

surface and interruption to traffic caused by forming house connections. In the plans and "suggestions" of Sir Robert Rawlinson made in his report to the British Government he obviates this trouble by placing sewers at the backs of the houses, and connecting them at one point, so that each block has only one or perhaps two street connections. I am quite familiar with this arrangement in my native city Edinburgh, Scotland, where it is extensively used, and I have used my best endeavors to introduce it into my practice during the past four years. I have recommended it at Calgary and Brandon in the Northwest, and St. John's, Newfoundland.

A little consideration will readily impress on one's mind the advantages of this plan, a few of which may be noted. The drains being outside the house, there can be no danger from defective joints and poisoning by sewer air; the drain can be put in better and more cheaply if outside, as glazed pipe can be employed instead of costly iron; the drains will be at the back of the house, and will afford better opportunities for overhead ventilation; there will not be the constant interruptions to the street and destruction of the street surface. This method can be easily adopted where there are lanes in the rear of each block: it may be urged that in the case of Peterborough this will not be practicable as there are no lanes.

This objection can hardly be accepted as insurmountable as a city ordinance can be passed or the proper legal power easily acquired to enter upon private lands for the purpose of laying sewers and connecting house drains thereto. In the city of Washington this question is being dealt with, and powers sought to "condemn" land for this purpose. The introduction of this system will be of such great advantage especially in George street, that I have prepared a special small plan showing how one or two blocks can be treated, which I recommend to the most favorable consideration of your worshipful council. It will also have a practical effect on the pocket of the ratepayer, who can have short connections at the rear of his property at a moderate cost, instead of long expensive iron drains under his house, and corporation charges for connections to the sewers in the streets; and he will also benefit by not being called upon to pay yearly taxes for the repairs to street surfaces which will be caused by the constant addition of house connections to the sewer in the street.

MANHOLES.

The sewers will be laid in right lines from manhole to manhole, for the purpose of inspection, junctions of one sewer with another will be made within the manhole according to the Rawlinson principle; detailed drawings are furnished shewing these junctions.