

J. E. EVANS.

BRICK.

APPLICATION FILED NOV. 23, 1921.

1,422,949.

Patented July 18, 1922.

FIG. 1.

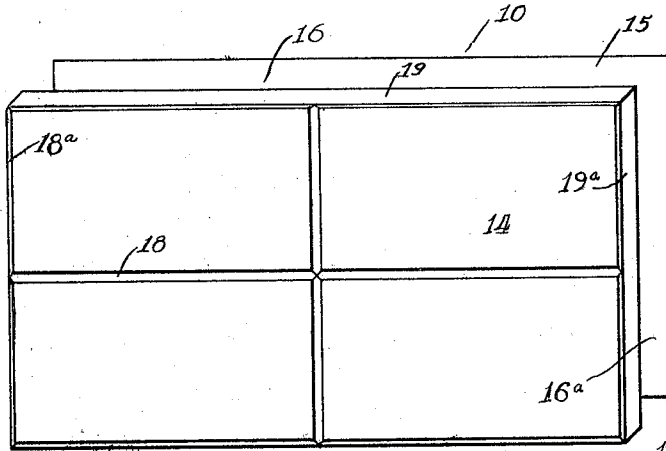


FIG. 2.

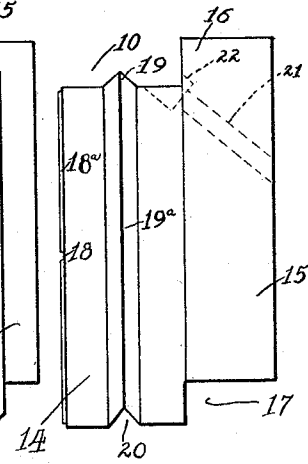
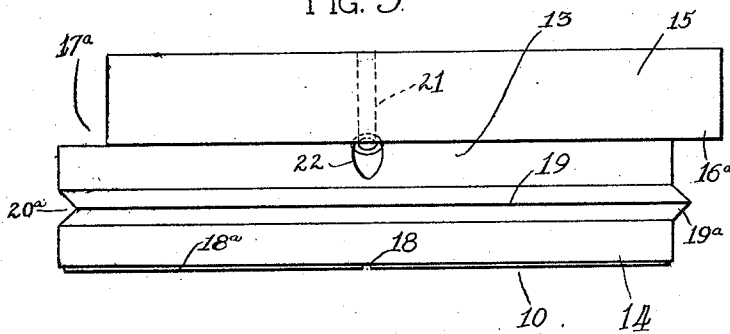


FIG. 3.



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BRICK.

1,422,949.

Specification of Letters Patent.

Patented July 18, 1922.

Application filed November 23, 1921. Serial No. 517,159.

To all whom it may concern:

Be it known that I, JOHN E. EVANS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bricks, of which the following is a specification.

This invention relates to bricks and has particular reference to facing bricks or tiles adapted to be applied to a skeleton frame structure in buildings.

One of the principal objects of the invention is to provide bricks of this kind which when placed together in a structure upon a sustaining inner wall, interlock in such a way as to produce a substantially moisture-proof, snug fitting outer wall and which avoids the formation of bulges or crevices and loose lapping, to which serious practical objections bricks of this kind in the past were susceptible.

Another object is to provide bricks for the purpose described which have lapping portions and matching edges and which are adapted to be fastened in such a way that a wedging action occurs at the joints between contiguous bricks in the structure resulting in substantially moisture-proof joints and also in an inward movement of the unattached free edge of the brick toward the inner wall because of the novel arrangement.

Other objects and advantages are embraced by the invention as will hereinafter more definitely appear.

In the drawing, Fig. 1 is a front elevation of a brick made in accordance with the invention. Fig. 2 is a side elevation, and Fig. 3 is a plan view thereof.

In the views, the same reference numerals are applied to the same or similar parts.

Referring to the drawing, the bricks 10 are made preferably from concrete or similar material and in sizes which may be handled conveniently by one or two workmen working together. The bricks 10 comprise a body portion 13 having a comparatively heavy face slab portion 14 and an integral back slab portion 15. The back slab 15 is diagonally offset as most clearly appears in Fig. 1, and thus provides longitudinal flanges 16 and 16^a on the rear edge of the body portion 13 at two adjoining sides. On the opposite adjoining sides are formed longitudinal recesses or rabbets 17 and 17^a which are adapted to receive the

flanges 16 and 16^a respectively, of contiguous bricks in abutting and superimposed relation in a structure. The bricks when thus correlated in an outer wall on a skeleton frame structure comprising the sustaining inner wall, lie flush with one another both on the back which is presented to the inner wall and on the face of the wall. The face portion 14 has a criss-cross half-round groove 18 and along the forward peripheral edges, as at 18^a, has quarter-round grooves which serve as ornamentation and to simulate courses of standard bricks.

Wedge-shaped longitudinal tongues or ribs 19 and 19^a are formed on the periphery of the face portion 14 on two adjoining sides. On the opposite adjoining sides are provided longitudinal grooves or channels 20 and 20^a adapted to receive the tongues 19 and 19^a respectively of two contiguous bricks in a structure. The purpose of having these tongues and grooves wedge-shaped is to produce a wedging action at the joints between contiguous bricks which with the binder of mortar spread in between the bricks, will tend to compensate for any slight variation in the bricks to make for substantial moisture-sealing joints and of course to act as a better shield against the weather. A further purpose is to ensure that contiguous bricks will stay in alignment under all circumstances and at least provide a continuous wall uninterrupted by crevices or openings which besides being unsightly, afford access to the inside of the wall for moisture which would result in dampness and consequent rotting or disintegration and other undesirable actions. One of the principal objects, however, in providing this construction is that the lower end of the brick which as will later appear, has no other means of attachment besides the bond of mortar will, due to the wedging action, be forced inwardly toward the inner wall and thus prevent bulging and loose lapping of the bricks as will hereinafter be described.

The bricks are held to the sustaining inner wall or skeleton frame structure by means of nails or the like. These nails are driven through the flanges of the bricks into the studding or other uprights comprised in the inner wall. The bricks have holes 21 extending rearwardly from the base of the flange 16 diagonally downwardly in the general direction of the lower side of

the brick as appears in Fig. 2. This hole which receives the nail may be countersunk as at 22 to admit the head of the nail which is driven home and set to fasten each brick securely. In this way, the head of the nail forms no obstruction for the entering edge of the face portion of the brick superimposed thereupon.

In order to understand the action to which may be attributed the advantageous results secured by this brick as outlined above, it will be necessary to assume for example that the brick shown in side elevation in Fig. 2 is being superimposed upon another brick similar to it in all respects. This other brick may be one that forms part of a continuous structure or may be in the first and lowermost course of bricks placed preferably upon a sill or a concrete foundation. The brick is placed in position and may be tamped lightly so that the ribs 19 and 19^a of the adjacent bricks in the structure are received in its grooves 20 and 20^a respectively. A nail entered in the hole 21 and driven into the studding exerts a downward and inward pressure upon the brick so that a tightly wedged joint is formed at the lower edge of the brick. Besides the wedging action taking place, the tongue 19 entering the groove 20, forces the lower edge of the brick inwardly toward the inner wall. Another nail may if desired be provided to enter an opening through the flange 16^a to exert a similar pressure laterally on the brick and thus to secure a similar joint at the side of the brick remote therefrom between the tongue 19^a and the groove 20^a.

I claim as my invention:

1. A brick of the character described comprising a body portion, a flange on the inner edge of a side of said body portion, a recess formed in the inner edge of the opposite side of said body portion adapted to receive the aforementioned flange of a contiguous brick in a structure, a groove formed in the periphery of said body portion on one of said sides, a wedging tongue on the periphery of the opposite side adapted to be received in the aforementioned groove of a contiguous brick in a structure, said flange being provided with an opening to receive a nail or other fastening extending diagonally therethrough in the general direction of the side of said brick remote from said flange.

2. A brick of the character described, comprising a body portion having a comparatively heavy face slab portion, a back slab portion of substantially the same height and width as said face slab portion but diagonally offset with respect thereto to provide a continuous flange extending along two adjoining edges at the back of said body portion and continuous recesses on the opposite adjoining edges similarly located, said re-

cesses being adapted to receive said flange of contiguous bricks in a structure, wedge-shaped tongues on the periphery of said face slab portion on two adjoining sides and wedge-shaped grooves in the opposite adjoining sides, said grooves being adapted to receive said tongues of contiguous bricks in a structure in interlocking relation.

3. A brick of the character described comprising a body portion having a face slab portion, a back slab portion diagonally offset with respect thereto to provide a continuous flange extending substantially from end to end and top to bottom on two of the sides of the brick and continuous recesses extending substantially from end to end and bottom to top on the other remaining sides, said flanges being adapted to be received in said recesses when bricks are arranged in contiguous relation in a structure, a continuous groove formed substantially from end to end and top to bottom on the periphery of two of the sides of said face slab portion, and a continuous wedging tongue extending substantially from end to end and bottom to top on the other remaining sides, said grooves being adapted to receive said tongues in interfitting wedging relation when bricks are arranged in contiguous relation in a structure.

4. A brick of the character described comprising a body portion having a face slab portion of substantial thickness, a relatively thin back slab portion formed diagonally offset with respect to said face slab portion providing on two sides of the brick a continuous flange extending substantially from end to end and top to bottom and continuous recesses on the remaining two sides extending substantially from end to end and bottom to top, said flanges being adapted to be received in said recesses when bricks are arranged in contiguous relation in a structure, a continuous groove formed in the periphery of said face slab portion extending substantially from end to end and top to bottom on two of the sides of said brick, and a continuous wedging tongue formed on the periphery of said face slab portion on the remaining two sides of said brick extending substantially from end to end and bottom to top, said grooves being adapted to receive said tongues in interfitting wedging relation when bricks are arranged in contiguous relation in a structure, said continuous flange being provided on one side of said brick with an opening extending therethrough formed to guide a nail or other fastening diagonally therethrough in the general direction of the side of said brick remote from said flange.

In testimony whereof, I have hereunto set my hand.

JOHN EDWARD EVANS.