High School, had, before my visit, done splendid service in diffusing correct information about the purpose and scope of these classes, enrolling students and arranging generally for carrying out my proposals. A good example was set at once by the bankers, lawyers, doctors, and leading business people of Lawrence, many of whom did not miss one of the fourteen lectures delivered.

The teachers also, to the number of about fifteen, attended regularly. The Press at Lawrence, as, indeed, all over the goldfields, treated my scheme with the warmest advocacy, and great exertions were made to give the fullest reports of the lectures and of the work done in the testing classes. Indeed, to the goldfields Press I am under the greatest obligations for advocating and giving prominence to the scheme.

The example set by Lawrence was nobly followed by Naseby, Bannockburn, Cromwell, Alexandra, Arrow, and the other centres. There are many instances of miners riding in twelve to eighteen miles daily to attend the lectures; and at Naseby, Mr. Cogan, who had come in the beginning of the week on county business from Serpentine, some forty or fifty miles, stayed four days to work up the tests, and by his presence and influence convinced others that the movement was a step in the right direction.

At Naseby a great number of the leading residents took an active part in the classes—clergymen, bankers, teachers, doctors, business men, and miners attending day after day, and working harder than our ordinary students here to master the details of the subject. Over all the Otago Goldfields at least sixty miners gave themselves a holiday during the whole time of my visit at the various centres, so as to spend the whole day in testing the ores.

One of the most valuable features of my tour was the number of the excursion parties got up to visit the outlying fields. In these excursions from six to ten or twelve joined me, and our journeys extended to localities from twelve to thirty miles away. We often started—some in buggies, some on horseback—at 6 a.m., breakfasting on the way or at the scene of our visit. At Naseby we had quite a number of these most enjoyable and instructive excursions, got up by Messrs. Wilson, Brown, Petrie, McHutchinson, Guffie, Worsop, Johnston, Inder, &c.

In this way, and by spending every spare hour in visiting the mines and workings, I managed not only to say much on my own subject, but also to gain a great deal of useful information for myself. The intercourse between myself and the miners was always of the most direct and cordial description. I never engaged in any work in which I was supported by so many men of all shades of opinion so warmly as I have been throughout the whole of this tour.

The subjects of my lectures were such as the following:—

(1.) How quartz reefs were formed:
(2.) How gold came into the reefs:
(3.) How metallic ores in general were formed:
(4.) The formation of alluvial drifts:
(5.) The treatment of auriferous sulphides:
(6.) The chlorine process for extracting gold from pyrites:
(7.) Copper: its ores, tests, and smelting:
(8.) Lead and silver and their tests, and metallurgy:
(9.) The testing of metallic solutions:
(10.) Sodium amalgam: its manufacture, properties, and uses:
(11.) The amalgamation of copper plates, and their treatment to prevent the growth of green salts on them.

In the testing classes the students all assayed pyrites and quartz for gold; also the ores of copper, tin, lead, silver, iron, antimony, zinc, mercury. In some cases also water and coal were analysed, and scheelite. In these testing classes the students themselves did all the work: pulverizing the minerals, weighing the powder, dissolving or fusing it, precipitating, filtering, igniting, weighing, and calculating the results. At most of the centres visited I found arrangements had been made to insure the success of my classes.

At Arrowtown Messrs. Miller, Clark, Hornsby, Elliot, Sutherland, and Mackay had exerted themselves with this object, and formed the nucleus of an earnest and hard-working testing class. At Queenstown Dr. Douglas, the Rev. D. Ross, and Messrs. Wilmot, Hotop, Geisow, Ross, and Mehaffy took up the matter warmly, and carried it through in a most satisfactory way. At Cromwell Mr. D. McKellar and Dr. Stackpool had been at work for weeks before my arrival, and had everything arranged for commencing work at once. At Alexandra the Mayor, Mr. McDonald, and Dr. Lewis threw themselves heartily into the movement, and, joining the classes with the leading townsmen, gathered around me a large number of miners, who, during the three days of my stay, went through a good deal of useful testing.

From my experience on the Otago Goldfields, and from my intercourse with miners, I am convinced that unless the School of Mines here is speedily completed, so as to give a full curriculum in all mining subjects, the teaching staff would be with more advantage employed in teaching their subjects on the goldfields than they are here in our School of Mines. On the goldfields they will find plenty of eager, earnest, and intelligent students, who will bring a great deal of practical knowledge to bear on their more scientific studies. On the goldfields also there are the rock and alluvial formations, the mines and the minerals, and these are infinitely superior to sections and plans and diagrams on the blackboard for the purposes of real instruction in mining. Indeed, I never could understand how it is possible to teach the art and science of mining without the advantage of having the practice of mining and the reefs and drifts and mines themselves, and not mere pictures of them before the student. It seems to me quite impossible to dispense with these requirements in a thorough-going practical mining school. If the Council are unable to complete the mining school, by providing for instruction in geology, practical mechanics, and mine-surveying, it will, I think, be desirable to abolish the School of Mines here altogether, and to devote any means available to the support of technical classes in mining subjects on the goldfields. This might be accomplished in some such way as the following:—