

NEW ZEALAND AND SOUTH SEAS INTERNATIONAL EXHIBITION,  
DUNEDIN, 1889-90.

---

ILLUSTRATED HANDBOOK OF VICTORIA,

TOGETHER WITH THE

Official Catalogue of Exhibits

IN THE

VICTORIAN COURT.

---

MELBOURNE:

BY AUTHORITY: ROBT. S. BRAIN, GOVERNMENT PRINTER.

MDCCCLXXXIX.

*VICTORIA, by the Grace of God, of the United Kingdom  
of Great Britain and Ireland Queen, Defender of the  
Faith.*

**To** Our trusty and well-beloved the Honorable GEORGE DAVID LANGRIDGE, a Member of the Executive Council of Our Colony of Victoria, and a Member of the Legislative Assembly of Our said Colony; HENRY GYLES TURNER, Esquire, J.P., Acting President of the Chamber of Commerce; ISAAC JACOBS, Esquire, President of the Victorian Chamber of Manufactures; JOHN GEORGE BARRETT, Esquire, President of the Melbourne Trades' Hall Council; JAMES COOPER STEWART, Esquire, an Alderman of the City of Melbourne; and HENRY MEAKIN, Esquire, a Councillor of the Town of Geelong,

GREETING—

WHEREAS it has been notified to us that an Exhibition of the Arts, Industries, Resources, and Manners of New Zealand, Australia, and the other Countries and Colonies in the Southern Pacific will open at Dunedin, in Our Colony of New Zealand, in the month of November next, in celebration of the Fiftieth Anniversary of the Foundation of Our said Colony of New Zealand, and whereas it is in every respect desirable that Our Colony of Victoria should be duly represented at the same and that a Commission should be appointed to devise and carry out such measures as may be necessary to secure the effectual exhibition thereof of fitting specimens of the Arts, Industries, and Resources of Our said Colony of Victoria: NOW KNOW YE that We, reposing great trust and confidence in your knowledge and ability, have constituted and appointed, and by these presents do constitute and appoint you the said GEORGE DAVID LANGRIDGE, HENRY GYLES TURNER, ISAAC JACOBS, JOHN GEORGE BARRETT, JAMES COOPER STEWART, and HENRY MEAKIN to be our Commissioners for the purposes aforesaid, and we do by these presents give and grant unto you or any three or more of you full power and authority to carry into effect the purposes of this Our Commission by all lawful ways or means whatever: AND We do further hereby appoint you the said GEORGE DAVID LANGRIDGE to be the PRESIDENT of this Our Commission: AND We do further will and direct that you do report in writing your proceedings to Our Governor of Our said Colony of Victoria, or to the Officer for the time being administering the Government thereof: AND, LASTLY, We do by these presents ordain that this Our Commission shall continue in full force and virtue, and that you Our said Commissioners, or any three or more of you, shall and may from time to time, and at any place or places, proceed in the execution thereof and of every matter and thing therein contained, although your proceedings be not continued from time to time by adjournment. IN TESTIMONY whereof We have caused these Our Letters to be made patent, and the Seal of our said Colony of Victoria to be hereunto affixed.

WITNESS Our trusty and well-beloved Sir WILLIAM CLEAVER FRANCIS ROBINSON, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George; Administrator of the Government of Our Colony of Victoria and its Dependencies, &c., &c., &c., at Melbourne, this twenty-seventh day of June, One thousand eight hundred and eighty-nine, and in the fifty-third year of Our reign.

(L.S.)

W. C. F. ROBINSON.

By His Excellency's Command,

ALFRED DEAKIN.

A complete representation of the various valuable timbers used in the colony, as well as of our building stones, would be of manifest utility. Timber merchants sawmill proprietors, and quarry owners are, therefore, invited to contribute suitable specimens.

The pre-eminent position occupied by Victoria in gold mining justifies the expectation of the Commissioners that a comprehensive collection of our minerals and, if possible, models of machinery and other appliances used in mining operations may be made, which would constitute a most valuable and instructive exhibit.

The development of artistic taste and knowledge which has taken place in Victoria since the date of the Melbourne International Exhibition, will, it is hoped, be illustrated on the present occasion by an exhibit representing the best efforts of our young colonial artists.

The prominent position which manufacturing industries have attained in Victoria, and the appreciation of their products shown by other communities, justify the expectation of the Commissioners that the exhibits in this department will be a leading feature of the Exhibition.

Owing to the limited time at the disposal of the Commissioners, intending exhibitors are requested to send in their applications for space to the Secretary without delay, and it will be necessary that all exhibits be ready for shipment not later than Monday, the 16th day of September.

All exhibits from country districts, as well as from Melbourne, will be conveyed over the Victorian lines free of charge, and, if necessary, will be stored in the goods shed at Spencer-street, or elsewhere, pending their despatch to the Exhibition.

---

# HANDBOOK OF THE COLONY OF VICTORIA.

---

## INTRODUCTION.

THERE is probably no country in the world that offers such attractions to the working man as Victoria. There it is not unusual for the agricultural labourer, the artisan, and the mechanic to find several masters competing for his services, and outbidding each other in order to obtain them. What is called the eight hours' system, founded upon the division of the day into three parts of eight hours each—one to be devoted to labour, one to recreation, and one to rest—has been in existence for the last 32 years, and no employer would venture to ask his men to work a minute longer than the recognised time. Wages are so high and work so constant—the weather being habitually so fine that there is scarcely any broken time—that an industrious man is often able not only to maintain his family in comfort, but by the exercise of economy to lay by as much as the whole sum of his wages would amount to in England. Free instruction to his children is provided by the State, and, as his boys and girls grow up, plenty of employment offers for them, so that instead of being an expense they soon bring in money.

To women and girls desirous of engaging in domestic service the colony presents even greater attractions. Wages have been going up steadily for years past, notwithstanding which it is now difficult to get good servants at any wages. Besides the satisfaction of obtaining high remuneration, servants feel that their privileges are greater and the restrictions placed upon them are fewer than in England, whilst, from the value placed upon their services in consequence of the smallness of the supply, they are naturally treated with a kindness and consideration to which many of them had been strangers before coming to Victoria.

To professional men, clerks, shopmen, and shopwomen the certainty of remunerative employment is not so absolute as it is to the operative classes. Many succeed beyond their warmest aspirations, whilst others fail utterly. Industry, perseverance, and, it may be added, versatility, will in time conquer many difficulties. The colony presents a large field for male and female instructors, but in this there is already no dearth of competitors, and much will depend upon the qualifications of the individual. The failures of society—the dissipated, the drunken, and the idle—had far better not come to the colony. If they do they will assuredly soon fall into destitution.

Those desirous of entering into farming pursuits can lease land direct from the Crown at an annual rental of from 2d. to 4d. per acre, with a conditional pre-emptive right to 320 acres of the leasehold at a price of £1 per acre, payment of which may extend over twenty years without interest; or, if they prefer it, can purchase improved farms from private individuals. Farming has, upon the whole, paid fairly well in the past, although the precarious nature of the seasons has occasionally subjected the farmer to disappointments. Irrigation, however, is now being successfully practised, and several measures have been enacted for its better promotion and regulation. Many of the driest districts are those which, from their position, can be most easily irrigated, and for these elaborate irrigation schemes have been devised, some of which are already being carried out.

Probably no better field for the employment of capital exists than Victoria, where, if anywhere, money makes money. Judgment in its use is of course necessary, and newcomers should be especially careful. Safe and profitable investments are plentiful, and if proper caution be exercised no risk need be run.

An important consideration to all classes is that the rate of mortality at every period of life is much lower in Victoria than in the United Kingdom, therefore persons from the latter settling in the former have a greater prospect of rearing their children and themselves living to old age than they would have had if they had remained in the country from which they took their departure.

A word of advice to those who are about to emigrate to Victoria with the view of making it their home: Do not condemn the colony if you do not succeed in it immediately. Land of plenty though it be, it is not sufficient merely to set your foot in it to become a partaker of that plenty to its fullest extent. On landing you will probably know no one, and be known to none; consequently it may be some time before you obtain exactly the kind of employment which suits you, but every fresh job you get will gain you acquaintances, both amongst employers and workmen, and will also afford you the opportunity of looking about you. Your qualifications will gradually become known, and you will drop into the fitting groove at last. Remember that, in the most palmy days of gold getting, the precious metal was not to be picked up in the streets, but had to be wrung from the soil by hard and persevering toil. "Work, honest work!" must still be the watchword of him who desires success.

#### POSITION AND AREA.

1. Victoria, so named after Her Most Gracious Majesty, although the smallest, is probably the richest and most prosperous of the various colonies situated on the Australian Continent, of which it occupies the south-eastern portion. It is bounded on the north and north-east by the colony of New South Wales, and on the west by the colony of South Australia. On the south and south-east its shores are washed by the ocean. It lies between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. Its extreme length from east to west is about 420, its greatest breadth about 250, and its extent of coast-line nearly 600 geographical miles. Its area is 87,884 square miles, or 56,245,760 acres. The whole Continent of Australia is estimated to contain 2,944,628 square miles, and therefore Victoria occupies about a thirty-fourth part of its surface. Great Britain, exclusive of the islands in the British seas, contains 89,644 square miles, and is therefore somewhat larger than Victoria.

#### DISCOVERY AND HISTORY.

2. From the period of the expedition into India of Alexander the Great (B.C. 330 to 325), allusions to a Great South Land begin to be met with in the contemporary writings, and later on Strabo (B.C. 50), Pliny (A.D. 77), and Ptolemy (A.D. 150) distinctly mention such a land, although the accounts they give of it and its inhabitants are wide of the truth. It seems clear at least that the existence of Australia was known to the Greeks and Romans, although its position and extent remained uncertain long after their times; and it scarcely admits of a doubt that in the seven or eight centuries during which the Mahomedan power dominated in the Malay Peninsula and Indian Archipelago the northern coasts of Australia were often visited by their navigators, the results of these visits being plainly perceptible both in the persons and languages of the aborigines. The Chinese trepang fishery on the northern shores of Australia dates from very remote times,

and traces of Chinese intercourse with the aboriginal inhabitants about Cape York and the Gulf of Carpentaria are said to be yet perceptible in the features of the latter. Marco Polo, the celebrated navigator (A.D. 1293), makes allusion to the Great South Land, and there is no doubt its existence was known to him, although it is not probable he ever visited its shores. The honour of being the first European to behold the Great South Land has been awarded with some confidence by Sir Robert Rawlinson\* to a Provençal navigator named Guillaume le Testu, a native of the city of Grasse. The evidence relied upon is furnished by certain French maps and relative documents found in the British Museum and the War Office of Paris, of dates respectively 1542 and 1555, and from these it would appear that the original discovery was made as early as 1531. Three quarters of a century after this (about the end of 1605) Fernandez de Quiros, a Spanish navigator, started from Lima with three ships to try and discover the Great South Land, and on the 26th April of the following year he sighted land he believed to be the continent of which he was in search, which he named "Tierra Austral del Espiritu Santo." It is generally thought, however, that this was not Australia, but one of the islands of the New Hebrides. His crew shortly afterwards mutinied and would proceed no further, but two of the ships of the expedition, under the command of Torres, continued their course, and passed through the straits dividing Australia from New Guinea. In March, 1606, a few days before this, the Dutch landed on the shores of Australia in a small vessel called the *Duyffken*.† She proceeded as far as Cape Turnagain (lat.  $13\frac{3}{4}^{\circ}$  S.), situated in the Gulf of Carpentaria, where some of the crew landed, and several were killed by the aborigines. The statements brought to Holland by the survivors awakened a desire for further information, and an expedition was sent out to found a colony. It is uncertain where the landing was effected, but the territory was soon abandoned in consequence of the hostility of the natives. On their return, the members of the expedition reported that the land was rich with gold, but this was not generally believed. After this, repeated attempts to obtain particulars of the land were made by the Dutch. Dirk Hartog, in 1616, fell in with the north-west coast, and examined it from lat.  $19^{\circ}$  to lat.  $25^{\circ}$  S. Jan Edels, in 1619, coasted along the shore as far as  $29^{\circ}$  S., and gave his name to portion of the present colony of Western Australia. In 1622 the south-western extremity of Australia was discovered by a Dutch ship named the *Leeuwin*;‡ and in the same year Francis Pelsart, in a ship called the *Batavia*, was wrecked on a reef of rocks about 200 miles north of Swan River. In 1642 Abel Jansen Tasman discovered Van Diemen's Land, now called Tasmania, which for a long time afterwards was believed to be part of the Australian main land. In 1688, and again in 1699, Dampier, a noted English buccaneer, visited and examined a considerable portion of the north-western coast of Australia; Dampier Bay, Roebuck Bay, and the Buccaneer Islands being named by him. Other English and Dutch navigators followed. They seem, however, to have confined their examinations to the western and northern coasts, and it was not until 1770 that the south-eastern and eastern shores were visited, the discoverer of these portions being the celebrated English navigator, Captain Cook. He made the land at that part of Australia now called Victoria, the point first sighted being apparently identical with the present Cape Everard, in Gippsland, situated between Cape Howe and the mouth of the Snowy River. He then sailed along the east coast, and carefully examined portions of it, especially Botany Bay, near which Sydney, the capital of the present colony of New South Wales, is situated.

\* See *Westminster Review* for October, 1885, article "Australia and New Zealand."  
† Or "small pigeon." The word would now be spelt *Duijken*.  
‡ Or "lioness."

3. On his return to England, Cook reported Botany Bay to be a suitable place for colonization, and this led to a party of convicts being despatched there in 1788, under Captain Arthur Phillip, R.N. On the shores of Port Jackson, a few miles to the north of Botany Bay, Phillip established a permanent settlement, but for nearly ten years afterwards nothing was done towards the exploration of the southern shores of Australia. At length George Bass, a surgeon in the Royal Navy, started in a whaleboat, manned by six seamen, and, passing Cape Howe, coasted along that part of Victoria now called Gippsland, and, rounding Wilson's Promontory—the southernmost point on the Australian Continent, entered Western Port on the 4th June, 1798. He, however, returned to Sydney without discovering Port Phillip Bay, which was first entered on the 5th January, 1802, by Acting Lieutenant John Murray, in command of the armed brig *Lady Nelson*. In the month of October, in the following year, an attempt was made to colonize the territory by Lieutenant-Colonel David Collins, of the Royal Marines, in command of a party of convicts. Collins, however, after the expiration of three months, abandoned Port Phillip as unfit for settlement, and for the next 20 years the district attracted but little attention; when two explorers—Hume and Hovell—made their way overland from Sydney, and, on their return, gave a satisfactory report of the country, the result being that a convict establishment was soon afterwards founded on Western Port Bay, which, however, was in a short time abandoned, apparently on economic grounds. The first permanent settlement in Victoria was formed at Portland Bay, by Mr. Edward Henty, from Van Diemen's Land—as Tasmania was then called—who landed on the 19th November, 1834, and soon commenced to till the soil, run and breed stock, and carry on whaling operations. Others followed, but the absence of good land in the immediate vicinity of the port, and the openness of the bay, which rendered it unsafe for shipping during the prevalence of certain winds, caused it to be considered an unsuitable site for a capital, which was eventually founded at the northern end of Port Phillip Bay by two parties—one led by John Batman, who landed on the 29th May, 1835, and the other by John Pascoe Fawkner, whose party arrived at the site of Melbourne on the 28th August of the same year. Both of these were from Van Diemen's Land, and they were soon followed by others from the same island, and from Sydney, who brought stock with them, and commenced to push their way into the interior. These were met by Major (afterwards Lieutenant-Colonel Sir) Thomas Mitchell, who, entering from New South Wales on the north, and traversing a considerable portion of the, as yet, unknown territory, was so struck with its wondrous capabilities that he named it *Australia Felix*—a title the aptness of which a subsequent knowledge of the geniality of its climate, the excellence of its soil, and the then unsuspected richness of its mineral treasures, has proved to be fully justified. The reports of Sir Thomas Mitchell, and the success of the first settlers, caused great excitement, not only in the Australian settlements, but in the mother country. Herds of sheep and cattle, driven overland from New South Wales, speedily occupied the best parts of the new territory. Every available craft capable of floating was put into requisition to bring passengers and stock from Van Diemen's Land, and after a time shiploads of emigrants began to arrive from the United Kingdom. Regular government was first established under Captain William Lonsdale, who, having been sent from Sydney to take charge of the district, landed on the 29th September, 1836; and, on the 2nd March of the following year, Sir Richard Bourke, the Governor of New South Wales, visited it, and named the metropolis Melbourne. Mr. Charles Joseph La Trobe arrived on the 30th September, 1839, having been appointed to the principal official position in the settlement, under the title of Superintendent, which was changed to that of Lieutenant-

Governor, when, on the 1st July, 1851, it was separated from New South Wales, and erected into a separate colony under the name of Victoria. Shortly afterwards rich deposits of gold were discovered, the fame of which soon spread throughout the world, and led to a great influx of population. After a time some discontent arose amongst the diggers, in consequence of the oppressive character of the mining regulations, which culminated in riots, which occurred on the Ballarat gold-field towards the end of 1854. The disturbance was soon quelled, with some bloodshed on both sides, and the grievances complained of were afterwards redressed. A new constitution, giving responsible Government to the colony, was proclaimed on the 23rd November, 1855, and since then, although political struggles have been frequent, and party feeling has at times run high, these circumstances have had no permanent effect in setting class against class, or in any way lessening the good feeling which exists between all section of the community. At times commerce has been depressed, but this has soon revived, and the material prosperity the colony has upon the whole enjoyed is, perhaps, without a parallel in the history of any country.

#### PHYSICAL FEATURES.

4. Victoria is traversed, with more or less regularity, throughout its entire length from east to west by a chain of mountains and lesser hills, completely dividing it into two parts, and known as the Dividing Range. The summit of this range runs generally at a distance of 60 or 70 miles from the coast. The streams to the north of it flow towards the River Murray, and those to the south of it towards the sea. The eastern part of the range, which divides the Gippsland district from that of the Murray, is named the Australian Alps; and that part which separates the County of Ripon from that of Borung, and extends into the County of Kara Kara, is named the Pyrenees. The higher peaks of the Dividing Range are covered with snow for several months in the year. The mountainous country is, for the most part, densely wooded to the very summits with fine timber, but the peaks above the winter snow-line are quite bare, or only partially covered with dwarfed trees or shrubs. From near Kilmore eastward, a distance of 200 miles, the mountains are generally so steep and inaccessible as to present a considerable barrier between the parts of the colony north and south of them, and they can only be traversed with great labour by the few passes that exist. From Kilmore westward the range rapidly dwindles, so that, although presenting in places points of considerable height—such as Mount William and Mount Macedon—it is easily crossed. From Mount Macedon it becomes, as it stretches away to the Western district, a chain of hills, in parts only of considerable altitude, and offering no serious obstructions to crossing in very many places. That portion of the Murray basin commencing at Wodonga on the east as a point, and extending in the form of a regular triangle to a width of 200 miles along the western boundary of Victoria, has almost a flat surface, with a very slight inclination towards the Murray. The remaining cuntry north and south of the Dividing Range and its spurs is moderately undulating; it is in some parts destitute of timber, but closely wooded in others.

5. Besides the main Dividing Range there are also other ranges extending in different parts of the country, many of them being spurs of the main chain. The highest peaks, however, are found in the Dividing Range and its offshoots, between St. Clair and the eastern boundary of Victoria. The chief of these are:—The Bogong Range, 6,508 feet; Mount Feathertop, 6,303 feet; Mount Hotham, 6,100 feet; Cobberas, 6,025 feet; the Pilot Range, 6,020 feet; and Mount Cope, 6,015 feet. These, so far as known, are



the only peaks which exceed 6,000 feet in height. So far as is at present known by observation, there are fifteen peaks between 5,000 and 6,000 feet high, and thirteen between 4,000 and 5,000 feet. There are, however, many peaks rising to upwards of 4,000 feet above the level of the sea whose actual heights have not yet been determined. The highest mountain on the Australian continent is Mt. Kosciusko, which is situated in New South Wales, close to the Victorian frontier, near the head waters of the River Murray. A recent observer states the height of this peak to be 7,256 feet.

6. The rivers in Victoria are, for the most part, inconsiderable. Many of them are liable to be partially dried up during the summer months, so as to be reduced at that season to mere chains of pools or waterholes. With the exception of the Yarra, on the banks of which the metropolis is situated; the Goulburn, which empties itself into the Murray about eight miles to the eastward of Echuca; the La Trobe and the Mitchell, with, perhaps, a few other of the Gippsland streams; and the Murray itself, not one of them is navigable except by boats. As, however, they drain the watershed of large areas of country, some have already been, and others will ultimately be, made feeders to permanent reservoirs for the purposes of irrigation, gold-washing and manufactures. The Murray, which forms the northern boundary of the colony, is the largest river in Australia. Its total length is 1,300 miles, for 980 of which it flows along the Victorian border.\* The names and lengths of the other principal Victorian rivers are as follow:—The Goulburn, 345 miles; the Snowy, 300 miles, 180 of which are in New South Wales; the Glenelg, 281 miles; the Wimmera, 228 miles; the Loddon, 225 miles; the Mitta Mitta, 175 miles; the Avoca, 163 miles; the Hopkins, 155 miles; the Campaspe, the Wannon, and the Yarra Yarra, each 150 miles; the Ovens, 140 miles; the La Trobe, 135 miles; the Tambo, 120 miles; the Mitchell, 80 miles.

7. Victoria contains numerous salt and fresh-water lakes and lagoons; but many of these are nothing more than swamps during dry seasons. Some of them are craters of extinct volcanoes. Lake Corangamite, the largest inland lake in Victoria, covers 90 square miles, and is quite salt, notwithstanding its augmentation by numerous fresh-water streams. It has no visible outlet. Lake Colac, only a few miles distant from Lake Corangamite, is a beautiful sheet of water, covering  $10\frac{1}{2}$  square miles in extent, and quite fresh. Lake Burrumbeet is also a fine sheet of fresh water, embracing 8 square miles. The Gippsland lakes, covering a total area of almost 148 square miles, are situated close to the coast, and are only separated from the sea by a narrow belt of sand. Through this there is a natural entrance, which is subject to be closed at irregular intervals in consequence of the shifty nature of the sand at its mouth; an artificial channel, however, connecting the lakes with the ocean, has recently been constructed with much difficulty and at considerable cost. There is every reason to hope that the navigable entrance thus formed will be permanent. Lake Wellington, the largest of all the Gippsland lakes, lies to the westward of Lakes Victoria and King, and is united with the first-named by a narrow channel. South-east of Geelong is Lake Connearwarre, connected with the sea at Point Flinders.

8. From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other colony upon the Continent of Australia, as within a comparatively limited area it possesses the climatic advantages of the more favoured portions of Southern Europe. Upon examining a chart showing isothermal lines it will be found that Melbourne, the capital, is situated upon or near the line corresponding with that in the Northern Hemisphere on which Marseilles, Bordeaux, Bologna, Nice, Verona,

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

Madrid, and Washington are situated. The difference, however, between summer and winter, and the hottest and coldest month, is far less in Melbourne than in any of these places. In the 25 years ended with 1888, the maximum temperature in the shade at Melbourne was 111°; the minimum was 27°; and the mean was 57½°. Upon the average, on four days during the year the thermometer rises above 100° in the shade; and generally on about three nights during the year it falls below freezing point. The maximum temperature in the sun (solar radiation) on record is 179°. The mean atmospheric pressure, noted at an observatory 91 feet above the sea-level, was during a period of 25 years 29.94 inches; the average number of wet days during the same period was 131, and the yearly rainfall varied from 16 to 34 inches, the average being 26 inches. In some parts of the colony the rainfall is much lower, and in the mountainous portions of Gippsland much higher, than in Melbourne.

### CONSTITUTION AND GOVERNMENT.

9. The legislative authority in Victoria is vested in two Houses of Parliament, viz., the Upper House, or Legislative Council, consisting of 48 members, returned in fourteen provinces, each member being elected for six years, and one member, at least, for each province retiring every two years in rotation, but being eligible for re-election, a small property qualification existing for both electors and members; and the Lower House, or Legislative Assembly, which consists of 95 members, elected for three years, returned in 84 districts or electorates. There is no property qualification for members of this House, and every male of 21 years of age or upwards, untainted by crime, is allowed a vote. In the year 1888-9 the electors on the rolls of the Legislative Council numbered 138,562, and those on the rolls of the Legislative Assembly 243,730. Of the whole population of the colony two in every nine are electors for the Lower House, and there is a member to every 11,483 persons. If Victoria were to be represented according to the population in the same proportion as the United Kingdom, she would, instead of sending 95 members to Parliament, return only 20.

10. The executive power is in the hands of a Governor, appointed by the Crown, who acts under the advice of a responsible Ministry, consisting of ten members.

11. Municipal or local government is almost universal throughout Victoria, its whole area, with the exception of a very small portion, being divided into urban or rural municipalities. The former are called *cities, towns, and boroughs*, and the latter *shires*. They are regulated under an Act of the Legislature, each municipality being a body corporate, with perpetual succession and a common seal, and capable of suing and being sued, and of purchasing, holding, and alienating land. The cities, towns, and boroughs number 59, and the shires 126. They have power to levy rates, and are also subsidized by the State. Their peculiar functions are to make, maintain, and control all streets, roads, bridges, ferries, culverts, watercourses, and jetties within their respective boundaries; also to regulate under proper by-laws the markets, pounds, abattoirs, baths, charitable institutions, and the arrangements for sewage, lighting, water supply, prevention of fire, and carrying on of noxious trades. Together, they contained, in 1888, 1,072,619 inhabitants, or all but about 2,000 of the then population. The total value of the rateable property in municipalities was assessed in the same year at £167,385,210, and the annual value at £11,913,473. Rates may be levied as low as 6d. in the £, and as high as 2s. 6d.; but the most common rating is one shilling.

## POPULATION.

12. Although, as has been already stated, Victoria occupies no more than the thirty-fourth part of the Australian Continent, from various causes such has been its attractiveness, as compared with other colonies of the group, that it was at the end of 1888 the most populous Australian colony, and contained 37 per cent. of the inhabitants of the whole Continent. The population at the last census, which was taken on the 3rd April, 1881, was 862,346. On the 31st December, 1888, the inhabitants were estimated to have increased to 1,090,869, consisting of 581,333 males and 509,536 females. These numbers show an average of about 88 females to 100 males, or 114 males to 100 females.

13. According to an estimate made at the middle of 1888, 96½ per cent. of the colonists were British subjects by birth, and only 3½ per cent. were foreigners. The native Victorians numbered about 630,000, or nearly 60 per cent. of the population; the natives of other Australian colonies numbered 50,000; the English, 174,000; the Irish, 101,000; the Scotch, 57,000; the Chinese, 12,000; and natives of other countries, about 38,000.

14. The religions of the people, according to the same estimate, were as follows:—Protestants, 761,500; Roman Catholics, 250,400; Jews, 5,300; Buddhists, Confucians, &c., 11,300; and persons of other sects or of no denomination or religion, about 33,500.

15. The modes of classifying the population of a country according to age admit of great variety. Probably the mode of grouping most easily understood, however, is that under the following heads:—“Infants,” to denote persons who have not completed their first year; “children,” from 1 to 5 years of age; “boys and girls,” from 5 to 15 years; “youths and maidens,” from 15 to 20 years; “young men and young women,” from 20 to 30 years; “middle-aged men and middle-aged women,” from 30 to 50 years; old men and old women,” 50 years and upwards. The following were the estimated numbers at these periods of life at the middle of 1888:—

				Males.		Females.
Infants	...	...	...	14,874	...	14,551
Children	...	...	...	53,105	...	50,248
Boys and girls	...	...	...	116,824	...	112,843
Youths and maidens	...	...	...	60,295	...	57,347
Young men and women	...	..	..	122,096	...	107,884
Middle-aged men and women	...	...	...	109,920	...	96,667
Old men and women	...	...	...	87,951	...	57,445
Total	...	...	...	565,065	...	496,985

16. In 1881, according to the census returns, 44 per cent. of the males and 51 per cent. of the females over 15 years of age were living in the marriage state, about 5 per cent. of the males and about 9 per cent. of the females at the same period of life were living in a state of widowhood; 9 males and 10 females were living in a state of divorce; and about 51 per cent. of the males and about 40 per cent. of the females had never been married.

17. The occupations as returned at the census are classified under a great number of heads. They have, however, been brought on to the middle of 1888 in the following groups:—Ministering to government, 6,200; ministering to religion, 1,600; ministering to health, 4,400; ministering to law, 1,600; ministering to education, 8,400; ministering to art, science, and literature, 4,600; trades, 29,600; ministering to entertaining or clothing, 51,400; domestic servants, 30,200; contractors, artisans, and mechanics, 59,300;

engaged in mining, 26,000 ; engaged in pastoral pursuits and agriculture, 153,000 ; engaged in land carriage, 18,600 ; engaged in sea navigation, 4,200 ; dealing in food, 19,700 ; labourers, 30,100 ; wives, widows, children, &c., 574,200 ; following other pursuits or no occupation, about 38,500.\*

18. At the first colonization of the district now called Victoria the aborigines were officially estimated to number about 5,000 ; but, according to other and apparently more reliable estimates, they numbered at that time not less than 15,000. When the colony was separated from New South Wales in 1851 the number was officially stated to be 2,693 ; and at the end of 1888 the number had become reduced to 737. The existence of the few that still remain alive has no political or social significance whatever. The race will probably become extinct in the course of a few years.

19. The metropolis of Victoria is Melbourne, the most populous and important city in Australasia. With its immediate suburbs, consisting of eighteen municipalities, all lying within a radius of ten miles from the centre of the city, it contains 438,000 inhabitants ; it is truly a noble city, the streets being wide and regularly laid out ; many of the buildings of great architectural merit ; and the parks, reserves, and public gardens numerous, extensive, beautifully situated, and well kept. In regard to paving, lighting, water supply, and police protection it is equalled by few cities of the Old World. Extensive sewage works have been planned, and are now being rapidly proceeded with. Next to Melbourne, the most populous towns in Victoria are Ballarat and Sandhurst, both of which are of imposing appearance, vying with Melbourne in the grandeur of their public and private edifices, the beauty of their parks and gardens, and the excellence of their municipal arrangements. Each of these is situated in the centre of an extensive gold-mining district, the former containing 41,000 and the latter 36,000 inhabitants. Next to these is Geelong, an important seaport town, situate on Corio Bay, a branch of Port Phillip, with streets, buildings, and reserves but little inferior to those in the towns already mentioned, and containing 21,000 inhabitants. The total urban population of Victoria amounts to 633,000, or nearly three-fifths the population of the colony. In Melbourne, and especially in its suburbs, as well as in most of the extra-metropolitan towns, tree-planting in the streets has been carried on extensively, giving a fresh and pleasant appearance to the various localities, and no doubt contributing to the health of inhabitants.

20. According to an estimate made in the Department of Mines, the gold-mining population in Victoria numbered, at the end of 1888, 25,142 ; of these 12,726 were engaged in quartz, and 12,416 in alluvial workings ; 21,373 were Europeans, and 3,769 were Chinese. The followers of this occupation in 1869 are estimated to have amounted to 63,787, but since then they have been gradually falling off in numbers.

21. The habitations of all descriptions, according to the census of 1881, numbered 179,816, or 21,335 more than were returned 10 years previously. The increase in the total number of houses, however, does not show the whole improvement, for whilst brick and stone houses increased 36 per cent., wood, iron, and lath and plaster houses increased only 13 per cent. ; and huts and tents actually decreased in number by about 6,000. The superior character of the dwellings in 1881 is also indicated by the number of rooms, for whilst houses of one or two rooms *decreased* by 15,496, and houses of three and four rooms increased only 14 per cent., houses of five and six rooms increased 72 per cent., and houses

\* For a complete list of the occupations of the people of Victoria to the returns of the census of 1881, see Appendix, page 51 *post*.

of more than six rooms increased 60 per cent. At no previous census period since the discovery of gold were the inhabitants of Victoria so well housed as in 1881. At that time 95 per cent. were returned as living in houses properly so called, less than 4 per cent. as living in huts, and only about 1 per cent. as living in tents or ships or camping out. In 1871 less than 93 per cent., in 1861 only 69 per cent., and in 1857 only 63 per cent. of the population were living in houses. In 1881 the average number of persons to a dwelling was about 5, that of rooms to a dwelling was about  $4\frac{1}{4}$ , and that of persons to a room was about  $1\frac{1}{3}$ . At the beginning of 1889 the estimated number of houses in the colony was 235,000.

#### IMMIGRATION.

22. Although no State assistance is now given by Victoria to emigrants from Europe, yet every facility is offered by various lines of steamers and sailing vessels for persons of all ranks of society to take passages to this rich and prosperous, although thinly-populated, country. Hitherto the United States, chiefly on account of the shortness of the voyage, has been the great depository of the surplus population of the Old World; but, as the available lands in that country become occupied, the struggle for existence must necessarily be proportionately increased; whereas there is little doubt that in this and the neighbouring colonies the farmer, the artisan, and the labourer will be able to find abundance of remunerative employment for many years to come. The amount of room available for immigrants in the Australian colonies, as compared with the United States, may be realized by consideration of the fact that at the present time the Australian Continent contains barely one person to the square mile, whereas the United States has as many as seventeen.

24. In 1888 as many as 102,032 persons arrived in Victoria, but a number of these merely called there on their way to other places, and some left the colony, so that the net immigration during the year only amounted to 41,803.

25. The highest offices of the State are open to persons of foreign as well as of British birth; and, without becoming naturalized, alien friends resident in the colony may acquire real and personal property, and may convey, devise, and bequeath it in the same manner as if they had been British subjects by birth. Alien women also married to British subjects become naturalized thereby; but to become a member or elector of either House of Parliament it is necessary for a foreigner to take out letters of naturalization, to procure which he must present a memorial to the Governor, stating on oath his name, age, birthplace, residence, occupation, period of residence in the colony, and his desire to settle therein, which memorial must be accompanied by a certificate from a magistrate to the effect that he is known to be the person signing and is of good repute. Should the letters be granted, the applicant, before they are issued, must take an oath of allegiance to the Sovereign of the United Kingdom of Great Britain and Ireland. During the last seventeen years the following persons of different nationalities have become naturalized:—French, 65; Belgians, 11; Dutch, 13; Austrians, 47; Germans, 720; Italians, 38; Spaniards, 5; Portuguese, 2; Russians, 36; United States subjects, 22; Chinese, 2,969; subjects of other countries, 440; total, 4,368.

#### MARRIAGES, BIRTHS, AND DEATHS.

26. Marriages in Victoria numbered 8,946 in 1888, or 8.42 to every 1,000 of the population. The Victorian marriage rate had been falling off for a number of years until

1879, when it reached its lowest point. Since then it has been steadily increasing, and now compares favorably with that in most other countries. The decline referred to resulted, not from any disinclination to marry on the part of either sex, or from inability to support a family, but from the number of single men at marriageable ages being abnormally small in proportion to the total population. This arose from the fact that at the time immigrants flocked to the colony in the early days of the gold discoveries these consisted, to a very large extent, of adults without a corresponding proportion of younger persons, so that when immigration became very much reduced there was an insufficient youthful class growing up to supply the places of those adults who had married, died, or left the colony. The young population have now grown up to marriageable ages, and this has brought about a large increase in the marriage rate, which increase may be expected to continue for years to come. In proportion to the marriageable men living the rate was never low, but it is probably higher at the present time than it was at any previous period of the colony's history. Births in 1888 numbered 34,503, or 32.49 per 1,000 of the population. Owing to the same causes as those which have affected the marriage rate, the birth rate is now not so high as formerly. It is, however, increasing, and must obviously continue to do so concurrently with the improvement in the former. Deaths in 1888 numbered 16,287, or 15.34 per 1,000 of the population, which is an exceedingly low proportion. Seventeen deaths per 1,000 persons living has been held by high authority to be a natural rate of mortality in countries where adults and children exist in their normal proportions, but few countries can boast of so low a rate. For instance, in England and Wales the death rate is rarely, if ever, less than 19 per 1,000; in Belgium, it is about 20; in France and the Netherlands, 22; in the German Empire, about 26; in Italy, 27; in Austria, 30; and in Hungary, 33. The births in Victoria during 1888 exceeded the deaths by 18,216, or by as much as 112 per cent.

#### MINERAL WEALTH.

27. The gold deposits of Victoria are of world-wide fame. From the period of the first discovery of the precious metal in 1851 to the end of 1888, the total quantity recorded as having been raised is 55,635,959 ozs., of an aggregate value at £4 per ounce of £222,543,836. Although many of the old goldfields have become exhausted, the yield of some of the quartz reefs which have been worked for long periods continues undiminished, and fresh discoveries are being continually made. Not less than 625,026 ozs., valued at £2,500,104, were produced during the year 1888

28. Besides gold, the only metals which have been mined for in Victoria are tin, copper, antimony, silver, iron, and lead. None of these, however, have been found in sufficient quantity to warrant mining operations being pursued persistently. Kaolin of a superior quality, and quite suitable for the manufacture of porcelain, has been worked to some extent; and small quantities of gypsum and magnesite have been also raised. Quarries, from which a hard and durable description of basalt, locally called bluestone, is raised, are worked to a large extent, as also to a less extent are quarries of slate, flagging, sandstone, freestone, limestone, and granite.

29. Coal exists in several localities, and extends over a large area of country, but the seams of true coal hitherto discovered have rarely exceeded 2 feet in thickness, which has been considered insufficient to enable them to be profitably worked. A determined effort is, however, now being made to prove the value of the Victorian coal measures, and

borings under scientific direction are being put down at the cost of the Government in various places. Such coal as has been discovered is of excellent quality, and much of it lies convenient to a good port of shipment. Brown coal and lignite exist in large beds, some of which exceed 150 feet in thickness. The brown coal which has been recently placed upon the market is highly approved of as a fuel for steam as well as for household purposes, and is also believed to be suitable for the manufacture of gas. It is expected that this mineral will prove of great value to the colony. A Royal Commission has been appointed by the Government to inquire into the whole subject of the coal resources of Victoria.

30. That gems and precious stones will one day form an important article of Victorian produce there is scarcely room to doubt. Although they have never been systematically searched for, the following have been discovered, many of them in large quantities, and some of great size and beauty:—Diamonds, sapphires, rubies, oriental emeralds or green sapphires; white, blue, and pink topazes; zircons and hyacinths, beryls, opals, garnets, tourmalines, and numerous others. There is as yet no instance of the true emerald having been discovered.

31. It is estimated that the value of the metals and minerals other than gold, not including the stone from quarries, raised in Victoria since 1851 has amounted to over £1,250,000. If the value of stone raised during the same period be added, it is probable that the total value would not be less than £1,800,000.

#### AGRICULTURE AND GRAZING.

32. The conditions under which land may be obtained from the Crown in Victoria were changed in 1884. Under the present law, the best unsold portions of the public estate, amounting in the aggregate to 8,712,000 acres, are to be divided into "grazing areas," not exceeding 1,000 acres in size, each of which will be available for the occupation of one individual, who will be entitled to select, within the limits of his block, an extent not exceeding 320 acres, for purchase in fee simple at £1 per acre, payment of which may extend over twenty years, without interest. The selected portion is termed an "agricultural allotment," and of it the selector is bound to cultivate one acre in every ten acres, and make other improvements amounting to a total value of at least £1 per acre. The unselected portion of the original area is intended for pastoral purposes, and for this the occupier obtains a lease, at a rental of from 2d. to 4d. per acre, for a period of fourteen years, after which it reverts to the Crown, an allowance up to 10s. per acre being made the lessee for any improvements he may have effected calculated to improve the stock-carrying capabilities of the land. Residence is compulsory if an agricultural allotment has been selected, but not otherwise; or, by paying twice the amount of purchase money and expending upon improvements £2 instead of £1 per acre, residence may be altogether dispensed with.

33. Persons desirous of purchasing farms already improved can always do so from private individuals, at prices ranging from £2 per acre upwards, according to quality of soil and value of improvements effected.

34. Prior to the discovery of gold, which took place about the middle of 1851, agriculture had made considerable progress in Victoria. In the year 1850, no less than 52,000 acres were in cultivation, while the population was only 76,000. Owing to the gold discoveries the cultivation of the land languished for a time, only 35,000 acres

having been placed under cultivation in 1853, when the population amounted to 222,000; but since that date a fresh impulse has been given to agricultural pursuits, every subsequent year presenting an increased area of land under tillage. At the end of the first quarter of 1889 the extent of land in cultivation was 2,564,742 acres, and the number of cultivators was 35,727. The five principal crops are:—Wheat, which covered 1,217,191 acres; oats, 197,518 acres; barley, 83,483 acres; potatoes, 43,074 acres; and hay, 411,332 acres. In addition to these, green forage and permanent artificial grasses covered 192,540 acres; maize, rye, vegetables, fruit trees, vines, olives, hops, tobacco, and a few other crops of minor importance, occupied 86,961 acres; and 332,643 acres were lying fallow. The produce of wheat in 1887-8 was 13,329,000 bushels, or 11 bushels to the acre; that of oats was 4,563,000 bushels, or 23 bushels to the acre; that of barley was 956,000 bushels, or 14 bushels to the acre; that of potatoes was 198,000 tons, or 4 tons to the acre; and that of hay was 624,000 tons, or 1½ tons to the acre. In 1888-9, however, owing to the drought, the yield was from 30 to 50 per cent. below that in the previous year.

35. For many years Victoria did not produce enough wheat for the consumption of her own inhabitants, but latterly a much greater breadth of land has been placed under this crop, with the result that in the nine years ended with 1888 there was a balance for export amounting to 35,800,000 bushels. In 1888 the actual surplus exported amounted to 4,374,000 bushels.

36. Of late years so much attention has been paid to the cultivation of wheat that the growth and preparation of many other articles of farm and garden produce have been to a great extent neglected. During the six years ended with 1888, over four millions sterling (£4,200,000), which a little more enterprise might have caused to be spent in, instead of outside, the colony, was sent away for the following articles:—Oats, barley, pearl barley, malt, maize, maizena; beans, pease, and split pease; green and bottled fruit; dried currants and raisins; jams, jellies, and preserves; nuts, almonds, and walnuts; hops, chicory, pickles; olive and salad oil; tobacco, cigars, and snuff; preserved vegetables; canary, grass, and clover seed. All of these articles are capable of being produced, and all or nearly all are to a certain extent now produced, in the colony.

37. Victoria is well suited to the growth of vegetables, and cabbages, cauliflowers, artichokes, pease, beans, beet, carrots, turnips, parsnips, spinach, lettuces, radishes, onions, and all pot-herbs grow quite as well as in England, whilst celery, tomatoes, vegetable marrows, cucumbers, pumpkins, and asparagus succeed much better. The potato in some districts yields as much as 10 tons to the acre, the quality being unsurpassed. No disease has as yet affected the potato in this colony.

38. All kinds of English fruits grow luxuriantly in Victoria. Apples, pears, peaches, nectarines, apricots, plums, greengages, cherries, currants, gooseberries, mulberries, raspberries, strawberries, walnuts, and almonds have been planted extensively; but medlars, filberts, and chesnuts up to the present time not so largely. All, however, thrive well and produce heavy crops of fruit. Grapes, oranges, lemons, and all the melon tribe also grow and ripen beneath the Victorian sun, attaining an excellence which is paralleled in but few countries. Twenty-seven thousand acres were returned in 1888-9 as under orchards and gardens, but this does not nearly represent the whole, as notice is not generally taken of orchards and gardens (other than market gardens) not attached to farms.



39. Victoria is doubtless destined to be a great wine-producing country. The products of her vineyards have obtained honorable distinction at all the recent exhibitions, and have been especially reported on for their purity, flavour, and natural strength. The wine industry received a temporary check some years since in consequence of an outbreak of the *phylloxera vastatrix*, but this was found to be confined to one district of the colony, where it was promptly stamped out by the eradication of all the vines within a radius of 30 miles. Great efforts have been made to improve the quality of the Victorian wines by better methods of manufacture and judicious blending. Skilled vigneronns have also been introduced from Spain, France, and Germany. Victorian wines are now not only extensively used in Australia, but are being largely sought after in the United Kingdom, the Continent of Europe, and British India. Viticulture has been most profitable to those who have undertaken it, and it is believed a great future awaits this industry. The manufacture of raisins has as yet only been tried upon a small scale, but, so far as it has gone, the result has been quite satisfactory; 12,750 acres were under vines in 1888-9, and the wine produced in the previous season amounted to over 1,206,442 gallons. Besides the grapes made into wine, about 49,000 cwt. were sold for table use.

40. Olive trees grow rapidly and bear largely in Victoria, and, where the manufacture of olive oil has been tried, an excellent article has been produced. The trees abound in some localities, and the industry is beginning to excite some attention.

41. It has been found that hops, but little inferior in aroma to the best Kentish, can be grown in Victoria; and the comparative failure for several successive seasons of this crop in the United Kingdom gave a considerable stimulus to the industry. As many as 1,760 acres were under hops in 1884, which produced 15,700 cwt. Consequent upon a renewed supply in the Old World the high prices which prevailed in 1883 have not been sustained, and the cultivation of hops has been comparatively neglected. Only 763 acres, producing 5,539 cwt., were placed under hops in the past season, but the industry is still a profitable one, and it may be expected that considerably larger figures will appear in the returns of future years.

42. The white mulberry, which is the natural food of the silkworm, is well suited to the soil and climate of Victoria, and the trees rapidly attain large dimensions. Several attempts have been made to rear silkworms profitably, but these have failed, not because the worms did not breed and thrive as well as in other countries, indeed they were absolutely free from disease, but solely in consequence of the high price of labour. The industry, however, is well suited to women and children, and as population increases there is no doubt it will be extensively practised. The *ailanthus glandulosa*, on which the Chinese silkworm feeds, is to be found in vigorous growth in many gardens in and around Melbourne, and should it be decided to introduce that variety of the worm the shrub could easily be grown to any extent which might be required.

43. 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 crop is rather a precarious one, and the mode of treating the leaves after they have been gathered has not always been properly understood by the cultivators; still the efforts of these have been upon the whole successful. From 1,300 to 2,000 acres are usually placed

under tobacco annually, and the quantity produced in one year has risen as high as 17,000 cwt. There would seem to be scope for increased skill and enterprise in extending the cultivation of this product.

44. The breeding of live stock, for which the climate and rich natural pastures of the colony offer eminent advantages, was the first Victorian interest which attained much magnitude. As cultivation advanced, after the first excitement consequent upon the gold discoveries had subsided, the propagation of animals was not neglected, and much attention was paid to improving the breeds of the various descriptions of live stock, especially sheep, with the result that Victorian wools invariably realize the highest price in the world's markets. According to the latest returns the live stock in the colony amounts to 323,115 horses, about 357,000 milch cows, 1,013,660 other horned cattle, 10,818,575 sheep, and 245,818 pigs. The numbers have been almost stationary for several years past, but with the opening up of the extensive mallee country, situated in the north-western portion of Victoria, it may be expected that the improved carrying capabilities of the land will lead to a large increase in the numbers of live stock.

45. The mallee country—so called from the fact of its being to a great extent covered with the various species of stunted trees of which the native name is "mallee"—embraces  $11\frac{1}{2}$  millions of acres, and is divided into blocks of various sizes, which are let on lease for pastoral purposes at a rental varying with their carrying capability, but in no case to be less than 2s. 6d. to the square mile. Of the remainder of the colony an extent of 6,700,000 acres is set apart for pastoral purposes, and is divided into "pastoral allotments," each capable of carrying from 1,000 to 4,000 sheep, or from 150 to 500 head of cattle, which allotments are let for terms not exceeding 14 years, at an annual rent of 1s. per head of sheep and 5s. per head of cattle the land is capable of depasturing.

46. According to official estimates the gross annual value of the agricultural produce of Victoria is over £7,250,000 sterling, and that of the pastoral produce is about £9,000,000 sterling.

#### WATER SUPPLY.

47. The climate of Australia is essentially a dry one, and it is to this that its superior salubrity, as compared with that of most new countries, is, to a great extent, attributed. The drawback to such a climate, however, is that the rainfall is in parts so uncertain that great losses of stock, as well as of crops, occur in some years. Victoria is in this respect better off than most parts of this continent, droughts being neither so general nor so continuous as they are in several of the other colonies. Still, in certain districts, serious inconvenience and loss has been experienced at times on account of deficient rainfall. To obviate these consequences irrigation has been frequently practised by individuals with great success, which having been brought to the notice of the Government a measure has been passed with a view of promoting national irrigation upon a large scale. To accomplish this object certain areas may, at the request of the residents, be proclaimed "irrigation areas," to which Trusts are appointed to carry out the irrigation scheme proposed for the district. The commissioners of these Trusts have power, under certain restrictions, to borrow money for the purpose of constructing the works included in the scheme—for the repayment of which a sinking fund must be provided—also to levy rates upon all lands capable of irrigation within the area under their jurisdiction, in order to provide the annual interest on the loan and the necessary payment to the sinking fund, also to defray the current expenses attendant upon the operations of the Trust. From the

satisfactory results which have attended the irrigation of land when carried out by private persons, and from the peculiar facilities which exist for supplying water for irrigation purposes to the principal farming districts in Victoria, it is expected that the effect of this measure, when it comes into full force, will be to give a marked impulse to the profitable carrying on of agricultural operations.

48. Extensive works for the storage and supply of water for domestic and mining, as well as for irrigation, purposes have already been constructed or commenced by the Government in as many as 48 different districts. 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. To meet the increased demand for water consequent upon the growth of the city and suburbs a new channel has recently been made for the purpose of turning into the reservoir other considerable streams of pure water, by which means all fear is averted of the supply becoming exhausted in seasons of drought. The storage capacity of the whole of these works is over thirteen thousand million gallons, and the cost has amounted to nearly four millions sterling.

#### MANUFACTURES.

49. Manufacturing enterprise in Victoria has for years past been stimulated by protective duties. Great difference of opinion exists as to the wisdom of such a policy; but, whether in consequence or in spite of these imposts, there can be no doubt that Victoria, as a manufacturing country, now occupies a far higher position than any other colony of the Australasian group. Statistics of manufactures and works in operation are collected annually. The collectors are instructed to obtain returns only from establishments of an extensive character, except when the existence of industries of an unusual or interesting nature seems to call for special comment. No attempt is made to enumerate mere shops, although some manufacturing industry may be carried on thereat; were this done, the manufactories of the colony might be multiplied to an almost indefinite extent. According to the latest returns, there are in the colony 114 flour-mills, which, during the year, operated upon 8,903,320 bushels of wheat and 234,149 bushels of other grain; 68 breweries, in which 19,798,272 gallons of beer were brewed; 241 brick-yards, some being also potteries, which made 277,896,807 bricks, and pottery valued at £71,927; 136 tanneries, fellmongeries, and wool-washing establishments, which tanned 1,736,815 hides and skins, and washed 9,276,000 lbs. of wool; 8 woollen mills, which used 1,653,554 lbs. of wool, and produced 1,030,322 yards of tweed, cloth, and flannel, and 2,248 pairs of blankets; 32 soap and candle works, which made 151,150 cwt. of soap and 52,085 cwt. of candles; 13 tobacco manufactories, which manufactured 1,303,862 lbs. of tobacco, 12,904,600 cigars and cigarettes, and 2,882 lbs. of snuff; 8 distilleries, which made 451,459 gallons of spirits; 170 establishments working in books or stationery; 8 in musical instruments; 16 in carving and figures; 5 in designs, medals, and dies; 7 in philosophical and surgical instruments; 9 in arms and ammunition; 300 in machines, tools, and implements; 279 in carriages and harness; 17 in ships and boats; 66 in houses, buildings, &c.; 120 in furniture; 50 in chemicals; 209 in dress; 21 in fibrous materials; 48 in animal food; 50 in vegetable food; 185 in drinks and stimulants; 61 in animal matters; 575 in vegetable

matters; 27 in coal and lighting (gasworks); 240 in stone, clay, earthenware, and glass; 6 in water (ice-making); 24 in gold, silver, and precious stones; and 41 in metals other than gold and silver. The total number of these establishments is 3,154, of which 1,403 use steam-engines, the total horse-power of which is 25,486. They employ 56,271 hands—of whom 7,153 are females—and the approximate total value of lands, buildings, machinery, and plant is £14,946,149.

50. In the census year (1881), when the manufacturing establishments were neither so numerous nor so extensive as they are at present, the increase of value of the raw materials used after they had undergone the process of manufacture was ascertained to be £5,371,091, or 67 per cent.

#### VICTORIAN TREES.

51. Whilst extensive tracts in Victoria are either lightly wooded without undergrowth—giving a park-like appearance to the country—or are altogether untimbered, large forests exist in the mountain ranges, as well as in many other localities; indeed, there are few parts in the colony where the settler will not find within easy reach, if not on his own land, sufficient timber for fencing and building purposes, as well as for firewood. In some of the forests the trees attain to a height unequalled in any other country. On a range called the Black Spur, situated in the neighbourhood of Fernshawe, as well as in parts of the Gippsland and Cape Otway ranges, there are instances of trees measuring 400 feet in height. It is believed that the tallest which has been actually measured was 480 feet high, but it is doubtful whether specimens are still to be found of that height. The majority of these giants are perfectly sound throughout, and their straight white stems, shooting up 200 or 250 feet before the first bough is reached, present a most striking appearance. All of these are of the eucalyptus tribe (gumtree of the colonists), the tallest being those of the variety called *eucalyptus amygdalina* or giant gumtree.\* As timber, the most valuable Victorian tree is the *eucalyptus rostrata* or red gum. Its great hardness and durability and the ease with which it is worked, as well as its peculiar power of resisting the attacks of insects, causes it to be extensively used for railway sleepers, piles, bridges, and a variety of other purposes. Scarcely less prized is the *eucalyptus globulus* or blue gum, which is of much quicker growth than the former, or than any of the other eucalypti. This tree is not only valuable for its timber, but it has become famous throughout the world for its alleged property of preventing the spread of infectious diseases and fevers, which has caused it to be successfully acclimatised and extensively grown in Spain, Italy, the south of France, Algeria, the Western States of America, and other countries. There many other varieties of the eucalyptus family, the best known being the ironbark (*E. leucoxylon*) and stringybark (*E. macrorrhynca*). The former of these, in point of hardness and durability, is only second to the red gum; whilst the latter, although less durable, is especially valuable in consequence of the facility with which it can be split into palings, shingles, slabs for mining purposes, staves for casks, &c. The essential oils and gums of some of the eucalypti possess important medicinal properties, and the virtues of others have yet to be discovered. Besides the eucalypti, the *fagus Cunninghami* or evergreen beech, and the *acacia melanoxylon* or blackwood, are the most important timber trees, the latter especially being found admirably adapted for the manufacture of railway carriages, also for furniture, which is almost indistinguishable from that made of the best walnut.

\* The Baron Sir F. Von Mueller, Government Botanist of Victoria, in the fifth decade of his work, *Eucalyptographia*, states that this variety of eucalyptus "represents probably the tallest of all trees of the globe."

52. Several species of acacia, locally termed "wattle," supply bark for tanning purposes, those most used being the black, silver, golden, and swamp wattles. These, especially the first-named, have been so much sought after for years past that the indigenous supply has become nearly exhausted, and the wattle is now being extensively cultivated by private individuals, and bids fair in some localities to yield a more profitable return than legitimate farming. It is of exceedingly quick growth, being ready for stripping of its bark in five or six years. Whilst its timber, which is valueless, becomes finer on good land, its bark-producing properties are said to be the greatest on poor arid soils; it is, therefore, well suited for certain sandy belts bordering on the coast, and is also being grown by the Government along some of the lines of railway. The price of the dried bark has been rising for years past, and now ranges from £8 to £10 per ton.

#### ANIMAL LIFE.

53. None of the quadrupeds running wild upon the Australian Continent are dangerous to man. The only carnivora are the native dog or dingo and the native cat. The former is a cowardly animal, very destructive to sheep, but kept in check, and, in all but scrubby and mountainous districts of an isolated character, now exterminated by the settlers. The native cat resembles a ferret in shape, and is of like predatory habits, but is often much larger. It possesses a prettily-spotted skin, which is prized by the furriers. Many species of kangaroo exist, the largest being the "old man" (*macropus major*). Kangaroos were formerly much complained of in consequence of the quantity of grass they consumed, to the detriment of sheep and cattle; they have, however, now been driven back from the more settled portions of the colony, but abound in districts which are still thinly peopled. The leather made from their skins is soft, but strong and durable, and that of the smaller varieties resembles kid; their tail sinews, moreover, are used in surgery. The opossum, an animal of arboreal habits, thicker but not so long as a rabbit, is found in large quantities in most parts of the colony; it is, however, ruthlessly pursued for the sake of its skin, of which handsome and comfortable travelling rugs are made. The native bear is a kind of sloth, not much larger than the opossum, and of similar habits. The wombat is a clumsy animal with a blunt head, dark in colour, as large as a middling-sized pig, living on roots and burrowing under ground. The bandicoot is shaped like a kangaroo, but with much shorter legs in proportion to its size, the head being like that of a rat. There are, besides, the native or ant-eating porcupine and the platypus—the latter being an amphibious animal resembling a mole, but with a duck bill. Of birds, the best known are the emu or Australian ostrich; the so-called "native companion," a large species of crane; black and white cockatoos; parrots of various kinds; the splendidly-plumaged lyre-bird; pigeons of several varieties; snipe, quail, and plover; wild ducks, geese, and black swans; the magpie or organ bird, noted for its musical cry; the laughing jackass and the mopoke; also several species of owls and kites. Under the head of reptiles, there are several species of lizard, the largest being the so-called "iguana," which sometimes attains a length of 6 feet; the death-adder, and the tiger, black, brown and whip snakes, all tolerably common and most deadly; also the carpet snake, a small species of python, the only non-venomous snake found in Victoria. The crocodile, which abounds in the streams and rivers of the northern part of Australia, is never found within 1,000 miles of Victoria. The best edible sea fish are the whiting, flounder, garfish, ling, pike, and sole (scarce). Of less delicate flavour are the kingfish, schnapper, bream,

flathead, rock-cod, stranger, mullet, pilchard, trevalli, salmon trout, and barracouta. Sharks of various species abound on the coast, rendering bathing dangerous in unprotected places. Of river fish, by far the largest is the gigantic Murray cod, which sometimes attains a weight of 50 lbs. or 60 lbs., and is occasionally even heavier. The Murray perch and Murray bream range from 5 lbs. to 8 lbs. in weight, and, as well as the cod, abound not only in the Murray but in all the streams to the north of the Dividing Range, and are brought in quantities to the Melbourne markets. In the streams to the south of the main range the most esteemed fish are—the blackfish, ranging from 2 lbs. to 5 lbs.; a small species of grayling, locally called the herring, which rises readily to a fly, but which has been somewhat scarce of late years; the Gippsland perch, which also rises to a fly; and the small mountain trout. There are also quantities of eels in these streams, but, strange to say, none are to be found in the streams to the north of the range. A large marine crayfish is very common, and is daily brought to market, as is also, sometimes, a gigantic marine crab. A small river crayfish abounds in the streams throughout the colony. The Murray and its tributaries produce a small lobster, which is much appreciated for the table. Insect life is exceedingly prolific in Victoria. Cicadas of several varieties fasten upon the leaves of the gum trees at certain seasons, keeping up a deafening hum as long as daylight lasts; grasshoppers make occasional inroads upon the crops and herbage; ants of various species are numerous; mosquitoes abound in marshy localities and on the banks of rivers; the common house-fly and the blow-fly are the despair of housewives; gorgeous butterflies flit about in the sunlight, delighting the eye and almost causing forgetfulness of the damage done by their tribe whilst at the caterpillar stage; beetles of curious shape invite the attention of the entomologist; various species of mantis almost startle the beholder by their close resemblance to the leaves of the plants on which they feed.

54. The Zoological and Acclimatisation Society of Melbourne has done much to introduce animals and birds from other countries, and their efforts have been seconded by those of private individuals. The selections, however, have not always been judicious, as, for instance, the rabbit, which has now multiplied so much in all parts of the colony as to be the occasion of serious loss to the grazier and farmer, which has led to persistent attempts being made to exterminate these animals by snare and poison. The sparrow, also, which was imported in consequence of its supposed insectivorous proclivities, has proved most destructive to fruit, but hardly at all to insects. The introduction of other animals has, however, been beneficial. Several species of deer, liberated in various parts of the colony, have increased in numbers largely, and, whilst they have been the cause of enjoyment to many, have been a nuisance to no one. The hare is to be found in most localities, and affords scope for the establishment of coursing clubs in most of the inland towns, whilst it is much esteemed and can be purchased cheaply for the table. Numbers of pheasants and Californian quail have been set free, but, probably in consequence of their eggs being often destroyed by native cats, are not yet numerous in any part of the colony. Thrushes, blackbirds, skylarks, and other song-birds have also been liberated near Melbourne, and their notes are sometimes heard, especially in the vicinity of the Botanical Gardens; it is to be feared, however, that their nests have been much interfered with by boys, which have prevented their rapid increase. Trout, carp, perch, tench, dace, and goldfish have been successfully placed in many of the streams, and some of these fish in the lakes. Attempts have been made to acclimatise both the English and the Californian salmon. These have not been successful, perhaps, because the experiments were upon too small a scale.

## FINANCE.

55. The revenue of Victoria, in the financial year ended with the 30th June, 1889, was £8,676,081, and the expenditure was £7,920,238. These were the largest amounts ever raised and spent in any year. The revenue per head was £7 19s. 10d., and the expenditure per head was £7 5s. 11d. The estimated amount raised by taxation was about £3,733,700, or 43 per cent. of the whole revenue, the principal item under this head being Customs duties and wharfage rates, which yielded £2,879,830. The land revenue amounted to £616,028, the railway revenue to £3,104,907, and the postal revenue to about £574,000. Besides the ordinary revenue just alluded to, an amount exceeding £2,000,000 annually is derived from the proceeds of loans, and is expended on railways and other public works. Omitting the receipts from the sale and occupation of land and from railways, in order to make the figures comparable with those of other countries, the balance of revenue in 1888-9 was £4,955,146, or a larger amount in proportion to population than is raised in any country in the world out of Australia. The amount per head was £4 11s. 3d., as against £3 1s. 11d. in France; £2 13s. 9d. in Germany; £2 7s. 8d. in the United Kingdom; £2 4s. 10d. in Holland; £2 2s. 3d. in Belgium; £2 1s. 3d. in Italy; £2 0s. 2d. in Spain; £1 15s. 9d. in Austro-Hungary; and £1 8s. 9d. in the United States; yet such are the resources of the colony that the large amount named is raised without difficulty, and the taxation is scarcely felt.

56. The revenue of municipalities consists of amounts received from rates, licences, dues, &c., supplemented by a State subsidy. In 1888 their total receipts amounted to £1,426,946, and their expenditure to £1,503,292. The State subsidy, which is divided amongst the different municipalities according to a scale based upon the amount they respectively levy from rates, is fixed at £310,000 per annum.

57. On the 30th June, 1889, the public debt of Victoria amounted to £37,627,382, which is equivalent to a proportionate indebtedness of £34 1s. 6d. to every man, woman, and child in the colony. Over three-fourths of the debt was borrowed for the construction of railways, nearly a sixth for works of water supply, and the remainder for defences, State schools, construction of a graving dock, and for miscellaneous public works and buildings. It will be observed that the debt, unlike the national debts of most of the countries of the Old World, was not incurred for expensive wars or other unproductive objects, but for the prosecution of works of a permanent character, necessary for the development of the colony, from which amounts are already received sufficient to go a long way towards payment of the interest on the loans, and by which succeeding generations will be largely benefited. Of the total amount of 37½ millions, 1¼ million was borrowed at 6 per cent., 2½ millions at 5 per cent., 5 millions at 4½ per cent., 25¾ millions at 4 per cent., and 3 millions at 3½ per cent. The average rate of interest is about 4·16 per cent. At the present time the railways usually return an annual profit of over 4 per cent.

58. The loans contracted by municipalities up to September, 1888, amounted to £2,062,327, of which £1,787,763 was borrowed by cities, towns, and boroughs, £274,564 by shires. The rates of interest paid varied from 4 and 8 per cent., the average being 5 per cent.

## MONETARY INSTITUTIONS.

59. The Melbourne branch of the Royal Mint was established in 1872. From the time of its opening to the end of 1888, 10,506,502 ozs. of gold had been received thereat, valued at £42,097,471. Gold is issued from the Mint as coin or as bullion. The former,

with the exception of 555,500 half-sovereigns, has consisted entirely of sovereigns, which have numbered 37,671,650. The bullion issued has amounted to 997,977 ozs., valued at £4,149,590.

60. There is no State bank in Victoria, but there are thirteen joint-stock banks of issue, of which eight are Victorian institutions, with 492 branches within the colony. According to the sworn returns of these banks, their note circulation during the last quarter of 1888 was £1,728,032, and their total liabilities £39,749,590, as against which the coin and bullion on hand amounted to £5,604,097, and the total assets to £53,111,387. At the same date the capital stock paid up was £10,461,850, and the amount of reserved profits was £5,507,689. The last half-yearly dividend declared amounted to £636,665, or at an average rate of 12·17 per cent. per annum. It may be observed that banking in Victoria has hitherto been conducted with much intelligence and judgment, and has been attended with a large amount of success.

61. Every facility is afforded in Victoria to persons desirous of investing their savings securely and profitably. Two kinds of savings banks exist—the ordinary savings banks, which were established in 1842, and the post-office savings banks, which were established in 1865. Both of these are State institutions; of the former there are 29, including branches, and of the latter 300. According to the returns for 1888, the number of deposits in the two institutions was 237,433, who had to their credit £4,669,541, or an average of £19 13s. 4d. to each depositor. Most of the depositors belong to the working classes. The highest rate of interest savings banks are permitted to give on moneys left on deposit is 4 per cent. The full rate is paid by both kinds of institutions.

62. The facilities for acquiring the fee-simple of land and houses in Victoria are so great that all classes have a natural objection to pay rent. Artisans and labourers, as a rule, display this characteristic in a marked degree, and consequently heads of families are commonly willing to make almost any sacrifice for the purpose of obtaining a freehold of their own. To assist in this effort numerous building societies have been established, whose plan is to advance sums of money secured on the property to be purchased or built upon, such sums to be repaid with interest by small fortnightly or monthly instalments, ranging over as many years as may have been previously agreed upon. These institutions also present an easy and safe means of investing surplus savings, which may be effected either by depositing money or taking shares in the society, much higher interest being obtainable than that paid by the savings banks. In 1888 there were 74 building societies in the colony, with 26,312 members. The amount advanced by them during the year was £4,381,330, and the moneys on deposit at date of balancing amounted to £5,292,364.

63. The moneys on deposit in banks, saving banks, and building societies, at the close of 1888, amounted to £47,532,743, of which £37,570,838 was in banks, £4,669,541 in savings banks, and £5,292,364 in building societies. Other institutions, such as deposit banks and some of the insurance companies, also receive deposits, but of these no returns are furnished.

#### TRADE AND COMMERCE.

64. In 1888 the declared value of goods imported into Victoria was £23,972,134, and that of goods exported therefrom was £13,853,763. The excess of imports over exports was thus £10,118,371, and the total value of external trade was £37,825,897. Per head of the population, the average value of the imports was £22 11s. 5d., and that of the exports £13 0s. 11d., or together £35 12s. 4d. These proportionate values are



higher than corresponding amounts in most other countries in the world. In the latest year of which returns are at hand, the value per head of the external trade of Holland, which is larger than that of any other independent country, was £39 17s. 1d., whilst that of Belgium was £38 1s. 0d., that of the United Kingdom was £17 2s. 3d., that of France was £9 12s. 3d., and that of the United States was only £5 8s. 1d. Nearly half the total trade is with the United Kingdom, and more than a third with the neighbouring colonies—principally New South Wales. In 1888 the principal articles imported were wool (from across the border), valued at £2,704,060; timber, £1,420,349; sugar and molasses, £945,978; cottons, £1,129,334; woollens, £923,549; live stock, £2,040,213; iron and steel (exclusive of railway rails, &c.), £977,928; and gold (including specie), £959,045. The principal exports were wool, of the value of £5,170,930; gold (including specie), £3,690,519; wheat, flour, and biscuit, £938,008; and live stock, £406,777. The value of these articles of export alone represents nearly three-fourths of the whole export trade. Articles of Victorian produce or manufacture were represented in the exports by £10,356,633, being equivalent to £9 15s. 0d. per head of population; or to 75 per cent. of the total exports. The three staple articles included in the list were—Wool, of the value of £3,755,265; gold (including specie), £3,690,519; and wheat, flour, and biscuit, £903,524.

65. The vessels entered and cleared at Victorian ports in 1888 numbered 5,354, of an aggregate burthen of 4,307,883 tons, and carried 170,112 men. The tonnage was in excess of that in any former year. Nearly three-fourths of the vessels, embracing about three-fourths of the tonnage and carrying seven-eighths of the men, were steamers.

66. All the railways in Victoria are the property of the State, whose policy it has been to open up the interior by their means to such an extent that railway communication should keep pace with settlement, be the latter ever so rapid. The consequence is that railways are extending to the most remote parts of the colony, and it appears probable that ere long there will be a railway at every man's door, the advantage to farmers, graziers, miners, and all others who have business relations with the interior of the colony being incalculable. Cheap excursion trains are run weekly as well as at holiday seasons, the tickets of the former being available from Friday until Monday, and those of the latter for much longer periods. At the end of June, 1889, 2,200 miles were open for traffic, 269 miles of which were laid with double lines. The cost of construction, inclusive of rolling-stock and building a bridge over the Murray to connect with the New South Wales lines, was over £29,363,560, or an average of about £13,350 per mile; of this amount about £26,800,000 was raised by means of debentures, and the remainder—being about 8 per cent. of the whole—was paid from the general revenue. About 10,700,000 miles were run during the year. The total receipts amounted to £3,110,140, and the working expenses to about £1,945,837. The net income was thus £1,164,303, which is equivalent to a return of 4.11 per cent. on the whole capital cost, or of 4.51 per cent. on the debenture capital; whilst the average rate of interest upon the railway loans is now only  $4\frac{1}{5}$  per cent.

#### POST AND TELEGRAPHS.

67. A very efficient postal system exists in Victoria, and post-offices are established throughout the length and breadth of the colony; 1,544 of such institutions now exist, as against 1,295 five years since. In the same quinquennial period the letters, newspapers, and packets despatched and received in a year increased from 50,000,000 to 79,000,000. The postage on letters to places in any of the Australasian colonies is twopence per ounce,

and on newspapers one halfpenny each. The postage on letters to the United Kingdom is sixpence per half-ounce *viâ* Italy, or fourpence by the long sea route, and on newspapers one penny.

68. Money-order offices in Victoria in connexion with the Post-office have been established in 383 places, and the system is being rapidly extended by the opening of fresh offices. Besides the issue and payment of money orders at those places, such orders are issued in favour of Victoria, and Victorian orders are paid at places in Great Britain and Ireland, and in the various Australasian colonies; also in the United States and Canada, Germany, Ceylon, India, China, Japan, and the Cape of Good Hope. The number of money orders issued during the year 1888 was 246,586, of an aggregate value of £762,483, and the number paid was 226,850, of an aggregate value of £697,357. The number and value of orders issued in favour of the United Kingdom are always much greater than the number and value of those received therefrom; but the reverse is the case with orders between Victoria and the neighbouring colonies. The commission on money orders for sums not exceeding £5 is 6d. to places in Victoria, and 1s. to places in the other Australasian colonies. For sums over £5 and under £10, the commission is 1s. to places in Victoria, and 2s. to places in the other colonies. To the United Kingdom and the other countries named above 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 in some of the Australasian colonies *by telegraph* at the following rates:—Under £5, to places in Victoria, one shilling; New South Wales, two shillings; South Australia and Tasmania, three shillings; Queensland, four shillings. For sums over £5 and under £10, to places in Victoria, one shilling and sixpence; New South Wales, three shillings; South Australia and Tasmania, four shillings; Queensland, five shillings. Money orders are not granted for sums exceeding £10.

69. Telegraphs in Victoria are Government property, and are worked in connexion with the Post-office. Telegraphic communication exists between 601 stations within the colony, and the Victorian lines are connected besides with the lines of New South Wales, and by means of them with Queensland and New Zealand. They are also connected with the lines of South Australia, and by their means with Western Australia and with the Eastern Archipelago, Asia, Europe, and America. They are likewise united with a submarine cable to Tasmania. In 1888 the miles of line along which poles extended numbered 4,194, and the miles of wire 10,360; the telegrams transmitted numbered 2,743,938, of which 90,938 were on Government business. A considerable extension of the lines, as well as an increase of business, takes place each year. To places within Victoria, telegrams containing not more than six words are sent for sixpence, one penny extra being charged for each additional word. To New South Wales, twice, to South Australia and Tasmania, four times, and to Western Australia and Queensland, six times these rates are charged for messages of ten words. To New Zealand ten words are sent for ten shillings, each additional word being charged thirteen pence. To England or the Continent of Europe, the rate is nine shillings and fourpence per word; to India it varies from seven shillings and elevenpence to eight shillings and fourpence; and to the United States, from twelve shillings and eightpence to fourteen shillings and twopence. 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, England, the Continent of Europe, India, and the United States the names and addresses of both sender and receiver are charged for as part of the message.

#### EDUCATION.

70. The Melbourne University was established under a special Act of the Victorian Legislature, which was assented to on the 22nd January, 1853. This Act, as amended by an Act passed in 1881, provides for its endowment by the appropriation of £9,000—recently increased by further grants to £16,500—annually out of the general revenue; also, that no religious test shall be administered to any one to entitle him to be admitted to the rights and privileges of the institution; also for the election, by the senate, of a council consisting of twenty members, to hold office 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 vice-chancellor; also for the constitution of a senate, consisting of all male persons who have been admitted to the degree of master or doctor, and for the election by them annually of one of their body as warden, as soon as the superior degrees should amount to not less than 100. This number was reached in 1867, and the senate was constituted on the 14th of June of that year. The Council are empowered to grant in any faculty except divinity any degree, diploma, certificate, or licence which can be conferred in any university in the British dominions. Royal letters patent, under the sign-manual of Her Majesty Queen Victoria, were issued on the 15th March, 1859, declaring that all degrees granted, or thereafter to 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 the British colonies and possessions throughout the world just as fully as if they had been granted by any university in the United Kingdom. The foundation stone was laid on the 3rd July, 1854, and the building was opened on the 3rd October of the following year. On the 22nd March, 1880, the University was thrown open to females, and they can now be admitted to all its corporate privileges. Affiliated to the University there are colleges in connexion with the Church of England, the Presbyterian, and the Wesleyan Church respectively. The University Hall, built at a cost of about £40,000, is called the Wilson Hall, after Sir Samuel Wilson, who contributed the greater portion of the funds for its erection. Since the opening of the University, 2,716 students matriculated, and 1,430 degrees were granted, of which 1,110 were direct, and 320 *ad eundem*. The students who matriculated in 1888 numbered 146, and the graduates in the same year numbered 134.

71. The State educational system of Victoria, the basis of which is that secular instruction shall be provided, without payment, for children whose parents may be willing to accept it, but that, whether accepted or not, satisfactory evidence must be produced that all children are educated up to a given standard, has been most successful in its operation; and for securing the object sought to be attained, it is believed, compares favorably with that of any other country in the world. In 1872, just before the present system came into operation, the number of children returned as on the rolls of State schools was 136,055, whilst in 1888, after the system had been in force for fifteen years, the number had increased to 242,046, or by 78 per cent.; the increase of children at the school age in the population during the same period having been only about 18 per cent. It has been estimated that the children attending school for not less than 30 days in each quarter amount to about 73 per cent. of the numbers on the rolls, a proportion of efficient

school attendance which, it is believed, has been attained in but few countries. Although the course of instruction is quite elementary, extra subjects are taught on payment of a small charge.

72. Up to the present, no provision has been made towards opening State schools in which the higher education can be attained, but two hundred scholarships, each of the annual value of £10, tenable for three years, are each year awarded, in accordance with the results of a competitive examination, to scholars attending State schools; and the successful scholars, at the end of their term, are allowed to compete for eleven exhibitions, each of the annual value of £35—also awarded annually—by means of which those who obtain them are enabled to go on to the University and proceed to their degree.

73. Besides the State schools, which are attended by five-sixths of the children under instruction in the colony, they are, according to the latest returns, 753 private schools, attended by 40,291 scholars. Some of these private schools are attached to religious denominations, as many as 186, with 22,696 scholars, being connected with the Roman Catholic Church. Six of the private colleges, or grammar schools, formerly received grants from the State, two of which are connected with the Church of England, two with the Roman Catholic, one with the Presbyterian, and one with the Wesleyan Church. In these, as well as in some of the other private schools, a very high class of education, little inferior to that obtained in the best public schools in England, is given.

74. It has been officially estimated that all the children in Victoria between the ages of six and fifteen (the school age), except about 4 per cent., receive education during some portion of each year. The results are shown in the very large proportion of educated children comprised in the population. According to the returns of the census of 1881, of every 10,000 children at the school age, 9,481 could read, 8,535 of whom could also write, and only 519 were unable to read. The proportion of instructed children indicated by these figures is far higher than the proportion prevailing in any of the other Australian colonies, and is equalled in few, if any, other countries.

#### PROVIDENT, CHARITABLE, LITERARY, SCIENTIFIC, AND SOCIAL INSTITUTIONS.

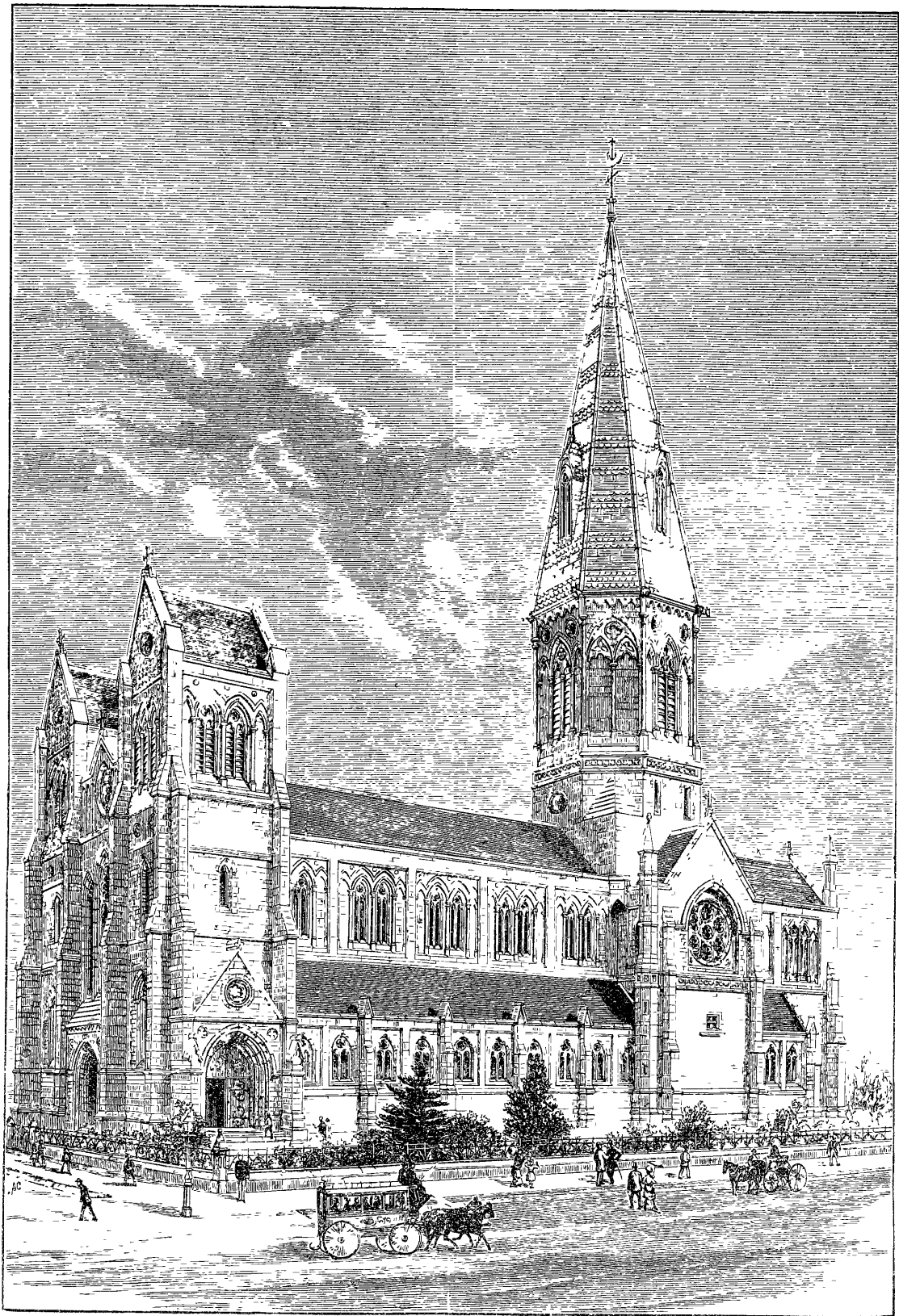
75. Friendly Societies in Victoria have for years past been much patronised by the industrial classes, many members of which have derived great benefit from their connexion therewith. So far as their relations with the State are concerned, they are under the supervision of the Government Statist and Registrar, and there are also public auditors and valuers. The law 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 has been 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 nearly all the valuations are now made by the departmental actuary, an arrangement which has worked in a most satisfactory manner. It is doubtful whether in any other

part of Her Majesty's dominions Friendly Societies can have their valuations made so cheaply and so effectually as they now do in Victoria. There are 310 parent institutions in the colony, having 903 branches and 71,089 members. The total income is about £267,000 per annum, and the accumulated funds exceed half a million sterling. The principal societies are the Manchester Unity, Grand United, and Independent Order of Odd Fellows; the Foresters, Druids, Rechabites, Sons of Temperance, Free Gardeners, Order of St. Andrew, Protestant Mutual, and Protestant Alliance; the St. Patrick's, Hibernian-Australasian Catholic, and the Australian Natives.

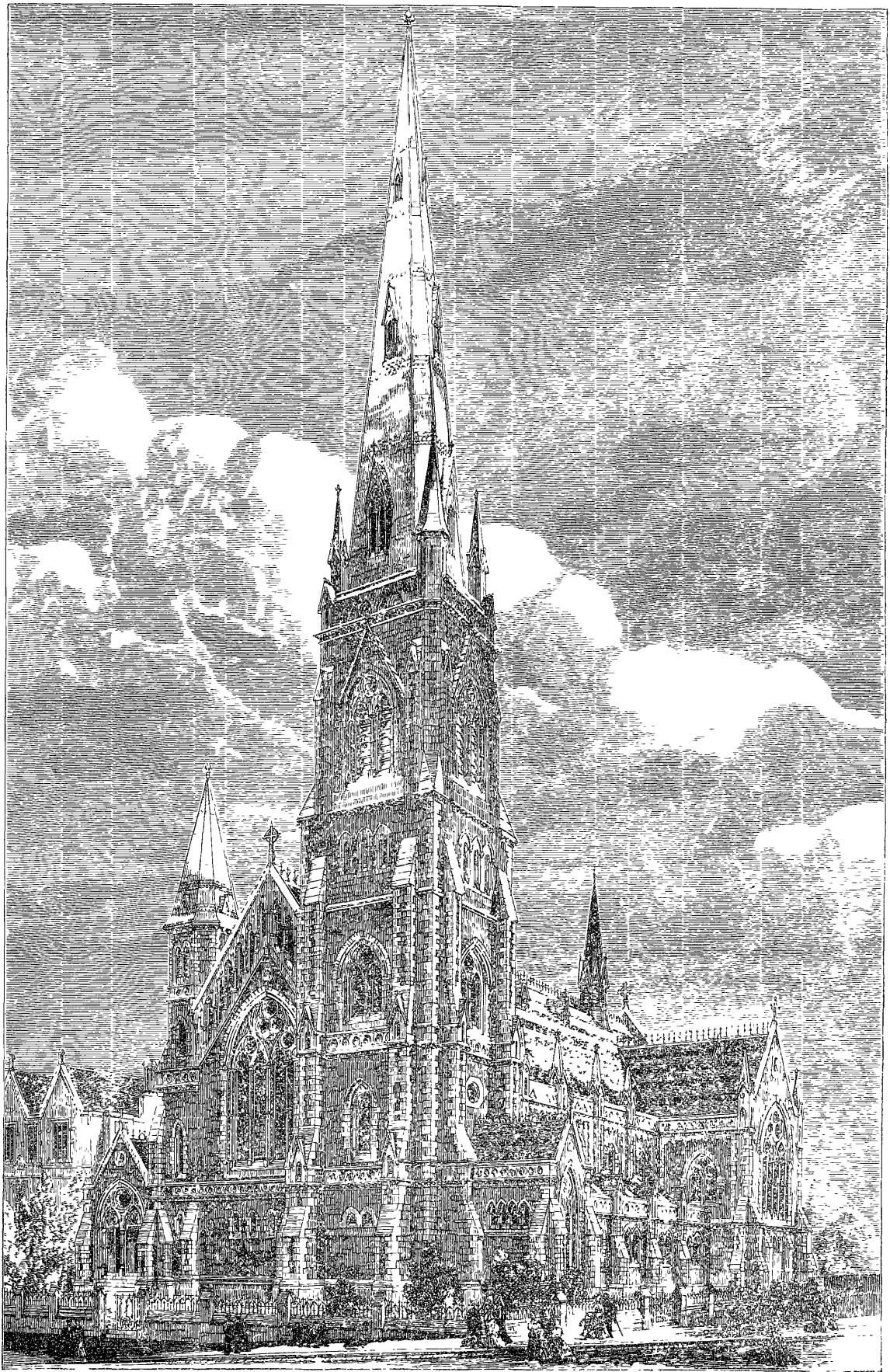
76. There is no poor law in Victoria, but a very complete organization exists for the relief of the sick, the infirm, and the necessitous, by means of the many excellent charitable institutions which are scattered throughout the length and breadth of the colony. Most of these establishments are subsidized by the State, and they are also largely contributed to by private persons. There are 38 general hospitals situated in the principal towns, and there is, besides, a Hospital for Incurables, a Lying-in Hospital, an Eye and Ear Hospital, a Children's Hospital, a Blind Asylum, a Deaf and Dumb Asylum, and an Infant Asylum situated in the metropolis. There are 6 Benevolent Asylums, where aged and infirm persons are received as inmates, and out-door relief is also given. There is also in Melbourne an institution partaking of the character of a Benevolent Asylum, called the Immigrants' Home. It was founded for the purpose of affording relief and accommodation to new arrivals, but it now assists all who are in want, without reference to the period of their residence in the colony. There are, besides, 7 Orphan Asylums, 9 Industrial and Reformatory Schools, 6 Hospitals for the Insane, and 5 Female Refuges. Over 33,000 inmates pass through these institutions annually, and they are maintained at a cost of over £350,000 a year, £213,000 of which is from Government. Scattered over the colony there are 45 other associations for the relief of distressed or indigent persons, which are generally managed by ladies. These are termed Benevolent Societies; the names of three of them indicate their connexion with the Jewish body, but no distinctive denomination is perceptible in the titles of the others. The persons relieved by them each year number about 8,500, the average cost of each of which is about thirty-eight shillings, as the annual expenditure (more than a third of which is from the Government) amounts to about £16,000.

77. The Melbourne Public Library is open to all classes of persons over fourteen years of age without payment, on week days, between ten a.m. and ten p.m. The buildings have cost £111,604, and are still unfinished. These funds were provided by the Government, as also were further moneys, amounting, with the sum just named, to £447,827. The estimated value of the private contributions, consisting of books, pamphlets, maps, &c., is £24,000; and the total number of books in the library is 230,739. About 500,000 visits are paid to this institution annually. In most of the towns in the colony there are free libraries, athenæums, or scientific, literary, or mechanics' institutes, some of which receive books on loan from the Melbourne Public Library. Three hundred and fifty of these institutions furnish returns to the Government, which show that the annual receipts amount to about £52,000, of which £13,600 is contributed by Government and £38,400 by private individuals; that the number of volumes amount to 416,000; and that the number of visits in each year amount to about 3,700,000.

78. The Melbourne National Gallery contains 150 oil paintings, 2,528 objects of statuary, &c., and 12,991 drawings, engravings, and photographs. In the last year for



CHURCH OF ENGLAND CATHEDRAL.



SCOT'S CHURCH, COLLINS STREET.

which returns have been issued the school of painting connected with this institution was attended by 7 male and 23 female students, and the school of design by 64 male and 113 female students.

79. The Industrial and Technological Museum, which joins the last-named institution, contains 1,524 publications, 49,000 specimens, and 161 drawings. According to the latest returns, class lectures on chemistry and mineralogy are attended by 19, on engineering by 35 students, and on telegraphy by 90 students. The collections of the National Museum, which is situated on the grounds of the Melbourne University, consist of specimens of minerals, stuffed animals and birds, insects, and other objects of curiosity. The cost of the edifice was £8,500, and it is visited by 134,000 persons annually. These institutions are open to the public free of charge.

80. Schools of Mines have been established at Sandhurst, Ballarat, Maryborough, and Castlemaine, to which are attached museums, containing geological and technological specimens, models of mining machinery and mining plant, sections of mines, and geological maps and plans. At these schools, instruction is given not only in the various branches of science connected with mining operations, in the theory and practice of mining and safe conduct of mining works, mining surveying and mining engineering, but also in many other subjects not necessarily connected with mining. Students at the Sandhurst school number about 600, at the Ballarat school about 1,400, and at the Maryborough school, 100. The annual income of the three institutions is about £11,000, of which all but £4,200 is granted by Government.

81. Schools of Design have been established at 31 places in Victoria, in connexion with a Royal Commission for promoting technological and industrial instruction. The subjects taught comprise practical geometry, mechanical and architectural drawing, isometrical perspective and freehand drawing, figure drawing, ornamental drawing from models, flat examples, and from nature. Each school receives two shillings and sixpence from Government for every pupil who attends at least eight times in one quarter, besides which fees, varying from 1s. to 10s. 6d. per quarter, are paid by pupils. There are nearly 2,200 pupils on the rolls, of whom nearly three-fourths generally attend eight or more times during each quarter. An exhibition of the works of pupils is held yearly in Melbourne, and local exhibitions are held in other towns.

82. The gardens of the Zoological and Acclimatisation Society of Victoria are situated in the Royal Park, distant not quite two miles from the centre of Melbourne, and can be reached by rail or tram, which set passengers down within a short distance of the gates. The ground enclosed contains 50 acres, rather more than half of which is laid out as a Zoological Garden, and the rest in deer paddocks. The gardens contain a fine zoological collection, which is always increasing. There are at present lions from South Africa (generally admitted to be among the finest in captivity), Bengal tigers, the tiger royal from Java, different varieties of leopards, panthers, cheetahs, bears of several kinds, hyænas, an elephant, a fine white camel, Brahmin cattle, baboons, a fine specimen of the orang-outang from Borneo, a large collection of monkeys of different kinds, wolves, dingoes, jackalls, foxes, wild boars from India, otters, the coypu rat (or South American beaver), porcupines, the guanaco and llama, deer of several varieties, Angora goats, kangaroos, wallabies, wombats, opossums, native bears, and a large collection of small mammals, both foreign and Australian. There are besides ostriches, emus, cassowaries, adjutants from India, flamingoes from Egypt, the Indian saurus crane, the native companion (or large Australian crane), white and black swans, and several of the beautiful black-necked



swans from Chili; the magnificent crown goura pigeons from New Guinea, and, in the same aviary, a number of other beautiful birds, including the kaleege and fire-backed pheasants. In other parts of the grounds are more pheasants of different varieties, macaws, cockatoos, parrots, bustards (or native turkeys), eagles, vultures, ravens, hawks, and a large number of other birds; also a large collection of water-fowl. There is likewise a collection of reptiles, including pythons, snakes (venomous and non-venomous), lizards, iguanas, and a crocodile. Many of the cages are pretty and attractive; for example, the guinea-pigs live in luxurious style in a small Swiss chalet, known as "Guinea-pig Cottage"; the white Egyptian rats in a model of an old Norman or Rhenish castle, called "Rat Castle"; the white rabbit in a miniature log cabin of the old times; and on the opposite side of the path is a still more primitive structure known as the "Old Bush House," an exact counterpart, in miniature, of the shepherd's hut of thirty or forty years ago. In another part of the garden is a native encampment, the *mia-mias*, or huts, being exactly similar to those erected by the natives when the white men first entered Victoria; they are furnished with spears, boomerangs, shields, and waddies or war-clubs. The entrance fee to these gardens has been fixed at a low rate. On Mondays it is a shilling for adults and sixpence for children, and on all other week days sixpence for adults and threepence for children. On Sundays the entrance is free.

83. Numerous literary and scientific societies exist in Victoria. Of these the most important is the Royal Society, with its various sections devoted to special branches of science or literature, which assumed that title by special permission of Her Majesty. Besides this, there are geographical, historical, photographic, kalizoic, eclectic, Shakespearean, pharmaceutical, two medical, and several horticultural societies; also a bankers' and an insurance institute, and a field naturalists' club. All these institutions are well supported, and the papers read frequently display much originality and research.

84. It is creditable to the liberality of the Government and people of Victoria that for years past a first-class Observatory, with an efficient staff of assistants, has been maintained at the expense of the State. This Observatory is situated in the Government domain, at Melbourne; it stands in a reserve of rather more than  $5\frac{1}{2}$  acres, and is 92 feet above the level of the sea. Of the instruments, the most important is the great Melbourne telescope, which, as a piece of mechanism, has always excited the greatest admiration, the facilities for working being marvellous for so ponderous an instrument, its defining power being also excellent. This telescope is of the Cassegrain construction; the large mirror has a diameter of 4 feet, with a focal length of  $30\frac{1}{2}$  feet; the small mirror is convex, with a diameter of 8 inches and a focal length of 74.7 inches, the effect of the combined mirrors being such that when the rays come to a focus near the lower end of the tube they form an image as if they had come from a single mirror of 166 feet focus; an average image of the moon at this place would therefore have a linear diameter of a little over 18 inches. The telescope is furnished with nine eyepieces, whose magnifying powers range from 220 up to 1,000. The equatorial mounting, being on the Fraunhofer plan, allows of an uninterrupted view of the sky, and the whole is moved during observations by a small clock governed by a conical pendulum, which has a differential gearing, so that the telescope which ordinarily follows the motions of the stars may be readily made to move with the average motion of the moon. The weight of the whole instrument amounts to more than 8 tons, its cost, including spectroscopic, photographic apparatus, &c., was about £5,500, and the building and piers cost another £2,000. Some of the photographs of the moon taken with this telescope are considered to surpass those produced by any other instrument. Besides this telescope, the

Observatory contains a south equatorial refractor, a north equatorial refractor, a Newtonian reflector, a transit instrument, an altazimuth, a zenith sector, a photoheliograph which photographs an image of the sun about 4 inches in diameter, five astronomical clocks, seven box-chronometers, four barrel chronographs, a tape chronograph, an anemograph, a barograph, several thermographs, an electrograph, and the usual barometers, thermometers, and rain-gauges.

85. The Victorians are essentially an amusement-loving people. The hours devoted to business are shorter than in England, and the recognised working day of the labourer being only eight hours, ample time is left for social enjoyment and exercise. Cricket, football, tennis, bowls, rifle practice, rowing, and yachting are amongst the commonest everyday sports in Melbourne, and the first two especially are practised in all parts of the colony, each town and village having its club and ground. Bicycle clubs are also quite common, and in Melbourne there is a lacrosse and a polo club. Horse racing is much patronized, and racecourses exist in all parts of the colony. The Melbourne course especially is one of the best situated and appointed in the world. The principal race of the year is that for the Melbourne Cup, which is run about the beginning of November, and is attended annually by nearly 200,000 persons, who flock to Melbourne at that time from all parts of Australia. Hunt clubs exist at Melbourne and Ballarat, and, since hares have become common, coursing has been practised all over the colony. There are several anglers' societies and associations; and in Melbourne there are chess and whist clubs. There are five theatres and several music halls constantly open in Melbourne, and all are often crowded nightly; there are also theatres in Ballarat, Sandhurst, and some other of the principal towns. There are many philharmonic and musical associations, two of which in Melbourne, having been originally founded by Germans, are called "Liedertafels"; there is also in Melbourne a dramatic and musical association, the objects of which are partly of a philanthropic nature.

#### CLERGY AND CHURCHES.

86. There being no State religion in Victoria, and no money voted for any religious object, the clergy are supported by the efforts of the denomination to which they are attached. The clergy number 1,101, of whom 197 belong to the Church of England, 123 to the Roman Catholic Church, 213 to the Presbyterian Church, 200 to the Methodist Churches, 39 to the Bible Christian Church, 57 to the Independent Church, 45 to the Baptist Church, 219 to other Christian churches, and 8 to the Jewish Church. Beside these there are other officials connected with some of the sects who, without being regularly ordained, perform the functions of clergymen, and are styled lay readers, lay assistants, local preachers, mission agents, &c. The number of these is not known, but it no doubt materially swells the ranks of religious instructors in the colony.

87. The buildings used for public worship throughout Victoria number at the present time about 4,220, of which 2,200 are regular churches and chapels, 500 school-houses, and 1,520 public or private buildings. Accommodation is provided for 579,000 persons, but the number attending the principal weekly services is said not to exceed 344,000. More than 392,000 services are performed during the year. Of the whole number of buildings used for religious worship, 970 belong to the Church of England, 513 to the Roman Catholics, 936 to the Presbyterians, 1,120 to the Methodists, 169 to the Bible Christians, 76 to the Independents, 100 to the Baptists, 352 to other Christians, and 6 to the Jews. The Salvation Army have erected their so-called "barracks" in

various localities and sometimes rent edifices for the purpose of Divine service, but no statistics of their operations have yet been obtained.

#### HOUSE RENT.

88. The houses occupied by clerks, shopmen, artisans, and labourers, and many other persons, are usually constructed as cottages, the whole of the accommodation being on the ground floor. Many persons of all classes possess houses of their own, the purchase-money being either entirely cleared off or in process of payment by periodical instalments. Where rent is paid it is usually somewhat higher than that for which the same amount of accommodation could be obtained in England, and therefore persons often live in smaller houses than those in the small walk of life would occupy there. If smaller, the houses in Victoria are generally comfortable, wind and water tight, well finished, and cheerful. In Melbourne and suburbs gas is generally and water is always laid on, and the smallest cottages possess a bath-room in addition to other accommodation. Rents of houses suitable for clerks and shopmen range from £35 to £65 per annum, and those for artisans and labourers from 8s. to 15s. per week. In many of the inland towns rent is lower than in Melbourne; and on the gold-fields, as well as in some other parts of the interior, it is usual to erect, at a small cost, a cottage of logs or split timber on Crown lands, so that rent is altogether saved.

#### DEFENCES.

89. Victoria is well protected from external attack; not only is the approach to the metropolis guarded by forts and torpedoes, constructed upon the most approved principle, but the colony possesses a small but efficient fleet, and land forces numbering over 9,000. The fleet consists of a flagship, an ironclad turret ship, two gunboats, three torpedo boats, and several armed steamers. The land forces embrace a paid artillery and torpedo corps; and a militia consisting of cavalry, field and garrison artillery, and engineers and infantry. There are also auxiliary forces consisting of mounted rifles, rangers, and riflemen in clubs; and there is a militia reserve. The ships and troops are commanded by Imperial officers, who are paid by the colony. All the forces are enrolled under a Discipline Act, which appropriates £110,000 annually for defence purposes. It should be mentioned that cadet corps have been established in connexion with the principal schools in the colony. The cadets now number 2,800. They wear a simple and inexpensive uniform, are regularly drilled, and have competitive rifle matches. A camp for the instruction of the cadets (lasting for four days) is held each year, and is generally attended by from 1,800 to 2,000 cadets and officers. The military forces have been lately inspected by a General Officer in the Imperial Service, specially sent by the Horse Guards to perform that duty, who has reported that the troops are in a satisfactory state, and capable of fulfilling the duty for which they are maintained, viz., the defence of the colony. He, however, recommends that, for the general defence of Australasia, there should be a federation of the forces of the different colonies.

#### RATES OF LABOUR.

89. Every description of labour is well remunerated in Victoria, and the supply frequently falls far short of the demand, especially in the case of female domestic servants, of whom there is always a deficiency, and the various trades connected with building operations. The following table, showing the rates of wages prevailing in the case of

PRICES IN MELBOURNE, 1888—*continued.*

Articles.								Prices in January and February.
Cabbages	...	...	...	...	...	...	per doz.	6d. to 4s.
Cauliflowers	...	...	...	...	...	...	"	2s. to 6s.*
Lettuces	...	...	...	...	...	...	"	3d. to 1s.
Green pease	...	...	...	...	...	...	per lb.	1d. to 4d.
MISCELLANEOUS ARTICLES.								
Tea	...	...	...	...	...	...	per lb.	6d. to 1s. 11d.
Coffee	...	...	...	...	...	...	"	8d. to 1s. 2d.
Sugar	...	...	...	...	...	...	"	2½d. to 4d.
Rice	...	...	...	...	...	...	"	3d. to 4d.
Jams	...	...	...	...	...	...	per lb. tin	5d. to 7d.
Tobacco—Colonial	...	...	...	...	...	...	per lb.	3s.
" American	...	...	...	...	...	...	"	5s. to 6s.
Soap	...	...	...	...	...	...	"	3d. to 4d.
Candles—Sperm, stearine, paraffine, &c.	...	...	...	...	...	...	"	6d. to 9d.
Salt	...	...	...	...	...	...	"	1d.
Coals	...	...	...	...	...	...	per ton	24s. to 30s.
Firewood	...	...	...	...	...	...	"	10s. to 14s.
WINES, SPIRITS, ETC.								
Ale—English	...	...	...	...	...	...	per doz.	10s. to 12s.
" Colonial	...	...	...	...	...	...	"	5s. and 6s.
Porter—English	...	...	...	...	...	...	"	10s. to 12s.
" Colonial	...	...	...	...	...	...	"	5s. and 6s.
W	...	...	...	...	...	...	per gall.	22s. 6d. to 35s.
Whisky	...	...	...	...	...	...	"	15s. to 18s.
Geneva	...	...	...	...	...	...	per case, 15 bottles	18s. to 28s.
Port wine	...	...	...	...	...	...	per doz.	60s. to 62s. 6d.
Sherry	...	...	...	...	...	...	"	33s. to 72s.
Claret	...	...	...	...	...	...	"	35s. to 75s.
Champagne	...	...	...	...	...	...	"	15s. to 37s.
Colonial wine	...	...	...	...	...	...	"	34s. to 95s.
								12s. to 30s.

\* Cheaper when in season, during March and April, say 1s. to 2s.



NEW ZEALAND AND SOUTH SEAS INTERNATIONAL  
EXHIBITION, 1889-90.

---

CATALOGUE OF EXHIBITS

IN THE

VICTORIAN COURT.



# CATALOGUE OF EXHIBITS.

## CLASS 1.—Geological and Mineralogical Collections.

MINES, THE DEPARTMENT OF; Hon. D. GILLIES, M.P.,  
Minister; A. W. HOWITT, Esq., F.G.S., Secretary; Public Offices,  
Melbourne:

### 1-58. Specimens of Metalliferous Ores and Minerals, and Fac-similes of Gold Nuggets, found in Victoria:

- S/10.—Auriferous Quartz, from 1,050-foot level of the Sandhurst Mine, Sandhurst.  
6/B.—Magnetic Pyrites, containing Nickel, from the 108-foot level, Gift Shaft, Wallace  
Bethanga Mining and Smelting Co. Limited, Bethanga.  
5/B.—Argentiferous Zincblende, associated with Mispickel, Iron Pyrites, and Galena,  
from South tunnel, Gift Mine, Wallace Bethanga Mining and Smelting Co. Limited,  
Bethanga.  
3/B.—Auriferous Mispickel—average contents, 1oz. to 2oz. 15dwt. per ton—from Berry-  
man's Shaft, Wallace Bethanga Mining and Smelting Co. Limited, Bethanga.  
S/9.—Auriferous Quartz, from the 2,400-foot level of G. Lansell's 180 Mine. Total depth  
of shaft (the deepest in the Southern Hemisphere), 2,640 feet. Sandhurst.  
C/24.—Auriferous Quartz, with Country Rock, from the South Clunes United. Average  
yield of quartz, 7dwt. 2gr. per ton; value of bullion, £4 1s. 10d. per ounce. Lothair  
shaft, 900 feet deep. Clunes.

Mayday Lode	...	460 feet deep, 15 feet wide.
Middle	..	760 .. 5 feet 6 inches wide.
East	..	760 .. 3 .. 4 .. "
West	..	660 .. 4 .. wide.

ST/33.—Auriferous Quartz, from 410 feet deep, Wonga Gold Mining Co., Stawell. Strike  
of reef, N. and S.; underlay, 65° E.; width, 3½ feet to 4 feet. Value of gold extracted,  
£41,862 8s. 4d.

A/28.—Alluvial Paydirt, Madame Berry Gold Mining Co., Spring Hill, Allendale.  
Dividends paid for quarter, December to March, 1889, £20,700.

B/27.—Auriferous Quartz. Sir Henry Loch Quartz Mining Co. No Liability. Total depth,  
1,107 feet; width of reef, 2 feet; average contents, 16dwt. 18gr. per ton. Dividends  
paid, £192,000. Redan, Ballarat.

Slate and Slab. Kara Kara Quarry, near Avoca.

MO/38.—Brown Coal (Miocene). Great Morwell Brown Coal Mining Co., Morwell. Assays  
by E. J. Dunn:—

Percentage of Water	...	12·00	...	12·60	
..	Volatile matter	...	35·64	...	39·00
..	Fixed carbon	...	51·46	...	47·35
..	Sulphur	...	trace	...	trace
..	Ash	...	0·70	...	1·05
			100·00		100·00

BO/39.—Fire Clay (Miocene). Great Morwell Brown Coal Mining Co., Morwell.

62.—Argentiferous Galena. Mount Tara Proprietary Silver Co., Buchan. Results of bulk  
treatment in England:—

Lead	...	73 %	76½ %	70½ %	73 %	74 %	75 %
Silver	...	22oz.	32oz.	31oz.	25oz.	28oz.	23oz.

W/37.—Auriferous Quartz, with accompanying Diorite Rock. Stone crushed from  
December, 1869, to July, 1889, 354,162 tons, yielding 515,504oz. 16dwt. 12gr.  
bullion; gross value, £1,810,942 14s. Dividends paid, £1,041,600, or £434 per share.  
Tunnel, 659 feet long; shaft, 900 feet deep; reef, 5 feet wide. Long Tunnel Gold  
Mining Co., Walhalla.

SY/47.—Fire Clay, with Brick made from it. South Yarra.

ME/51.—Under-clay of Bituminous Coal, 20 feet thick. Moe Coal Co., Coalville.

R/46.—Auriferous Antimonite and Cervantite. Ringwood

49/E.—Auriferous Quartz. Black Horse Mine, Egerton.

M/18.—Sandstone: Freestone used in building the Victorian Houses of Parliament, from  
the Grampian Ranges, near Stawell.



CLASS 1.—Geological and Mineralogical Collections—*continued.*Specimens of Metalliferous Ores, &c., found in Victoria—*continued.*

- S/54.—Auriferous Quartz, from 970 to 980 foot level on Saddle Reef in North Johnson's Mine. Deepest workings, 1,194 feet. Dividends paid, £147,050. Eaglehawk.
- L/50.—Disinfectant made from the Lal Lal Lignite by the Australian Deodorising, Disinfecting, and Fertilising Co. Limited (Hunter's patent).
- 1/C.—Alluvial Tin, mixed with Titaniferous Iron and Gold, concentrated from the paydirt of the Chiltern Valley Gold Mining Co. Limited, Chiltern. Alluvial, 285 feet thick. Assay:—Tin, 33·6 %; gold, 48oz. 13dwt. 11gr.; silver, 13dwt. Sgr. per ton.
- H/11.—Magnesite. Heathcote.
- 11/12.—Antimonite. Costerfield.
- 7/D.—Limonite. Mount Major, Dookie.
- BO/41.—Porcelain Clay, found 27 feet from the surface. Mirboo Colliery Proprietary No. 1 Co., Boolarra.
- M/16.—Auriferous Quartz, from R. D. Oswald's Independent Mine, Parkin's Reef. Deepest workings, 620 feet. Maldon.
- BO/52.—Pipeclay, 8 feet from the surface. Mirboo Colliery Proprietary No. 1 Co., Boolarra.
- A/29.—Cement, from the Hepburn Estate Gold Mining Co., Smeaton. Creswick Sub-division.
- BO/53.—Fire Clay, 137 feet from the surface. Mirboo Colliery Proprietary No. 1 Co., Boolarra.
- O/48.—Lode Tin. Mount Wills, near Omeo.
- L/25.—Limonite, from the banks of the Moorabool River, near Lal Lal. Analysis made at the Ballarat School of Mines:—

Oxide of Iron	...	...	68·71	..	70·44
Silica	...	...	17·30	...	16·30
Alumina	...	...	4·89	...	3·58
Carbonate of Lime	...	...	1·06	...	·60
Carbonate of Magnesia	...	...	·47	...	·83
Sulphur	...	...	trace	...	trace
Phosphoric Acid	...	...	trace	...	trace
Organic Matter	...	...	·45	...	·74
Hygroscopic Moisture	...	...	6·40	...	6·64
Loss	...	...	·72	...	·87
			100·00		100·00

- S/8.—Auriferous Quartz, with Country Rock, from 1,700 to 1,925 foot levels of G. Lansell's 222 Mine, Sandhurst.
- ST/34.—Auriferous Quartz, from the Sloanes and Scotchman's, on the Magdala line of reef, Stawell. Total depth of mine, 1,000 feet. Sample taken from 500-foot level of vertical reef, where 26 feet in width is payable, and 14 feet is left standing.
- M/58.—Antimonite, with Native Sulphur, from Fentiman's line of reef, Maldon.
- C/20.—Potters' Clay: two grades of Red Clay and one of White; also Vessels made out of the coarsest Red Clays. From John McAdam's Hyde Park Pottery, Wesley Hill, Castlemaine.
- M/56.—Molybdenite, from the Eaglehawk line of reef, Maldon.
- L/26.—Lignite, from 100 feet. Shaft, 220 feet deep. Deposit, 140 feet deep, and not yet bottomed. Lal Lal.
- ST/32.—Auriferous Quartz. Moonlight and Magdala, Stawell.
- A/31.—Auriferous Quartz, from No. 2 Shaft of the Amalgamated Scotchman and Cross Reef Mine. Depth, 614 feet. Reef, 10 feet wide; strike, N. 35° W.; underlay, W. about 1 in 2. Value, 1½oz. per ton, with 3% pyrites; average, 8oz. per ton. Stawell.
- S/14.—Auriferous Quartz. Johnson's Reef Gold Mining Co., from the 1,000 to 1,200 foot levels. Average yield, 8dwt. 15gr. per ton. Called-up capital, £3,800. Dividends paid for last 23 years, £174,000, besides £22,500 spent on the claim. Eaglehawk.
- M/57.—Dolomite, coloured blue, from the Eaglehawk line of reef, Maldon.
- 60.—Sandstone (Mesozoic). Apollo Bay.
- ME/44.—Bituminous Coal, with Core of Country Rock, from Giant Rock Drill (Mesozoic), Narracan Seam; 2 feet thick. Shaft, 100 feet. Coalville Colliery Company, Coalville.
- ME/45.—Bituminous Coal (Mesozoic). Thickness of Moe seam, 2ft. 6in. to 3 feet; rises N.W. 1 in 8. Moe Coal Mining Co., Coalville.
- 61.—Slate and Slabs. Percydale Slate Co. Limited, Percydale, near Avoca.
- A/22.—Concentrates. Lord Nelson Mine, St. Arnaud.
- ST/35.—Auriferous Quartz, from flat reef of the Oriental and North Cross Co. Depth of shaft, 1,676 feet. Dividends paid, over £1,000,000. Stawell.

CLASS 1.—Geological and Mineralogical Collections—*continued.*

Specimens of Metalliferous Ores, &c., found in Victoria—*continued.*

- A/21.—Auriferous and Argentiferous Quartz. Average contents of stone, 9½dwt. of bullion per ton; worth £3 per ounce. Dividends paid during last two years, £10,800. Depth of shaft, 1,030 feet; average thickness of reef, 8 feet. Lord Nelson Mine, St. Arnaud.
- 4/B.—Auriferous and Argentiferous Copper Pyrites, associated with Mispickel, averaging 1oz. gold, 2oz. silver, 4½% copper, from No. 1 North Tunnel, Gift, Wallace Bethanga Mining and Smelting Co. Limited, Bethanga.
- C/2.—Auriferous Quartz, in Country Rock of Micaceous Shale, from shaft 175 feet deep, in Burton's Alabama Claim, Beardsmore Hill, Chiltern.
- BO/40.—Lignite, from 157 feet deep. Deposit struck 138 feet from the surface; seam 162 feet thick; depth of shaft, 312 feet. Mirboo Colliery Proprietary No. 1 Co., Boolarra.
- C/19.—Auriferous Quartz, from flat reefs, averaging 6½dwt. per ton. Taken out of 240-foot level. Francis Ormond Mine. Total depth of shaft, 290 feet. Chewton.
- M/55.—Scheelite, from the Eaglehawk line of reef, Maldon.
- M/17.—Auriferous Quartz, from the South German Gold Mine. Average thickness of reef, 20 feet. Deepest workings, 742 feet. Paid in dividends, £5,400. Maldon.
- S/13.—Auriferous quartz, from 400, 1,800, and 1,900 foot levels; average contents, 12dwt. 18gr. per ton. Dividends paid, £14 5s. per share. Great Extended Hustler's Reef Quartz Mining Co. Limited, Sandhurst.
- ST/36.—Auriferous Quartz, with Dyke Stone and Country Rock, from the Long Tunnel Extended Gold Mining Co., Stringer's Creek, Cohen's line of reef. Strike of reef, 18° W. of N.; underlay 30° W.; average thickness, 4 feet. Tunnel, 900 feet long, being 600 feet below top of hill; shaft 1,200 feet below level of tunnel. Stone crushed. 85,850 tons, yielding 113,165oz. bullion. Dividends paid, over £140,000. Walhalla.

Collection of Fac-similes of Large Nuggets of Gold found in Victoria:—

No.	Date when found.	Name of Nugget.	Name of Place from which Nugget was obtained.	Depth from Surface.		Gross Weight.	Approximate Value.
				ft.	in.	oz. dwt.	£
1	11th June, 1858 ..	Welcome .. ..	Bakery Hill, Ballarat ..	180	0	2,195 0	8,780 <sup>9</sup>
2	5th January, 1871 ..	Precious .. ..	Catto's Paddock, Berlin ..	12	0	1,717 0	6,868
3	31st May, 1870 ..	Viscount Canterbury ..	John's Paddock, Berlin ..	15	0	1,121 10	4,420
4	8rd October, 1870 ..	Viscountess Canterbury ..	Berlin .. ..	6	6	890 14	3,536
5	11th July, 1872 ..	The Schlemm .. ..	Near Wilson's Lead, Dunolly ..	3	0	533 5	1,912
6	17th April, 1871 ..	Kum Tow .. ..	Catto's Paddock, Berlin ..	12	6	795 19	2,872
7	March, 1861 .. ..	Platypus .. ..	Robinson Crusoe's Gully, Bendigo ..	5	0	377 6	1,508
8	About the year 1858	Beauty .. ..	Kangaroo Gully, Bendigo ..	9	0	242 0	968
9	11th July, 1873 ..	Unnamed .. ..	Kitty's Lead, Bunmyong ..	0	3	250 15	920
10	November, 1872 ..	Spondulx .. ..	Eureka Gully, Jordan's ..	8	0	155 10	520
11	18th July, 1873 ..	Little Highlander ..	Corndhap .. ..	40	0	178 18	712
12	12th December, 1877	Christmas Gift .. ..	Corndhap .. ..	40	0	178 18	912
13	2nd April, 1872 ..	Crescent .. ..	John's Paddock, Berlin ..	2	0	179 0	704
14	10th May, 1871 ..	Needful .. ..	Catto's Paddock, Berlin ..	12	0	249 0	984
15	24th July, 1879 ..	Unnamed .. ..	Garden Flat, Majorca ..	..	..	93 9	372
16	January, 1881 ..	The Inglewood .. ..	Near Inglewood .. ..	..	..	201 16	800
17	March, 1871 .. ..	Unnamed .. ..	Wedderburn .. ..	..	..	20 16	88
18	28th December, 1877	Unnamed .. ..	Elysian Flat, Sandhurst ..	9	0	75 5	292
19	24th March, 1880 ..	Unnamed .. ..	Working Miners Claim, Homebush	170	0	80 0	320
20	3rd April, 1880 ..	Unnamed .. ..	Little Wonder Claim, Taradale	140	0	111 19	440
21	11th December, 1878	Unnamed .. ..	Rising Sun Mine, Ballarat ..	50	0	41 8	164
22	26th July, 1881 ..	Unnamed .. ..	Dunolly .. ..	15	0	92 0	370
23	18th July, 1881 ..	The Boort .. ..	Boort .. ..	..	..	61 0	243
24	11th July, 1875 ..	Lothair .. ..	Lothair Company's Mine, Clunes	307	0	107 4	308
25	9th August, 1880 ..	Unnamed .. ..	Shicer's Gully, Wedderburn ..	330	0	99 0	380
26	January, 1871 ..	Unnamed .. ..	Key Company's Mine, Creswick ..	..	..	32 0	120
27	25th December, 1875	Unnamed .. ..	White Horse Ranges, Ballarat ..	50	0	41 8	164
28	23rd May, 1873 ..	Unnamed .. ..	Killar's Creek, Wood's Point ..	12	0	113 12	452
29	31st December, 1880	The Yandoit .. ..	Yandoit .. ..	15	0	62 0	282
30	14th September, 1881	Unnamed .. ..	Old Dunolly .. ..	7	0	85 0	340
31	13th December, 1879	Unnamed .. ..	Green Hills, near Stawell ..	40	0	40 13	152
32	April, 1873 .. ..	The Oldham .. ..	Turton's Creek, near Foster ..	2	0	36 0	144
33	1st February, 1877 ..	Unnamed .. ..	Chinaman's Flat, Maryborough ..	200	0	50 19	200
34	11th March, 1871 ..	The Virtue .. ..	Chinaman's Flat, Maryborough ..	220	0	30 0	116
35	14th April, 1873 ..	Alma No. 2 .. ..	Alma Consols Mine, Maryborough ..	120	0	19 10	60
36	8th August, 1772 ..	Unnamed .. ..	Broomfield's Gully, Creswick ..	100	0	24 7	69
37	14th April, 1873 ..	Alma No. 1 .. ..	Alma Consols Mine, Maryborough ..	120	0	145 14	500
38	26th March, 1880 ..	Unnamed .. ..	Little Wonder Claim, Taradale ..	140	0	26 9	100
39	.. ..	Welcome Stranger ..	Dunolly .. ..	0	3	2,520 0	10,000
382	11th April, 1888 ..	Unnamed .. ..	Midas Company's Mine .. ..	..	..	32 0	128
384	.. ..	Unnamed .. ..	Dunolly .. ..	..	..	370 12	1,560
385	25th August, 1888 ..	Unnamed .. ..	Boort's Gully, Daylesford ..	15	0	58 0	220
383	23rd July, 1888 ..	Unnamed .. ..	Inglewood .. ..	0	6	42 18½	172

\* Sold for £10,000.

CLASS 1.—Geological and Mineralogical Collections—*continued.*

PIGDON, JOHN, Moreland Hall, Moreland.

59. Grampian Freestone, as used in the construction of New Parliament Houses, Melbourne.
- 

CLASS 2.—Mining and Metallurgical Machinery and Appliances.

AUSTRALASIAN ASBESTOS MANUFACTURING COMPANY LIMITED, Flinders-street, Melbourne:

60. Asbestos materials for Household, Structural, and Mechanical purposes.

DANKS, JOHN, AND SON LIMITED; 401 Bourke-street, Melbourne:

61. Sight Drop Lubricators.  
62. Exhaust Injectors.

JOHNSON AND SONS, Tyne Foundry, Yarra Bank, South Melbourne:

63. "Victorian" Rock-Boring Machine, for use in Mines or Quarries. Can be worked by compressed air or steam, but the former is preferable.

MCNEILL, JAMES R., Walhalla, North Gippsland:

64. Model of McNeill's Patent Concentrator and Amalgamating Pan. Saves the float-gold and flowered-silver that flows to waste from quartz batteries; also all Pyrites in the outer rim. The gold is caught on the copper studs.
- 

CLASS 3.—Chemical Manufactures.

BOSISTO, J., AND CO., Bridge-road, Richmond:

65. Essential Oils from Australian Vegetation.  
66. Gums, Gum-resins, Resins, and other Pharmaceutical Products.  
67. Perfumes from Native Plants.  
68. Opium, grown in Victoria.

EVERARD, F. W., Kingston:

69. Tomato Sauce.

FRY, JAMES, AND COMPANY LIMITED, Robb's Buildings, 553 Collins-street, Melbourne:

70. Chemical Manures.

CLASS 3.—Chemical Manufactures—*continued.*

HARPER, ROBERT, AND CO., 352 Flinders-lane, Melbourne:

71. Rice Starch.

KIERATH, CHARLES, Indigo, *via* Chiltern.

72. Tomato Sauce.

LONGMORE, FRANCIS, 490 and 504 Flinders-street, Melbourne:

73. Perfumery.

74. Toilet Articles.

75. Oilmen's Stores.

TOD, J. W., AND CO. LIMITED, City Road, South Melbourne:

76. Baking Powder.

77. Culinary Essences.

78. Sauces.

79. Blue.

80. Insecticide.

81. Fluid Magnesia.

82. Perfumery.

83. Liquid Ammonia.

84. Acetic Acid.

CLASS 4.—Glassware, Pottery, &c.

BENDIGO POTTERY COMPANY LIMITED, THE; GEORGE D. GUTHRIE, Esq., Managing Director, Epsom, Sandhurst:

85. Exhibit of General Pottery, consisting of Parian, Majolica, C. C. Bristol, and Stoneware, &c., &c.

CAWKWELL, H. A., High-street, Malvern:

86. Mosaic and Encaustic Tiles, for flooring verandahs.

FLOYD, GREEN, AND CO., Glass Works, Type-street, Richmond:

87. Cut Glass.

88. Gas Globes.

89. Chimney Glasses.

90. Railway and Telegraph Glassware.

MELBOURNE GLASS BOTTLE WORKS COMPANY, THE;  
LAMBTON L. MOUNT, Esq., Managing Director, Graham-street,  
South Melbourne:

91. Glass Bottles.

CLASS 5.—Household Furniture, Brushware, &c.

ALCOCK AND CO., 202 Russell-street, Melbourne:

- 92. Tulip Wood, Exhibition pattern, Billiard Table.
- 93. Combination Cabinet and Marking Board complete.
- 94. One Full-size Billiard Table, taken from stock.

CLAUSCEN, G. C., AND CO., 104-8 Bourke-street, Melbourne:

- 95. Diningroom Suite.

NICHOLSON AND CO., 244 and 246 Collins-street, Melbourne:

- 96. Patent Metal Music Stools.
- 

CLASS 6.—Heating and Lighting Apparatus.

JEANS, SAMUEL ENGLAND, Junction, St. Kilda:

- 97. Gas Cooking Stoves.
- 98. Water Heaters for Baths, &c.
- 99. Gas Heating Fires.

MOORE, EDWARD, 38 Victoria-street, Richmond:

- 100. Champion Gas Cooking Stove.

PORTA, J., AND SONS, 13, 15, and 17 Little Lonsdale-street,  
Melbourne:

- 101. House Bellows.
- 102. Fancy Bellows.
- 103. Blacksmiths' Bellows.
- 104. Double-action Circular Bellows.
- 105. Portable Forges.

SCHMITT, FERDINAND, Denmark-street, Kew:

- 106. Patent Heating Apparatus and Bath.
- 

CLASS 7.—Textile Fabrics.

CASTLEMAINE WOOLLEN COMPANY LIMITED, THE,  
Castlemaine:

- 107. Flannels.
- 108. Blankets.

MILLER, JAMES, AND CO., Market-street, Melbourne:

- 109. Rope.
- 110. Cordage.
- 111. Twines.
- 112. Mats.

CLASS 7.—Textile Fabrics—*continued.*

POLGLASE, JAMES H. P., 135 and 137 Queensberry-street, North Melbourne:

113. Quilts for Bed Clothing, manufactured of Satin, Plush, and Cotton Coverings, stuffed with Feather Down.

VICTORIAN WOOLLEN AND CLOTH MANUFACTURING COMPANY LIMITED, THE; W. S. J. SMYTH, Esq., Secretary, Geelong:

114. Woollen Piece Goods.

---

CLASS 8.—Ready-made Clothing, &c.

BEATH, SCHIESS, AND CO., 204 Flinders-lane, Melbourne:

115. Boys', Youths', and Men's Clothing; Show Case and Wax Figures.

SHELMERDINE, THOMAS, AND CO., Yarra Hat Works, Abbotsford:

116. Felt Hats.

---

CLASS 9.—Printing, Stationery, &c.

"AGE," THE PROPRIETORS OF THE, *Age* Office, Collins-street, Melbourne:

117. Regular copies of the *Age* and *Leader* during the currency of the Exhibition.

"ARGUS," THE PROPRIETORS OF THE, *Argus* Office, Collins-street, Melbourne:

118. Regular copies of the *Argus* and *Australasian* during the currency of the Exhibition.

"DAILY TELEGRAPH," THE PROPRIETORS OF THE, Collins-street, Melbourne:

119. Regular copies of the *Daily Telegraph* and *Weekly Times* during the currency of the Exhibition.

DETMOLD, WILLIAM, 277-9 Flinders-lane, Melbourne:

120. Account Books.  
121. Specimens of Manufactured Stationery.  
122. Bookbinding.  
123. Photographic Mounts.

CLASS 9.—Printing, Stationery, &c.—*continued.*

“EVENING STANDARD” CO. LIMITED, THE; JAMES THOMSON, Esq., Manager, 224 Flinders-street, Melbourne:

124. Regular copies of the *Evening Standard* during the currency of the Exhibition.

FAUSSET, J. B., 267 Little Collins-street, Melbourne:

125. Cut-out Mounts, by hand only, machinery not used.

GOVERNMENT PRINTER (ROBT. S. BRAIN, Esq.), Government Printing Office, Melbourne:

126. Planisphere of the Southern Sky. By R. L. J. Ellery. 2 copies, 1 red morocco, 1 purple morocco, both bevelled boards.
127. Australian Race. By E. M. Curr. 3 vols. demy 8vo, 1 vol. royal folio, full purple calf, gilt edges, bevelled boards, diced sides.
128. Zoology of Victoria. By Professor McCoy. 2 vols., imperial 8vo, full purple morocco, gilt tooled edges, bevelled boards.
129. Aborigines of Victoria. By R. B. Smyth. 2 vols., imperial 8vo, full tree calf, gilt tooled edges.
130. Eucalyptographia. By Baron von Mueller. Royal 4to, 2 copies, 1 half green morocco, marble edges, gilt top, 1 half red morocco, gilt edges.
131. Iconography of Australian Species of Acacia. By Baron von Mueller. Royal 4to, full green morocco, marble edges, gilt sides, bevelled boards.
132. Myoporinous Plants of Victoria. By Baron von Mueller. Royal 4to, light-brown morocco, white edges, gilt tooled, bevelled boards.
133. Victorian Statutes. 5 vols., demy 8vo, full law calf.
134. Select Extra Tropical Plants. By Baron von Mueller. 2 copies, demy 8vo, coloured calf, gilt edges.
135. Key to the System of Victorian Plants. By Baron von Mueller. 4 vols., crown 8vo, 2 green and 2 brown, full calf, gilt edges.
136. Illustrated Handbook of Victoria, together with Official Catalogue of Victorian Exhibits. Demy 4to, full red morocco, gilt edges, bevelled boards.
137. Register of Work. 10 quires medium, full purple morocco, tooled sides, paged.
138. Detail Ledger. 10 quires super royal, rough calf, single bands, paged.
139. Departmental Printing Account. 10 quires super royal, full russia, double under-bands, folioed.
140. Newspaper Cuttings Guard Book. 9 quires full white vellum, green morocco, single bands, green and red lined.
141. Requisition Book. 10 quires medium, green vellum, white and black lined, folioed.
142. Stationery Account. 10 quires super royal, white vellum, russia bands cut out, black and red lines, paged.
143. Revenue Cash Book. 8 quires demy, full rough calf, paged.
144. Railway Invoices. 10 quires medium, full rough calf, single russia bands and corners, folioed.
145. Advertising Totals. 7 quires foolscap, full smooth calf, red morocco double bands cut out, folioed.
146. Time Record Book. 8 quires imperial, rough calf, double russia bands cut out, paged.
147. Delivery Book. 6 quires demy, full smooth calf, paged.
148. Cost of Production. 10 quires imperial, full rough calf, russia ends, centre, and corners.
149. Specimens of Lithographic Printing (6 frames). These have been executed as illustrations to Professor McCoy's Zoology.
150. Victorian Duty Stamps, adhesive and impressed, employed for postage and revenue purposes; also Post and Letter Cards, Newspaper Wrappers, Postal Notes, &c.

CLASS 9.—Printing, Stationery, &c.—*continued.*

“HERALD,” THE PROPRIETORS OF THE, 306 Little Collins-street, Melbourne:

151. Regular copies of the *Herald* during the currency of the Exhibition.

ROYAL HUMANE SOCIETY OF AUSTRALASIA, THE; WM. HAMILTON, Esq., Acting Secretary, 41 Selborne Chambers, Bourke-street west, Melbourne:

152. Samples of Medals Awarded by the Society.

153. Society's Instructions for Restoring the Apparently Dead.

154. Conditions on which Bronze Medallions are Awarded to Schools.

SANDS AND McDOUGALL LIMITED, JAMES McDOUGALL, Esq., Managing Director, 365 Collins-street, Melbourne:

155. Electrotypes.

156. Stereotypes.

157. Specimens of Embossing.

158. Specimens of Engraving.

WIMBLE, F. T., AND CO., 189 Little Collins-street, Melbourne:

159. Printing Inks.

160. Samples of Varnishes and Colours from which Inks are made.

CLASS 10.—Armament, Native Weapons, &c.

DEPARTMENT OF DEFENCE, THE; Hon. JAMES BELL, M.L.C., Minister; Commander R. M. COLLINS, Secretary; Public Offices, Melbourne:

161. Model of Original Armstrong Gun, on French-polished Truck Carriage.

162. Six Lead-coated Shell.

CLASS 12.—Hardware.

BLAKELEY, W. H., 115 Lonsdale-street, Melbourne:

163. Specimens of Saws, Made and Ground by Machinery.

DANKS, JOHN, AND SON LIMITED, 401 Bourke-street, Melbourne:

164. Ejectors.

165. Steam Valves.

166. Boiler Mountings.

THOMSON BROS., 134 Fitzroy-street, Fitzroy:

167. Patent Safety Hooks, applied to the following uses, viz.:—Watch Chains Door Chains, Plough Reins, Cart Reins, Carriage Reins, Trace Hooks Crane Hooks, Mill Bucket Hooks, and Mining Hooks, &c.



**CLASS 13.—Carriages, Horse Furniture, &c.**

**BURTON AND KNOX, Burwood-road, Hawthorn:**

- 168. Lady's Polished Pony Carriage, with Child's seat.
- 169. Slide-seat Buggy, with hood.

**PERRY, JOHN, 233 Russell-street and 150 to 158 Lonsdale-street, Melbourne:**

- 170. Steam-bent Timber for Carriage Builders and Wheelwrights' purposes.
- 171. Spokes.
- 172. Felloes.
- 173. Naves.

**PICKLES, G. M., AND CO., 344 Latrobe-street, Melbourne, and 32 to 36 Brunswick-street, Fitzroy:**

- 174. C spring Landau.
- 175. Brougham.
- 176. Victoria.
- 177. Dog Cart.
- 178. Concord Buggy, with Hood.
- 179. Concord Buggy, without Hood.
- 180. Slide-seat, or Convertible Buggy.
- 181. Family Waggonette.

**WARING BROS., 490 to 494 Elizabeth-street, Melbourne:**

- 182. Automatic Slide-seat Whitechapel Dog Cart.

**WIGHTMAN AND SON, Barry's Reef:**

- 183. Horse Shoes.

**CLASS 14.—Educational Appliances.**

**EDUCATION, THE DEPARTMENT OF; Hon. C. H. PEARSON, LL.D., M.P., Minister; J. MAIN, Esq., Secretary; Public Offices, Melbourne.**

184-228. Complete Educational Collection, illustrative of the State School System of Victoria, comprising Models of Schools, Maps, Specimens of Pupils' Work, &c., &c.:—

Map of Schools in Victoria.  
 Model of Eaglehawk State School.  
 Photographs of Schools and other Public Buildings.  
 Desk and Seat.  
 Dual Desk.  
 Kindergarten Desk (1) and Seat (1), Table (2), and Blackboard (3).  
 Table and Press combined.  
 Easel.  
 Blackboard.

School Law, &c.—  
 Education and Public Service Acts.  
 Regulations.  
 Classified Roll.  
 Annual Report of Education Department for 1888.  
 Class Rolls.  
 Teachers' Rolls.  
 School Register.  
 Inspector's Register.  
 Corporal Punishment Register.

CLASS 14.—Educational Appliances—*continued.*

Exhibits from the DEPARTMENT OF EDUCATION—*continued.*

- |  |   |
|--|---|
| <p>School Law, &amp;c.—<i>continued.</i><br/> Forms of Reports furnished by Inspectors of Schools.<br/> Forms of Reports, &amp;c., of Inspector of Music.<br/> Form of Application for Free Grant of Books and Requisites.<br/> Form of Application for School Furniture.<br/> Forms of Claims—<br/> Salaries and Allowances.<br/> Maintenance Expenses.<br/> Singing and Drawing.<br/> Superannuation Allowance.<br/> Health Society's Wall Sheets—<br/> Saving Life, Drowning, Snake-bite, Sunstroke, &amp;c.—Instructions for.<br/> Regulations in respect to State School Reserves.<br/> Examination Papers—Printed copies of.<br/> Examination for Results—Answers of Pupils, and Actual Questions set.<br/> Needlework—Specimens of.</p> | <p>Album of Needlework done by the Pupils of Miss Tegetmeier's Special Class.<br/> Drawings Executed by Pupils—<br/> Five Albums.<br/> One Portfolio.<br/> Kindergarten Work, in Albums.<br/> Text Books—<br/> Royal Readers, I. to VI.<br/> Renzow's Progressive Examples in Arithmetic.<br/> Hackwood's Notes of Lessons on Moral Subjects.<br/> Training College, Melbourne—<br/> Photograph of Elevation and Plan of the Training College.<br/> Specimens of Drawings of Students.<br/> Specimens of Needlework of Students.<br/> Specimens of Examination Papers of Students.<br/> Specimens of Criticisms of Lessons.<br/> Circulars, Regulations—Course of Instruction in Training.<br/> Specimens of Kindergarten Work of Students.</p> |
|--|---|

EDUCATIONAL MUSEUM, MELBOURNE.

229-314. Exhibits illustrating Public Education in France, presented to the Victorian Government by the French Republic (Translation):—

- |  |  |
|--|--|
| <p>I. Detailed Plans of Primary Schools—<br/> 1. Infant Schools.<br/> 2. Schools of one room only.<br/> 3. Schools of two rooms.<br/> 4. Town Schools.<br/> 5. Mixed Schools.<br/> 6. Special Schools for Boys.<br/> II. Photographs of School Buildings, or of certain portions of them.<br/> III. Educational Apparatus and Pupils' Work—Graduated specimens constituting the method of instruction for elementary manual work—<br/> City of Paris:<br/> 1. Joinery—Exercise with the file, saw, chisel, and gouge.<br/> 2. Turning—Graduated exercises.<br/> 3. Fitting — Curves, head-pieces, patterns, and squares.<br/> 4. Modelling—Graduated exercises (upper course).<br/> 5. Carving—In wood and stone.<br/> Normal Schools:<br/> 1. Exercise in Turning—Cylinder, roll, nine-pin, &amp;c.<br/> 2. Forging and Fitting—Peg, hook, pincers, &amp;c.<br/> 3. Joiner's work.<br/> Bordeaux:<br/> Communal School — Collection of locksmith's work.<br/> Armentières:<br/> Pupils' work from the Infant School, and from the Primary School annexed to the Technical School.</p> | <p>Voiron:<br/> Pupils' work from the Primary School annexed to the Technical School.<br/> Infant School Society:<br/> Mosaic Patterns, Plaiting, Embroidery, and Paper Folding.<br/> Bordeaux:<br/> Infant School—Copy-books of the class.<br/> Communal School for Girls—Manual work, maps, plans.<br/> Infant School—Picture album.<br/> Girls' School } Daily and Monthly<br/> Boys' School } tasks set for pupils.<br/> Dijon:<br/> Superior Primary School—Exercises in Drawing and Colouring.<br/> Nansouts:<br/> Communal School—Pupils' Tasks.<br/> City of Paris:<br/> Free-hand Drawings (5).<br/> Examination for the Higher Certificate of Primary Instruction, Drawing Test—Specimens.<br/> Specimens of the Maps of France and Algeria.<br/> Wall Maps:<br/> France, four Maps.<br/> Geographical terms, two Maps.<br/> Terrestrial Planisphere.<br/> Celestial Planisphere.<br/> England and France.<br/> Twelve Tables—Statistics of Primary Instruction.</p> |
|--|--|

CLASS 14.—Educational Appliances—*continued.*Exhibits from the DEPARTMENT OF EDUCATION—*continued.*

- III. Educational Apparatus—*continued.*  
 Fifteen Tables—Primary Teaching of Drawing.  
 Six Tables—Educational Museum.  
 Wall Plate of Natural History.  
 Five Plates—Apparatus and Methods for the Infant School occupations.  
 Geometric Table.  
 Four Tables—Method of Cuissart.  
 Table—Method of Gregenberger.
- IV. Educational Publications—  
 “The Schoolmasters’ Journal,” 1883-4-5 (3 vols.).  
 “General Journal of Public Instruction,” 1881.  
 “Statistics of Primary Instruction,” 1881-2.  
 “Gréard’s Notes on Teaching.”  
 “Pedagogic Congress of 1881.”  
 “The Tribune” (vols. 1, 2, 3, 4).  
 “Higher Instruction: Laws and Regulations” (3 vols.).  
 “Higher Instruction: Laws and Regulations—Tables,” 1789-1883.  
 “Decoration of Schools and Educational Pictures.”  
 “Organization of Primary Instruction in Algeria.”  
 “Account of the Personal Labours of the Professors of the Faculty of Letters.”  
 “Philotechnical Association,” 1887.  
 “Hygiene of Primary and Infant Schools.”  
 “Teaching of Drawing,” 1882-3.  
 “Decrees and Resolutions passed by the Superior Council of Public Instruction.”  
 “Teaching of Singing—Reports and Programmes.”  
 Library of the School of Advanced Studies:  
 “Philology and History.”  
 “Bulletin of Mathematical Sciences.”  
 “Section of Natural Science.”  
 “Academy of Bordeaux.”  
 “Academy of Aix and Marseilles.”  
 “Superior Instruction—Documents.”
- “Review of Instruction,” 1884.  
 “Annual Report of Public Instruction,” 1884.  
 “On the Importance of Education in a Republic.”  
 Department of Public Instruction:  
 “Administrative Orders” (5 vols.).  
 “Organic Regulations of Primary Instruction,” 1886-7.  
 “Collection of Subjects for Composition given at the Examinations for Certificates of Competency” (2 vols.).  
 “Licences and Certificates of Competency.”  
 “Infant Classes.”  
 Teaching of Gymnastics:  
 “National Technical Schools (Vierzon, Voiron, Armentières).”  
 “Proposed Laws regarding the Ordinary Expenses of Primary Instruction.”  
 “Proposed Laws as to Primary Instruction (1887) — Chamber of Deputies.”  
 “Law of October, 1886; Organic Regulations of January, 1887.”  
 “Primary Normal Schools—Building and Establishment.”  
 “The French Line of Teaching for the Propagation of Instruction in the Departments.”  
 “Superior Primary Instruction—Laws, Regulations, Statistics.”  
 “Bulletin of the Superior Council—Statistics.”  
 “Commission on the Decoration of Schools and Educational Pictures.”  
 “Primary Normal Schools—Science Apparatus.”  
 “Recapitulation of the Conditions of the Situation of Primary Instruction.”  
 “Resolutions adopted by the Staff—Teaching of Primary Normal Schools, &c.”  
 “International Exhibition of Melbourne, 1888; France—Detailed Catalogue of the French Section of Education and Instruction.”

HAYTER, H. H., C.M.G., Government Statist of Victoria, Bourke-street, Melbourne :

315. Victorian Year-Book, 12 volumes.  
 316. Victorian Census Report, 1 volume.  
 317. Large Statistical Sheet, mounted on rollers.

LANDS AND SURVEY, THE DEPARTMENT OF; Hon. J. L. Dow, M.P., Minister; A. MORRAH, Esq., Secretary, Public Offices, Melbourne :

318. Maps.

**CLASS 14.—Educational Appliances—*continued.***

**MINES, THE DEPARTMENT OF ;** Hon. D. GILLIES, M.P.,  
Minister; A. W. HOWITT, Esq., F.G.S., Secretary; Public Offices,  
Melbourne:

319. Maps.

**MORRISON, ALFRED CHAS.,** 52 Doveton-street north, Ballarat :

320. Mechanical Drawings (2).

321. Book of Geometrical Drawings (Figures).

322. Exercise Book of varied School Work.

323. Book-keeping Book of Commercial Penmanship.

**MULLIS AND TAYLOR,** 14 and 15 Fink's Buildings, Elizabeth-street,  
Melbourne :

324. Section 1 of the Property Chart of the City of Melbourne.

**NORTHCOTE BOROUGH COUNCIL, THE ;** W. G. SWIFT, Esq.,  
Town Clerk, Council Chambers :

325. Perspective Drawing of Municipal Buildings.

**RAILWAYS, THE DEPARTMENT OF ;** P. P. LABERTOUCHE, Esq.,  
Secretary ; Spencer-street, Melbourne.

326-330. Railway Maps:—

Railway Map of Victoria, December, 1889.

Time-table Map of Victorian Railways.

Railway Map of Victoria, showing portion of New South Wales and South Australian  
Lines.

Railway Map of Victoria, showing Stations, Mileages, Accommodation, &c.

Map showing Melbourne and Suburban Railway Lines and Tramway Routes.

**WORKING MEN'S COLLEGE, THE ;** FREDK. A. CAMPBELL, Esq.,  
Secretary, Latrobe-street, Melbourne :

331. Examples of Work of the Students in various classes.

---

**CLASS 16.—Musical Instruments.**

**STRINGER, FRANK,** Fairfield Park, Melbourne :

332. Banjo, German silver and blackwood.

---

**CLASS 17.—Sanitary and Athletic Appliances.**

**ADAMS', R. T. (Late DAHLKE'S), FILTER WORKS,** Prince's Bridge,  
Melbourne :

333. Samples of Adams' (late Dahlke's) Improved Patent Silicated Carbon  
Filters.

CLASS 17.—Sanitary and Athletic Appliances—*continued.*

DANKS, JOHN, AND SON LIMITED, 401 Bourke-street,  
Melbourne:

- 334. Water Meters.
- 335. Gas and Water Supply requisites.
- 336. Sheet Lead, &c.

DRAPER AND SONS, 464 and 466 Bourke-street, Melbourne:

- 337. Patent Earth Closets, and appliances for same.

EDWARDS, JAMES AND SONS, Prince's Bridge, Melbourne:

- 338. Boats.

EDWARDS, JAMES, Prince's Bridge, Melbourne:

- 339. Racing Oars and Sculls.
- 340. Club Oars and Sculls.
- 341. Pleasure Boat Oars and Sculls.
- 342. Canoe Paddles and Hooks.

JEANS, SAMUEL ENGLAND, Junction, St. Kilda:

- 343. Sanitary Closet-pans.
- 344. Dust Bins.

MELBOURNE WATER SUPPLY, THE DEPARTMENT OF;  
W. GALBRAITH, Esq., Secretary; WM. DAVIDSON, Esq., M.Inst.C.E.,  
Supt. Engineer; Public Offices, Melbourne:

- 345. General Plan of Melbourne Water Supply Works.
- 346. Model of same.
- 347. Four Sluice Valves, 4, 12, 18, 30 inch.

---

CLASS 18.—Works of Art.

AITKEN, WILLIAM, St. Vincent-place, Albert Park, South  
Melbourne:

348-353. Oil Paintings:—

- |  |  |
|--|--|
| Piece of Needlework, representing the<br>"Last Supper," by W. Bridges.<br>"Mountain Gorge and Bridge"<br>(Glover).<br>Landscape, "Otway Castle" (W.<br>Meadows). | "Comfort of Prisoner" (Locatillo).<br>"Horse in Stable" (F. E. Bodkin).<br>"Cornfield, Merri Creek" (G. Pea-<br>cock). |
|--|--|

CLASS 18.—Works of Art—*continued.*

BARTON, Miss ROSE, Fletcher's Art Gallery, 230 Collins-street, Melbourne:

354-359. Water-Colour Drawings:—

"Carden on the Moselle" (B. H. McGuinness, R.H.A.). "On the Road to Gareloch" (B. H. McGuinness, R.H.A.). "On the Wye" (F. C. Coleridge).	"At Sonning on Thames" (F. C. Coleridge). "Plas tan y Bwetch" (F. C. Coleridge). "Sunset, Wargrave on Thames" (F. C. Coleridge).
---	--

BATES, PAUL, Grattan-street, Carlton:

360-364. Oil Paintings:—

A Study, "Near Capel Curag" (David Bates). "Snow Piece" (David Bates).	"Ashow Church" (David Bates). "Knighton Church" (David Bates). "Near Brécon" (David Bates).
---	---

BERTHON, Miss L. DE C., Stanley-road, South Yarra:

365. Oil Painting:—

Landscape Painting in Oils: "Scene on the Upper Derwent, Tasmania."

BOYD, A. M., "Harwood," Fulton-street, East St. Kilda:

366. Oil Painting:—

"After a Cruise."

BOYD, Mrs. A. M., "Harwood," Fulton-street, East St. Kilda:

367. Oil Painting:—

"A Lassie yet."

BURNS, ANDREW, Fletcher's Art Gallery, 230 Collins-street, Melbourne:

368-370. Oil Paintings:—

"Woman and Child" (A. Mossolini). "A Tiff" (A. Mossolini).	Figure Piece, "Maranders" (L. Noerr).
---	---------------------------------------

371-372. Water-Colour Paintings:—

Figure Piece, "Flirtation" (P. Gioga).	"Landscape" (the late J. H. Mole, P.R.I.).
--	--

CAUGHEY, BROS., AND CO., Agents Mount Prior Vineyard, 134 William-street, Melbourne:

373. Painting of Mount Prior Vineyard, Murray River, showing House, Cellars, &c.

COLE, Miss CHASSIE, "Pilrig," Newtown Hill, Geelong:

374-376. Oil Paintings:—

"Shade and Shine."  
 "Beams of Evening."  
 "In the Otway Forest."

CLASS 18.—Works of Art—*continued.*

COLQUHOUN, ALEXANDER, Burke-road, Camberwell:

377-381. Oil Paintings:—

“In the Land of Faerie.”  
“A Brown Study.”  
“Still Life.”

“Mount Wellington, Tasmania.”  
“On the Derwent (grey day), Tasmania.”

CONOLAN, G. J. R., “Athol,” Mercer-road, Malvern:

382. Oil Paintings.

CURRIE, MISS ALICE, “Windemere,” Millswyn-street, South Yarra:

383-384. Oil Paintings:—

Landscape.  
Study of a Child's Head.

DAHLE, M. K., Fletcher's Art Gallery, 230 Collins-street, Melbourne:

385. Oil Painting:—

“Sea Piece” (W. Bennet).

FLETCHER, A., 230 Collins-street, Melbourne:

386-390. Oil Paintings:—

“Puppies” (Sir E. Landseer, R.A.).  
“Queen Catherine's Dream” (H. Le  
Jeune, A.R.A.).

“Roses” (W. G. Sanders).  
“Sunset, Yarmouth” (F. H. Miles).  
“My Laddies on the Sea” (H. Baldry).

391-394. Water-Colour Paintings:—

“Takaka Valley” (J. Gully).  
“Mount Cooke” (J. Gully).

“In Sussex” (E. P. Brandard).  
“A Dusty Road” (Menain).

FREEMASONS' HALL CO. LIMITED, THE; T. H. LEMPRIERE,  
Esq., Manager, 25 Collins-street, Melbourne:

395. Drawing of the Freemasons' Hall.

GILBERT, J., Fletcher's Art Gallery, 230 Collins-street, Melbourne:

396-409. Oil Paintings:—

“Sanctuary” (Wm. Holyoake, O.P.S.  
B.A.).  
“A Venetian Noble” (Wm. Holyoake,  
O.P.S.B.A.).  
“After the Bath” (Wm. Holyoake,  
O.P.S.B.A.).  
“Italian Peasant Girl” (T. K. Pel-  
ham).  
“Out in the Valley of the Avon”  
(Chas. Marshall).  
“On the Stour” (Chas. Marshall).  
“On the Avon” (Chas. Marshall).

“Sundown” (Chas. Marshall).  
“The Tow-path, Arlesford” (L.  
Wray).  
“Among the Welsh Hills” (S. R.  
Percy).  
“Bala Lake” (S. R. Percy).  
“Farmyard” (Wm. Ashford).  
“Wimbleton Common” (James  
Webb).  
“The Old Stage Waggon” (J. F.  
Herring).

CLASS 18.—Works of Art—*continued.*

GILBERT, J., Fletcher's Art Gallery—*continued.*

410-443. Water-Colour Paintings:—

"Near Yarmouth" (A. W. Weedon, R.I.).  
 "In the Highlands" (A. W. Weedon, R.I.).  
 "On the Beach" (F. H. Mole).  
 "The Young Artist" (T. Walter Wilson, R.I.).  
 "Floods" (A. A. Fraser).  
 "Gathering Firewood" (H. C. Fox).  
 "Flowers" (P. R. Marshall).  
 "Finishing Touches" (C. McL. Greerson).  
 "Penance" (C. Schroder).  
 "Twilight" (W. Ayerst Ingram, R.B.A.).  
 "A Summer's Day" (W. Ayerst Ingram, R.B.A.).  
 "Home with the Catch" (W. Ayerst Ingram, R.B.A.).  
 "On the Yorkshire Coast" (W. Ayerst Ingram, R.B.A.).  
 "Waiting for the Tide" (W. Ayerst Ingram, R.B.A.).  
 "Sunset" (C. J. Barraud).  
 "Preparing for the Conquest" (T. Sydney Muschamp).

"Street in Caen" (W. Mesker).  
 "In the Isle of Skye" (Reginald Jones).  
 "A Burn in Perthshire" (Reginald Jones).  
 "Castle Burn, Loch Awe" (Reginald Jones).  
 "The Nore" (R. H. Biddle).  
 "Christmas Dinner" (J. Barnes).  
 "Tarantella" (P. de Tomassi).  
 "Compliments to the Hostess" (P. de Tomassi).  
 "Day Dreams" (W. H. Hooper).  
 "Mill Stream" (S. Morris).  
 "Orange Boy" (Carnevalin).  
 "Storm on Moor" (W. Beattie).  
 "Gathering Brush" (Pignegnot).  
 "On the Little Stour" (C. Marshall).  
 "Flowers" (Provaggi).  
 "Vanity" (Feregatti).  
 "Leominster Church" (Stuart Lloyd, R.B.A.).  
 "Dead Men's Shoes" (C. Cattermole, R.I.).

HODSON, Miss E., Fletcher's Art Gallery, 230 Collins-street, Melbourne:

444. Oil Painting:—

"On the Lagoons, Venice" (G. G. Kilburne, R.I.).

445-469. Water-Colour Drawings:—

"Arthog, Barmouth" (R. A. K. Marshall).  
 "Highland Pasture" (A. W. Weedon, R.I.).  
 "Peat Gatherers" (E. Hargitt, R.I.).  
 "A Stream in Wales" (J. M. Bromley, R.B.A.).  
 "Newbury, Berkshire" (Yeend King, R.I., &c.).  
 "On the Boulevards" (Dudley Hardy).  
 "Near Woolford" (R. A. K. Marshall).  
 "Sunset, Thundery Weather" (G. S. Watters, R.B.A.).  
 "Melrose Bridge" (F. W. Cartwright).  
 "Peat Bog, Loch Ewe" (A. W. Weedon, R.I.).  
 "Companions" (G. G. Kilburne, R.I.).  
 "On the Lagoons, Venice" (T. B. Hardy, R.B.A.).  
 "On the Pier, Ramsgate" (T. B. Hardy, R.B.A.).

"Footbridge near Hurst" (A. E. Bowers).  
 "Dover Cliffs" (T. B. Hardy, R. B. A.).  
 "A Quiet Corner, Dordrecht" (W. W. May, R.I.).  
 "Off Katwyk" (T. B. Hardy, R. B. A.).  
 "A Loch on the River Wey" (E. P. Bucknall).  
 "Windmill Heath, Reigate" (W. H. Wheeler).  
 "A Gale in Swansea Bay" (G. S. Walters, R.B.A.).  
 "Mount Siabad, from Capel Curog" (David Law, R.B.A.).  
 "A Stormy Day" (David Law, R.B.A.).  
 "Good Morning" (C. Cattermole).  
 "Travelling in the Olden Times" (C. Cattermole).  
 "Cattle in Meadows" (J. McPherson).

JOHNSON AND SONS, Tyne Foundry, Yarra-bank, South Melbourne:

470. Painting of the Tyne Foundry, at Yarra-bank, South Melbourne.



CLASS 18.—Works of Art—*continued.*

KNEEBONE, FRED., Clarke Buildings, 430 Bourke-street, Melbourne:

471. Water-Colour Drawing.

KRETZSCHMAR, RICHARD, "Home Lodge," St. Helliers-street, Abbotsford:

472-475. Sculpture:—

Bust of a Child (portrait).  
Model of a Lion.Group of Apollo and Infant Mercury.  
Panel, Venus and Iris.

MILLER, J., corner Dana and Armstrong streets, Ballarat:

476-479. Water-Colour Drawings:

"Village of Greenmills" (A. K.  
Brown, R.W.S.).  
"After a Storm" (A. K. Brown,  
R.W.S.)."Crossing the Sands" (Wm. Carlan,  
R.W.S.).  
"Evening on the Clyde" (A. K.  
Brown, R.W.S.).

MUNTZ, MISS JOSEPHINE M., Williams-road, Hawksburn:

480. Oil Painting.

MCGREGOR, ADOLPH S., "Carlton House," 765 Drummond-street, North Carlton:

481. Oil Paintings.

NELSON, CARL, Derrick-street, Kew:

482-485. Water-Colour Paintings:—

"Group of African Blacks."  
"Good Luck.""Friendly Overtures."  
"Australian Aborigines."

RAE, MISS ISOBEL, care of WALTER J. ANDERSON, Esq., William-street, Melbourne:

486. Oil Painting:—

"Marchand de Volaille."

RICHARDSON, C. D., Gurner-street, St. Kilda:

487-488. Oil Paintings:—

"Captives."  
"Highgate Woods."

ROGERS, CHARLES, AND CO., 89 Little Collins-street, Melbourne:

489-491. Stained Glass Panels:—

Church-light—subject, "Prodigal Son's Return."  
Domestic-light—subject, "Music and Dancing."  
Mosaic Glass Panels.

CLASS 18.—Works of Art—continued.

ROWAN, MRS. ELLIS, 61 Queen-street, Melbourne:

- 492. Water-Colour, "Crysanthemums."
- 493. "Marguerites."
- 494. "Winter Flowers."
- 495. "Australian Wild Flowers" (18).

TOOTH, ARTHUR AND SONS, Fletcher's Art Gallery, 230 Collins-street, Melbourne:

496-522. Oil Paintings:—

- "Sunset in Bavaria" (L. Neubert).
- "Rest and Refreshment" (W. Velten).
- "The Waning of the Year" (E. Parton).
- "Penelope" (L. Blanc).
- "An Angel of Prayer" (L. Blanc).
- "Interior of a Stable" (W. Verschauer).
- "Battery Green, New York" (Andrew Melrose).
- "In the Deder Valley" (J. B. Smith).
- "Waterfall at Tobermory" (J. B. Smith).
- "Lower Fall, Aberfeldy" (J. B. Smith).
- "Cottage at Thorpe" (J. Thors).
- "The Rivals" (T. F. Dicksee).
- "Near Clovelly" (F. Brangwyn).

- "The Last Drop" (David Hardy).
- "Moonlight" (Noerr).
- "Temple of Vesta" (De Franceschi).
- "The New Novel" (L. J. Pott).
- "On the Balcony" (G. W. Chapman).
- "A Meeting of the Unemployed" (Will. Anderson).
- "Sunset" (Collingwood Smith).
- "A Home by the Sea" (E. A. Waterlow).
- "On the Thames" (F. Hollingdale).
- "Dangerous Documents" (F. Roe).
- "The Pets" (W. H. Dobson, R.A.).
- "Driving Geese" (Iso. Rae).
- "Egyptian Maid" (J. L. Reh).
- "The Reprimand" (F. Vertias).

523-546. Water-Colour Paintings:—

- "Fishing at Beer" (Kate Macaulay).
- "Mending Nets" (Kate Macaulay).
- "A Pompeian Lamp-seller" (J. Bouvier).
- "Off Tieport" (T. B. Hardy).
- "Venice" (T. B. Hardy).
- "In the Highlands" (E. Rieck).
- "St. Helier's Journey" (P. J. Naftel).
- "Mussel Gatherers" (J. H. Mole).
- "Sailing the Boat" (J. H. Mole).
- "Happy Hours" (Jas. Hardy, jun.).
- "Near Guildford" (T. J. Watson).
- "Port Madoc" (C. Pearson).
- "Lake Scene" (C. Pearson).

- "A Loch Scene" (E. Richardson).
- "Near Ewhurst, Surrey" (G. Shalders).
- "The Thames at Pangbourne" (S. P. Jackson).
- "Near Ilfracombe" (A. Hartland).
- "A Loch Scene" (A. Hartland).
- "After Work" (E. P. Bucknall).
- "Near Capel Carig" (E. P. Bucknall).
- "The Logan Rock" (John Mogford).
- "Ischia" (T. L. Rowbotham).
- "Off Capri" (T. L. Rowbotham).
- "Morlaise" (L. Lewis).

TRADES' HALL COUNCIL, THE; DAVID BENNETT, Esq., Secretary, Victoria-street, Carlton, Melbourne:

- 547. Drawing of Main or West Front of the Trades' Hall, Melbourne.

TREEBY, PHILLIP E., 421 Collins-street, Melbourne:

- 548. Architectural Drawings (6).

WALTON, GEORGE, Grosvenor Chambers, Collins-street, Melbourne:

- 549. Oil Painting:—  
"The Acolyte."

CLASS 18.—Works of Art—*continued.*

WEBB, Miss EMMA E., "Farleigh," Park-street, Middle Brighton:  
550. Oil Painting.

WILSON, CHARLES VERNON, "Glenrock," Dalgety-street, St. Kilda:

551. Oil Painting:—  
"Picnic Point, Brighton."

## CLASS 19.—Photographs.

AUSTRALIAN MUTUAL PROVIDENT SOCIETY, THE;  
N. MAINE, Esq., Resident Secretary, 459 Collins-street, Melbourne:

552. Photograph of the Society's Premises in Melbourne.

BAKER AND FARQUHAR, Austral Works, Bond-street, Abbotsford:

553. Photographic Views of Melbourne and Victorian Scenery.

BANK OF AUSTRALASIA, THE; J. SAWERS, Esq., Supt., 396 Collins-street, Melbourne:

554. Photograph of Melbourne Branch Premises.

BOCK, ALFRED, "Waitakerei," Currajong-road, Auburn:

555. Photographs, Plain and Coloured.

556. Enlargements on Paper and Opal, Plain and Coloured.

557. Permanent Carbon Photos. on Porcelain Plaques.

558. Bromide Enlargements.

559. Landscape Photographs.

560. Lantern Slides.

BRIGHTON TOWN COUNCIL, THE; EDWARD LUCAS, Esq., Town Clerk:

561. Photograph of the Town Hall, Brighton.

CAIRE, N. J., 135 Toorak-road, South Yarra:

562. Photographic Views of Victorian Scenery.

CITY OF MELBOURNE BANK LIMITED, THE; COLIN M. LONGMUIR, Esq., Manager, Collins and Elizabeth streets, Melbourne:

563. Photograph of Bank Premises, Melbourne.

CLASS 19.—Photographs—*continued.*

CITY OF MELBOURNE BUILDING SOCIETY, THE; 118  
Elizabeth-street, Melbourne:

564. Photograph of the Society's Premises.

COLLINGWOOD CITY COUNCIL, THE; A. M. MORTLEY, Esq.,  
Town Clerk, Town Hall, Collingwood:

565. Photographs of Public Buildings, &c., in the City of Collingwood.

COLONIAL BANK OF AUSTRALASIA, THE; W. GREENLAW, Esq.,  
General Manager, Elizabeth-street, Melbourne:

566. Photograph of the Bank Premises, Melbourne.

COLONIAL MUTUAL LIFE ASSURANCE SOCIETY LIMITED,  
THE; T. JAQUES MARTIN, Esq., Manager, 419 and 421 Collins-street,  
Melbourne:

567. Photograph of the Society's Premises.

EDUCATION, THE DEPARTMENT OF; Hon. C. H. PEARSON,  
LL.D., M.P., Minister; J. MAIN, Esq., Secretary; Public Offices,  
Melbourne:

568-609. Photographs of Schools and other Public Buildings:—

State School, Ballarat (Urquhart-street).	State School, St. Kilda (Brighton-road).
„ Eaglehawk.	„ South Yarra.
„ Geelong (Central).	„ St. Kilda (Park).
„ Hawthorn.	„ Carlton (Rathdowne-st.).
„ California Gully.	„ Prahran (High-street).
„ Horsham.	„ South Melbourne (Moray- street).
„ Ballarat (Macarthur-st.).	„ Armadale.
„ Fitzroy (Napier-street).	„ Gordons.
„ Collingwood (Lithgow-st.).	„ Avoca.
„ Ballarat (Dana-street).	„ Hotham (Queensberry-st.).
„ Geelong (South).	„ Echuca East.
„ Dandenong.	„ South Melbourne (Dorcas- street).
„ Collingwood (Cambridge- street).	„ Colac.
„ Richmond (Burnley).	„ Echuca.
„ North Melbourne (Boun- dary-road).	„ South Melbourne (Mills- street).
„ Collingwood (Vere-street).	„ Beechworth.
„ Gipsy Village.	„ North Footscray.
„ Sandhurst.	„ Camperdown.
„ Mt. Macedon.	„ Williamstown.
„ Campbell's Creek.	„ Footscray.
„ Shepparton.	
„ Richmond (Yarra Park).	

FERGUSON, MEPHAN, Carlton Foundry, 56 to 64 Leicester-street,  
Carlton:

610. Photographs of Wrought-iron Pipes.

CLASS 19.—Photographs—*continued.*

FOSTER AND MARTIN, 262 and 264 Collins-street, Melbourne :

611. Photographs.

GEELONG TOWN COUNCIL, THE :

612. Photographs.

GRAND COFFEE PALACE CO. LIMITED, THE; G. WALKER, Esq., Manager, Grand Hotel, Spring-street, Melbourne :

613. Photographs of Interior and Exterior of Grand Hotel.

GROUZELLE, LOUIS, 119 Swanston-street, Melbourne :

614. Photographs of the Members and Officers of the Royal Commission for Victoria for the New Zealand and S.S. Exhibition.

JOHNSTONE, O'SHANNESSEY, AND CO. LIMITED, 234 Collins-street, Melbourne :

615. Plain and Art-Finished Photographs.

616. Various Art Work, &c.

MASSINGHAM, G. L., Moorabool-street, Geelong :

617. Photographs.

MELBOURNE CITY COUNCIL, THE; E. G. FITZGIBBON, Esq., Town Clerk, Town Hall, Melbourne :

618. Photographic views of interior and exterior of Town Hall.

619. Photographic view of the Council Chamber.

620. "The Settlement," or Melbourne from the south side of the Falls in 1837.

621. Bird's-eye Views of the City, taken from the Law Courts, Exhibition, Federal Coffee Palace, and other points of vantage.

622. Photographic View of Bourke-street.

MELBOURNE SAVINGS BANK, THE; JOHN ALSOP, Esq., Actuary, Market-street and Flinders-lane, Melbourne :

623. Photograph of the Melbourne Savings Bank.

MELBOURNE WATER SUPPLY, THE DEPARTMENT OF; W. GALBRAITH, Esq., Secretary; W. DAVIDSON, Esq., Superintending Engineer; Public Offices, Melbourne :

624. Photographs.

MENZIES, MRS. CATHERINE, Menzies' Hotel, Bourke-street, Melbourne :

625. Photographic View of Hotel and Interior Accommodation.

CLASS 19.—Photographs—*continued.*

NATIONAL AGRICULTURAL SOCIETY OF VICTORIA, THE;  
THOMAS PATTERSON, Esq., Secretary, 414 Bourke-street, Melbourne:

626. Photographs of Live Stock.

NATIONAL BANK OF AUSTRALASIA, THE; F. G. SMITH, Esq.,  
Chief Manager, 279 Collins-street, Melbourne:

627. Photograph of the National Bank of Australasia.

NEW ZEALAND INSURANCE COMPANY, THE; BARRY CLEVELAND,  
Esq., Manager, 483 Collins-street, Melbourne:

628. Photograph of the Company's Melbourne Premises.

PUBLIC WORKS, THE DEPARTMENT OF; Hon. D. M. DAVIES,  
M.P., Minister; W. GALBRAITH, Esq., J.P., Secretary; Public Offices,  
Melbourne:

629-668. Photographs of Public Buildings in Victoria:—

Penal Establishment, Pentridge.  
Police Court, Geelong.  
Dining Hall, Pentridge.  
Police Station and Court House, Prahran.  
Post Office, Geelong West.  
Corridor, Pentridge Prison.  
Melbourne Gaol.  
Public Offices, Spring-street.  
Government Printing Office.  
Government Printing Office—Machine  
Room.  
Government Printing Office—Composing  
Room.  
Prince's Bridge.  
Lunatic Asylum, Kew.  
The Morgue, Melbourne.  
Post and Telegraph Office, Oakleigh.  
Custom House, Geelong.  
Post Office, Brunswick.  
Government House.  
Court House, Carlton.

Court House, Camperdown.  
Governor's Cottage, Mt. Macedon.  
Royal Mint—Main Building.  
Royal Mint—Coining Hall.  
Sale Post and Telegraph Office.  
Royal Mint—Coining Hall.  
Royal Mint—Melting House.  
Custom House, Melbourne.  
Brigade Orderly Room, Ballarat.  
Public Buildings, Sandhurst.  
Sandhurst Public Offices.  
Post Office, Nhill.  
Fitzroy Post and Telegraph Office.  
Benalla Post and Telegraph Office.  
Ballarat East Post Office.  
Portland Post Office.  
Port Fairy Post Office.  
Melbourne Public Library.  
Queenscliff Post Office.  
Castlemaine Court House.  
Public Offices, Kew.

RAILWAYS, THE DEPARTMENT OF; P. P. LABERTOUCHE, Esq.,  
Secretary; Spencer-street, Melbourne:

669-699. Photographs:—

Moorabool Viaduct.  
Werribee Viaduct.  
Timber Viaduct near Bacchus Marsh.  
Timber Viaduct at Yarra Flats.  
Flinders-street Station.  
Hawksburn Station.  
Williamstown Railway Pier, with  
Mail Steamer.  
Werribee Viaduct (end view).  
Moorabool Viaduct (side view).  
Malmsbury Viaduct.  
Taradale Viaduct.  
Station Buildings, Seymour.  
Station Buildings, Geelong.  
Railway Station, Sandhurst.  
Bridge over the Thomson, Sale.  
Bridge over the Goulburn, Seymour.

Bridge over the Broken River, Benalla.  
Railway and Road Bridge over the Murray,  
Echuca.  
Iron Footbridge over the Railway, Yarra Park.  
Iron Footbridge over the Railway, Jolimont.  
Railway Pier, Port Melbourne.  
Railway Pier, Williamstown.  
Breakwater Pier, Williamstown.  
Goods Shed, Batman's Hill, Melbourne.  
Railway Tunnel, Geelong.  
Locomotive Engine, Class B.  
" " M.  
" " O.  
" " R.  
" " A.  
New Railway Offices, Spencer-street (pen  
and ink sketch).

CLASS 19.—Photographs—*continued.*

SANDHURST CITY COUNCIL, THE; W. D. C. DENOVAN, Esq.,  
Town Clerk:

700. Photograph of the Town Hall, Sandhurst.

SOUTH MELBOURNE CITY COUNCIL, THE; F. G. MILES, Esq.,  
Town Clerk:

701. Photographs of Public Buildings.

TRADE AND CUSTOMS, THE DEPARTMENT OF; Hon. J. B.  
PATTERSON, M.P., Commissioner; A. W. MUSGROVE, Esq., J.P.,  
Secretary; Custom House, Melbourne:

702. Photographs.

TRADES' HALL COUNCIL, THE; DAVID BENNETT, Esq., Secretary,  
Trades' Hall, Victoria-street, Carlton, Melbourne:

703. Photographs of Exterior and Interior of Trades' Hall and Female  
Operatives' Hall.

UNION BANK OF AUSTRALIA LIMITED, THE; D. FINLAYSON,  
Esq., General Manager, 357 Collins-street, Melbourne:

704. Photograph of the Bank's Premises, Melbourne.

WARRNAMBOOL TOWN COUNCIL, THE; H. A. C. MACDONALD,  
Esq., Town Clerk:

705. Photograph of New Town Hall, Warrnambool.

---

 CLASS 22.—Heavy Machinery, Castings, Ship Models, &c.

DANGERFIELD, CHARLES, AND CO., Normanby Foundry,  
Normanby-road, South Melbourne:

706. Iron and Bronze Art Castings.

HORWOOD, J. W., Albion Foundry, Castlemaine:

707. 33-in. Clock or Fire Bell.

708. 18-in. Fire Bell.

709. 15-in. Fire Bell.

710. 15-in. Church Bell and Bracket.

711. 13-in. School Bell and Bracket.

712. 10½-in. Factory Bell and Bracket.

713. Borough and Shire Council, Street, and Road Plate Castings.

HUMBLE AND NICHOLSON, Vulcan Foundry, Geelong:

714. Compound Condensing Tandem Engine.

## CLASS 23.—Forestry Products.

GUILFOYLE, W. R., F.L.S., &c., Director Botanic Gardens,  
Melbourne.

715-1294. Collection of Carpological Specimens of Australasian and Exotic Plants  
containing 570 species.

*Ranunculaceæ.*

*Clematis flammula* (Linnæus). "Sweet-scented Clematis." South Europe and N. Africa.

*Magnoliaceæ.*

*Liriodendron tulipiferum* (Linnæus). "Common Tulip Tree" or "Saddle-leaf." North America.

*Magnolia grandiflora* (Linnæus). "Laurel-leaved Tulip Tree." North America.

*Berberideæ.*

*Berberis aristata* (De Candolle). "Awned Berberry." Nepal.

*Berberis asiatica* (Roxburg). "Asiatic Berberry." Nepal.

*Berberis canadensis* (Pursh). "Canadian Berberry." North America.

*Berberis cratægina* (De Candolle). "Cratægus-like Berberry." Asia Minor.

*Berberis Jamiesonii* (Lemaire). "Jamieson's Berberry." Quito.

*Berberis nepalensis* (Wallich). "Nepaul Berberry." Northern India.

*Berberis sanguinolenta* (Schroder). "Pliant red Berberry." North America.

*Berberis sinensis* (Desfontaines). "Chinese Berberry." China.

*Papaveraceæ.*

*Argemone mexicana* (Linnæus). "Infernal or Devil's Fig." Mexico.

*Papaver Rhœas* (Linnæus). "Common Corn Poppy." Europe.

*Papaver somniferum* (Linnæus). "Opium Poppy." Europe and Asia.

*Bixineæ.*

*Bixa Orellana* (Linnæus). "Arnotto or Arnatto." Tropical South America.

*Sceloparia Brownii* (F. Mueller). "Brown's Sceloparia." New South Wales and Queensland.

*Bursaria spinosa* (Cavanilles). "Victorian Prickly Box." Australia and Tasmania.

*Pittosporæ.*

*Hymenosporum flavum* (F. v. Mueller). "Yellow-flowered Hymenosporum." New South Wales and Queensland.

*Pittosporum Buchananii* (Hooker fil.). "Buchanan's Pittosporum." New Zealand.

*Pittosporum crassifolium* (Banks and Solander). "Parchment Bark." New Zealand.

*Pittosporum eugenioides* (A. Cunningham). "New Zealand Hedge Laurel." New Zealand.

*Pittosporum Ralpii* (Kl.). "Ralph's Pittosporum." New Zealand.

*Pittosporum revolutum* (Aiton.). "Yellow-flowered Brisbane Laurel." Victoria, New South Wales, and Queensland.

*Pittosporum rhombifolium* (A. Cunningham). "Diamond-leaved Queensland Laurel." New South Wales and Queensland.

*Pittosporum rigidum* (Hooker fil.). "Stiff-leaved Hedge Laurel." New Zealand.

*Pittosporum tenuifolium* (Banks and Solander). "Slender-leaved Hedge Laurel." New Zealand.

*Pittosporum Tobira* (Aiton). "Tobira." Japan.

*Pittosporum undulatum* (Ventenat). "Victorian Laurel or New South Wales Mock Orange." Victoria, New South Wales, Tasmania, &c.

*Caryophylleæ.*

*Lychnis coronaria* (Lamarck). "Rose Campion." Italy.

*Hypericineæ.*

*Hypericum cernuum*. "Nodding Hypericum."

*Hypericum floribundum* (Aiton). "Many Flowered St. John's Wort." Madeira.

*Hypericum grandifolium* (Choisy). "Large-leaved St. John's Wort." Teneriffe.

*Androsæmum officinale* (Allioni). "Common Tutsan." Britain.

*Guttifera.*

*Calophyllum inophyllum* (Linnæus). "Tamanu" or "Dilo Oil Nut." Java, Ceylon, India, and S. S. Islands.



CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.**Ternstroemiaceæ.*

- Thea chinensis* (Sims). "Chinese Tea Plant." China.  
*Camellia japonica* (Thunberg). "Common Camellia" or "Japan Rose." China and Japan.

*Malvaceæ.*

- Hibiscus splendens* (Fraser). "Hollyhock Tree." New South Wales and Queensland.  
*Lagunaria Patersonii* (Don). "Queensland Whitewood" or "Cowitch Tree of Norfolk Island." New South Wales, Queensland, and Norfolk Island.  
*Plagianthus betulinus* (A. Cunningham). "Ribbon Tree." New Zealand.  
*Eriodendron anfractuosum*. "The Curled Wool Tree." West Indies.  
*Sida mollis* (Ortega). "Soft Indian Mallow." Syn. *Abutilon molle* (G. Don). Peru.  
*Bombax malabaricum* (Malabar). "Silk-cotton Tree."

*Sterculiæ.*

- Commersonia Fraseri* (J. Gray). "Blackfellows' Hemp." Victoria, New South Wales, and Queensland.  
*Guazuma tomentosa* (Humboldt). "Jamaica Bastard Cedar." South America and West Indies.  
*Hermannia angulata* (Thunberg). "Angular Hermannia." Cape of Good Hope.  
*Rulingia hazel-leaved* (Thunberg). "Hazel-leaved Rulingia." West Australia.  
*Rulingia parviflora* (Thunberg). "Small-flowered Rulingia." West Australia.  
*Sterculia acerifolia* (A. Cunningham). "Flame Tree" or "Lack Bark of New South Wales." New South Wales and Queensland.  
*Sterculia diversifolia* (G. Don). "Victorian Bottle Tree." Victoria, New South Wales, and Queensland.  
*Sterculia lurida* (F. v. Mueller). "Pale-leaved Sterculia." New South Wales and Queensland.  
*Cola laurifolia*. "The Laurel-leaved Cola" or "Goora Nut."

*Tiliaceæ.*

- Elæocarpus cyaneus* (Aiton). "Victorian Olive-berry Tree." Victoria, Tasmania, New South Wales, and Queensland.  
*Elæocarpus dentatus* (Vahl). "Tooth-leaved Bracelet Tree." New Zealand.  
*Grewia occidentalis* (Linnaeus). "African Star Bush." Cape of Good Hope.  
*Sparmannia palmata* (E. Meyer). "Palmate-leaved Sparmannia." South Africa.  
*Tilia parvifolia* (Ehrhart). "Small-leaved Lime Tree." Europe.

*Rutaceæ.*

- Calodendron capense* (Thunberg). "Bucku" or "Cape Wild Chestnut." Cape of Good Hope.  
*Citrus australis* (Planchon). "Native Orange." New South Wales and Queensland.  
*Correa alba* (Andrews). "White-flowered Native Fuchsia." Victoria, Tasmania, New South Wales, and South Australia.  
*Correa speciosa* (Andrews). "Green-flowered Australian Fuchsia," var. *normalis*. Victoria, Tasmania, and New South Wales.  
*Diosma alba* (Thunberg). "African Sleetbush." South Africa.  
*Ruta bracteosa* (De Candolle). "Sicilian Rue." Sicily.  
*Ruta graveolens* (Linnaeus). "Common Rue." South Europe.

*Simarubæ.*

- Ailanthus glandulosa* (Linnaeus). "Chinese Tree of Heaven." China.  
*Cneorum tricoccum* (Linnaeus). "Three-grained Widow Wail." South Europe.  
*Amoora Rohituka*. *Meliaceæ.*

*Meliaceæ.*

- Cedrela Toona* (Roxburgh). "New South Wales and Queensland Red Cedar." Syn. *C. australis* (F. v. Mueller). New South Wales and Queensland.  
*Chisocheton divergens*. Malayan Peninsula and Ganges.  
*Ekebergia capensis* (Thunberg). "Cape Ash." Cape of Good Hope.  
*Flindersia Bennettiana* (F. v. Mueller). "Boyrum-Boyrum of Queensland." New South Wales and Queensland.  
*Melia Azaderachta* (Linnaeus). "Neem Tree." Persia to China.  
*Melia Azedarach* (Linnaeus). "Common Bead Tree" or "White Cedar." East Indies.  
*Melia sempervirens* (Schwartz). "West Indian Evergreen Bead Tree." Jamaica.  
*Owenia venosa* (F. Mueller). "Large-veined Tulip-wood." Queensland.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.**Ilicineæ.*

- Ilex cornuta* (Lindley). "Horned Holly." China.  
*Ilex crocea* (Willdenow). "African Holly." Cape of Good Hope.

*Celastrineæ.*

- Celastrus buxifolia* (Willdenow). "Box-leaved Staff Tree." Cape of Good Hope.  
*Euonymus japonicus* (Linnaeus). "Japanese Box or Spindle Tree." Japan.

*Rhamneæ.*

- Ceanothus thyrsiflorus* (Eischweiler). "Thyrse-flowered Ceanothus." California.  
*Pomaderris lanigera* (Sims). "New South Wales Hazel." Victoria, New South Wales, and Queensland.

*Ampelideæ.*

- Vitis rhomboidea*. "The Rhomboid-leaved Vine."

*Sapindaceæ.*

- Acer opulifolium* (Villars). "Rich-leaved Maple." France.  
*Æsculus californica* (Nuttall). "Californian Buckeye or Chestnut." California.  
*Æsculus Hippocastanum* (Linnaeus). "Common Horse Chestnut." Central Asia and Orient.  
*Dodonæa viscosa* (Linnaeus). "Victorian Lignum Vitæ." Australasia.  
*Harpullia Hillii* (F. v. Mueller). "Hill's Tulip Wood." New South Wales and Queensland.  
*Kœlreuteria paniculata* (Laxmann). "Panicled-flowered Kœlreuteria." China.  
*Melianthus major* (Linnaeus). "Large Honey Flower." Cape of Good Hope.  
*Nephelium leiocarpum* (F. v. Mueller). "Smooth-fruited Nephelium." Victoria, New South Wales, and Queensland.  
*Sapindus emarginatus*. "The Emarginate Soap-nut" or "Soap-berry Tree."  
*Sapindus inæqualis* (De Candolle). "The Uneven-leaved Soap-nut" or "Soap-berry Tree." Mexico and Panama.  
*Sapindus saponaria* (Linnaeus). "South American Common Soap-berry." West Indies.

*Anacardiaceæ.*

- Corynocarpus lævigatus* (Forster). "New Zealand Laurel." New Zealand.  
*Mangifera indica* (Linnaeus). "Common Mango." East Indies.  
*Rhus succedanea* (Linnaeus). "Red Lac" or "Japanese Wax Tree." China and Japan.  
*Schinus molle* (Linnaeus). "Peruvian Mastic" or "Pepper Tree." Peru.  
*Spondias pleiogyne* (F. Mueller). "Burdekin Plum." Queensland.

*Moringeæ.*

- Moringa pterygosperma* (Gærtner). "Horseradish Tree." India.

*Leguminosæ.*

- Acacia armata* (R. Brown). "Prickly Acacia." Victoria, New South Wales, Queensland, South and West Australia.  
*Acacia calamifolia* (Sweet). "Reed-leaved Acacia." Victoria, South and East Australia.  
*Acacia Catechu* (Willdenow). "Catechu" or "Khair Tree." Tropical Asia and Africa.  
*Acacia cultriformis* (A. Cunningham). "Knife-leaved Acacia." New South Wales.  
*Acacia cyanophylla* (Lindley). "Blue-leaved Acacia." West Australia.  
*Acacia dealbata* (Link). "Silver Wattle." Victoria, Tasmania, South and East Australia.  
*Acacia decurrens* (Willdenow). "Common Black Wattle." Victoria, Tasmania, and New South Wales.  
*Acacia dentifera* (Bentham). "Toothed Acacia." West Australia.  
*Acacia diffusa* (Lindley). "Spreading Acacia." Victoria, Tasmania, and New South Wales.  
*Acacia Drummondii* (Lindley). "Drummond's Acacia." West Australia.  
*Acacia farinosa* (Lindley). "Mealy Acacia." Victoria, New South Wales, and South Australia.  
*Acacia farnesiana* (Willdenow). "Sponge Tree." East and North Australia.  
*Acacia horrida* (Willdenow). "Karoo Thorn" or "Doornboom." South Africa.  
*Acacia iteaphylla* (F. Mueller). "Itea-leaved Acacia." South Australia.  
*Acacia leprosa* (Sieber). "Scurfy Acacia." Victoria and New South Wales.  
*Acacia leprosa*, var. *tenuifolia* (Sieber). "Slender-leaved Acacia." Victoria.  
*Acacia longifolia* (Willdenow). "Long-leaved Acacia." Victoria, Tasmania, New South Wales, and South Australia.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Acacia melanoxylon* (R. Brown). "Blackwood or Lightwood Tree." Victoria, Tasmania, and New South Wales.  
*Acacia myrtifolia* (Willdenow). "Myrtle-leaved Acacia." Victoria, Tasmania, East, South, and West Australia.  
*Acacia natalitia* (E. Meyer). "African Wattle." Natal.  
*Acacia oxycedrus* (Sieber). "Juniper Wattle." Victoria, Tasmania, New South Wales, and South Australia.  
*Acacia pendula* (A. Cunningham). "Weeping Myall" or "Borie." New South Wales and Queensland.  
*Acacia podalyriifolia* (A. Cunningham). "Queensland Silver-leaved Wattle" or "Fraser's Wattle." New South Wales and Queensland.  
*Acacia prominens* (A. Cunningham). "Fringed Acacia." New South Wales and Queensland.  
*Acacia retinodes* (Schlechtendall). "Bold Acacia." Victoria and South Australia.  
*Acacia rubicaulis* (Lamarck). Syn. *Mimosa rubicaulis*. "Rubus-stemmed Acacia." India.  
*Acacia salicina* (Lindley). "Murray River Willow." Throughout Australia.  
*Acacia saligna* (Wendland). "Weeping Acacia." West Australia.  
*Acacia spectabilis* (A. Cunningham). "Remarkable Acacia." New South Wales and Queensland.  
*Acacia suaveolens* (Willdenow). "Sweet-scented Acacia." Victoria, Tasmania, South and East Australia.  
*Acacia urophylla* (Bentham). "Tail-leaved Acacia." West Australia.  
*Acacia verniciflua* (A. Cunningham). "Varnish Wattle." Victoria, Tasmania, and New South Wales.  
*Acacia verniciflua*, var. *latifolia* (A. Cunningham). "Broad-leaved Varnish Wattle." South Australia.  
*Acacia verticillata* (Willdenow). "Whorled-leaved Acacia." Victoria, Tasmania, New South Wales, and South Australia.  
*Acacia vestita* (Ker). "Clothed Acacia." New South Wales.  
*Albizia lophantha* (Bentham). "Cape or Crested Wattle." West Australia.  
*Adenocarpus foliosus* (De Candolle). "Small-leafy Gland Pod." Canary Islands.  
*Adenocarpus frankenioides* (Choisy). "Frankenia-like Gland Pod." Canary Islands.  
*Amorpha fruticosa* (Linnaeus). "Carolina spurious Indigo." North America.  
*Anthyllis Barba-Jovis* (Linnaeus). "Jupiter's Beard" or "Silver Bush." South Europe.  
*Baptisia australis* (R. Brown). "Purple-flowered Wild Indigo." North America.  
*Bauhinia Hookeri* (F. Mueller). "Mountain Ebony of Queensland." Queensland and North Australia.  
*Bossiaea rufa* (R. Brown). "Reddish Bossiaea." West Australia.  
*Cæsalpinia arborea*.  
*Cæsalpinia coriaria* (Humboldt). "Divi-divi, Libi-divi, or Libi-dibi." Tropical America, Jamaica, and Trinidad.  
*Cæsalpinia pulcherrima* (Swartz). "Barbadoes Pride" or "Flower Pride." South America and Tropical Africa.  
*Cæsalpinia Sappan* (Linnaeus). "Bukkum or Sappanwood Tree." East Indies.  
*Cassia polyantha* (Mocino). "Many-flowered Cassia." New Spain.  
*Cassia pseudo-sophora* (Hort). "False Sophora Senna." East Indies.  
*Castanospermum australe* (A. Cunningham). "Moreton Bay Chestnut." New South Wales and Queensland.  
*Ceratonia silqua* (Linnaeus). "Carob Tree" or "St. John's Bread." Mediterranean Regions.  
*Cercis siliquastrum* (Linnaeus). "Common Judas Tree." South Europe and Asia.  
*Clianthus puniceus* (Banks and Solander). "Glory Pea," or "Parrot Beak." New Zealand.  
*Coronilla juncea* (Linnaeus). "Rush-leaved Coronilla." France.  
*Cytisus Alschingeri* (Visiani). "Alschingers Cytisus."  
*Cytisus Laburnum* (Willdenow). "Common Laburnum," or "Golden Chain." South Europe.  
*Cytisus proliferus* (Linnaeus). "Fruitful Cytisus." Canary Islands.  
*Cytisus spinosus* (Lamarck). "Prickly Broom." South Europe.  
*Dolichos Lablab* (Linnaeus). "Lablab Bean." East Indies.  
*Dolichos lignosus* (Linnaeus). "Common Horse-eye Bean." East Indies.  
*Erythrina compacta* (Hortorum). "Compact Coral Tree." South America.  
*Erythrina Crista-galli* (Linnaeus). "Cockscorb Coral Tree." Brazil.  
*Erythrina versicolour*. "Various coloured Coral Tree."  
*Genista æthnensis* (De Candolle). "Sicilian Broom." Sicily.  
*Genista rhodopena* (Hort). Europe.  
*Gleditschia triacanthos* (Linnaeus). "Three-thorned Acacia" or "Honey Locust Tree." North America.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Hardenbergia monophylla, var. alba (Bentham). "White-flowered spurious Sarsaparilla." South Australia.
- Hovea longifolia, var. lanceolata (R. Brown). Syn. *H. purpurea* (Loddiges). "Lance-leaved Hovea." Victoria, Tasmania, South, East, and North Australia.
- Hymenæa verrucosa (Gærtner). "Warty Hymenæa." East Africa and Madagascar.
- Indigofera australis (Willdenow). "Australian Indigo Plant." Throughout Australia.
- Indigofera incana (Thunberg). "Hoary Indigo Plant." Cape of Good Hope.
- Indigofera juncea (Ker). "Rush-leaved Indigo Plant." Cape of Good Hope.
- Kennedyia macrophylla (Bentham). "Large-leaved Bean Flower." West Australia.
- Kennedyia prostrata (R. Brown). "Scarlet Bean Flower." Victoria, East, South, and West Australia.
- Kennedyia rubicunda (Ventenat). "Red Bean Flower." Victoria, New South Wales, and Queensland.
- Lathyrus annuus (Linnæus). "Two-flowered Lathyrus." South Europe.
- Lathyrus latifolius (Linnæus). "Everlasting Pea." Europe.
- Lathyrus odoratus (Linnæus). "Common Sweet Pea." Sicily.
- Lathyrus tingitanus (Linnæus). "Tangier Pea." Barbary.
- Leucaena glauca (Bentham). "West Indian Lead Tree." South America, &c.
- Lotus major (Scopoli). "Larger Bird's-foot Trefoil." Britain.
- Lupinus arboreus (Sims). "Tree Lupine." North America.
- Lupinus luteus (Linnæus). "Yellow Lupine." Sicily and Mediterranean.
- Oxylobium Callistachys (Bentham). "Pointed Pod." West Australia.
- Platylobium formosum (Smith). "Beautiful Platylobium." Victoria, Tasmania, New South Wales, and Queensland.
- Podalyria biflora (Sims). "Two-flowered Podalyria." Cape of Good Hope.
- Podalyria sericea (R. Brown). "African Satin Bush." Cape of Good Hope.
- Podalyria styracifolia (Lindley). "Styrax-leaved Podalyria." Cape of Good Hope.
- Poinciana Gilliesii (Hooker). "Crimson Thread Flower." South America.
- Psoralea pinnata (Linnæus). "Pinnate-leaved Psoralea." Cape of Good Hope.
- Pultenæa daphnoides (Wendland). "Native Wallflower." Victoria, Tasmania, New South Wales, and South Australia.
- Robinia pseudo-Acacia (Linnæus). "Common or False Acacia." North America.
- Schotia latifolia (Jacquin). "Elephant Hedge Bean." South Africa.
- Sophora tetraptera (Aiton). "Kowhai of New Zealand." New Zealand.
- Spartium grandiflorum (Hort). "The Grand-flowered Broom." Spain.
- Spartium junceum (Linnæus). "Spanish Broom." South Europe.
- Spartium linifolium (Desfontaines). "Flax-leaved Broom." Spain.
- Spartium scoparium (Linnæus). "Common English Broom." Europe.
- Swainsona galegifolia (R. Brown). "Galega-leaved Poison Pea." New South Wales and Queensland.
- Swainsona galegifolia, var. Osbornii (R. Brown). "Purple-flowered Poison Pea." Queensland.
- Swainsona galegifolia, var. alba (R. Brown). "White-flowered Poison Pea." South and East Australia.
- Swainsona Greyana (Lindley). "Great-flowered Poison Pea." Victoria, South and East Australia.
- Templetonia retusa (R. Brown). "Blunt-leaved Templetonia." South and West Australia.
- Trigonolobus purpureus (Mœnch). "Purple Winged Pea." Sicily.
- Viminaria denudata (Smith). "Victorian Swamp Broom" or "Golden Spray Flower." Victoria, Tasmania, South, East, and West Australia.

*Rosaceæ.*

- Cotoneaster affinis (Lindley). "Close Cotoneaster" or "Rose Box." Nepal.
- Cotoneaster microphylla (Wallich). "Small-leaved Cotoneaster." Nepal.
- Cotoneaster nepalensis. "Stragglng Cotoneaster." Nepal.
- Cotoneaster Simmondsii (Hort). "Simmond's Cotoneaster" or "Rose Box." Khasaya.
- Cratægus Azarolus (Linnæus). "Azarole Hawthorn." South Europe.
- Cratægus mexicana (Mocini). "Mexican Hawthorn." Mexico.
- Cratægus oxyacantha (Linnæus). "Common White Thorn" or "May Tree." Europe, Asia, and Africa.
- Cratægus punctata (Aiton). "Canadian White Thorn." North America.
- Cratægus pyracantha (Persoon). "Evergreen Thorn." South Europe.
- Cydonia japonica (Persoon). "Japan Quince." Japan.
- Eriobotrya japonica (Lindley). "Common Loquat." China and Japan.
- Mespilus germanica (Linnæus). "Common or Dutch Medlar." Europe.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Poterium Sanguisorba (Linnæus). "British Burnet." Europe.  
 Prunus domestica (Linnæus). "Common Plum." Europe.  
 Prunus lusitana (Linnæus). "Portugal Laurel." Portugal.  
 Quillaja saponaria (Molina). "Chilian Soap-bark Tree." Chili.  
 Rosa sempervirens (Linnæus). "Evergreen Rose." South Europe.

*Saxifrageæ.*

- Ceratopetalum apetalum (D. Don). "White-flowered Christmas Bush." New South Wales.  
 Ceratopetalum gummiferum (Smith). "New South Wales Christmas Bush." New South Wales.

*Combretaceæ.*

- Quisqualis indica. Syn. *Q. glabra*, Burmann (Linnæus). "Rangoon Climber." Java, India, and Malayan Archipelago.  
 Terminalia Chebula (Retz). "Chebulic Myrobalana Tree." India.  
 Terminalia Arjuna (Wight and Arnott). "Arjuna" or "East Indian Wedge Seed." India.  
 Terminalia tomentosa (Wight and Arnott). "Downy or Myrobalan Tree." India.

*Myrtaceæ.*

- Agonis flexuosa (Schaner). "Willow Myrtle." West Australia.  
 Agonis marginata (Schaner). "Tea-tree Agonis." West Australia.  
 Angophora intermedia (De Candolle). "Spurious Native Apple Tree." Victoria, New South Wales, and Queensland.  
 Angophora lanceolata (Cavanilles). "Lance-leaved Gum Myrtle." New South Wales and Queensland.  
 Angophora subvelutina (F. v. Mueller). "Velvety Gum Myrtle." New South Wales and Queensland.  
 Backhousia myrtifolia (Hooker). "Backhouse Myrtle." New South Wales and Queensland.  
 Callistemon brachyandrus (Lindley). "Short-stamened Bottle Brush." Victoria, New South Wales, and South Australia.  
 Callistemon coccineus (F. Mueller). "Scarlet Bottle Brush." Victoria, New South Wales, and South Australia.  
 Callistemon lanceolatus (De Candolle). "Lance-leaved Bottle Brush." Victoria, New South Wales, and Queensland.  
 Callistemon pnciceus (Lindley). "Purple Bottle Brush." West Australia.  
 Callistemon rigidus (R. Brown). "Stiff Bottle Brush." New South Wales.  
 Callistemon speciosus (De Candolle). "Showy Bottle Brush." West Australia.  
 Calothamnus quadrifidus (R. Brown). "Four-cleft Net Bush." West Australia.  
 Calothamnus quadrifidus, var. *acerosus* (R. Brown). Syn. *C. purpureus*. "Purple Net Bush." West Australia.  
 Eucalyptus alpina (Lindley). "Alpine Gum." Victoria.  
 Eucalyptus amygdalina (Labillardiere). "Victorian Peppermint." Victoria, Tasmania, New South Wales, and South Australia.  
 Eucalyptus annulata (Bentham). "The Ringed Gum." West Australia.  
 Eucalyptus botryoides (Smith). "Bastard Mahogany Gum." Victoria, New South Wales, and Queensland.  
 Eucalyptus calophylla (R. Brown). "Red Gum of Port Gregory." West Australia.  
 Eucalyptus cneorifolia (De Candolle). "Cneorum-leaved Gum." South and West Australia.  
 Eucalyptus cornuta (Labillardiere). "Yeit Tree." West Australia.  
 Eucalyptus corynocalyx (F. v. Mueller). "Helmet-fruited Gum," or "Sugary Eucalyptus." Victoria and South Australia.  
 Eucalyptus diversicolor (F. v. Mueller). "Karri Gum." West Australia.  
 Eucalyptus doratoxylon (F. v. Mueller.) "Spearwood Gum." West Australia.  
 Eucalyptus ficifolia (F. v. Mueller). "Scarlet-flowered Gum." West Australia.  
 Eucalyptus globulus (Labillardiere). "Tasmanian Blue Gum." Victoria, Tasmania, and New South Wales.  
 Eucalyptus gomphocephala (De Candolle). "Tooart." West Australia.  
 Eucalyptus grossa (F. v. Mueller). "Phillip's River Gum." West Australasia.  
 Eucalyptus Lehmannii (Preiss). "Lehmann's Gum." West Australia.  
 Eucalyptus leucoxylon (F. v. Mueller). "Victorian Iron Bark." Victoria, South and East Australia.  
 Eucalyptus leucoxylon, flore rosea (F. v. Mueller). "Pink-flowered Iron Bark." South Australia.  
 Eucalyptus macrorrhyncha (F. v. Mueller). "Victorian Stringy Bark." Victoria, New South Wales, and South Australia.

CLASS 23.—Forestry Products—*continued*.Carpological Specimens of Australasian and Exotic Plants—*continued*.

- Eucalyptus maculata* (Hooker). "Spotted Gum of East Australia." New South Wales and Queensland.
- Eucalyptus marginata* (Smith). "Jarrah," or "Mahogany Gum." West Australia.
- Eucalyptus megacarpa* (F. v. Mueller). "West Australian Blue Gum." West Australia.
- Eucalyptus melliodora* (A. Cunningham). "Victorian Yellow Box." Victoria and New South Wales.
- Eucalyptus obliqua* (L. Heritier). "Victorian Messmate." Victoria, Tasmania, New South Wales, and South Australia.
- Eucalyptus occidentalis* (Endlicher). "Flat-topped Yate." West Australia.
- Eucalyptus oleosa*, var. *longirostris* (F. Mueller). "The Morrell of West Australia." West Australia.
- Eucalyptus platypus* (Hooker). "Maalok." West Australia.
- Eucalyptus platypus*, var. *nutans* (Bentham). "Purple-flowering Maalok." West Australia.
- Eucalyptus punctata* (De Candolle). "Leather Jacket." New South Wales.
- Eucalyptus rostrata* (Schlechtendahl). "Red Gum of Victoria." Victoria, South, East, North, and West Australia.
- Eucalyptus rudis* (Endlicher). "Vasse River Flooded Gum." West Australia.
- Eucalyptus saligna* (Smith). "Blue or Flooded Gum of New South Wales." New South Wales and Queensland.
- Eucalyptus siderophloia* (Bentham). "Large-leaved Iron Bark of Queensland." New South Wales and Queensland.
- Eucalyptus tetragona* (F. Mueller). "Four-angled Gum." West Australia.
- Eucalyptus tetraptera* (Turezaniow). "Four-wing-fruited Gum." West Australia.
- Eucalyptus viminalis* (Labillardiere). "Victorian Manna Gum." Victoria, Tasmania, New South Wales, and South Australia.
- Eugenia eucalyptoides* (F. Mueller). "Gum Rose Apple." Queensland and North Australia.
- Eugenia myrtifolia* (Sims). "Native Rose Apple." New South Wales and Queensland.
- Eugenia Smithii* (Poiret). "Lilly Pillies." Victoria, East and North Australia.
- Kunzea corifolia* (Reichenbach). "Bottle-green Tea-tree." Victoria, Tasmania, and New South Wales.
- Kunzea peduncularis* (F. v. Mueller). "Mountain Bush." Victoria, New South Wales, and Queensland.
- Leptospermum lævigatum* (F. v. Mueller). "Coast Tea-tree." Victoria, Tasmania, South and East Australia.
- Leptospermum lanigerum* (Smith). "Woolly Australian Tea-tree." Victoria, Tasmania, South and East Australia.
- Leptospermum myrsinoides* (Schlechendahl). "Myrsine-like Australian Tea-tree." Victoria, New South Wales, and South Australia.
- Leptospermum scoparium* (Forster). "Broom Tea-tree." Victoria, Tasmania, South and East Australia, and New Zealand.
- Melaleuca acuminata* (F. v. Mueller). "Pointed-leaved Tea-tree." Victoria, New South Wales, South and West Australia.
- Melaleuca armillaris*, var. *tenuifolia* (Smith). "The Slender-leaved Bracelet Tree." South Australia.
- Melaleuca decussata* (R. Brown). "Close-leaved Tea-tree." Victoria and South Australia.
- Melaleuca densa* (R. Brown). "Dense Tea-tree." West Australia.
- Melaleuca ericifolia* (Smith). "Common Swamp Tea-tree." Victoria, Tasmania, South and East Australia.
- Melaleuca hypericifolia* (Smith). "Hypericum-leaved Tea-tree." New South Wales.
- Melaleuca lateritia* (Otto). "Brick-red-flowered Tea-tree." West Australia.
- Melaleuca Preessiana*, var. *leiostachya* (Bentham). Syn. *M. parviflora*. "Small-flowered Tea-tree." West Australia.
- Melaleuca sparsiflora* (Turezaniow). "The Sparse-flowered Tea-tree." West Australia.
- Melaleuca squarrosa* (Smith). "The Squarrose Tea-tree," or "Yellow Wood." Victoria, Tasmania, New South Wales, and South Australia.
- Melaleuca uncinata* (R. Brown). "Hook-leaved Tea-tree." Victoria, New South Wales, South and West Australia.
- Metrosideros robusta* (A. Cunningham). "Rata." New Zealand.
- Metrosideros tomentosa* (A. Cunningham). "New Zealand Fire Tree." New Zealand.
- Myrtus bullata* (Banks and Solander). "Blistered-leaved Myrtle." New Zealand.
- Myrtus communis* (Linnæus). "Common Myrtle." South Europe.
- Psidium Cattlejana* (Lindley). "Purple or Black Guava." Brazil.
- Syncarpia laurifolia* (Tenore). "New South Wales Turpentine Tree." New South Wales and Queensland.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Tristania conferta* (R. Brown). "Queensland Box." East and North Australia.  
*Tristania laurina* (R. Brown). "Laurel-leaved *Tristania*." Victoria, New South Wales, and Queensland.

*Lythrariceæ.*

- Lagerstroemia indica* (Linnæus). "Pride of India." India, Java, Moluccas, and Queensland.  
*Nesæa salicifolia* (Commerson). Syn. *Heimia salicifolia* (Link). "Mexican Hanchinol."  
 Texas, Mexico, and Buenos Ayres.  
*Punica Granatum* (Linnæus). "Common Pomegranate." North Asia and West Africa.

*Onagrariæ.*

- Godetia viminea* (Spach). "Twiggy *Godetia*." California.  
*Oenothera taraxacifolia* (Sweet). "Dandelion-leaved Evening Primrose." Peru.

*Cucurbitaceæ.*

- Trichosanthes palmata*. "Palmate-leaved Snake Gourd." India and North Australia.  
*Mesembryanthemum curvifolium* (Willdenow). "Curve-leaved Pig's-face." Cape of Good Hope.

*Ficoideæ.*

- Tetragonia expansa* (Murray). "New Zealand Spinach." Australasia.

*Umbelliferae.*

- Ammi majus* (Linnæus). "Common Bishop's Weed." South Europe.  
*Anethum Fœniculum* (Linnæus). "Fennel." Europe.  
*Anethum graveolens* (Linnæus). "Common Dill." Spain, Egypt, and South Africa.  
*Anethum sowa* (Roxburg). "Sowa Dill." East Indies.  
*Conium maculatum* (Linnæus). "Common Hemlock." Europe.  
*Coriandrum sativum* (Linnæus). "Common Coriander." South Europe and Levant.  
*Daucus gummifer* (Lamarck). "Gum-bearing Carrot." Italy.  
*Eryngium bromeliæfolium* (Lamarck). "Pine Apple-leaved Eryngo." New Spain.  
*Ferula Asafoetida* (Linnæus). "Asafoetida." Persia.

*Araliaceæ.*

- Panax crassifolium* (Decaisne and Planchon). "New Zealand Lancewood." New Zealand.

*Caprifoliaceæ.*

- Symphoricarpos vulgaris* (Michaux). "Common St. Peter's Wort." North America.

*Rubiaceæ.*

- Coffea liberica* (Bull). "Liberian Coffee Plant." Africa.  
*Coprosma robusta* (Raoul). "New Zealand Currant." New Zealand.  
*Gardenia resinifera*.  
*Uncaria Gambier*. "Gambier Catechu." India.  
*Arctium Lappa* (Linnæus). "Common Burdock." Europe and Asia.

*Compositæ.*

- Carthamus tinctorius* (Linnæus). "Saff Flower or Bastard Saffron." Egypt.  
*Cassinia arcuata* (R. Brown). "Bow-shaped *Cassinia*." Victoria, New South Wales, South and West Australia.  
*Centaurea canariensis* (Willdenow). "Canary Islands Centaury." Canary Islands.  
*Olearia avicenniæfolia* (Hooker fil). "Avicennia-leaved Daisy Tree." New Zealand.  
*Olearia stellulata* (De Candolle). "Victorian Snow-bush." Victoria, Tasmania, and South Australia.  
*Osteospermum moniliferum* (Linnæus). "Jungle Sunflower." Cape of Good Hope.

*Ericaceæ.*

- Arbutus Unedo* (Linnæus). "Irish Strawberry Tree." South Europe and Ireland.  
*Clethra arborea* (Aiton). "Tree Clethra." Madeira.  
*Erica baccans* (Linnæus). "Berried Heath." Cape of Good Hope.  
*Erica arborea* (Linnæus). "Tree Heath." South Europe.  
*Erica urceolaris* (Thunberg). "Pitcher-flowered Heath." Cape of Good Hope.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.**Myrsinææ.*

- Myrsine Urvillei (De Candolle). "Tipan or Matipan." New Zealand.  
 Myrsine variabilis (R. Brown). "Victorian Smooth Beech." Victoria, New South Wales,  
 and Queensland.

*Sapotacææ.*

- Imbricaria maxima. "Largest Imbricaria." Bourbon and Mauritius.

*Ebenacææ.*

- Royena lucida (Linnæus). "African Snowdrop Tree." Cape of Good Hope.

*Styracææ.*

- Halesia diptera. "Two-winged Snowdrop Tree." North America.

*Oleacææ.*

- Fraxinus excelsior (Linnæus). "Common European Ash." Europe, Asia, and North America.  
 Fraxinus Ornus (Linnæus). "Manna" or "Flowering Ash." South Europe.  
 Ligustrum ovalifolium (Hasskarl). "Oval-leaved Privet." Japan.  
 Ligustrum vulgare (Linnæus). "Common Privet." Europe.  
 Notelæa longifolia (Ventenat). "Gippsland Mock Olive." Victoria, New South Wales, and  
 Queensland.  
 Olea capensis (Linnæus). "Cape Olive." Cape of Good Hope.  
 Olea europæa (Linnæus). "Common cultivated Olive." South Europe and West Asia.  
 Syringa vulgaris (Linnæus). "Common Lilac." Europe and Asia.

*Apocynacææ.*

- Acokanthera Thunbergii (G. Don). Syn. Foxicophlæa Thunbergii (Harvey). "Hottentot's  
 ordeal Tree." South Africa.  
 Parsonsia albiflora (Raoul). "White-flowered Parsonsia." New Zealand.

*Asclepiodeææ.*

- Aranja albens (G. Don). "White Bladder Flower." Buenos Ayres.  
 Tweedia cœrulea (D. Don). "Blue-flowered Tweedia." Buenos Ayres.

*Polemoniaceææ.*

- Cantua buxifolia (Jussieu). "Flower of the Incas." Peru.

*Boraginææ.*

- Cordia myxa (Linnæus). "Smooth-leaved Cordia." India.

*Solanææ.*

- Datura Metel (Linnæus). "Downy Thorn Apple." Asia.  
 Datura quercifolia (H. and B.). "Oak-leaved Thorn Apple." Mexico.  
 Datura stramonium (Linnæus). "Common Thorn Apple." Europe.  
 Lycium horridum (Willdenow). "Caffre Box Thorn." South Africa.  
 Lycium rigidum (Willdenow). "Stiff Box Thorn." Cape of Good Hope.  
 Solanum aviculare (Forster). "Kangaroo Apple." Australia and New Zealand.  
 Solanum ciliare (Willdenow). "Ciliated Nightshade." Porto Rico.  
 Solanum Dulcamara (Linnæus). "Woody Nightshade" or "Bitter Sweet." Europe, North  
 Africa, and Asia Minor.  
 Solanum marginatum (Willdenow). "Margined Nightshade." Africa.  
 Solanum pseudo-capsicum (Linnæus). "Madeira Winter Cherry" or "Spurious Capsicum."  
 Madeira.  
 Solanum Warscewiczii (Hort. Hub.) "The Great Nightshade." Mexico.

*Scrophularinææ.*

- Maurandya Barclayana (Jacquin). "Barclay's Maurandya." Mexico.  
 Paulownia imperialis (Siebold). "Imperial Paulownia." Japan.  
 Teedia lucida (Rudolphi). "Shining Teedia." Cape of Good Hope.  
 Veronica Andersonii (Lindley). "Anderson's Speedwell." Garden Origin.  
 Veronica Hulkeana (F. v. Mueller). "Hulke's Speedwell." New Zealand.  
 Veronica lobelioides (Hort). "Lobelia-like Speedwell." New Zealand.  
 Veronica perfoliata (R. Brown). "Diggers' Speedwell." Victoria and New South Wales.



CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Veronica salicifolia (Forster). "Willow-leaved Speedwell." New Zealand.  
 Veronica Schmidtii (Roemer and Schultes). "Bohemian Speedwell." Bohemia.  
 Veronica speciosa (R. Cunningham). "Showy Speedwell." New Zealand.  
 Veronica spicata (Linnæus). "Spike-flowered Speedwell." Europe.  
 Veronica siberica (Linnæus). "Siberian Speedwell." Siberia.

*Bignoniaceæ.*

- Spathodea Rheedii. "Rheed's Spathodea."  
 Tecoma australis (R. Brown). "Wonga Wonga Vine." Victoria, New South Wales, South and North Australia.  
 Tecoma jasminoides (Lindley). "Moreton Bay Trumpet Jasmine." New South Wales and Queensland.  
 Tecoma radicans (Jussieu). "Common Trumpet Flower." North America.  
 Tecoma Smithii (Hort). "Smith's Trumpet Flower." Hybrid.

*Myoporineæ.*

- Eremophila bignoniæflora (F. v. Mueller). "Bignonia-flowered Desert Fuchsia." Victoria, South, East, and North Australia.  
 Eremophila longifolia (F. v. Mueller). "Long-leaved Desert Fuchsia." Throughout Australia.

*Verbenaceæ.*

- Callicarpa angusata. "The narrow Callicarpa."  
 Duranta Plumierii (Jacquin). "Plumier's Duranta" or "Sky Flower." West Indies and Tropical America.  
 Lantana bicolor. "Two coloured Lantana."  
 Lantana purpurea (Hornemann). "Purple Lantana." South America.  
 Tectonia grandis (Linnæus). "Common Teak" or "Indian Oak." India, Burmah, and Java.  
 Vitex littoralis (A. Cunningham). "Coast Chaste Tree" or "New Zealand Teak." New Zealand.

*Labiata.*

- Leonotis Leonurus (Persoon). "Common Lion's Ear" or "Lion's Tail." Cape of Good Hope.  
 Prostanthera lasianthos (Labillardiere). "Victorian Dogwood" or "Mint Tree." Victoria, Tasmania, South and East Australia.

*Chenopodiaceæ.*

- Atriplex hortensis (Linnæus). "Garden Orache" or "Mountain Spinach." Tartary.

*Polygonaceæ.*

- Polygonum Fagopyrum (Linnæus). "Common Buck-Wheat." Central Asia.

*Myristiceæ.*

- Myristica surinamensis. "Surinam Nutmeg Tree." Surinam.

*Monimiaceæ.*

- Hedycarya dentata (Forster) Native names: "Puri-puri-kipili, Kaiwhiria." New Zealand.

*Laurineæ.*

- Cylicodaphne fusca (Nees).  
 Cryptocarya glaucescens (R. Brown). "Sea-green-leaved Australian Nutmeg." New South Wales, Queensland, and North Australia.  
 Nesodaphne Tawa (Hooker fil.) "Tawa." New Zealand.  
 Nesodaphne Tarairi (Hooker fil.) "Tarairi." New Zealand.  
 Tetranthera ferruginea (R. Brown). "Rusty Tetranthera." Queensland.

*Proteaceæ.*

- Banksia attenuata (R. Brown). "Thin Honeysuckle Tree." West Australia.  
 Banksia grandis (Willdenow). "Noble Honeysuckle Tree." West Australia.  
 Banksia integrifolia (Linnæus fil.) "Victorian Coast Honeysuckle Tree." Victoria, New South Wales, and Queensland.  
 Banksia marginata (Cavanilles). "Common Victorian Honeysuckle Tree." Victoria, Tasmania, New South Wales, and South Australia.  
 Banksia speciosa (R. Brown). "Showy Honeysuckle Tree." West Australia.  
 Banksia verticillata (R. Brown). "Whorled-leaved Honeysuckle Tree." West Australia.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Grevillea Banksii (R. Brown). "Bank's Grevillea." Queensland.  
 Grevillea Banksii, var. Forsteri (R. Brown). "Forster's Grevillea." Queensland.  
 Grevillea Hilliana (F. v. Mueller). "Hill's Grevillea." New South Wales and Queensland.  
 Grevillea robusta (A. Cunningham). "Silky Oak" or "Robust Grevillea." New South Wales and Queensland.  
 Hakea acicularis (R. Brown). "Needle-leaved Hakea." Victoria, Tasmania, and New South Wales.  
 Hakea dactyloides (Cavanilles). "The Fringed Hakea." New South Wales and Queensland.  
 Hakea elliptica (R. Brown). "Elliptical-leaved Hakea." West Australia.  
 Hakea eriantha (R. Brown). "Woolly-flowered Hakea." Victoria, New South Wales, and Queensland.  
 Hakea flexilis (F. v. Mueller). "Pliant Hakea" or "Twine Bush." Victoria, New South Wales, and South Australia.  
 Hakea gibbosa (Cavanilles). "Rock Hakea." New South Wales.  
 Hakea laurina (R. Brown). Syn. H. eucalyptoides (Meissner). "Cushion Flower." West Australia.  
 Hakea nitida (R. Brown). "Shining-leaved Hakea." West Australia.  
 Hakea nodosa (R. Brown). "Knotted Hakea." Victoria and Tasmania.  
 Hakea multilineata (Meissner). "Many-lined Hakea." South and West Australia.  
 Hakea pugioniformis (Cavanilles). "Dagger-fruited Hakea." Victoria, Tasmania, New South Wales, and Queensland.  
 Hakea rostrata (F. v. Mueller). "Bird's-beak Hakea." Victoria and South Australia.  
 Hakea saligna (Knight). "Willow-leaved Hakea." Victoria, New South Wales, and Queensland.  
 Hakea suaveolens (R. Brown). "Sweet-scented Hakea." West Australia.  
 Hakea ulcima, var. carinata (F. v. Mueller). "Keel'd Hakea." South Australia.  
 Hakea verrucosa (F. v. Mueller). "Warted Hakea." West Australia.  
 Hakea vittata (R. Brown). "Striped Hakea." South Australia.  
 Isopogon anethifolius (R. Brown). "Anethum-leaved Isopogon." New South Wales, Queensland, and West Australia.  
 Isopogon ceratophyllus (R. Brown). "Buckshorn-leaved Isopogon." Victoria, New South Wales, South and West Australia, and Tasmania.  
 Knightia excelsa (R. Brown). "New Zealand Oak" or "Rewa-rewa." New Zealand.  
 Lomatia fraxinifolia (F. Mueller). "Ash-leaved Lomatia." Queensland.  
 Lomatia ilicifolia (R. Brown). "Victorian Native Holly." Victoria and New South Wales.  
 Lomatia longifolia (R. Brown). "Long-leaved Native Holly." Victoria and New South Wales.  
 Lomatia tinctoria (R. Brown). "The Stained Lomatia." Tasmania.  
 Macadamia ternifolia (F. Mueller). "Queensland Nut." New South Wales and Queensland.  
 Persoonia myrtilloides (Sieber). "Myrtallus-like Persoonia." Victoria and New South Wales.  
 Petrophila pulchella (R. Brown). "Pretty Petrophila" or "Native Rock Broom." New South Wales.  
 Protea mellifera (Thunberg). "Common Cape Honeysuckle." Cape of Good Hope.  
 Protea mucronifolia (R. Brown). "Dagger-leaved Cape Honeysuckle." Cape of Good Hope.  
 Stenocarpus salignus (R. Brown). "Willow-leaved Stenocarpus" or "Beefwood." New South Wales and Queensland.  
 Telopea truncata (R. Brown). "Tasmanian Waratah." Tasmania.  
 Xylomelum angustifolium (Kippist). "West Australian Wood-Pear." West Australia.

*Santalaceæ.*

- Fusanus acuminatus (R. Brown). Syn. Santalum acuminatum (De Candolle). "Native Peach" or "Quandong." Victoria, South, East, and West Australia.

*Euphorbiaceæ.*

- Carumbium populifolium (Reinwardt). Syn. Omalanthos populifolius (Graham). "Queensland Poplar." Victoria, New South Wales, and Queensland.  
 Mallotus philippinensis (F. Mueller). Syn. Rottlera tinctoria (Roxburgh). "Kamala Tree." New South Wales, Queensland, and Asia.  
 Mainhot Glaziovii (F. Mueller). " Ceara Rubber." Brazil.  
 Putranjiva Roxburgii. "Roxburg's Putranjiva." Central India.  
 Ricinus communis (Linnæus). "Common Castor Oil Plant." India and Tropical Africa.  
 Ricinus Gibsonii. "Gibson's Castor Oil Plant,"

CLASS 23.—Forestry Products—*continued*.Carpological Specimens of Australasian and Exotic Plants—*continued*.*Urticæ.*

- Celtis australis* (Linnæus). "European Nettle Tree." South Europe, North Africa, and South Asia.  
*Celtis occidentalis* (Linnæus). "North American Nettle Tree." North America.  
*Ficus Livingstonii*. "Livingston's Fig." Africa.  
*Ficus macrophylla* (Desfontaines). "Moreton Bay Fig." New South Wales and Queensland.  
*Ficus nesophila* (F. v. Mueller). "Swamp Fig Tree." Queensland and North Australia.

*Platanaceæ.*

- Platanus occidentalis* (Linnæus). "American Plane Tree" or "Button-wood." North America.  
*Platanus orientalis* (Linnæus). "Oriental Plane Tree." Levant and Central Asia.

*Juglandææ.*

- Juglans nigra* (Linnæus). "Black Walnut." North America.

*Casuarinææ.*

- Casuarina Cunninghamiana* (Miquel). "Fire-oak of Queensland." New South Wales and Queensland.  
*Casuarina distyla* (Ventenat). "Stunted She-oak." Victoria, New South Wales, South and West Australia, and Tasmania.  
*Casuarina glauca* (Sieber). "Bench Oak." Victoria, New South Wales, Queensland, and South Australia.  
*Casuarina stricta* (Aiton). "Coast or Drooping She-oak." Victoria, New South Wales, South Australia, and Tasmania.  
*Casuarina suberosa* (Otto and Dietrich). "Erect She-oak." Victoria, Tasmania, South and East Australia.

*Cupuliferæ.*

- Alnus glutinosa* (Gærtner). "Common Alder." Europe and Asia.  
*Quercus lusitanica* (Webb). "Portugal Oak." South Europe and North Africa.  
*Quercus pseudo-coccifera* (Desfontaines). "Oak of Mamre" or "Abram's Oak." Algiers.  
*Quercus robur* (Linnæus). "Male," or "Sessile-fruited British Oak." Europe.  
*Quercus sideroxylon* (Humboldt and Bonpland). "Mexican Iron Oak." Mexico.  
*Quercus virens* (Aiton). "American Live Oak." North America.

*Coniferæ.*

- Araucaria Bidwillii* (Hooker). "Bunya Bunya Pine." Queensland.  
*Araucaria Cunninghamii* (Aiton). "Moreton Bay Hoop Pine." New South Wales and Queensland.  
*Araucaria Cookii* (R. Brown). "Captain Cook's Pine." New Caledonia.  
*Callitris Gunnii* (Hooker fil). Syn. *Frenela australis* (R. Brown). "Tasmanian Cypress." Tasmania.  
*Callitris quadrivalvis* (Ventenat). "Common Sandarac" or "Arar Tree." Barbary and North Africa.  
*Cedrus Deodara* (Loudon). "Deodar" or "Indian Cedar." Nepaul.  
*Cupressus Corneyana* (Knight). "Corney's Cypress." China.  
*Cupressus excelsa* (Scott). Syn. *C. aromatica* (Van Houtte). "Lofty Guatemala Cypress." Guatemala.  
*Cupressus funebris* (Endlicher). "Weeping or Funeral Cypress." China.  
*Cupressus glandulosa* (Hooker). "Talmapais Cypress." North California.  
*Cupressus Lawsoniana* (Murray). "Port Orford Cypress." North California.  
*Cupressus macrocarpa* (Hartweg). "Monterey or Citron Cypress." California.  
*Cupressus sempervirens* (Linnæus). "Common Cypress." South Europe and Asia.  
*Cupressus thurifera* (Humboldt). "Mexican White Cedar." Mexico.  
*Juniperus excelsa* (Bieberstein). "Tall Crimean Juniper." Grecian Archipelago, Siberia.  
*Juniperus squamata* (Don). "Scaly-leaved Juniper." Nepaul.  
*Pinus canariensis* (C. Smith). "Canary Island Pine." Canary Islands.  
*Pinus contorta* (Douglas). "Twisted Pine." California.  
*Pinus albicaulis* (Engelmann). "White-stemmed Pine." California and British Columbia.  
*Pinus halepensis* (Mill). "Aleppo or Jerusalem Pine." Levant and North Africa.  
*Pinus insignis* (Douglas). "Remarkable or Monterey Pine." California.  
*Pinus Laricio* (Poiret). "Corsican Pine." Corsica and South Europe.  
*Pinus leiophylla* (Schiede). "Smooth-leaved Mexican Pine." Mexico.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.*

- Pinus muricata* (D. Don). "Obispo or Bishop's Pine." California.  
*Pinus pinaster* (Solander). "Star or Cluster Pine." South Europe.  
*Podocarpus dactyloides* (Richard). "White Pine." New Zealand.  
*Podocarpus ferruginea* (Don). "Otago Black Pine." New Zealand.  
*Podocarpus macrophylla* (Don). "Long-leaved Podocarpus" or "Fon Maki." China and Japan.  
*Podocarpus spicata* (R. Brown). "Otago Black Rue Pine." New Zealand.  
*Thuja orientalis*, var. *glauca* (Linnaeus). "Sea-green-leaved Arbor Vitæ." English garden origin.

*Cycadaceæ.*

- Cycas media* (R. Brown). "Queensland Fern Palm." Queensland and North Australia.  
*Macrozamia Perowskiana* (Miquel). Syn. *M. Denisonii* (F. v. Mueller). "Giant Fern Palm." New South Wales and Queensland.

*Scitamineæ.*

- Musa superba* (Roxburg). "Superb Banana." South India.

*Irideæ.*

- Antholyza æthiopica* (Linnaeus). "Ethiopian Antholyza." Africa.  
*Sisyrinchium striatum* (Smith). "Mexican Pig-Root." Mexico

*Amaryllideæ.*

- Agave Americana* (Linnaeus). "Toddy Lily" or "Pita Hemp Plant." South America.  
*Doryanthes excelsa* (Correa de Serra). "New South Wales Spear Lily." New South Wales and Queensland.  
*Doryanthes Palmerii* (Hill). "Queensland Spear Lily." Queensland.  
*Fourcroya longæva* (Karwinski and Zuccarini). "Long-lived Giant Lily." Guatemala and Mexico.

*Hæmodoraceæ.*

- Anigozanthos flavida* (Redoute). "Yellow Sword Lily" or "Kangaroo-foot Flower." West Australia.

*Liliaceæ.*

- Aloe ensifolia* (Rœmer and Schultes). "Sword-leaved Aloe." Cape of Good Hope.  
*Aloe formosa* (Schultes). "Beautiful Aloe." Cape of Good Hope.  
*Aloe latifolia* (Haworth). "Great Soap Aloe." Cape of Good Hope.  
*Aloe obscura* (Haworth). "Great Soap Aloe." Cape of Good Hope.  
*Aloe saponaria* (Haworth). "Soap Aloe." Cape of Good Hope.  
*Cordyline Australis* (Hooker). "Foster's Palm Lily." New Zealand.  
*Cordyline Baueri* (J. Hooker). Syn. *C. nutans* (A. Cunningham). "Bauer's Palm Lily." Norfolk Island and Tropical Polynesia.  
*Cordyline indivisa* (Kunth). "Toii." New Zealand.  
*Eustrephus latifolius* (R. Brown). "Broad-leaved Wombat Berry." Victoria, New South Wales, and Queensland.  
*Eustrephus latifolius*, var. *angustifolius* (Bentham). "Narrow-leaved Wombat Berry." New South Wales and Queensland.  
*Geitonoplesium cymosum* (A. Cunningham). "Australian Shepherd's Joy." Victoria, New South Wales, and Queensland.  
*Hyacinthus candicans* (Baker). "Great White Cape Hyacinth." Cape of Good Hope.  
*Melanthium junceum* (Willdenow). "Rush-leaved Black Lily." Cape of Good Hope.  
*Ornithogalum longibracteatum* (Jacquin). "Long-bracted Star of Bethlehem." Cape of Good Hope.  
*Phormium tenax* (Forster). "Common New Zealand Flax" or "Flax Lily." New Zealand and Norfolk Island.  
*Rhipogonum scandin* (Forster). "Supple Jack." New Zealand.  
*Ruscus aculeatus* (Linnaeus). "Butcher's Broom," "Box Holly," or "Knee Holly." Europe, North Africa, and North-West Asia.  
*Smilax aspera*, var. *auriculata* (Willdenow). "The Ear-leaved Sarsaparilla." South Europe.  
*Urginea Scilla* (Steinhil). Syn. *Scilla maritima* (Linnaeus). "Common Squill." South Europe, North Africa, and Asia Minor.

CLASS 23.—Forestry Products—*continued.*Carpological Specimens of Australasian and Exotic Plants—*continued.**Palmae.*

- Acroscopia sclerocarpa* (Martius). "Macaw Palm." Tropical South America and West Indies.  
*Actinorhynchus Calapparia* (Wendland). "The Malayan Ray Palm." Malayan Archipelago.  
*Areca lutescens* (Bory). "Yellow Cabbage Palm." Bourbon.  
*Areca pumila*. "Dwarf Cabbage Palm." Java.  
*Areca sapida* (Solander). "New Zealand Cabbage Palm." New Zealand.  
*Arenga obtusifolia* (Martius). "Blunt-leaved Gomuti Palm." Java.  
*Astrocaryum aculeatum*. "Prickly *Astrocaryum*." Guiana.  
*Attalea Guichire*.  
*Calyptrocalyx spicatus* (Blume). "Spicate *Calyptrocalyx*." East Indies.  
*Calyptronoma Swartzii*. "Swartz's *Calyptronoma*." Jamaica.  
*Caryota furfuracea* (Blume). "Scurvy Palm." Java.  
*Caryota ochlandra*.  
*Chamærops Fortunei* (Hooker). "Chinese Hemp" or "Fan Palm." China.  
*Cocos oleracea* (Martius). "Iraiba of Natives." Brazil.  
*Cocos plumosa* (Loddiges). "Feathery Coconut Palm." Brazil.  
*Cyrtostochys Renda* (Blume). "Renda Palm." Malayan Peninsula.  
*Corypha elata* (Roxburg). "Tall Umbrella Palm." India.  
*Dæmonorops marginatus* (Blume). "Margined Rope Palm." Java.  
*Dæmonorops periacanthus*. Syn. *Calamus periacanthus*. "Ring-spined Cane Palm." Sumatra.  
*Dictyosperma album*. Syn. *Areca alba* (Bory). "White Cabbage Palm." Madagascar.  
*Diplothemium maritimum* (Martius). "Brazilian Coast Palm." Brazil.  
*Elaeis guineensis* (Jacquin). "African Oil Palm." Guinea.  
*Eugeissonia triste* (Griffiths). "Bertam of Malays." Malayan Archipelago.  
*Kentia costata*. "Ribbed *Kentia*." Aru Islands.  
*Licuala amphifrons* (Miquel). "Sumatra Fan Palm." Sumatra.  
*Licuala elegans*. "Elegant *Licuala*." East Indies.  
*Licuala horrida*. "Horrid *Licuala*." Indian Archipelago.  
*Livistona olivæformis* (Martius). "Olive-shape fruited Fan Palm." Java.  
*Mischophloeus paniculatus* (Scheff). "The panicle-flowered Pith Palm." Ternate Island.  
*Oreodoxa oleracea*. "West Indian Cabbage Palm." West Indies.  
*Pholidocarpus Thur* (Blume). "Scale-fruited Palm." Malayan Archipelago.  
*Plectocomia elongata* (Martius). "Tall *Plectocomia*." Java.  
*Pinanga javanica*. "The Java Penanga Palm." Java.  
*Pinanga Kuhlîi* (Blume). "The Slender *Pinanga* Palm." East Indies.  
*Phoenix pumila* (Gærtner). "Dwarf Date Palm." India and South China.  
*Phytelephas macrocarpa*. "Large-fruited Ivory Palm." Columbia and New Granada.  
*Ptychosperma Alexandra* (F. v. Mueller). "Princess Alexandra's Palm." Queensland.  
*Ptychosperma angustifolia*. "Narrow-leaved *Ptychosperma*."  
*Ptychosperma Cunninghamii* (Wendland). "Illawarra Palm." New South Wales and Queensland.  
*Ptychosperma paradoxa*. "Paradoxical *Ptychosperma*."  
*Sabal Adansonii* (Guersent). "Stemless Fan Palm." Florida.  
*Sabal Blackburniana* (Glazobs). "Tallipot" or "Umbrella-leaved Fan Palm." West Indies.  
*Sabal Havanensis*. "Havannah Fan Palm." Cuba.  
*Thrinax argentea* (Loddiges). "Silvery *Thrinax*." Antilles.  
*Wallichia porphyrocarpa*. "Purple-fruited *Wallichia*." India.  
*Ptychosperma elegans* (Blume). "Bangalow Palm." Queensland.  
*Kentia Baueri* (Seeman). "Norfolk Island Palm." Norfolk Island.

ROBERTSON, ROBT. A., Wandong:

1295. Colonial Timbers, seasoned by a new patented process.

**CLASS 24.—Agricultural and Pastoral Products.**

**DANELLI, SEBASTIAN, Sydney-road, Brunswick :**

- 1296. Alimentary Pastes, assorted.

**DILLON, BURROWS, AND CO., 384 Latrobe-street, and Prince's Bridge, Melbourne :**

- 1297. Confectionery.
- 1298. Candies.
- 1299. Preserved Fruits.

**GUEST, T. B., AND CO., 221 William-street, Melbourne :**

- 1300. Biscuits of various Kinds.

**SPINK, E. J. AND S., 488 to 498 Latrobe-street, Melbourne :**

- 1301. Jams.
- 1302. Preserved Fruits.

**STRACHAN, JAMES, Cohuna :**

- 1303. Purple Straw Wheat, in sheaf.

**TOD, J. W., AND CO. LIMITED, City-road, South Melbourne :**

- 1304. Arrowroot.

**ADAMSON, WILLIAM, Seed Merchant, 474 Collins-street, Melbourne :**

- 1305. Maize, White Horse-tooth, in cob.
- 1306. Maize, 90-day, in cob.

Grown at Bairnsdale, Gippsland.

**AGRICULTURAL EDUCATION, THE COUNCIL OF ; A. PLUMMER, Esq., M.D., President ; D. E. MARTIN, Esq., Secretary ; Public Offices, Melbourne :**

- 1307. Champlain Hybrid Wheat.
- 1308. Du Foit Wheat.
- 1309. Farmer's Friend Wheat.
- 1310. Fill Bag Wheat.
- 1311. Purple Straw Wheat.
- 1312. Rattling Tom Wheat.
- 1313. Chevalier Barley.
- 1314. Olive Oil.
- 1315. Pickled Olives.
- 1316. Sorghum Syrup.
- 1317. Marc, or Refuse from Olive Crushing.
- 1318. Castor Oil Bean.
- 1319. Dried Fruit (Raisins).
- 1320. Silk Cocoons.

CLASS 24.—Agricultural and Pastoral Products—*continued.*

CHAFFEY BROS. LIMITED, Chaffey's Irrigation Offices, 136  
Swanston-street, Melbourne; J. F. KILBURN, Esq., Secretary:

1321. Exhibits in connexion with the Australian Irrigation Colonies, Mildura  
and Renmark.

DEPPELER, J. F., Yinnar Post Office, Gippsland:

1322. Horse Tick Beans, large.

1323. Horse Tick Beans, small.

DEUTSCHER, C. T., Woorak:

1324. Red Straw Wheat, grown on red sandy soil; yield, 28 bushels per acre.

1325. Wheat in Sheaf.

EDIS, JOHN E., Kyabram:

1326. Purple Straw Wheat.

HENTY, JAMES, AND CO., 356 Little Collins-street, Melbourne:

1327-1332. Six Samples of Victorian Hops from the following growers:—

Bright Hop Company, Bright.  
Brookes, Wm., Bairnsdale.  
Calvert, John, Bairnsdale.

Hoppner, C., Bairnsdale.  
Poulson, M., Bairnsdale.  
Rhein and Poulson, Bairnsdale.

HUGHES, D. S., AND CO., 325 Lonsdale-street, Melbourne:

1333. Wheat.

1334. Calcutta Oats.

1335. Poland Oats.

1336. Potato Oats.

1337. Tartarian Oats.

1338. Dun Peas.

1339. Grey Peas.

1340. Maize, 90-day.

1341. Maize, White Horse.

JOHNS, JOHN, Maidstone Farm, Katandra, *viâ* Rockville P.O.:

1342. Farmer's Friend Wheat.

1343. Short Oats.

1344. Malting Barley.

1345. Muscatel Raisins.

KIERATH, CHARLES, Indigo, *viâ* Chiltern:

1346. Mexican Red Wheat.

1347. Wheat and Oats, in Sheaf.

LANDY, MICHAEL, Briagolong, Gippsland:

1348. Plaster of Paris Models of Potatoes grown by Exhibitor.

1349. Hops.

CLASS 24.—Agricultural and Pastoral Products—*continued.*

MAXWELL DANIEL, Cohuna:

- 1350. Purple Straw Wheat, in Sheaf.
- 1351. Egyptian Barley, in Sheaf.

McINTOSH, JAMES, Tabilk:

- 1352. Purple Straw Wheat,
- 1353. White Tuscan Wheat.

TAMBO SHIRE COUNCIL, THE, Bruthen, North Gippsland:

- 1354. Maize, 90-day, grown by John A. Watt, Esq., at Orbost, Snowy River.
- 1355. Maize, White, grown by James Cameron, Esq., J.P., at Orbost, Snowy River.

THOMPSON, HUGH, JUN., Dry Lake, Kerang:

- 1356. Purple Straw Wheat.

WARREN, THOMAS W., Glenelg View, Sandford:

- 1357. Tuscan Wheat.

---

WOOL.

LEWIS, WILLIAM, Stoneleigh, Beaufort:

- 1358. Wool.

RUSSELL, PHILIP, Carngham:

- 1359. Case containing Samples of Wool.
- 1360. Bale of Wool, marked <sup>R</sup>Carngham.

WILSON, SIR SAMUEL, Ercildoune, Burrumbeet; FISKEN, VALENTINE, AND Co., Collins-street, Melbourne, Agents:

- 1361. Washed Fleeces (12), from 2-tooth Ewes.

---

CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and Cooperage.

WINES.

AGRICULTURAL EDUCATION, THE COUNCIL OF; A. PLUMMER, Esq., M.D., President; D. E. MARTIN, Esq., Secretary; Public Offices, Melbourne:

- |                  |  |                  |
|------------------|--|------------------|
| 1362. Carbinet.  |  | 1365. Sherry.    |
| 1363. Chasselas. |  | 1366. Tokay.     |
| 1364. Hermitage. |  | 1367. Verdeilho. |



CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and  
Cooperage—*continued.*

AUSTRALIAN FREEHOLD LAND AND PRODUCE CO.  
LIMITED, THE, Chateau Tahbilk Vineyard; ARTHUR H. L. BROWNE,  
Esq., Secretary, 486 Collins-street, Melbourne:

- |                               |                             |
|-------------------------------|-----------------------------|
| 1368. Carbinet, 1887 vintage. | 1371. Hock, 1886 vintage.   |
| 1369. Chablis, 1886 vintage.  | 1372. Muscat, 1885 vintage. |
| 1370. Claret, 1886 vintage.   | 1373. Port, 1886 vintage.   |

BLAYNEY, THOMAS, Goulburn Valley Vineyard, Nagambie:

- |  |   |
|--|---|
| 1374. Carbinet, red, full-bodied, 1888 vintage.  | 1376. Reisling, white, full-bodied, 1888 vintage. |
| 1375. Hermitage, red, full-bodied, 1885 vintage. | 1377. Verdelho, white, full-bodied, 1888 vintage. |

BOOTH, WILLIAM, Wine Merchant, Rutherglen:

- |  |   |
|--|---|
| 1378. Port, red, full-bodied, 1886 vintage.        | 1380. Sherry, white, full-bodied, 1886 vintage. |
| 1379. Reisling, white, light-bodied, 1887 vintage. | 1381. Shiraz, red, full-bodied, 1886 vintage.   |

BRACHE AND CO., Collins-street, Melbourne:

- |   |  |
|---|--|
| 1382. Carbinet Sauvignon, red, full-bodied, 1886 vintage. | 1387. Reisling, medium-bodied, 1884 vintage.       |
| 1383. Claret, light-bodied, 1887 vintage.                 | 1388. Shiraz, red, full-bodied, dry, 1883 vintage. |
| 1384. Frontignac, red, full-bodied, 1886 vintage.         | 1389. Verdelho, white, full-bodied, 1881 vintage.  |
| 1385. Hock, light-bodied, 1882 vintage.                   |  |
| 1386. Muscatel, full-bodied, 1887 vintage.                |  |

BRENSING, ERNST, Erholung Vineyard, Nagambie:

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| 1390. Burgundy, red, 1887 vintage. | 1391. Reisling, white, 1887 vintage. |
|------------------------------------|--------------------------------------|

BUCHANAN, CHARLES, Vine Bank Vineyard, Beac:

- |  |  |
|--|--|
| 1392. Carbinet, dry, light-bodied, 1886 vintage. | 1393. Hermitage, white, sweet, light-bodied, 1886 vintage. |
|--|--|

CALDWELL'S AUSTRALIAN WINE COMPANY LIMITED;  
ROBERT H. CALDWELL, Esq., Managing Director, 495 Collins-street,  
Melbourne:

- |  |  |
|--|--|
| 1394. Chablis, white, light-bodied, dry, 1884 vintage.   | 1397. Hock (Ngarveno), white, light-bodied, dry, 1884 vintage. |
| 1395. Claret, red, light-bodied, dry, 1885 vintage.      | 1398. Port, red, sweet, full-bodied; 1883 vintage.             |
| 1396. Constantia, red, sweet, full-bodied, 1884 vintage. | 1399. Sherry, white, full-bodied, 1884 vintage.                |

CARSON BROS., St. Benedict's Vineyard, Wahgunyah:

- |  |  |
|--|--|
| 1400. Burgundy, red, light-bodied, 1889 vintage. | 1401. Pedro Ximenes, white, full-bodied, 1889 vintage. |
|--|--|

CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and  
Cooperage—*continued.*

CAUGHEY BROS. AND CO., Agents, Mount Prior Vineyard, 134  
William-street, Melbourne :

- |  |   |
|--|---|
| 1402. Chablis, white, light dry.           | 1407. Madeira, white, sweet, full-bodied. |
| 1403. Claret, red, light dry.              | 1408. Muscatel, red, sweet.               |
| 1404. Constantia, red, sweet, full-bodied. | 1409. Reisling, white, dry.               |
| 1405. Hermitage, red, dry, full-bodied.    | 1410. Shiraz, red, sweet, full-bodied.    |
| 1406. Hock, white, light dry.              |   |

CRAIKE, THOMAS, Bowmont Vineyard, Axe Creek, near Sandhurst :

- |  |  |
|--|--|
| 1411. Chasselas, white, dry, medium-bodied,<br>1887 vintage. | 1413. Hermitage, red, dry, fruity, full-bodied,<br>1887 vintage. |
| 1412. Dolcetto, red, dry, medium-bodied,<br>1887 vintage.    | 1414. Hermitage, red, dry, fruity, full-bodied,<br>1888 vintage. |

DE CASTELLA AND ROWAN, Collins-street, Melbourne :

- |  |   |
|--|---|
| 1415. Chasselas, white, light-bodied, 1883<br>vintage. | 1418. Reisling, white, light-bodied, 1886<br>vintage. |
| 1416. Hermitage, red, light-bodied, 1887<br>vintage.   | 1419. Sauvignon, red, light-bodied, 1883,<br>vintage. |
| 1417. Hermitage, white, light-bodied, 1886<br>vintage. |   |

DE CASTELLA, PAUL, Yering Vineyard, Yarra Glen :

- |  |  |
|--|--|
| 1420. Chasselas, white, light-bodied, 1887<br>vintage. | 1421. Sauvignon, red, light-bodied, 1887<br>vintage. |
|--|--|

FLANNERY, K., Mountain Vale Vineyard, Barnawartha :

1422. Shiraz, 1889 vintage.

FORTUNE, NICHOLAS, Miramichi Vineyard, Rutherglen :

- |  |  |
|--|--|
| 1423. Pedro, white, sweet, light-bodied, 1889<br>vintage.  | 1425. Reisling, white, dry, light-bodied, 1889<br>vintage. |
| 1424. Reisling, white, dry, light-bodied, 1888<br>vintage. | 1426. Shiraz, red, dry, full-bodied, 1889<br>vintage.      |

GOOCH, H. M., AND CO., 485 Collins-street, Melbourne :

- |   |   |
|---|---|
| 1427. Burgundy, white, dry, light-bodied,<br>1887 vintage.          | 1434. Pedro, white, dry, full-bodied, 1884<br>vintage.    |
| 1428. Carbinet Sauvignon, red, dry, light-<br>bodied, 1884 vintage. | 1435. Port, fruity, full-bodied, 1882 vint-<br>age.       |
| 1429. Carbinet Sauvignon, red, dry, light-<br>bodied, 1888 vintage. | 1436. Reisling, white, dry, full-bodied, 1884<br>vintage. |
| 1430. Chablis, white, dry, light-bodied, 1885<br>vintage.           | 1437. Shiraz, red, fruity, full-bodied, 1886<br>vintage.  |
| 1431. Claret, dry, light-bodied, 1882 vintage.                      | 1438. Verdeilho, fruity, full-bodied, 1885<br>vintage.    |
| 1432. Claret, dry, light-bodied, 1883 vintage.                      |   |
| 1433. Muscat, red, fruity, full-bodied, 1885<br>vintage.            |   |

GRAHAM BROS., Netherby Vineyard, Rutherglen :

1439. Port.

**CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and Cooperage—continued.**

**GREIFFENHAGEN, W., Hercynia Vineyard, Emu Creek, Sandhurst :**

- |  |  |
|--|--|
| 1440. Carbinet, red, full-bodied, 1884 vintage.  | 1443. Hermitage, white, full-bodied, 1885 vintage. |
| 1441. Claret, red light, 1886 vintage.           | 1444. Reising, white, light, 1886 vintage.         |
| 1442. Hermitage, red, full-bodied, 1885 vintage. | 1445. Verdelho, white, full-bodied, 1885 vintage.  |

**GROSSE, FREDERICK, Bendigo Wine Cellars, 465 Collins-street, Melbourne :**

- |   |  |
|---|--|
| 1446. Carbinet Sauvignon, red, full-bodied, 1884 vintage. | 1449. Hermitage, red, dry, full-bodied, 1884 vintage.  |
| 1447. Chablis, white, dry, light-bodied, 1885 vintage.    | 1450. Reising, white, dry, light-bodied, 1885 vintage. |
| 1448. Claret, red, dry, light-bodied, 1885 vintage.       | 1451. Verdelho, white, dry full-bodied, 1888 vintage.  |

**HEADDEY, EDWARD AND W. W., St. Ethel's Vineyard, Great Western :**

- |   |   |
|---|---|
| 1452. Claret, light-bodied, 1887 vintage. | 1453. Hock, white, light-bodied, dry, 1887 vintage. |
|---|---|

**HUGHES, WILLIAM, Quondong Vineyard, Rutherglen :**

- |   |                                     |
|---|-------------------------------------|
| 1454. Muscat, brown, sweet, 1889 vintage. | 1456. Reising, white, 1889 vintage. |
| 1455. Muscat, white, 1889 vintage.        | 1457. Shiraz, 1889 vintage.         |

**KAHLAND, JOCHIM, King-street, Sandhurst :**

- |  |   |
|--|---|
| 1458. Burgundy, red, dry, full-bodied, 1883 vintage. | 1462. Madeira, white, fruity, full-bodied, 1885 vintage.  |
| 1459. Carbinet, red, dry, full-bodied, 1884 vintage. | 1463. Muscat, red, sweet, 1886 vintage.                   |
| 1460. Chasselas, white, dry, light, 1886 vintage.    | 1464. Reising, white, fruity, 1885 vintage.               |
| 1461. Hermitage, red, dry, light, 1885 vintage.      | 1465. Verdelho, white, fruity, full-bodied, 1885 vintage. |

**KITZ, L., AND SONS, Selborne Chambers, Chancery-lane, Melbourne :**

1466. Wine.

**LEVIN, L., Lake Vineyard, Wahgunyah :**

- |  |  |
|--|--|
| 1467. Chablis, white, light-bodied, 1889 vintage.            | 1469. Pedro Ximenes, white, sweet, light-bodied, 1888 vintage. |
| 1468. Pedro Ximenes, white, dry, light-bodied, 1887 vintage. | 1470. Port, light-bodied, 1887 vintage.                        |
|  | 1471. Reising, white, light-bodied, 1888 vintage.              |

**LOGAN, DUNCAN, Rutherglen :**

1472. Wine.

**MELLON, FRANCIS, St. Francis Vineyard, Dunolly :**

- |  |  |
|--|--|
| 1473. Hermitage, red, full-bodied, 1887 vintage. | 1476. Pineau, red, light-bodied, 1887 vintage.   |
| 1474. Mataro, red, light-bodied, 1886 vintage.   | 1477. Reising, white, full-bodied, 1886 vintage. |
| 1475. Muscat, red, full-bodied, 1887 vintage.    |  |

CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and Cooperage—*continued.*

MILLER, JAMES, Noorilim East Vineyard, Arcadia :

1478. Red Wine, 1889 vintage.

MORRIS, G. F., AND SONS, Fairfield Vineyard, Brown's Plains :

1479. Chablis, white, dry.	1485. Muscat, red, dry.
1480. Claret, red dry.	1486. Port, red, sweet.
1481. Frontignac, red, sweet.	1487. Reisling, white, dry.
1482. Frontignac, white, sweet.	1488. Sherry, white, dry.
1483. Hermitage, red, dry.	1489. Shiraz, red, sweet.
1484. Hock, white, dry.	1490. Verdeilho, white, sweet.

MUELLER, A., Yackandandah Wine Cellars, corner Bourke and Queen streets, Melbourne :

1491. Aucarot, sweet, fruity, full-bodied, 1885 vintage.	1493. Madeira, sweet, fruity, full-bodied, 1884 vintage.
1492. Burgundy, red, dry, fruity, full-bodied, 1886 vintage.	1494. Muscat, brown, sweet, fruity, full-bodied, 1885 vintage.

PRENTICE, JAMES, Emu Plains Vineyard, Rutherglen :

1495. Carbinet, red, sweet, full-bodied, 1886 vintage.	1499. Muscat, red, sweet, full-bodied, 1888 vintage.
1496. Carbinet, red, dry, light-bodied, 1889 vintage.	1500. Muscat, red, sweet, light-bodied, 1889 vintage.
1497. Chablis, white, dry, light-bodied, 1889 vintage.	1501. Pedro Ximenes, white, sweet, full-bodied, 1887 vintage.
1498. Malbec, red, sweet, full-bodied, 1889 vintage.	1502. Pedro Ximenes, white, sweet, full-bodied, 1889, vintage.

REEVE, T. J., Orwell Vineyard, Rutherglen :

1503. Claret, full-bodied, 1887 vintage.	1506. Shiraz, red, sweet, full-bodied, 1888 vintage.
1504. Muscat, red, full-bodied, 1888 vintage.	
1505. Pedro Ximenes, white, full-bodied, 1887 vintage.	

SKYRME, GEORGE, St. George's Vineyard, Great Western :

1507. Burgundy, red, light-bodied, 1884 vintage.	1511. Muscat, white, light-bodied, 1884 vintage.
1508. Claret, light-bodied, 1884 vintage.	1512. Sauterne, white, light-bodied, 1880 vintage.
1509. Hock (No. 1), light-bodied, 1884 vintage.	
1510. Hock (No. 2), light-bodied, 1884 vintage.	

SMITH, G. S., AND SONS, Selborne Chambers, 507 Bourke-street, Melbourne :

1513. Chablis.	1518. Muscat.
1514. Claret.	1519. Port.
1515. Constantia.	1520. Reisling.
1516. Frontignac.	1521. Sherry.
1517. Hermitage.	1522. Verdeilho.

CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and  
Cooperage—*continued.*

SMITH, DANIEL, Beausejour Vineyard, Eversley :

- |   |   |
|---|---|
| 1523. Burgundy, red, light-bodied, dry, 1886<br>vintage.            | 1527. Chasselas, white, light-bodied, dry,<br>1888 vintage. |
| 1524. Burgundy, red, light-bodied, dry, 1887<br>vintage.            | 1528. Hermitage, red, light, dry, 1886 vin-<br>tage.        |
| 1525. Chasselas (No. 1), white, light-bodied,<br>dry, 1887 vintage. | 1529. Hermitage, red, light, dry, 1887 vin-<br>tage.        |
| 1526. Chasselas (No. 2), white, light-bodied,<br>dry, 1887 vintage. |   |

SMITH, J. H., Mundadda Vineyard, Barnawartha :

- |                      |                                       |
|----------------------|---------------------------------------|
| 1530. Madeira.       | 1533. Reisling, white, dry.           |
| 1531. Muscat, brown. | 1534. Reisling, red, dry.             |
| 1532. Muscat, white. | 1535. Reisling, sweet, red, or blend. |

TELFORD, JAMES, AND SON, Motherwell Vineyards, Rutherglen :

- |   |                                     |
|---|-------------------------------------|
| 1536. Pedro, 1888 vintage.                    | 1538. Shiraz, fruity, 1888 vintage. |
| 1537. Shiraz, dry, full-bodied, 1887 vintage. |                                     |

WEBSTER, R., Moodemere Vineyard, Wahgunyah :

1539. White Wine.

WUILLEMIN, LOUIS, Delta Vineyard, Briagolong, Gippsland :

- |   |   |
|---|---|
| 1540. Burgundy, red, light-bodied, 1889 vin-<br>tage. | 1541. Hermitage, white, light-bodied, 188<br>vintage. |
|---|---|

BEERS.

BILLSON, ALFRED A., Beechworth :

- |                      |                       |
|----------------------|-----------------------|
| 1542. Ales, bottled. | 1543. Stout, bottled. |
|----------------------|-----------------------|

ECHUCA BREWING, MALTING, AND AERATED WATERS CO.  
LIMITED, THE, Echuca :

- |                     |                                 |
|---------------------|---------------------------------|
| 1544. Ale, in bulk. | 1546. Porter, bottled, (No. 1). |
| 1545. Ale, bottle.  | 1547. Porter, bottled (No. 2).  |

FOSTER BREWING CO., THE, 15 Rokeby-street, Collingwood :

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 1548. Lager Beer, bottled, quarts. | 1549. Lager Beer, bottled, pints. |
|------------------------------------|-----------------------------------|

WHITE, EDWARD, AND CO., Dublin Brewery, Richmond :

- |                     |                       |
|---------------------|-----------------------|
| 1550. Ale, bottled. | 1551. Stout, bottled. |
|---------------------|-----------------------|

CORDIALS, AERATED WATERS, ETC.,

BILLSON, ALFRED A., Beechworth :

- |                       |                             |
|-----------------------|-----------------------------|
| 1552. Aerated Waters. | 1554. Bitters.              |
| 1553. Cordials.       | 1555. Non-Alcoholic Drinks. |

CLASS 25.—Wines, Spirits, Beers, Cordials, Aerated Waters, and  
Cooperage—*continued*.

O'NEILL BROS., 11 Woodside-street, North Fitzroy :

1556. Ginger Ale.  
1557. Lemonade.  
1558. Sodawater.  
1559. Sarsaparilla.

1560. Lemon Syrup.  
1561. Lime Juice.  
1562. Raspberry Vinegar.

TOD, J. W., AND CO. LIMITED, City-road, South Melbourne :

1563. Hop Bitters.

1564. Lime Juice.

CLASS 27.—Boots, Shoes, Saddlery, Leather, &c.

BROOKS, ABRAHAM, 96 Brunswick-street, Fitzroy :

1565. Stock-whip Thongs.  
1566. Hunting-whip Thongs.  
1567. Waggon-whip Thongs.  
1568. Coach-whip Thongs.  
1569. Cart-whip Thongs.  
1570. Bullock-whip Thongs.

CURTIS, JOHN, 490 Bourke-street, Melbourne :

1571. Bags.  
1572. Portmanteaus.  
1573. Trunks.

ELLIOTT'S PATENT IMPROVED ROTARY HEEL-MOTOR  
COMPANY LIMITED, Nicholson-street, Footscray :

1574. Patent Improved Rotary Heel-Motors, for Boots and Shoes.

KENNON, JAMES, AND SONS, River-street, Richmond :

1575. Kangaroo Leather.  
1576. Kangaroo Leather Laces.  
1577. Kangaroo Whipthongs.

LLOYD BROS. AND MAGINNIS, Broadford Tannery, Broadford, and  
453 Flinders-lane, Melbourne :

1578. Japanned and Enamelled Leathers of all kinds.  
1579. Harness Backs.  
1580. Bridle and Stirrup Backs.  
1581. Belt and Fancy Leathers.  
1582. Shoe Leathers.

CLASS 27.—Boots, Shoes, Saddlery, Leather, &c.—*continued.*

## MUNDAY, JAMES, Geelong Tannery, 12 Moorabool-street, Geelong:

- 1583. Leather Machine Belting.
- 1584. Belt Laces.

## MURRELLS AND BECKER, 193 Punt-road, Richmond:

- 1585. Portmanteaus.
- 1586. Trunks.
- 1587. Travelling Bags, &c.

## POWER, THOMAS P., 398 and 400 Little Bourke-street, Melbourne:

- 1588. Saddlery.
- 1589. Harness.
- 1590. General Leatherware.

## SCHOFIELD, J., AND CO., Big Hill, Yarra Flats:

## 1591-1602. Collection of Furs:—

Opossum Skin Carriage Rug.  
 Native Bear Skin Buggy Rug.  
 Native Bear Skin Hall Mat.  
 Native Bear Skin Hearth Rug.  
 Wallaby Skin Specimen Mat.  
 Native Bear Skin Bedroom Mat.

Opossum Skin Perambulator Rug.  
 Kangaroo Skin Mat.  
 Native Bear Skin Specimen Mat.  
 Wallaby Skin Bedroom Mat.  
 Native Bear Skin Door Mat.  
 Native Bear Skin Door Mat.

## SMALLEY AND HARKNESS, 3 and 5 Wellington-street, Collingwood:

- 1603. Factory-made Boots and Shoes.

## TOPP, DANIEL, 392 Bourke-street, Melbourne:

- 1604. Saddlery.

## VIAL, FRANK, AND CO., Macaulay-road, Kensington:

- 1605. Leather Belting.
- 1606. Leather Belts.
- 1607. Belt Laces.

## WALKER, JAMES HENRY, 87 Toorak-road, South Yarra:

- 1608. Surgical Boots.
- 1609. Lasts.
- 1610. Plaster Casts.
- 1611. Wooden Models of Boots.

## CLASS 28.—Wood and Fibres.

## GUILFOYLE, W. R., F.L.S., Director Botanic Gardens, Melbourne :

1612-1721. Collection of Fibres prepared from Australian and Exotic plants growing in the Botanic Gardens, Melbourne, and exhibited in large showcase:—

*Those Specimens obtained from Australasian plants are distinguished by their being tied with blue cord, and arranged in the front of showcase; those obtained from Exotic plants are tied with red cord, and are arranged at back of showcase.*

- Abutilon album.* "White Lantern Flower." Order Malvaceæ. China.—Fibres from six species of the *Abutilons* have been prepared. All the samples show the plants of this genus to be rich in fibre of good quality. The plants are of quick growth, and robust habit, and are capable of being readily acclimatized in the colony. All the specimens of this genus have been prepared by maceration.
- Abutilon Bedfordianum* (Hooker). "Duke of Bedford's Lantern Flower." Order Malvaceæ. Brazil.—This splendid shrub grows with great celerity in this colony, and may be profitably cultivated, especially with irrigation. The fibre is of good quality, valued by experts at £30 per ton, and very simply prepared by macerating the young shoots in the same way as "Jute" (*Corchorus capsularis*), &c. The period of maceration varies from seven to ten days, according to temperature.
- Abutilon Molle* (G. Don). "Soft-leaved Lantern Flower." Order Malvaceæ. Peru.—Like most of the other species of the same genus, this plant, which assumes the form of an ornamental flowering shrub, is of quick growth, and yields both a valuable bast and fibre. These are of a strong and beautiful quality, and are easily prepared by the simple process of maceration.
- Abutilon striatum* (Dickson). "Streaked Lantern Flower." Order Malvaceæ. Brazil.—A handsome, quick-growing shrub of slender habit, readily available for cultivation in Victoria, and, like the foregoing species, yields a valuable fibre by maceration.
- Abutilon venosum* (Lemaire). "Veined Lantern Flower." Order Malvaceæ. Brazil.—A very fine species, of robust habit, yields a very superior fibre. Two crops of "canes" may be readily obtained in a year in Victoria by proper management.
- Abutilon vexillarum* (E. Mon?). "Urn-shaped Lantern Flower." Order Malvaceæ. Brazil.—The fibre is easily prepared by maceration process. Like the others, it would prove a most productive *fine quality* fibre plant.
- Agave angustifolia* (Haworth). "The Narrow-leaved Agave." Order Amaryllidææ. St. Helena.—A narrow-leaved species of the genus, producing a very strong fibre, which is easily prepared by the boiling process.
- Agave Americana* (Linneus). "Pita Hemp Plant," "American Aloe," or "Toddy Lily." Order Amaryllidææ. South America and West Indies.—This plant is too well known to need further description here than to remark that waste lands in arid regions might be planted with the *Agave* with profitable results after the lapse of, say, from eight to ten years. Its thick fleshy leaves yield the "Pita Hemp" of South America, known commercially also as "Agave Thread." It may be prepared either by maceration, or by a boiling or steaming process; the latter is much more expeditious than the former, Machinery for the preparation of *Agave* fibre has been invented of late years in Mexico, and other parts of America.
- Agave Americana variegata.* "Variegated American Aloe."—Yields a fibre of same quality as the normal form, but much easier of preparation; this fact is more evident in the case of the "New Zealand Flax," *Phormium tenax*, the variegated-leaved variety yielding a stronger and softer fibre than the green-leaved form, and more readily prepared; the want of chlorophyll in these plants may account for this singular difference, as it is found that the variegated flax, even in a raw state, is much stronger than the green, a fact which has led to the experiment of testing the relative qualities of the two, with the results just described.
- Agave densiflora* (Hooker). "Dense-flowered Agave." Order Amaryllidææ. Mexico.—A valuable species, of moderately quick growth; furnishes a useful fibre. It is prepared either by bruising or macerating the leaves, or by boiling.
- Agave geminiflora* (Ker). "Twin-flowered Agave." Order Amaryllidææ. America.—The sample of fibre from this species exhibited was prepared from the leaves in their natural state, without passing through the processes of either boiling or maceration. The fibre is of a strong quality.
- Agave ixioides* (Lehmann). "Ixia-like Agave." Order Amaryllidææ. Mexico.—This species, although short-leaved, produces a fine strong fibre, which is prepared by boiling.
- Agave Jacquiniiana* (Schultz). "Jacquin's Agave." Order Amaryllidææ. America.—Like many of the other species, this plant produces a very fine and strong fibre, suitable for various purposes; it is also very easily prepared.
- Agave Karatto* (Miller). "The Karatto." Order Amaryllidææ. South America.—The fibre is strong, and prepared in the same way as other species of the genus.



CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

- Agave Mexicana* (Lamarck). "Mexican Agave." Order Amaryllideæ. Mexico.—This species affords a very good fibre, in texture like that of the "American Aloe" (*Agave Americana*). Prepared by boiling.
- Agave Rumphii*. "Rumph's Agave." Order Amaryllideæ. Mexico.—Like most of the Agaves, this yields a good fibre. It is easily prepared after passing through a boiling process.
- Alpinia nutans* (Koscoe). "Indian Shell Flower." Order Scitamineæ. India, &c.—This plant is a hardy herbaceous perennial, belonging to the same order as the Ginger plant of commerce. The flowers are remarkably beautiful. It yields a fine fibre, which is easily prepared by boiling in the usual way.
- Amperea Spartioides* (A. Brongniart). "Broom-like Amperea." Order Euphorbiaceæ. Victoria, Tasmania, &c.—This species derives its specific name from the similarity of its foliage to that of the English Broom. The plant, which is of a dwarf shrubby habit, is found in large quantities in Gippsland, and still larger quantities in Tasmania. The sample of fibre shown is very crude; but with proper appliances a useful fibre could be obtained from this plant.
- Anigozanthos flavida* (Redouté). "Sword Lily." Order Amaryllideæ. Western Australia.—This hardy perennial—not unlike the Irideæ in habit—sends up a number of thick sword-shaped shining leaves, about an inch wide, and from 18 inches to 2½ feet in height. The fibre obtained from the leaves is of a chocolate-brown colour, of fair strength and texture. The mode of preparation is by boiling in a caustic solution from nine to twelve hours, or, in fact, until the outer fleshy coating of the leaves is sufficiently digested to admit of its easy removal by scraping with a blunt knife. The plant thrives in a sandy loam, and may be propagated in unlimited quantities by division of the roots, and from seeds.
- Astelia Banksii* (A. Cunningham). "Banks' Astelia." Order Liliaceæ. New Zealand.—A coarse, tufted perennial, leaves from three to five feet long, half to one inch broad, covered with a silky down. The leaves are traversed longitudinally by stout nerves, which furnish a coarse fibre of considerable strength. It is prepared by boiling or steaming for about ten hours.
- Beaucarnea glauca* (Lehmann). Order Liliaceæ. Mexico.—This plant produces a fibre of good quality. The sample exhibited was very readily prepared after a few hours' boiling.
- Bœhmeria nivea* (Hooker). "Rhea," or "Chinese Grass-cloth Plant." Order Urticææ. East Indies, China, &c.—A hardy evergreen shrub. The fibre of this quick-growing plant is prepared by boiling or steaming. The one-year-old shoots are used for the purpose.
- Bœhmeria puya*. "Nepaul Grass-cloth Plant." Order Urticææ. Nepaul and Sikkim.—This species of the Grass-cloth plant produces a very fine soft fibre. The sample prepared was obtained principally by stripping the canes, and cleaning the bark in a raw state, without any maceration whatever.
- Bromelia sylvestris* (Linnæus). "Wild Pine Apple." Order Bromeliaceæ. South America.—Many of the species of this genus supply valuable fibres useful for textile purposes. This species yields a very fine fibre, which is prepared by the maceration process. The plant is a hardy evergreen perennial.
- Canna gigantea* (Desfontaines). "Large Indian Shot Plant." Order Scitamineæ. South America.—This tall-growing species of *Canna* grows luxuriantly in the warmer parts of Victoria. The rhizomes furnish a very good kind of arrowroot. The stalks furnish a fine fibre of great strength, closely assimilating to Manilla hemp. All the Cannas furnish a similar fibre. The refuse from the root-stocks of this and other starch-yielding species, such as *C. edulis*, "Tons les mois," *C. Achiras*, &c.; can be converted into a very strong paper after the arrowroot has been extracted. This has been proved by experiments at the laboratory attached to the Botanic Gardens.
- Carex paniculata* (Linnæus). *Carex adpressa* (R. Brown). "Close-spiked Sedge Grass." Order Cyperaceæ. Australia, New Zealand, Europe.—This species of sedge is found generally throughout Victoria in low-lying swampy grounds, and along river and creek courses. It yields a strong fibre, which is prepared by boiling.
- Carex tereticaulis* (F. Mueller). "The Round-stemmed Carex." Order Cyperaceæ. Australia.—This sedge produces a very strong fibre, which is easily prepared, like preceding species.
- Cassytha melantha* (R. Brown). "Common Scrub Vine," or "Dodder Laurel." Order Lauraceæ. Victoria, Tasmania, &c.—The genus is principally found in Australia. This species, like others, assumes a parasitic form.

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

- Corchorus olitorius* (Linnæus). "Jute." Order Tiliaceæ. North Australia and Southern Asia.—A quick-growing erect annual, in a wild state attaining a height of three feet or more; close cultivation, however, causes the plant to grow to a much greater height. This species, with *C. capsularis* (Lin.), furnishes the chief supply of jute fibre for commercial purposes. According to Mueller's Census of Australian Plants there are no less than fifteen species of *Corchorus* found in Australia, many of which will no doubt prove of commercial importance. Jute is prepared by a retting process, which extends over a period of from five to ten days, according to temperature.
- Cordyline australis* (Hooker). Syn. *C. Forsteri* (F. v. Mueller). "Forster's Palm Lily." Order Liliaceæ. New Zealand.—This noble plant attains an ultimate height of 40 feet under favorable circumstances. Its leaves afford a large percentage of excellent fibre, of finer texture than that of *C. Banksi*, though not quite so strong. It is prepared in a similar manner; the weight of fibre to the acre would be very much greater on account of the more robust habit of the species. Under good cultivation the plants would begin to yield a profitable return after the third year, which would go on increasing annually for a considerable time. As the *Cordylines* produce seed in enormous quantities, there is no limit to the numbers which may be propagated, so that a young plantation could be always coming on to take the place of the old when the latter became unprofitable. It must be remembered, too, that a great extent of land comparatively useless on account of partial inundation, could be profitably planted with *Cordylines* and kindred plants.
- Cordyline Baueri* (?) (Hooker). "Bauer's Palm Lily." Order Liliaceæ.—This fine broad-leaved species yields a fibre of fair quality, which takes very little time in preparing by steaming. The leaves attain a length of two feet or more, and are three inches broad before the plants become old. At present it is, like many of the New Zealand forms, a doubtful species, as it is not properly described in any botanical work.
- Cordyline Cookii* (?) "Cook's Cordyline." Order Liliaceæ. New Zealand.—The fibre from the leaves of this species is easily prepared. It is very strong. The boiling process is adopted with this as with other species of the genus.
- Cordyline indivisa* (Kunth). The "Toi" of the New Zealanders. Order Liliaceæ. New Zealand.—A tall-growing species, with thick and rigid leaves. The plant yields a good fibre.
- Cordyline lineata* (?) "Line-leaved Palm Lily." Order Liliaceæ. New Zealand.—This species, like many others of the same genus, yields a very strong fibre, prepared readily by boiling.
- Cordyline Banksi* (Hooker fil.). "Banks' Palm Lily." Order Liliaceæ. New Zealand.—The leaves of this species of *Cordyline* in cultivation sometimes attains a length of three feet, the fibre prepared from it is of superior quality to most of the New Zealand species, on account of its long staple and great strength. In addition to being available for converting into ropes, matting, &c., &c., that of the stout midrib might be used in brush making. Mr. Chas. R. Dodge, of New York City, in his report to the Commissioner of Agriculture, the Hon. Wm. G. Le Duc, on the fibres exhibited at the late Philadelphia Exhibition, thus speaks of the sample of *Cordyline pumilio* fibre sent from these gardens:—"It is convertible into a good quality of paper. The fibre is from 2½ to 3 feet in length, straight, white, and glossy, but very stiff, resembling fibre of *Yucca* or *Agave*. It is fully as strong as *Yucca* fibre, and would make excellent rope of great tenacity." This plant would pay well for cultivation, especially on irrigated land; under these conditions two or even three strippings of the outer leaves might be gathered in a year. The preparation of the fibre is very easy by boiling or steaming, six hours being sufficient to digest the fleshy coating of the leaves, which require very little heckling to separate the filaments.
- Cordyline stricta* (?) (Endlicher). "Erect Palm Lily." Order Liliaceæ. Tropical Australia.—A slender-growing species which, like *C. terminalis*, throws up numerous stems from the roots. The fibre is of much finer and softer texture than the species already described, though not so long in staple. It is very easily and expeditiously prepared by boiling or steaming, and is suitable for converting into ropes, twine, &c. It is undoubtedly a good paper-plant.
- Cordyline terminalis* (Kunth). "Terminal Palm Lily." Order Liliaceæ. Tropical Australia, &c.—The fibre from the leaves of this species is easily prepared, and shows a very fine silky sample.
- Cordyline terminalis* (Kunth), var. *cannæfolia*. Syn. *C. cannæfolia* (Robt. Brown). "Canna-leaved Palm Lily." Order Liliaceæ. New South Wales and Queensland.—A handsome variety of this species, attaining a height of eight or ten feet. It is of quick growth and very prolific. The fibre is very easily prepared and of good quality.

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

- Cyperus lucidus* (R. Brown). "Shining Galingale Rush." Order Cyperaceæ. Victoria, New South Wales, &c.—This well-tufted water plant is found all over Australia, with the exception of the western portion. The fibre is prepared by the boiling process.
- Cyperus papyrus* (Linné). "Nile Papyrus" or "Paper Reed" of the ancients. Order Cyperaceæ. Egypt.—A water plant attaining a height of eight feet. The fibre of this plant is easily procured by boiling the stalks.
- Dasyllirion glaucophyllum* (Zuccarini). "Glaucous Dasyllirion." Order Bromeliaceæ. Mexico.—A fine fibre is obtained from this hardy evergreen shrubby plant. The sample exhibited was prepared by the boiling process. The fibre is strong, and of a whitish texture.
- Dianella cœrulea* (Sims). "Paroo Lily." Order Liliaceæ. New South Wales and Queensland.—Produces a fibre similar to that of *D. revoluta*, and is easily prepared by boiling.
- Dianella elegans* (Kunth). "Elegant Dianella" or "Flax Lily." Order Liliaceæ. Victoria and Tasmania.—The sample of fibre prepared from this is not so strong as some of those from other species. It is, however, very fine, and easily prepared.
- Dianella lævis* (Robt. Brown) Syn. *D. longifolia*. "Smooth-leaved Flax Lily." Order Liliaceæ. Australia and Tasmania.—A pretty tufted herbaceous perennial, which bears large panicles of cerulean-blue flowers, succeeded by large globular shining blue berries, which render the plant quite as attractive as when in flower. The fibre of the various species of *Dianella* is prepared by boiling or steaming the leaves for eight or ten hours, or until they are sufficiently digested to admit of the easy removal of the cuticle by scraping. It is of a fine silky texture, and might be converted into twine, fishing lines, &c. The aborigines formerly plaited the leaves of this and other species into baskets, and also prepared fishing nets and lines from them.
- Dianella revoluta* (R. Brown). "Curled Dianella" or "Flax Lily." Order Liliaceæ. Australia.—This species is found generally throughout Victoria. It is of easy culture. The fibre sample although short is, compared with some other species, very strong. It is prepared by the boiling process.
- Dianella Tasmanica* (Hooker). Syn. *D. latifolia*. "Broad-leaved Native Flax Lily." Order Liliaceæ. Victoria, New South Wales, and Tasmania.—This fine species is of robust habit, the leaves often attaining a length of more than five feet. It delights to hide itself in the moist and densely-shaded fern gullies and ravines in the sub-alpine districts of Victoria and Tasmania; often found on the overhanging banks of streams, its leaves trailing in the water, and almost completely hidden by the dense brushwood. It is a good fibre plant, and furnishes excellent paper stock. Mr. C. R. Dodge, in his *Economic Classification of the Fibres* in the collection of the Department of Agriculture, Washington (U.S.), places the fibre of *Dianella Tasmanica* in the 4th class, and after quoting from the description accompanying the specimen sent from these gardens to the Philadelphia Exhibition, says—"Some of the filaments are white and brilliant; it is quite strong, a few twisted together requiring quite an effort to break them." "Its name does not appear in the list of useful textile fibres, from which it is to be inferred it has not hitherto been known as a fibre-producing plant of any value." This plant can be multiplied *ad lib.* from the root-stock as well as from seed. Two crops of leaves per year may be obtained with ease; it thrives in any good soil, but attains its greatest perfection in a rich alluvial, such as is usually met with on river flats, &c.
- Dombeya Natalensis* (Sonder). "Cape Wedding Flower." Order Sterculiaceæ. Natal.—A beautiful flowering shrub, or small tree, hardy, and of quick growth in the neighbourhood of Melbourne. The bark furnishes by maceration a very good fibre, suitable for ropes, cordage, sacking, &c.
- Doryanthes excelsa* (Correa de Serra). "Spear Lily." Order Amaryllidææ. New South Wales.—This noble plant closely resembles the *Fourcroya gigantea* of South America in appearance, and is often mistaken for it by the uninitiated. The difference can be easily ascertained by making an incision in one of the leaves, and applying the nostrils thereto. The *Fourcroya* emits a fetid odour (from which fact it has been named *Agave fetida*, Lin.), whilst from the leaves of the *Doryanthes* no such smell is perceptible. Like the *Fourcroya*, however, the leaves are very rich in fibre, of great strength, but rather coarse and wiry in texture. With proper appliances, no doubt it could be converted into coarse cloth, ropes, &c., whilst the refuse might be converted into paper and utilized for stuffing mattresses, &c. Mr. Dodge considers the strength of *Doryanthes* fibre, judging from the samples sent to the Philadelphia Exhibition, "below the average of fibres in the Amaryllidææ family." In his economic classification he places it in Class III. It must be borne in mind, however, that our samples were very crudely prepared. The fibre is prepared by boiling for a period of ten or twelve hours, and, judging from the amount of colouring matter extracted from the leaves during this process, a dye or pigment might

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

be obtained from the plant which may yet prove of commercial importance. This colouring matter (which somewhat resembles dragon's blood) detracts from the fibre as regards its bleaching properties. The plant can be propagated by division of the roots or from seed, which is produced in great abundance.

- Doryanthes Palmeri* (Hill). "Queensland Spear Lily." Order Amaryllidæ. Queensland.—The principal difference between this and the preceding species is in the inflorescence, which in the former is borne in a dense terminal corymbose panicle, whilst in *D. Palmeri* the panicle is elongated to 4 feet or more, the weight of the inflorescence often causing the flower-stem to assume a drooping, almost horizontal, position. The same remarks apply to the quality of the fibre, cultivation, &c., as to *D. excelsa*.
- Dracæna Draco* (Linnaeus). "Dragon's-Blood Tree." Order Liliaceæ. Canary Islands.—A most remarkable plant, with an arborescent stem like the *Cordylines*, and of similar habit, becoming ramified by age into several leafy heads. It attains to enormous proportions in its native habitat. "The celebrated Dragon-tree at the town of Orotavia, in Teneriffe, being 70 feet in height, and 48 feet in circumference, with an antiquity which must be greater than that of the pyramids." It is very slow of growth, even in its native home. Its growth is divided into three ages by T. Moore Esq., F.L.S., Curator of the Botanic Gardens, Chelsea. "Unbranched" in its "first age," or infancy, which lasts in its native country from 25 to 30 years; the "second age," or period of maturity and reproduction; and the "third age," or period of decay, are of indefinite extent. From the same authority we learn that "the tree derives its common name from a resinous exudation, known in commerce as Dragon's-blood. At one time it formed a considerable branch of export from the Canaries, and has never wholly fallen into disuse." The fibre from the leaves assimilates closely to *Yucca* fibre, and is prepared in a similar manner.
- Fourcroya gigantea* (Ventenat). "Giant Lily." Order Amaryllidæ. West Indies, South America.—This magnificent Amaryllid attains to great perfection in Victoria, although severe frosts damage the leaves to some extent. This, however, is no detriment to the fibre contained in them. It is extracted in a similar manner to *Agave* or "Pitta" fibre, which it resembles closely, and, in fact, is often exported as such. The present sample has been prepared by a boiling process which extended over a period of ten hours.
- Fourcroya longæva* (Karwinski). "Long-lived Tree *Fourcroya*." Order Amaryllidæ. Mexico to Guatemala.—Unlike its congeners, this magnificent production of the vegetable kingdom assumes an arborescent form, growing to an ultimate height of from 30 to 50 feet. Crowned by the gigantic flowerscape, which often exceeds 40 feet in height, it must present a spectacle in its wild state at once marvellous and grand in the extreme. It has withstood the frosts experienced since its introduction into cultivation in the Melbourne Botanic Gardens much better than *F. gigantea*, and has proved comparatively quick of growth. The fibre is similar in texture to *Agave* fibre. The sample has been prepared by the boiling process.
- Gahnia (Cladium) psittacorum* (Labillardière). "Victorian Giant Grass." Order Cyperaceæ. Victoria, New South Wales, &c.—This species is usually found in the uplands on banks of creeks, &c. It closely resembles *Gahnia radula* in appearance, and the remarks in the description of that species apply equally to this as a fibre-plant.
- Gahnia (Cladium) radula* (Bentham). "Victorian Black-reed" or "Brickmakers'-grass." Order Cyperaceæ. Victoria and Tasmania.—A coarse, tufted perennial, very plentiful on poor, rather wet land, especially near the coast. It is chiefly valued by the settlers as a thatching material, for which purpose it is well adapted, lasting for several years; and by brickmakers as a covering for newly-made bricks where there is not sufficient shed accommodation prior to their being placed in the kilns. As a fibre-plant, it is of no value, the filaments being harsh and brittle; but as a paper-stock it would no doubt prove of commercial importance, even if it had to be utilized as admixture with other material. It may be had in almost unlimited quantity.
- Grewia occidentalis* (Linnaeus). "African Star Bush." Order Tiliaceæ. Cape of Good Hope.—A quick-growing evergreen shrub, which bears a profusion of bright purple aster-like flowers of great beauty. The bark of the young branches furnishes by maceration a strong fibrous bast, which might be manufactured into ropes, cordage, &c. The plant thrives well in Victoria, and is easily propagated both by seed and from cuttings, the latter rooting freely out of doors.
- Hibiscus heterophyllus* (Ventenat). "Queensland Sorrel Tree," native name "Batham." Order Malvaceæ. Queensland and New South Wales.—A tall, stout-branched shrub or small tree. Flowers large, white and crimson, of great delicacy and beauty. The bark affords a fibre very similar in quality and appearance to that prepared from *H. splendens*. Its mode of preparation, too, is exactly the same.

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

- Hibiscus mutabilis* (Linnæus). "Changing Rose Mallow." Order Malvaceæ. Java.—This plant is a very hardy evergreen shrub, attaining to a height of 15 feet. It is of quick growth. Like most of the other fibre-producing plants of this order, it yields a fibre of very fine texture, which is easily prepared by maceration.
- Hibiscus splendens* (Fraser). "Queensland Hollyhock Tree." Order Malvaceæ. Queensland and New South Wales.—A coarse-growing pubescent shrub, or small tree, attaining a height of 10 to 15 feet, branches covered with short stout spines. The plant is very floriferous; its large handsome deep pink or rose-coloured blossoms resemble a hollyhock. The bark affords a white fibre of silky lustre and considerable strength, which is prepared by macerating the branches in water for a period of eight to twelve days, according to the age of the wood and the temperature of the weather. Mr. Dodge places the fibre of this and the following species (*H. heterophyllus*, Vent.) in Class No. 2. This class contains "fibres that are or may be employed in the arts, capable of being spun and woven into fabrics of inferior durability or coarse texture, and also applicable to fine cordage."
- Hibiscus Syriacus* (Linnæus). Syn. *Althæa frutex*. "Syrian Rose Mallow." Order Malvaceæ. Syria.—This well-known shrub affords a beautiful white fibre of considerable strength. It could be worked into a very fine cloth, and is also available for converting into fine cord, &c. The branches are macerated for a period extending from eight to fifteen days, according to temperature. The plant succeeds well in most parts of Victoria, and is readily propagated by cuttings, which root freely out of doors in sandy soil.
- Hoheria populnea* (A. Cunningham). "Ribbonwood of Otago." Order Malvaceæ. New Zealand.—A graceful tree, not unlike the Aspen (*Populus tremula*, Willd.), attaining a height of 60 to 70 feet in favorable situations. The bast furnished from the branches and from young trees is very beautiful, being of a delicate lace-like texture, very strong and glossy. It is suitable for weaving into textile fabrics, and may be also converted into matting, ropes, cordage, &c. The mode of preparation is by maceration, which occupies from twelve to fifteen days.
- Juncus communis* (E. Meyer). "Common Rush." Order Juncaceæ. Australasia, &c.—This cosmopolitan species may be had in enormous quantities, as it is very plentiful wherever there are marshes or wet ground. It makes excellent paper. The fibre has been prepared by boiling in a similar manner as detailed in the description referring to *J. pallidus* (R. Brown).
- Juncus maritimus* (Lamarck). "Coast Rush." Order Juncaceæ. Australasia, &c.—This, like the preceding species, *J. communis* (Meyer) has a very wide geographical range, "being common in maritime marshes and moist sands in most temperate regions." It forms a good paper-stock, and can be had in large quantities. The fibre has been prepared in the manner detailed in the description referring to *J. pallidus* (R. Brown).
- Juncus pallidus* (R. Brown). Syn. *J. vaginatus* (E. Meyer). "Pale-green Rush." Order Juncaceæ. Victoria, New South Wales, South and West Australia, and Tasmania.—This beautiful tall-growing and stout rush may be had in large quantities. It is an excellent paper material, and furnishes also a fibre of considerable strength. Baskets and other fancy household ornaments, as picture frames, &c., are sometimes made of this rush, both in a peeled and unpeeled state. The mode of preparation is by boiling in a strong alkaline solution for about twenty-four hours, or until the cuticle comes away easily by scraping. This species is often confounded with the *J. vaginatus* of Robt. Brown, which, according to Mueller and Benthams, it very closely resembles. The latter species is found in New South Wales and Queensland only, whilst the *J. Pallidus* has a far wider geographical range, as will be seen by the habitats enumerated. The synonym *J. vaginatus* (E. Meyer) is given on the present occasion as the samples of fibre sent out heretofore have been described as having been prepared from the large form of *J. vaginatus* (R. Br.), which is a mistake. That said to have been prepared from the small form should have been labelled *J. communis* (E. Meyer).
- Juncus prismatocarpus* (R. Brown). "Prism-fruited Rush." Order Juncaceæ. Australia and Tasmania.—A dwarf flat-stemmed species, seldom more than 2 feet in height. It is plentiful in marshy ground, especially near the sea. It may prove valuable as a paper-plant.
- Lagunaria (Fugosia) Pattersonii* (Don). "Norfolk Island Whitewood" or "Cowitch Tree." Order Malvaceæ. Norfolk Island.—A very beautiful leafy tree, of pyramidal habit of growth. It bears pretty rose-coloured hibiscus-like flowers in great profusion. The fibre obtained from its bark by maceration is of a fine texture, strong and glossy; it might be converted into the finer kinds of cordage, textile fabrics, matting, &c. It takes from eight to ten days in retting; if left much longer the fibre is completely destroyed.

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

Lagunaria fibre is placed in the third division by Mr. Dodge in his economic classification, that is, "fibres capable of employment in the arts, or used by natives chiefly in the manufacture of cordage, twine, nets, &c., sometimes woven into fabrics, or beaten into cloth or 'tappa.'"

- Lavatera arborea* (Linnæus). "Common Tree Mallow." Order Malvaceæ. Europe.—A tall biennial plant of quick growth. "The ribbon-like bast is produced in greater abundance than most malvaceous plants, and is recommended for paper material."
- Lavatera maritima* (Willdenow). "Sea Mallow." Order Malvaceæ. South Europe.—A hardy evergreen shrub, of quick growth. The fibre is obtained by maceration. It is fine and silky, and easily prepared.
- Lavatera Olbia* (Linnæus). "Velvet Mallow." Order Malvaceæ. France.—A quick-growing perennial. The stalks yield a beautiful fibre by macerating for a period of five to ten days. A well-prepared sample of this fibre resembles white horse-hair. Two, or even three crops could be had in a year by good cultivation and liberal manuring. The second crop of stalks is fit for cutting ten weeks after the first cutting, when the plants have become properly established.
- Lepidosperma elatius* (Labillardière). "Tall Sword Rush." Order Cyperaceæ. Victoria and Tasmania.—A tall species, very plentiful in mountainous districts, sometimes attaining a length of 7 or 8 feet. It is a good paper-plant. The fibre is not so strong as that of *L. gladiatum*, the "Coast Sword-Rush." It is also very difficult of preparation, a remark, in fact, which applies to most of the genera comprising the orders Cyperaceæ and Junaceæ, on account of the large amount of silica contained in the cuticle of the leaves and stems.
- Lepidosperma gladiatum* (Labillardière). "Coast Sword-Rush." Order Cyperaceæ. Victoria, South and West Australia, and Tasmania.—This rigid, smooth-stemmed, sword-shaped, rush is undoubtedly one of our best paper-plants, and is also one of the most plentiful. The shores of many parts of the mainland and the islands of Western Port Bay—Phillip Island especially—being thickly clothed with this species. It grows in the poorest of soils, and in maritime sands. The fibre is strong, of a dark colour, susceptible of artificial bleaching; but takes too much time and labour in its preparation to admit of its being classed amongst our legitimate fibre plants, as it takes 50 hours boiling before an impression is made on the hard outward coating of the leaves sufficient to admit of its removal by scraping. Machinery, no doubt, would overcome the difficulty experienced in its preparation, as in the case of "New Zealand flax" (*Phormium tenax*), &c.
- Lepidosperma longitudinale* (Labillardière). "Lengthened Sword-Rush." Order Cyperaceæ. Victoria, Tasmania, and Western Australia.—One of the tall sword-rushes, very plentifully distributed over the south-east portion of Victoria, on marshy land, extending from the coast to the hills. Like most of the genus, it yields a good paper-pulp.
- Malva capensis* (Willdenow). "Cape Mallow." Cape of Good Hope.—A handsome shrub, of quick growth. Fibre prepared same as other mallows.
- Moræa* (*Iris*) *Robinsoniana* (F. v. Mueller). "Wedding Flower of Lord Howe's Island." New South Wales.—This magnificent perennial grows to a height of more than 6 feet. Its leaves are rich in fibre, especially the stout midrib. No doubt it would prove valuable for paper-stock. It is, however, too brittle for any other purpose. It is "known as the Wedding Flower, and is the largest species of the genus; the habit is that of the nearly allied *Pardanthus Chinensis*, the flowers nearly alike to those of *Moræa iridioides*" (*Flora Australiensis*, p. 409, vol. 5).
- Pandanus Forsteri* (C. Moore and Mueller). "Tent Tree." Order Pandanaceæ. Lord Howe's Island.—The sample of fibre prepared from this species has been obtained by the boiling process.
- Pandanus pedunculatus* (R. Brown). "Native Screw Pine." Order Pandanaceæ. Queensland and New South Wales.—The fibre sample from this and other species of this genus are not so readily obtained as from many other plants, owing to the outer skin of the leaves being so very hard. It is, like the other species, obtained by boiling.
- Pandanus utilis* (Bojer). "Common Screw Pine" or "Vacoua." Order Pandanaceæ. Mauritius.—A very common plant in Mauritius, the leaves of which are largely used in the manufacture of sugar bags. The fibre is easily prepared by boiling. It is not, however, very strong.
- Phormium tenax* (Forster). "New Zealand Flax" or "Flax Lily." Order Liliaceæ. New Zealand.—This plant has now become so well known in the commercial world, from the fact that the exportation of *Phormium* fibre is now a staple industry in New Zealand, that it is needless to enter into details here further than to add that, so far as Victoria and the other Australian colonies are concerned, it succeeds admirably, and would well repay cultivation, as much land otherwise useless for agricultural purposes, such as

CLASS 28.—Wood and Fibres—*continued*.Collection of Fibres from Botanic Gardens, Melbourne—*continued*.

swamps, &c., might be planted with Phormium. Three methods have been tried in the preparation of the sample by way of experiment—namely, 1st. By the primitive method of scraping the green leaves, as adopted by the natives from time immemorial; 2nd. By macerating the leaves in cold water for upwards of 21 days; 3rd. By boiling in a caustic solution for 33 hours. With regard to the first process, the time and labour is much against it, although the fibre is much finer in texture and bleaches white; the second system (maceration) I must condemn, as it in the first place occupies too much time, without any material advantage being gained as regards scraping afterwards, and I find also that it is detrimental to the fibre. The third method (boiling or steaming), I pronounce decidedly in favour of, as being a saving of both time and labour; the only objection which can be raised is the dark colour of the fibre, which is not otherwise impaired. This, however, can be easily remedied by artificial bleaching. A sample prepared from the variegated-leaved variety is also forwarded. It is much finer, stronger, and more easily prepared than the green-leaved form. It has proved much stronger and more enduring in the Botanic gardens when used as a tying material in a green state torn into shreds.

*Phormium tenax variegata*. "Variegated New Zealand Flax."—See notes in paragraph concerning preceding species, and also in the description relating to *Agave Americana variegata*, in reference to this variety.

*Pimelia axiflora* (F. v. Mueller). "The Axil-flowered Tough Bark." Order Thymeleæ. Victoria, Tasmania, &c.—The fibre sample has been prepared from bark in its natural state. The plant, which assumes the form of a tall-growing shrub, is found more particularly in the eastern portion of Victoria.

*Pimelia clavata* (Labillardière). "Club-flowered Pimelia." Order Thymeleæ. West Australia.—This species yields a very fine bast. The bast is obtained, as well also as the fibre, by stripping the bark from stems of trunk and branches, and scraping same while in its natural green state. The plant is of a shrubby appearance, and very hardy.

*Plagianthus betulinus* (A. Cunningham). "New Zealand Lace Bark." Order Malvaceæ. New Zealand.—A hardy evergreen birch-like tree, growing to an ultimate height of 80 feet. From the bark a beautiful lace-like bast is obtained by maceration, closely assimilating to that furnished by *Hoheria populnea*, the "Otago Ribbonwood;" in fact, it is impossible to distinguish between the two when placed side by side. Like the latter, the *Plagianthus* is sometimes called the "Ribbon Tree" from this similarity of the bark. The period of maceration is from twelve to fifteen days for stout branches, the younger wood, of course, taking much less time.

*Plagianthus pulchellus* (A. Gray). Syn. *Sida pulchella* (Bonpland). "Victorian Hemp." Order Malvaceæ. Victoria, New South Wales, and Tasmania.—A pretty shrub or small slender tree, somewhat like birch in appearance. It is almost invariably found growing on banks of rivers, creeks, &c., especially on the banks of the Yarra at Melbourne. It is surprising that as a fibre-plant of importance this species should have been overlooked so long; it is prepared in a similar way to "jute-fibre," and takes about the same period of "maceration. It is quite equal to "Queensland Hemp" (*Sida retusa* or *rhomboidea*), and possesses the advantage of being much longer in staple. It may be had 8 feet in length if necessary. The plant is of quick growth, and is propagated by seed, which is produced freely. On marshy land, subject to partial inundation, this plant should pay for cultivation. *Plagianthus* fibre is classed by Mr. Dodge in the third division in his report. It is adapted for weaving into cloth, and may also be converted into ropes, cordage, twine, &c.

*Poa caespitosa*, var. *australis* (Bentham). "Victorian Wiry Grass."—This coarse perennial grass affords a fibre of fair quality by boiling for a period of six to eight hours. It is an excellent paper-stock, and with proper appliances might rival the "Esparto" or "Atocha Grass" of the Spanish Peninsula (*Stipa tenacissima*, Linnæus) in this respect. It is very plentiful on the rich alluvial flats bordering on rivers, creeks, and tea-tree (*Melaleuca*) swamps, where it grows in large tussocks, and, when not eaten down by stock, growing to a height of nearly 4 feet. It is not much relished by cattle; they will not touch it while the young spring herbage lasts; it, however, affords a good bite when all other vegetation is dried up in summer, and in severe winters has often been the means of saving stock.

*Sansevieria fasciata* (Hort). "Pale-banded Bowstring-Hemp." The sample of fibre exhibited was obtained by the boiling process. It is easily prepared, and shows a fibre of very fine texture.

*Sansevieria guineensis* (Willdenow). "Common Bowstring-Hemp." Order Liliaceæ. Guinea.—This valuable exotic fibre-plant, though of too tender a nature to withstand the frosts of our ordinary Victorian winters, might be cultivated with profit with other plants

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

of like character in the warmer portions of Australia. The fibre is very strong, of fine texture, and simple in its preparation, boiling for six hours being sufficient to digest the outer fleshy coating of the leaves, which are very rich in fibre.

*Schoenus brevifolius* (Robt. Brown). "Cord-Rush." Order Cyperaceæ. Victoria, New South Wales, Queensland, &c.—A wiry, tufted, rush-like perennial, very plentiful along the coast and for some distance inland, especially in the south-east portions of Victoria. It furnishes a fine fibre of considerable strength, not unlike that obtained from the different species of *Sansevieria*, and known as "Bowstring-Hemp," and is also a valuable paper-plant. The mode of preparation is by boiling for about nine hours, after which the pulpy matter may be separated from the filaments either by washing or by simple pressure. The plant grows on very poor sandy soils of a wet nature and very little good for tillage.

*Scirpus nodosus* (Rottb.). Syn. *Isolepis nodosa* (Robt. Brown). "Knotted Rush." Order Cyperaceæ. Australasia, South America, South Africa.—A rush-like tufted perennial, plentifully distributed throughout Australia, usually along the coast-line, and adjacent to water on rather poor sandy soils. It forms a good paper-stock, but as a fibre-plant for other purposes is comparatively useless.

*Sida rhomboidea*. Syn. *S. retusa* (Linnæus). "Queensland Hemp." Order Malvaceæ.—A hard semi-deciduous shrub; height 3 to 5 feet. One of the best Australian fibre-plants. It is a weed throughout Queensland, where it forms an article of commercial importance on account of the quality of its fibre. It is a cosmopolitan plant as regards the warmer regions of the globe, being found in North and South America, East Indies, Azores, Canary and West Indian Islands, &c. It has become naturalized in Victoria, having established itself in the neighbourhood of Melbourne, is of very quick growth, and produces seed freely. The fibre is very similar to the best kind of "jute," and is prepared by retting in a similar way; the time occupied in this process being from six to ten days, during which time the decaying vegetable matter gives off an intolerable stench. It may be woven into textile fabrics, either by itself or mixed with fibres of softer and finer texture, and converted into cordage and fine paper. According to Dr. Roxburgh, the bark of the Indian plant yields an abundance of "very delicate flax-like fibres, which might be advantageously used for many purposes." Other authorities, such as Royle and Forbes Watson, pronounce the fibre to be similar to "jute," but infinitely superior, so much so that it is worth from £5 to £6 per ton more. The present sample must not be looked upon as a fair indication of the value of this plant, having been prepared from an old stunted plant growing in the Melbourne Botanic Gardens, where it was formerly a weed, but the alterations which have taken place in the remodelling of the grounds have almost extinguished it. This plant should yield a handsome return if extensively cultivated, as it is content with a moderately good soil, and requires no particular skill in preparing the fibre for market.

*Sparmannia Africana* (Linnæus fil.). "African Hemp." Order Tiliaceæ. Cape of Good Hope.—This handsome quick-growing shrub attains a height of 10 to 12 feet. It delights in a rich sandy loam; it is quite at home in Victoria, where a good cultivation and a liberal water supply during the hot season would induce such an abundant growth that two crops of "canes" might be obtained in a year. The bark, more especially that of the young branches or shoots, is very rich in fibre of very fine texture. For many purposes it is equal if not superior to "Ramie" or "Chinese Grass-cloth" fibre. It is prepared by macerating the branches for a period of six to ten days, according to temperature and the age of the wood. In appearance it resembles jute-fibre, but is much superior in every respect. Mr. Dodge, in speaking of the sample of *Sparmannia* fibre (the first of its kind) which was forwarded from these gardens to the Philadelphia Exhibition (1876), says—"The fibre is of a beautiful silvery grey colour when it has been properly prepared. Some of the filaments of this sample are brilliant and lustrous, and it possesses considerable strength; in fact, seems almost equal to China grass in tenacity." He places it in the second division in his Economic Classification of Fibres.

*Sphæralcia umbellata* (Spach). "The umbelled Globe Mallow." Order Malvaceæ. Spain.—A beautiful ornamental and flowering shrub of quick growth, attaining to a height of 10 feet. It yields by the process of maceration a splendid silky fibre which is very easily prepared.

*Sterculia acerifolia* (A. Cunningham). Syn. *Brachychiton acerifolia* (F. v. Mueller). "New South Wales Flame Tree," or "Lace Bark." Order Sterculiaceæ. New South Wales and Queensland.—A lofty ornamental foliage tree, bearing a profusion of brilliant scarlet flowers, from which fact it derives its common name "Flame Tree." The bark is very thick, and is composed of numerous layers of beautiful lace-like ribbons, which are easily separated by maceration for a period of two to four weeks, the young bark being ready much sooner than that of the stem and large branches—remarks which apply to all barks



CLASS 28.—Wood and Fibres—*continued*.Collection of Fibres from Botanic Gardens, Melbourne—*continued*.

undergoing a retting process. It is equal if not superior to Cuba bast, which is composed of the inner bark of the "Mountain Mahoe," *Paritium elatum* (G. Don). It can be woven into coarse cloth, plaited into hats and bonnets, and is also available for converting into ropes, cordage, and matting. It should make good ships' hawsers on account of its elasticity, and as water does not appear to have an injurious effect upon it. The refuse after heckling would form no mean substitute for horsehair in stuffing mattresses, saddles, &c., and can also be utilized as admixture in paper-making. From the seed-pods a rich brown dye is obtained.

*Sterculia diversifolia* (G. Don). Syn. *Brachychiton populneum* (Robt. Brown). "Victorian Bottle Tree." "Currajong," of Gippsland. Order Sterculiaceæ. New South Wales and Queensland.—A handsome leafy tree of pyramidal habit, attaining a height of 50 feet or more. It has a thick swollen trunk, from which fact it is called "Bottle Tree" by some of the settlers. The natives call it "Currajong," which would seem to imply tough bark, as the name is applied to various *Pimeleas* and other plants which have tough barks, and which they use for making their fishing-lines, baskets, &c. The fibre of the inner bark of this species is similar to that of the preceding, but coarser in texture, and of a darker colour. It would make strong ropes, matting, &c. This bark takes much longer in retting than that of the "Flame Tree."

*Sterculia foetida* (Linnaeus). "Fœtid Sterculia." Order Sterculiaceæ. Queensland, New South Wales, and India.—A tall-growing, handsome timber tree. The bark affords a strong fibrous bast. It is also useful for tanning purposes. On account of its astringent properties, this bark takes a long time to macerate. The fibre might be converted into matting, ropes, &c.; the refuse forms good paper-stock.

*Sterculia lurida* (F. v. Mueller). Syn. *Brachychiton luridum*. "Pale-flowered Sterculia." Order Sterculiaceæ. New South Wales and Queensland.—A tall handsome tree, with dark-green, deeply-lobed leaves, somewhat like the Flame Tree. The bark affords a good fibre, suitable for converting into ropes, cordage, &c. The process of maceration extends sometimes to five or six weeks.

*Stypandra cœspitosa* (R. Brown). "Tufted Stypandra." Order Liliaceæ. Victoria and New South Wales.—A hardy herbaceous perennial, found in southern parts of Victoria, &c. This plant yields a strong fibre, which by a boiling process is readily prepared.

*Tetrarrhena juncea* (Robt. Brown). Syn. *Ehrharta tenacissima* (Steudel). "Climbing Rush Grass" or "Wallaby Grass." Order Gramineæ. Victoria.—A climbing wiry grass, often growing to a height of 8 feet or more among the branches of shrubs, where it delights to insinuate itself. It furnishes a pulp suitable for packing and writing paper, and can be had in large quantities, it being very plentiful in the uplands of Victoria.

*Tritoma aurea* (Kunth). "Golden Torch Lily." Order Liliaceæ. Cape of Good Hope.—This species, like *T. recurvata*, is rich in fibre material. It is easily grown, and produces a wealth of long foliage. The fibre is easily prepared after a short process of boiling.

*Tritoma grandiflora*. "Great Flowered Torch Lily." Cape of Good Hope.—This fibre is prepared from the leaves of the plant, and like the following two species is easily obtained by the boiling process.

*Tritoma recurvata*. Syn. *Kniphofia recurvata*. "Recurved-leaved Torch Lily." Order Liliaceæ. Cape of Good Hope.—This beautiful quick-growing perennial succeeds admirably in Victoria. Its long recurved leaves are very rich in fibre, of fair strength and quality, which is very easily prepared by boiling the leaves for a few hours, or by a steaming process. This species was first brought under notice as a fibre-producing plant in 1875, samples having been prepared in the gardens and forwarded to several Exhibitions. It should commend itself as an article of commercial importance from the fact that the fibre is ready for market eight hours from the time the leaves are cut. The plant is readily multiplied by root division, and would yield at least two crops of leaves in a year with good cultivation.

*Tritoma uvaria* (Ker). "Queen's Torch Lily." Order Liliaceæ. Cape of Good Hope.—The fibre from this species is readily obtained, and shows a sample of good quality.

*Typha angustifolia* (Linnaeus). "Native Bulrush" or "Catstail." Order Typhaceæ.—This cosmopolitan aquatic perennial is too well known to need description. It is very plentiful in Victoria and the other Australian colonies on the banks of streams and fresh-water lagoons. It furnishes a first-class material for paper-making, and a fibre of considerable strength and fineness may be manufactured from the leaves. This was first brought under notice by the writer at the Amsterdam Exhibition of 1876, and, strange to say, shortly afterwards an article came under his notice in an English periodical stating that a French company had been formed for the purpose of utilizing the *Typha* fibre, and further stating that machinery had been invented capable of converting it

CLASS 28.—Wood and Fibres—*continued.*Collection of Fibres from Botanic Gardens, Melbourne—*continued.*

into textile fabrics of great fineness. It is prepared by a boiling process, which occupies from twelve to sixteen hours, the leaves being afterwards scraped with a blunt instrument.

- Xanthorrhoea australis* (Robt. Brown). "Victorian Grass Tree." Order Juncaceæ. Victoria and Tasmania.—The leaves of this species of grass tree afford a very good fibre, but it is rather difficult of preparation on account of the amount of silica and resin which they contain. It is unquestionably a valuable paper plant. A fragrant resin is obtained from the base of the leaves, and from the trunk, which is used as a varnish, for dyeing purposes, and in the manufacture of "japan" lacquer for tinware. The trunk affords a large percentage of wood spirit. The arborescent stem often attains a height of 10 feet, crowned with a dense head of gracefully recurved brush-like leaves. The flower-scape is often 7 feet in length.
- Xanthorrhoea minor* (Robt. Brown). "The Bayonet Grass" or "Dwarf Grass Tree." Order Juncaceæ. Victoria, &c.—As a fibre plant it is quite equal to the preceding species. It may be had in unlimited quantities, as it covers a vast extent of country, especially in Dandenong and Gippsland.
- Xerotes longifolia* (Robt. Brown). "Tussock Grass." Order Juncaceæ. Victoria, &c.—A tufted perennial, widely dispersed throughout the colony, especially on plains and open country subject to floods, and in the neighbourhood of water. The leaves attain a length of 3 or 4 feet; they furnish a valuable paper-pulp. As a fibre-plant for any other purpose, however, of little value.
- Yucca aloifolia* (Linnaeus). "Dagger Leaf." "Spanish Dagger." Order Liliaceæ. Southern United States, Mexico, Antigua, and Jamaica.—A plant well known in Australian gardens of any pretensions, being extensively planted for scenic effect in conjunction with *Cordylines* and such like. It is a fine fibre-plant like all the genus, succeeds on the poorest soils, and is of moderately quick growth. The fibre is suitable for ropes, cordage, and coarse cloth, and possesses great strength. In appearance and texture it resembles *Agave* fibre. It is very simply prepared, either by maceration, by crushing the leaves between fluted rollers, or by boiling; the latter operation takes about nine hours, after which the cuticle comes away readily. Propagated by roots and from seed, which it produces freely; remarks which apply to all species.
- Yucca Californica*. "Californian Yucca or Mound Lily." Order Liliaceæ. California.—The fibre of this species is exceedingly fine, and very easily prepared after a short boiling process.
- Yucca filamentosa* (Linnaeus). "Thread-bearing Mound Lily." "Adam's Needle," "Eve's Thread," "Bear's Grass," &c. Order Liliaceæ. Virginia.—A good fibre-plant of easy cultivation.
- Yucca Ghiesbreghtii*. "Ghiesbrecht's Yucca" or "Mound Lily." Order Liliaceæ. S. America.—The fibre exhibited was obtained by boiling in the usual way. It is of similar good quality to the fibres prepared from the other species of the genus.
- Yucca gloriosa* (Linnaeus). Syn. *Y. superba*. "Common Mound Lily" or "Adam's Needle." Order Liliaceæ. Southern United States.—This magnificent plant furnishes the "Petre hemp" of Mexico, where it is manufactured into "ropes, cordage, packing cloth, &c., and is extremely durable." Undoubtedly one of the best American fibre-plants, it is to be preferred to either *Agave* or *Fourcroya* fibre, which it equals in quality, gives a quicker return and a larger percentage of clean fibre weight for weight, and is so much more readily prepared for market. The same remarks apply to this, and, in fact, all the *Yucca* tribe in a general way, as are made regarding the first-named species *Y. aloifolia*.
- Yucca gloriosa*, variety *superba*. The "Superb Mound Lily."—A variety of the preceding described species. The fibre is of a similar good quality, and is prepared in the same manner.

MUELLER, BARON FERDINAND VON, K.C.M.G., M.D., F.R.S.,  
Government Botanist, Arnold-street, South Yarra:

1722. Australian Woods in book form.

1723. Small specimens of Turnery.

PERRY, JOHN, 233 Russell-street, and 150 to 158 Lonsdale-street,  
Melbourne:

1724. General Turnery.

**CLASS 29.—Stuffed Animals, Insects, Bee-keeping Appliances.**

**FRENCH, CHARLES, F.L.S.,** Botanical Museum, South Yarra:

1725. Australian Coleoptera (Beetles), scientifically arranged and named, with localities, &c.
- 

**CLASS 31.—Agricultural Machinery and Implements.**

**CHERRY, E., AND SONS,** Gisborne:

1726. Churns.  
1727. Butter Workers.

**HUMBLE AND NICHOLSON,** Vulcan Foundry, Geelong:

1728. Portable Engine, 4-h.p.  
1729. Thrasher.  
1730. D. Ferrier's Wool Press.  
1731. Winnower.

**PERRY, JOHN,** 223 Russell-street and 150 to 158 Lonsdale-street, Melbourne:

1732. Hay Rakes and Handles.
- 

**CLASS 33.—Silversmiths' Work.**

**STOKES AND MARTIN,** Post Office place, Melbourne:

1733. Medal-making Process.  
1734. Buttons.  
1735. Military Ornaments.  
1736. Stamped Metal Work.  
1737. Electro-plate Work, &c.
- 

**CLASS 34.—Artisans' Individual Work.**

**BROWN, RICHARD,** 519 Station-street, North Carlton:

1738. Wire-work Stand.

**CANT, GEORGE TUDOR,** 227 Brunswick-street, Fitzroy:

1739. Copper-plated Engraving and Chasing.

CLASS 34.—Artisans' Individual Work—*continued.*

COMBINED POSTAL ELECTRIC SIGNAL ALARM AND TELEPHONE PILLAR COMPANY, THE, 63 Collins-street east, Melbourne:

1740. Wooden Model of a Postal Box, having telephones and electric signal alarms for fire brigades, police, &c. Panels to be used for advertising purposes.

JACOBS, HART, AND CO., 225 and 227 Queen-street, Melbourne:

1741. Cigars.  
1742. Cigarettes.

JOHNSTON, ROBERT, Harding's-road, Coburg:

1743. Johnston's Patent "Excelsior" Incubators.

PATENT SAFETY SELF-LOCKING NUT AND BOLT PROPRIETARY ASSOCIATION LIMITED, THE, Collins-street, Melbourne:

1744. Patent Bolts.  
1745. Patent Nuts.  
1746. Patent Wrenches.

SAMUELL, MISS JOSEPHINE L., 24A Clara-street, South Yarra:

1747. Engravings on Wood.  
1748. Proofs of Engravings on Wood.

WINN, LANGLEY, AND CO., Howie's-place, Little Collins-street east, Melbourne:

1749. Hair Dressers' Fittings.  
1750. Hair Dressers' Requisites.  
1751. Dental Chairs, &c., &c.

NEW ZEALAND AND SOUTH SEAS INTERNATIONAL EXHIBITION,  
DUNEDIN, 1889-90.

---

ILLUSTRATED HANDBOOK OF VICTORIA,

TOGETHER WITH THE

Official Catalogue of Exhibits

IN THE

VICTORIAN COURT.

---

MELBOURNE:

BY AUTHORITY: ROBT. S. BRAIN, GOVERNMENT PRINTER.

MDCCLXXXIX.