Victorian Year-Book, 1919-20.

INTRODUCTION.

GEOGRAPHICAL POSITION, AREA, AND CLIMATE.

Victoria is situated at the south-eastern extremity of Area of the Australian continent, of which it occupies about a thirty-fourth part, and it contains about 87,884 square miles, or 56,245,760 acres. It is bounded on the north and north-east by New South Wales, from which it is separated by the River Murray. and by a straight line running in a south-easterly direction from a place near the head-waters of that stream, called The Springs, on Forest Hill, to Cape Howe. On the west it is bounded by South Australia, the dividing line being about 242 geographical miles in length, approximating to the position of the 141st meridian of east longitude, and extending from the River Murray to the sea. On the south and southeast its shores are washed by the Southern Ocean, Bass Strait, and the Pacific Ocean. It lies between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. Its extreme length from east to west is about 420, its greatest breadth about 250, and its extent of coast-line nearly 600 geographical miles. Great Britain, exclusive of the islands in the British Seas, contains 88,756 square miles, and is therefore slightly larger than Victoria.

The southernmost point in Victoria, and in the whole of the Australian continent, is Wilson's Promontory, which lies in latitude 39 deg. 8 min. S., longitude 146 deg. 26 min. E.; the northernmost point is the place where the western boundary of the State meets the Murray, latitude 34 deg. 2 min. S., longitude 140 deg. 58 min. E.; the point furthest east is Cape Howe, situated in latitude 37 deg. 31 min. S., longitude 149 deg. 59 min. E.; the most westerly point is the line of the whole western frontier, which, according to the latest correction, lies upon the meridian 140 deg. 58 min. E., and extends from latitude 34 deg. 2 min. S. to latitude 38 deg. 4 min. S., or 242 geographical miles.

From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other State upon the Continent of Australia. In the sixty-three years ended with 1919 the maximum temperature in the shade recorded at the Melbourne Observatory was 111.2 deg. Fahr., on the 14th January, 1862; the minimum was 27 deg., on the 21st July, 1869; and the mean was 57.4 deg. Upon the average, on four days during the year the thermometer rises above 100 deg. in the shade; and, generally, on about three nights during the year it falls below freezing point. The maximum temperature in the sun ever recorded (i.e., since 1857) was 178 5 deg., on the 4th January, 1862. The mean atmospheric pressure noted at an Observatory 91 feet above the sea level was, during the sixty-three years ended with 1919, 29.93 inches; the average number of days on which rain fell each year was 137, and the average yearly rainfall was 25.58 inches.

MOUNTAINS AND HILLS. RIVERS AND LAKES.

Mountains and Hills.

The highest mountain in Victoria is Mount Bogong,* situated in the county of the same name, 6,509 feet above the sea-level; the next highest peaks are—Mount Feathertop, 6,306 feet; Mount Nelson, 6,170 feet; Mount Fainter, 6,160 feet; Mount Hotham, 6,100 feet; Mount McKay, 6,030 feet; and Mount Cope, 6,027 feet; all situated in the same county; also the Cobboras, 6,030 feet, situated between the counties of Benambra and Tambo. These, so far as is known, are the only peaks which exceed 6,000 feet in height; but, according to a list which appears in the Year-Book for 1915-16, there are 39 peaks between 5,000 and 6,000 feet high, and 40 between 4,000 and 5,000 feet high; it is known, moreover, that there are many peaks rising to upwards of 4,000 feet above the level of the sea whose actual heights have not yet been determined.

With the exception of the Yarra, on the banks of which the metropolis is situated; the Goulburn, which empties itself into the Murray about eight miles to the eastward of Echuca; the La Trobe and the Mitchell, with, perhaps, a few other of the Gippsland streams; and the Murray itself, the rivers of Victoria are not navigable except by boats. They, however, drain the watershed of large areas of country, and many of the streams are used as feeders to permanent reservoirs for irrigation and water supply purposes. The Murray, which forms the northern boundary of the State, is the largest river in Australia. Its total length is 1,520 miles, for 1,200 of which it flows along the Victorian border. Several of the rivers in the northwestern portion of the State have no outlet, but are gradually lost in the absorbent tertiary flat country through which they pass.

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 that it receives the flood waters of several fresh-water streams. It has no visible Lake Colac, only a few miles distant from Lake Corangamite. is a beautiful sheet of water, 10½ square miles in extent, and quite Lake Burrumbeet is also a fine sheet of fresh water, embracing 8 square miles. The Gippsland lakes—Victoria, King, and Reeve—are situated close to the coast, and are separated from the sea by only a narrow belt of sand. Lake Wellington, the largest of the Gippsland lakes, lies to the westward of Lakes Victoria and King, and is united to the first-named by a narrow channel. South-east of Geelong is Lake Connewarre, connected with the sea at Point Flinders.

A list of mountains and hills, rivers and lakes in Victoria appears in the *Victorian Year-Book* for 1915–16. This was revised by the Surveyor-General, Mr. A. B. Lang, and contains information in regard to heights, lengths, and areas respectively.

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

PHYSICAL GEOGRAPHY AND GEOLOGY OF VICTORIA.

Articles contributed by Mr. H. Herman, B.C.E., M.M.E., F.G.S., Director of Victorian Geological Survey, on the "Physical Geography and Geology of Victoria," appeared in the *Year-Books* for 1916–17 and 1918–19.

ADDENDUM TO ABOVE ARTICLES.

Supplied by Mr. Herman in March, 1920.

The first described Upper Cambrian radiolarian in Victorian rocks has been recorded from Mansfield, viz., Carposphaeridium cambrense, gen. et sp. nov. From its similarity to a species figured from the Upper Cambrian of South Australia, this is additional evidence in support of the reference of the Victorian rocks to this horizon.

One of the most remarkable cases of the survival of invertebrate forms, namely hydroids, has been described from the basal Ordovician of Monegetta by Mr. F. Chapman. The modern representatives of this hydroid are now found living in the Great Australian Bight at 100 fathoms.

By boring, the brown coal-fields of the Latrobe valley have now been ascertained to extend eastward of the meridian of Rosedale.

THE FLORA OF VICTORIA.

Articles by Alfred J. Ewart, D.Sc., Ph.D., F.L.S., Government Botanist and Professor of Botany and Plant Physiology, Melbourne University, appeared in the *Year-Books* for 1916–17 and 1918–19.

ADDENDUM TO ABOVE ARTICLES.

Received from Professor Ewart in April, 1920.

During the period 1919-20 the following species were added to the list of the native flora:—

Phebalium obcordatum, Cunn. (Rutaceæ), previously recorded from New South Wales only. Thryptomene Miquelliana, F. v. M. (Myrtaceæ), previously recorded from New South Wales and South Australia. Eucalyptus Woollsiana, Baker (Myrtaceæ), previously recorded from New South Wales only.

The following species new to science have also been added:

Eucalyptus Mitchelliana, Cambage (Myrtacew); Eucalyptus transcontinentalis, Maiden (Myrtacew); and Pimelea Williamsoni, Black (Thymelaeacew). In addition, Goodenia lanata, R. Br., and Goodenia robusta, Krause, which have hitherto been considered varieties, have been raised to specific rank; whilst Goodenia Macmillani, F. v. M., has been reduced to a variety of Goodenia grandiflora, Sims. Several new records have also been made of the regional distribution of various native plants.

During the period, five foreign plants have been recorded as having

established themselves as naturalized aliens. These are:—

Agrostis lachnantha, Nees. (Gramineæ), a native of South Africa. Lasiospermum radiatum, Trev. (Compositæ), a native of South Africa.

Nothoscordum fragrans, Kunth. (Liliaceæ), a native of North America. Oxalis purpurata, Jacq. (Oxalidaceæ), a native of South Africa. Vicia sepium, L. (Leguminosæ), a native of Europe.

Agrostis lachnantha has a fair pasture value, while Vicia sepium is useful for green manuring and has also some value as a pasture plant.

The other three plants are weeds without economic value.

In addition, seven other exotics have made their appearance for

the first time, namely:

Bromus Cebadilla, Steud. (Gramineæ). Collomia coccinea, Lehm. (Polemoniaceæ). Crepis setosa, Hall, f. (Compositæ). Gaillardia pulchella, Fouger (Gramineæ). Ixia lutea, Baker (Irideæ). Lonicera aponica, Thunb. (Caprifoliaceæ). Polypogon littoralis, Sm. (Gramineæ).

So far as we can judge at present, none of these are likely to become troublesome weeds, whereas the first and last named (Bromus and

Polypogon) have a slight pasture value.

THE FAUNA OF VICTORIA.

An article on the "Fauna of Victoria," by the late T. S. Hall, M.A., D.Sc. (University of Melbourne), and Mr. J. A. Kershaw, F.Z.S., Curator of the National Museum, Melbourne, appeared in the *Year-Book* for 1916–17, and an addendum thereto by Mr. Kershaw in the *Year-Book* for 1918–19.

ADDENDUM TO ABOVE ARTICLE.

Supplied by Mr. J. A. Kershaw, in May, 1920.

Since the publication of the addendum to the above article last year, no additions have been made to the Victorian vertebrate fauna. The possibility of adding to the species already recorded from the State is now very remote, except perhaps among the smaller reptiles and marine fishes.

Numerous additions, however, continue to be made to the insect fauna, among which the Coleoptera and blood-sucking flies (Diptera) have received most attention.

THE HISTORY OF VICTORIA.

An article on this subject contributed by Ernest Scott, Professor of History in the University of Melbourne, appeared in the *Year-Book* for 1916–17, pages 1 to 31.

CHRONOLOGICAL TABLE OF LEADING EVENTS.

The Year-Book for 1916-17 contained, on pages 31 to 50, a chronological table of leading events in Victorian history for the years 1770 to 1900 inclusive, and of leading events in Victorian and other history for the years 1901 to 1916 inclusive. The leading events in 1917 were given in the volume for 1917-18, pages 5 to 9, and those in 1918 in the volume for 1918-19, pages 6 to 9.

Some of the principal events in Victorian and other history during 9 are given in the table which follows:—

1919	are give	en in the table which follows:—
1919.	-	anuary — Outbreak of influenza reported in Melbourne. The
		disease was prevalent for several months in all the
	00 1	States, and there were many deaths. January.—A conference of Federal and State Premiers held in
"	22nd	Melbourne to discuss repatriation and the financial
		relations between the Commonwealth and the States.
"	23rd	January.—Peace Conference opened in Paris.
,,	5th	March.—Heavy floods in Melbourne, causing damage to property and loss of life. The rainfall—355 points—was the
		heaviest ever recorded for 24 hours.
	2nd	April.—The collier Muola foundered off Sydney Heads during a
:,		heavy gale. Four of the crew were drowned.
"	11th	April.—The s.s. Dromana, the first large steam-ship built in
		Victoria and the second in Australia, was launched at Williamstown.
	5th	May.—Strike of miners at Broken Hill, New South Wales.
"	5011	Seven thousand men were rendered idle.
,,	$14 ext{th}$	May.—The law suit between the Melbourne Tramways Board
		and the Melbourne Tramway and Omnibus Company
	1041	was settled by the company paying £110,000. May.—Shipping strike, which had been in operation in Queens-
"	19th	land for some time, extended to Melbourne. All
		interstate and coastal shipping held up.
22	26 th	May News received that Harry Hawker, the Australian
		aviator, who was attempting a trans-Atlantic flight from Newfoundland to England and was reported
		missing, had been picked up and was uninjured.
	$26 \mathrm{th}$	May.—Death of Judge Eagleson, County Court Judge, aged
"		55 years.
,,	28th	May.—First electric train run on the Essendon-Sandringham
	30th	line. May.—Arrival in Melbourne of Lord Jellicoe, who had been sent
"	30 th	by the Imperial Government to report on the naval
		defences of Australia.
,,	13th	June.—Victorian conversion loan of £3,000,000 at 5½ per cent.
	01.4	maturing 1924-34 fully subscribed in London at par. June.—Death of Sir T. a'Beckett, ex-Supreme Court Judge,
,,	21st	aged 83 years.
,,	22nd	June —Forty-six out of 72 German warships which were
,,		interned at Scapa Flow, in the Orkney Islands, were
		sunk by order of the Admiral in charge of the German
•	$26 \mathrm{th}$	fleet. June.—It was announced that the question of prohibition,
"	#00II	which had been submitted to a referendum in New
		Zealand had been defeated.
,,	28th	June.—Peace Treaty signed at Versailles, Paris, by delegates representing the Allies and Germany.
	6th an	d 19th July —Peace celebrations held in Victoria.
,,,	17th	July — The blockade against Germany raised by the Allies.
"	18th	July.—Appointment of Mr. W. J. Schutt and Mr. F. W. Mann
• •	0 2 . 1	to the Supreme Court Bench.
,,	$25 \mathrm{th}$	July.—Death at Yanco, New South Wales, of Sir Samuel McCaughey, M.L.C., millionaire pastoralist and
	•	philanthropist, aged 84 years.
,,	$30 ext{th}$	July.—Departure for England of Sir Arthur L. Stanley,
,,		Governor of Victoria.
"	$30 ext{th}$	July.—Death of Sir Simon Fraser, pastoralist and politician, aged 87 years.
		agen or years.

1919.	2nd	August.—Death from pneumonic influenza of Mr. E. B. Jones,
,,	8th	Victorian Railways Commissioner. August.—Death of Sir Henry Hodges, Supreme Court Judge,
,,	23rd	aged 75 years. August.—Arrival at Fremantle of Mr. W. M. Hughes, Prime
		Minister, and Sir Joseph Cook, Minister for the Navy, on their return from attendance at the Peace Con-
		ference.
,,	25th	August.—Strike of seamen settled.
,,	8th	September.—Influenza epidemic officially declared to be at an end in Victoria.
"	10th	September.—Peace Treaty submitted to the House of Representatives by the Right Hon. the Prime Minister.
"	$12 ext{th}$	September.—Death of Sir J. M. Davies, formerly President of the Legislative Council, aged 79 years.
,,	18th	September.—The steam-ship <i>Pareora</i> wrecked off Althorpe's Islands, 90 miles from Adelaide. Several lives were lost.
"	$26 \mathrm{th}$	September.—Great railway strike in Great Britain. It lasted ten
		days, causing great inconvenience and loss to the
,,	7th	October.—Death of the Hon. Alfred Deakin, ex-Prime Minister of the Commonwealth, aged 63 years.
,,	$15 \mathrm{th}$	October.— Peace loan of £25,000,000 fully subscribed.
,,	21st	October.—Lord Jellicoe's report on the naval defences of Australia
		presented to the House of Representatives.
,,	,,	Mr. Hughes announced in Brisbane that the Federal Government had decided to pay a gratuity of 1s. 6d. per day in non-negotiable bonds to soldiers who embarked from Australia on active service.
,,	28th	October.—Strike of engine-drivers and firemen on the trans- continental railway line. Work was suspended for
,,	29 th	about two months, when a compromise was effected. October.—Austria signed Peace Treaty.
,,	31st	OctoberMr. Staniforth Smith, Administrator of Papua, ap-
		pointed temporarily Deputy Administrator of the Northern Territory.
. ,,	27th	November.—Bulgaria signed Peace Treaty drawn up by the Allies.
••	5th	December.—Strike of gas employees in Melbourne and Geelong against decision of Arbitration Court. The strike lasted about a week.
,,	·10th	December.—Captain Ross Smith, with his brother Lieutenant Keith Smith and two mechanics, reached Darwin after
		completing a journey by air from London of 11,294
		miles, thus winning the prize of £10,000 offered by the Commonwealth for the first flight made in 720
	12th	Consecutive hours before 31st December, 1919.
,,		December.—Marine engineers on all interstate steamers stopped work.
,,	13th	December.—General elections held throughout Australia. The National Party led by the Prime Minister (the Right Hon. W. M. Hughes) was returned to power.

PROGRESS OF STATE SINCE 1842.

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

subse-

Population, 31st December
Population, 31st December
Agriculture— Land in cultivation acres Wheat bushels Oats gallons defel Oats gallons defel Oats gallons defel Oats de
Agriculture— Land in cultivation acres Wheat bushels Oats , Oats
Agriculture— Land in cultivation acres Wheat bushels Oats , Oats
Agriculture— Land in cultivation acres Wheat bushels Oats , Oats
Agriculture— Land in cultivation acres Wheat bushels Oats , Oats
Agriculture— Land in cultivation acres Wheat bushels Oats , Oats
Agriculture— Land in cultivation acres Wheat bushels Oats , Oats
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Oats
Oats
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Savings Bank Deposits £ 147,160 381,158 2,349,655 4,277,179 5,172,970 11,440,732 22,729,005 27,104,344 34,982,384 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,000 582,0
Savings Bank Deposits £ 147,160 381,158 2,349,655 4,277,179 5,172,970 11,440,732 22,729,005 27,104,344 34,982,384 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,000 582,0
Savings Bank Deposits £ 147,160 381,158 2,349,655 4,277,179 5,172,970 11,440,732 22,729,005 27,104,344 34,982,384 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,796 1,117,761 2,569,488 55,715,687 9,662,006 38,364,5665 & C Savings Bank Deposits £ 173,090 582,000 582,0
Newspapers , 147,160 381,158 2,349,656 4,277,179 5,172,970 11,440,732 22,729,005 27,104,344 34,932,384 5 5 5 5 5 5 5 5 5 5 5 6 9 7 173,090 582,796 1,117,761 2,569,488 5,715,687 9,662,006 38,364,566; 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Footories
Footories
Number of 978 521 1.740 2.488 3.141 3.249 5.720 : 5
Hands employed 4.395 $19,468$ $43,209$ $52,225$ $66,529$ $122,349$
land, and buildings £ 4,725,125 8,044,296 16,472,859 12,298,500 27,318,735
Value of articles produced £ 13,370,836 22,390,251 19,478,780 80,195,677
State Education—
Number of Primary schools . 61 370 671 988 1,757 2,233 1,967 2,236 \(\text{D}\).
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Total value of rateable property
in municipalities £ 1 99 638 001 50 166 078 87.642.459 203.351.360 185.101.993 340.604,233
Friendly Societies—
Number of Members
Number of natembers

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

* Owing to the Commonwealth authorities having discontinued the keeping of records of Inter-State trade, the value of the total imports and exports of the State are not available for a later year than 1909. For that year the imports were valued at £28,150,198 and the exports at £29,896,276.

† Exclusive of gold.

‡ Including deposits in the Commonwealth Savings Bank.

The population of the State at the end of 1842 was 23,799; and at the end of 1919 it had increased to 1.495.938. During the period 1842-1919 the revenue steadily increased from £87,296 to £13,044,088. There was no public debt until after separation. In 1855 the State indebtedness was £480,000; in 1919 the funded debt had reached £80,678,644, which has been spent on revenue-yielding and other works of a permanent character. The land in cultivation in 1842 was slightly over 8,000 acres; it now amounts to 5,491,020 acres. In the number of horses, cattle, and pigs increases are generally shown. The value of oversea imports in 1861 was £10.991,377; in 1918-19 it was £34.822.019. Oversea exports amounted to £12,209,794 in 1861, and to £27,824,479 in 1918-19. No railways or telegraphs were in existence up to the end of 1855; in 1861 there were 214 miles of railway open and in 1919 there were 4,197 miles; 2,586 miles of telegraph wires had been erected up to 1861, and 30,860 miles up to the 30th June, 1919. Postal business in letters and newspapers has expanded rapidly during the period covered by the table, and there has also been a large increase in Savings Bank deposits, which rose from £52,697 in 1850 to £38,364,566 in 1919.

The expenditure on education amounted to £115,000 in 1855, and had increased to £1,430,577 in 1918–19. Members of friendly societies numbered 1,698 in 1856, and 153,870 in 1918—the funds amounting to £213,000 in 1871 and £3,073,083 in 1918. Hands employed in factories rose from 19,468 in 1871 to 122,349 in 1918–19. The total value of rateable property in municipalities, which was £29,600,000 in 1861, was £340,604,233 in 1918–19.

CONSTITUTION AND GOVERNMENT.

The Present Constitution.

After the establishment of the Federal Government it Reform Act became evident that the representation of the States in the States Houses was excessive, and steps were taken to reform the States Constitutions. Accordingly an Act "to provide for the Reform of the Constitution" was passed in Victoria and reserved for the Royal assent on 7th April, 1903. After an interval of some months the Royal assent was proclaimed on 26th November, 1903. This Act, entitled The Constitution Act 1903, provided for a reduction in the number of responsible Ministers from ten to eight, and in their salaries from £10,400 to £8,400; and decreased the number of members of the Legislative Council from 48 to 35, including one special representative for the State railways and public servants; but increased the number of electoral provinces from fourteen to seventeen, each being now represented by two members elected for six years—one retiring every three years by rotation, except at a general election, when onehalf of the members are to be elected for only three years.