

Mr. Levi J. Clark read a paper on "City Sanitation and the Sewage Problem."

Mr. Arthur Harvey had paid a good deal of attention to the subject since the reading of Mr. Clark's paper of last session. The main question was then discussed, and the opinions of some of the engineers present were favourable to the plan proposed. He could not help protesting against the waste of fertilizing matter which it involved. If the sewage of Toronto were to be turned into the lake, Mr. Clark's ingenious contrivance for utilizing the water-power of the flushing tanks to drive the sewage out to sea and prevent the choking of the great outlet pipe seemed very cheap and appeared to promise good results. But while he thought considerations of economy might compel the adoption of such a system in Toronto, he was much opposed to the great waste involved in it. Some regions in the Old World, once fertile, had become deserts through taking successive harvests from the soil and returning nothing to it. From this and other causes several New England States and parts of New York no longer yielded as they once did. In Canada, the Richelieu district, once the granary of a Province, was now an importer of food. Surely we ought to exhaust every means of saving the fertilizers in sewage before accepting a method of total waste. He had caused a close enquiry to be made in England of modern methods of sewage disposal, and had interested in the subject Mr. T. Kennard Thomson, one of the brightest graduates of the Toronto School of Science, now a member of the American Institute of Civil Engineers. This gentleman had examined the sewage farms, the filtering beds, the methods of electrolysis, the Condor method of deodorisation, the Amiens system, and had come to the conclusion (with which Mr. Harvey agreed) that if any European system was to be introduced into America it should be the system of precipitation, and that the best and cheapest precipitant was the porous carbon, charged with chemicals, now being used at Ealing, Southampton, Coventry, and other places; of which certain trials had been made at the City Hall here and at the Agricultural College in Guelph. Mr. T. Kennard Thomson had visited Southampton (shortly after the visit of the Mayor of Toronto), also Ealing and one or two other towns. The system at Southampton was self-supporting; at the other places nearly so. The precipitation was very rapid, and the solids, though not being of as much value for manure as once expected, were nevertheless all in demand. The effluent of the precipitation was colorless and bright. It contained some nitrates, and all germs were not destroyed; but if it was desirable, these nitrates could be saved and the effluent sterilised at small cost. After referring to the systems in use in other towns in England, which had worked quite satisfactorily in