## Principal Industries and Productions.

Grazing.—Wool is undoubtedly the most important production of New Zealand, its value as an export being more than double that of gold. The mildness of the winter season, which does not require that any special provision for the keep of stock during that period should be made, and the general suitability of the country for grazing purposes, with the growth of a superior class of wool, caused the attention of the early settlers to be much given to pastoral pursuits: grass-lands were looked up as sheep- or cattle-runs. The success attending the pursuit enabled the runholders to a large extent to purchase the freehold of their runs, or the best portions of them; and by improvements in fencing, and sowing with English grasses, which thrive remarkably well in the colony, the bearing capabilities of the land were increased many fold. The extent to which pastoral pursuits have been followed may be estimated by the quantity of stock in the colony in 1886 (when the census was last taken). The numbers of the undermentioned kinds were as follows: Horses, 187,382; cattle, 895,461; sheep, 15,254,198; pigs, 369,992. These numbers do not include the animals in the possession of aboriginal natives, no estimate of which can be given: while, however, possessing a considerable number of horses, they own but small numbers of sheep and cattle. The export of wool has grown, since the first settlement of the colony in 1869, to an export in 1888 estimated in value at £3,115,008. In ten years the increase in the quantity has been at the rate of 124 per cent. During the last few years the export value of wool has diminished, this being attributable partly to the increased manufacture of woollen goods in the colony, and partly to the lower price of wool in the European markets.

Within the last few years new employment has been found for capital and labour in New Zealand by the establishment of refrigerating-works. Beginning in 1882 with an export value of £19,000, the shipments of frozen meat have increased in five years so rapidly that this item now occupies third place in the annual value of exports, the total declared value of frozen meat exported in 1888 being £628,129. At the works of the New Zealand Refrigerating Company, at Dunedin and Oamaru, there were frozen 146,591 sheep and 460 cattle during 1887; and at the factory of the Wellington Meat Export Company there were frozen 104,249 sheep and 660 head of cattle. The charge made by the latter company for freezing meat is stated to be  $\frac{2}{3}$ d. per pound in all. A large quantity of dairy-produce, chiefly of butter, was also exported to England the same year by the aid of refrigeration, and there appears good reason for supposing that the channel to the world's market thus opened by science will add very materially to the value of the pastoral and agricultural

industries of the colony.

Gold.—Second to wool only in value as an export is gold, which was discovered in 1842, less than three years from the foundation of the colony; but it was not practically worked until 1852, when the mines at Coromandel first attracted attention to the district of Cape Colville Peninsula, which at the present time forms the chief seat of true mining operations in New Zealand. The yield from those mines has up to the present time been over four and a half millions sterling; but this is small when compared with the quantity of alluvial gold obtained more recently in the South Island. The principal quartz-mines in the North are in Coromandel and in the Thames districts, about thirty miles apart. In those localities the reefs have been "proved" to a depth of over 600ft. below sea-level; but the best mines have as yet been principally confined to the decomposed and comparatively superficial rock. Veins have been discovered, and gold obtained, at all levels on the ranges, from the sea-level to an altitude of 2,000ft. The quantity of gold that has been obtained from some of those quartz reefs is very great; and for considerable distances the quartz has yielded very uniformly at the rate of 600oz. to the ton. Such reefs are, however, very exceptional in New Zealand, as elsewhere. Auriferous reefs are also extensively worked in the schistose rocks of Otago, and they occur at all altitudes, from the sea-level to a height of 7,400ft., the most elevated gold-mine in the Australasian Colonies being that opened during the year 1878 on the summit of Advance Peak, near the Wakatipu Lake. Several promising reefs have also been found in the Westland goldfields, amongst which may be mentioned a reef of auriferous stibnite at Langdon's Creek, near Greymouth, which yields from a few ounces to 99oz. of gold per ton; but up to the present time these reefs have not received the attention they deserve, except at Reefton and a few other localities. The importance of Reefton as a well-established mining district may be judged of from the fact that nine mining companies there, during the single year ending 31st March, 1878, divided as profit the sum of £63,508 among the shareholders. So far as this more permanent form of gold-mining is concerned, there is every reason to feel confident that it is still in its infancy in the colony, and that it only awaits the judicious application of capital for its development to a vast extent. Alluvial gold is chiefly found in the South Island, in the districts of Otago, Westland, and Nelson, in which mining operations are carried on over an area of almost 20,000 square miles. alluvial diggings at Collingwood were discovered in 1858, those of Otago in 1861, and in 1864 the goldfields near Hokitika proved a great attraction to the mining population of New Zealand. The richest alluvial diggings in Westland usually occur in places very inaccessible for water-supply, the streams having cut their channels much below the surface of the country, so that an organized system of irrigation is necessary to obtain the required amount of water for the gold-washing. The sea-beaches are often highly auriferous, but only the shallow leads have been hitherto worked, owing to the influx of water. The recent adaptation of the "Wellman" and "Ball" suction dredger will now enable the deeper leads all to be successfully worked, so that a good revival of this form of alluvial gold-mining may be anticipated. The value of the gold exported from New Zealand for the year 1888 was £914,309, making the total value of New Zealand gold exported, from the year 1857 to 31st December, 1888, inclusive, £44,956,885.

Copper and other Minerals.—Copper, which in the earlier days of the colony formed a very important item of export, has of late years almost entirely disappeared from the Customs returns. Its value as an article of export has been more than replaced by the more precious metal, silver, that which is exported from the colony being chiefly extracted from the gold obtained at the