

Although it can hardly be hoped that fifty will take the full course in the near future, yet no doubt an increasing number will do so; and the women students of the training colleges, who are all in general expected to take a course in home science, will help to make the department self-supporting.

School of Engineering.

The annual cost of maintenance of the Canterbury College Engineering School is, the average for the last three years being taken, about £3,800. This is exclusive of non-recurring items and of interest upon the initial cost of the buildings, equipment, and apparatus: if these were included the total cost would be somewhat over £5,000 a year. Hence it is to my mind altogether out of the question to consider the establishment in New Zealand of another Engineering School of University rank; nor can I persuade myself that real benefit would be derived either by students or by the community if there were established in any other part of the Dominion an imperfectly equipped and inadequately staffed school.

Otago School of Mines.

The average annual cost for salaries and other items of maintenance is somewhat over £1,300; the number of students is fourteen, so that the average annual cost per student is about £93. The course varies from two to four years; for a degree four years are required.

To get some idea of the cost elsewhere we take as a basis of comparison the Mining School at the University of Birmingham, where the cost is very full and much advanced work is done. The number of degree students is forty-seven, and there are two professors and four lecturers and demonstrators, so that with our scale of salaries the cost would be about £51 per student per annum. The tuition fees average £33 17s. per annum.

If the school were only now about to be established it would probably be more economical of effort and money either if it were established in connexion with an engineering school, as in some other universities, or if there were associated with a University College some local school of mines in the same way as for the purposes of the degree in agriculture an agricultural college is associated with a University College.

The School of Mines in Auckland has practically ceased to exist as a school of mines, and I do not think any attempt should be made to rehabilitate it.

Medicine.

The annual cost of the Medical School in the University of Otago is about £4,600, of which £3,950 is for salaries. (I have not charged to the school any part of the salaries of the staff in the departments of arts and science, as these would still have to be paid even if there were no medical school). There are 121 students, so that the extra expenditure entailed by the Medical School is about £38 per student per annum, which comparison with the cost elsewhere shows to be decidedly low. If the staff were increased, and some addition made to some of the salaries, as suggested elsewhere in this report, probably another £800 or £900 at least would be required, that is, with the present number of students. (Efficiency would be still more assured if the total salaries could be brought up to, say, £5,400 per annum.) The cost of additional students would be fully met by the fees paid by them.

It may be taken as obvious that there should be only one medical school in the Dominion until the population is at least double what it is.

Agriculture.

The training of experts—Directors of Agriculture, Inspectors of the Agricultural Department, and chief instructors of farmers and of teachers for rural schools and high schools—is so important for this country that the provision for higher agricultural education in New Zealand calls, in my opinion, for very careful and full consideration, both as to the objects sought to be attained and as to the best means of attaining them. At the present time, however useful in its own province may be the work that the Canterbury Agricultural College is doing, it cannot be seriously considered that it is giving, except to a very small proportion of its students the higher education that the agricultural experts of the Dominion ought to receive.

As, however, I think that separate provision ought to be made for higher agricultural education, I do not propose to discuss the question in this report. (I note that the bequest of the late Sir John Logan Campbell will enable a Chair of Agriculture to be established in connexion with Auckland University College, involving comparatively small expenditure out of the Dominion Treasury.)

STAFF REQUIRED.

The staff necessary for the teaching of a subject in a University depends, *inter alia*, upon the number of students taking the subject, and the number of classes required for the different parts and different stages of the course; upon the nature of the subject and the style of teaching it, and upon whether there are both day and evening lectures in the subject.

The maximum number of students that may be taken in a class varies according to the nature of the subject: for instance, it is commonly considered that a literature class may without risk to the efficiency of the work be twice or three times as large as a science class. To a certain extent this may be true; but if the work in the former were to take to any great extent the form of mere dictation of notes to students, as it does in some parts of the world, and even, it has been said, occasionally in New Zealand, then, although one man could address a number of students limited only by the range of his voice, yet he would hardly be doing the proper work of a professor. Moreover, there are the exercises and essays of the students to supervise, correct, or criticize. Hence, if for no other reason, it is necessary to have lecturers in such subjects as English, Latin, and French. The complexity introduced into the problem by the number of classes required for the different parts and different stages of the subject may be illustrated by two examples: in Latin, for instance, there may be at the same time