

judging from the increased interest displayed and additional students who have already enrolled, that the year now entered on will be even more successful than the past.

The public battery treated for the last twelve months twenty-two parcels of quartz. The particulars *re* returns of same are duly reported by the battery-manager. To increase the efficiency of this plant it is proposed to alter somewhat the pulley-wheels and belt connections, and other minor matters, as found expedient.

The cost of crushings has been somewhat reduced, and the Council trust, on the proposed alterations being completed, to be enabled to still make further concessions under this head.

WAIHI SCHOOL OF MINES.

Mr. Percy G. Morgan, M.A., Director, supplies the following report:—

During the past year the school has been well attended, the average number of registered students being fifty-one. This is an increase of four over the attendance in 1901, the average for that year being forty-seven. The great majority of these students entered the school for the first time, most of the previous year's students having either completed their studies or left the district. On referring to the subjoined table of attendances for the year it will be seen that most of the classes were fairly well attended, the more popular subjects being mineralogy and blowpipe, mathematics, mining, assaying, and surveying, whilst geology, metallurgy, and (to a less extent) the two chemistry classes attracted but little attention.

TABLE of ATTENDANCES for the Year ending 31st December, 1902.

Name of Subject.	First Term.	Second Term.	Third Term.
Mining	16	20	18
Mathematics	23	24	23
Theoretical surveying	17	16	11
Practical surveying	13	17	7
Geology	4
Mineralogy and blowpipe	26
Theoretical chemistry	8	11	6
Practical chemistry	7	10	9
Wet and dry assaying	15	22	18
Metallurgy	5	5	6
Drawing	8	14	11
Totals	116	139	135
Individual registered students	46	54	53

Much the same course of instruction has been followed as in former years, but a slightly higher standard has been aimed at, and I believe attained, though not without the expenditure of much painstaking labour by the staff, who are handicapped here, as in other schools of mines on this goldfield, by inadequate apparatus and teaching accessories, by the backward state of many pupils on their entrance, by the irregular attendance of some, and, above all, as it seems to me, by the want of suitable text-books in a majority of the subjects. Owing to this latter disadvantage much time is occupied in dictating notes, which means a great loss of teaching-power. This matter of text-books is one which I should like to see taken up by the Government, for there can be no doubt that the class of students attending the schools of mines on this goldfield requires special text-books, concisely written but full, up to date, and adapted to the needs of a practical man who has little book knowledge but is anxious to learn.

The following is a summary of the work done in the various classes:—

(1.) *Mining* (Lecturer, the Director).—This was one of the best-attended classes in the school, the average attendance being eighteen. The instruction given embraced the subjects of shaft-sinking, opening out and exploitation of mines, use of timber, iron, and masonry as supports for mine-workings, pumping, hauling and winding, mine-ventilation, tapping water, dams, blasting, explosives, strength of materials, and mining geology. In this class it is endeavoured to cover the ground required by the Government examiners in the mining subjects of the coal- and quartz-mine managers' examinations. A few years ago it was not impossible to do this in one year, but now, owing to the higher standard that seems to be required (and rightly, in my opinion), an elaborate course of instruction has to be given in order to prepare candidates sufficiently. Owing to the uncertainty of work in most mining districts, and a spirit of restlessness which is fostered by the fluctuating nature of his employment, the average miner, especially if young or unmarried, seldom stays more than a year or two in one place. Partly for this reason the courses of instruction in the Waihi School of Mines are confined to twelve months, thus giving the wandering miner an opportunity of obtaining a fair knowledge of any one subject in that time. Last year, however, notwithstanding extra hours of instruction, the syllabus of the mining course was not quite overtaken.

(2.) *Mathematics* (Instructor, Mr. F. T. Seelye).—During 1902 this was the best-attended class in the school, the attendance being 23·7. The instruction given was individual, and adapted as far as possible to each student's needs. The work done comprised the whole subject of