

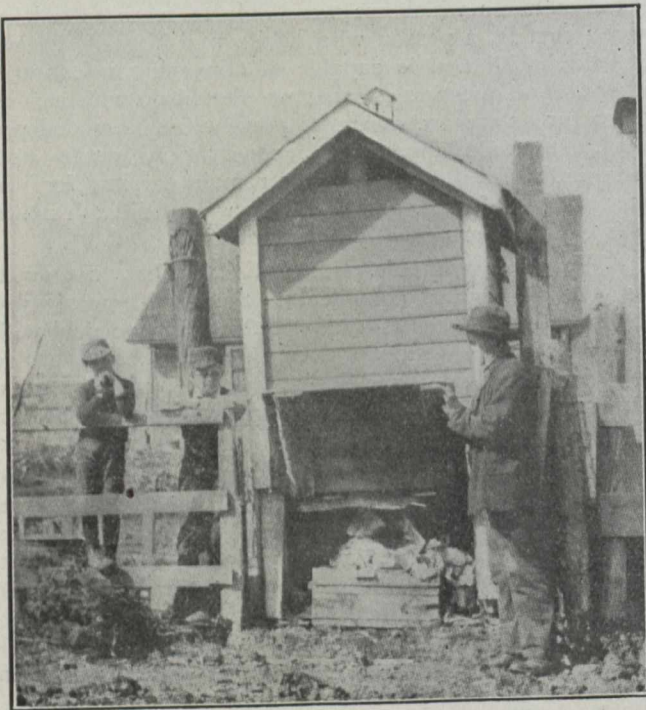
If Winnipeg wishes to hold its position as the first city in the West, it had better take some cognizance of the advanced work in sewage disposal at present being adopted by other Western cities. One would surely conclude that the question of screening, sedimentation and sterilization of sewage effluents was not too great a proposition for Winnipeg.

In closing this short review we wish to take the opportunity of stating our great appreciation of the high record of work accomplished by Dr. Douglas, assisted by a splendid and effective staff of inspectors, the working organization of which is a model to any city in the world.

### THE TYPHOID DEATH RATE.

The annual typhoid death rate per 100,000 inhabitants for the period 1901-1905 was: In Scotland, 6.2; in Germany, 7.6; in England and Wales, 11.2; in Belgium, 16.8; in Austria, 19.9; in Hungary, 28.3; in Italy, 35.2; in the United States (estimated), 46.5.

The European countries now having relatively low rates formerly had high rates.



The compulsory extinction of open privies has been the principal factor in the reduction of the typhoid rate in Winnipeg from 248 per 100,000 in 1904 to 38 in 1909. The above open privy removed in 1909 represents the last of a bunch of 6,400 in existence in 1904.

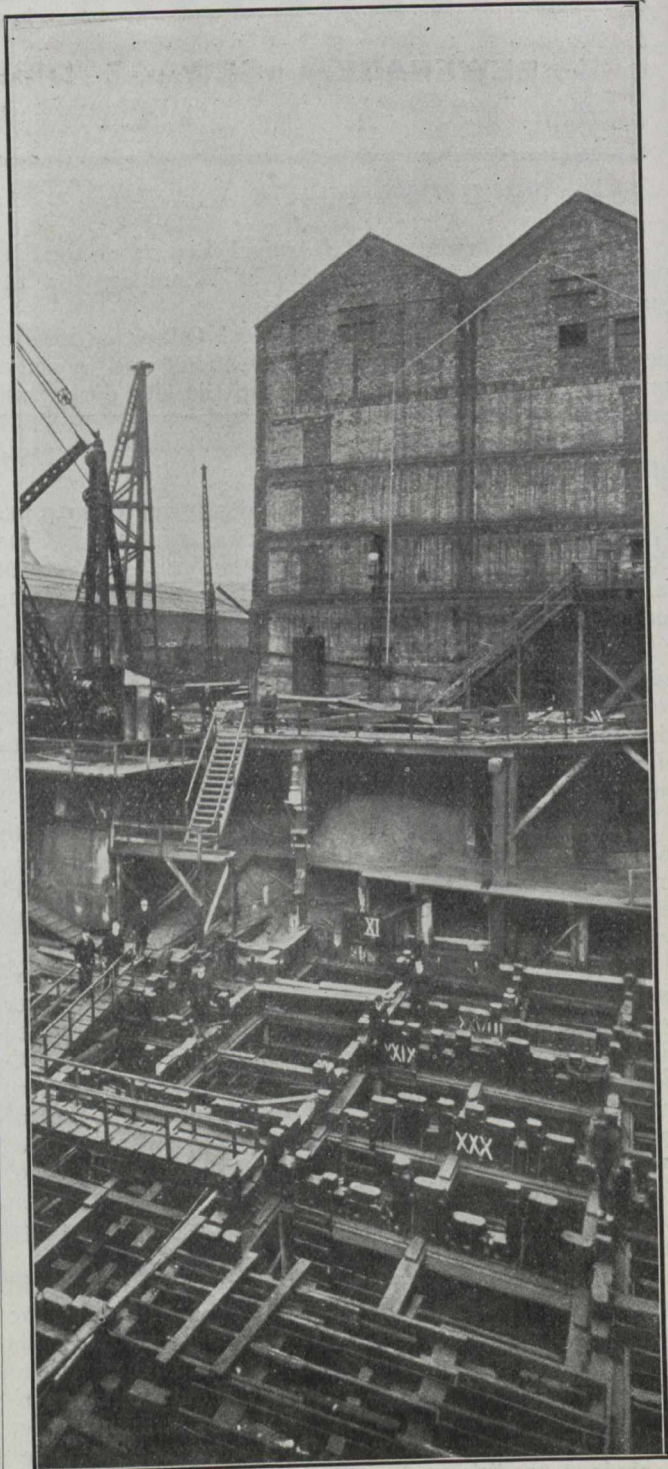
### GLASGOW MAIN DRAINAGE AND CHEMICAL SEWAGE PRECIPITATION.

By Mr. R. H. Murray, C.E.

The city of Glasgow, Scotland, enjoys a reputation for municipal enterprise. Its water supply and street car system, owned and controlled by the corporation, have already been the objective of many municipal deputations. This

spring another big undertaking was added by the completion of the main drainage works.

Glasgow has expended over \$12,000,000 in collecting and disposing of its sewage, and the scheme is only second in magnitude to that of the London County Council.



Glasgow Main Drainage Substructure of Kinning Park Pumping Station.

In 1896 the first section of the work was completed, and a drainage area of 11 square miles, giving a dry weather flow of 16 million gallons per day, was successfully treated. This represented but a small section of the total area to be dealt with, 42 sq. miles, but it served as a means of testing the principle on which it was proposed to treat the sewage, that of chemical precipitation. The results gave a very high