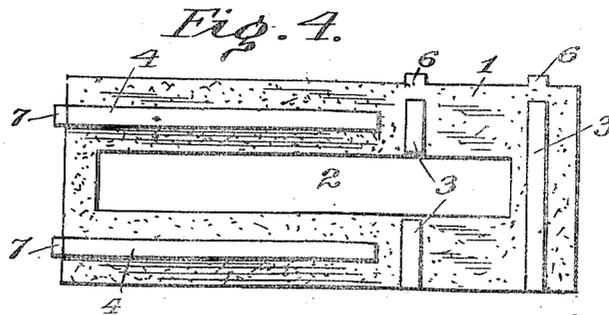
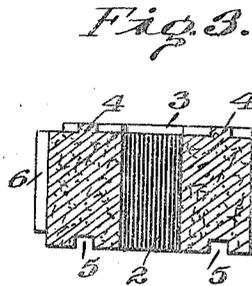
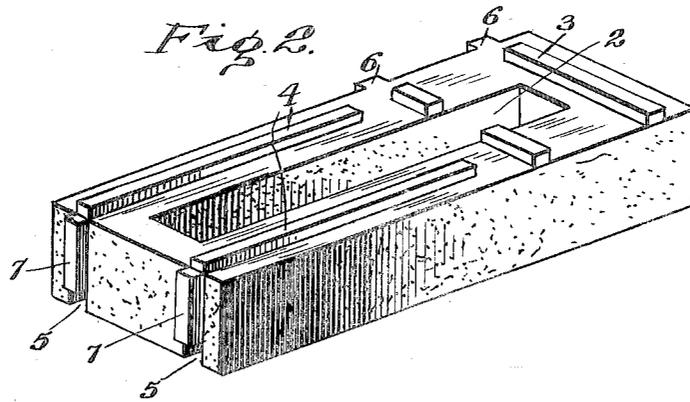
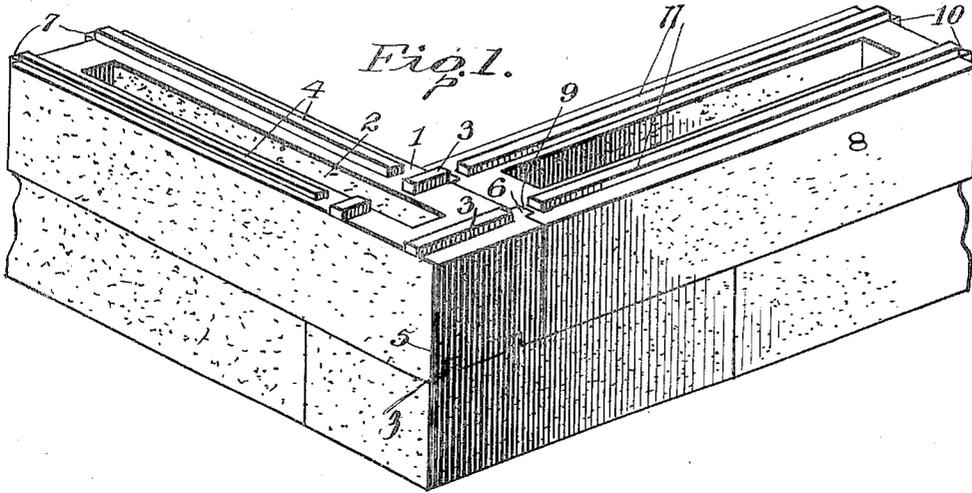


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PATENTED FEB. 6, 1906.

W. M. AKERS & B. F. HUSTON.
BUILDING WALL CONSTRUCTION.
APPLICATION FILED JULY 21, 1905.



Witnesses

W. M. Akers
W. V. Woodson

Inventors

W. M. Akers
B. F. Huston.

By

W. M. Akers, Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM M. AKERS AND BENJAMIN F. HUSTON, OF DECATUR, IOWA.

BUILDING-WALL CONSTRUCTION.

No. 811,584.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed July 21, 1905. Serial No. 270,722.

To all whom it may concern:

Be it known that we, WILLIAM M. AKERS and BENJAMIN F. HUSTON, citizens of the United States, residing at Decatur, in the county of Decatur and State of Iowa, have invented certain new and useful Improvements in Building-Wall Constructions, of which the following is a specification.

This invention relates to building-wall construction, and embodies, primarily, novel forms of building-blocks of cement or like plastic material composed in the corner and main wall construction.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view showing the corner portion of a building-wall composed of blocks comprising this invention. Fig. 2 is a perspective view of one of the corner-blocks. Fig. 3 is a transverse section of one of the corner-blocks. Fig. 4 is a plan view of the corner-block.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In the practical embodiment of the invention the corner-blocks 1 used in the building-wall construction are of special formation, being of rectangular shape in general form, having a single elongated air-space 2. The outer face or side of the corner-block 1 may be smooth or finished in any suitable way. The upper side of the block, however, is provided near one end with transverse ribs 3, one of which is interrupted centrally thereof by the space 2. Near the opposite end portion of the block 1 and also upon its under side are formed the integral longitudinal ribs 4, each terminating at one end near the adjacent rib 3, the other ends terminating near the extremity of the block. The under side of the corner-block 1 is formed with a pair of longitudinal grooves 5, which preferably extend the entire length of the block, said grooves being adapted to receive ribs upon blocks arranged beneath the corner-block, as will be described more clearly hereinafter. The inner side of each corner-block 1 is provided with spaced vertical ribs 6 and the latter will be received in grooves in the end of an adjacent main block of the wall structure.

The ribs 6 are located near one end of the block 1, as will be readily apparent. Spaced vertical ribs 7 will be formed at one end of each block 1 also, and these ribs will enter grooves in the end of an adjacent abutting main block in a manner similar to the interlocking of the ribs 6 with such grooves, as before mentioned. Thus it will be noted that each of the corner-blocks composed in the wall structure will have upon its upper side transverse ribs 3 and longitudinal ribs 4, upon its under side the longitudinal grooves 5, at one side and near one end the vertical spaced ribs 6, and at one end which abuts with an adjacent main block of the wall the spaced end ribs 7. The main blocks of the wall or those which will be composed in the body of the wall throughout its length are indicated at 8, and these blocks are provided at opposite ends with spaced grooves 9 and spaced ribs 10, respectively, said grooves 9 and ribs 10 extending vertically of the block. Furthermore, each block 8 will have upon its upper side spaced longitudinal ribs 11 and upon its under side spaced longitudinal grooves. The blocks 8 are also provided with the air-spaces described with reference to the corner-blocks 1.

By referring to Figs. 2 and 3 of the drawings it will be seen that the transverse ribs 3 terminate at one end short of the adjacent ends of the vertical ribs 6 and preferably short of the adjacent side edge of the block 1. It will be seen also that the vertical ribs 7 terminate at their upper ends flush with the upper surface of the block, but short of the upper surface of the longitudinal ribs 4, and that both the vertical ribs 6 and 7 terminate at their lower ends short of the lower ends of the said block. It will also be noted by reference particularly to Fig. 1 that the longitudinal ribs 11 do not extend over the grooves 9, but terminate short of said grooves, and that the other end of the longitudinal ribs 11 terminate flush with the other face of the block 8, so as to produce an angular formation with respect to the end vertical ribs 10. By means of this arrangement it will be seen by referring to Fig. 1 that when the block 8 is assembled next to a corner-block 1 with the grooves 9 receiving the vertical ribs that the ribs 3 and 11, while they are in alinement with each other, are spaced somewhat at their adjacent ends, this space providing portions in the nature of sockets, which will receive the mortar and tend to effect a locking engage-

ment as against longitudinal displacement between the block 8 and the block 1. It will also be evident from the arrangement of the longitudinal ribs 11 and 4 with respect to the vertical ribs 10 and 7 that said ribs produce at their meeting ends angular formations, which also produce sockets for the mortar and that this construction insures a rigid formation of the wall.

When the corner and main blocks of the wall are assembled, the corner-block which is arranged at an angle to its adjacent corner-block and above the same will have the longitudinal grooves 5 interlocked with the transverse ribs 3 of the lower corner-block. The adjacent main block 8, which overlaps the lower corner-block 1, will have the grooves upon its under side interlocking or receiving the longitudinal ribs 4 on the upper side of said corner-block, and the grooves 9 in the end of said main block will receive the vertical ribs 6 on the side of the upper corner-block of the two blocks above mentioned. The above construction of the corner and main blocks is such that the same are interlocked in a peculiar manner, and the substantiality of the wall structure is greatly increased, the various blocks being virtually tied together by the interlocking connection between the same. The vertical arrangement of the ribs 6 and 7 upon the inner side and at one end of the corner-block, as well as of the ribs 10 at an end of the main block, is advantageous in that the blocks can be placed in position by vertical movement in establishing the interlocking connection between the ribs and grooves thereof. This is important when it is considered that the mortar would interfere with interlocking of horizontal ribs and grooves were such provided. The ribs 4 on the upper side of the corner-blocks terminate or are discontinued at a point adjacent to the ribs 3, as shown most clearly in Figs. 2 and 4 of the drawings.

Having thus described the invention, what is claimed as new is—

1. A building-block provided on one face with longitudinally-extending grooves and on its opposite face with longitudinal ribs and transverse ribs spaced from each other and from the longitudinal ribs, and also provided

on one side edge with vertical ribs and on one end edge with vertical ribs, the transverse ribs terminating short of the vertical ribs on one side edge of the block, as and for the purpose set forth.

2. A building-block provided on one face with longitudinally-extending grooves and on its opposite face with longitudinal ribs and transverse ribs spaced from each other and from the longitudinal ribs, and also provided on one side edge with vertical ribs and on one end edge with vertical ribs, the transverse ribs terminating short of the vertical ribs on one side edge of the block, and the vertical ribs on the end edge of the block terminating flush with the face thereof and producing an angular formation with the meeting ends of the longitudinal ribs.

3. In a building-wall construction the combination of the corner-block provided in one face with longitudinally-extending grooves and on the opposite face with longitudinal ribs and with transverse ribs spaced from each other and from one end of the longitudinal ribs, said corner-block being also provided on one side edge near one end thereof with vertical ribs in alinement with the transverse ribs and being also provided on one end edge with vertical ribs in alinement with the longitudinal ribs, the transverse ribs terminating short of their alining vertical ribs and the end vertical ribs terminating short of their alining longitudinal ribs and a main wall-block provided with vertical grooves designed to receive the side edge vertical ribs of the corner-block and provided on its opposite end with vertical ribs, said main-wall block being also provided with longitudinal ribs on one face terminating at one end short of said vertical grooves and in alinement therewith and terminating at their other ends short of the outer faces of the vertical ribs of said block, as and for the purpose set forth.

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

WILLIAM M. AKERS. [L. s.]
BENJ. F. HUSTON. [L. s.]

Witnesses:

CHAS. BENTON,
J. W. HANNAH.