particulars previously furnished by the different colonies were not strictly comparable. The extent open now embraces, besides cables worked by companies, not only lines under the control of the Postal Department, but also those managed by the Railway authorities, which, although largely availed of by the public, were not in all cases taken into account. According to the plan followed in some colonies, the telegrams refer to those *transmitted* only, those *received* from places outside each colony being excluded. It is questionable, however, whether it would not be better to uniformly include those received from abroad in all the colonies. An attempt has been made, which is only partially successful, to separate telephone from telegraph lines, and to show the extent to which telephones are employed in the various colonies.

* Where asterisks occur, the information has not been furnished, or is incomplete.

¹ Including Railway Telegraphs, as follow:—Victoria—line 2,958, wire 4,779; New South Wales, line 2,182 (the lines belong to Postal Department); Queensland, length not stated; South Australia—line 107, wire, 1,942; Western Australia, length not stated; Tasmania—line 362, wire, 417; New Zealand, length not stated. Telephone line and wire are excluded, except in the case of New South Wales. Cables worked by public companies are included, as follow:—Tasmania, 359 miles; New Zealand, 202 miles.

² Including international telegrams of other colonies, viz., 28,834 outward and 27,803 inward telegrams.

³ Exclusive of business of Cable Company.

⁴ Including 794 miles used solely for railway purposes.

⁵ Included with telegraph wire.

⁶ In the case of South Australia the telegraph revenue includes telephone revenue.

TABLE XIII.—CROWN LANDS ALIENATED AND IN PROCESS OF ALIENATION, 1890.

Colony.	Sold by Auction, Private Contract, etc.			Selected under System of Deferred Payments. ¹	Granted without Purchase.	Total Extent Wholly or Conditionally Alienated.
	Area.	Amount of Purchase Money.	Average Price per Acre.			
	acres.	£	£ s. d.	acres.	acres.	acres.
Victoria ..	12,883	88,758	6 17 9	99,307	195	112,385
New South Wales ..	83,650	194,625	2 6 6	632,178	2,416	718,244
Queensland ..	23,193	72,101	3 2 2	315,433 ²	339	338,965 ²
South Australia ..	1,951	3,995	2 0 11	..	26,230	28,181
Western Australia ..	228,481	32,842	0 2 10 ³	74,830	1,610,287 ⁴	1,913,598
Total ..	350,158	392,321	1 2 5	1,121,748	1,639,467	3,111,373
Tasmania ..	572	8,454	14 15 7	42,987	217	43,776
New Zealand ..	98,479	108,959	.1 2 2	39,106	135,763 ⁵	273,348
Grand Total ..	449,209	509,734	1 2 8	1,203,841	1,775,447	3,428,497

Colony.	Up to the end of 1890.—Extent—			At the end of 1890.—Extent—	
	Alienated in Fee Simple. ⁶		In Process of Alienation under System of Deferred Payments. ⁷	Alienated or in Process of Alienation.	Neither Alienated nor in Process of Alienation.
	Sold.	Granted without purchase.			
	acres.	acres.	acres.	acres.	acres.
Victoria ..	16,076,720	15,160	6,267,174	22,359,054	33,886,706
New South Wales ..	23,156,956	3,121,077	18,480,118	44,758,151	153,113,849
Queensland ..	10,191,163	67,494	2,057,963 ⁸	12,316,620	415,346,740
South Australia ..	7,429,061	435,354	4,479,107 ⁸	12,343,522	565,848,478
Western Australia ..	5,154,673	*	441,037	5,595,710	618,993,090
Total ..	62,008,573	*	31,725,399	97,373,057	1,787,188,863
Tasmania ..	*	*	*	4,695,022	12,184,978
New Zealand ..	13,224,517	6,442,399 ⁹	515,323	20,182,239	46,528,081 ¹⁰
Grand Total ..	75,233,090	6,442,399	32,240,722	122,250,318	1,845,901,922

* Where asterisks occur the information has not been furnished or cannot be completed.

¹ The purchase money for selected land varies in the different colonies from 10s. to 30s. per acre, payable by annual instalments (generally without interest) extending over a period of 10 or 20 years. For particulars of the terms and conditions under which such land is acquired, see Part "Production," *ante*.

² Land alienated in fee-simple only. See also footnote (⁸) *infra*.

³ This low average is explained by the circumstance that a large portion of the purchase money was previously paid as rent. The price of rural land is 10s. per acre.

⁴ Chiefly Great Southern Railway grant.

⁵ Of this area 28,815 acres were granted to Natives, or Europeans who purchased from them, under Native Land Acts.

⁶ Including only that of which the purchase has been completed.

⁷ Exclusive of the extent estimated to have been forfeited for non-fulfilment of conditions, etc., except in the case of Western Australia.

⁸ Including land held under leases with right of purchase on certain conditions, viz., 1,270,492 acres in Queensland, and over 1,313,000 acres in South Australia.

⁹ These figures relate partly to lands in respect to which Crown grants have been issued either to the original Maori possessors, or to Europeans or Maoris who have purchased from them, under certain Native Land Acts.

¹⁰ Of this extent, about 14,000,000 acres belong to the Maoris, or to Europeans who have purchased from them; and 798,571 acres were held under "Perpetual Lease."

TABLE XIV.—STATE PRIMARY EDUCATION, 1890.

Colony.	At the end of 1890.				Gross Enrolment of Scholars during 1890.		
	Number of State Schools.	Number of Teachers.			Males.	Females.	Total.
		Males.	Females.	Total.			
Victoria ..	2,170	1,845	2,863	4,708	129,932	120,165	250,097
New South Wales ..	2,423	2,087	2,094	4,181	115,368	106,496	221,864
Queensland ..	621	726	813	1,539	38,731	34,544	73,275
South Australia ..	551	395	672	1,067	25,556 ¹	23,637 ¹	49,193
Western Australia ..	101 ²	50	129	179	2,548	2,466	5,014
Total ..	5,866	5,103	6,571	11,674	312,135	287,308	599,443
Tasmania ..	240	195	274	469	9,854	8,302	18,156
New Zealand ..	1,200	1,301	1,677	2,978	81,666 ¹	75,360 ¹	157,026
Grand Total	7,306	6,599	8,522	15,121	403,655	370,970	774,625

Colony.	Scholars in Average Daily Attendance during the Year.			Estimated Number of Distinct Children Attending during the Year.	Expenditure on State Education. ³			Cost of Instruction per head of—	
	Total Number	Number to each Teacher	Percentage of Scholars on the Rolls.		Amount contributed by—		Total.	Mean Population.	Scholars in Average Attendance.
					State. ⁴	Parents, etc., in Fees.			
Victoria ..	133,768	28	53.49	204,497	£ 705,467	£ 2,361 ⁵	£ 707,828	£ s. d. 0 12 8	£ s. d. 5 5 10
New South Wales ..	116,665	28	52.58	195,241	481,992	71,827	553,819	0 10 1	4 14 11
Queensland ..	40,836	27	55.73	64,563 ¹	167,139	..	167,139	0 8 8	4 1 10
South Australia ..	27,551	26	56.01	44,804	89,454	24,491	113,945	0 7 4	4 2 9
Western Australia ..	3,818	21	76.15	5,014	10,311	1,377 ⁶	11,688	0 4 11	3 1 3 ⁷
Total	322,638	27	53.82	514,119	1,454,363	100,056	1,554,419	0 10 6	4 16 4
Tasmania ..	8,898	19	49.01	12,640	33,226	9,825	43,051	0 6 0	4 16 9
New Zealand ..	94,632	32	60.27	122,521	354,089	3,003 ⁸	357,092	0 11 6	3 15 6
Grand Total	426,168	28	55.02	649,280	1,841,678	112,884	1,954,562	0 10 6	4 11 9

NOTE.—The State system of education is compulsory and undenominational (or secular) in all the colonies, and Western Australia is now the only colony which grants assistance to denominational schools. Public instruction is free in Victoria, Queensland, and New Zealand; but fees are charged in the other colonies, although they are partially or entirely remitted in cases where the parents are unable to pay them. The prescribed school age differs in the various colonies—in Victoria it is from 6 to 13 years; in New South Wales and Western Australia, from 6 to 14; in Queensland, from 6 to 12; in South Australia, Tasmania, and New Zealand, from 7 to 13. For further particulars relating to the educational systems of the various colonies, see Part "Social Condition," ante.

¹ Estimated.
² Including 19 assisted schools.
³ This represents the cost of State (Primary) Education, including expenditure on Head Office, staff, and inspection, but exclusive only of expenditure on buildings (either for repairs or erection) and rent. In the case of New Zealand, however, rent is included, as the amount could not be ascertained.
⁴ Portions of the amounts in this column are derived from Education Reserves, etc., viz., about £10,400 in South Australia, and £33,772 in New Zealand.
⁵ For extra subjects.
⁶ Exclusive of amounts received by assisted schools, which were not returned.
⁷ In Government schools only. The average amount also paid by the State to assisted schools was £1 7s. 7½d.
⁸ In the figures for New Zealand, amounts received by Boards from local sources, and sums raised locally by School Committees, are also included.

TABLE XV.—AGRICULTURAL STATISTICS, 1890-91.—LAND IN CULTIVATION.

** The Agricultural Statistics in most of the colonies are collected in the months of February and March in each year. The present returns are for those months of 1890. In calculating the rates of tillage per head, the population on the 31st December, 1890, has been taken.

Colony.	Number of Acres under Tillage.	
	Total.	Per Head of Population.
Victoria	2,652,768	2.34
New South Wales	1,498,835	1.34
Queensland	239,618	.61
South Australia	2,649,098	8.50
Western Australia	122,032	2.54
Total	7,162,351	2.38
Tasmania	517,174	3.56
New Zealand ⁶	1,636,179	2.62
Grand Total	9,315,704	2.46

Colony.	Number of Acres under—									
	Wheat.	Oats.	Barley.	Maize.	Other ¹ Cereals.	Pota- toes.	Hay.	Vines.	Green Forage. ²	Other Tillage. ³
Victoria	1,145,163	221,048	87,751	10,357	26,940	53,818	413,052	20,686	245,332	428,621
New South Wales	333,233	14,102	4,937	191,152	923	19,406	175,242	8,044	422,977	328,819
Queensland	10,390	411	584	99,400	469*	8,994	31,106	1,981	9,546	76,737
South Australia	1,673,573	12,475	14,472	..	4,358	6,626	345,150	9,535	28,780	554,129
West. Australia	33,820	1,934	5,322	81	501	510	23,183	1,023	161	55,497
Total	3,196,179	249,970	113,066	300,990	33,191	89,354	987,733	41,269	706,796	1,443,803
Tasmania	39,452	20,740	4,376	..	10,142	20,133	45,381	30	202,557	174,363
New Zealand	301,460	346,224	32,740	5,759	17,146	32,691	44,045	.. ⁵	607,695 ⁶	248,419
Grand Total	3,537,091	616,934	150,182	306,749	60,479	142,178	1,077,159	41,299	1,517,048	1,866,585

NOTE.—Land in fallow is included in the total area under tillage in all the colonies; but land under permanent artificial grasses is not included in Queensland, Western Australia, and New Zealand. See also Notes 2, 3, and 6.

¹ Including beans and pease, except in the case of New South Wales.

² In addition to crops sown for the purpose of being cut green for cattle, this column contains the following areas laid down in permanent artificial grass in the colonies named:—Victoria, 235,241 acres; New South Wales, 385,504 acres; South Australia, about 30,000 acres; Western Australia, only small area; Tasmania, 201,060 acres. In Queensland, where it is not so included, the area returned is 22,252 acres. For extent of such land in New Zealand, see Note 6.

³ This column embraces land in fallow as well as land under crop. The following are the areas in fallow included in the returns of such colonies:—Victoria, 385,572 acres; New South Wales, 260,627 acres; Queensland, 14,625 acres; South Australia (approximate), 540,000 acres; Western Australia, 52,356 acres; Tasmania, 21,467 acres; New Zealand, 210,509 acres. Total, 1,485,156 acres. The following is a statement of the acreage under various crops included in the same column, also of the produce so far as it has been given:—

Victoria—			Queensland (contd.)—		
Acres.	Produce.		Acres.	Produce.	
Turnips, carrots, parsnips, and beet	708	8,566 tons	Pineapples	721	263,349 doz.
Mangel-wurzel	892	14,676 „	Tobacco	540	2,392 cwt.
Onions	2,238	13,961 „	Cotton	16	5,315 lbs.
Tobacco	618	326 cwt.	Gardens and orchards	2,425	—
Chicory	258	1,859 tons	South Australia—Hops	—	101 cwt.
Hops	789	7,931 cwt.	Tasmania—Turnips	2,142	14,596 tons
Grass seeds	2,587	36,415 bush.	Mangel-wurzel	945	12,151 „
Gardens and orchards	26,955	—	Gardens and orchards	10,345	—
N.S. Wales—Tobacco	1,148	14,021 cwt.	Fenced and cleared land, not strictly under tillage, devoted to pastoral purposes	137,271	—
Sugar cane	20,446	—	New Zealand—		
Of which productive	8,344	277,252 tons of cane.	Mangolds, beet, carrots, parsnips, etc.	4,358	—
Oranges	11,288	11,562,800 doz.	Hops	577	7,298 cwt.
Gardens and orchards (including market gardens)	33,864	—	Tobacco	16	51 „
Queensland—Sugar cane	50,922	—	Gardens and orchards	26,857	—
Of which crushed	40,208	1,378,480 cwts. of sugar.	Other crops	6,102	—
Arrowroot	276	712,144 lbs.	Land broken up, but not under crop	210,509	—
Oranges	1,234	913,759 doz.			
Bananas	3,890	22,002,092 „			

⁴ Rice, 300 acres; and Rye, 169 acres.

⁵ No account taken.

⁶ In the figures for New Zealand, the land under permanent artificial grass, amounting to 6,922,173 acres—of which about one-half had been, and the other half had not been, previously ploughed—is not entered as green forage, nor is it included in the total area under tillage, as in the majority of the other colonies. Were the whole so placed, it would bring the land under tillage up to 8,558,352 acres, or to 13.68 acres per head of the population. The green forage entered above consists of 203,694 acres of green oats, 402,184 acres of turnips, and 1,817 acres of green maize.

TABLE XVI.—AGRICULTURAL STATISTICS, 1890-91.—PRODUCE OF CROPS.

Colony.	Bushels raised of—					Tons raised of—	
	Wheat.	Oats.	Barley.	Maize.	Other Cereals. ¹	Pota-toes.	Hay.
Victoria	12,751,295	4,919,325	1,571,599	574,083	756,893	204,155	567,779
New South Wales ..	3,649,216	256,659	81,383	5,713,205	11,546	52,791	213,034
Queensland	207,990	8,967	12,673	2,373,803	13,226	28,810	50,116
South Australia ..	9,399,389	116,229	175,583	..	64,068	23,963	310,125
Western Australia ..	465,025	37,693	87,813	1,023	10,020 ²	1,655	26,495
Total	26,472,915	5,338,873	1,929,051	8,662,114	855,753	311,374	1,167,549
Tasmania	642,980	519,395	99,842	..	183,471	73,158	52,021
New Zealand	5,723,610	9,947,036	758,833	238,864	330,092	178,121	62,901
Grand Total	32,839,505	15,805,304	2,787,726	8,900,978	1,369,316	562,653	1,282,471

Colony.	Gallons of Wine made.	Bushels per Acre of—					Tons per Acre of	
		Wheat.	Oats.	Barley.	Maize.	Other Cereals. ¹	Pota-toes.	Hay.
Victoria	2,008,493	11·13	22·25	17·91	55·43	28·10	3·79	1·37
New South Wales ..	842,181	10·95	18·20	16·48	29·89	12·52	2·72	1·22
Queensland	189,274	20·02	21·82	21·70	23·88	28·20	3·20	1·61
South Australia ..	762,776	5·62	9·32	12·13	..	14·70	3·62	·90
Western Australia ..	194,881	13·75	19·49	16·50	12·63	20·00 ²	3·25	1·14
Total	3,997,605	8·28	21·36	17·06	28·78	25·78	3·48	1·18
Tasmania .. ..	..	16·30	25·04	22·82	..	18·08	3·63	1·15
New Zealand .. ..	..	18·99	28·73	23·18	41·47	19·25	5·45	1·43
Grand Total	3,997,605	9·28	25·62	18·56	29·02	22·64	3·96	1·19

¹ Including beans and pease, except in the case of New South Wales.
² Estimated.

TABLE XVII.—LIVE STOCK, 1890-91.

Colony.	Number of—				Total.
	Horses.	Cattle.	Sheep.	Pigs.	
Victoria	436,459	1,782,978	12,692,843	282,457	15,194,737
New South Wales ..	444,163	1,909,009	55,986,431	284,453	58,624,056
Queensland	365,812	5,558,264	18,007,234	96,836	24,028,146
South Australia ¹ ..	187,686	359,938	7,004,642	116,277	7,668,543
Western Australia ..	44,384	130,970	2,524,913	28,985	2,729,252
Total	1,478,504	9,741,159	96,216,063	809,008	108,244,734
Tasmania	31,165	162,440	1,619,256	81,716	1,894,577
New Zealand	211,040	831,831	18,117,186	308,812	19,468,869
Grand Total	1,720,709	10,735,430	115,952,505	1,199,536	129,608,180

NOTE.—The figures for Victoria and New Zealand have been derived from the results of the census taken on the 5th April, 1891. Those for the other colonies were, it is believed, collected in February and March, 1891, except in the case of Western Australia, where they were collected in the previous October. The figures for New Zealand include 42,912 cattle, 251,763 sheep, and 86,259 pigs, belonging to the Maoris.

¹ Exclusive of the Northern Territory of South Australia.

TABLE XVII.—LIVE STOCK, 1890-91—continued.

Colony.	Horses.		Cattle.		Sheep.		Pigs.		Total.	
	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.
Victoria ..	4·97	39	20·29	157	145	1,120	3·21	25	173	1,341
New South Wales ..	1·44	40	6·17	170	181	4,991	·92	25	190	5,226
Queensland ..	·55	94	8·32	1,421	27	4,604	·14	25	36	6,144
South Australia ¹ ..	·21	59	·40	115	8	2,230	·13	37	8	2,441
Western Australia ..	·04	90	·13	266	3	5,132	·03	59	3	5,547
Total ..	·50	49	3·31	323	33	3,192	·27	27	37	3,591
Tasmania ..	1·18	21	6·16	112	61	1,115	3·10	56	72	1,304
New Zealand ..	2·02	34	7·98	133	174	2,896	2·96	49	187	3,112
Grand Total ..	·56	45	3·49	284	38	3,063	·39	32	42	3,424

¹ Exclusive of the Northern Territory of South Australia.

TABLE XVIII.—WOOL PRODUCE, 1890.

Colony.	Wool Imported.		Wool Exported.		Wool used in Manufacture in the Colony.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value, at 1s. 4d. per lb.
	lbs.	£	lbs.	£	lbs.	£
Victoria ..	78,369,780	3,190,239	132,148,207	5,933,603	1,780,859	118,724
New South Wales ..	7,752,553	277,110	243,738,266	9,232,672	700,000 ²	46,667
Queensland ..	..	..	55,584,370	2,524,742	130,000 ²	8,667
South Australia ..	17,669,174	580,489	53,438,971	1,871,277	100,000 ²	6,666
Western Australia ..	..	..	6,969,380 ³	261,325 ³	..	..
Total ..	103,791,507	4,047,838	491,879,194	19,823,619	2,710,859	180,724
Tasmania ..	..	..	8,984,281	419,173	168,000	11,200
New Zealand ..	34,310	1,210	102,817,077	4,150,599	2,979,293	198,620
Grand Total ..	103,825,817	4,049,048	603,680,552	24,393,391	5,858,152	390,544

Colony.	Wool Production, 1890.				Proportion of Exports of Wool to Total General Exports.	Average Export Price per lb.
	Quantity. ¹		Value.			
	Total.	Average to each Sheep in the Colony.	Total.	Average per Head of Population.		
	lbs.	lbs.	£	£ s. d.	per cent.	d.
Victoria ..	55,559,286	4·36	2,862,088	2 11 2	44·73	10 ³ / ₄
New South Wales ..	236,685,713	4·23	9,002,229	8 3 5	41·88	9
Queensland ..	55,714,370	3·09	2,533,409	6 11 4	29·51	11
South Australia ..	35,869,797	5·12	1,297,454	4 3 4	21·20	8 ¹ / ₂
Western Australia ..	6,969,380 ³	2·76	261,325 ³	5 9 0	38·90	9
Total ..	390,798,546	4·06	15,956,505	5 7 7	37·15	9 ³ / ₄
Tasmania ..	9,152,281	5·65	430,373	2 19 11	28·19	11 ¹ / ₄
New Zealand ..	105,762,060	6·53	4,348,009	7 0 1	42·30	9 ³ / ₄
Grand Total ..	505,712,887	4·43	20,734,887	5 11 0	37·72	9 ³ / ₄

¹ These figures are made up of the sum of the total quantities exported from and used for manufactures in, less the quantities imported by, the respective colonies. The wool referred to is, of course, not homogeneous in quality, some being greasy and some washed and scoured. The Government Statistician of New South Wales has estimated that the equivalent weight in greasy wool of the whole clip for that colony was 262,973,047 lbs.

² Estimated.

³ Since closing the accounts for 1890, returns have been received of the export of 2,656,252 lbs., valued (9d. per lb.) at £99,609, of the wool clip for the same year which will be carried to account in the returns for 1891.

TABLE XIX.—GOLD PRODUCE.

Colony.	Gold raised—					
	Prior to 1890.		During 1890.		Total.	
	Quantity.	Value. ¹	Quantity.	Value. ¹	Quantity.	Value. ¹
	oz.	£	oz.	£	oz.	£
Victoria ..	56,250,798	225,003,192	588,561	2,354,244	56,839,359	227,357,436
New South Wales ..	10,050,150	37,210,268	127,289	458,453	10,177,439	37,668,721
Queensland ..	6,827,888	23,897,608	610,587	2,137,055	7,438,475	26,034,663
South Australia ² ..	273,441	1,068,191	29,738	106,105	303,179	1,174,296
Western Australia ..	135,492	518,871	22,806 ³	86,664	158,298	605,535
Total ..	73,537,769	287,698,130	1,378,981	5,142,521	74,916,750	292,840,651
Tasmania ..	565,222	2,151,569	23,451	87,114	588,673	2,238,683
New Zealand ..	11,625,028	45,652,191	193,193	773,438	11,818,221	46,425,629
Grand Total ..	85,728,019	335,501,890	1,595,625	6,003,073	87,323,644	341,504,963

NOTE.—The figures for Victoria, New South Wales, and Queensland express the quantity and value of all the gold known to have been raised in those colonies since the period of its first discovery in Australia in 1851; those for South Australia are estimated chiefly from the returns of the Melbourne and Sydney Mints, and partly from the export returns; those for New Zealand express the total exports of gold from the earliest period; and those for Tasmania express the quantity known to have been raised since 1866, there being no record of the gold raised prior to that period. There being no reliable returns of the gold raised in Western Australia, the yield prior to 1889 has been estimated roughly at 100,000 oz., to which have been added the quantities which have since appeared in the export returns of the colony, which, however, are admittedly very defective.

¹ The purity, and consequently the value, of gold varies considerably in different localities. In Victoria the average value is set down as £4 per oz., and in Queensland as £3 10s. per oz. Standard gold (*i.e.*, 22 carats fine) is worth £3 17s. 10½d., and pure gold £4 4s. 11½d. per oz.

² Including Northern Territory.

³ Quantity declared for export only.

TABLE XX.—PUBLIC SAVINGS BANKS, 1890.

(Including both General and Post Office Savings Banks.)

Colony.	On the 31st December.				Rates of Interest allowed to Depositors.
	Number of Depositors.		Amount remaining on Deposit.		
	Total.	Per 100 of the Population.	Total.	Average to each Depositor.	
				per cent.	
Victoria ..	288,240	25·44	£ 5,405,644	£ s. d. 18 15 1	4
New South Wales ..	143,826	12·73	4,730,469	32 17 9	4 and 5
Queensland ..	45,885	11·73	1,666,855	36 6 6	4 ¹
South Australia ..	70,873	22·75	2,078,576	29 6 7	5
Western Australia ..	3,014	6·13	31,486	10 8 11	3½
Total ..	551,838	18·33	13,913,030	25 4 3	3½ to 5
Tasmania ..	25,324	17·43	521,250	20 11 9	3½ and 5
New Zealand ..	118,344	18·92	3,137,023	26 10 2	4½ and 5
Grand Total ..	695,506	18·37	17,571,303	25 5 3	3½ to 5

NOTE.—There are both Post Office and General Savings Banks in Victoria, New South Wales, Tasmania, and New Zealand; Post Office Savings Banks only in Queensland and Western Australia; and General Savings Banks only in South Australia. There is a limit to the amount of an interest-bearing deposit, varying from £100 to £250 in the different colonies. When two rates of interest are quoted, the lower one is that allowed by the Post Office Banks.

¹ This rate is allowed on deposits up to £200; above that amount, *nil*.

TABLE XXI.—STATE-ASSISTED IMMIGRATION, 1851 TO 1890.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Total.
1851	2,551	1,799	..	3,670	..	418	..	8,438
1852	15,477	4,981	..	5,279	..	220	..	25,957
1853	14,578	10,412	..	4,583	..	1,831	..	31,404
1854	16,318	7,309	..	8,824	..	4,172	..	36,623
1855	9,245	14,567	..	11,871	..	5,471	..	41,154
1856	4,679	7,210	..	4,177	..	..	..	16,066
1857	14,369	10,205	..	3,965	..	2,512	..	31,051
1858	5,859	6,916	..	3,553	..	479	..	16,807
1859	3,151	5,114	..	2,011	..	715	..	10,991
1860	1,736	3,073	..	972	..	818	..	6,599
1861	2,682	1,589	..	21	..	354	..	4,646
1862	4,728	2,631	..	611	..	583	..	8,553
1863	8,622	4,633	..	1,499	..	170	..	14,924
1864	6,631	3,977	..	2,647	..	118	..	13,373
1865	5,104	2,717	..	4,625	..	92	..	12,538
1866	4,194	1,204	..	3,891	..	53	..	9,342
1867	3,202	944	..	349	..	56	..	4,551
1868	2,871	431	..	..	..	56	..	3,358
1869	4,219	47	..	87	..	28	..	4,381
1870	4,341	..	1,617	..	..	342	..	6,300
1871	3,212	403	2,862	..	..	9	303	6,789
1872	1,093	362	2,241	..	..	199	4,736	8,631
1873	863	140	6,903	226	..	28	8,754	16,914
1874	149	1,080	8,463	2,152	..	18	32,118	43,980
1875	102	973	5,363	2,067	..	16	20,370	28,891
1876	71	1,463	5,380	7,730	409	48	9,677	24,778
1877	17	6,018	5,785	4,947	343	7	5,344	22,461
1878	18	5,190	6,913	4,250	76	44	6,618	23,109
1879	15	5,731	3,722	3,235	61	56	10,311	23,131
1880	5	3,134	3,150	808	..	52	2,689	9,838
1881	..	2,577	3,941	783	146	59	103	7,609
1882	2	3,233	11,892	1,122	..	141	726	17,116
1883	..	8,369	25,245	4,129	296	598	5,902	44,539
1884	..	7,568	14,719	968	351	949	3,888	28,443
1885	..	5,554	9,616	293	381	582	1,072	17,498
1886	..	4,081	10,451	..	1,556	168	917	17,173
1887	..	1,362	9,400	..	1,529	183	1,286	13,760
1888	..	528	8,349	..	50	32	485	9,444
1889	..	431	6,274	..	161	19	91	6,976
1890	..	376	3,253	..	82	3	144	3,858
Ten years—								
1851 to 1860	87,963	71,586	..	48,905	..	16,636	..	225,090*
1861 to 1870	46,594	18,173	1,617	13,730	..	1,852	..	81,966*
1871 to 1880	5,545	24,494	50,782	25,415	889	477	100,920	208,522
1881 to 1890	2	34,079	103,140	7,295	4,552	2,734	14,614	166,416
Total	140,104	148,332	155,539	95,345	5,441	21,699	115,534*	681,994*

* Exclusive of the number for New Zealand for years prior to 1870.

TABLE XXII.—STATISTICS OF FIJI, 1880 AND 1886 TO 1890.

** Fiji consists of from 70 to 80 inhabited islands, the estimated area of which is 7,500 square miles. There are also about 150 smaller islands uninhabited. The total area of the group is estimated to be 7,740 square miles.

Year.	Estimated Population on the 31st December.			Births.	Deaths.	Marriages.	Immigrants (Poly-nians and Coolies only).		
	Males.	Females	Total.				Males.	Females	Total.
1880	67,598	54,286	121,884	4,103	4,326	1,358	2,500	34	2,534
1886	68,727	57,283	126,010	4,253	5,502	1,155	..	..	1,273
1887	66,144	58,514	124,658	4,749	4,365	1,167	..	..	276
1888	66,636	58,806	125,441	4,709	4,236	966	627	190	817
1889	67,480	57,439	124,919	4,289	4,906	1,102	475	180	655
1890	67,902	57,780	125,682	3,681	4,035	1,980	968	392	1,360

Year.	Emigrants (Poly-nians only).			Public Revenue.			Public Expenditure.	Public Debt.	Value of Imports.	Value of Exports.
	Males.	Fe-males.	Total.	Raised by Taxation.	Not raised by Taxation.	Total.				
1880	170	18	188	£ 46,544	£ 34,134	£ 80,678	£ 91,102	£ 210,000	£ 185,741	£ 229,528
1886 .. ..	..	..	2,113	51,882	12,692	64,574	78,133	264,695	230,742	283,496
1887 .. ..	..	..	1,634	41,616	23,300	64,916	73,150	265,389	188,071	281,080
1888	267	31	298	44,223	20,795	65,018	58,993	253,289	183,222	376,978
1889	410	187	597	44,316	19,406	63,722	57,710	251,090	189,393	364,282
1890	239	41	280	46,928	19,889	66,817	60,826	248,989	206,757	364,533

Year.	Shipping.				Crown Lands Granted and Sold in each Year. ¹	Live Stock. ²			
	Inwards.		Outwards.			Number of—			
	Vessels.	Tons.	Vessels.	Tons.		Horses.	Cattle.	Sheep.	Pigs. ³
1880	157	32,933	150	32,689	acres. 27,562	360	5,000	4,769	50,000
1886	118	54,132	113	51,237	14,028	567	6,841	6,055	50,000
1887	119	46,902	118	44,865	8,120	647	6,778	6,508	1,711
1888	106	49,579	110	51,548	6,300	684	6,754	6,996	1,903
1889	89	51,220	81	47,303	5,059	695	8,768	6,838	2,089
1890	79	56,711	89	60,644	2,824	695	6,988	6,800	2,000

NOTE.—The following additional information has been supplied for the year 1890 :—Birth rate, 29.33; death rate, 32.10; marriage rate, 15.67, per 1,000 persons living. *Immigration*—Unassisted (not included above), 482 in 1888, 752 in 1889, and 456 in 1890; *Emigration*, 419. *Sources of Revenue*—Customs duties, £26,158; other taxes, £20,770; other sources, £19,889. *Heads of Expenditure*—Interest on public debt, £8,761; post office, etc., £900; immigration, £6,127; other expenditure, £45,038. *Public Debt*—Consists of £115,390 Imperial advances, bearing no interest, in aid of annexation, and in payment of compensation in respect of disallowed land claims; £100,000 for payment of liabilities of former so-called Government; and £50,000 for public works and immigration, less £16,400 redeemed, bearing interest at 4½ per cent. *Imports and Exports*—Of the total value of imports, £189,114 was from the Australasian Colonies, and £17,643 from other countries; and of the total value of exports, £332,322 was to Australasian Colonies, and £32,211 to other countries; almost the whole of the exports were of Fijian production. *Postal Returns*, 1889—Number of offices, 38; letters, 262,006; newspapers, 227,868. *State Education*—Number of schools, 3; teachers, 6—viz., 4 males and 2 females; scholars on the rolls, 216—viz., 140 males and 76 females. *Agriculture*—Land under cultivation (by whites only), 35,400 acres, of which 300 acres were under maize; 18,500 acres under cocoanuts; 12,900 acres under sugar-cane; 2,400 acres under bananas; and 1,300 acres under cotton, coffee, tobacco, tapioca, pineapples, and other crops.

¹ The total area alienated at the end of 1890 was 413,440 acres, and the area unalienated 4,540,520 acres. The amount realized by the State for sales of land to the end of 1888 was only £26,446, which, however, represents the price of but a small proportion of the acreage alienated. The majority of the grants issued were for lands acquired by whites and others previously to annexation, and these received their titles at the nominal price of one shilling.

² In addition to the live stock referred to in these columns, about 5,000 angora goats were kept on the islands.

³ Returns from Europeans only since 1886

TABLE XXIII.—STATISTICS OF BRITISH NEW GUINEA, 1888-9.

British New Guinea.					Year 1888-9.*	
Area	...	...	...	...	90,000 square miles	
Population	...	...	...	...	150,000	
Revenue—						
Taxation	...	...	...	...	£2,637	
Guarantee	...	...	...	...	7,801	
Miscellaneous	...	...	...	...	43	
					—	£10,481
Expenditure	...	...	...	...		£10,770†
Imports	...	...	...	...		£11,103
Exports	...	...	...	...		£5,943
Shipping (Port Moresby ten months, Samaria six months, to 30th June, 1889)—					Vessels.	Tons.
Inwards	..	...	...	...	198	7,482
Outwards‡	...	...	...	...	188	6,952
Postal Returns—					Received.	Despatched.
Letters	...	...	...	...	2,366	2,587
Packets	...	...	...	...	93	98
Newspapers	...	...	...	...	4,071	574

NOTES.—On 4th September, 1888, Sir William Macgregor, K.C.M.G., Her Majesty's Administrator of the Government of British New Guinea, read at Port Moresby a Proclamation declaring that the following territory and islands thereby became part of the Queen's Dominions, namely:—"The southern and south-eastern shores of New Guinea, from the 141st meridian of east longitude eastward as far as East Cape; and thence north-westward as far as the 8th parallel of south latitude in the neighbourhood of Mitre Rock, together with the territory lying south of a line from Mitre Rock, proceeding along the said 8th parallel to the 147th degree of east longitude; then in a straight line in a north-westerly direction to the point of intersection of the 6th parallel of south latitude and of the 144th degree of east longitude, and continuing in a west-north-westerly direction to the point of intersection of the 5th parallel of south latitude and of the 141st degree of east longitude, together with the Trobriand, Woodlark, D'Entrecasteaux, and Louisiade groups of Islands, and all other islands lying between the 8th and 12th parallels of south latitude and between the 141st and 155th degrees of east longitude, and not forming part of the colony of Queensland; and furthermore including all islands and reefs lying in the Gulf of Papua to the northward of the 8th parallel of south latitude."

The Government is vested in the Administrator and an Executive Council, and the finances are supplied by a sum not exceeding £15,000 per annum, for which the colony of Queensland has made itself responsible. Victoria and New South Wales have agreed to contribute equally with Queensland towards this amount. Local revenue is applied in reduction of the sums payable by the contributing colonies, and any credit balance in the appropriation account must be written off at the end of the year.

Gold.—Exports of gold are reported as 334½ oz., value £1,209 17s. 6d. A much larger quantity, however, is known to have left the possession, although it is impossible to obtain accurate data on the point. The Queensland Customs record, as received at Cooktown from the Louisiade goldfield, 3,850 oz., value £14,337. All the gold was obtained from the islands of Sudest and St. Aignan, where mining began about the time the sovereignty was declared. The number of miners on the field has varied considerably, the maximum being about 800 men. Towards the end of the period the fields appeared to be getting worked out. *Sources of Local Revenue.*—Customs, £2,419; gold-fields, £188; fees, fines, etc., £30; miscellaneous, £43. *Heads of Expenditure.*—Salaries, £2,634; temporary and special services, £2,092; vessels, £2,641; stores, £512; miscellaneous (including travelling expenses and mail service), £2,891. *Missions.*—*London Missionary Society.*—Mission staff, 111, of whom ten are European; stations occupied, 50; church members, 500; children in schools, 3,500. There is also a Roman Catholic mission, with a staff of twenty, directed by Archbishop Navarre.

* From 4th September, 1888, to 30th June, 1889.

† This sum, although £289 in excess of the actual revenue, is £1,730 less than the amount authorized by guarantee.

‡ Some vessels left without a clearance outwards.

APPENDIX B.

TARIFFS OF AUSTRALASIAN COLONIES.

ALTERATIONS IN TARIFFS OF THE AUSTRALASIAN COLONIES
SINCE 1889.

The following, so far as known, are the changes which have taken place in the Australasian tariffs since the issue of this work for 1888-9, when the tariffs were published in full. No changes have taken place in Victoria, New South Wales,* or Queensland:—

Order.	Articles.	Rate of Duty.		Date of Alteration.
		Former.	Present.	
SOUTH AUSTRALIA.				
22	Barley per bushel	£ 0 1 0	£ 0 1 6	25th June, 1891.
	Malt "	0 2 6	0 4 6	25th June, 1891.
WESTERN AUSTRALIA.				
23	Tobacco (unmanufactured) per lb.	0 1 0	0 2 0	26th February, 1891.
24	Pearl Shells (export duty) ...	4 0 0	2 0 0	1st January, 1890.
TASMANIA.				
21	Pork { under 5 lbs. } ...ad valorem	10 per cent	10 per cent.	} 7th August, 1890.
	{ over 5 lbs. }		2d. per lb.	
33	Cattle per head	exempt	1 10 0	1st January, 1891.
	Sheep or Lambs "	"	0 1 6	1st January, 1891.
NEW ZEALAND.				
	Primage Duty (in addition to Import Duty) on all goods, wares, and merchandize imported into the colony ...ad valorem	1 per cent.	Nil.	30th September, 1890.

* Important changes in the tariff of New South Wales were under the consideration of the Parliament of that colony at the time of going to press.

ALTERATIONS IN TARIFFS OF THE AUSTRALASIAN COLONIES
SINCE 1889—continued.

ERRATA.

The following items were either incorrectly given or accidentally omitted from the tariffs as published in the *Victorian Year-Book*, 1888-9:—

Order.	Articles.	Rate of Duty.
SOUTH AUSTRALIA.		
<i>Northern Territory.*</i>		
	Import Duty on—	£ s. d.
14	Opium per lb.	1 10 0
22	Rice " "	0 0 1
	„ Meal Offal per ton	0 10 0
26	Chinese Oil per gal.	0 1 0
WESTERN AUSTRALIA.		
14	Import Duty on Opium per lb.	1 0 0
33	Export Duty on Horses per head	0 1 0
TASMANIA.		
6	Instruments (scientific and optical) ad valorem	12½ per cent.
7	„ (surgical) „	„
12	Gilt Mouldings „	20 per cent.
14	Sulphur „	12½ per cent.
22	Vegetables (unenumerated) „	„
32	Iron Fencing „	„

* In force since 17th November, 1886.

APPENDIX C.

CHAFFEY IRRIGATION COLONY, MILDURA.*

The progress of this settlement cannot but be noted with the greatest interest. It is giving striking proof that the arid waste lands of Victoria can be tilled and brought to sustain those who settle on them, thereby affording what is so much needed in these days of over-stocked labour markets and congested centres of population—greater scope, and more opportunity for working capacity. It is, by its example and teaching, assisting to develop a comparatively new but most important industry, by which the resources of the colony will be greatly increased, and is demonstrating to the farmers and fruit-growers of the country what irrigation properly employed can accomplish, and how best to make use of it.

In the Departmental Report for 1890, Appendices Nos. 8 and 35 were devoted to the subject of the Irrigation Colony of Mildura, and a phenomenal growth was predicted for it. The history of the past year fully bears out the wisdom of that prognostication.

The progress that has been achieved is, without doubt, largely due to the liberal manner in which the Messrs. Chaffey have interpreted their obligations. According to the agreement with the Victorian Government under which the Messrs. Chaffey entered upon the occupation of the present area, they were bound to expend on the land the sum of £35,000 during the first five years. There has actually been expended up to the 30th June, 1891, £275,000, though the colony will not be four years old until October, 1891. In addition to that, it is estimated that the settlers themselves have spent, in improving their land, £100,000.

The population has increased to about 3,000, and continues to increase. The additions to its fleet by the River Murray Navigation Company, in order to provide a service twice a week between Mildura and Morgan, in South Australia, and Swan Hill, in Victoria, which was found necessary to meet the increasing passenger traffic, have aided development by multiplying facilities for reaching the settlement.

The increase in population is marked in another way. The new school-house, opened about a year ago, has been found inadequate for the accommodation of the 350 children who attend it, and considerable enlargements have been found necessary. The school board has applied to the Department of Education for the erection of two additional school-houses in localities distant about four miles from the centre of the present township, a fact which indicates how rapidly the inhabited area is being extended into the country.

The building industry has been very brisk during the past year, numerous private dwellings having been erected within the town area. Mildura is not a match-box town, almost all the new buildings being of brick made on the settlement, where an excellent bed of clay exists suitable for the purpose. The demand has hitherto been in excess of the supply, though there are turned out over 40,000 bricks per day, but an American expert has been engaged to re-model the brickyards and enlarge their capacity.

Two new industries have been established—the manufacture of fire-proof porous terra-cotta ware, which, from its being a non-conductor of heat and cold, is suitable for the climate; and the making of paper pipes, to be utilized in the conveyance of the domestic water supply.

Of public buildings, the Custom House and Post Office have been completed for some months.

* See Fifth Annual General Report by the Minister of Water Supply, page 22. Parliamentary Paper, No. 135, Session 1891.

The returns from the former give a good idea of the progress in the commercial life of the settlement, which indeed it may be reasonably expected from its position will yet become a valuable commercial *entrepôt* for the supply of the interior of the country.

Customs returns—

1888	...	...	...	...	£73 12 10
1889	...	...	...	...	1,723 11 4
1890 (nine months)...	...	...	...	...	3,226 7 10

The numerous issues of new Savings Bank books, as disclosed by the Post Office statistics, afford an interesting indication of the condition of the settlers.

The foundation stone of the projected Agricultural College was laid by His Excellency the Governor in April, 1890, on a prominent site in the principal thoroughfare—Deakin Avenue. Its erection is being pushed on, the contract for one wing having been let at £5,000. The importance of this institution—fully endowed as it is, one-fifteenth of the entire value of the land having been set aside for that purpose—not only to Mildura, but to Victoria, cannot be over-estimated. It will not only provide that technical instruction so necessary for the successful carrying on of agricultural or horticultural pursuits—and that, too, of the very best of its kind, of which there is already a sample in the skilled experts brought by the Messrs. Chaffey from California—but it will afford means for the higher general education of the young of the settlement, who will thus in no way suffer by being removed from the educational advantages of the city.

A Public Institute is in progress, for one wing of which a contract has been let for £3,160.

Tenders for a hospital, to cost £1,400, are under consideration.

There are now over 60 stores and places of business.

Two commodious new stables have been erected at suitable centres, each stalled for 25 horses; the company has in all 300. These buildings are intended to be utilized hereafter for fruit preserving and canning works, to provide which the Messrs. Chaffey have bound themselves, for the development of that most important branch of the fruit industry.

It is intended that the town shall be lighted by electricity, the Messrs. Chaffey defraying the cost of maintenance for the first two years. The machinery has arrived, and the installation will be at once commenced.

Outside the township area the horticultural blocks are everywhere dotted with comfortable settlers' homes, surrounded by their vineyard or orchard, from which the owners confidently expect to realize a competency.

LAND.

The 25,000 acres now being dealt with were three years ago lying untouched, so bare that even rabbits were dying by hundreds on the parched soil, covered only by balar and mallee. More than 20,000 acres are in the hands of purchasers and cleared. Fully 6,500 acres are already cultivated, about 6,000 acres being devoted to vines or fruit trees, the remainder being under feeding stuffs, such as sorghum and lucerne, or cereals. The proportion of the amount of land under cultivation to that sold shows that it has been purchased to produce wealth.

The value of the land has steadily risen, keeping pace with the improvements effected, and will, no doubt, continue to do so, especially in the township, with the increasing importance of Mildura as a *commercial* centre.

Though the company has eighteen traction engines at work in clearing and cultivating, orders have been sent to England for four more, to enable it to get through the fast accumulating orders for grubbing and ploughing.

IRRIGATION WORKS.

An engine intended to pump water from the River Murray into King's Billabong, the natural reservoir of overflow water which is such an aid to the irrigation system, has now been placed in position at Psyche Bend, on the river bank. Of 1,000 h.p., it will lift 650 tons of water per minute.

At the chief pumping station there has been erected a new pumping plant of 50 horse-power, double cylinders, with a lifting capacity of 20,000 gallons per minute, to raise water from the 50-foot channel into a part of the 70-foot channel.

A branch channel has been constructed at a level of 92 feet, as an offshoot from the 70-foot channel, from which the water is pumped into it by an engine of 25 horse-power, with a lifting capacity of 10,000 gallons per minute. This latter is the highest channel of the entire system, which, by having channels at the levels of 50, 70, 85, and 92 feet above the summer-level of the river, insures that land of various levels will be supplied by some one of the four.

There are now constructed 125 miles of main channel and 200 miles of subsidiary channels; 50 miles of various channels are surveyed, and, as the surveying parties are pushing beyond the 25,000 acre limit, are being daily extended.

The engineering works and the foundry have been greatly enlarged, and afford occupation for a large staff in these works and the other work of the settlement. The company's pay-sheet shows a disbursement of £7,000 per month.

Extensive timber storage and goods storage have been provided, and a building for cold storage of meat and other perishable goods, and the production of ice in summer, is in full use.

The entire township has been reticulated by wrought-iron pipes for the conveyance of the domestic water supply, which is pumped from the river.

Several hundreds of acres have been planted by the company with lucerne, and are irrigated to provide pasturage.

The construction of a wharf on the river bank will be undertaken shortly.

RETURNS.

The raisin industry is manifestly to be the leading one at Mildura; this partly from the evident demand, but also largely from the ease and cheapness with which, on this settlement, raisins can be prepared. The grapes are laid out on wooden trays, to be converted into raisins by the warm sun and dry atmosphere. Mildura is exempt from the fogs which are such a drawback on the Californian colonies at the drying season. This sun-drying preserves the aroma and flavour of the grapes, and raisins so prepared have been found marketable at 1s. per lb.

The fact that 4,000 of these trays were required for the present season's crop at this age of the vines shows the extent and earliness of the productiveness under scientific irrigation and intense culture. Twenty-five pounds of raisin grapes were taken from a single vine planted as a cutting in August, 1889.

Three successive crops were taken from a 10-acre block this season, the third picking amounting to 3½ tons. Another holding realised £8 per acre from raisin grapes. Apricots, peaches, and figs have all been treated by drying, and have been found excellent. Orange and lemon trees only two years old are found heavily fruited. Every possible fruit has been found to flourish amazingly, with the exception of apples, but Mildura oranges will yet become a feature.

The early and large returns which have been obtained are due not alone to the quality of the soil or the character of the atmosphere and climate, though these aid, but also to the methods of irrigation and cultivation practised and advocated by the Messrs. Chaffey through their staff of experts. The method of irrigation is one of "seepage," as opposed to flooding; the water being taken to the highest corner of each lot by a "head-ditch," furrows are then run alongside the rows of vines or trees, and the water allowed to flow to the end of these; the flow is continued for a length of time, varying with the season of the year, the state of the ground, and other considerations. After the water has sunk from the furrows they are filled in by means of a "cultivator," which is then passed over all the ground to keep it worked. A noteworthy feature of the vineyards and orchards, and to which much of the success is due, is their perfect cleanliness and well-worked surface, "cultivators" and other means of cleaning the ground being kept constantly at work. This constant stirring and culture of the soil adds materially to the result of the combination of soil, climate, and weather.

APPENDIX D.

CENSUS TABLES.

** The figures in the following tables have been finally revised.

TABLE I.—BIRTHPLACES, 1891.

(Persons, Males, and Females—distinguishing the Chinese and Aborigines, whether of pure or mixed race—of different birthplaces, according to the census of 1891.)

Country of Birth.	Total of Victoria (including Chinese and Aborigines).			Chinese.				
	Total.	Males.	Females.	Total.	Males.		Females.	
					Pure.	Half-caste.	Pure.	Half-caste.
Total	1,140,405	598,414	541,991	9,377	8,355	417	134	471
Victoria	713,585	354,726	358,859	876	57	359	46	414
New South Wales	19,792	9,737	10,055	12	2	5	..	5
Queensland	2,757	1,280	1,477	..	..	..	..	..
South Australia	25,316	13,072	12,244	2	..	2	..	..
Western Australia	756	352	404	..	..	..	..	..
Tasmania	16,398	7,667	8,731	1	..	..	..	1
New Zealand	12,026	6,325	5,701	1	..	1	..	..
Fiji	136	70	66	..	..	..	..	..
Australia (colony not named)	2,538	1,169	1,369	1	..	1	..	..
England	157,813	93,074	64,739	3	..	..	..	3
Wales	5,094	3,170	1,924	..	..	..	..	..
Scotland	50,667	28,404	22,263	..	..	..	..	..
Ireland	85,307	42,787	42,520	..	..	..	..	..
Other British possessions—								
European	131	81	50	..	..	..	..	..
Asiatic	1,853	1,188	665	3	..	1	..	2
African	1,008	550	458	..	..	..	..	..
American	1,860	1,307	553	..	..	..	..	..
France and French colonies ..	1,307	914	393	..	..	..	..	..
Belgium	235	155	80	..	..	..	..	..
Holland and Dutch colonies ..	366	282	84	..	..	..	..	..
Germany and German colonies	10,775	7,781	2,994	..	..	..	..	..
Austria-Hungary	586	490	96	..	..	..	..	..
Switzerland	1,317	1,121	196	..	..	..	..	..
Italy	1,717	1,555	162	..	..	..	..	..
Spain and Spanish colonies ..	227	161	66	..	..	..	..	..
Portugal and Portuguese colonies	168	138	30	..	..	..	..	..
Denmark and Danish colonies	1,399	1,223	176	..	..	..	..	..
Sweden and Norway	3,214	3,013	201	..	..	..	..	..
Russia	1,172	911	261	..	..	..	..	..
Other European countries ..	237	213	24	..	..	..	..	..
United States of America ..	2,905	2,005	900	1	..	1	..	..
China	8,467	8,330	137	8,450	8,278	40	87	45
Other countries	669	462	207	23	18	3	1	1
At sea—British subjects ..	1,882	973	909	..	..	..	..	..
,, Foreign subjects	91	59	32	..	..	..	..	..
Unspecified British names ..	6,360	3,483	2,877	..	..	..	..	..
,, Foreign names	274	186	88	4	..	4	..	..

APPENDIX D.

TABLE I.—BIRTHPLACES, 1891—continued.

Country of Birth.	Aborigines.					Total of Victoria (exclusive of Chinese and Aborigines).		
	Total.	Males.		Females.		Persons.	Males.	Females.
		Pure.	Half-caste.	Pure.	Half-caste.			
Total	565	192	133	125	115	1,130,463	589,317	541,146
Victoria	511	159	129	112	111	712,198	354,022	358,176
New South Wales	17	7	2	6	2	19,763	9,721	10,042
Queensland	21	19	..	2	..	2,736	1,261	1,475
South Australia	7	2	2	1	2	25,307	13,066	12,241
Western Australia	3	2	..	1	..	753	350	403
Tasmania	1	..	..	1	..	16,396	7,667	8,729
New Zealand	2	..	..	..	..	12,025	6,324	5,701
Fiji	2	..	..	2	..	134	70	64
Australia (colony not named)	3	3	..	..	..	2,534	1,165	1,369
England .. .. .	..	..	..	..	..	157,810	93,074	64,736
Wales .. .. .	..	..	..	..	..	5,094	3,170	1,924
Scotland .. .. .	..	..	..	..	..	50,667	28,404	22,263
Ireland .. .. .	..	..	..	..	..	85,307	42,787	42,520
Other British possessions .. .. .	..	..	..	..	..	..	..	..
European .. .. .	..	..	..	..	..	131	81	50
Asiatic .. .. .	..	..	..	..	..	1,850	1,187	663
African .. .. .	..	..	..	..	..	1,008	550	458
American .. .. .	..	..	..	..	..	1,860	1,307	553
France and French colonies .. .. .	..	..	..	..	..	1,307	914	393
Belgium .. .. .	..	..	..	..	..	235	155	80
Holland and Dutch colonies .. .. .	..	..	..	..	..	366	282	84
Germany and German colonies .. .. .	..	..	..	..	..	10,775	7,781	2,994
Austria-Hungary .. .. .	..	..	..	..	..	586	490	96
Switzerland .. .. .	..	..	..	..	..	1,317	1,121	196
Italy .. .. .	..	..	..	..	..	1,717	1,555	162
Spain and Spanish colonies .. .. .	..	..	..	..	..	227	161	66
Portugal and Portuguese colonies .. .. .	..	..	..	..	..	168	138	30
Denmark and Danish colonies .. .. .	..	..	..	..	..	1,399	1,223	176
Sweden and Norway .. .. .	..	..	..	..	..	3,214	3,013	201
Russia .. .. .	..	..	..	..	..	1,172	911	261
Other European countries .. .. .	..	..	..	..	..	237	213	24
United States of America .. .. .	..	..	..	..	..	2,904	2,004	900
China .. .. .	..	..	..	..	..	17	12	5
Other countries .. .. .	..	..	..	..	..	646	441	205
At sea—British subjects .. .. .	..	..	..	..	..	1,882	973	909
Foreign subjects .. .. .	..	..	..	..	..	91	59	32
Unspecified British names .. .. .	..	..	..	..	..	6,360	3,483	2,877
Foreign names .. .. .	..	..	..	..	..	270	182	88

TABLE II.—BIRTHPLACES, 1881 AND 1891.

(Persons, Males, and Females of each Birthplace, and the proportion per cent. of those of each Birthplace to the number whose place of birth was specified at the censuses of 1881 and 1891.)

Country of Birth.	Population.					
	1881.			1891.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Total	862,346	452,083	410,263	1,140,405	598,414	541,991
Total specified	857,587	449,230	408,357	1,133,648	594,635	539,013
Victoria	499,199	247,528	251,671	713,585	354,726	358,859
New South Wales	9,826	4,748	5,078	19,792	9,737	10,055
Queensland	1,120	645	475	2,757	1,280	1,477
South Australia	9,928	4,883	5,045	25,316	13,072	12,244
Western Australia	404	179	225	756	352	404
Tasmania	11,876	5,544	6,332	16,398	7,667	8,731
New Zealand	2,885	1,418	1,467	12,026	6,325	5,701
Fiji	95	57	38	136	70	66
Australia (colony not named)	3,727	1,634	2,093	2,538	1,169	1,369
England	142,906	82,658	60,248	157,813	93,074	64,739
Wales	4,547	2,768	1,779	5,094	3,170	1,924
Scotland	48,153	26,224	21,929	50,667	28,404	22,263
Ireland	86,733	41,226	45,507	85,307	42,787	42,520
Other British Possessions—						
European	136	89	47	131	81	50
Asiatic	1,130	704	426	1,853	1,188	665
African	638	345	293	1,008	550	458
American	1,660	1,153	507	1,860	1,307	553
France and French Colonies	1,334	1,042	292	1,307	914	393
Belgium	112	92	20	235	155	80
Holland and Dutch Colonies	342	261	81	366	282	84
Germany and German Colonies	8,571	6,144	2,427	10,775	7,781	2,994
Austria-Hungary	323	289	34	586	490	96
Switzerland	1,314	1,144	170	1,317	1,121	196
Italy	947	888	59	1,717	1,555	162
Spain and Spanish Colonies	148	105	43	227	161	66
Portugal and Portuguese Colonies	153	131	22	168	138	30
Denmark and Danish Colonies	1,039	918	121	1,399	1,223	176
Sweden and Norway	1,375	1,319	56	3,214	3,013	201
Russia	369	302	67	1,172	911	261
Other European Countries	284	243	41	237	213	24
United States of America	2,343	1,645	698	2,905	2,005	900
China	11,799	11,743	56	8,467	8,330	137
Other Countries	277	196	81	669	462	207
At Sea—British Subjects	1,877	960	917	1,882	973	909
Foreign Subjects	17	5	12	91	59	32
Unspecified British Names	4,707	2,807	1,900	6,360	3,483	2,877
Foreign Names	52	46	6	274	186	88

TABLE II.—BIRTHPLACES, 1881 AND 1891—*continued.*

(Persons, Males, and Females of each Birthplace, and the proportion per cent. of those of each Birthplace to the number whose place of birth was specified at the censuses of 1881 and 1891.)

Country of Birth.	Proportion per cent. of the Population.					
	1881.			1891.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Total specified	100·000	100·000	100·000	100·000	100·000	100·000
Victoria	58·212	55·100	61·630	62·947	59·657	66·588
New South Wales	1·146	1·057	1·243	1·747	1·638	1·865
Queensland	·131	·144	·116	·243	·215	·274
South Australia	1·158	1·087	1·235	2·233	2·199	2·271
Western Australia	·047	·040	·005	·066	·059	·074
Tasmania	1·385	1·234	1·551	1·447	1·289	1·620
New Zealand	·336	·316	·359	1·061	1·064	1·057
Fiji	·011	·013	·009	·011	·011	·012
Australia (colony not named)	·435	·364	·513	·223	·197	·254
England	16·664	18·400	14·754	13·921	15·654	12·012
Wales	·530	·616	·436	·449	·532	·357
Scotland	5·615	5·837	5·371	4·469	4·778	4·131
Ireland	10·113	9·177	11·144	7·525	7·198	7·889
Other British Possessions—						
European	·011	·020	·011	·011	·013	·009
Asiatic	·134	·157	·105	·164	·199	·123
African	·076	·077	·071	·088	·092	·084
American	·194	·256	·125	·165	·219	·102
France and French Colonies	·155	·232	·071	·115	·154	·072
Belgium	·013	·020	·005	·020	·026	·015
Holland and Dutch Colonies	·040	·058	·020	·032	·047	·015
Germany and German Colonies	·999	1·368	·594	·951	1·309	·555
Austria-Hungary	·038	·064	·008	·051	·082	·017
Switzerland	·153	·255	·041	·117	·189	·036
Italy	·110	·198	·014	·152	·262	·030
Spain and Spanish Colonies	·017	·023	·011	·020	·026	·012
Portugal and Portuguese Colonies	·018	·029	·005	·014	·023	·005
Denmark and Danish Colonies	·121	·204	·030	·124	·205	·032
Sweden and Norway	·160	·294	·014	·284	·506	·037
Russia	·043	·067	·016	·103	·153	·048
Other European Countries	·033	·054	·010	·020	·035	·005
United States of America	·273	·366	·171	·257	·337	·166
China	1·376	2·614	·014	·746	1·399	·024
Other Countries	·032	·044	·020	·049	·061	·036
At Sea—British Subjects	·219	·214	·225	·167	·163	·168
Foreign Subjects	·002	·001	·003	·008	·009	·005

TABLE III.—RELIGIONS, 1891.

Persons, Males and Females—distinguishing the Chinese and Aborigines, whether of Pure or Mixed Race—of different Religions, according to the Census of 1891.

Religious Denomination.	Total of Victoria (inclusive of Chinese and Aborigines).			Chinese.				
	Persons.	Males.	Females.	Total.	Males.		Females.	
					Pure.	Half-caste.	Pure.	Half-caste.
Total	1,140,405	598,414	541,991	9,377	8,355	417	134	471
Total specified	1,117,528	583,690	533,838	8,896	7,897	407	129	463
Anglicans—								
Church of England, Episcopalians	401,604	210,986	190,618	711	341	152	25	193
Protestants (not otherwise defined)*	15,578	8,714	6,864	47	11	21	1	14
Presbyterians—								
Presbyterian Church of Victoria	163,149	84,713	78,436	170	99	31	1	39
Free Presbyterian Church of Victoria	3,849	1,994	1,855	..	..	..	..	..
Other Presbyterians	29	18	11	..	..	..	..	..
Methodists—								
Wesleyan Methodists	134,841	66,957	67,884	323	181	73	6	63
Primitive Methodists	11,351	5,572	5,779	5	2	..	..	..
Bible Christians	9,579	4,682	4,897	..	..	..	..	..
United Methodist Free Church	2,269	1,104	1,165	1	1	..	..	..
Other Protestants—								
Independents—Congregationalists	22,110	11,175	10,935	6	4	..	1	1
Baptists	27,883	13,497	14,386	7	2	3	..	2
Disciples of Christ—Church of Christ	8,267	3,942	4,325	..	..	..	..	..
Christians (not otherwise defined)	1,075	578	497	10	10	..	..	..
Christians—Plymouth Brethren	1,068	508	560	..	..	..	..	..
Lutherans—German Protestants	15,529	9,895	5,634	..	..	..	..	..
Moravians—United Brethren	134	64	70	7	..	4	..	3
Calvinists—Calvinistic Methodists, Welsh Church	1,027	594	433	..	..	..	..	..
Society of Friends	360	222	138	..	..	..	..	..
Salvation Army	13,521	6,753	6,768	19	4	5	..	10
Unitarians	1,502	989	513	..	..	..	..	..
Other Protestants	2,131	1,077	1,054	..	..	..	..	..
Catholics—								
Roman Catholics	240,300	121,756	118,544	226	39	82	..	105
Catholics (not otherwise defined)	8,291	4,265	4,026	5	..	4	..	1
Greek Church	247	206	41	..	..	..	..	..
Other Sects—								
Catholic Apostolic Church	407	206	201	..	..	..	..	..
Israelites—Christian Israelites	293	145	148	..	..	..	..	..
Latter-day Saints--Mormons	48	29	19	..	..	..	..	..
New Church—Swedenborgians	305	156	149	..	..	..	..	..
Spiritists—Spiritualists	790	422	368	..	..	..	..	..
Jews	6,459	3,540	2,919	..	..	..	..	..
Mahomedans	242	230	12	4	3	1	..	..
Buddhists, Confucians, etc.	6,746	6,623	123	6,688	6,546	20	93	29
Other Denominations	119	95	24	35	29	6	..	..
No Denomination	12,971	9,245	3,726	124	122	1	..	..
No Religion	3,454	2,738	716	508	503	4	..	..
Unspecified	9,269	5,392	3,877	..	..	..	..	..
Object to state their Religious Belief	13,608	9,332	4,276	481	458	10	5	8

* Including a few who returned themselves as of the Free Church of England.

TABLE III.—RELIGIONS, 1891—continued.

Persons, Males and Females—distinguishing the Chinese and Aborigines, whether of Pure Mixed Race—of different Religions, according to the Census of 1891.

Religious Denomination.	Aborigines.				Total of Victoria (exclusive of Chinese and Aborigines).			
	Total.	Males.		Females.		Persons.	Males.	Females.
		Pure.	Half-caste.	Pure.	Half-caste.			
Total	565	192	133	125	115	1,130,463	589,317	541,146
Total specified	502	158	127	104	113	1,108,130	575,101	533,029
Anglicans—								
Church of England, Episcopalians	229	80	46	49	54	400,664	210,367	190,297
Protestants (not otherwise defined)*	2	1	..	1	..	15,529	8,681	6,848
Presbyterians—								
Presbyterian Church of Victoria	116	29	31	31	25	162,863	84,523	78,340
Free Presbyterian Church of Victoria	..	..	..	..	..	3,849	1,994	1,855
Other Presbyterians	..	..	..	..	..	29	18	11
Methodists—								
Wesleyan Methodists	32	5	13	3	11	134,486	66,685	67,801
Primitive Methodists	..	..	..	..	..	11,346	5,570	5,776
Bible Christians	..	..	..	..	..	9,579	4,682	4,897
United Methodist Free Church	..	..	..	..	..	2,268	1,103	1,165
Other Protestants—								
Independents—Congregationalists	11	..	4	1	6	22,093	11,167	10,926
Baptists	5	2	1	1	1	27,871	13,489	14,382
Disciples of Christ—Church of Christ	1	..	..	..	1	8,266	3,942	4,324
Christians (not otherwise defined)	..	..	..	..	..	1,065	568	497
Christians—Plymouth Brethren	..	..	..	..	..	1,068	508	560
Lutherans—German Protestants	1	..	..	..	1	15,528	9,895	5,633
Moravians—United Brethren	58	15	25	7	11	69	20	49
Calvinists—Calvinistic Methodists, Welsh Church	..	..	..	..	..	1,027	594	433
Society of Friends	..	..	..	..	..	360	222	138
Salvation Army	2	1	..	..	1	13,500	6,743	6,757
Unitarians	..	..	..	..	..	1,502	989	513
Other Protestants	..	..	..	..	..	2,131	1,077	1,054
Catholics—								
Roman Catholics	6	4	..	..	2	240,078	121,631	118,447
Catholics (not otherwise defined)	..	..	..	..	..	8,276	4,261	4,015
Greek Church	..	..	..	..	..	247	206	41
Other Sects—								
Catholic Apostolic Church	..	..	..	..	..	407	206	201
Israelites—Christian Israelites	..	..	..	..	..	293	145	148
Latter-day Saints—Mormons	..	..	..	..	..	48	29	19
New Church—Swedenborgians	..	..	..	..	..	305	156	149
Spiritists—Spiritualists	..	..	..	..	..	790	422	368
Jews	..	..	..	..	..	6,459	3,540	2,919
Mahomedans	..	..	..	..	..	238	226	12
Buddhists, Confucians, etc.	..	..	..	..	..	58	57	1
Other Denominations	..	..	..	..	..	84	60	24
No Denomination	17	10	1	6	..	12,830	9,111	3,719
No Religion	22	16	1	5	..	2,924	2,214	710
Unspecified	49	28	3	18	..	9,220	5,361	3,859
Object to state their Religious Belief	14	6	3	3	2	13,113	8,855	4,258

* Including a few who returned themselves as of the Free Church of England.

TABLE IV.—RELIGIONS, 1881 AND 1891.

Persons, Males and Females, of different Religions, and the Proportion per cent. of those of each Religion to the Number whose Religion was specified at the Censuses of 1881 and 1891.

Religious Denomination.	Population.					
	1881.			1891.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Total	862,346	452,083	410,263	1,140,405	598,414	541,991
Total specified	847,291	442,512	404,779	1,117,528	583,690	533,838
Anglicans—						
Church of England, Episcopalians	299,542	157,937	141,605	401,604	210,986	190,618
Protestants (not otherwise defined)*	11,749	6,583	5,166	15,578	8,714	6,864
Presbyterians—						
Presbyterian Church of Victoria	126,729	65,888	60,841	163,149	84,713	78,436
Free Presbyterian Church of Victoria	5,748	2,810	2,938	3,849	1,994	1,855
Other Presbyterians	114	55	59	29	18	11
Methodists—						
Wesleyan Methodists	98,061	48,904	49,157	134,841	66,957	67,884
Primitive Methodists	8,707	4,364	4,343	11,351	5,572	5,779
Bible Christians	6,660	3,280	3,380	9,579	4,682	4,897
United Methodist Free Church ..	1,625	829	796	2,269	1,104	1,165
Other Protestants—						
Independents, Congregationalists	19,878	9,859	10,019	22,110	11,175	10,935
Baptists	20,373	9,698	10,675	27,883	13,497	14,386
Disciples of Christ—Church of Christ	4,859	2,301	2,558	8,267	3,942	4,325
Christians (not otherwise defined)	648	364	284	1,075	578	497
Christians—Plymouth Brethren	11,149	7,286	3,863	15,529	9,895	5,634
Lutherans—German Protestants	172	86	86	134	64	70
Moravians—United Brethren ..	712	420	292	1,027	594	433
Calvinists—Calvinistic Methodists, Welsh Church	282	182	100	360	222	138
Society of Friends	942	602	340	1,502	989	513
Salvation Army	442	244	198	2,131	1,077	1,054
Unitarians						
Other Protestants						
Catholics—						
Roman Catholics	197,157	97,491	99,666	240,300	121,756	118,544
Catholics (not otherwise defined)	6,323	3,153	3,170	8,291	4,265	4,026
Greek Church	103	95	8	247	206	41
Other Sects—						
Catholic Apostolic Church	383	179	204	407	206	201
Israelites—Christian Israelites ..	238	124	114	293	145	148
Latter-day Saints—Mormons	15	13	2	48	29	19
New Church—Swedenborgians ..	292	139	153	305	156	149
Spiritists—Spiritualists	853	434	419	790	422	368
Jews	4,330	2,396	1,934	6,459	3,540	2,919
Mahomedans	111	110	1	242	230	12
Buddhists, Confucians, etc.	11,159	11,122	37	6,746	6,623	123
Other Denominations	349	194	155	119	95	24
No Denomination	4,979	3,375	1,604	12,971	9,245	3,726
No Religion	2,607	1,995	612	3,454	2,738	716
Unspecified	6,457	3,848	2,609	9,269	5,392	3,877
Object to state their Religious Belief	8,598	5,723	2,875	13,608	9,332	4,276

* Including a few who returned themselves as of the Free Church of England.

TABLE IV.—RELIGIONS, 1881 AND 1891—continued.

Persons, Males and Females, of different Religions, and the Proportion per cent. of those of each Religion to the Number whose Religion was specified at the Censuses of 1881 and 1891.

Religious Denomination.	Proportion per cent. of the Population.					
	1881.			1891.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Total specified	100·000	100·000	100·000	100·000	100·000	100·000
Anglicans—						
Church of England, Episcopalians	35·353	35·691	34·983	35·937	36·146	35·707
Protestants (not otherwise defined)*	1·387	1·487	1·276	1·394	1·493	1·286
Presbyterians—						
Presbyterian Church of Victoria	15·253	15·156	15·358	14·600	14·513	14·693
Free Presbyterian Church of Victoria	·331	·316	·347	·344	·342	·348
Other Presbyterians	·065	·063	·067	·002	·003	·002
Methodists—						
Wesleyan Methodists	11·574	11·049	12·144	12·068	11·472	12·716
Primitive Methodists	1·028	·985	1·073	1·016	·955	1·083
Bible Christians	·786	·741	·835	·857	·802	·917
United Methodist Free Church ..	·192	·197	·197	·203	·189	·218
Other Protestants—						
Independents, Congregationalists	2·346	2·228	2·475	1·979	1·915	2·048
Baptists	2·404	2·191	2·637	2·495	2·313	2·695
Disciples of Christ—Church of Christ	·573	·520	·632	·739	·675	·810
Christians (not otherwise defined)	·076	·082	·070	·096	·099	·093
Christians—Plymouth Brethren	·076	·082	·070	·096	·087	·105
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Society of Friends	·033	·041	·025	·032	·038	·026
Salvation Army	·111	·136	·084	1·210	1·157	1·268
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No Denomination	·588	·763	·397	1·160	1·583	·698
No Religion	·308	·451	·151	·309	·469	·134
Unspecified
Object to state their Religious Belief

* Including a few who returned themselves as of the Free Church of England.

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APPENDIX E.

CHINESE IN AUSTRALASIAN COLONIES, 1881 AND 1891.
(CENSUS FIGURES.)

Colony.	Number of Chinese enumerated in—		Increase (+). Decrease (-)
	1881.	1891.	
Victoria	12,128	9,377	-2,751
New South Wales	10,205	12,781	+2,576
Queensland	11,229	8,574	-2,655
South Australia	4,151	3,976*	-175
Western Australia	145	917	+772
Total	37,858	35,625	-2,233
Tasmania	844	939	+95
New Zealand	5,004	4,444	-560
Grand Total	43,706	41,008	-2,698

* Figures not final.

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