

the foul air in the drains is being pressed up into our houses. This fact can be easily demonstrated by merely lifting up the handle of the closet, and, although there is an S or bend, yet the air is forced up as the water rushes down the pipe. When we consider this poisonous state of the air in our houses we need not be surprised when we see typhoid fever (which is called by many eminent physicians water-closet fever), scarlatina, measles, &c., so prevalent as they are at present in our city. For the houses that are already built, the plan of ventilating the sewers seems to me to be the most simple and successful, but to those who are about to build, I should suggest an entire change from the present system adopted in this country. The plan that I would recommend is the flat roof, with the pitch to the centre, the drain or spout being carried in a straight line down through the centre of the house. It will be seen at a glance that the rain and snow water will keep the sewers constantly flushed out and free from all impurities. This shaft, or drain, answers as a natural ventilator, and never permits any foul air to be disseminated through the building. Again, there are no bends or traps necessary for the closets, as they open in a straight line into the drain. The advantage of this must be very obvious, for, as the upright drain acts as a chimney, it not only clears itself of every noxious vapour, but acts as a ventilator to every room that has an opening into it. While speaking upon this subject, I will say a word or two on flat roofs. I know that many of my fellow-citizens have a great objection to the gravel roof, as it is called, and I admit that a roof of this description, badly constructed, is a perfect pest. I speak from experience, for I believe I was one of the first in Montreal to adopt a flat roof on a private dwelling. There is nothing original in them, for they have been used from time immemorial, nor is there anything new in valley or central drainage roofs, for they have been in use for a very long period in New York; but, I believe Mr. James Shearer was the first to introduce them into Montreal. This flat roof will always be a failure, unless it is thoroughly ventilated underneath, so that the lower part can be completely chilled, for, should the hot air from the rooms come in contact with the under surface, it will thaw the snow and ice, and tear the roof, allowing the water to stream in from