be remembered that this is the lowest cost for any week that the furnaces were at work, the maximum cost being nearly £4 per ton. The difference in cost appears to be that the Probert furnace is larger, consequently smelts more ore, and only requires about the same number of men to work it. However, Mr. Hurley contemplates, when all the improvements he is now making to the Pacific are completed, he will be able to treat the ore for about £2 per ton. This company has smelted about 4 tons 6¾cwt. of silver from the commencement of the year to the 29th of March, the ore averaging 45ozs. per ton. Since my return to New Zealand I have received a copy of the Directors' special report of the 8th April last, with reference to the working of the mine and smelting operations with Messrs. La Monte and Kahlo's "Probert smelter," from which the following is an extract: "Your directors deem it necessary to advise you specially of the reasons of the non-payment of a dividend. In the report of the 3rd December last you were informed of the work expected of the Probert smelter. It was estimated that it would smelt 60 tons of ore per day, instead of which it has only averaged 25 tons. If the Probert smelter, during the ninety days that have elapsed since it commenced smelting for this company, had performed the work your directors had a right to expect, it would have treated 4,950 tons of ore, yielding bullion of value, say, £50,128, at a smelting cost of £5,940, with coke at Sydney prices, whereas the actual results show the total quantity of ore treated by the Probert smelter to the 23rd March, 1885, to be only 1,915 tons, yielding £19,639, at a smelting cost of £5,752, a sufficient explanation of the nonpayment of a dividend. A total of 140,794ozs., or 4 tons 6cwt. 2qrs. 21lbs. of silver has been shipped to London since the commencement of the year to the 29th March. There was also at the mine on the 29th ultimo 29,882ozs. of silver, already smelted, awaiting refining, which will come forward weekly as 'finished' for shipment. The cost of smelting the ore from which the silver was produced was £13,921, or equal to £3 4s. 2¼d. per ton. The value of the whole quantity exported and on the mine is £40,535, thus leaving a surplus of £26,614 above cost of treatment. The average value of the ore already furnaced has proved to be 45ozs. to the ton, or, at 4s. 6d. per oz., equal to £9 2s. 6d. value. It has hitherto cost to mine, smelt, and refine, say, £4 per ton, leaving a net profit of £5 2s. 6d. per ton. There are now furnaced weekly 300 tons of ore, which will give a weekly profit of £1,537 10s. The four new smelters to be erected will have an actual capacity of 20 tons per day each, which would, exclusive of the Probert smelter, and allowing an average of one smelter to remain idle for repairs, give a weekly reduction of 560 tons of ore, returning, at 45ozs. to the ton, a weekly profit of £2,870, or £149,240 per annum."

There are several other mines in this district which promise to give good returns; but, as silver mining is only a new industry in the colony, very little has yet been done to erect plants to treat the ore.

Silverton.

This is a township recently sprung into existence owing to rich silver lodes having been discovered in the district. It is the head quarters of the mining population, said to amount to about three thousand at the time of my visit. It is the most extensive mineral district I have seen in either Victoria or New South Wales. It is situated in the north-western portion of the New South Wales territory, close to the boundary of South Australia, in the Barrier Ranges, being about 850 miles by road from Sydney and 330 miles from Adelaide. The railway on the South Australian side is within 180 miles of Silverton, but the New South Wales railway is not within 400 miles of this place; therefore all the supplies at the present come from Adelaide.

The large extent of metalliferous formations in this district, together with the rich silver lodes that have been discovered, will in a few years make this field capable of supporting a large mining population; but at the present time there is very little being done beyond prospecting. It will require a great amount of capital to open up the mines before they are properly developed and to erect plants on the ground to treat the ore.

There is a great deal of speculation in taking up mining leases of 40-acre blocks (in the vicinity of a known lode) in the hope that prospecting may reveal payable ground. During my stay in Silverton Mr. Wilson, one of the principal legal managers of the mining companies, kindly took me to some of the principal mines that were at work, and afforded me a deal of information respecting the field. He likewise gave me a number of specimens from the various mines that I visited. As illustrative of the extent of the field, I may mention that Mr. Wilson informed me that a party of miners had just arrived in Silverton to make an application for a lease of ground where they had found some rich ore about a hundred miles distant to the northwards.

The mines I visited were the "Broken Hill," "Pinnacles," "May Bell," "Day Dream," "Apollyon," and the "Umberumberka;" but, as some of these mines are forty miles distant from each other, the time at my disposal would not admit of visiting more. The chief object was to see the various descriptions of ores and the formation of the lodes.

The Broken Hill Company's mine is situated in the Mount Gibbs District, about twenty miles in a south-east direction from Silverton, on a rocky broken ridge which stands about 200ft. above the level of the surrounding country, forming a conspicuous feature in the landscape. It is on the crest of this ridge where the lode crops out, presenting a dark-brown rugged mass of ore, which can be traced for a long distance on the surface. The outcrop of the lode varies in width considerably; in some places it is 10ft., whilst in others it is over 100ft. in width. It likewise varies considerably in character in different places along the outcrop, consisting of ferruginous quartz, felspar, gossan, and oxide of manganese, having in some places crystallized carbonate of lead. Shafts have been sunk on the lode in various places, the deepest of which is 120ft.; but, as the underlie of the lode dips about 50°, the principal sinking was on the rock adjoining the lode. It afforded me a good opportunity of seeing the character of the rock, which was highly micaceous slate regularly stratified. A cross-cut was put in through the lode at 20ft. from the bottom of this shaft, showing it to be 14ft. thick, and the character of the ore was slightly altered. It contained large masses of argentiferous gossan and more galena than was shown on the surface. I was subse-