

the time of the Roman Empire. But little work was done for some years, till the fearful mortality amongst the troops before Sebastopol compelled the British Government to take action. In three months 11,000 men had died out of a total of 32,000, and a Sanitary Commission consisting of an engineer and two doctors was sent to the Crimea. Within nine months, as the result of the Commission's labors, the entire army was in better health than it had ever been at home, whereas, in the French army, which has no Sanitary Engineer, there were over 40,000 men on the sick list. Of course it is in fighting the so-called "filth diseases," such as typhoid, that Sanitary Engineering is seen at its best. In fifteen years the death rate of Paris has been reduced from 26 per 1,000 to 21, of Berlin from 26 to 19, and of New York from 31 to 22. Let us see what this means. Taking the case of New York, we find a reduction of 9 per 1,000, that is, last year Sanitary Science saved the lives of 15,000 persons, and in the whole period of 15 years 120,000 lives were saved. That Sanitary Engineering has a great future before it, especially on this continent, will be seen from the terrible mortality from typhoid in our larger cities. In 1892 the mortality per cent. due to typhoid was 6.7 in Chicago, thirteen times as great as that of London, and fourteen times that of Berlin. Of course this has lately been much reduced by the improvements in the water supply, and will probably be still further reduced on the completion of the Drainage Canal—a gigantic project, now near its completion, and which has cost \$31,000,000.

That there will be work in plenty for the next fifty years must be evident from the above rough sketch, and we may be quite certain that the hundred Engineering Schools on this side of the Atlantic will continue to furnish annually a large and probably increasing

number of Engineers. For the Profession has a peculiar fascination about it which seems to draw men of all kinds of tastes to it. Even Huxley wished to have been an Engineer, as we learn from the following extract from an autobiographic sketch: "As a boy my great desire was to be a Mechanical Engineer; but the fates were against me, and when very young I commenced the study of medicine. But, though the Institution of Engineers would certainly not own me, I am not sure that I have not been all along a sort of Mechanical Engineer *in partibus infidelium*. . . . The only part of my professional course which really and deeply interested me was Physiology, which is the Mechanical Engineering of living machines.

. . . . What I cared for was the Architectural and Engineering part of the business, the working out of a wonderful unity of a plan in thousands and thousands of diverse living constructions, and the modifications of similar apparatuses to serve diverse ends." But we do not find that nearly all who were attracted to the study of Engineering have sufficient energy and patience in the struggle for a place in the profession, and as a consequence the number of those really trying for engineering work is not at all so great as we would expect from the number of students in the engineering schools. And so in regard to overcrowding engineering is no worse off than any other profession or business; and for the young engineer who has received a good training it will be a consolation for him to remember, in his early efforts, that if life is a struggle for existence in this profession certainly the fittest alone survive.

What facilities does our Province offer to those who wish to become Engineers? As will be seen from the Calendar of the Provincial University in connection with the Arts Course is a Department of Civil Engineering