

River for a number of years, and more recently on the Shotover River, as well as in working wet ground on Waipori Flat, there is no reason why they should not be made profitable ventures if ordinary care is taken in prospecting the ground before incurring expense in procuring machinery.

#### COAL-MINING.

I now come to one of the most important branches of the mining industry—namely, coal-mining, which is steadily progressing year after year in proportion to the increase of our population requiring fuel, and to the establishment of industries using coal for generating motive power. The increase in the output from our mines where lignite, brown, and pitch coal are obtained can only take place as the demand for local consumption increases, for, although the best of these classes of coal can be carried some distance from the mines, its supply is limited to the consumption, it may be said, within a radius of 150 miles, as no large stock of it can be kept on hand on account of its breaking up and crumbling away by exposure to the atmosphere. It is therefore only from bituminous coal-mines that a large increased output can be looked for; and, as our principal bituminous coal-field is on the western slope of the main range in the Middle Island, the yearly increased output from the mines in this part of the colony cannot be expected to be much greater than hitherto until the harbours at Westport and Greymouth are completed to such an extent that vessels carrying 3,000 tons on one bottom can leave these ports, so as to carry the coal to markets outside of the colony. No large sudden increase in the output from our mines need be expected on the completion of these harbours, as it will take some years to open up the mines and find foreign markets for the coal. Seeing that there is now a large number of coal-mines being worked in Japan, where the cost of labour is extremely small, the coal from that country being taken to different ports in India and South America, it is only owing to the superior quality of our coal that we may hope to find a market, and this will take a certain time to establish. We may, however, reasonably expect that coal properties in this colony, on the completion of the West Coast harbours, will be able to compete with those in New South Wales in supplying coal to any of the other Australian Colonies.

During last year the total output from all the mines of the colony was 668,794 tons, as against 637,397 for the previous year, thus showing an increase in the output of 31,397 tons. The quantity of coal imported was 120,775 tons from New South Wales, and 4,543 tons from other countries, making 125,318 tons, as against 110,939 tons imported for the previous year. This shows an increase in the quantity imported for the previous year of 14,379 tons. In regard to importation of coal from New South Wales, the quantity has varied from 98,241 tons to 144,442 tons per annum. The total quantity imported from New South Wales during the last twelve years was 1,428,309 tons, which is equal to an average annual importation of 119,026 tons. It may be said, taking one year with another, that the importation of coal from New South Wales has varied very little. A great deal of this is due to the coal being carried as back-freight by vessels trading with produce between here and Australia, and also by coal being used to fill up as dead-weight in vessels carrying timber.

Taking the output from the mines last year and the quantity of coal imported, it makes a total of 794,112 tons, as against 748,366 tons for the previous year. The quantity exported last year was 99,464 tons, but out of this 70,371 tons is returned by the Customs Department as coal exported to the United Kingdom, which means that it was used for coaling the Direct steamers; this may fairly be termed consumption within the colony on the same basis as supplying coal for the Union Company's steamers in the intercolonial trade; therefore, on this assumption, the net export last year was 29,093 tons, out of which 6,300 tons was of foreign produce. Deducting the quantity of coal exported it leaves the consumption within the colony last year as being 765,019 tons, as against 714,932 tons for the previous year, which shows an increased consumption last year of 50,087 tons. It is, however, very gratifying to find, notwithstanding the quantity of foreign coal consumed in the colony, that the demand is gradually increasing year after year. The consumption last year was 432,574 tons more than what it was in 1878.

Of the total quantity of the different classes of coal obtained in the colony since the records have been kept by the department, 3,531,749 tons is bituminous coal, 2,275,364 tons brown coal, 1,112,965 tons pitch coal, and 211,708 tons of lignite—making a total of 7,131,986 tons. During last year the output from the mines consisted of 387,839 tons of bituminous coal, as against 323,712 tons for the former year, thus showing an increase