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KEELE STREET SEWER SYSTEM, TORONTO

ONE OF THE MOST RECENT EXTENSIONS TO THE SEWERAGE WORKS—A STORM OVERFLOW SEWER SERVING THE EXTREME WESTERN PART OF THE CITY.

AMONG the problems that confront the engineering department of a city upon the rapid annexation of outlying areas, that of sewerage is probably the most formidable. The speedy growth of these districts has invariably had connected with it a decreasing efficiency and sufficiency of sewerage service. In this respect the city of Toronto, the land area of which has

mediate attention, the whole situation overshadowing in importance the numerous extensions which the sewer section of the works department of the city was called upon to make in other parts.

The establishment of an adequate sewer service for the western section has been under way for the past two years and is now nearing completion at a cost approxi-



Fig. 1.—Early Construction Operations at Bloor Street and Clendennan Avenue, Showing Piling to Support Timber Trestle to Carry the Bloor Street Line Westward and the Clendennan Avenue Branch Northward.

increased in round numbers from 17 square miles to 32 square miles in the past decade, with a corresponding increase of population from 238,600 to 470,000 in that time, has had to cope with some intricate and interesting sewer problems, varying from the needs of large and sparsely populated sections to the requirements of a veritable city, *viz.*, West Toronto. Ward 7, as the extreme western portion of the city is now known, has a population of about 25,000. When annexed some few years ago, it was very inadequately served with sewers. The voluminous industrial and residential expansion, which immediately followed, rendered the situation more acute. The industries there include large packing houses, stock yards and innumerable manufacturing concerns with trade wastes of varying nature. These commanded im-

mating \$3,500,000. It is one of the most interesting installations in Canada, and its construction has been attended by some unique design and executed by novel methods. One exceedingly interesting part of it is the Keele Street storm overflow sewer and the various lines feeding thereto. The following notes relate to its more important features.

This overflow system has an outlet in Lake Ontario at the foot of Keele Street, and the relief sewer extends north along Keele Street to Conduit Street, east to Woodville Avenue, north again to Junction Road, west on Junction Road to Mulock and north to St. Clair Avenue.

As the sewer proceeds northward it gets smaller and throws out a number of branches, the chief of which are first those near the corner of Bloor and Keele Streets, one