Oct. 11, 1949. J. E. ABBOTT 2,484,062

CEMENT BLOCK BUILDING WALL

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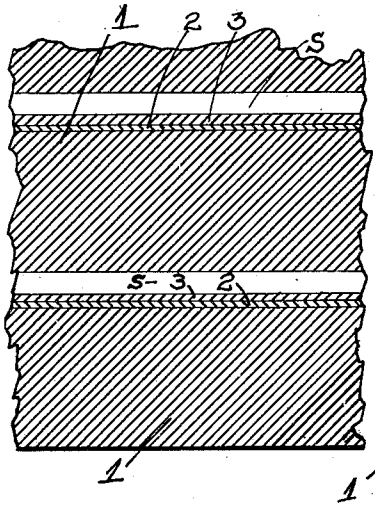


Fig. 3.

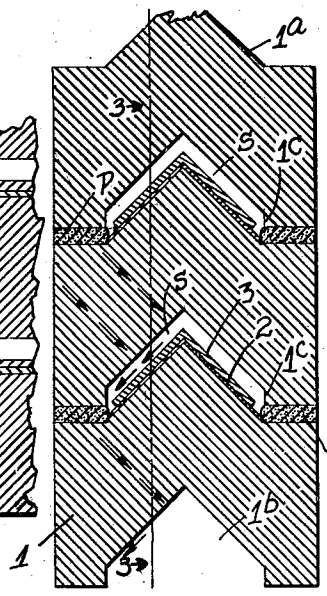


Fig. 1.

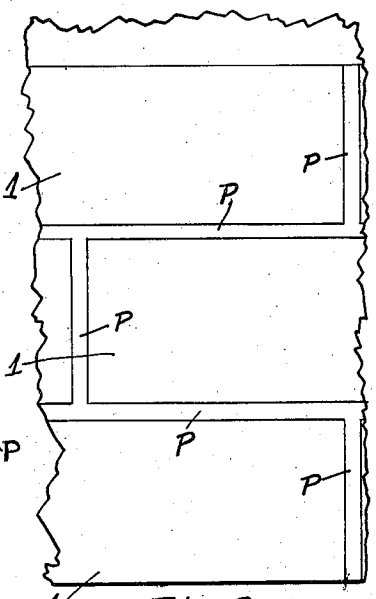


Fig. 2.

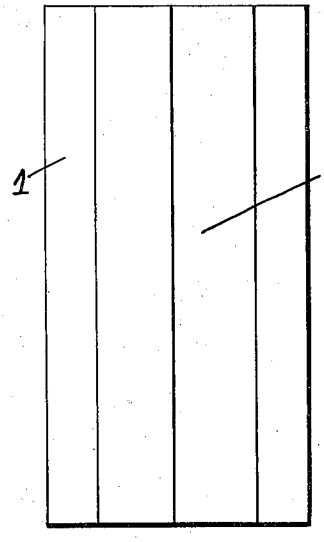


Fig. 4.

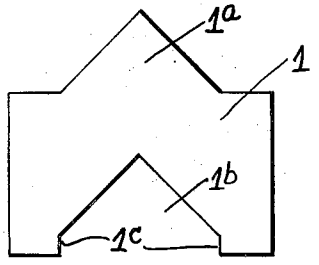


Fig. 5.

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CEMENT BLOCK BUILDING WALL

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2 Claims. (Cl. 72—38)

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My invention relates to building wall made of cement brick and the bricks for constructing said wall and the objects of my invention are:

First, to provide a cement brick wall of this class which reduces to a minimum the water passing through the wall by capillary attraction;

Second, to provide a building wall of this class in which the wall is provided with an air space for insulation purposes;

Third, to provide a building wall of this class in which the wall is reinforced in connection with the air space;

Fourth, to provide a building wall of this class in which the separate bricks are interlocked with each other;

Fifth, to provide a building wall of this class which is simple and economical to construct, very durable and which will not readily deteriorate; and

Sixth, to provide a novel building wall brick.

With these and other objects in view as will appear hereinafter my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings and to the characters of reference thereon which form a part of this application in which:

Figure 1 is a transverse sectional view of a fragmentary portion of a wall constructed with the use of my novel bricks; Fig. 2 is a fragmentary side elevational view thereof; Fig. 3 is a sectional view taken from the line 3—3 of Fig. 1; Fig. 4 is a top or plan view of one of the bricks used in my construction and Fig. 5 is an end view thereof.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawings:

The specially constructed brick 1, waterproof composition strip 2 and reinforcing member 3 constitute the principal parts and portions of my wall construction.

The building brick 1 is preferably made of cement, concrete, or similar material, and is generally substantially the size and shape of the conventional brick, eight inches long, four inches wide and two and one half inches thick. It is provided on its normally upper side with an inverted V-shaped ridge portion 1*a* extending upwardly more than one-half the thickness of the side wall of the brick, the sides of which are

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substantially at a right angle to the other. It is also provided in its normally lower side with a similar V-shaped recess 1*b* extending its full length. This V-shaped recess 1*b*, however, communicates with and is a portion of a straight sided recess portion 1*c*. These bricks are laid in lapped relation to each other in the wall, as shown in Fig. 2 of the drawings with the conventional thickness of plaster layer between the brick, as indicated by the letter P.

Positioned over the ridge 1*a* and covering the same and extending some distance into the plaster if desired, is a layer of waterproof composition paper, or any kind of waterproof material 2. Positioned over this strip of waterproofing material 2 is a reinforcing angle member 3, it being noted that the strip 2 and angle member 3 may extend along the full length of the wall if desired, or the angle members may be positioned in suitable locations to provide the proper strength of reinforcing. It is to be noted that above the angle members 3, which may be any width desired and past the edges thereof, is left a hollow space S, thus providing a substantially waterproof reinforced hollow wall construction made up from these special shaped bricks, the outside and inside of the wall looking substantially the same as the conventional brick wall and the waterproofed strip positioned in such a manner that water passing through the wall by capillary attraction at and around the joints is reduced to a minimum. It is to be here noted that water under capillary attraction passes downwardly as well as inwardly, as shown by arrows in Fig. 1 of the drawings and is therefore directed outwardly by the particular shaped water-proofing tube.

Though I have shown and described a particular construction, combination and arrangement of parts and portions, and a certain special brick construction, I do not wish to be limited to this particular wall construction, nor to the particular brick construction, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a building wall of the class described, the combination of a wall comprising superposed solid imperforate brick laid one upon another, each brick provided with a sharp cornered inverted V-shape in cross section ridge along its middle from end to end on its normally upper

side extending upwardly from the main body of the brick more than one-half the thickness of the side wall of the brick, and provided with a V-shaped in cross-section recess of greater depth than the heighth of the ridge in its lower side and mortar intermediate adjacent bricks at opposite sides of said V-shaped in cross-section ridge and between the adjacent ends of said brick, and leaving an inverted V-shaped horizontal opening between said bricks and waterproofing material covering said ridge on the upper side of said bricks in said opening and continuing from one brick to another in each horizontal opening.

2. In a building wall of the class described, the combination of a wall comprising superposed solid imperforate brick laid one upon another, each brick provided with a sharp cornered inverted V-shape in cross section ridge along its middle from end to end on its normally upper side extending upwardly from the main body of the brick more than one-half the thickness of the said wall of the brick, and provided with a V-shaped in cross-section recess of greater depth than the heighth of the ridge in its lower side, and mortar intermediate adjacent bricks at opposite sides of said V-shaped in cross-section ridge and between the adjacent ends of said brick, and leaving an inverted V-shaped horizontal opening between said bricks and an angular in cross section reinforcing and water directing member positioned on

and conforming to said ridge positioned in said horizontal opening and continuing from one brick to another in each horizontal opening and imbedded in mortar between said bricks.

JOHN E. ABBOTT.

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