

surveying, 30; mathematics, 30; geology, 14; mineralogy and blowpipe, 14; assaying, 21; theoretical chemistry, 16; practical chemistry, 16; mechanical drawing, 4: total attendances, 177. Number of individual students, 63.

*Mining and Surveying.*—These are the most popular of the subjects taught at the school, and are taken up by students who intend to qualify for a first-class mine-manager's certificate. Field classes in surveying are held every week. Finding that students working on the Tokatea were unable to attend these classes, I have made arrangements to hold the field-surveying class there every alternate Tuesday. Several of these supplementary classes have been held, with very satisfactory attendances.

*Mathematics.*—This class is conducted by Mr. A. J. Litten, who reports satisfactory progress. Mining students who are deficient in mathematical knowledge avail themselves largely of this class, which is arranged to meet their particular requirements.

*Assaying.*—This is generally the largest class in a school of mines, and the comparative paucity of members is evidence of the good work done in the class formerly carried on by Mr. A. T. Kenrick, of the Bank of New Zealand. The assay plant in connection with this class leaves nothing to be desired, and double the number of students could, on an emergency, be accommodated.

*Theoretical Chemistry.*—In this important subject, the basis of metallurgical science, considerable attention is paid to the principles underlying the science. Instruction is imparted by means of lectures, illustrated where possible by numerous experiments.

*Practical Chemistry and Laboratory Practice.*—This class is composed entirely of beginners in the subject, who have made very satisfactory progress indeed. So far, only the reactions of metals and acids and the separation of the metals into groups have been treated of.

*Geology.*—There are fourteen members of this class, which is the best attended of any of the classes, the average for each student for the whole term being nineteen attendances in twenty lectures. The lectures are illustrated by a splendid series of coloured lecture diagrams, the work of Mr. A. R. Hyatt, who has kindly placed them at my disposal. In future the lectures will also be illustrated by means of an optical lantern and some two hundred slides dealing with geological subjects. The first extended geological excursion for the year was held on the 23rd April. The s.s. "Falcon" was chartered, and the Cretaceous-tertiary series of rocks at Torehine visited and thoroughly examined. A collection of fossils was made, including *Ostrea wuellerstorffii*, *Turritella*, sp., *Fusus*, sp., *Cucullæa*, sp., crinoids (*Pentacrinus stellatus* and others), and *Hemipatagus tuberculatus*. In addition to the foregoing, which have already been recorded, *Scalaria*, sp., and sharks' teeth (probably *Lamna huttoni*, Davis), were collected. I propose to hold similar excursions to places of geological interest at intervals throughout the year.

*Mineralogy and Blowpipe Determination.*—Instruction in this class is considerably facilitated by the use of the valuable mineral collection in the possession of the school, containing, as it does, over two hundred specimens of minerals and rocks.

*Petrology.*—This important branch of geology will be entered on as soon as students have acquired a fair rudimentary knowledge of geology and mineralogy. This class will treat of the preparation of mineral sections, their examination under the polarising microscope, the determination of the component minerals, nomenclature of volcanic rocks, and the photographing of sections, &c.

*Metallurgy.*—This class has been deferred to the second and third terms of the year for various reasons, the most important being that a knowledge of chemistry is essential to enable students to understand the chemical processes, and this knowledge can be partly gained during the first term.

*Mechanical Drawing.*—This class was commenced very late in the term under the supervision of the Rev. C. F. R. Harrison, M.A. The attendance, so far, has been somewhat disappointing, but I understand there are several intending students, who prefer to wait until the commencement of the second term.

In the foregoing classes, where not otherwise specified, the syllabus of lectures and instruction is precisely as at the Thames School of Mines.

No Saturday classes for school-children are held, and all students are adults except three. Of these three one only is under seventeen years of age.

*Laboratory.*—During the term several assays and analyses have been performed for the public, notably one for the Public Works Department, of water from Cadman's Creek, Coromandel. I append a copy of the report furnished.

*Analysis of Water from Cadman's Creek, Coromandel.*—This is a clear, colourless, tasteless water, depositing only a very minute quantity of sediment on standing. After boiling for some time it has a feebly alkaline reaction. The fixed salts or solids are very low, amounting to 7.28 gr. per gallon, made up of alkaline chlorides (principally sodic chloride or common salt), 4.6 gr. per gallon, and carbonate of lime, 2.4 gr. per gallon. It must be termed a very soft water, and is therefore eminently suitable for steam or manufacturing purposes. With regard to its suitability for domestic purposes, I find it requires 0.149 gr. of oxygen to oxidize the organic matter in 1 gallon of water. This is a somewhat high factor, and the water is therefore of only ordinary purity. It must, however, be remembered that the sample was taken towards the close of a long period of drought, and that water is then not so pure as at any other time of the year. This percentage of organic matter, though large, will not invalidate it as a potable water; the more so as I failed to discover any traces of albuminoid ammonia or other nitrogenous compounds, the presence of which in any quantity would have infallibly indicated contamination.

*Governing Body.*—The committee for the current year are as follows: President, Mr. J. McGowan, M.H.R.; Vice-presidents, Captain W. H. Argall, Captain Hodge; members, Messrs. A. T. Kenrick, And. Jamieson, J. B. Rockliff, A. E. Argall, A. W. Attwater, T. W. Rhodes; Hon. Secretary, Mr. William Thomas.

In conclusion, I have to express my appreciation of the ready support and co-operation the committee have always afforded me in forwarding the interests of the school.