MUNICIPAL DEPARTMENT

TO MUNICIPAL OFFICERS.

The CONTRACT RECORD is desirous of publishing, as far as possible, advance information regarding projected works of construction in all parts of Canada, such as sewerage and waterworks systems, railways, street pavements, public and private buildings, etc. Municipal officers would confer a favor upon the publisher by placing at our disposal particulars of such undertakings which are likely to be carried out in their vicinity, giving the name of the promoter, character of the work, and probable cost. Any information thus furnished will be greatly appreciated.

SEWAGE DISPOSAL.

Sewage and sewage disposal have been questions which have engaged the attention of leading chemists and sanitary scientists for many years in European countries, but, strange to say, in a very minute degree on this continent. Many excellent works have been written on the "Treatment of Sewage," but none have struck home, except in the case of one or two comparatively small communities in the United States. It is but right to say that the soil purification and agricultural utilization of a city's sewage, though perfectly correct in principle, has some features about it which are, at least in many cases, impracticable. In large centres of population the first great difficulty is the large quantity to be dealt with, but there are remedies proposed for even this drawback.

There has been in existence at a college in St. Laurent, a suburb of Montreal, a small farm, which was recently visited by members of the Montreal City Council. The Gazette says:

The visitors were escorted to the college, and after being introduced to the Procureur (Rev. Father Renaud), were hospitably entertained. An inspection of the farm was then made under the guidance of Mr. G. Janin, C.E., who is in charge. The ground, a few acres in extent, was minutely examined. It was observed that the land was cut up into sections, through which ran a series of narrow drains, into which the feculent matter was pumped. There were no offensive odors to speak of; the nasty fluid gradually percolated through the soil, and the fine crop of onions, vegetables, etc., proved that the fertilization did not injure or retard their growth.

It is pointed out that at the present time as much as 8,000 gallons of sewage is being disposed of in this manner; and it can readily be understood that during the scholastic year three times that amount would have to be handled.

Mr. Janin accentuated the fact that at the busiest time the whole of the sewage would be absorbed in two or three hours. Being asked if there was any danger of freezing in the winter months, Mr. Janin said it had never occurred, to his knowledge; and he did not believe that it was possible, for the reason that the saline matter in the sewage precluded the possibility of such a contingency. In Paris, where the system had been in vogue for many years, and many times under the lowest temperatures, such a thing had never occurred. "I may add," said Mr. Janin, "that the system we are now advocating was the subject of an interesting paper, a synopsis of which was published in The Gazette during the meeting of the British Medical Association at Montreal in 1897."

Whether the sewage farm system would be applicable here is a moot question. Other methods have been developed, among the best being what is known as the International process, the best known and most widely used in Great Britian. It was first put into operation about eleven years ago at Acton, where the system is still in successful operation.

In explanation of the process, it is pointed out that the sewage receives its proper proportion of ferozone (a precipitant and deodorant) as it flows from the sewer into a channel, through which it passes to the settling tanks; the ferozoned sewage flows on into another channel which surrounds the top of the sewage tank, on the outside, and passes down from it through a series of vertical pipes, which enter and deliver the sewage into the tank near the bottom, thus aiding materially the sedimentation of the suspended matters carried by the sewage, and depositing them almost as soon as the sewage has been delivered into the tank. The sewage water (after having parted from the solids which have been deposited in the bottom of the tank) then rises up inside, and flows out through iron channels placed across the mouth of the tanks near the top to the filters, and comes out again from the filters, having a sufficient degree of purity to allow it to flow into any river, stream or body of water, without polluting the same, and in a highly purified condition to satisfy the demands of the most advanced sanitary critics.

The water will not decompose in hot seasons, but it will remain inodorous, non-putrescible, clear and tasteless; and will not kill fish. Feronzone, the chemical used to treat the sewage, is acknowledged to be the best and most powerful precipitant and deodorant known for sewage purification. By virtue of its soluble salts, it soon causes subsidence of the suspended solids, and the sludge precipitated by it is rich in ammonia, and is therefore valuable as a fertilizer.

The polarite used in the filters for purifying the feronzoned sewage water from the putrescible matter, which is dissolved therein, is a powerful deodorizer *also, as well as a purifier, by virtue of the* oxygen occluded in its microscopic pores, and which is constantly supplied by the surrounding air and water.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

CITY OF KINGSTON VS. KINGSTON AND PEMBROKE RAILWAY COMPANY.—Judge Wilkinson has handed out judgment in the case of the City of Kingston vs. the Kingston and Pembroke Railway Company, a suit for interest on overdue taxes for the years 1894, 1895, 1896 and 1897. By the terms of a by-law adoped in 1881, representatives of the company and the city were to meet annually and adjust the amount of taxes due on certain lands held, but not used by the company. The company did not pay its taxes in the years named until long overdue, and percentage was charged according to the terms of a civic by-law. The company contended that the taxes were not due until the amount had been adjusted, but the city took the opposite ground, and the judge upheld this decision. The company is therefore liable for the percentage on the taxes of the four years mentioned.

WOOD FOR PAVEMENTS.

Mr. Thomas Southworth, Clerk of Forestry for Ontario, has suggested that jack pine be employed for street paving purposes. Concerning it he says: "This timber is to be found in considerable quantities in the sections north of Lake Huron and the Georgian Bay, and on the north shore of Lake Superior. It is a very hard, close-grained wood, containing more or less resin. It is used to some extent for railway ties, but is so hard and resinous that it has not been considered suitable for lumber. Jarrah wood, imported from Australia, is used very largely in England for street paving material. The demand for this kind of wood has been so large that it has almost exhausted the supply immediately available, and paving operations had to be suspended in some quarters in England owing to the scarcity. In several of the best residential sections of London they are discarding granite for paving purposes and using Jarrah wood. It is very hard and durable, and is treated with creosote so as to deaden the noise of vehicular traffic."