If the Owen reefs are to pay—of which I have no doubt—under any circumstances, the men who are there now may be trusted to make them do so. Most of them are veterans, who have taken a leading part in the opening of many a field; and all of them, so far as one can judge from one day's intercourse with them, are of the successful mining stamp.

I regretted not seeing more of Mr. Byrne, who, with Mr. Bulmer, has done so much to prospect and open up the Owen. We met him on his way to Nelson just as we were entering the Owen country; but he did not part with us until he had made all arrangements for our comfort and the inspection of the district during our visit.

Mr. Fenton, Goodlet, and myself reached Nelson on Saturday, the 16th April; and from our arrival till our departure, on the 24th, we were surrounded with hosts of friends, all intent on making our visit pleasant and our mission prosperous. The Mayor (Mr. Fell) immediately put the Town Hall at our disposal during our stay for the purposes of the lectures and classes. Messrs. Bayfield and Washbourne, with Dr. Tatton and others, on behalf of the mining industry, at once put us in possession of all the information procurable about the minerals, mines, and mining generally in the Nelson and Collingwood Districts, and began to agitate for the establishment of a school of mines at Nelson. To this I was at first opposed, not realizing the great variety of valuable minerals in these districts and the immense extent of some of them, and not being aware then, as I am now, of the devoted enterprise with which Nelson men invested on the mining industry and engaged in it. I had not then, moreover, an adequate idea of the splendid educational institutions of Nelson, and the scholarly traditions and high culture that characterize the community. I was very glad indeed to change my mind as to the desirability of instituting a school of mines there when this state of things dawned on me.

After making arrangements for lectures in the City Council Chambers on our return, and leaving Goodlet to make the preparations, Mr. Fenton and myself proceeded by steamer on the 18th to Collingwood, which we reached the same evening. Here we were met by Messrs. Washbourne and , who made arrangements for taking us through the mining district the following day.

As we had a long day's work before us, we started at 6 in the morning for the Parapara iron-country and Messrs. Washbourne's hæmatite-paint works. Here there is exposed an immense formation of brown and red hæmatite and spathic iron-ore, which is estimated to yield something like twenty-five or thirty millions of tons of metallic iron. The ore is freely exposed on the surface, in boulders of every size and in outcrops of vast lodes, all over a well-defined district of considerable area. There will be no difficulty in the working and smelting of it, as there is a virtually-unlimited supply of coal of unsurpassed quality close by, and also plenty of limestone for fluxing the charge.

It is strange that, with this magnificent deposit of the best iron-ore, and coal, and lime on the seaboard at Collingwood, all side by side, and close to a harbour that can be easily made available, and with so many men that periodically turn up in our cities to join the cry of the unemployed, no practical steps have yet been taken to manufacture here all the iron and steel that are required for the colony. Surely, with the present and prospective requirements of the great Midland and Nelson Railway, there is offered sufficient inducement to utilize this bountiful profusion of mineral wealth with which nature has endowed our country.

Messrs. Washbourne's hæmatite-paint industry here is carried on in a very satisfactory manner, though, owing to the limited demand, not on a very large scale. The stone is coarsely broken up, fired in kilns, crushed in a stamper-battery, ground to fine mud in berdans, sorted by gravity in settling-troughs, and then dried in wide open pans heated underneath, mixed into various qualities and colours, and packed for the market either dry or made up ready for the brush with the necessary oils. It is surely a mistake to import hæmatite paint into New Zealand.

Leaving the Parapara, we resumed our journey, struck into Glengyle, inspected the alluvial diggings in that valley, and crossed over to see the silver-lead and nickel lodes up the river. We saw on our way occasional fragments of black or magnetic oxide of iron, micaceous ironstone, and spathic iron-ore of excellent quality; also large outcrops and bluffs of steatite and magnesian limestone.

From the shortness of the time at our disposal we were not able to estimate the probable extent of the silver-lead and nickel lodes, but we saw enough to make further prospecting and opening up what is already disclosed very advisable. We took samples of everything with us for analysis, which we have not yet completed.

From the silver-lead lodes we proceeded through the Red Hill country, and examined some of the company's quartz reefs in the tunnels. What is supposed to be their richest stone, however, was inaccessible, the tunnel being locked up.

We then visited Johnston's United Mine, at the head of Bedstead Gully, and were shown through by the manager, Mr. Heslop. Some of the gold-bearing quartz here is of a peculiar character, and throws a great deal of light on the formation of quartz reefs in general. I would not grudge travelling a long distance to see the admixture of true-reef or lode quartz with the siliceous conglomerates I saw cemented together in this mine. It amply confirms the infiltration theory of the formation of quartz reefs which I have been teaching so assiduously in the schools of mines for the last three years. The occurrence—rarely, I should think, seen to such advantage, and bearing so immediately on the clear comprehension of the processes by which our gold-bearing reefs were formed—would almost justify a pilgrimage on the part of the more enthusiastic geologists and mine-viewers of the colony.

We afterwards inspected some very skilfully-worked alluvial-conglomerate mines on a tributary of the Aorere River, and returned to Collingwood, which we reached at 8 p.m. Mr. Fenton then assayed two samples of local quartz, explaining and showing the process in all its details, in the blacksmith's forge, to an audience of about fifty miners, till 10 p.m.

A strong desire was expressed in many quarters to establish a school of mines in Collingwood; but, owing to the great extent of the district, and the distance apart at which the scattered parties