extensive series of glaciers, of which the lower moraines were de­posited only about 400 feet above sea level.

The information as to the geology of Tasmania up to 1888 is collected in R. Μ. Johnston's *Systematic Account of the Geology of Tasmania,* which gives a bibliography up to that date. A later sketch of the island is by W.H. Twelvetrees, “ Outlinesof the Geology of Tasmania,” *Proc. R. Soc. Tasmania,* 1900-1901, pp. 58-74. The mining literature is given in the reports of the Mines Depart­ment, and special reports issued in the Parliamentary Papers; and the economic and general geology are described in reports issued periodically by the Geological Survey, under W. H. Twelvetrees, and in papers published in the *Proceedings of the Royal Society of Tasmania.* The Mount Lyell mining field is described, with some account of the neighbouring districts of Western Tasmania, in J. W. Gregory, *The Mount Lyell Mining Field* (Melbourne, 1904). The glacial geology, with a summary of the literature thereon, is described by the same writer in the *Quarterly Journal of the Geo­logical Society,* 1904, vol. lx., pp. 7-8, 37-53∙ (J. W. G.)

*Climate.—*Tasmania possesses a very temperate and healthy climate. The mean temperature of the year, as estimated from observations extending back to 1841, is about 50∙10°. The mean at Hobart was 54∙4º, at Launceston 56∙6° and at Oatlands, which is in the centre of the island and 1400 ft. above sea-level, 51∙76°. Snow is rarely seen except in the mountains. The average tem­perature at Hobart of January, the hottest month, is 63°, and of July, which is mid-winter, 45º. The western prevailing winds— particularly the north-western—carry the rain-bearing clouds. The elevation-divide between the western and eastern parts of the island rises generally to a height of between 3000 and 5000 ft., and consequently the parts to the east of such heights receive much less precipitation than those to the westward. The general average for the eastern district over a period of years was 22∙07 inches; for the western, 37∙55 inches; and for Tasmania 26∙69 inches.

*Flora.—*The vegetation which prevails among the older schistose rocks of the west and extreme south presents a totally different appearance to that which occurs in the more settled districts of the east. The western vegetation, as compared with that of the east, presents as marked a contrast as do the prevailing rocks upon which it flourishes. The characteristic trees and shrubs of the west include the following genera, *viz.: Fagus, Cenarrhenes, Anodopetalum, Eucryphia, Bauera, Boronia, Agastaahys, Richea, Telopea, Grevillea, Orites, Athrotaxis, Dacrydium, Phyllocladus.* On the eastern side the plains and rocky ridges, where not artificially cleared, are occupied by shaggy and often sombre forests mainly composed of the following genera : *Eucalyptus* (gum tree), *Casuarina, Bursaria, Acacia, Leptospermum, Drimysi Melaleuca, Dodonaea, Notolea, Exocarpus, Hakea, Epacris, Xanthorrhoea, Frenela.* The mountain slopes and ravines of the east have a well-marked vegetation. In character it is more akin to, and in many cases identical with, that of the west. The tree fern *(Dicksonia antarctica)* in the mountain ravines is especially remarkable. The following genera are also found in such positions in great luxuriance, viz.: *Fagus, Anopterus, Phebalium, Eucalyptus, Richea, Cyalho'des, Pomaderris, Prostan- thera, Boronia, Gatdtheria, Correa, Bedfordia, Aster, Archeria, Atherosperma,* &c. In the extreme west the trees and larger shrubs do not appear to ascend the schistose rocky mountain slopes of the central and eastern parts.

*Fauna.—*Animal life in Tasmania is similar to that in Australia. The dingo or dog of the latter is wanting; and the Tasmanian devil and tiger, or wolf, are peculiar to the island. The Marsupials include the *Macropus* or kangaroo; the opossums, *Phalangista vιdpina* and *P. Cookii;* the opossum-mouse, *Dromicia nana∙, Peraméles* or bandi­coot; *Hypsiprymnus* or kangaroo rat; *Phascolomys* or wombat; while of *Monotremata* there are the *Echidna* or porcupine ant-eater and the duck-billed platypus. The marsupial tiger or Tasmanian wolf *(Thylacinus cynocephalus),* 5 ft. long, is yellowish brown, with several stripes across the back, having short stiff hair and very short legs. Very few of these nocturnal carnivores are now alive to trouble flocks. The tiger-cat of the colonists, with weasel legs, white spots and nocturnal Habits, is a large species of the untameable native cats. The devil *(Dasyurus* or *Sarcophilus ursinus)* is black, with white bands on neck and haunches. The covering of this savage but cowardly little night-prowler is a sort of short hair, not fur. The tail is thick, and the bull-dog mouth is formidable. Among the birds of the island are the eagle, hawk, petrel, owl, finch, peewit, diamond bird, fire-tail, robin, emu-wren, crow, swallow, magpie, blackcap, goatsucker, quail, ground dove, parrot, lark, mountain thrush, cuckoo, wattlebird, whistling duck, honey­bird, Cape Barren goose, penguin duck, waterhen, snipe, albatross and laughing jackass. Snakes are pretty plentiful in scrubs; the lizards are harmless. Insects, though similar to Australian ones, are far less troublesome; many are to be admired for their great beauty.

*Population.—*At the beginning of 1905, the state contained 181,100 people, giving a density of 6∙9 persons per square mile. The population in 1870 was 100,765. The discovery of Mount Bischoff one year later, though it greatly stimulated speculation and induced a large influx of immigrants, did not put a stop to the outflow, for in 1880 the population was still below 115,000. During the next two decades there was a substantial advance; in 1890 it had reached 145,200, and in 1900, 172,980. Like all the Australian states, Tasmania shows a decline in the birth­rate; in 1905 the births were 5256—36 less than in 1904—which gives a rate of 29∙32 per 1000 of mean population.

The climate is probably more healthy than that of any of the Australian states, although, owing to the large number of old people in the colony, the death-rate would appear to put Tasmania on a par with New South Wales and South Australia. The death-rate per 1000 of population, which was 16∙52 in the period 1876-80, had fallen to 11∙01 in the period 1901-5. There has therefore been a gradual and substantial improvement in the health conditions of the state. The annual marriage-rate was for many years consider­ably below the average of Australia generally, a condition sufficiently accounted for by the continued emigration of men unmarried and of marriageable ages; this emigration had ceased in 1900, and the marriage-rate may be taken as 7∙8 per thousand. The chief towns are Hobart (pop. 35,000) and Launceston (pop. 22,500).

*Administration.—*As one of the states of Australia, Tasmania returns six senators and five representatives to the federal parliament. The local constitution resembles that of the other Australian states inasmuch as the executive government of four ministers is responsible to the legislature, which consists of a legislative council and a house of assembly. The former is composed of eighteen members elected for six years. Electors of the council must be natural-born or naturalized subjects of the king, twenty-one years of age, resident in Tasmania for twelve months, and possessing a freehold of the annual value of £10 or a leasehold of the annual value of £30 within the electoral district; the property qualification being waived in the case of persons with university degrees or belonging to certain professions. Members of the council must be not less than thirty years of age. The house of assembly consists of 35 members elected for three years. Every resident of Tasmania for a period of twelve months who is twenty-one years of age, natural-born or naturalized, is entitled to have his name placed on the electoral roll, and to vote for the district in which be resides. The franchise has been conferred on women.

*Education.—*Half the population are adherents of the Church of England, and about 18 per cent. Roman Catholics; Wesleyans number nearly 16 per cent., and Presbyterians about 6½ per cent. Instruction is compulsory upon children over seven years of age and under thirteen years in the towns of Hobart and Launceston, but not in the rural districts. Special religious instruction is allowed to be given after school hours by teachers duly authorized by the various religious denominations, and this privilege is some­what extensively used by the Church of England. The schools are not free, as small fees are charged; but these are not enforced where parents can reasonably plead poverty. In 1905 there were 343 state schools, with 19,000 pupils on the roll, and administered by 600 teachers; there were also 180 private schools, with 310 teachers and 9000 scholars. The net expenditure averages £3, 15s. 2d. per child in average attendance, inclusive of what is spent in the up­keep of school buildings and on new schools. The university of Tasmania has an endowment of £4000 and a revenue from other sources (chiefly fees) of from £1100 to £2000. The students attend­ing lectures in 1904 were 62, of whom 51 matriculated, and the number of degrees conferred to the close of that year was 180, the great majority of these degrees being granted *ad eundem gradum.*

*Finance.*—The revenue is chiefly obtained through the custom­house, but the federal tariff has had the effect of considerably reducing the receipts from this source. In 1905 the state raised £852,681 on account of the public revenue, which is equal to £4, 13s. 3d. per inhabitant; of this sum £259,099 was the excess of Commonwealth collections over expenditure, and £216,953 from other taxation; the railways returned £245,049, while from public lands was obtained £63,088, and from other sources £43,504. The expenditure was £840,185, thus distributed: railway working expenses, £171,619; public instruction, £67,403; interest and charges upon debt, including sinking funds, £349,090; and other services £252,075. The interest and other debt charges come to £1, 18s. 9d. per inhabitant, and represent 41∙55 per cent, of the expenditure of the state. The public debt in the year 1906 stood at £9,471,971, of which £7,830,250 was held in London; this represents £52, 6s. per inhabitant. In 1871 it was £1,315,200, in 1881 £2,003,000, and in 1891 £7,110,290, representing respectively £12, 18s., £16, 16s. 10d., and £46, 11s. 10d. per inhabitant, the great increase in recent years being due to the rapid extension of railway and other public works. The expenditure upon works may be