

I lectured at the Bluespur on the 17th, 18th, 24th, 25th, and 26th January, and the 2nd and 3rd February, and at Wetherstone's on the 19th and 27th January, and the 5th February. To the Bluespur miners I lectured on "Gold," "Wet Testing of Ores," and "Dry Testing of Ores." Instruction was also given to the classes in testing by the wet and dry processes. The attendance throughout the course varied from twenty to fifty. Assaying of gold was also taught in Mr. Campbell's forge.

The lectures at Wetherstone's were very well attended, the attendance averaging about a hundred. The greatest interest was taken in the work done. I showed how the ores of the principal metals are tested, and, at the same time, had a number of the younger miners of the place testing the same ores under my supervision. I also showed the miners how quartz is assayed for gold. As the Wetherstone's people showed a great desire for acquiring a thorough knowledge of testing, it is hoped that next session more time may be spent by an instructor in this place.

From the 7th to the 13th February I lectured in Waipori. Here a school of mines has been established, and the miners were most attentive and enthusiastic. The attendance averaged 110. The miners there were taught how to test the ores of silver, lead, copper, mercury, platinum, tin, antimony, arsenic, and tungsten, both by the dry and wet processes. During two afternoons assaying was carried on in the local forge. Eighteen samples of auriferous stone were tested, giving results from nothing up to 8oz. to the ton, the latter being from a gold-bearing manganiferous stone. From the great and intelligent interest taken in the lectures and testing- and assaying-classes, and the great variety of minerals in the district, I should like to recommend that this school next session should receive a longer visit from a member of the staff.

The minerals found in the district are as follows: Scheelite, gold, cinnabar, manganese-ore bearing gold, lignite, peat, copper, pyrites, iron-ore, limestone, and stibnite. During my stay, in company with Mr. Green, the local constable, I visited the Lammerlaw diggings, Mr. Clifford's reef, the antimony mine, and the Post-office Creek diggings. Messrs. Kerr, Greene, and Ritchie rendered me valuable assistance in my work.

I have here to report that at Waipori I tested some metallic sand for Mr. McLean, which I found to be platinum alloyed with silver. This is an unusual admixture, and was said to have been found in the Manuherikia River. The metal was in small pellets, varying from $\frac{1}{4}$ gr. to 3gr. in weight.

On the 14th February I went to Roxburgh and lectured there till the 18th. Instruction was given in testing ores by the dry and wet processes. The attendance averaged twenty. Mr. Smith, the local member of the Tuapeka County Council, has taken the initiative in forming a school of mines in this place.

On the 19th February, with Mr. Smith, of Roxburgh, I went to Bald Hill Flat, where a few miners are engaged in reefing and sluicing, and lectured to them on that evening and on the 21st. These were the first lectures delivered in this place by any member of the staff, and great interest was taken in them. The attendance averaged sixty. The miners were anxious to found a local school of mines and obtain a stock of chemicals, so that next year they could get more instruction. The lectures given were on "Gold" and "Wet and Dry Testing of Minerals."

From Bald Hill Flat, on the 22nd February, I went to Bannockburn, and from that date till the 14th March lectured nightly to audiences averaging thirty-five. As Mr. Goodlet and yourself had just previously been there, and had given instruction to the miners in wet testing and assaying, I devoted my attention almost exclusively to blowpipe-testing and lecturing. The lectures I gave were on "Testing Minerals by the Wet Way," "Testing by the Blowpipe," "Silver and Lead," "Iron," "The Acids," "Phosphorus, Arsenic, and Antimony," and "The General Principles of Crystallography," as exemplified in the collection of minerals lately presented to the School of Mines by the Government. The local teacher, Mr. Strong, an old student of your own in the Otago University, has arranged to give instruction to the schoolboys in mineral chemistry. Whilst speaking of teaching schoolboys mineral chemistry I would suggest to the authorities that teachers on the goldfields should be empowered to give their pupils three years' graduated instruction in mineral chemistry as their science-course, in the same way as teachers in the agricultural districts are allowed to give three years' instruction in agricultural chemistry. Messrs. Strong, Torrance, and Reay rendered me valuable assistance during my visit.

Leaving Bannockburn on the 15th March for Naseby, which I reached on the 21st of that month, I lectured *en route* at the following places: Cromwell, on the 15th, in the Athenæum Hall, to an audience of thirty; Clyde, on the 16th, in the Town Hall, to forty people; Alexandra, on the 17th (the race-night), in the Library, to fifteen people; Black's, on the 18th, at the school, to an audience of eighty; Tinker's, on the 19th, at Sheppard's Hall, to sixty miners: the subject of the lecture on each occasion being "Gold," and "Wet Testing of the Ores of the Principal Metals." The audiences in each place were most attentive, and it would be advisable that, next session, more time be devoted to this district.

On the 21st March I arrived at Naseby, and that evening met the committee and arranged a programme. From the 21st March to the end of April I gave systematic instruction in testing ores by the wet and dry processes, and in the process of assaying gold-bearing stone. The ores treated were those of silver, lead, mercury, copper, cadmium, gold, platinum, tin, antimony, arsenic, manganese, zinc, iron, nickel, cobalt, lime, and tungsten. The lectures I gave were on "Gold" and "How to test Minerals by the Wet Way." The audiences at these averaged forty. The class of regular students averaged about twelve. With the co-operation of the teacher, Mr. Worsop, I was enabled to form a class of schoolboys. This class was held from 4 to 5 p.m., and was attended by twenty boys, varying in age from twelve to sixteen. The tests for ores of silver, lead, mercury, copper, gold, antimony, arsenic, tin, iron, lime, and manganese, were gone through. Elaborate notes were taken by the boys, who displayed great intelligence in their work.

During my stay at Naseby I visited and lectured at St. Bathans, on the 2nd April, to an audience of about eighty, the subject being "Gold." I also opened out for the residents a stock of