April 29, 1924. 1,491,856

F. S. HART

BUILDING BLOCK AND WALL

Filed March 5, 1921 2 Sheets-Sheet 1

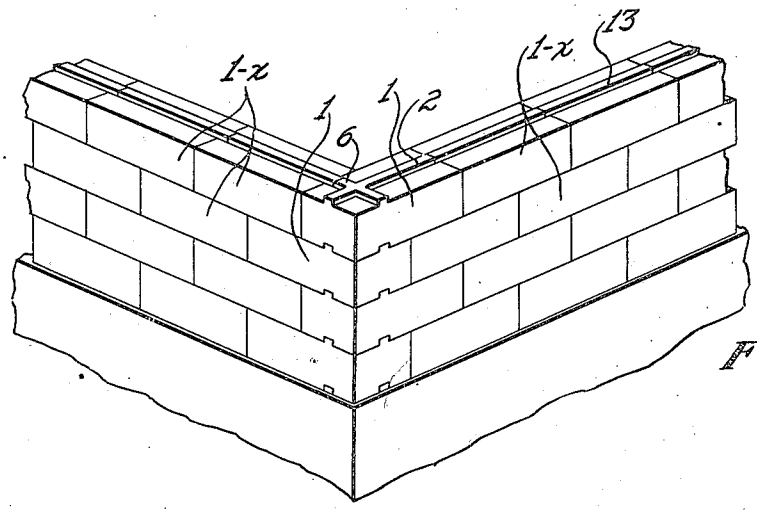


Fig. 1.

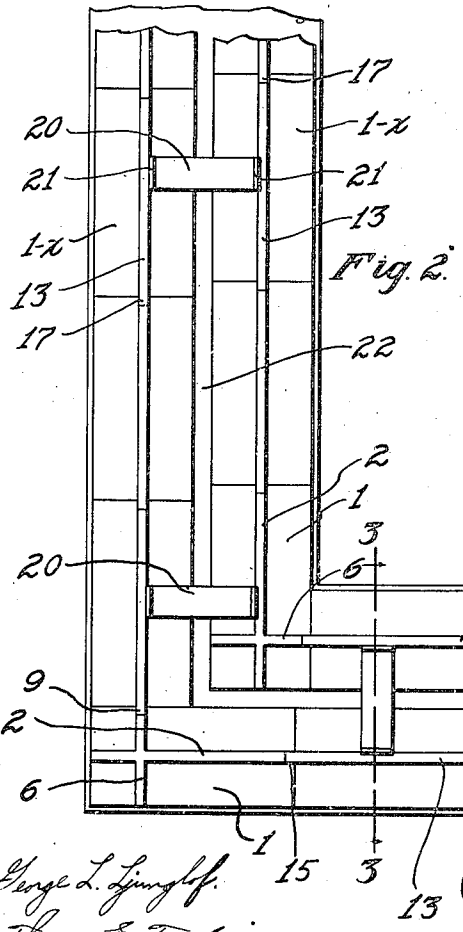


Fig. 2.

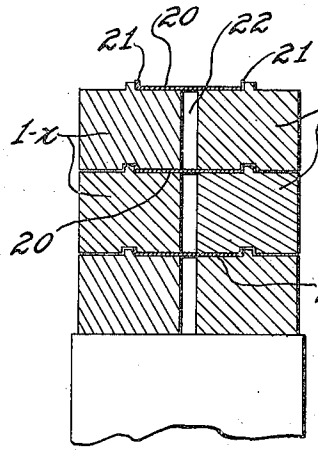


Fig. 3.

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Fig. 4.

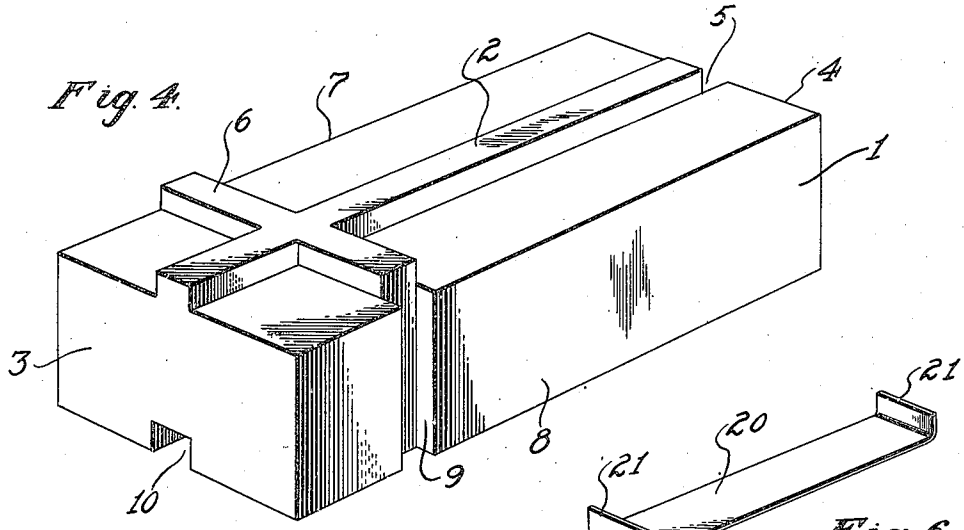


Fig. 6.

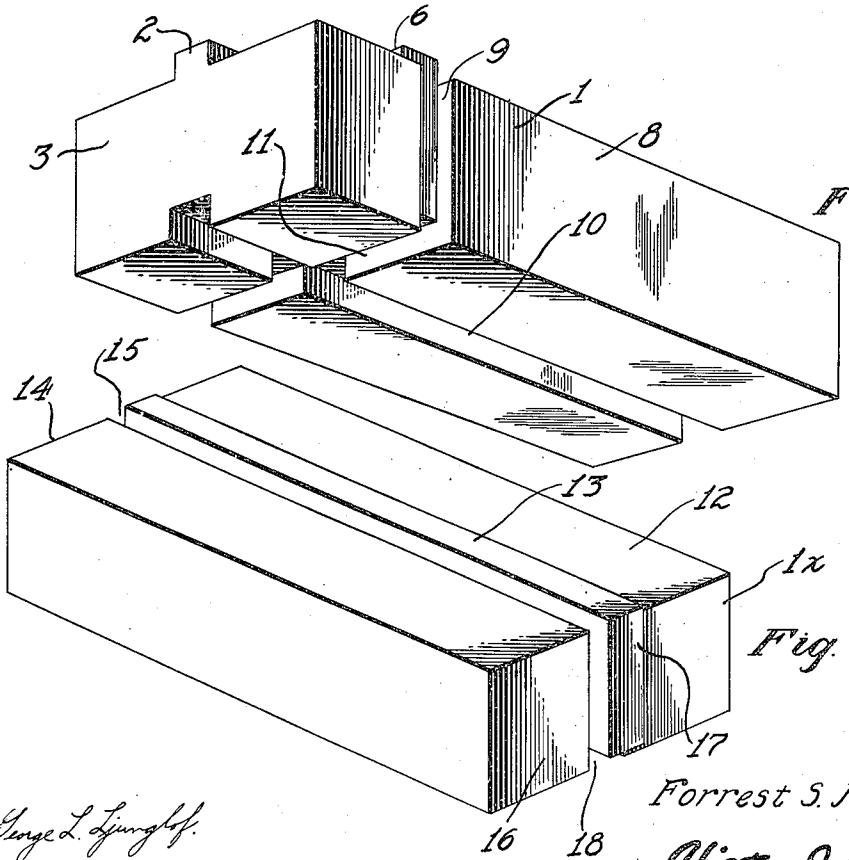


Fig. 5.

Fig. 7.

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UNITED STATES PATENT OFFICE.

FORREST S. HART, OF BATAVIA, NEW YORK.

BUILDING BLOCK AND WALL.

Application filed March 5, 1921. Serial No. 449,916.

To all whom it may concern:

Be it known that I, FORREST S. HART, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented new and useful Improvements in Building Blocks and Walls, of which the following is a specification.

One object of my present invention is the provision of a corner block for use in walls, and one that is characterized by the strong manner in which it may be keyed to the blocks above and below it as well as to the blocks opposed to its end and side, and this notwithstanding the facility with which the block may be produced and the cheapness of the block considered as a unit.

Another object of the invention is the provision of a wall made up of spaced and parallel courses of interlocked blocks, and means interlocked with the blocks of the two courses and strongly tying the courses together.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part hereof:—

Figure 1 is a perspective showing a corner of a single wall constructed in accordance with my invention.

Figure 2 is a plan view of a two course wall constructed in accordance with my invention.

Figure 3 is a vertical transverse section taken in the plane indicated by the line 3—3 of Figure 2.

Figure 4 is an enlarged perspective showing a corner block constructed in accordance with my invention.

Figure 5 is a perspective showing the underside of the said corner block.

Figure 6 is a detail perspective of one of the metallic tie straps.

Figure 7 is a perspective of one of the intermediate blocks that I preferably employ in the single wall as well as in the double wall.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

One of the important features of my invention resides in the corner block 1 which may be made of any material compatible with its purpose such as concrete, and which may be made for right or left use without involving departure from the scope of my invention. The said corner block 1 is characterized by a longitudinal central tongue 2 at one side thereof; the said tongue 2 extending from one end 3 of the block to a point adjacent to the other end 4 of the block which end 4 is provided with an end upright groove 5 to receive the end tongue of an adjacent intermediate block hereinafter described in detail. The block 1 is also provided with a transverse tongue 6, arranged adjacent to and in parallelism with the block end 3 and extending from one side 7 of the block to a point spaced from the other side 8 of the block, the latter to provide the side 8 with an upright groove 9. Manifestly the tongues 2 and 6 serve to form a cruciform projection at the upper side of the block which may be depended upon to key the block against sidewise and endwise movement of the block superimposed upon it. The underside relative to the block 1 is provided with a longitudinal groove 10 and a transverse groove 11; the said grooves 10 and 11 corresponding to the tongues 2 and 6 and being adapted to receive the tongues 2 and 6 of a block below the one described.

The intermediate blocks of the walls shown in Figures 1 and 2 are identical in construction and therefore a detailed description of the intermediate block 1^x shown in Figure 7 will suffice to impart a definite understanding of all of the intermediate blocks. The said intermediate block 1^x, Figure 7, is provided at one side 12 with a longitudinal central tongue 13, and in one end 14 with an upright groove 15, and at the opposite end 16 with an end tongue 17. The underside of the block 1^x is provided with a longitudinal central groove 18 adapted to receive the tongue 13 of the block under the one described.

The manner of constructing a single wall of the blocks 1 and 1^x is clearly shown in Figure 1 and need not therefore be described in detail.

The manner of constructing a two course wall of my novel blocks is clearly shown in Figures 2 and 3, and in this embodiment is incorporated another important feature of my invention. The feature referred to comprises the metallic straps 20, Figures 2, 3 and 6, with upturned flanges 21 at their ends and disposed at right angles to their major portions. In the fabrication of the two course wall, the blocks of the courses are

arranged as illustrated so that the courses are separated by an intervening space 22. The straps 20 are arranged at intervals to bridge the said space 22, and the flanges 21 of the straps are made to abut against the upstanding tongues opposed to them, as clearly appears in Figures 2 and 3. From this it follows that when blocks constructed in accordance with my invention are superimposed upon the blocks and straps shown in Figure 2, the superimposed blocks will straddle both the tongue of the blocks shown in Figure 2 and the flanges 21 of the tie straps 20 with the result that the said tie straps will be strongly held in place without the assistance of any extraneous means. It will also be readily appreciated that the straps 20 interposed between the tongues of side by side blocks will strongly maintain the blocks in spaced relation and in that way will contribute materially to the strength and durability of the two course wall and that walls may be constructed in accordance with my invention and with the use of my novel blocks expeditiously and easily and without the employment of skilled labor.

In practice it will be understood that as before indicated my novel corner blocks may be molded or otherwise produced in "rights" and "lefts;" also that the described interlocking of the blocks, particularly corner blocks, may be depended upon to strongly hold the blocks together and thereby contribute to the strength and lasting quality of the walls in which the blocks are incorporated.

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

1. As a new article of manufacture, a corner building block characterized by an upright groove in one end, by a longitudinal central tongue at the upper side of the block and extending from said upright groove to the opposite end of the block and arranged flush with said end, by an upright groove in one vertical side of the block and adjacent to the last named end thereof extending throughout the height of the block, by a transverse tongue at the upper side of the block and extending from said side groove to the opposite vertical side of the block and arranged flush with said side, and by longitudinal and transverse grooves in the underside of the block and corresponding to the said longitudinal and transverse tongues.

2. A wall including intermediate blocks having tongues at their upper sides and grooves in their undersides and also each having a vertical groove in one end and an upright tongue at its opposite end, and also including corner blocks, each corner block characterized by an upright groove in one end by a longitudinal central tongue at the upper side of the block and extending from said upright groove to the opposite end of the block and arranged flush with said end, by an upright groove in one vertical side of the block and adjacent to the last-named end thereof and extending throughout the height of the block, by a transverse tongue at the upper side of the block and extending from said side groove to the opposite vertical side of the block and arranged flush with said side, and by longitudinal and transverse grooves in the underside of the block and corresponding to the said longitudinal and transverse tongues.

3. A building block with a cruciform projection on one side and grooves in its opposite side corresponding to said projection, and also with a vertical groove in one end and a vertical groove in one vertical side whereby a plurality of said blocks when laid are interlocked and prevented from slipping and cracking.

In testimony whereof I affix my signature.

FORREST S. HART.