

There was only one division certificate granted during the year to one of the past students—namely, that of Mines and Land Surveyor, to F. B. Allen, M.A., B.Sc., who had become entitled to it by having been engaged for six months in the practice of mine- and land-surveying.

The liberality of the Hon. the Minister of Mines (Mr. Cadman) in establishing three scholarships of £50 each per annum for the colonial Schools of Mines, tenable for three years at the Otago University, caused at first much excitement and satisfaction amongst our students. However, after the conditions of success in obtaining a scholarship had been closely studied by each, there seemed to be only two of the students—and these, I am sorry to say, are very doubtful—who showed a desire to try for the distinction. The reason for this apparent want of ambition is that, in order to avail himself of the money-value of the scholarship in studying for a degree of the New Zealand University, which it is evidently intended for, an older student would have to extend his studies for several years longer, in order to embrace more subjects counting for the degree, while a new student would have to reckon upon at least five years' hard study, as the examinations to be passed for the scholarship require three years' study at the School of Mines alone, and two years' study thereafter of degree subjects is, perhaps, scarcely sufficient. Amongst our present students there are, however, few, if any, in circumstances permitting such a protracted University course; all are anxious to gain in three or four years—*i.e.*, as quickly as is possible for them—the certificates of the mining and assaying divisions, and, with those credentials in possession, to go into the world in search of suitable positions, in the hope of meeting with similar success as some of our past students have achieved with like qualifications. The most of those students who went abroad found, without long waiting, satisfactory employment, while several gained really good positions. As a recent case in point of such success, I can mention that of Edward Paterson, who only left New Zealand for the Transvaal in August of last year, and, after being in well-paid employment nearly from the date of his arrival there, was offered and holds now a responsible position at a salary of £600 per annum, with free residence. There are other two of our past students in good positions in the Transvaal, and a number well placed in Victoria, Tasmania (the Government Geologist and Inspector of Mines), and Western Australia; but only three have, so far, found employment in New Zealand. And here I may be permitted to quote, as pertinent to the subject, portion of a small article headed "On Matters relating to the School of Mines," which I wrote for the commemoration number of the *Otago University Review* of 1893. It is as follows: "On glancing at the educational results of the teaching in the School of Mines one is struck by the fact that most of the past students who have succeeded in attaining to responsible good positions did so outside of New Zealand, thus favouring the opinion the writer has occasionally heard expressed 'that State support to the School of Mines is of questionable utility if, after receiving their education at comparatively small expense to them, students leave our shores, and use their knowledge for the benefit of other countries which have spent nothing in training them. At first sight this may seem a formidable indictment, but, based as it is upon a rather one-sided, if not selfish, view of the *raison d'être* of professional schools, it quite ignores the main principle upon which such schools are nowadays established in all civilised countries. This principle is to afford parents opportunity to have their sons trained in professions promising them a satisfactory status and income in after life. If their own country offers openings in this respect no doubt the young men remain, but, if it does not, they are obliged and prepared to try their fortune in other countries, and so stands the case with our past mining students. All would gladly stay in New Zealand if suitable positions, with some promise of advancement, were available, but this, unfortunately, is the case to but a very limited number." So far the article. What requires to be added is that openings, such as mentioned, are, from experience, most likely to occur in the Thames and Reefton mining districts, and there the students trained at the Thames and Reefton Schools of Mines have naturally the advantage of early information in applying for them.

A few months ago, as reported to the Council, the representative of the Cassel Gold-extraction Company (owners of the patent rights in this colony of the MacArthur-Forrest cyanide gold-extraction process), resident in Auckland, made a present to our school of the apparatus and chemicals left behind by the officer of the company to whom the Council had granted room and facilities in our laboratory for executing assays and trials by the cyanide process of auriferous material from Otago mines. Two of our advanced students took advantage of the necessities thus available, and experimented with the process on auriferous tailings, though on a very small scale, under the guidance of Mr. Wilkinson, who had never himself, however, worked or seen the process worked on a large scale. It therefore much enhances his qualifications, and is greatly to the advantage of the school, that Mr. P. Fitzgerald, whom the Council have temporarily appointed in Mr. Wilkinson's place, thoroughly understands the working of the process on the large scale, having learnt it at the Premier Mine, Wakatipu district, under the instruction of the officer of the Cassel Company before mentioned. According to Mr. Fitzgerald's estimate it would only require an outlay of about £20 towards the purchase and erection of some larger apparatus, and providing a stock of necessary chemicals to permit the treatment by the process of samples up to 4cwt. of auriferous tailings, and, in view of the fact that this process of gold-extraction is doubtless the most important and successful one introduced into practice in recent times, and should therefore be especially well taught, both theoretically and practically, in a mining-school of a gold-mining country, I take the liberty of strongly recommending this expenditure, considering that it might be made up in time by judicious charges for treatment of such larger samples. Another reason for my recommendation is that the results of the treatment by the process of comparatively large weights of material would be more reliable in estimating the percentage of gold extractible on a large scale, and therefore more satisfactory to miners sending samples than those yielded by small trials, or by fire-assays of minute weights, hitherto resorted to. Next we have the example of the Thames School of Mines, where the process is excellently well taught by the treatment of still larger samples than above specified, and forms, I am told, a special attraction to students. The Cassel Company having the patent