

and it was generally believed that separate papers would be set for each. Assaying is a subject of great scope and of much practical importance, and I would suggest that two papers should be set instead of one for the examination to be held at the end of this year.

"The paper on metallurgy was of a very practical character, and gave the students ample scope for showing what knowledge they possessed of the subject. It would be considered a difficult one by university students of the third or fourth year. The geology paper was well set, but about twice the length of the papers generally set for three hours. The mining papers were fully up to the standard of those set for first-class mine-managers' certificates, while that on surveying was so long that it was quite impossible to get through it in the time allowed. Surveying is one of our strongest subjects, and in the Government examinations for mine-managers our students have always secured the highest number of marks, but in this case only one of the students who sat for examination managed to secure a place through want of time. The three candidates who sat through the examination—namely, R. Turner, J. M. McLaren, and H. Paltridge—were well able to answer and work out the questions in the paper, except the last two, dealing with the fixing of the meridian and latitude. This would have secured for them second-class places. They had not been taught how to fix a meridian, or determine latitude, this instruction being reserved for authorised surveyors, or more advanced students of the second year.

"*Laboratory*.—The number of assays and analyses performed for the public during the year was 395, most of which were determinations for gold and silver. These involved the writing of 112 separate reports. In the actual performance of these assays and analysis I received much valuable help from Messrs. Carnie, Wells, Taylor, Carpenter, F. Callan, T. Callan, P. Callan, von Rotter, McDermott, Ansley, and Eddowes, all reliable and careful assayers.

"Three separate poison cases were investigated by myself for the Police Department, and reported on; and the number of practice assays of all kinds performed during the year by the different students reached almost 1,500. During the two last terms of 1892, Mr. William Eddowes, an advanced student, took charge of the furnace-room, and the students engaged in dry assaying. I have much pleasure in stating that Mr. Eddowes proved himself a most able and painstaking teacher. His assistance was of great value, and enabled me to devote my time more fully to those engaged in the laboratory at wet assaying and analyses.

"*Coromandel*.—I visited this place in December last, but was unable to get classes together, as almost all the miners had left for Kuaotunu. In accordance with instructions from the Minister of Mines, I visited Kuaotunu, where arrangements are now being made to start a school.

"EXPERIMENTAL PLANT.

"Twenty-one separate parcels of ore were treated at the plant attached to the school during the past year, being the largest number since the plant was erected. An abstract of the particulars relating to each parcel, the method of treatment, and the results obtained, are shown in the tabulated statement which follows.

"The drying, roasting, crushing, sampling, assaying, pan-treatment, and cleaning-up connected with the extraction of the bullion, together with the subsequent retorting of the amalgam, melting, refining, and assaying of the bullion, were all effected by the students under my own personal supervision, no outside labour of any kind being employed.