

The sewers are constructed on what is known as the combined system—that is, they carry off the street drainage as well as the house sewerage.

The sewers are ventilated through manholes into the open air, generally in the centre of the street.

These manholes are very often objectionable, particularly on some of the large brick sewers, which have very little sewage running through them in dry weather. This is unavoidable in the present stage of development of the City; as house connections are made and large quantities of water taken into the sewer they will gradually improve.

The system of ventilation by manholes is the best known at the present day.

The following remarks are from Baldwin Latham's Sanitary Engineering :

“The objections raised against the use of simple openings into the sewers, that deleterious gases escape from them, and are left to take their own course comparatively uncontrolled. In combating this objection it should be borne in mind that gases escaping in the centres of roads become considerably diluted before they can arrive at the footpath or houses. The amount of dilution supposing the gas to be uniformly distributed through the atmosphere, would be proportional to the cube of the distance from the point of discharge, and dilution means in this matter something more than the dilution of effect. These open ventilating shafts act at certain periods both as upcast and downcast shaft, and the fact should not be lost sight of that they can be made as efficient when viewed in the light of ventilating shafts as the lofty shafts, which have been referred to, and at considerably less expense. The efficiency of a shaft is proportionate to the square root of its height, consequently, short shafts of larger area may be made quite as effective as smaller shafts of greater altitude.

“ * * * * * Moreover less pressure will be exercised throughout a system of sewerage where ventilation takes place through low instead of high shafts.

“One of the most important things to be considered in connection with the ventilation of sewers is the disposal of the sewer gas in an innoxious manner. It should be

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