

a minimum depth of 12 feet with an average of 14 would have cost
4 \$19,740.00 and this for trenching and refilling alone, without taking
into consideration the extra cost on manholes and flushing tanks.

While acquiescing with Mr. Rust, that "with perfectly constructed house drains the danger is merely imaginary," the author believes that the danger is in practice very real, since in spite of all care absolute perfection is rarely attained, and prevention, being better than cure, would place the sewers where the risk was least.

The exact area sewerred cannot now be given by the author, as he has no map with him. It is, however, about 100 acres, and it must not be forgotten that the system has been designed so as to permit of extension, when expedient, over a much larger area without alteration in the work already completed.

With reference to the iron pipes for house drainage, the writer quite agrees with Mr. Fleming as to the desirability of testing before use. Under the By-Law, the Inspector has large power, and need only accept such materials and workmanship as are satisfactory. The coating of American black varnish appeared to answer well with some of the cast iron outlet pipes which were exposed to the weather from October to March.

Some engineers think an interoceptor between the house and the sewer unnecessary, while others recommend it. In the case in question it is intended as an additional safeguard (should the ventilation of the sewer prove defective), by which an exit is provided for any gas which may find its way into the house drain; it also provides a fresh air inlet for the soil pipe. If too close to the house the foul air outlet might be connected with a ventilating pipe.

The author does not understand Mr. Fleming's remark, if correctly reported "that the two pipes were exactly together. They came up into one chamber, the grating under the house certainly had a draft, and the air escaped exactly at that point." If the two pipes referred to are the soil and ventilating pipes, they are supposed to be each provided with their own fresh air inlets and foul air outlets. The ventilating pipe is not connected with the soil pipe at the foot of the furnace.

Since the Council declined to sanction the entire suppression of privy vaults, the regulation referred to by Mr. Hering was adopted to meet cases in which cesspools had been or were about to be constructed in accordance with the By-Law. A reference to the paper will show that Mr. Rust is incorrect in assuming that any solid matter can be introduced into the sewer from these vaults.