

52-123

No. 869,770.

PATENTED OCT. 29, 1907.

W. W. BIRNSTOCK.

BUILDING BLOCK.

APPLICATION FILED OCT. 31, 1906.

Fig. 1.

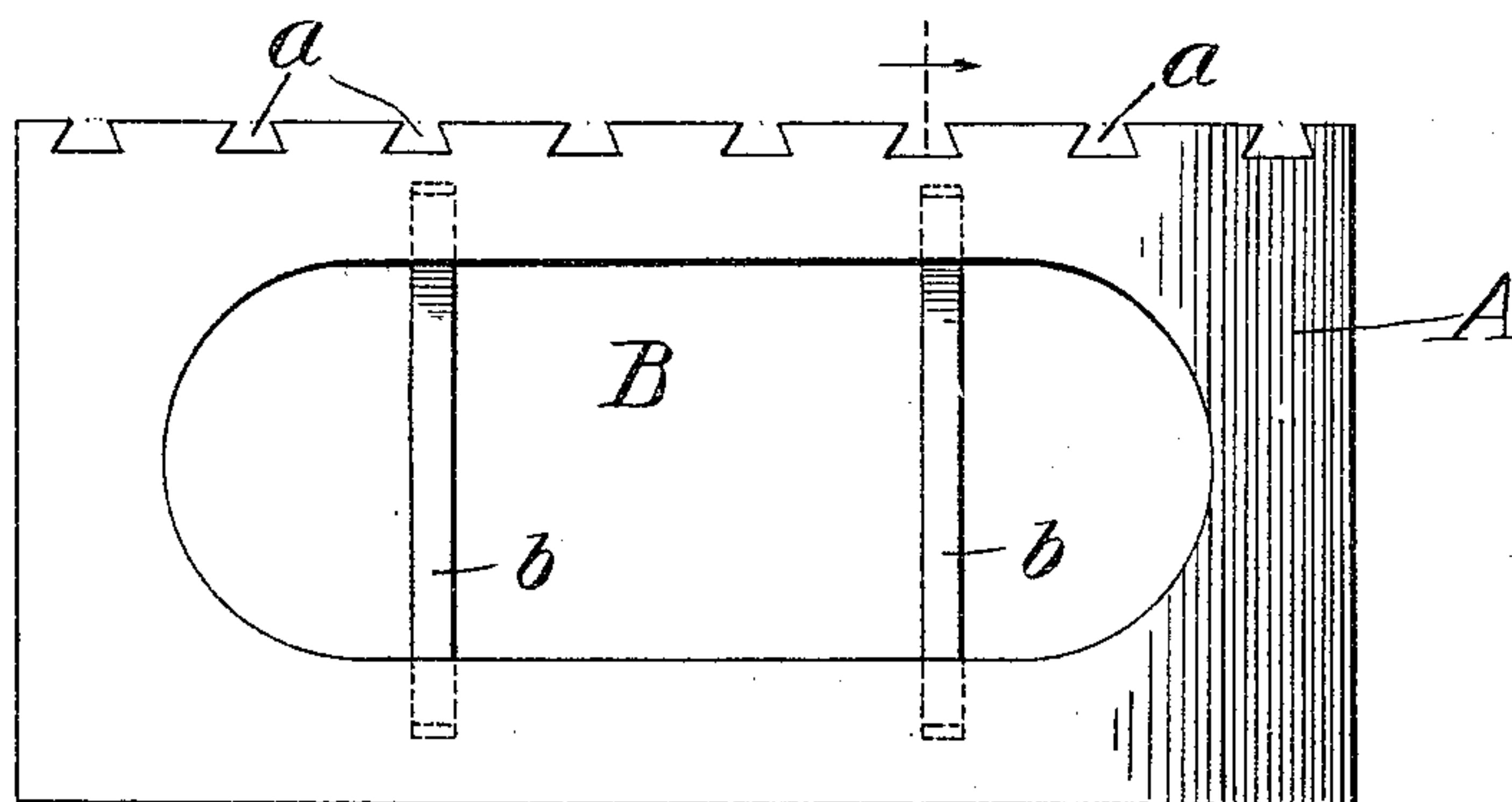


Fig. 3.

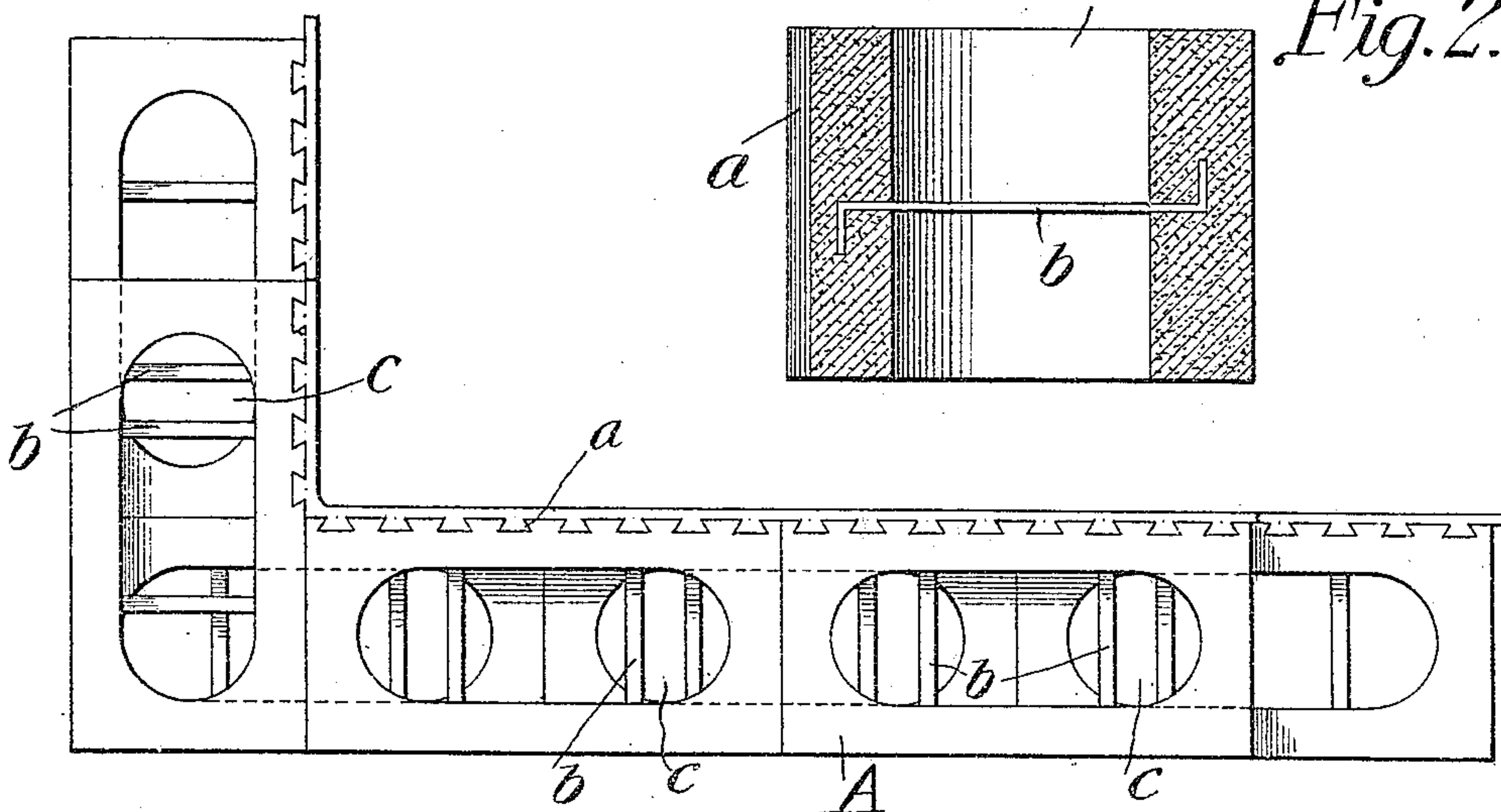


Fig. 2.

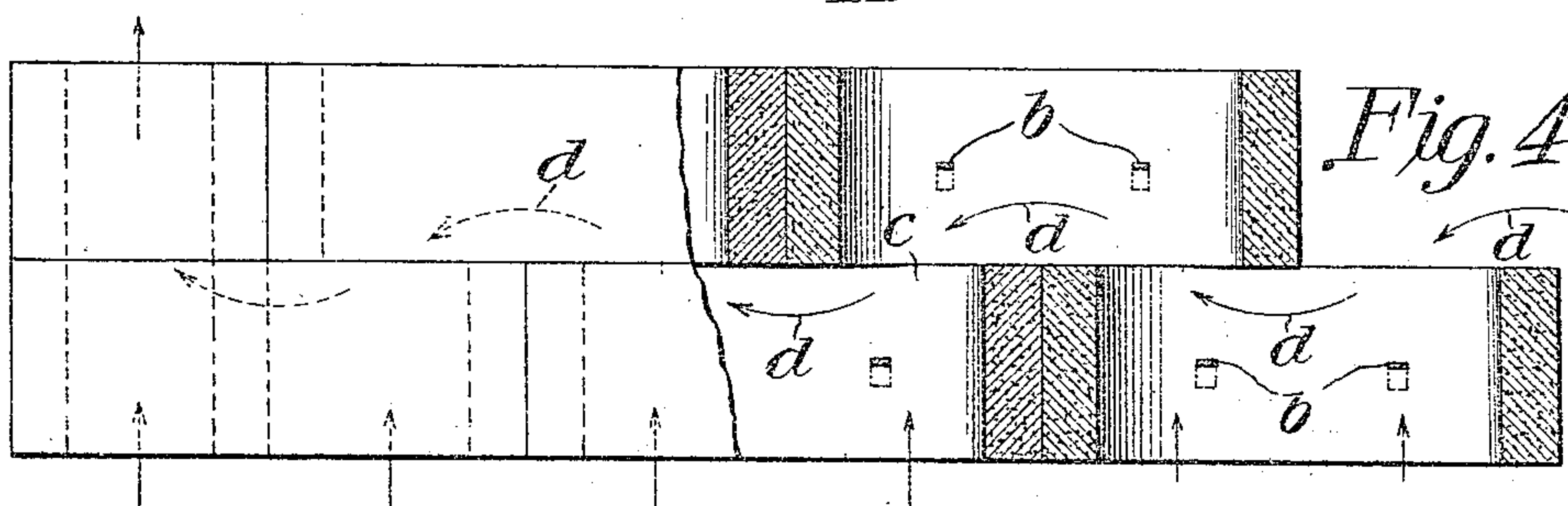
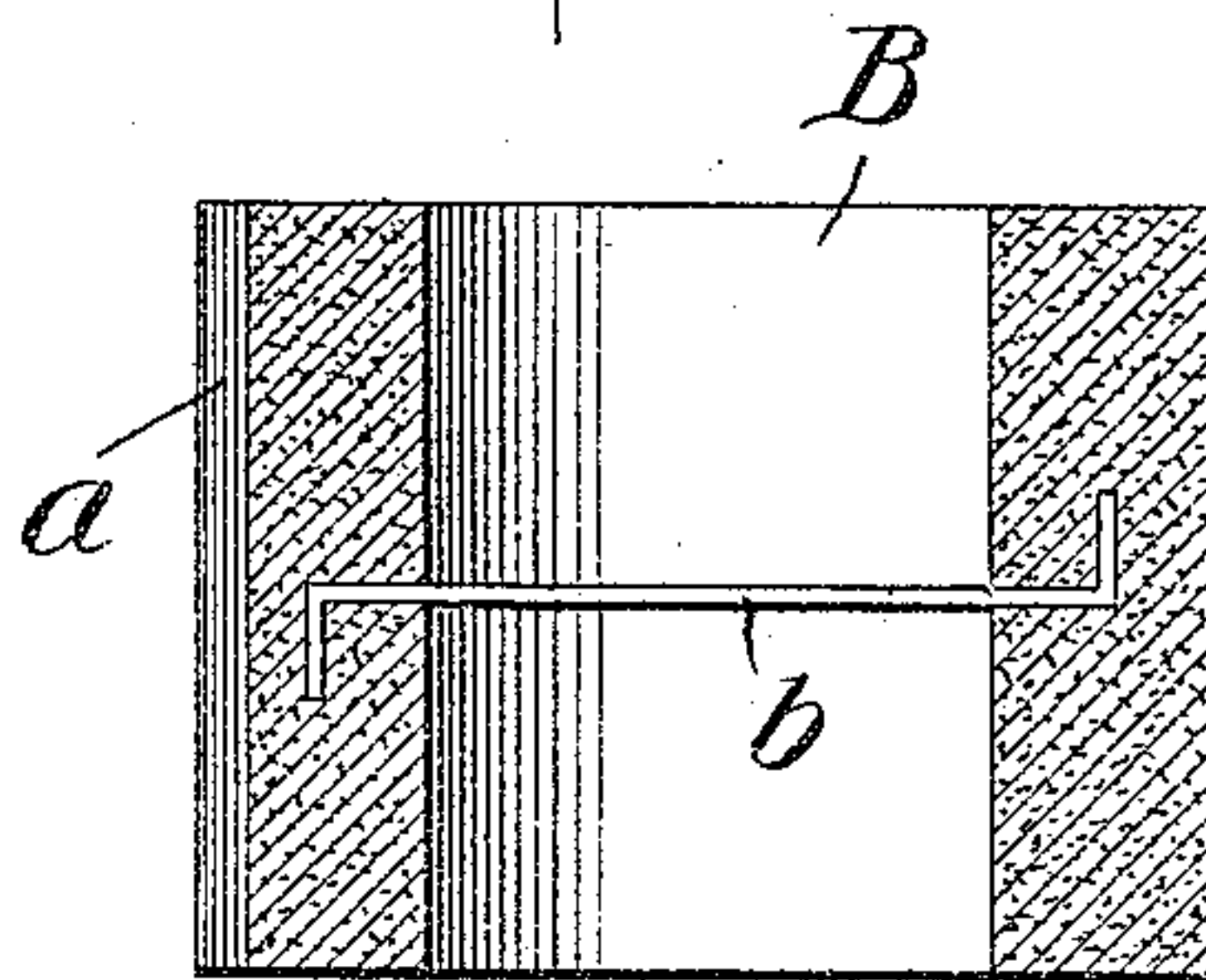


Fig. 4.

Witnesses  
Fenton & Belt  
Albert Popkins

Inventor  
William W. Birnstock  
By Stewart and Mason  
Attorneys



# UNITED STATES PATENT OFFICE.

WILLIAM WILTON BIRNSTOCK, OF YORK, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO  
MATTHEW G. COLLINS, OF YORK, PENNSYLVANIA.

## BUILDING-BLOCK.

No. 869,770.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed October 31, 1906. Serial No. 341,419.

*To all whom it may concern:*

Be it known that I, WILLIAM WILTON BIRNSTOCK, a citizen of the United States, residing at York, in the county of York, State of Pennsylvania, have invented certain new and useful Improvements in Building-Blocks, of which the following is a description, reference being had to the accompanying drawing and to the letters and figures of reference marked thereon.

This invention relates to that type of building blocks constructed of cement, concrete or other analogous composition.

The object is to provide a novel article of the above character, that can be manufactured with greatest ease, is economical in the amount of material employed, and yet is not only strong and durable, but in itself provides an insulating air space, and by reason of the way it is applied in the construction of buildings, gives an air circulation, thus not only giving vertical air passages but also horizontal circulating passages.

The invention includes first a construction of building block itself having an elongated central opening, with metal reinforcing struts whose ends are embedded in the walls, and which extend across the open space, thereby affording a convenient means of handling the blocks, said blocks on the inner side having grooves, projections or the like to facilitate plastering thereagainst without requiring intermediate studding or lathing.

Secondly, the invention includes a wall made of hollow blocks constructed as aforesaid, the blocks of the respective layers breaking joints with the blocks in the adjacent rows, whereby continuous vertical air passages are formed, as well as horizontal passages.

Finally, the invention consists in the matters hereinafter described and referred to in the appended claims.

The invention is illustrated in the accompanying drawings, in which,

Figure 1 is a plan view of a hollow building block embodying my invention; Fig. 2 is a cross section of the same; Fig. 3 is a plan view, of a wall built up of my building blocks; and Fig. 4 is an elevation of Fig. 3, partly in section.

In these drawings, A represents the block which is composed of cement, concrete or analogous composition, and which is formed according to any well known molding process.

It is herein shown as having one side formed with dovetail grooves *a* adapted for reception of plaster, as shown in Fig. 3, by which construction the plastering may be secured directly to the block without necessitating intermediate studding or lathing.

It will be observed that the plaster receiving grooves are vertically disposed so that the body of plaster will form a bonding medium between adjacent blocks in the same course. These vertical grooves are further important in that the plaster is more firmly held and is not so liable to crack in case of settling of the walls. 55

The block A is hollow, having a central elongated opening B, the ends of which are preferably rounded, as shown, and projecting entirely across the opening are herein shown two metal struts *b, b*, the ends of which are embedded in the side walls of the block and serve to reinforce the block, and at the same time afford a convenient way of handling the blocks by which they may be moved from place to place, or set in position, without danger of breaking or clipping them. 60 65

As a further and special improvement, I have devised a special construction of building wall to be made up of these blocks. This is shown in Figs. 3 and 4. The blocks A in the respective layers are arranged so as to break joints, thus leaving the vertical air passages *c* and the horizontal air passages indicated by the arrows *d*. 70

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:— 75

1. A hollow building block formed with continuous side and end walls and having a single central elongated opening between the side and end walls extending vertically through the block, and a pair of spaced reinforcing metal struts extending across the opening, and having their opposite ends embedded in the front and rear parallel walls of the block, said struts being arranged midway of the vertical height of the block to form handles accessible from either open side of the block, and the struts being parallel with each other, and at equal distances from the ends of the block for convenience in lifting the latter. 80 85

2. A building block formed with continuous side and end walls and having a single central elongated opening between the side and end walls extending vertically through the block, spaced reinforcing metal struts extending across the opening and having their opposite ends embedded in the front and rear walls of the block, said struts being arranged midway of the vertical height of the block, the inner face of said block being provided with plaster receiving grooves. 90 95

3. A building block formed with continuous side and end walls and having an opening extending vertically through the block, and reinforcing metal struts extending across the opening and having their opposite ends embedded in the front and rear walls of the block. 100

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM WILTON BIRNSTOCK.

Witnesses:

ELMER C. ZEIGLER,  
GEORGE S. DELLINGER.