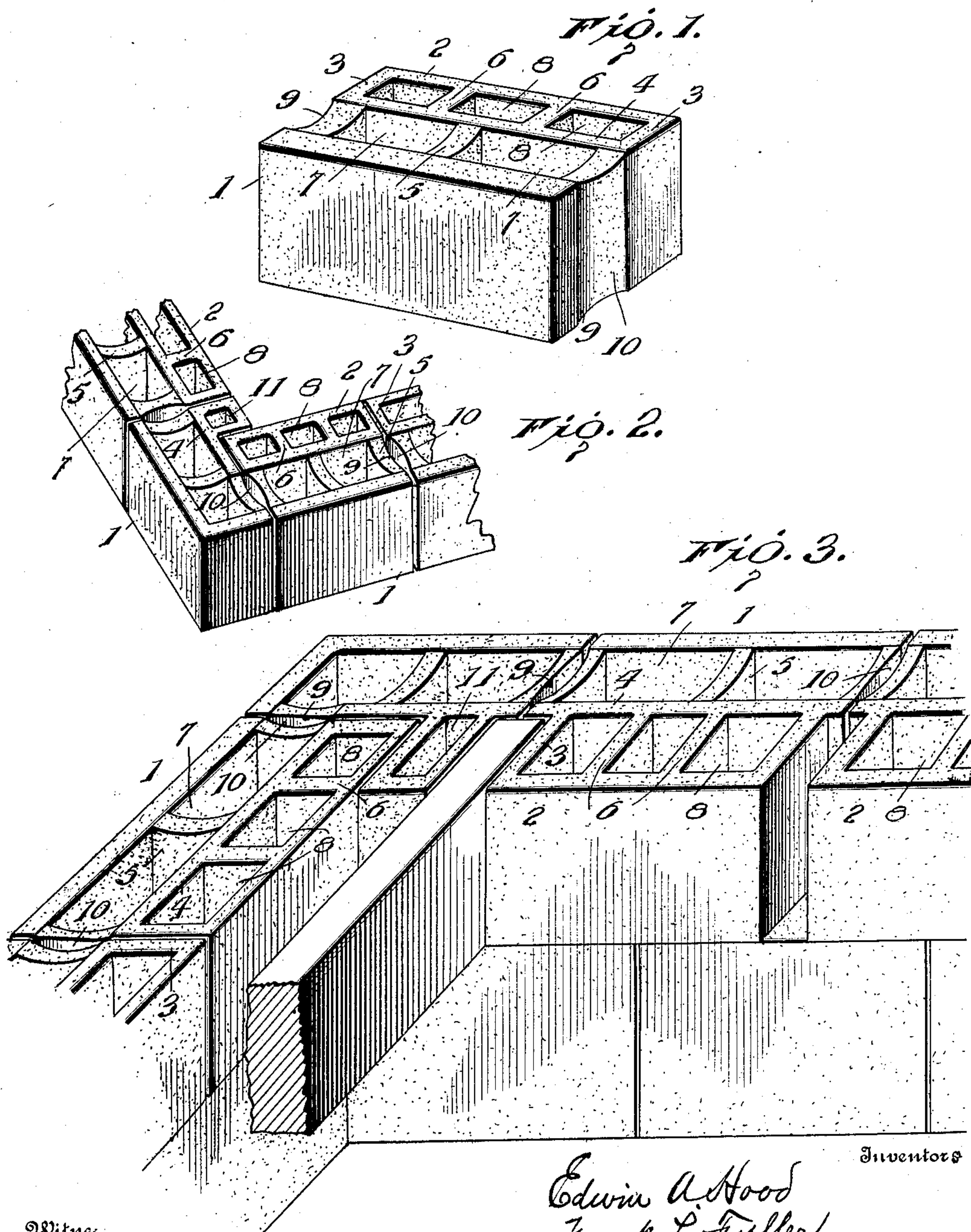


No. 828,818.

PATENTED AUG. 14, 1906,

E. A. HOOD & F. L. FULLER.  
BUILDING WALL AND BLOCK FOR SAME.

APPLICATION FILED OCT. 20, 1905.



Witness

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# UNITED STATES PATENT OFFICE.

EDWIN A. HOOD AND FRANK L. FULLER, OF PIERRE, SOUTH DAKOTA.

## BUILDING-WALL AND BLOCK FOR SAME.

No. 828,818.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed October 20, 1905. Serial No. 283,708.

*To all whom it may concern:*

Be it known that we, EDWIN A. HOOD and FRANK L. FULLER, citizens of the United States, residing at Pierre, in the county of Hughes and State of South Dakota, have invented certain new and useful Improvements in a Building-Wall and Block for Same, of which the following is a specification.

Our invention relates to improvements in the construction of a building-wall and block for same, in which hollow building-blocks are used.

The objects of our improvements are to provide continuous circulating air-spaces throughout the walls of buildings, the resistance of frost or moisture, a convenient building-wall for the reception of joists or other braces, and a binding-corner, a further object being the construction of a building-wall having an outer wall composed of fine compact material for the resistance of frost and dampness and an inner wall constructed in a novel manner to afford strength where needed most.

Other objects and advantages will be disclosed in the subjoined description and explanation.

Figure 1 is an isometrical view of our building-block, showing webs and air-spaces. Fig. 2 is a fragmental perspective view of a portion of our wall as used in building construction, showing application of the perpendicular and horizontal grooves and also corner-block with bond-lug. This figure also represents the means of continuous circulation of air. Fig. 3 is a perspective view of a portion of our wall, with particular reference to our recess for joists.

Similar numerals refer to similar parts throughout the several views.

Numeral 1 designates the outer wall of our block; 2, the inner wall.

3 represents connecting ends having a groove 10.

The numeral 4 designates a partition-wall within the block extending from ends 3. A small web connecting 1 and 4 is shown by 5. Rear connecting-webs are shown by 6. The two series of vertical air-shafts formed by our webs are shown by 7 and 8. This block is provided with horizontal grooves extending across both top and bottom faces. These grooves are shown by 9. The ends of our block have a vertical groove 10, which serves to form a vertical air-shaft in connecting with other blocks when assembled in a wall.

The outer face 1 is made from the best and finest material available, while other portions of the block may be made of coarser material. In our machine for the construction of our block, which machine forms the subject-matter of our former application, the face 1 is formed on the bottom of the mold-box. The outer facing material is first placed in the mold, and coarser material may be added in the tamping, so that the inner wall 2 may be formed by material of different color, grade, or fineness.

In Fig. 2 we show the application of the perpendicular air-flues 7, 8, and 10, also the horizontal groove 9 in wall at right angle. Numeral 11 is the lug or ear of our specially-constructed corner-block. Our corner-blocks are used interchangeably in succeeding courses, making a corner of great strength.

In Fig. 3 we show the application of the perpendicular air-flues 7, 8, and 10, also the horizontal groove 9, our corner-block, and also our recess 12 for the reception of joist. A joist, as 13, is simply inserted into a recess 12, formed on the ends of our block. Thus there is no need for a specially-constructed joist-hanger, as required in the use of other building-blocks. The joist as inserted in our recess being wholly surrounded by webs of our block is thereby made fireproof. In a building partition-wall our recess is made from both sides of the block up to the center of the parting-web, thus providing a fireproof partition-wall for a building.

The vertical shafts 7, 8, and 10 are preferably so arranged in the blocks that continuous air-shafts extend from the bottom to the top of the wall when the blocks are associated together.

Our blocks are made of any suitable plastic material, preferably concrete.

From the foregoing and by reference to the drawings it will be readily understood and clearly seen that by employing our construction of building-blocks a wall may be provided that affords continuous air-passages both horizontally and vertically throughout and providing a construction that is frost and damp resisting.

It is evident that our corner-block is one of great strength and utility. It is further evident that our construction greatly strengthens the manner of setting joists in a block building-wall and increases the durability of the inner wall.



What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a plastic block for wall construction, a row of rectangular vertical air-passages, webs separating the same, a second row of rectangular vertical air-passages, webs separating the same, the upper surfaces of which are concave to form horizontal air-passages in the wall, the sides of said webs being also concave to form vertical air-passages in the wall, and a partition separating the two rows of air-passages.

2. A wall construction comprising a plurality of blocks, each block being provided with rows of vertical air-passages arranged therein to form continuous vertical air-passages in the wall, a vertical partition separating the rows of air-passages in each block,

vertical webs separating the passages in each row, the webs in one row intersecting the passages in the opposite row and having their upper surfaces concave to form continuous horizontal air-passages in the wall, and having their sides concave to form rows of vertical continuous air-passages in the wall, and spaces between the blocks for the reception of joists or rafters.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

EDWIN A. HOOD.

FRANK L. FULLER.

Witnesses:

F. W. LAMBERT,

M. M. Z. GUTHRIE.