A Statement of the Advantages and Opportunities Offered to Graduates in Civil and Sanitary Engineering.

It is a very general impression, and one the truth of which a superficial world is constantly attempting to assure itself, that such an old professional Engineering branch as that of Civil (including Railroad Engineering and the more recent outgrowth, Sanitary), is now extremely crowded, and that the lately recognized and established branches of Electrical and Chemical Engineering, with allied undertakings, are practically open to all newcomers. It would take, however, but a few statements from well-known men of the several Engineering professions to thoroughly overthrow this long-petted thing. On the contrary, it is an unfortunate circumstance that the favorite pursuit of Electrical Engineering is now more than filled and men, graduates of technical institutions, are oftentimes obliged to accept positions and remain in them for long periods of time at a remuneration scarcely, if at all, above that paid to men of no training and with but moderate mental capacity.

In the United States there is a large and very constant demand for well-trained men in Civil and Sanitary Engineering. In these pursuits alone, of all professions of a technical character, the demand in proportion to the supply has, during the past two decades, increased, and that considerably. Especially during the years in the immediate past, engineering problems of a nature and size almost incredible have compelled solution. Throughout our country to-day, with a rapidly increasing population, there are constantly arising problems of no small importance, providing for transit, and for sanitary conveniences and necessities, including water supply, sewerage, and to some extent, heating, ventilation, and construction.

It needs but a few illustrations to show what a vast expenditure of brain, of time, and of money is now being made throughout the United States, and largely, it may be said, in the East, upon Civil and Sanitary Engineering work of a diverse and broad character.

The first undertaking to which reference will be made is the construction of the Croton Aqueduct, providing an abundant and excellent water supply for the City of New York. Operations have been carried on from 1883, when the Commission was organized, until the present time; and it is probable that the whole scheme will not be completed for several years. To provide for the enormous outlay of money which would be necessary to carry on the work, bonds were authorized to the amount of fifty million seven hundred and fifty thousand dollars, of which, at the close of 1894, nearly thirty millions had been expended.

The Metropolitan Sewage Commission was established nearly seven years ago to devise and carry through a complete scheme for the sewage disposal of the entire Metropolitan District not already provided for. This district, including the City of Boston, represents the combination of a large number of cities and towns to the north and west of its nucleus, Boston, for the mutual solution of a perplexing and difficult problem. The estimated cost of the work, which will not be completed for several years, is fifty million dollars.

The new Boston Subway, which has recently attracted such a deal of attention, which will be of such importance in eliminating the disagreeable features of a congested district, was commenced nearly a year ago, and will not be completed for an extended period. The subway is a striking example of transit problems, which in one form or another are constantly arising. The expense of the undertaking will be in all probability not less than five millions.

Again, an enormous enterprise of a Sanitary nature may be cited in the work of the Metropolitan Water Board, which began its labors under the Metropolitan Water Supply