

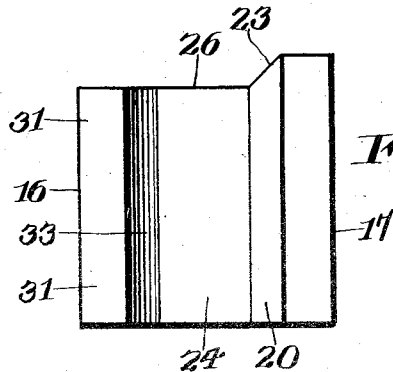
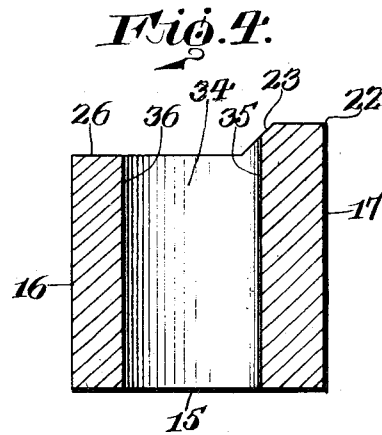
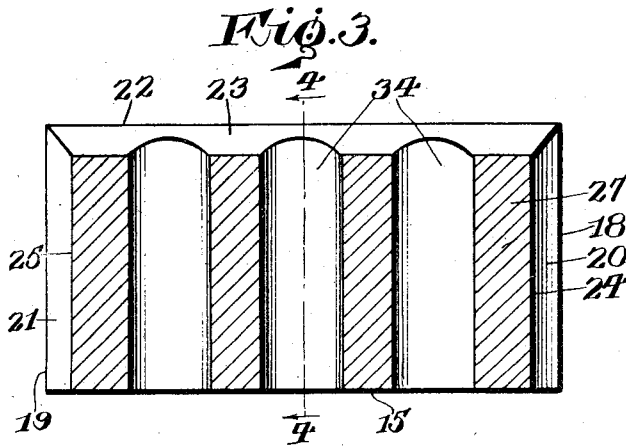
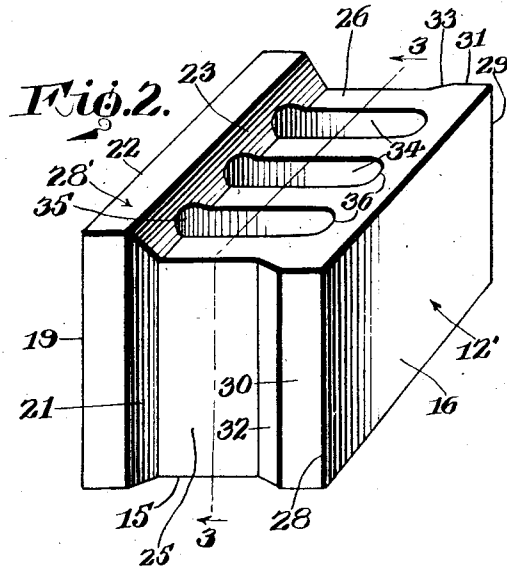
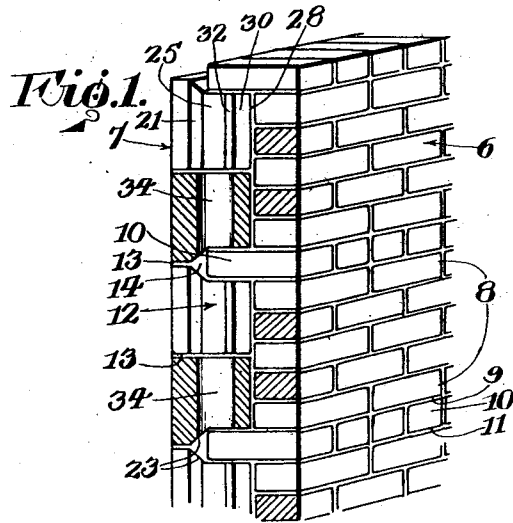
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BUILDING BLOCK

Filed June 18, 1928



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BUILDING BLOCK

Application filed June 18, 1928. Serial No. 286,186.

This invention relates to building blocks designed primarily for use in connection with brick veneer building walls but it is to be understood that a block in accordance with this invention may be employed for any purpose wherein it is found applicable, and the object of the invention is to provide in a manner as hereinafter set forth, a block for coacting with a header for bonding the veneer course of brick with the block course and to further provide a cavity to receive the surplus mortar squeezed from the joints during the process of laying.

Another object of the invention is to provide, in a manner as hereinafter set forth for receiving and joining the header brick of the veneer course to the block course, and to further provide a joint between the header and the block course which will have the maximum of anchorage.

Another object of the invention is to provide, in a manner as hereinafter set forth for breaking the transverse plane of the joint between the block course and the header brick which will result in a better bonded wall. A further object of the invention is to provide, in a manner as hereinafter set forth for concealing the header brick within the block course so that the inner and outer faces of the wall will have a uniform appearance.

Further objects of the invention are to provide, in a manner as hereinafter set forth, a building block that is highly efficient for its intended purpose, strong, durable and comparatively inexpensive to manufacture and which will make a strong, durable and weatherproof wall at a material reduction in the cost of labor and a unit that will require only one shape for all courses thus necessitating only one shape unit on the bricklayers' scaffold.

With the foregoing and other objects in view the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications

may be resorted to which fall within the scope of the invention as claimed.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:—

Figure 1 is a perspective view partly in section of a brick veneer wall showing an adaptation therewith of a building block in accordance with this invention.

Figure 2 is a perspective view of a building block in accordance with this invention.

Figure 3 is a section on line 3—3 of Figure 2.

Figure 4 is a section on line 4—4 of Figure 3.

Figure 5 is an end view of the block.

Referring to the drawings in detail, 6 indicates generally the weather face of a brick veneer wall and 7 denotes generally the interior face of the wall. The brick veneer portion of the wall consists of a plurality of rows of bricks 8 superimposed upon each other in a lengthwise direction with respect to the wall and having a joint 9 of mortar, cement or other bonding material interposed between the individual bricks and also the rows of bricks. Alternating with the plurality of rows of bricks 8 regarded as a unit, is interposed a single row of bricks 10, extending transversely with respect to the wall and having a joint of bonding material 11 between the individual bricks and the plurality of rows 8, similar to the joint 9. The alternate rows of bricks 10 will be hereafter referred to as the header, tie or bonding bricks.

The inner face 7 of the wall consists of a plurality of rows of building blocks indicated generally at 12, formed in accordance with this invention. The blocks are superimposed upon each other and are laid lengthwise with respect to the wall. The alternate layers are inverted with respect to Figure 2 of the drawings. Interposed between the rows and each individual block is a joint of mortar 13. The inner portion of the header brick 10 extends into and its inner end terminates in a cavity 14 formed between the alternate rows of blocks in accordance with this invention.

The building block 12 constructed in accordance with this invention consists of a body having a flat rectangular bottom face 15 and a flat rectangular inner side face 16 extending at right angles thereto. The outer side face 17 extends at right angles to the bottom face 15 and has its bottom edges terminating flush therewith. It will be noted that the bottom 15 of the block is not offset with respect to the bottom edge of the outer side face.

The edges 18 and 19 at each end of the outer side face of the block preferably extend inwardly at right angles thereto for a short distance and then taper inwardly to form bevelled shoulders 20 and 21 respectively. The top edge 22 of the outer side face of the block extends inwardly at right angles thereto for a like short distance and then tapers downwardly to form a bevelled top shoulder 23. The top shoulder 23 has a pitch of approximately forty-five degrees. The inner ends of the shoulders 20, 21 preferably merge with the end faces 24, 25. The top shoulder 23 merges with the flat top face 26 of a reduced inner portion 27 of the block.

That part of the block between the top edge 22 of the outer side face and the bevelled shoulder 23 forms a continuous outset portion or boss with respect to the reduced inner portion of the block. This boss or outset portion of the block is indicated generally at 28' in Figure 2. The face of the boss 28' extends at right angles to the outer face of the block and is coextensive with the top edge thereof as will be seen in Figures 2 and 3 of the drawings.

The edges 28, 29 at the ends of the inner face 16 preferably project forwardly at right angles to the said inner face, and in the same plane with the respective end faces of the shoulders 20, 21. The forwardly projecting edges form abutments 30, 31 at the inner ends of the end faces 25 and 24 respectively of the reduced portion of the block. The forward edges of the abutments decline forwardly until they merge with the end faces 25 and 24 whereby the bevelled shoulders 32 and 33 are formed between the abutments and the end faces of the reduced portion.

While the ends of the block are preferably formed with bevelled shoulders 20, 21 and abutments 31, 30 it is within the contemplation of the invention to use any kind of an end on the block.

The top face 26 of the reduced portion of the block extends in the same plane from the base of the bevelled shoulder 23 at its forward end to the top edges of the rear face 16. It will be noted that the whole top face 26 of the reduced portion of the block is inset with respect to the top face of the boss and the bevelled shoulder 23. The inset top face forms one wall of the inner end of the cavity 12. It will depend upon whether the block

is inverted or in the position shown in Figures 2 and 3 of the drawings as to whether said face will form the upper or lower wall of the inner end of said cavity.

The body of the block is preferably formed with a plurality of substantially oblong spaced openings 34 which project from the top face 26 to the bottom face 15 thereof. The oblong openings 34 extend a portion of the width of the block from a point adjacent the inner face 16 to a point approximately half way up the bevelled shoulder 23 of the boss. The top edges of the outer end wall 35 of each of the openings 34 are positioned in the bevelled shoulder 23 of the boss. The top edges of the inner end wall 36 of each of the openings 34 are positioned in the top face 26 of the reduced portion adjacent the inner face 16 of the body. The outer end wall 35 and the inner end wall 36 of each oblong opening are preferably curved.

While the openings 34 have been described as oblong and the edges of the end walls 35, 36 thereof are said to be curved, it is within the contemplation of the invention to have the openings of any desired shape as long as the top edges of the outer end walls 35 are positioned at a point approximately half way up the bevelled shoulder 23 of the boss 28'.

In the application the blocks are superimposed upon each other having alternate courses inverted with respect to the position of the block in Figure 2 of the drawings. The faces of the boss 28 are buttered with mortar and laid in abutting relation forming a joint of mortar 13 therebetween. The offset top faces 26 of the reduced inner portion together with the bevelled shoulders 23 form the cavity indicated at 14 when the alternate block is inverted with respect to Figure 1 of the drawings. The cavity will be positioned at alternate layers of the block. The cavity has an open end at the rear of the block layer into which the header bricks 10 extend.

In actual practice the brick layer is built up simultaneously with the block layer until the top face 26 of the block is in the same plane as the adjacent brick layer. The top face 26 and the header brick 10 are buttered with mortar and the header brick is then laid transversely of the wall. A portion of the header extends over on the top face 26 of the block and the inner end of the brick terminates at the base of the shoulder 23. The top layer of block is then laid in inverted position and the top face 26 thereof when inverted forms the top face of the cavity which forms a bond with the top face of the header brick. The excess mortar will be collected in the forward angular end of the cavity 14 which is formed by the opposed shoulders 23 when the blocks are superimposed upon each other in inverted position.

When the excess mortar is squeezed into the angular end of the cavity, a portion thereof

of will overlap the edge of the curved inner end 35 of the openings 34, because the openings 34 extend into the bevelled shoulders 23. The foregoing structure will form a mortar joint between the ends of the header and block course with many points of attachment and none of which are in the same plane with transverse plane of the main joints 9 and 11. The points of attachment of the mortar joint will be the inner face of the header brick 10 which is at right angles to the main joint 13; the opposed bevelled shoulders 23 at the forward end of the cavity 12; the curved inner end 35 of the openings 34. It will also be obvious that the obtuse angle of attachment between the bevelled shoulder 23 and the inner edge 35 of the opening 34 will not be as sharp as a right angle so that the corners of the joint will be less likely to crack when the wall settles. In view of the foregoing it will be seen that the block construction provides for the maximum strength at the joint between the header brick of the vincer course and the block course.

What I claim is:—

1. A building block comprising a rectangular body having a boss integral and coextensive with the forward portion of the top thereof, said boss having its top face uninterrupted throughout and squared, its outer side face flush with the outer side face of said body and its rear side face beveled throughout from said top face to the top of said body, said boss of a width in transverse cross section to have its rear side face positioned between the outer side and longitudinal median of said body, the bevel of the rear side face of said boss extending from its bottom towards the outer side face of said body whereby the said top base is of less width than the bottom of the boss, and said body formed with spaced, parallel, vertical openings disposed at right angles to the length of the boss, each of said openings having the major portion thereof of the same height as that of said body, and each of said openings extending from a point intermediate the top and bottom of said bevelled rear side face to a point in proximity to the rear side face of said body.
2. A building block comprising a rectangular body having a boss integral and coextensive with the forward portion of the top thereof, said boss having its top face uninterrupted throughout and squared, its outer side face flush with the outer side face of said body and its rear side face beveled throughout from said top face to the top of said body, said boss of a width in transverse cross section to have its rear side face positioned between the outer side and longitudinal median of said body, the bevel of the rear side face of said boss extending from its bottom towards the outer side face of said

body whereby the said top base is of less width than the bottom of the boss, and said body formed with spaced, parallel, vertical openings disposed at right angles to the length of the boss, each of said openings having the major portion thereof of the same height as that of said body, each of said openings extending from a point intermediate the top and bottom of said bevelled rear side face to a point in proximity to the rear side face of said body, and the end wall of each of said openings being rounded.

In testimony whereof, I affix my signature hereto.

CLARENCE C. HEINZMANN.

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