

By Mr. FREED :—

Q.—As regards the plumbing of houses what have you to say? A.—I suppose I could point out dozens of cases in this city where I know of diphtheria having been caused by a direct communication from the drain to the interior of the house and also from there being no trap to intercept the sewer gas; instances are numerous where from defective plumbing sewer gas goes into the house. A great many of those houses are built to rent and hitherto we have not had any inspection of them; but an inspector of plumbing has been appointed and we hope a similar course will be adopted in other places so as to have inspection made compulsory.

By Mr. ARMSTRONG :—

Q.—Are the plumbers practical men? A.—The trouble is not with the plumbers so much as with the persons who want to have the work done as cheaply as possible and who are putting up houses as cheaply as possible.

By Mr. FREED :—

Q.—If there is simply an ordinary water trap in a drain pipe will not the sewer gas force its way through into the house? A.—It may do so.

Q.—Are the methods of ventilation provided in the Ontario Law of 1884 satisfactory in the case of the ventilation of drain pipes? A.—Yes.

Q.—Are measures being taken to see that at present and hereafter the law will be carried out? A.—They are in Toronto and in some other places, but in a great many cases they are not.

Q.—Do you think the average working man's dwelling is too small? A.—Yes.

Q.—Is it so small as to be a danger or menace to the health of the occupants? A.—Yes.

Q.—What are considered the lowest cubic contents of a house for each inmate consistent with health? A.—You mean adopted by authorities in sanitary matters?

Q.—Yes. A.—From six hundred to one thousand cubic feet in each room occupied. It would, however, require that the cubic contents of the house should be greater than that figure, because at one time the family will be in the bed rooms and at another time in their sitting rooms; so I should think there should be double that capacity for the house.

Q.—So there should be from 1200 to 3,000 cubic feet to each occupant of the house? A.—To each individual in the house.

Q.—You think that space is not secured to the average working man? A.—I think not.

Q.—Do you know how that is outside of Toronto? A.—I think generally it is not secured, taking the accommodations all over the country. With that cubic space there should be proper means of ventilation, for changing the air a certain number of times in a given period. This should be done from three to four times per hour.

Q.—Do you think with the ordinary house as ordinarily constructed and maintained that special ventilation should be provided, or would the ordinary openings of the doors, crevices of the windows and so on, provide sufficient air? A.—I think there should be special ventilation, and with a little attention that could easily be secured. In rooms heated by a stove we lose a great deal of the benefit of the stove for lack of provision being made to carry a galvanized iron pipe into the house from outside, as we do in our furnaces. An iron pipe should be arranged to open underneath the stove and thus bring fresh air to the stove, and there should be a connection with the chimney to carry off the foul air.

By Mr. HEAKES :—

Q.—A pipe would be placed under the floor, which would be brought in from the outside? A.—Yes.

By Mr. FREED :—

Q.—Is it within your knowledge that poor people in order to economise fuel close up their houses unnecessarily tightly? Is that a result of their poverty—an