

Where fresh water from a spring flows through a cellar, a closed channel of drain tile should be made to carry all the water away.

When a cellar is found to be continuously damp, but not wet, neither the householder nor anybody else will voluntarily pay any attention to it : certainly the landlord wont. Dampness may be caused by a high level of ground water. Such a site could be improved by draining, but if a house must be built there and a cellar is a necessity, then the foundations and cellar floors should be made watertight with cement. In attempting to get a deep cellar with plenty of head room, care should be taken to keep the floor above the level of the sewers in the adjoining streets, so that the drain will have plenty of fall, and when the sewage is running full bore in the sewer, it will not back up into the house.

In times past most houses had no cellar at all, or only a small excavation under the extension at the back of the house, consequently the principles of construction necessary to obtain dry cellars have not had much attention in this country. We have had plenty of room round each house, and plenty of sunshine to keep things dry and wholesome, but to-day, in our large centres, elbow room is a thing of the past, and buildings are crowded together and built to such heights that the sun no longer has opportunity to perform its beneficent part : therefore we must look to the construction of our buildings and see that everything possible is done to prevent moisture accumulating in our cellars, or on our cellar walls. Damp walls mean moisture-laden air in the cellar, and as the air from the cellar is continually rising up into the house, it means an unhealthy house.

To prevent moisture getting into the walls various methods have been tried. The ordinary stone foundations have been covered on the outside with mortar, tar or hydraulic cement ; drain tile have been laid all round the building at a distance of two or three feet ; areas have been built open and wide, as seen in front of rows of houses in New York and London, or narrow and covered as built in Great Britain. This narrow covered area adds very little to the expense of construction, and is found to be most efficient as a protection from damp. It is constructed by building a brick wall of the thickness of one brick at a distance varying from three inches to a foot, from the outside of the ordinary stone foundation. The space left between the bricks and the stone wall is covered with stone or slate sloped so as to throw the rain away from the house ; openings are left at intervals for ventilation, and thus the moisture is held at a distance from the main wall, and the cellar walls are kept dry.

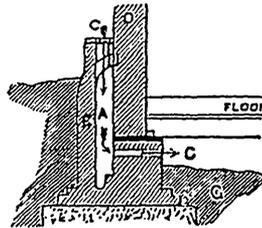


FIG. II.—FROM HEALTH EXHIBITION LITERATURE.

A point nearly related to damp cellars may be mentioned here ; by capillary action moisture will rise from the foundation up into the bricks of the house wall. The capillary action of stone and brick is well known, and by experiment has been proven to have raised moisture thirty feet up a wall, ten or twelve feet being a very