

welcome the Association in Croydon. With regard to sewage farms depreciating property in their neighborhood, he should like to say that in 1861 Beddington and Wallington had a rateable value of £11,700. At the present time these parishes had a rateable value of £47,424, an increase of fourfold, although the farm was in their midst. He believed that fresh sewage was never offensive, and the sewage applied to the farm was always in that condition. There was no doubt that the disease germs which might be present in sewage were destroyed when sewage was used to irrigate land. At any rate, the farm hands had always been most healthy, and no case of infectious disease occurring amongst them had ever been traced to the application of sewage to land. In like manner no epizootic or entozoon disease had occurred amongst the cattle fed on the farm or on sewage-grown produce, which could be attributed to the sewage irrigation. Foot-and-mouth disease had occurred on the sewage farm, but it had been invariably conveyed from other farms in the neighbourhood. There was not the least ground for saying that sewage-farming was injurious to either man or beast.

Other speeches followed, and the proceedings of the day, which had been most successful, then terminated."

Our problem in Toronto may be said to be exactly the same as that which Croydon had to meet, and successfully solve, excepting that an increment of cost must be added for pumping, which is not included for at Croydon. On the other hand, the available results ought to be at least as good in Canada as at Croydon, inasmuch the dry climate here is unusually favorable for the utilization of sewage for the production of garden produce. We do not fortunately, however, have to go as far as Croydon for an illustration of a sewage farm. At Pullman, Illinois, has been in successful operation for a number of years a system of sewage-disposal which, in its completeness, is not, probably, excelled in the world. We quote from a recent description of this contained in a report by Dr. Oldright to the Provincial Board of Health:

"The city of Pullman is sewered on the separate system. The sewerage mains discharge 16 feet below the surface of the ground into a reservoir under the water tower. This part of the system is thus described by Mr. Doty:

'This reservoir holds 300,000 gallons, and the sewage is pumped from it as fast as received and before sufficient time elapses for fermentation to take place. The ventilation of the reservoir is perfect. Eight flues run from it to the top of the tower above it, and a twenty-inch flue leads from it to the large chimney which takes the smoke from the fires under the boilers of the Corliss engine. The sewage is pumped through a twenty-inch iron main to a sewage farm about three miles distant, and at the farm end of this main the sewage goes into a receiving tank which contains a screen placed in a vertical oblique position, through which substances that are of more than half an inch in diameter cannot pass. The pressure of the sewage upon the tile piping in the farm is not allowed to exceed ten pounds to the square inch. The sewage from dwellings now, March, 1887, amounts to 100 gallons a day for each person of the population. This seems a large amount, but when it is remembered that every tenement is provided with the best of closets and sinks, and ten per cent. of them with bath tubs, and that the water taps are all inside the houses, it will be seen that a large amount of sewage *per capita* is unavoidable.' The receiving tank at the farm is elevated to such a height that a waggon can be driven under it and receive from a door in the bottom of it the solid matters, such as rags, boots, etc., that have been strained out. From the tank the sewage passes through vitrified hydrants distributed over the farm, in the proportion of about one to every two and three-quarter acres. From these hydrants it is allowed to flow intermittently into different portions of the farm. The soil is underdrained by means of porous tiles, and the effluent passes into mains, and from them into a ditch which discharges it into Lake Calumet. The subsoil drains are placed nearer together than in most irrigation farms, the distance being about 30 feet, and I should think from the nature of the subsoil and the configuration of the locality that this is absolutely necessary. Farms with a gravelly or sandy subsoil, and sloping towards the outfall, have a great advantage in this respect. From the experience he has had, Mr. Martin recommends that the subsoil drains should never be less than four inches in diameter. About fourteen acres are laid out in what may be termed the 'flat-bed system.' I saw some of the effluent in the mains, and it was quite clean and