

works of the Virgin Flat Gold-mining Company (Limited), no developments of importance have been reported. Hydraulic and alluvial mining operations in the Grey Valley, also at Barrytown, Kumara, and in the locality of Hokitika continue to afford employment to a large number of persons; upwards of fifty men are also employed at and in the vicinity of Ross.

The Southern goldfield—which includes the Otago, Southland, and Fiord Districts—is almost entirely dependent for its gold output on the operations of alluvial and hydraulic mining in conjunction with dredging; and although new installations of hydraulic plant of any magnitude have been few in number during the past year, the industry has been very steadily carried on at the various centres, and fairly good returns obtained. This form of mining appears in every way likely to support a considerable percentage of the population for many years to come.

As the shallow diggings of the West Coast and Southern Goldfields are becoming exhausted, it is found that the number of Chinese diggers is gradually decreasing.

DREDGE MINING.

During the past year a large number of dredges have been under construction both in the West Coast and Southern Districts. Of these, several have got to work; others are not yet completed. The numbers on the 31st March last were as follows: Working, 145; standing, 11; undergoing removal, 4; building, 122: total, 282.

In the South, the practicability of dredge-mining has been amply proved, but the working of river-beds and flats on the West Coast by dredges is not yet so fully developed owing to difficulties of an engineering character. No doubt these difficulties will be got over as further experience is gained, and when this has been accomplished there appears every reason to believe that dredging on the West Coast will become a steady industry. Even with the dredges now at work, evidences have not been wanting to show that gold exists in payable quantities in several parts of the West Coast District where other methods of working are, under existing conditions, largely out of the question.

It is quite apparent that where the gold is fine, there is ample room for improvement in the methods adopted on dredges for saving the gold, and this applies specially to the beach deposits. During the last two or three years there has been a decided tendency to increase the lifting-capacity of dredges, but it is possible this may be overdone, inasmuch as the improvements in, or extensions to, appliances for saving the gold have not kept pace with the increased capabilities for the raising of the gravels. It is to be regretted also that old and somewhat obsolete river dredges have, in some instances, been adopted for dredging on flats where the conditions are very different from river-dredging. Such unsuitable machines cannot be expected to be unqualified successes, and the opinion that dredges ought to be designed to efficiently work their ground, and to save the gold which the ground contains, cannot be too strongly emphasized.

The wild excitement and rash speculation which characterised this branch of mining from one to two years ago has, happily, been checked. Liquidations of companies floated during the boom are steadily in progress, and when the worthless claims which were foisted on an excited and easily gullible public have been weeded out the industry is in every way likely to settle down again to a steady, legitimate, and profitable branch of mining operations.

During the early part of this year the output of working river dredges was seriously curtailed in consequence of the phenomenally high state of the rivers both in the West Coast and Southern Districts.

The question of working the auriferous black-sand deposits is one to which attention is being directed, and, as the successful extraction of the gold is a matter of very great importance to the mining industry, it has been decided by the Government to offer a bonus of £2,000 for the introduction of a machine or appliance which will satisfactorily treat these sands on a large scale.