

authorities in relation to the position of traps, and to the ventilation of sewers; there is a want of a perfect trap; there is a want of a perfectly non-corrosive material for drains and soil and other pipes; there is scamping as well as ignorance in relation to the plumbing work, manifested, little or much, in spite of all care and oversight; all of which, with other defects and dangers, make the system exceedingly dangerous. And not only is it directly dangerous to the city in which it is constructed, but with the present method of disposal of sewage, after it has been removed from the city, emptying it into streams, rivers and lakes, instead of purifying it by means of a sewage farm or of some less natural chemical process, it is, from contamination of the water supply, rendered exceedingly dangerous to other cities and towns; or, as in the case of Toronto, dangerous in this way, too, to the city it relieves of sewage. But human progress, it appears, is not made without penalties, and the penalty of perfecting the water-carriage system for our dwellings has been, and will continue yet for some time to come to be, a vast sacrifice of human life. It is probable that this penalty, this sacrifice of life, even with the system imperfect as it is, is lighter than that of the vilely barbarous system of storing excreta in the vaults, and casting the slops upon the ground at the back door. Indeed any system would be better—none conceivable could be worse, than the old disgusting method of closet vaults. Fortunately, however, there are other methods for safely removing and disposing of waste matters besides that in which open pipes extend from the system of street sewers (which often contain cess-pools of stagnant sewage) directly into our bed-rooms and kitchens. In an elevated city with a free outflow, and with abundance of water, the system under consideration is less objectionable than in a city with opposite conditions. But even in the most favorable circumstances, the writer, after many years of observation and study of this subject, rather than have complete connection between the sewerage system and the sinks, baths and closets in a dwelling, would much prefer the use of earth

or ashes closets for the excreta, and disconnection in the yard of all the waste pipes for household slops—bearing with the extra trouble which the latter would give in frosty weather. This may seem to many like advocating a retrograde course, but it is simply in favor of making haste slowly, and of progressing cautiously and safely. If all connections between the sewers and the sinks, baths and closets in our houses were entirely cut off in the yard by an open grating, giving complete separation between the pipes and the drains and sewers, many premature deaths would be prevented—many lives saved. Many now are discarding fixed washing stands with wastepipes in bed-rooms, and we should like to find the discarding principle extended to the present usual method of disposal of other household slops.

Matters Recent and Current.

SEWER VENTILATION is a question which is always being more or less discussed. Complaints of the foul smells from sewer gratings are frequent in most cities, and it is proposed by some to ventilate the sewers by means of pipes carried up from house drains to the tops of the houses, and even to use the soil pipes of the houses for the purpose. A sewer, from which offensive smells arise, is clearly a badly constructed sewer, and is not carrying off the sewage properly, and the best way to remedy the matter and remove the smell is to have the sewer taken up and laid in a more perfect manner with a freer outflow. A foul smell from a grating indicates, unmistakably, stagnant putrifying sewage not far off, and to provide a remedy simply for conveying the effluvia to some point where it will not offend the sense of smell, is like treating a symptom of disease without attempting to remove the cause. Sewers should be so constructed as to carry away all sewage before it has had time to decompose and give rise to offensive gases.

"OF ALL EXPEDIENTS," Dryden has written, "never one was good." In the case of sewers as at present constructed, some sort of ventil-