L. F. KLINE.

BUILDING BLOCK.

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1,369,115. **Patented Feb. 22, 1921.**

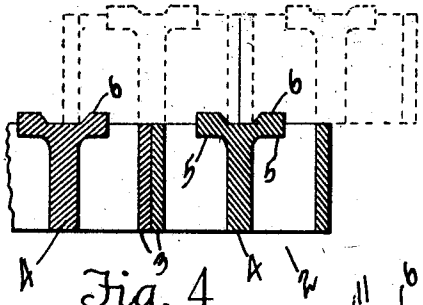


Fig. 4

Fig. 1

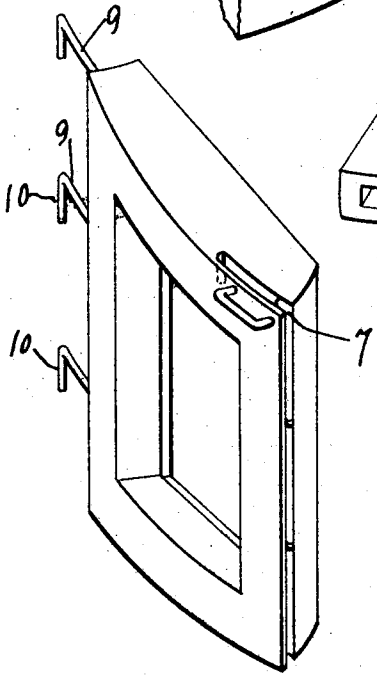


Fig. 3

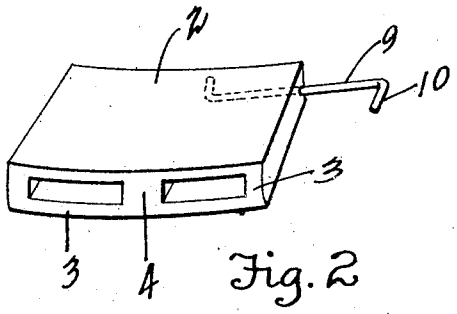


Fig. 2

INVENTOR.

LOUIS F. KLINE

BY E. C. Sauzi

ATTORNEYS.

UNITED STATES PATENT OFFICE.

LOUIS F. KLINE, OF WALLA WALLA, WASHINGTON.

BUILDING-BLOCK.

1,369,115. Specification of Letters Patent. Patented Feb. 22, 1921.

Application filed January 3, 1920. Serial No. 349,260.

To all whom it may concern:

Be it known that I, LOUIS F. KLINE, a citizen of the United States, residing at Walla Walla, in the county of Walla Walla and State of Washington, have invented certain new and useful Improvements in Building-Blocks, of which the following is a specification.

This invention relates to improvements in building blocks and has for its object to provide a structure that is simple in construction and of ample strength in all its parts.

A further object is to provide a structure that may be firmly bound together on all its sides.

A further object is to provide a structure wherein the courses of the building structure may be bound together with lugs.

A further object is to provide a hollow structure containing cavities that extend throughout the vertical height of the block in a manner to afford a continuous cavity or air space throughout the vertical height of the builded structure.

A further object is to provide a structure having reinforcement fabricated therein in a manner to provide a lock centrally positioned in the outer perimeter (or nearly so) of the block, and on one side thereof, and which does not require particular care in construction to embed as the bedding will be automatically carried on as the binding mortar is applied.

With these and other objects in view reference is had to the accompanying drawings in which—

Figure 1 is a perspective view of a portion of a wall constructed of the blocks and resting on a foundation;

Fig. 2 is a perspective view of a lower portion of the block;

Fig. 3 shows a door frame which may be used in constructional work of certain classes and which is a modified form of my block; and

Fig. 4 is a sectional elevation of the blocks.

Having reference to the drawings like numerals refer to like parts throughout and the numeral 1 refers to the foundation which may be of any approved design that will suitably support the blocks 2 which consist of outer walls 3 and a partition 4 which is of T shape in section with the ends of the cross arms 5 of the T extended upward to form lugs 6.

The partition divides the hollow into two cavities which are continuous throughout the vertical height of the block; the upper ends of the cavities are partly closed by the lugs 6, the lugs being positioned to register with the lower end of the cavity in the superposed block. By this means I provide a locking arrangement between two courses which at the same time provides a continuous air passage throughout the vertical height of the builded structure.

In the block is provided a groove 7 which is positioned in the outer portion of the upper surface of the block and is extended longitudinally throughout one half the length of the block where it terminates in a vertical hole 8 which is positioned vertically in the block to receive the succeeding complemental reinforcing member 9 which will now be explained.

This reinforcing member 9 consists of a bar, or other reinforcing means, and is provided at both ends with locking hooks 10 or other fastening means by which two blocks of a course may be locked together. One half of this member 9 is embedded or fabricated in the block as shown at 11, with one of the hooks bent about the vertical hole 8, and the other half extends in a manner to seat in a groove 7 of the adjoining block with the hook positioned to seat in the vertical hole 8, of the adjoining block, surrounded by the first mentioned hook of the adjoining member 9, the vertical hole, locking hook and groove being alined for this purpose.

In construction the foundation is prepared and a block laid thereon with the usual binding mortar, the succeeding adjoining block is then laid with the reinforcing member 9 seated in the groove 7 with the hook 10 within the locking hook and vertical hole 8; a second course may now be started in a similar manner, with the usual broken joints, as shown in Fig. 1, by placing the mortar on the lower course in the usual manner and resting the block thereon. It will now be readily seen that the act of placing the mortar on the blocks of the lower course will completely cover the exposed portion of the reinforcing member without additional labor and the pres-

sure of the upper block will force the mortar into the vertical hole and around the member in a manner to completely protect it from the elements.

The lugs are spaced apart sufficient to receive the end walls of both adjacent blocks, and hold the courses against lateral or radial movement with respect to its complemental course.

Thus with the courses held rigidly in place by the lugs there can be no lateral play; with the lugs positioned only partly over the cavities a continuous vertical air space is maintained; with the reinforcing designed to present a solid unjointed material at the place of joining of two adjacent blocks; with the lock of said reinforcing members centrally located in the blocks, the structure must be held rigidly together and the whole finally completed as one solid mass.

Having thus described my invention, I claim—

1. In a building block, a hollow structure having a continuous cavity throughout its vertical height and having lugs positioned in said cavity to register with the cavity of the succeeding superposed block and in a manner to provide a continuous cavity throughout the vertical height of the builded structure, a locking reinforcing means in said block with the lock thereof positioned intermediate the ends of said block and with continuous unbroken reinforcement between two adjoining blocks of a course.

2. In a building block, a hollow structure comprised of outer walls and containing a partition having a T shaped form in section, the ends of the cross arms of the T being extended to form lugs, said partition forming a plurality of cavities in said structure, said lugs being positioned over and partly closing the said cavities in a manner to register with the cavity of the succeeding superposed block and to provide a continuous cavity throughout the vertical height of the builded structure, a locking reinforcing means consisting of a groove positioned in the outer portion of the upper surface of the said block and extending longitudinally throughout one half the length thereof and terminating in a vertical hole, and a reinforcing member, one half of which is embedded in said block with the other half extending to rest in a corresponding groove of an adjoining block, said member carrying locking hooks on both ends thereof with one of said hooks positioned about said vertical hole, said vertical hole, locking hook and groove being alined to receive the complemental extended portion of the reinforcing member of the adjoining block.

In testimony whereof I affix my signature.

LOUIS F. KLINE.