

HEALTHY DWELLINGS

By Dr. F. T. Underhill, Medical Health Officer, Vancouver.

Note:—Preliminary to Publishing a series of articles by an architect, we are pleased to be able to incorporate in this issue the following constructively critical and suggestive article by Dr. Underhill.

—Editor, B. C. M.

The subject on which I have based these few notes is that of "Healthy Dwellings," and I propose to show that very many points have to be considered in erecting a dwelling in order to ensure an ideal place for human habitation.

The first consideration is the choice of a site—and this is one of the most important—as many unfortunate persons have found to their cost after they have occupied their new houses for a short time.

Any real estate man will sell you a so-called "desirable building site," the principal condition in his opinion being whether the size of the initial payment is sufficient to cover his commission. To the purchaser, however, the transaction is more vital, and should not be entered into until he is satisfied that the lot fulfils all the requirements of a "desirable building site."

First. The Size of the Lot. Twenty-five feet is not sufficient for a dwelling house. Provision must be made on a man's own property for uninterrupted light for each and every window in the house. It is not possible to leave a meagre allowance and trust to the neighbor leaving the balance. There is no law to compel him to do so, and he may insist on his rights and by building up to his lot line throw half your rooms into gloom. This has happened in this city many times. It can be seen in rows and rows of houses in the older quarters and also to some extent in the better class districts, but no matter where it is found it is a distinct menace to the health of the inhabitants.

Secondly. The Drainage of the Lot. Does it stand high above the street and lane so that there will be no difficulty with the drainage in wet weather, or is it low-lying and water-logged in wet weather, promising flooded basements and damp walls?

Third. Is There a Sewer adjacent to the property for the ready disposal of sewage in a sanitary manner, or will it be necessary to construct a septic tank or adopt some other makeshift means of disposing of liquid wastes? If there is no sewer and the latter expedient has to be adopted, the question of the drainage of the property becomes one of great moment. In this case, if the lot is high and well drained, it may be possible to run the liquids to a point free of the lot. But if the property is low-lying and water-logged, the sewage will remain on the lot and in wet weather may be washed even into the basement.

Examples of this are to be found in Vancouver where houses have been built on sites which receive the drainage from the higher land around, and short of the installation of a sewer there is no possible means of relieving the situation.

Filled-in Land

It is the practice in many cities to dump the refuse collected by the garbage department at various points where a fill-in is required—thus serving the double purpose of levelling the land and providing a ready and cheap method of garbage disposal. I hardly need to point out that such

land would be rendered totally unfit for the erection of dwellings, and yet in some cities such land has been used with dire results to the unfortunates who inhabit the houses.

Water Supply—Contamination

The water supply is another matter which is of the first importance. Fortunately in Vancouver City every building is served with city water and does not have to depend on a well in any instance.

In the country districts, however, it is frequently necessary to dig wells, and these are constantly in danger of pollution. There is many a farm both here and in the Old Country where the well and the cess-pit are to be found side by side, often only a few feet separating them—the filthy water of the cess-pit seeping through the ground and polluting the well. It does not follow that because the two are separated by a distance of many yards that safety is assured, for the seepage may travel a long distance, depending upon the character of the soil and the configuration of the ground.

All the points mentioned above are just as essential in planning a house as it is to count the cost before starting to build.

Planning the House

A house should be planned to accommodate so many people. That is to say, provision should be made in the sleeping apartments for adequate floor space and cubic air space for each person it is proposed to accommodate. This has been laid down as a minimum of 432 cubic feet for each adult—equivalent to a room 9x6x8 feet in height—the height not to be less than 8 feet. This minimum is laid down mainly to curb the avarice of rooming house and hotel keepers, and is not by any means to be considered as an ideal. In fact an eight foot ceiling in a room is much too low for comfort and does not allow for a proper circulation of air, while a room 9 feet by 6 feet cannot be considered a spacious apartment.

Ventilation and Lighting should be afforded in the most generous quantities.

"Natural daylight" is defined in the Lodging House By-law as being "the unreflected and unobstructed normal light of that period of the day time between sunrise and sunset."

There is no apartment in a house which can afford to be without "natural daylight" as defined above, least of all a sleeping apartment, for it is during the daytime that the bedroom can be exposed to the influences of sunlight and fresh air and rendered sweet and fit for occupancy again at night.

The windows should be of generous size and made to open to their full capacity, and, incidentally, they should be kept open, summer and winter.

Examples might be given of sleeping rooms in hotels and rooming houses and apartment houses from which light and ventilation have been excluded either in the construction of the building by the use of air shafts or by the erection of other buildings alongside.

These constitute a grave menace to the health of the occupants and yet because the law allowed—and because by this means it was possible to gain a little more revenue—some of our so-called best apartment houses are constituted on lines that are unqualifiedly condemned by all sanitary authorities. Even today the Building By-laws of Vancouver City do not adequately guard against this condition of