

district. The low-level tunnel entering at Black's Point, and trending towards Waitahu River, is now in 1,700ft., and has got into better country than was met in the first section of the work. This work was meant, in its initiation, to be driven through the mountain ridge for two and a quarter miles, but whether this is ever consummated will depend on circumstances. Its object is to test the numerous quartz-lodes by cutting them through at the deep levels, presuming they go down so far; also to afford drainage of the mines above; and further to lessen the cost of working them, by allowing the quartz to be sent down by shoots to the tunnel, instead of the more expensive mode, now in vogue, of each mine raising its stuff to the mountain surface. It is also proposed, if these anticipations are verified by results, to have one or more large batteries at Black's Point, where all the quartz would be crushed. There is a similar tunnel being driven in from Boatman's to test the deep levels of the reefs there. Both of these great works are subsidized by the Government, the Black's Point to the extent of one-half the cost, and the Boatman's to a less extent.

The results of the Otago quartz mines in the Lake District at Macetown, Skipper's, and the Invincible Mine, Rees River, head of Lake Wakatipu, all show a very marked increase in yield over last year's returns. This, as in the Reefton District, can be ascribed to the fruits of a great deal of past dead work beginning to appear, and to the greater facilities in procuring timber and machinery, owing to the very great improvements in the roads executed during the last two or three years. The Macetown Road, between Arrowtown and that place, has actually cheapened the cost of each main timber prop by no less a sum than 3s., and ordinary sawn timber by 12s. the hundred. Encouraged by this result, the department has been using every endeavour to improve the road to Skipper's, which at present is and indeed always has been, at one point—the zigzag—a very great obstacle to the transport of machinery, which has either to be packed on horses, or, when that is impracticable, as in the case of the larger and heavier pieces, dragged along on sledges and let down the steeps of the zigzag by ropes or other laborious expedients at great cost and labour. After many delays, which need not be here detailed, a survey and engineering section has at length been made of a road to be cut out of the rocky bluffs and formed along steep sidings for about two miles, so as to avoid the dreadful zigzag. Tenders are now called for the work, the cost of which will necessarily be very considerable; but the advantage of having a road of good mountain grade not worse than 1 in 10, and that only for a short distance, in place of 1 in 3 at the zigzag, will be a vast boon to the miners and settlers. And it is well worthy the expenditure, for there are many well-known reefs awaiting development, but, under the excessive cost of transit of machinery and other goods, they cannot unless very rich be worked to pay.

Attention was called in the previous annual report to the Invincible Mine, Rees Valley. The past year's experience has more than verified the hopeful anticipations regarding that mine. There is a very large body of stone, and the yield per ton has risen from 8dwt. to 15dwt., the year's yield of gold being 2,276oz., and £2,915 was paid in dividends. The success of this mine is held to be very encouraging in respect to the future extension of quartz-mining in that part of Otago, because Skipper's is on one side of the range and the Invincible on the other, and, in the gorges in the great dividing range between, there are many reefs exposed which either have never yet been prospected, or, if so, only very superficially.

#### OUTLAY ON GOLDFIELDS.

During the twelve months ending the 31st March, 1885, works to develop the goldfields were sanctioned to the value of £34,797. This, with the authorities for expenditure of the two previous years, gives a total of £127,549, of which two-thirds are for roads and tracks, and one-third for water-supply, prospecting, and sludge and drainage channels. The outlay on roads is much the more satisfactory expenditure, as it not only opens out the country for mining but also for its