O. F. MANN.

BUILDING BLOCK.

APPLICATION FILED JULY 24, 1906.

952,918. Patented Mar. 22, 1910.

Fig. 1.

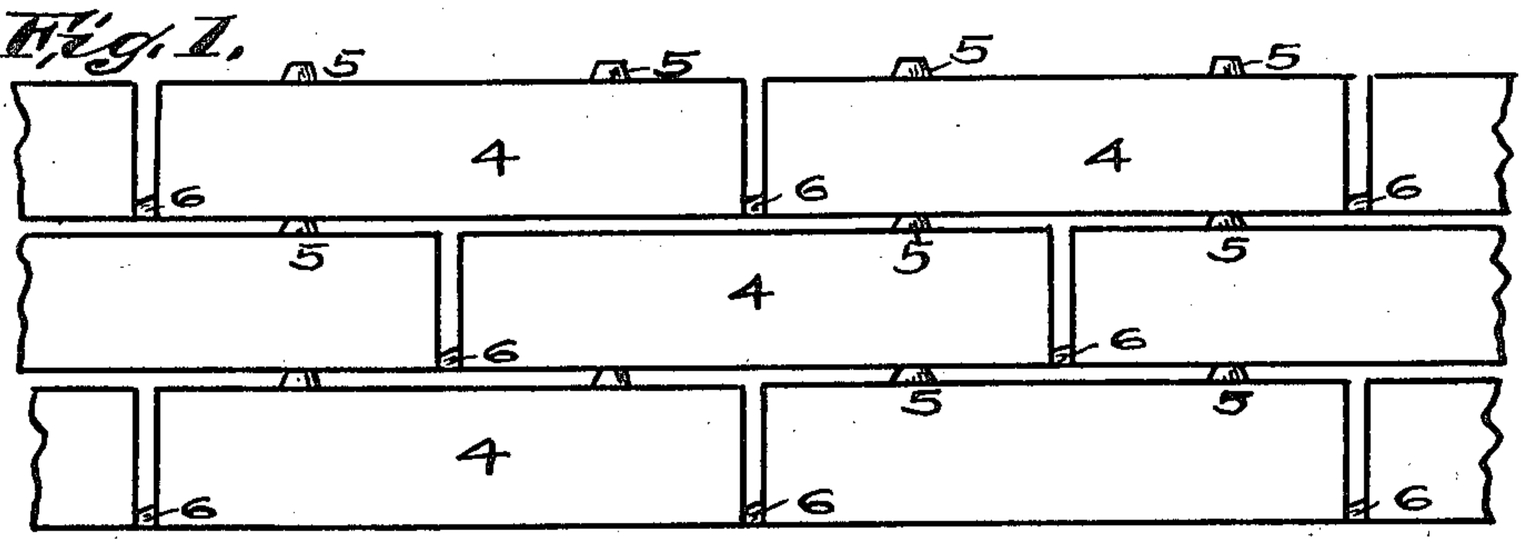


Fig. 2.

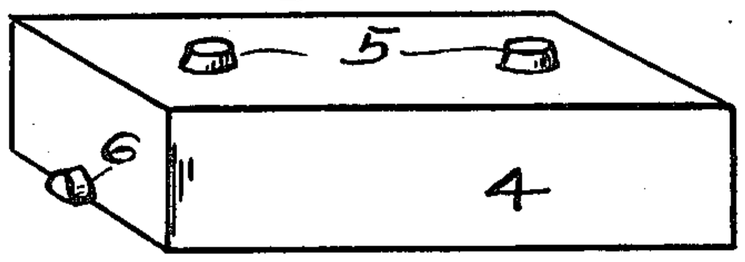


Fig. 3.

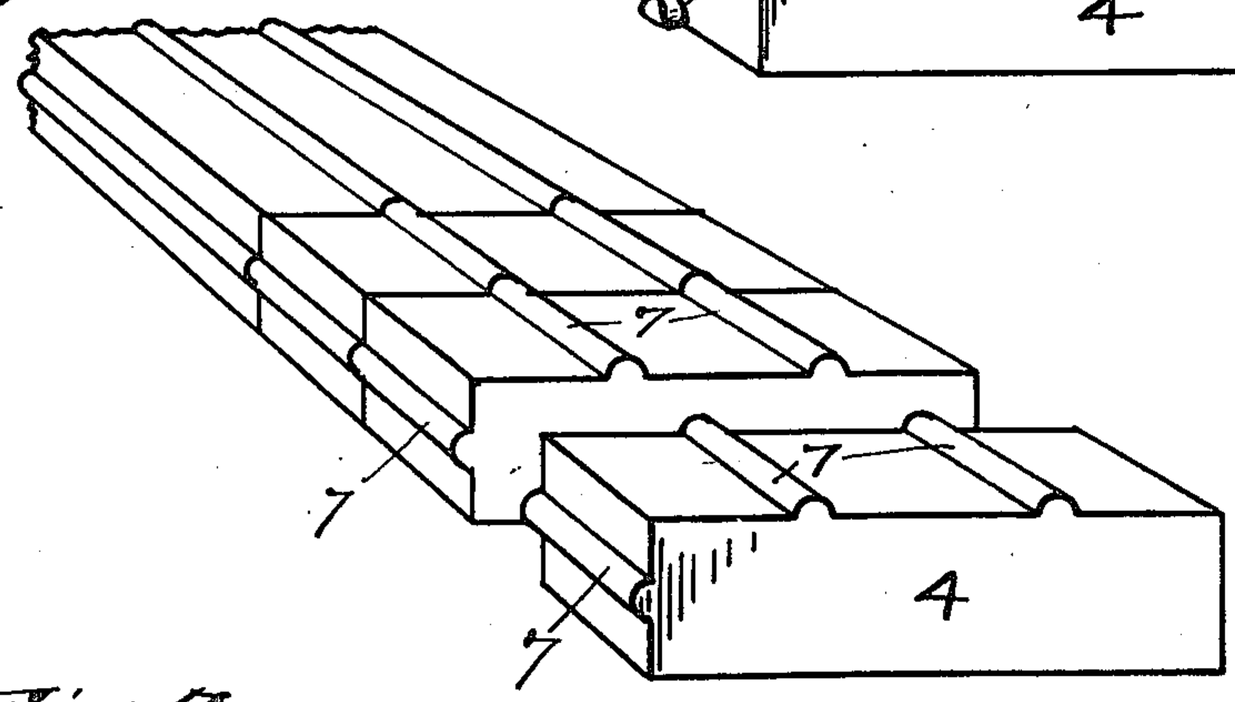
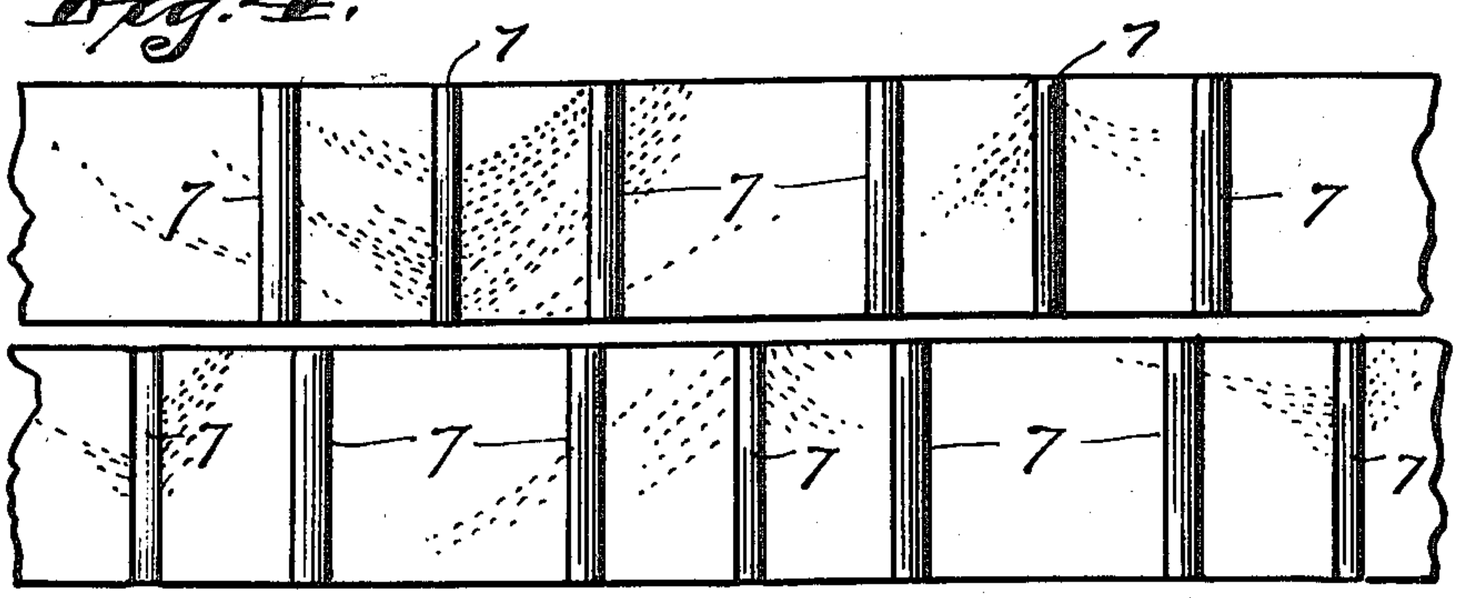


Fig. 4.



Witnesses;

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UNITED STATES PATENT OFFICE.

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BUILDING-BLOCK.

952,918. Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed July 24, 1906. Serial No. 327,548.

To all whom it may concern:

Be it known that I, OSCAR F. MANN, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Building-Blocks, of which the following is a specification.

This invention relates to improvements in brick and all kinds of building blocks which are to be laid in mortar, and the object is to simplify and cheapen the operation of laying these materials to form them into walls.

It is the practice in brick laying to deposit the mortar upon the top bricks of the new wall and then press and tap the bricks of the next course into place one at a time. In a nine inch wall, for example, the two rows of which it is formed are laid up seven courses at a time with the bricks running lengthwise of the wall, and every seven courses the wall is tied by a course of bricks placed transversely. Before this tie course is laid, the space between the inner and outer rows is supposed to be thoroughly flushed and filled with mortar, but in practice this space is not filled at all in many cases. This method of forming a wall is slow and expensive.

My invention contemplates the piling or laying up of all of the bricks between a tie course without mortar and the introduction of the mortar at the top between the inner and outer rows of brick. A sufficient quantity of mortar will be placed on top of the loosely piled brick and then by pressure the mortar will be made to permeate every joint between the bricks below. In practice, this wall will preferably be formed between a pair of vertical parallel retainers or forms, spaced the width of the desired wall from each other. The forms serve the purpose of a guide for placing the bricks in position and it also serves as a restraint to hold the bricks and mortar when pressure is applied at the top of the new wall to force the mortar home.

In the proper construction of a wall as above described, it is essential that the bricks used in it be separated from each other a uniform distance equal to the width of the required mortar joint, and the object of this invention is particularly to provide means as a part of the brick or other building block to compel their separation just the required distance when they are piled up preliminary to the addition of the mortar.

Referring to the accompanying drawings, Figure 1, represents in front view, a number of bricks with my improvement, laid up for the formation of a wall, the view being before the mortar is applied. Fig. 2, is a perspective view of a molded brick embodying my invention. Fig. 3, illustrates in perspective a clay slab and the manner in which it is cut into sections each of which sections constitutes a brick of regulation dimensions having my improvement, and Fig. 4 is a plan view of a two-course wall under construction, made with the blocks illustrated in Fig. 3.

The brick 4 shown in Figs. 1 and 2 is of usual size and shape and has the integral projecting portions 5 on its side. These projections extend out from the side of the brick a distance equal to the width of the mortar joint which will be required for uniting the bricks when they are formed into a wall and it is obviously important that the projections have equal extensions so as to make the mortar joint of uniform thickness in all parts of the wall and to bring the bricks into alinement in straight rows as the wall progresses. While I have shown only two of these extensions 5 on the same side of the brick and have placed these where they will be at the middle of their surface when the brick is broken into half bricks, it is obvious that more than two extensions can be used and that their positions may be changed without departing from the spirit of this invention. For example, four of these extensions or lugs might be used on a side, one approximately at each corner of the brick, with the advantage that the four lugs would have greater tendency to prevent tipping of the brick than where only the two middle ones are used.

6 is an extension or lug at the end of the brick at the corner opposite the corner between the end and side having the extensions 5. This location is determined by the necessity of manufacture in order to discharge the brick from the mold. It is not necessary to place these extensions or lugs on more than one side and end of the brick, though they may be placed on both sides and ends without departing from the spirit of this invention.

Fig. 3 shows the adaptation of my invention to a brick which is pressed out of the machine in slabs and then cut into brick sizes. Instead of lugs the extensions for spacing the bricks are in the form of ribs 7 which serve the same purpose as the lugs above described.

The bricks or blocks are laid in two or more vertical rows and the mortar or grouting is then forced by pressure into the vertical space between the rows whence it will enter laterally into the horizontal spaces between the blocks and fill them. Temporary molds are employed, as previously described, to retain the grouting within the interstices between the blocks. The blocks will be laid in a wall in the same manner as is shown in Fig. 1, and as the ribs 7 extend transversely of the blocks, or endwise to the direction of flow of grouting, they will not obstruct the movement of the latter.

I am aware of the patent to Scott, No. 721,751, having side and end edge-projections to space the blocks apart and also to retain the grouting within the wall, but my block is of a different form, without the side projections, and requires the use of temporary molds to retain the grouting in the spaces between the blocks, and mortar joints show in the usual way in the finished wall.

Having thus fully described my invention what I claim as new and wish to secure by Letters Patent of the United States, is—

1. A solid building block, having six plane surfaced sides, two of which have mortar spacing lugs, which serve to space one side and one end of the block from adjacent blocks and permit the unobstructed flow of mortar grout horizontally and vertically through three or more vertical rows of blocks.

2. A wall composed of solid building blocks each having a plane surfaced end and side and a like side and end each provided with a spacing lug or lugs which serve to space apart said side and end from the opposing block or blocks, the blocks so arranged in the wall structure that the body portion of each block is spaced apart from the body portion of every other block and the unobstructed flow of mortar grout is permitted both horizonally and vertically through three or more rows of blocks, substantially as shown and described.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, this, 21st day of July, A. D. one thousand nine hundred and six.

OSCAR F. MANN. [L. S.]

Witnesses:
JOSEPH A. MINTURN,
F. W. WOERNER.