

A storage dam has also been constructed near Naseby. The two works just named were undertaken by the Government, reference to their object being made in my Statement of last year.

DREDGE MINING.

The total number of dredges are returned to the 31st December last as follows: Working, 201; standing, 52; building, 23; under removal, 14; wrecked, 2: total, 292. This shows an increase of eighteen working dredges as compared with those actually employed at the end of 1901. The industry may be said to have fairly settled down after the excitement of the "boom" period of from two to four years ago, and steady returns can reasonably be expected from this branch of mining for a considerable time to come. In some instances dredges were placed on claims which were more suitable to the method of hydraulic mining, and have been superseded by the latter system. On the West Coast it was found that much stronger machinery was required to work the tight wash frequently met with than is necessary for the more free gravels of Otago, and the experience so gained should be of value in the design and construction of dredges intended for the West Coast District in the future.

The general design of dredges has been fairly well settled by experience, but improvements in the details of working-arrangements and in respect to the methods of saving fine gold continue to be made from time to time.

It is now necessary that the masters of dredges working on deep or swift-flowing streams should be the holders of certificates of service or competency. These certificates are issued by the Board of Examiners appointed under the provisions of "The Mining Act, 1898."

PROSPECTING.

The sum of £1,131 0s. 4d. was expended in subsidies for the year ending the 31st March, 1903, to prospecting associations and parties of miners actually engaged in prospecting.

THE CYANIDE PROCESS OF GOLD-EXTRACTION.

In 1897 the patent rights of this invention were purchased for New Zealand by the Government in order to place the process at the disposal of mine-owners in this colony. The results obtained from its adoption at quartz-mines have amply justified the action of the Government in this matter, and the amount of royalty received up to the 31st March, 1903, is £6,141, which is over three-fifths of the sum paid to acquire the rights for the colony.

WATERCOURSES FOR TAILINGS, ETC.

The sum of £3,215 has been paid during the year as compensation in respect to lands adjacent to five rivers and streams proclaimed as water-courses into which tailings and mining *débris* may be discharged. Channels for carrying off storm-water and tailings-water from the dredges working at Charlton Creek and Waimumu have also been put under construction.

SCHOOLS OF MINES.

During the past eighteen years the aggregate expenditure on schools of mines in the colony has been £36,114 11s. 5d. This amount includes the grants made to the Mining School in connection with the University of Otago at Dunedin.

The schools have proved of considerable value to a large number of students aspiring to become qualified to hold responsible positions in connection with mines and batteries.

COAL-MINING.

As already intimated, the returns from our coal-mines show a steady increase, the production for last year being 1,365,040 tons, or 125,354 tons in excess of the previous year's output.