

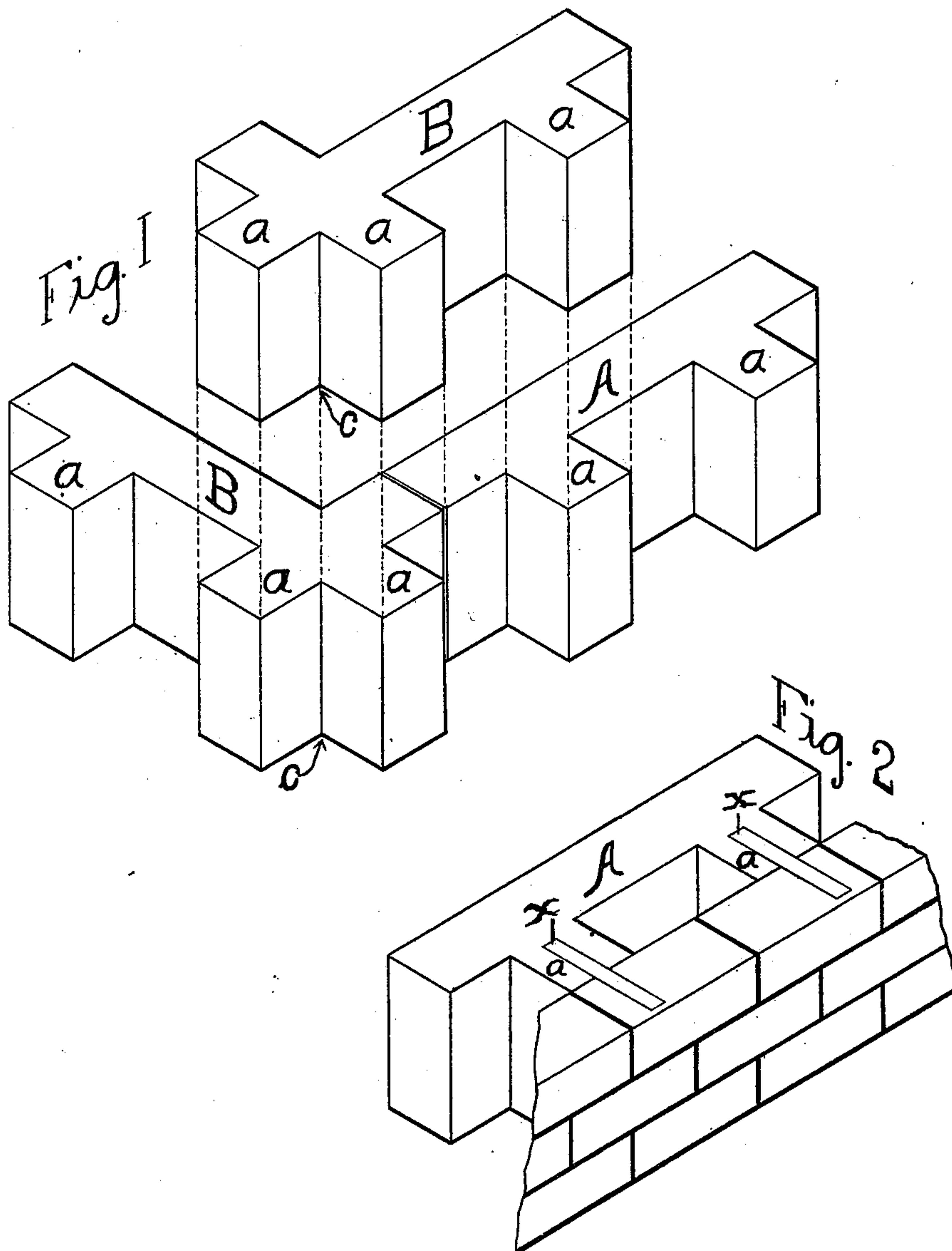
No. 675,278.

Patented May 28, 1901.

C. D. HIGGINS.
BUILDING BLOCK.

(Application filed Mar. 31, 1900.)

(No Model.)



Witnesses

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BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 675,278, dated May 28, 1901.

Application filed March 31, 1900. Serial No. 10,968. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. HIGGINS, a citizen of the United States of America, residing at the city of Aberdeen, in the county of Brown, in the State of South Dakota, have invented a new and useful Improvement in Building Construction, of which the following is a specification.

My invention relates to improvements in the method of constructing a hollow wall of a building by the use of building-blocks made of concrete or other material capable of being molded in the forms hereinafter described to form either the inner or outer part of the wall and vertical partitions between the inner and outer parts of the wall, in combination with an outer or inner part, respectively, made of any ordinary building material, and a means for tying the two parts of the wall together in such a manner as to leave each part independent of the settling, expansion, or contraction of the other part.

The object of my invention is to provide a more economical method of constructing a hollow wall by the use of building-blocks molded in such form as to make one facing of the wall and the projections extending to the other facing form vertical partitions between the two faces at regular intervals and also to provide a means for bonding securely together the inner and outer parts of the wall with anchors or bonding-ties and at the same time leave each face of the wall independent of the expansion and contraction of the other face. My invention includes the use of two forms of such blocks. One, which I call the "principal block," is used in straight walls. The other, which I call the "corner-block," is used for turning an interior right angle to form one facing of the wall and the vertical partitions, a wall constructed of any ordinary building material to form the other facing of the wall, and a metal anchor or bonding-tie to tie the two parts of the wall together. I attain this object by the use of blocks molded in the forms illustrated in the accompanying drawings, in which—

Figure 1 is an isometrical projection of the principal block A and the corner-block B as laid in the wall, showing the manner of using the two in combination to turn an interior right angle, the upper representation of the

corner-block B showing how it is laid in the next course to form a perfect bond at the corner. Fig. 2 is an isometrical projection of a section of the completed wall, showing the method of bonding to the outer facing.

Similar letters refer to similar parts throughout the drawings, which represent a four-inch backing with rectangular projections four inches wide and four inches long, which, with a four-inch facing on the outside, will form a twelve-inch hollow wall.

The principal block A has two projections *a a* molded on one side, which when the block is laid form vertical partitions between the outer and inner parts of the wall, leaving hollow spaces between the projections. There may be any number of such projections; but they must be so located with respect to each other and the distance from each end of the block to the nearest projection must be such that when the blocks are laid end to end, with sufficient space for a mortar-joint, the distances between all the projections throughout the course shall be equal, and when successive courses are laid so as to break joints each projection will be exactly superimposed upon a similar projection in the course below, forming continuous vertical partitions between the two parts of the wall.

The main body of the corner-block B, which forms one facing of the wall, is molded to turn a right angle; but the sides are of unequal length in order to form a perfect bond by reversing the block in laying up the corner. Upon the sides forming the exterior angle of the corner *c* are molded projections *a a*, similar to those on the principal block A. The sides of this block are of such length and the projections so located that when laid in the wall in connection with the principal block A all the projections in that course each way from the corner will be equidistant, and when successive courses are laid each projection will be exactly superimposed upon a similar projection in the course below.

It will be noticed in relation to the principal block A and the corner-block B that the distance from each end to the nearest lateral projection, plus one-half the space required for a mortar-joint, is equal to one-half the distance between any two projections. These blocks may be molded to any thickness de-

sired, but should be made of such a thickness as to bond with a certain number of courses of the material which is used in constructing the outer facing of the wall.

5 In the drawings the blocks described in this specification are used to form the backing or inner part of the wall; but by reversing the principal block it may be used equally as well to form the outer facing of the wall, bonding
10 in the same manner to the backing or inner part of the wall of other material.

As shown in Fig. 2, the projections *aaa* extend to the outer facing of the wall and afford it a support, and the two parts of the wall are
15 bonded or tied together by means of metal anchors or bonding-ties *xxx*, laid in the mortar-joints from one part of the wall to the other. The drawings show these anchors or bonding-ties placed in the wall at the projec-
20 tions *aaa* in the mortar-joint between the courses; but they may be placed equally as well at any other place in the wall from the inner to the outer part of the wall. Any form of metal anchors or bonding-ties may be used,
25 that shown in the drawings forming no part of my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

A wall composed of building-blocks with

one or more projections molded on one side, 30
of such form that the main part of the blocks forms one facing of the wall and each projection extending to the other facing of the wall, forms a vertical partition between the inner and outer parts of the wall, for the purpose 35
of making hollow spaces in the wall and affording a support to the other facing of the wall, in combination with the other facing of the wall constructed of any ordinary building material and metal anchors or bonding- 40
ties to bind the two parts of the wall together; said projections upon the building-blocks being so located that when the blocks are laid end to end in the wall, with allowance for mortar-joint, the distance between all the pro- 45
jections in the same course lying between any two consecutive corners of the wall, shall be equal, and when laid in successive courses, so as to break joints, each projection shall be exactly superimposed upon a similar projec- 50
tion in the course below, forming a continuous vertical partition from the bottom to the top of the wall between the two faces thereof.

CHARLES D. HIGGINS.

Witnesses:

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