

WAIHI SCHOOL.

Mr. P. G. Morgan, M.A., Director of the Waihi School of Mines, reports as follows:—

I have the honour to state that I took charge of the newly organized School of Mines at Waihi on the 1st July, 1897. Classes were at once formed in the following subjects: Mining, surveying, mathematics, theoretical chemistry, practical chemistry, assaying, and mineralogy and blowpipe analysis, to which later on was added geology.

The following is a syllabus of the work done from the beginning of July to the end of the year:—

Mining.—(a.) Methods of breaking down mineral and rock. (b.) Explosives, how used: their composition and relative strengths. (c.) Opening out mineral deposits by means of quarries, adits, levels, and shafts. (d.) Exploitation of mineral deposits. (e.) Transportation of mineral—hauling and winding machinery.

Surveying.—Nature and use of logarithms; the trigonometrical ratios; solution of triangles.

Mathematics.—(a.) Arithmetic—the whole subject. (b.) Elementary algebra.

Theoretical Chemistry.—The non-metallic elements.

Practical Chemistry.—(a.) Qualitative tests for metals and acids. (b.) Separation of the metals.

Assaying.—(a.) Furnaces, materials, and appliances used. (b.) Assay of gold, silver, tin, lead, copper, and antimony ores. (c.) Problems and calculations.

Mineralogy and Blowpipe Analysis.—(a.) The six crystallographic systems. (b.) Physical, chemical, and optical properties of minerals. (c.) The blowpipe, how used: tests for simple minerals. (d.) Classification of minerals.

Geology.—(a.) Physical and dynamical geology. (b.) Classification and mode of formation of rocks. (c.) The geological periods.

The numbers attending each class were as follows: Mining, 30 students; surveying, 14; mathematics, 32; theoretical chemistry, 9; practical chemistry, 16; assaying, 28; mineralogy and blowpipe analysis, 11; geology, 13: total attendance at classes, 153.

The number of individual students was sixty, and the average attendance between forty-five and fifty. This number severely taxed our accommodation, especially in the assaying class, which was overcrowded.

Since the beginning of the present year forty-two students have enrolled, a number which is quite sufficient to keep me fully employed, especially seeing that the more important classes are held both morning and evening for the benefit of those students who work on three shifts. I am also giving those students who wish it an opportunity of working in the laboratory out of class hours. The necessity of supervision is taking up more and more of my spare time as the number of such students increases.

The school is now fairly well furnished with chemicals and apparatus, a considerable sum having been spent in this direction. The committee are procuring a theodolite, and when this arrives we shall be able to start a class in practical surveying.

Though our present accommodation is in a way sufficient, the erection of a second class-room and the enlargement of the assay-room would be a great boon to the school, as I could probably obtain sufficient assistance locally to enable me to arrange for extra instruction in the various classes, and a room would always be available in which the more advanced students could work by themselves.

Since the opening of the school a considerable number of assays and determinations of minerals has been made by me for the public. A beginning has been made in getting together a collection of minerals, a number of specimens having been collected by myself, whilst others have been donated by students and friends of the school. Several good specimens of gold-bearing quartz and other minerals have been received from the Mines Department, for which, on behalf of the school, I now express my thanks.

In conclusion, I may state my belief that the Waihi School of Mines has so far fully justified its existence, and is doing good work towards the technical education of those connected with mining and battery work in this district.

COROMANDEL SCHOOL.

The following is the report of Mr. J. M. Maclaren, M.A., Director of the Coromandel School of Mines:—

I have the honour to report as follows on the work and progress of the Coromandel School of Mines during the first term of the year 1898:—

The formal opening of the school took place on Monday, the 20th February. In the unavoidable absence of Captain Hodge, the Vice-president, Mr. A. T. Kenrick took the chair. There were about a hundred and fifty students and subscribers present. The chairman expressed the gratification he felt at the successful termination of their labours as a committee, and felt confident that the school would prove itself of great value to the community. He hoped full advantage would be taken of it, and mentioned that there would be a total membership of fifty at the opening of the various classes. Mr. W. Thomas, the secretary, read the financial statement, showing a healthy state of affairs. The total amount expended was £313, whilst there was a credit balance in hand of £113. The estimated expenses yearly would be at least £250, towards which the Government would contribute £100 a year. The committee had confidence that this amount would be raised locally. The Director then gave a succinct synopsis of the proposed work of the school. A special vote of thanks was accorded to Mr. A. T. Kenrick for the active interest he had taken in the school in the past, and more especially for his lengthened gratuitous services as instructor.

Classes.—The attendance has been gratifying in the extreme, the number of individual students having been sixty-three, divided among the various classes as follows: Mining, 32; field- and mine-