

taking their course of training at the School of Aviation, wishing to attend the special lectures on aeroplanes, forming a class at the School of Engineering the numbers show a slight advance on those of the previous year.

It is to be expected and hoped that both now when men are returning from the war and also at the close of hostilities a large number will avail themselves of the opportunities offered by the school, as the services of men thoroughly trained in scientific work will be urgently required in the keen struggle for industrial supremacy that is sure to take place. This increased attendance may be confidently looked for from both matriculated and non-matriculated students, as occupations will be open to both classes of trained students. Owing to the continuance of the war, and the consequent prohibition of importation of material from England, it has not been possible to complete the additions to the machinery approved of by the Board. It will be necessary to wait for some time after the war before such additions, necessary though they may be, can be made, for even with the removal of the embargo on exportation the commandeering of shipping for the repatriation of our men from active service will prevent material being quickly transported to the Dominion.

*School of Art.*—During the past year a change was made in the staff of the school, and for a time there was a little disorganization, but thanks to the energy of the Acting-Director and the loyal co-operation of the other members of the staff the school is again working smoothly and well.

It is somewhat difficult to judge the efficiency of a school of this kind, especially in pure art, except by competition with kindred institutions. Such competition is difficult to arrange in New Zealand owing to the geographical conditions of the Dominion. The four centres are far removed from each other, and consequently there is a difficulty in comparing the work done in these different centres. When, however, competition has taken place it has been found that the students from this School of Art have more than held their own. In applied art it is less difficult to arrive at a definite conclusion, as it is possible to get master craftsmen to judge the work, and the reports received from them show that much of the work done reaches a high standard.

This year was the first complete year for the classes that have been established for painters' apprentices. The practical work done in the day classes is satisfactory, but the report of the Acting-Director shows that the classes set aside for the evening work are not so satisfactory. The award compelling apprentices to attend a certain number of times in the evening does not affect those who were indentured before the passing of the award, and consequently many of these are not anxious to attend. The practical work of those who do attend the drawing and design classes in the evening is far superior to the work of those who fail to attend, and goes to prove that when the system has had a fair trial these apprentices and the trade generally will benefit owing to the greater efficiency of those who have received this instruction. Of course, it is a moot point whether it is right to compel a lad who has done his eight hours' work to attend an evening class, and possibly before long legislation will be introduced by which apprentices receiving technical instruction will be entitled to receive the whole of this instruction in the daytime. They then will be able to devote their whole attention to their work while both mind and body are vigorous, and not be asked to strive to concentrate their attention on their studies when they are wearied with a day's work.

#### EXTRACT FROM THE REPORT OF THE PROFESSOR IN CHARGE, CANTERBURY COLLEGE SCHOOL OF ENGINEERING.

Since the commencement of hostilities 113 students have left the School of Engineering for the front, the total number of those recently at the school and now with the fighting forces being 176. It is greatly to be regretted that no attempt has yet been made to utilize the services of these highly trained men in the Engineers, Artillery, or other special corps, as is done by the English authorities, our Allies, and enemies.

The total number of names on the register of the school, including those of eighteen persons taking short courses on the aeroplane, was 147, as against 137 in 1916. The hour attendances per week of regular students were 924, as against 879 during the previous year. Twenty-four matriculated students were studying for the University degree or the Associateship of the School of Engineering, an increase of eight on last year's numbers, and in addition eight matriculated students were taking their preliminary year at the College. Thirty-one lectures and ninety-four hours' teaching in drawing, problems, and experimental work, or a total of 105 hours' instruction, were given each week. The hour attendances per week amounted to 924, an increase of forty-five on those of the previous year. These figures are remarkable when taken in conjunction with the fact that the number of students who have volunteered exceeds 75 per cent. of the normal attendance at the school, and that the average age of the engineering student is about nineteen. They point to the desirability of preparing for the accommodation of the large influx of students which is to be expected at the conclusion of the war. Definite information as to the results of the University examinations has not yet been received, but it is understood that the school has maintained its record, and that there have been no failures in professional subjects. The first-year Engineering Exhibition was awarded to Frank Matthewson, and the second-year Exhibition to Mr. J. C. Dickinson, who has volunteered for the front. At the College and Associateship Examinations two students passed in freehand mechanical drawing, five in advanced descriptive geometry, six in mechanical drawing and design (first year), one in mechanical drawing and design (second year), nine in the steam-engine (elementary), two in the steam-engine (intermediate), six in applied mechanics, nineteen in the elementary strength of materials, one in elementary surveying, six in applied electricity, one in mathematics A, one in physics, one in technical chemistry, two in spherical trigonometry, and one in electrical engineering (advanced). 140 extra-mural students attended lectures and passed examinations in various subjects.

During the year a large number of tests and investigations were carried out in the engineering laboratories. These included—An investigation of the weathering properties of Australian and New Zealand coals, and an investigation of the quality of cast steel (both for the New Zealand