DREDGING.

I now come to another most important branch of the gold-mining industry—dredging. When dredging-machines were first introduced by Messrs. Gibson, Brooke, Smith, and Wellman, they proved failures, for the reason that, although the principle was good, their construction was defective. The dredges at first were too small, and the washing appliances were of the crudest kind. But, as year by year passes by, improvements are being constantly made which render these machines more applicable to mining every day; and I venture to predict that the day is not far distant when a very large number of these dredges will be profitably employed on the ocean-beaches on the West Coast, where formerly they were all failures, as well as for working comparatively shallow wet ground, such as that in Waipori Flat, where three dredges were working last year. The whole of the dredges now at work on the different rivers, creeks, and beaches, answer admirably as far as lifting the materal is concerned, but their chief defect lies in the appliances for saving the gold. It is well known by those who are acquainted with working the auriferous sands on the ocean-beaches, that to rush the material through sluices with a large body of water renders it almost impossible to save the gold, which is of a fine scaly character, requiring the sand to be separated from the stones and coarse shingle, and treated carefully on wide tables covered with plush, blankets, or baize. The washing appliances on these dredges are, however, becoming more perfect.

COAL-MINING.

I will now refer to a branch of the mining industry which has in the past made rapid strides, and will continue in the future to steadily progress, in proportion to the increase of the population and enterprise displayed in the establishment of other industries, and the opening out of foreign markets for our coal. The difficulty in finding a foreign market is becoming greater every year, owing to the development of the Japanese coal-mines; and in future years the large deposits of coal in China, if worked and shipped away, will enter largely into competition with coal coming from any of the Australasian Colonies, as the cost of labour in both Japan and China is very small. Indeed, the price paid for labour in these countries would hardly be sufficient to provide bare food for unmarried men in these colonies. It is only, therefore, owing to the superiority of our coal that we can hope to compete successfully with coal from other countries outside the colony.

During last year, the total output from our mines amounted to 673,315 tons, and the quantity imported from the Australian Colonies was 125,453 tons, making the total output and coal imported to be 798,768 tons; while the quantity of coal exported was 84,414 tons. But of this amount, 56,245 tons was used in coaling the Direct steamers, and therefore may be treated as consumed within the colony, leaving the net export to be 28,169 tons. The consumption of coal, therefore, within the colony last year was 770,599 tons, as against 765,019 tons for the previous year. Details will be seen on reference to Tables Nos. 5 to 10 annexed. The increased output last year as against the former year was less than it has been any year since our coal-mines were opened, it being only 4,521 tons, while the coal imported last year showed an increase of 135 tons; but this quantity will always fluctuate year by year in proportion to the quantity of produce we can dispose of in the Australian markets, as it is cheaper to bring back coal as ballast, if only the same price can be got as it cost to put it on board the vessels and pay wharfage rates and harbour dues. The net export last year was 924 tons less than for the former one; and no increase in this direction may be expected until there is a class of vessels which can carry at least 3,000 tons on one bottom from the ports of Westport and Greymouth, as it is only on the west coast of the Middle Island that the superior class of bituminous coal is found, and it is to this class of coal especially to which we shall have to look for a largely increased output from our mines.

Taking the output of the different classes of coal from our mines last year, there were 406,828 tons of bituminous coal; 89,549 tons of pitch coal; 149,460 tons of brown coal; and 27,478 tons of lignite; as against 387,839 tons of bituminous coal; 96,979 tons of pitch coal; 161,904 tons of brown coal; and 22,072 tons of lignite for the former year: showing an increased output of 18,989 tons of bituminous coal, and 5,406 tons of lignite; while there was a decrease in the output of 7,430 tons of pitch coal, and 12,444 tons of brown coal, from the quantity raised the year previously. It is, therefore, gratifying to find that there is a steady increase year by year from our bituminous mines, this being the class of coal from the export of which alone we may expect this branch of the mining industry to rapidly expand. The pitch and brown coals will only be used within a certain radius of where it is raised, as it