

but the mountainous nature of the country would require very considerable outlay on roads before it could be brought on to the ground. Generally, quartz-mining in Otago is heavily handicapped owing to the distance from timber supply, but there is the compensatory advantage of a country well opened up with roads, and farming settlements close to the mines, and a very great deal of the initiatory work of prospecting gone through. Although success in quartz-mining in Otago has been confined to a few mines as yet, there are good grounds for believing that they are but the earnest of what is to come. The discovery of quartz reefs at Longwood, by Hayes' brothers, has widened very considerably the extensive area over which reefs were known to exist. Mr. Wood reports the stone as very rich, and the field as likely to furnish some very rich claims.

There are also discoveries of reefs referred to by Mr. Simpson in his district, and on the West Coast, at Black Ball, Grey Valley, and at Taipo more recently, prospecting on newly-opened reefs has taken place.

#### LEASES.

The return (No. 16) of gold-mining leases in force on the 31st of March last shows a marked decrease in the total number of leases and the rental derivable from them; but since the date of this return numerous applications under the Mines Act have been received, especially in Otago, and the reduction of the rental to £1 per acre under the above Act will probably have a very decided and general effect in extending this class of holdings for mining purposes.

The return (No. 17) of agricultural leases shows an increase of business as compared with last year. The effect of the increased area allowed by the Mines Act will be shown by next year's return.

#### MAINTENANCE OF GOVERNMENT WATER-RACES UNDER THE CONTROL OF THE GOLD FIELDS DEPARTMENT.

These are—

|              |    |    |    | Length in miles.  |    | Cost.    |
|--------------|----|----|----|-------------------|----|----------|
| Thames       | .. | .. | .. | 9 $\frac{3}{4}$   | .. | £70,018  |
| Waimea       | .. | .. | .. | 28 $\frac{1}{2}$  | .. | 140,830  |
| Nelson Creek | .. | .. | .. | 24                | .. | 90,008   |
| Mount Ida    | .. | .. | .. | 65                | .. | 61,416   |
|              |    |    |    | 127 $\frac{1}{4}$ |    | £362,272 |

From the table (No. 20) of revenue and expenditure, it will be seen that for the twelve months ended 30th June, 1878, the expenditure on the Nelson Creek and Mount Ida races exceeded the revenue, and on the Waimea and Thames revenue was in excess of expenditure. The current expenditure is for management and maintenance, and probably will not be so much for this year as for the last; but, considering the length of races, their liability to slips, and the amount of fluming and other works which must be frequently inspected and kept in order, the maintenance will always bear heavily on the revenue, and any margin that may remain will be but a small contribution towards interest of money sunk in prime cost of construction.

#### “THE MINES ACT, 1877.”

There have been several suggestions made for amending this Act, but as, with the exception of the subject of water-race licenses, none are of pressing importance, they can lie over until more experience of the working of the Act has been obtained. The difficulty in respect of water-race licenses is, that section 31 and its subsections provide a complete system of obtaining water-rights, and the Regulations at Appendix D (made under section 51, subsection 11) provide another and independent system for the same purpose. A memorandum upon this subject has been prepared and referred to the Gold Fields Committee of the House of Representatives.

#### GOVERNMENT AIDS TO PROSPECTING.

The published conditions upon which aids to prospecting could be obtained from the Parliamentary vote of last session have led to the formation of several prospecting associations in various parts of the colony, and many applications for the Government subsidy have been received. Those which have been granted, after satisfactory inquiry, include subsidies to associations formed at Ohinemuri, Westland (North and South), and Marlborough. As these various prospecting parties have only recently commenced operations, and the winter season has been exceptionally severe, there is no information at present as to results; but next year's report upon this subject will show the wisdom or otherwise of granting these subsidies. There are at the present time some applications under inquiry, and no doubt many more will be made as the spring advances.

In this connection may be mentioned that several applications have been made for scientific advice on quartz reef discoveries, and on the best method of saving gold. Professor Ulrich visited and reported on the reefs at Longwood, and his services have been asked for the West Coast on the other subject mentioned; and topographical maps are now being prepared for Dr. Hector, with a view to the geological survey of the country around Lawrence.