

In the Thames District Mr. McKay's work principally consisted in an examination of the rocks of that field, and of the various faults by which the reefs have been displaced.

During the progress of his examinations a large number of rock specimens were collected, which will be available for the forthcoming exhibition of the mineral and industrial products of New Zealand, to be held in Auckland towards the close of the present year.

MINING MACHINERY.

As in former years, information has been obtained in regard to any new process for the treatment of auriferous and argentiferous ores, and also in regard to new machinery and appliances in connection with mining. By giving the fullest publicity to this subject, opportunity is afforded those persons who are engaged in mining pursuits of obtaining information as to the different patents that have been granted; and, although the machinery or appliance may not in every case come up to the patentee's expectation, the ideas evolved may be the means of improvements being made by some one else who can detect defects in the patents. Plans and specifications of different machines and appliances in connection with mining will be found in the report of the Inspecting Engineer.

SCHOOLS OF MINES.

The Schools of Mines where classes are regularly carried on are those at Thames, Reefton, Otago University, Nelson, Waihi, Coromandel, Kuaotunu, and Westport, the instructors in the first two being officers of the Department. The Otago University receives substantial assistance towards the cost of a School of Mines, and subsidy is given towards the salary of the Director at the Waihi and Coromandel Schools; while the Nelson classes are carried on by Mr. Worley, aid being granted towards the cost of plant, chemicals, and apparatus. The instruction given at these schools is becoming year by year of increasing importance, and the number of ex-students from the colonial schools of mines who are occupying important positions in the scientific branches of the mining industry conclusively demonstrates alike the value of the instruction imparted and the ability of the students who have availed themselves of it. Valuable technical education is afforded at the Thames School, where students have opportunities of studying the practical methods of working mines, and of assisting in the treatment of ores for the recovery of gold and silver. A new quartz-crushing plant, with all the latest improvements in reducing, and suitable for the use of the various scientific processes for the extraction of bullion from ores of various kinds, has been recently completed at this school, aided by a grant from the Government. The recently discovered permanganate gold-recovery process for the treatment of ores has also been introduced into this school by Professor Black, who donated to the institution the requisite apparatus for carrying out the work. In the Otago School, also, the use of the new plant for the testing and treatment of ores has afforded students improved opportunities for obtaining the fullest information of a practical character.

At Miller's Flat, and also at Waipori, buildings have been erected, and it is anticipated that classes for practical instruction will shortly be carried on in each of these localities. A site for the Westport School has been provided, and a grant made towards the cost of chemicals and apparatus.

During the year 342 students attended the various Schools of Mines—namely, 139 at the Thames, 63 at Coromandel, 60 at Waihi, 50 at Dunedin, and 30 at Reefton; and, notwithstanding that the average attendance since scholarships were established in December, 1894, is 56, it is somewhat disappointing to find that only two candidates have succeeded in qualifying themselves for scholarships—namely, Mr. W. H. Baker, of the Thames, who is attending the classes at the Auckland University, and Mr. MacLaren, who has passed the University course, having held a scholarship for the specified period of three years.

The expenditure on Schools of Mines during the year was £1,780 17s. 3d., exclusive of teachers' salaries.