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TO WHAT CAUSES ARE TO BE ATTRIBUTED THE WANT OF SANITARY PROVISIONS IN THE DWELLINGS OF THE UPPER AND MIDDLE CLASSES ?

It has often been a matter of surprise to the residents of so many of the better classes of houses how they should be so very unhealthy—evidently from bad drainage—although it often is difficult to discover from whence the evil arises, when the drains are covered over with boarded floors.

We will first endeavor to point out some of the sanitary defects which exist in so many good houses, and, secondly, the best method which should be adopted to rectify the same.

In the first case, many of these buildings are erected as mere speculative investments, built to "sell," and the proprietor has curtailed his expenditure in every possible way where bad workmanship will not meet the eye. The interior and exterior may be all that could be desired, but cheapness in every form where cheapness could be hidden, is too frequently the rule in the erection of houses built simply to rent or to sell, and if there is one particular portion of a dwelling where parsimony is exercised more than in another, it generally is in the drainage, because it cannot be seen.

As a general rule, the subsoil of houses is not disturbed, beyond a depth necessary for a foundation; but frequently, in cities like Montreal, many depressed portions of it have been brought up to a grade by the filling in of refuse of the most putrescent nature, and which lays the sure foundation for future illness; upon these made foundations houses are frequently erected, and the basements simply floored over, and in cellars not even floored. Now, whilst the foul gases constantly arising from these undrained foundations, which are sometimes saturated with impurities, pass off into the open air without much injury to the surrounding neighbours, they become a bed of pestilence when covered over and concentrated inside the walls of a dwelling, within which in winter time the windows are nearly always closed. Here, then, from one cause arises a most insidious enemy, and to strangers to the history of

the locality a mystery how, when they have used every precaution in respect to ventilation, and even to a careful examination of the drain pipes, that low fevers and sickness so often prevail in the family. These foundations are sometimes little better than cesspools in the very centre of dwellings, filled with putrescent alvine matter.

The next defect in building, and the most common one, is from cheap drains and the defective method of laying them. It frequently happens that this matter, and which is of the utmost importance, is left to mere laborers to perform, and although the architect gives the proper gradients, he fails to see the work properly done, and as a consequence the drain pipes are scarcely ever properly laid, and the joints not completely cemented all the way round. The full gradient laid down to be followed is seldom perfectly done, and the pipes laid irregularly; the consequence is that they soon become silted up, the pressure of the sewage causes the joints to leak, and the saturation of the soil with general escape of insalubrious vapor to the interior of the house, follows as a natural consequence.

What, therefore, with impure subsoil and defective drainage, the basement of the house is totally unfit for habitation. In truth, such houses constructed for the upper and middle classes are but as receivers over a still below them, in which impurities and gases are distilled over, being collected and condensed above.

The staircases of many houses, instead of being used as ventilating shafts for carrying off the impure air and gases, have no vent, and therefore, are shafts for the collection of impure air, which is conveyed therefrom to the bed rooms. The basement, also, instead of all of its division walls being built of brick, is formed of studded partitions, up which the foul air is also drawn and distributed into every room in the house. Water-closets also are built in the middle of the house without any ventilating shafts carried to a warm flue in the chimney, and are frequently constructed with no ventilator whatever. The coal gas, which in winter is frequently escaping from the stove in the hall, is drawn up the wall of the staircase to the upper part of the house, and finding there no pipe through which to escape, becomes distributed throughout the dwelling, and if its deleterious effects upon flowers are so apparent, what must it be upon the human system? Thus, the staircase of the house, which should in fact