I. POMERANTZ.

LINTEL BLOCK.

APPLICATION FILED MAR. 4, 1918.

1,295,204.

Patented Feb. 25, 1919.

Fig. I

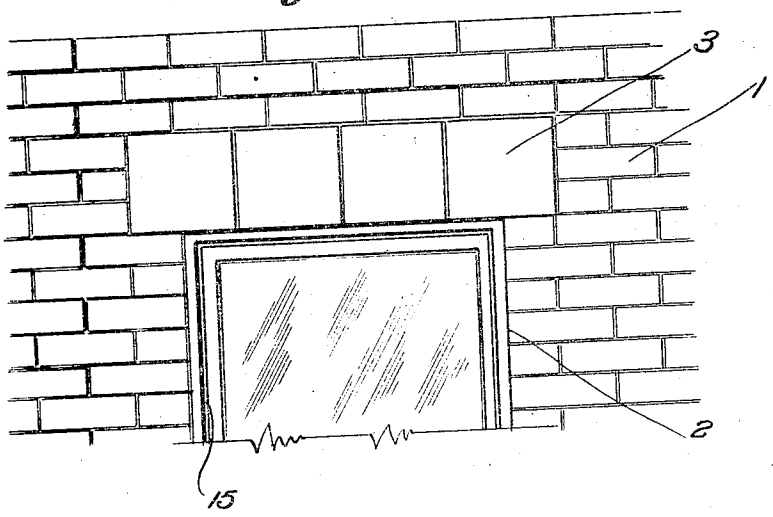


Fig. II

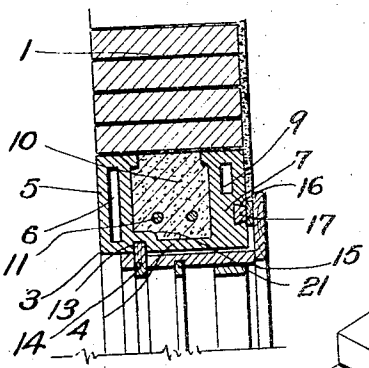


Fig. III

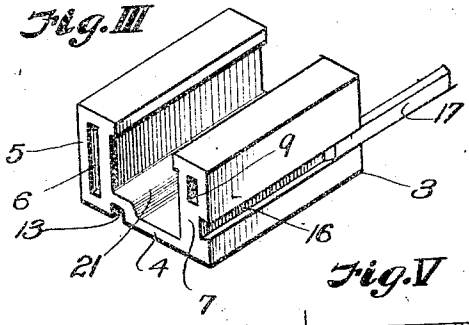


Fig. V

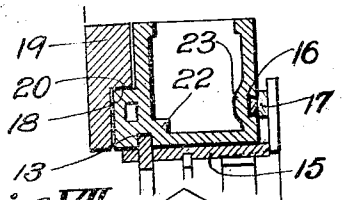


Fig. IV

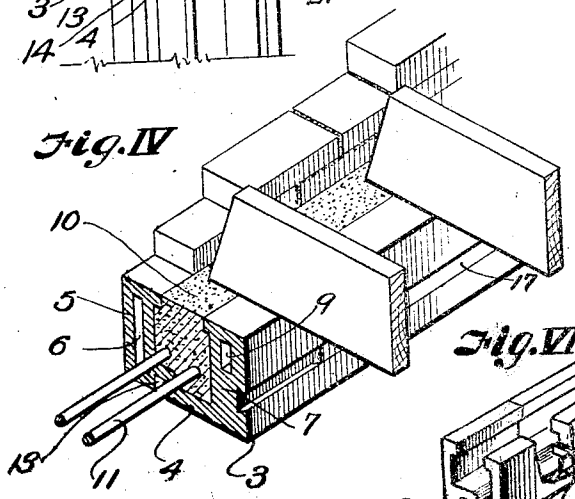


Fig. VII

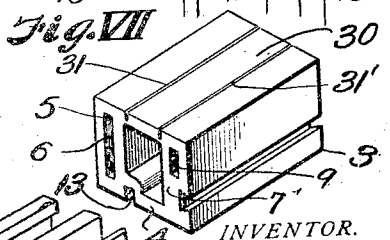
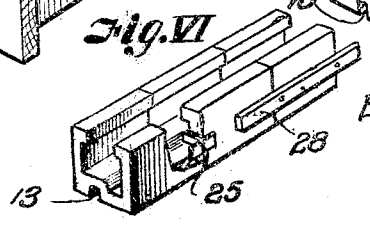


Fig. VI



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LINTEL-BLOCK.

1,295,204. Specification of Letters Patent. Patented Feb. 25, 1919.

Application filed March 4, 1918. Serial No. 220,131.

To all whom it may concern:

Be it known that I, ISADORE POMERANTZ, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Lintel-Blocks, and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in building blocks and more particularly to a lintel block so constructed that it may be assembled with blocks of like construction to form a mold for receiving a plastic building material whereby a monolithic lintel slab may be formed to support a brick, or other wall, across a door or window opening.

The principal object of the invention being to provide blocks of this character that may be used in place of the usual wood or I-beam lintel and whereby a tight and weather-proof joint may be made with the upper edge of the window or door frame above which the lintel is formed.

It is also an object of the invention to provide blocks of this character wherein nailing strips may be located for receiving nails, screws, or other anchoring devices for the support of molding, etc., on the inner face of the lintel.

In accomplishing these objects I have provided improved details of the structure, the preferred forms of which are illustrated in the accompanying drawings; wherein:

Figure I is an elevation of a part of a building wall showing a window lintel constructed of blocks formed and assembled according to the present invention.

Fig. II is a transverse, vertical section through the lintel on the line II—II Fig. I.

Fig. III is a detail perspective view of a preferred form of lintel block.

Fig. IV is a detail sectional perspective view, illustrating the supporting of floor or ceiling joints on a lintel built according to the present invention.

Fig. V is a transverse, vertical section of a modified form of lintel block.

Fig. VI is a detail perspective view illustrating another form of lintel block and the manner of placing anchor members between the blocks for the support of nailing strips or the like.

Fig. VII is detail perspective view of a block as it comes from the mold showing the scored upper face.

Referring more in detail to the drawings:

1 designates a building wall or the like having a window opening 2 therein across which a lintel, comprising building blocks 3 formed and assembled according to the present invention, is located.

Each of the blocks in the preferred form of construction, is substantially rectangular in cross section and comprises an under side or base wall 4, a double outer wall 5 forming an air chamber 6, and a correspondingly heavy inner face wall 7 spaced therefrom having an air chamber 9 formed along its upper edge. The ends and upper side of the block being open so that when a plurality of such blocks are arranged end to end, a continuous upwardly opening channel is formed, wherein a plastic material 10, such as building cement, may be poured; and which after it has set, will form a solid monolithic slab within the blocks whereon a wall may be built and thereby supported above the wall opening.

If it is necessary or desired reinforcing rods 11, as shown in Figs. II and IV may be embedded in the cement to substantially strengthen lintels of unusual length.

Each of the blocks is provided on its under face and adjacent its forward edge with a longitudinally extending groove or slot 13 and when the blocks are arranged in functional relation these grooves will form a continuous channel wherein the stop 14 in a window or like frame 15, that is located within the opening, may be inserted, as is particularly shown in Figs. II and V, to form a perfectly tight joint between the lintel and frame.

The blocks are likewise provided in their inner walls with longitudinally arranged dovetail groove 16 for receiving wood or other nailing strips 17, whereto window or door casings, moldings, etc., may be anchored. Such strips being inserted where necessary before the blocks are placed in position.

In Fig. V I have shown a modified form of block which is adapted for use where it is desired to show a stone faced lintel. In this particular construction a longitudinally extending, horizontal shelf 18 is formed

along the outer wall of the block, and stone finishing blocks 19 that may be used therewith are provided with downwardly facing shoulders 20 which are adapted to rest on the shelf and thereby support the slabs.

If it is necessary, the block walls, back of the slots formed therein, may be reinforced as is shown at 21 in Fig. III and at 22 and 23 in Fig. V, so that the slots will in no way weaken the construction of the block.

In Fig. VI I have illustrated the use of anchor members between the adjacent ends of blocks arranged as described. The anchor members 25 used preferably comprise single strips of metal, bent double to form thin clips which may be located within the joints between adjacent ends of blocks, with their outer ends turned laterally to lie flush with the inner faces of the blocks and their inner ends embedded in the cement to anchor the clips in place. Anchor or nailing strips 28 may be fixed to clips of this character by driving nails through the strips and between the side members of the clips which bind tightly against the nails and hold the strip firmly in place.

When blocks of this character come from the pressing mold, they comprise top walls 30 as is shown in Fig. VII. These top walls serve to retain the blocks in shape until they have been burned or baked in a kiln, then the top walls or panels 30, which are scored as shown at 31—31′, when the block is soft, are broken away without injury to the other parts of the block and the channel member remains intact.

When a lintel is to be built of blocks constructed according to the present invention, the window or door frame is first located in the opening and the blocks arranged in proper relation across the top thereof and resting on the frame with the stop at the top of the frame seated in the under face groove of the blocks. Concrete is then poured into the channel formed by the blocks and, if it is necessary or desired, reinforcing rods are embedded therein, so that when the concrete sets, a substantially solid block of sufficient strength is formed across the window to support the usual brick or stone wall.

If no facing is to be used in front of the blocks, they are placed flush with the outer face of the wall as shown in Fig. I, but should it be desired to face the wall with a stone slab as shown in Fig. V, the lintel blocks are set back, far enough that when the slab is placed in position it will be flush with the outer face of the finished wall. After the concrete has been poured in the blocks and has sufficiently set to form a solid slab support, the building wall may then be constructed across the lintel in the usual manner.

It is apparent that by so constructing the blocks a lintel may be formed that will eliminate the use of the usual I-beam or wood lintels, a less expensive construction is provided, and a more attractive result is attained.

It is also apparent that with this construction a perfectly weather-tight joint may be formed at the top of the window or door frame and a solid and substantial anchorage is provided for nailing strips to which the interior window casings may be fixed.

It is apparent that blocks of other forms than those shown could be provided for the same purpose without departing from the spirit of the invention, and I therefore do not wish to be limited only to the particular types shown.

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

1. In a building having an opening, the combination with a frame in the opening, of a plurality of lintel blocks upon the frame arranged end to end and each block comprising a bottom and two up-standing side walls, a stop strip on the frame and extending into the lintel blocks to seal the joint between the lintel blocks and the frame, nailing strips keyed in the rear walls of the lintel blocks and vertical strips connected to the nailing strips and bearing against the rear face of the frame.

2. In a building having an opening, the combination with a frame in the opening, of a plurality of lintel blocks upon the frame arranged end to end and each block comprising a bottom and two up-standing side walls, a stop strip on the frame and extending into the lintel blocks to seal the joint between the lintel blocks and the frame, nailing strips keyed in the rear walls of the lintel blocks, vertical strips connected to the nailing strips and bearing against the rear face of the frame, and reinforced concrete in the spacing between the walls of the lintel blocks to connect the blocks together.

In testimony whereof I affix my signature.

ISADORE POMERANTZ.