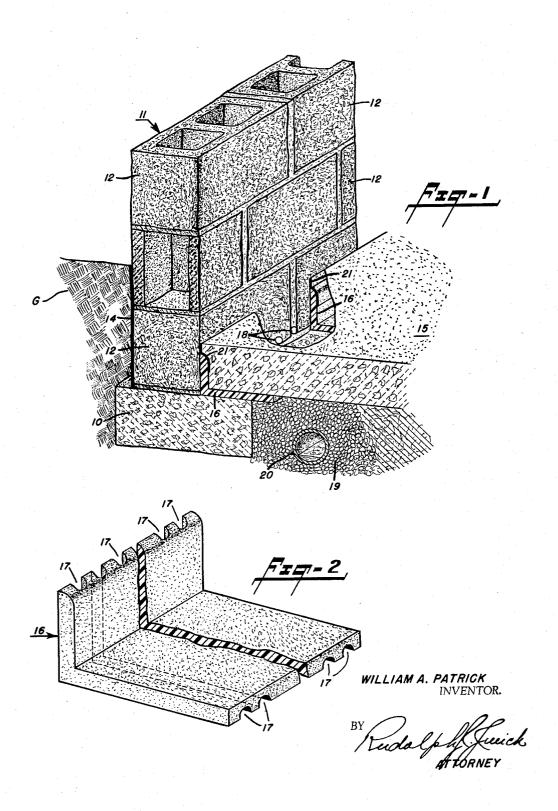
W. A. PATRICK L-SHAPED MEANS FOR DAMPPROOFING BASEMENTS FORMING PASSAGEWAYS BETWEEN FOUNDATION FLOOR AND WALL Filed July 3, 1963



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L-SHAPED MEANS FOR DAMPPROOFING BASE-MENTS FORMING PASSAGEWAYS BETWEEN FOUNDATION FLOOR AND WALL William A. Patrick, 947 Dunham Ave., Westfield, N.J. Filed July 3, 1963, Ser. No. 292,699 1 Claim. (Cl. 52—274)

This invention relates to the art of dam proofing masonry structures and more particularly to a novel, simple and effective arrangement for providing a dry basement in a dwelling or other building.

In constructing buildings with concrete basement floors, it is customary to cast the floor slab after the foundation has been set. This produces a seam, or crack, at the 15 function of the floor with the wall, and often permits the seepage of water into the basement. More importantly, the walls of most buildings are made of hollow cinder or concrete blocks. In time, these blocks, and/or the mortar binding, develop cracks so that water passes 20 from the exterior of the building into the hollow portions of the blocks from whence it flows to the basement floor. Even absent actual cracks in the blocks, such blocks, particularly cinder blocks, are subject to moisture seepage by capillary action. Irrespective of the specific reason. it is known that the problem of providing and maintaining a dry basement floor and walls is one which continues to plague building contractors and owners.

Inasmuch as a masonry structure which is inherently and permanently leakproof has not yet been devised, it 30 is customary to employ moisture-resisting flashings, or coatings, of one kind or another to seal the many joints and seams. These flashings, however, are not permanent as they fracture, or tear, due to building expansion, or settling, careless installation, etc.

I have solved the problem of providing a permanently dry basement by providing natural escape paths for water from the building walls to the underlying floor bed. I accomplish this by installing a rigid, L-shaped, more or less corrugated drainage member between the floor slab and the wall on one hand, and between the floor slab and the foundation on the other hand. Such drainage member encircles the entire basement along the wall seam and serves to drain water from any portion of the wall to the underlying floor bed. Further, I provide transverse openings in the lower portion of the walls, which openings communicate with the escape paths formed in the drainage member, thereby preventing a possible build-up of water within the building blocks.

An object of this invention is the provision of a novel 50 arrangement to prevent the accumulation of water on the basement floor of a structure.

An object of this invention is the provision of a method of dampproofing a structure having a poured concrete basement floor, which method comprises the formation of a plurality of passageways permitting the flow of water from the inner lower surfaces of the walls to points below the floor.

An object of this invention is the provision of a method for preventing seepage water from accumulating on the basement floor of a structure, which method comprises forming a plurality of water-escape paths between the inner walls of the structure and the medium underlying the floor, and forming a plurality of transverse holes in the wall at points below the floor level, said holes communicating with the water-escape paths.

These and other objects and advantages of the invention will become apparent from the following description when taken with the accompanying drawings. It will be understood the drawings are for purposes of illustration and are not to be construed as defining the scope

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or limits of the invention, reference being had for the latter purpose to the appended claim.

In the drawings wherein like reference characters denote like parts in the several views:

FIGURE 1 is a fragmentary, isometric view, with parts in section, showing a drainage arrangement made in accordance with this invention; and

FIGURE 2 is an enlarged isometric view showing the drainage member incorporated in FIGURE 1.

Referring, now, to FIGURE 1, there is shown a footing, or foundation, 10 of poured concrete and one wall 11 constructed of conventional concrete or cinder blocks 12 secured in position by mortar. The outer surface of the wall, which is below the level of the ground (indicated by the letter G), may be plastered and coated with hot tar, as indicated by the reference numeral 14. In accordance with conventional practice, the basement floor 15 normally abuts the wall and rests on the footing thereby resulting in a joint between the floor and the wall and between the floor and the footing.

Eventually, cracks develop in the outer protective surface 14 of the wall and in the wall proper. Ultimately, water seeps through these cracks, builds up on the footing and eventually flows onto the basement floor. At the same time, and irrespective of cracks in the wall, moisture seeps through weak areas of the wall blocks and collects on the basement floor.

To eliminate such water collection, I install a permanent drainage member 16 along the entire base of the basement walls. Such drainage member 16 is shown in the enlarged view of FIGURE 2. It is L-shaped and provided with a plurality of flutes, or channels 17, which individually extend laterally along the entire outer surface of the member. It will be noted that the channels 17, on the vertical portion of the drainage member, are adjacent to the side wall of the building, when such member is installed as shown in FIGURE 1. Also, the continuing channels in the horizontal portion of the drainage member are adjacent the footing 10. Thus, when the floor slab 15 is poured, it will abut and rest on the smooth, inner surface of the L-shaped drainage member and, therefore, the slab does not interfere with the channels 17.

It often happens that the outer walls of the structure 45 and the protective coating 14, develop cracks, due to settling of the structure, while the inner walls, along the floor slab, remain substantially sound. Thus, the water may collect within the hollow blocks, building up to a level above that of the floor. In such case, the water eventually seeps through the upper blocks and although such seepage may not result in visible water puddles on the floor, the basement becomes damp and musty. In order to prevent this condition, I purposely provide a plurality of transverse openings in the lower blocks and/ or the mortar as, for example, the openings identified by the numeral 18 in FIGURE 1. Such openings communicate with the channels of the drainage member and results in a draining off of the water, thereby preventing water accumulation within the blocks.

It will be apparent, therefore, that water entering into the blocks will flow either through cracks developed in the inner walls of the lower blocks or through the provided transverse openings, thence along the channels of the drainage member, and will either seep through the floor bed 19 or into a conventional, perforated drainage pipe 20.

As shown in FIGURE 1, the vertical wall of the drainage member terminates below the floor level. A strip of masking tape 21 preferably is placed over the drainage member before the floor slab 15 is poured. Once

the floor has set, the protruding portion of the tape can be cut off for purposes of appearance. The tape prevents the wet concrete from flowing into the waterdrainage channels as the floor is poured and effectively seals the channels to prevent clogging thereof, due to the 5 accumulation of dust, etc. At the same time, terminating the drainage member below the floor level eliminates an otherwise unsightly and unnecessary gap between the floor slab and the walls.

The drainage member may be molded, or otherwise 10 formed of suitable plastic material, or it may be cast, rolled, etc., of metal. In actual practice, the drainage member has a nominal thickness of about ½ inch and preferably is made in easy to handle lengths, say, eight 15 feet. The only requirement is that the drainage member be sufficiently rigid to prevent buckling during and after the pouring of the floor slab.

Having now described my invention, those skilled in this art will be able to make various changes and modifications without thereby departing from the scope and spirit of the invention as recited in the following claim.

I claim:

In a building structure having a footing, a wall sup25 FRANK L. ABBOTT, Primary Examiner. ported on the footing and a concrete floor having an end supported on the footing; the improvement com-

prising a unitary L-shaped drainage member having a vertically-disposed portion positioned between the wall and the floor and a horizontally-disposed portion positioned between the footing and the overlying portion of the floor, the upper edge of said drainage member terminating in a plane below the upper surface of the floor; means including said drainage member forming water passageways between the wall and the edge of the footing lying below the floor, said water passageways extending to the said upper edge of the drainage member; and means closing the upper ends of said water passageways, said means being disposed between the wall and the floor and extending downwardly over the said upper edge of the drainage member.

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