

The following is a *résumé* of the work done during the year in the various classes :—

(1.) *Mining* (average attendance, 13).—Instruction was given in shaft-sinking, opening out and exploitation of mines, timbering, pumping, hauling and winding, mine-ventilation, tapping water, modes of constructing dams, blasting, explosives, and strength of materials. All the students in this class attended regularly, and made excellent progress.

(2.) *Advanced Mining and Mining Geology*.—This class, which was a special class for candidates intending to sit for the Government examinations for mine-managers' certificates, was attended by fourteen students, all practical miners. The last set of examination papers for first-class mine-managers' certificates was fully explained and answered. Notes were given respecting the nature and mode of occurrence of mineral deposits, the formation of lodes and deep leads, the dynamics of lodes, &c.

(3.) *Mathematics* (average attendance, 17).—In this class the instruction was individual, and adapted to each student's needs as far as possible. Some of the members of this class attended regularly, and made good progress; but on the whole the attendance was irregular, and the progress made somewhat unsatisfactory. The work done comprised arithmetic, the whole subject; algebra, as far as quadratic equations; the use of logarithms; and a little Euclid. One student reached the third book of Euclid, and showed that he had obtained a good grasp of the subject.

(4.) *Theoretical Surveying* (average attendance, 15).—The students in this class, all practical miners, attended regularly, and made good progress. They were well grounded in the use of logarithms, the solution of triangles, the various calculations connected with land and mine surveying, mine-surveying problems, &c.

(5.) *Practical Surveying* (average attendance, 13).—This class was taught the adjustments and uses of the various instruments. A large amount of useful field-work was done, besides some plan-drawing and other indoor work.

(6.) *General Geology* (average attendance, 6.5).—During the first term this class was well attended. The instruction given was a continuation of the previous year's work, and comprised the geological periods, treated with special reference to New Zealand geology. Most of the members of this class had attended during the preceding year, and had taken much interest in the easier and more general part of the subject. This encouraged me to attempt this year a rather high standard of instruction; but the unfamiliar, jaw-breaking names of the fossils were too much for most of the students, and during the next term the attendance dwindled away to two. Evidently the instruction was not given on the most suitable lines; but experience teaches, and in future years care will be taken to present the subject in a more simple manner, with special reference to local geology.

(7.) *Mineralogy and Blowpipe Analysis* (average attendance, 9.5).—In this class blowpipe and other tests for simple minerals were taught. Mineralogy was hardly touched upon owing to the attendance falling off, and the class being therefore discontinued during the third term.

(8.) *Theoretical Chemistry* (average attendance, 12).—The chemistry of the non-metallic elements and of the alkali metals, together with the laws and principles underlying chemical reactions, was taught in this class. Instruction in chemical arithmetic was also given. The attendance in the chemistry and assaying classes was greatly affected during the last term by the depression prevailing in mining and business circles. The nature of the subject also caused the attendance to fall away. Chemistry, like mathematics, but in an even greater degree, is one in which many students fail to make any great progress. Its importance, however, to those who wish to acquire a knowledge of assaying or of the cyanide process cannot be overrated.

(9.) *Practical Chemistry* (average attendance, 13).—The work done in this class included the preparation of oxygen, hydrogen, chlorine, and carbon-dioxide, with illustrative experiments, tests for metals and acids, separation of the metals, manipulation of apparatus, and quantitative analyses of simple substances.

(10.) *Dry and Wet Assaying* (average attendance, 19).—In this class, which has always been the largest in the school, individual instruction is given, and each student is carried on from year to year as far as he wishes to go. Much good work was done by the students in this class, but many (in fact, all) of them are greatly hampered by their imperfect acquaintance with theoretical chemistry. It is difficult to make the beginner in assaying understand the importance of this subject to him, until he finds it out for himself from practical experience. The work done in assaying covered pretty nearly the whole of Park's treatise, with the exception of one or two analyses which seem almost out of place in a school of mines—*e.g.*, analyses of milk, sugar, artificial manures, &c.

(11.) *Metallurgy of Gold and Silver* (average attendance, 6).—This class is adapted specially to the needs of candidates for battery-superintendents' certificates. Last year the subject-matter comprised crushing and concentrating machinery, amalgamation, cyanidation (very fully treated), chlorination, bromination, miscellaneous lixiviation processes for the recovery of gold and silver, smelting, roasting and smelting furnaces, chemistry of gold and silver, &c.

(12.) *Drawing* (average attendance, 12).—This class was much better attended than in former years. Instruction was given in the use of instruments, lettering, machine-drawing, plan-drawing, &c.

A prospectus and syllabus, which gives full information concerning the classes, fees, &c., has lately been printed. Copies may be obtained on application to the secretary or Director of the school.

During the year some changes have taken place in the teaching staff. In April Mr. K. M. Barrance, assistant lecturer, left to take up a similar position at the Thames School of Mines. His place was taken by Mr. A. H. V. Morgan, M.A., who is possessed of the highest university credentials, and since his appointment has done very good work. At the end of April, on account of his ceasing to visit Waihi, we lost the services of Mr. A. B. Hardinge as drawing-master, but