

# The Canadian Engineer

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## MILWAUKEE ACTIVATED SLUDGE INVESTIGATIONS

A RESUME OF RESULTS OF EXPERIMENTS CARRIED ON DURING  
THE YEAR 1915 BY THE MILWAUKEE SEWERAGE COMMISSION.

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THE second annual report of the Milwaukee Sewerage Commission (see *The Canadian Engineer*, October 28, 1915) has just been published. It is a volume of over 200 pages and has many drawings, diagrams, photos and tables which afford the reader abundant matter to ponder over.

The activated sludge process has been investigated in various scales of magnitude ranging from the laboratory

The activated sludge process is capable, under scientific control, of producing such wonderful results, that the public is apt to enthuse and raise too high expectations to be realized in practice. Hence the fortunate fact that the process is receiving careful and scientific investigations in its early stages before errors are made on any serious scale. On the other hand, the Milwaukee Sewerage Commission is to be congratulated on its enter-

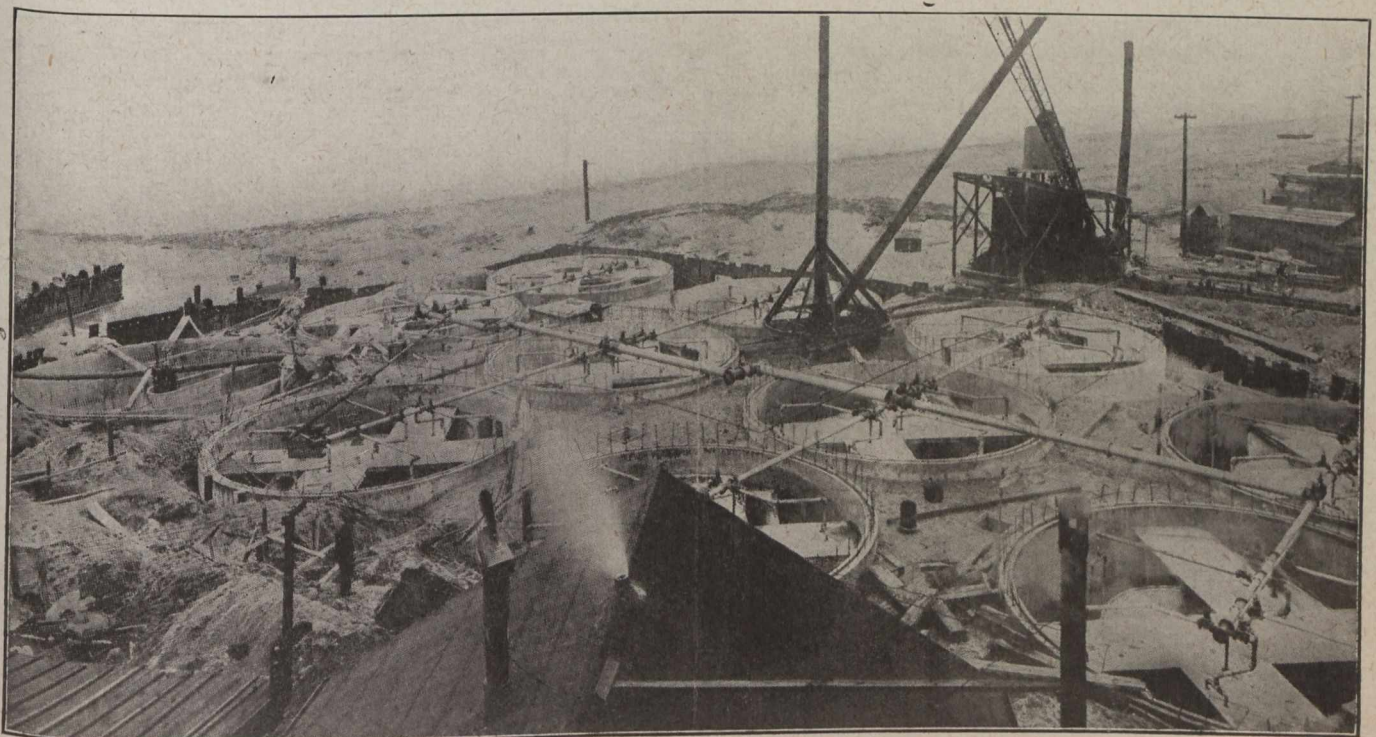


Fig. 1.—Panoramic View of Tanks.

to a large working installation, and also by the intermittent and continuous methods of charging. The writer well remembers visiting Exeter and Yeovil (England) in 1897 to study the septic tanks and filters, and has watched the vicissitudes of that system up to the present with interest, because great and excellent results were anticipated by enthusiasts who had not fully considered the problem. The septic tank is capable of doing good work when carefully managed, and the biological filters have proved satisfactory when operated properly. The septic tank was boomed and the predictions were great, but its originators were not entirely to blame for the undue boosting it received. The public was then seeking a solution of the sewage problem as it is doing to-day, although in the meantime much progress has been made.

prise in undertaking such investigations in a comprehensive manner.

A resumé of the experiments tried out during the year was as follows: Fine and coarse screening; grit chambers; sedimentation and sludge digestion in Imhoff tank; colloidal treatment by slate tanks; chemical precipitation using lime and iron; electrolytic treatment by Lautzenheiser process; percolating filters and final sedimentation; sterilization by liquid chlorine; activated sludge process by fill and draw method; activated sludge process by continuous flow method; dehydrating sludge by pressing, gravity and by draining on beds.

In the present review experiments other than those on the activated sludge process will not be discussed. These experiments were started on March 1st, 1915, by