

GOVERNMENT MINING SCHOLARSHIP.

Two students—namely, W. A. Given and Arthur R. Andrew—sat for this examination in December. The examination embraced eight written papers on senior mining subjects, and one paper on mechanical drawing. These students secured first place in six subjects—namely, mathematics, with 89 per cent. of possible marks; theoretical chemistry, with 82 per cent.; practical chemistry, with 75 per cent.; metallurgy of gold and silver, with 80 per cent.; mining, with 85 per cent.; land and mine surveying, 81 per cent. In mine-ventilation, with 81 per cent., A. R. Andrew tied with a Coromandel student for first place; and in geology, with 75 per cent., he was only one point behind a Thames student, who secured 76 per cent. of marks. The examination papers were set by the Government Board of Examiners on the curriculum of the Government mining schools, which is entirely different from that of the Otago University mining course. Our students having had no special preparation had thus to depend on their general knowledge of the subjects of examination. In the eight subjects enumerated above Mr. Andrew secured the high average of 80 per cent., but did not gain the scholarship, as he failed in mechanical drawing with 60 per cent.—that is, 15 per cent. below the scholarship requirements. Mr. Given secured the satisfactory average of 64 per cent. in the nine subjects of examination. Altogether, the results were eminently satisfactory.

Laboratory.

During the year fifty samples of ore were assayed for the public at schedule rates, and in the same period the Directors furnished reports of twenty-eight samples of rocks and minerals, for which no charge was made.

Donations.

The geological collections in the mining school were supplemented by a large number of fossils, rock and mineral specimens, presented by members of the staff and students. The school is also indebted to Messrs T. and W. Smith, of Sheffield, for a gift of "steel fractures," which will form a valuable addition to the technological exhibits for the class in applied mechanics.

Geodesic Station.

Towards the end of the session the much-needed transit railway theodolite and level arrived from the London makers, and in the few remaining weeks of the session a large block of concrete with an iron tube imbedded in it, was fixed on the top of Tana Hill, near the University, to serve as a geodesic observatory for our advanced students in surveying. Rounds of angles were observed at Flagstaff and Tana Hill late in October, but the cloudy weather prevailing in November prevented the reading of the angle at Signal Hill. Where the angles are completed, the latitude and longitude of the new station will be computed in terms of the meridional station of the General Survey Department; and with a permanent referring-light fixed in a convenient place in the harbour, students will be able to check the meridional error of their traverses, and make observations for the determination of latitude and time. This work will be completed early in the session of 1904.

Mining Students' Association.

Considerable interest was shown in the proceedings of this Association, and during the session a number of interesting papers were contributed by past and present students on the scope and kind of mining and metallurgical operations that had come under the notice of the authors in their practical work during the preceeding summer vacation. Most of the papers were short and simple, with the proper thesis flavour, and a few showed much close and shrewd observation. The titles of the papers and the names of the authors are given below: "The Shotover Mining District," Mr. D. N. Tomlinson; "Mining prospects of Western Australia," Mr. W. F. Tomlinson, A.O.S.M.; "Kaitangata Coal-mine," Mr. W. A. Given, M.A.; "Treatment of Zinc Slimes," Mr. G. W. E. Turner; "The Gem Rocks of Kakanui," Mr. J. A. Thomson, B.Sc.; "A New 'Tippler' used for Fortification Coal-mines," Mr. A. R. Andrews, B.Sc.; "Taratu Coal-mines," Mr. W. Gibson; "Metallography," Mr. J. C. Neill; "Mine Creek Coal-mine," Mr. U. B. Inglis; "Milburn Phosphate Deposits," Mr. A. R. Andrew, B.Sc. In addition to these a paper was read by Mr. D. B. Waters on "Acetylene Gas," and one by the Director on "Some Base-level Planes of Erosion in New Zealand."

DOMICILE OF STUDENTS.

The permanent homes of the students who attended the mining school during the session of 1903 were distributed throughout the colony as shown centesimally in the following table: Dunedin and suburbs, 34 per cent.; Otago (country districts), 9; Southland, 7; Canterbury, 18; Westland, 9; Wellington, 3; Hawke's Bay, 3; Auckland, 17: 100.

ASSOCIATES OF MINING SCHOOL.

The School of Mines was established in 1878, but the graduate course was not inaugurated until nine years later, when three additional lecturers were appointed. The first diplomas were issued in 1887, and since that year 59 diplomas as Associate in Mining, 36 as Associate in Metallurgy, and 12 as Associate in Geology have been granted to 66 individual students who had completed the prescribed course and complied with the regulations relating to practical work. Of the 66 graduates, 35 took the diploma in mining only; 20 took diplomas in both mining and metallurgy; 4 took metallurgy only; 2 graduated in both metallurgy and geology; and 2 in geology alone. On the other hand, 9 graduated in both mining and geology, and 2 in mining, metallurgy, and geology.

Besides these diplomas, since 1887, 60 certificates as metallurgical chemist and assayer and 18 certificates as mine and land surveyor have been issued to 63 individual students. From these figures it will be seen that 35 students took the mining diploma only, while 4 took metallurgical only. On the other hand, the majority of the students who graduated in mining also graduated in