

SCHOOL OF ENGINEERING AND TECHNICAL SCIENCE.

The number of students on the register of the school has increased from forty in 1890 to fifty-eight at the present time. Five of these students have matriculated, and are taking the full course set out in the calendar—four for the certificate of mechanical engineer and one for the certificate of civil engineer. The extra students are fifty-three in number. Fifty are attending lectures on mechanical engineering; one, lectures on civil engineering; whilst two are attending lectures in each course. The following table shows the attendance at each course of lectures set down for the year:—

Subject of Lecture.	Matriculated.	Extra.	Total.
Freehand mechanical drawing	3	32	35
Descriptive geometry ... ..	...	28	28
" " (advanced)	4	6	10
Mechanical drawing	1	3	4
" " (advanced) ... ..	...	...	...
The steam-engine	3	28	31
Applied mechanics (Section A)	1	6	7
Strength of materials in construction	2	5	7
Principles of civil engineering	1	...	1
Building construction .. ...	...	2	2
" " (advanced)	1	...	1
Surveying ... ..	...	...	...
" (advanced)	1	...	1
" (field-work)	1	1	2

As will be seen the great proportion of students are classed as "extra." These students are apprentices, mechanics, leading hands, and draughtsmen, whose employment prevents their attendance at any but evening lectures. Many, however, devote their spare time to the study of collateral subjects, and, on the completion of their term, should become capable engineers. Six of their number have already been promoted to responsible positions; but this demand for men possessing technical knowledge, although a gratifying testimony to the practical utility of the school, will for some years prevent the completion of the course by students of this class. Of the matriculated students, three are in the first, one in the second, and one in the third year of the course.

Pick and shovel excavation and tunnelling having given place to purely mechanical arrangements, usually designed on the spot, and masonry bridges having been supplanted by those of steel, there remains no branch of his profession which an engineer can successfully practice without an extended knowledge of machinery and mechanical details. Without an engineering laboratory the student becomes familiar only with such details on paper, and is practically unable to recognise them when in tangible shape. He is also liable to greatly underrate the value of actual practice and experience, and to regard a certain amount of theory as all that is required of an engineer. The presence of a testing-machine and other laboratory appliances would, in addition to the valuable assistance they afford in actual teaching, awaken in the student an interest in the practical portion of his profession, and lead him to investigate actual examples without the College walls.

It may here be mentioned that in the minutes of proceedings of the Senate of the University of New Zealand, held in Christchurch, in February last, it was resolved, "That intimation be given that in 1892 the University will be prepared to issue certificates to students who have gone through a course of study at the School of Engineering and Technical Science at the Canterbury College, or any other school or College of which the Senate may hereafter approve."

The change from the cramped quarters in which the school was previously located to the present building, which is admirably adapted for the work carried on, has been attended with many great advantages.

Finding it impossible to procure satisfactory diagrams for the illustration of lectures the preparation of permanent sets has been commenced. More than one hundred have been completed.

The officers of the Railway Department in particular, and the heads of various private firms have materially aided the success of the school. Special inducements and facilities have been offered to apprentices and others in the Government works to attend the evening lectures; and Messrs. Scott Brothers permitted regular students to work in their shops during the long vacation without charge.

An entrance exhibition of the annual value of £20, tenable for two years, is offered for competition each December, and a second one, tenable for a similar period, is offered each year for competition among those students who pass their second year examination.

GIRLS' HIGH SCHOOL.

The following changes have been made in the staff during the year: One of the assistant mistresses, Mrs. Hurst Seager, resigned, and to fill the vacancy others in the schoolroom were promoted, and two part-time teachers appointed. The cooking classes have been resumed under Mr. Jackson as teacher, who was appointed by the Board in the third term of last year. A large number of pupils attend, and the work is going on satisfactorily. The dress-cutting classes are well attended, and good progress is being made. All the pupils are drilled regularly twice a week by Major Richards. The swimming classes last season were very successful.

The number of pupils attending the school last term was 152; the number attending at the same time last year was 150.

At the entrance examination of the University of New Zealand, held last December, thirteen girls entered for matriculation and all passed. Of the three girls who entered for junior University scholarships two were successful in gaining them, and were respectively first and sixth on the list.