estimated, and it is to be hoped it will receive more attention in the future.

The following few selected instances of bad drainage discovered during the year may prove of interest:

In a club house, where frequent complaints were made, a room in the basement was quite uninhabitable, owing to the free entrance of sewer gas into it. This room was used as a sleeping apartment, and the drains of the house were entirely unventilated, rendering matters still worse. As was to be expected, sickness was caused by this state of affairs, which was remedied by the construction of a new drain, renewal of the plumber work and proper ventilation.

In a house on Beaver Hall Hill, where new iron soil pipes and drains had been put in and exposed to view, it was discovered that sewer gas was entering the house freely and in considerable volume alongside of the iron drain, from a faulty joint outside of the house.

In a public building in the city, among other grave defects, four or five open pipes were discovered in the basement, two, four and six inches in diameter, communicating directly with the drains of the building.

At a private residence in Dorchester Street, a very bad state of affairs was found to exist. The soil pipes were of lead trapped at the foot, wholly unventilated, and having numerous fixtures connected with them by long branch waste pipes, also wholly unventilated. In nearly every bedroom in the house was situated a wash-hand basin communicating with the unventilated soil pipes as described. The overflow pipe of a cistern in the attics was connected directly with one of the soil pipes, and protected only by a bell trap on top of it. This trap had, of course, evaporated, and the stench escaping from the top of the waste pipe was insupportable, indicating the condition into which pipes or drains will get when unventilated. All the appliances in connection with the house were old and unsatisfactory, and the pipes leaking badly

The main drain of the house consisted of fire clay pipes 9 inches in diameter and laid on a gradient of less than $\frac{1}{4}$ inch to each length of pipe. This drain had been recently put in at considerable cost, and was 70 or 80 yards long. It, of course, could not be self-cleansing, and I accordingly had it opened at a point chosen at random and found it standing about $\frac{1}{3}$ full of water.

In a large residence on Sherbrooke Street, the drains were found to be leaking very badly at various points, and sewer gas escaping freely into the house, which fact was quite apparent to the nose. Two sinks were also connected in such a way that the discharge of one deprived the trap of the other of its water seal, and so provided another opening for the entrance of sewer gas into the house.

In another large house on Sherbrooke street the main drain was found to be leaking and partially choked. A very large leak was discovered in the lead pipe leading from one of the water closets. A large hole had been eaten through the top of the pipe by rats, and although the hole was so situated that water did not escape from it, the smell of sewer gas was at times very strong.

In a large place of business in the city, where complaint was made of offensive odors in the offices, sewer gas was found to have free entrance into the building on the floor occupied by the offices. There were two water closets situated back to back; the basin of one was broken in a great number of places and in front of the trap, and was simply hanging together; and the air pipe connected with the ventilating horn of the other was torn from it, taking part of the horn with it, and leaving a $2\frac{1}{2}$ inch opening direct from the sewer.

In two or three houses in a terrace in the West End it was found that the soil pipe and kitchen sink were inserted into a 6 and a 4 inch faucet of the drain respectively, and no joints whatever made. These open pipes were within a few inches of the floor, and vomiting sewer gas into the houses freely. In one of the houses there had been several cases of diphtheria. The smoke test is invaluable in finding out such defects, readily revealing leaks in drains, sometimes many feet underground.