

drifts ; the construction of mining machinery, water-races, dams and reservoirs ; a knowledge of the rocks and formations where different minerals are likely to be found : indeed, a thorough knowledge of mining requires many years of toil and study, in both the technical and practical branches. As year by year passes we find the necessity for men who are engaged in conducting large mining operations having a practical and technical knowledge of the branch they are engaged in, as it is only by this means that the mining industry will be placed on a more solid and commercial foundation, and give greater encouragement for the investment of capital to open up and develop our mineral wealth.

The quantity and value of gold, minerals, and kauri gum produced in the colony since 1853, up to the end of December last, will be found in Table I., annexed, whilst Tables III. and IV. give the detailed production year by year. It will be seen from Table I. that the total value of gold and silver obtained amounted to £46,560,626, and the total value of minerals and kauri gum £8,973,020 ; making a total of £55,533,646 : whilst the value of the mineral produce exported and coal consumed within the colony for the year ending the 31st December last was : Gold, £773,438 ; silver, £6,162 ; antimony ore, £11,121 ; manganese ore, £1,004 ; hæmatite ore, £5 ; unclassified minerals, £273 ; coal, £67,003 ; coke, £3,334 ; coal consumed within the colony, £282,933 ; and kauri gum, £378,563 : making a total of £1,523,836, as against £1,493,167 for the previous year. These figures show that, although in some branches of mining there has been a decrease in the production last year, nevertheless the totals show an increased value of £30,669, which proves that the industry is gradually progressing.

#### GOLD-MINING.

In referring to the gold-mining industry, I regret to have to state that the yield last year shows a considerable falling-off from the previous one, and the lowest yet recorded ; but if honourable members will refer to the reports of the Inspecting Engineer and Wardens, they will see that the cause of this is to some extent attributable to the extremely dry season, which prevented hydraulic sluicing operations being carried on. The quantity and value of gold obtained from the different districts for the year ending the 31st March last, will be seen in Table II., annexed, the total quantity being 171,080oz., representing a value of £685,321 ; whilst the yield for the previous year was 201,760oz., representing a value of £803,174 : showing a decrease in the yield of 30,680oz., or a money value of £117,853. Notwithstanding the large falling-off last year, it is gratifying to find that the yield from the quartz-mines—in the two principal fields of the colony—shows an increase of 6,122oz., representing a value of £26,343. The decrease in the production of gold last year was : From Marlborough, 4,819oz. ; Nelson, 1,983oz. ; West Coast, 7,274oz. ; and Otago, 23,286oz. ; whilst the increased yield from Auckland was 6,682oz., the latter being due to the Kuao-tuna and Waihi gold-fields. In taking the production of gold last year, the West Coast contributed 50·7 per cent. ; Otago, 24·4 per cent. ; Auckland, 22·6 per cent. ; and Nelson and Marlborough, 2·3 per cent. The returns for the past year show that the percentage of gold produced is greater on the West Coast and in the Auckland District, and less in other districts than it was for the previous year. I will now, Sir, refer to the different branches of gold-mining—namely, quartz, alluvial, hydraulic, sluicing, and dredging.

#### QUARTZ-MINING.

Quartz-mining may be considered the most permanent branch of the gold-mining industry, but one in which very little has yet been done to test the lodes at deep levels. Rich discoveries have been made near the surface, and several mines have been worked to a depth of 500ft., but below this depth there are only two mines in the North Island, and three in the Middle Island, in which any prospecting has been done. There is a large extent of an auriferous and argentiferous belt of country on the Hauraki Peninsula, extending beyond Te Aroha, and also a belt of country from Puhipuhi to Cape Brett, which abounds in mineral lodes, where little or no prospecting has been yet done. And when we come to the Inangahua district, there is a wide belt of country, known to contain auriferous lodes, extending from the Big River to the Mokihinui, a distance of 60 miles, and it may be said that some portions of this belt have not yet been trodden by the foot of man, and very little prospecting has been done except in the localities where the mines are being worked. Again, in Otago, where rich deposits of gold have been obtained in the alluvial drifts, and where in many places the gold is intersected with fragments of quartz, yet comparatively few payable auriferous lodes have yet been discovered.