

No. 620,594.

Patented Mar. 7, 1899.

E. KETCHUM.  
BUILDING PARTITION.

(Application filed Sept. 22, 1898.)

(No Model.)

Fig. 1.

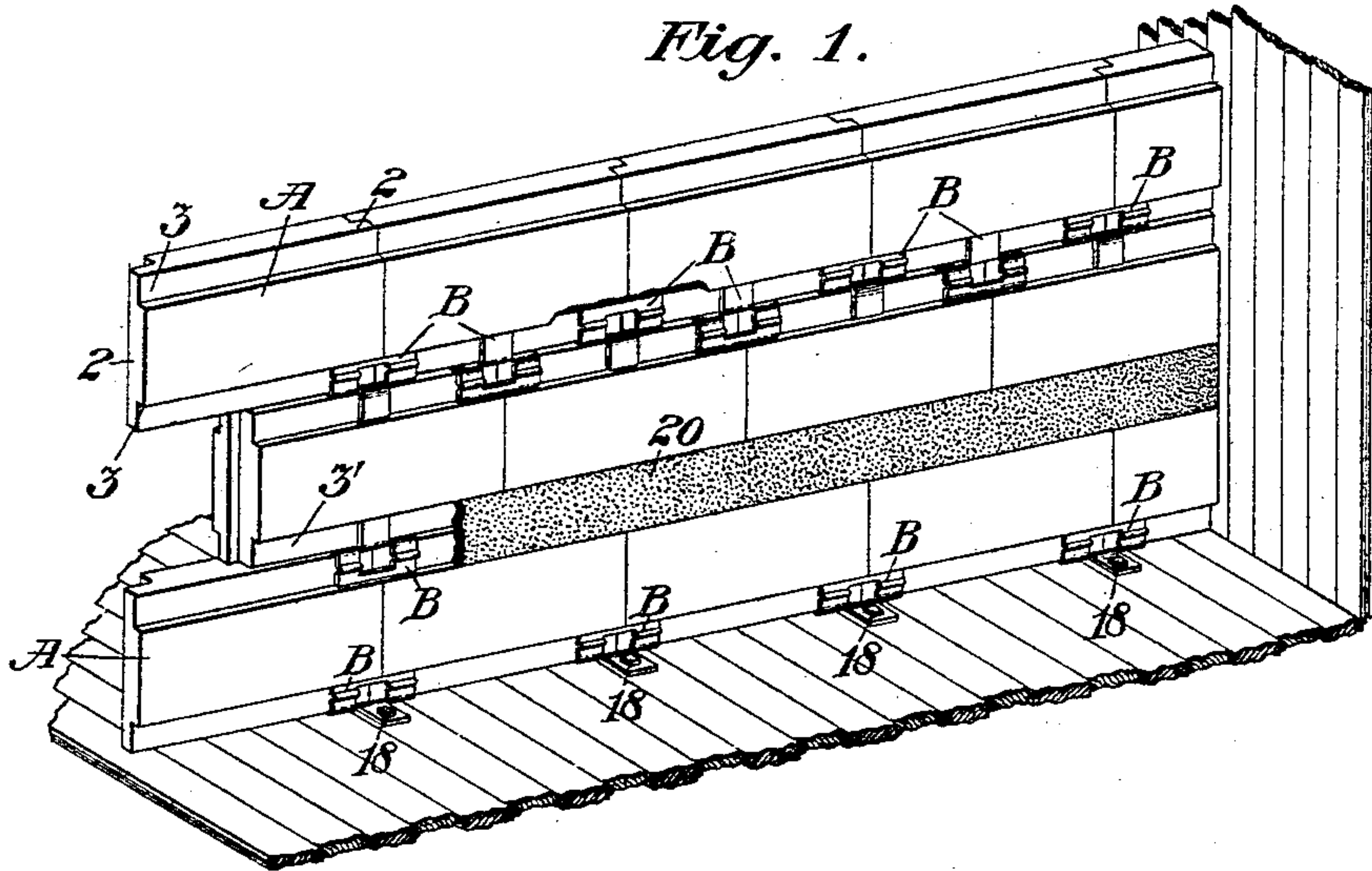


Fig. 2.

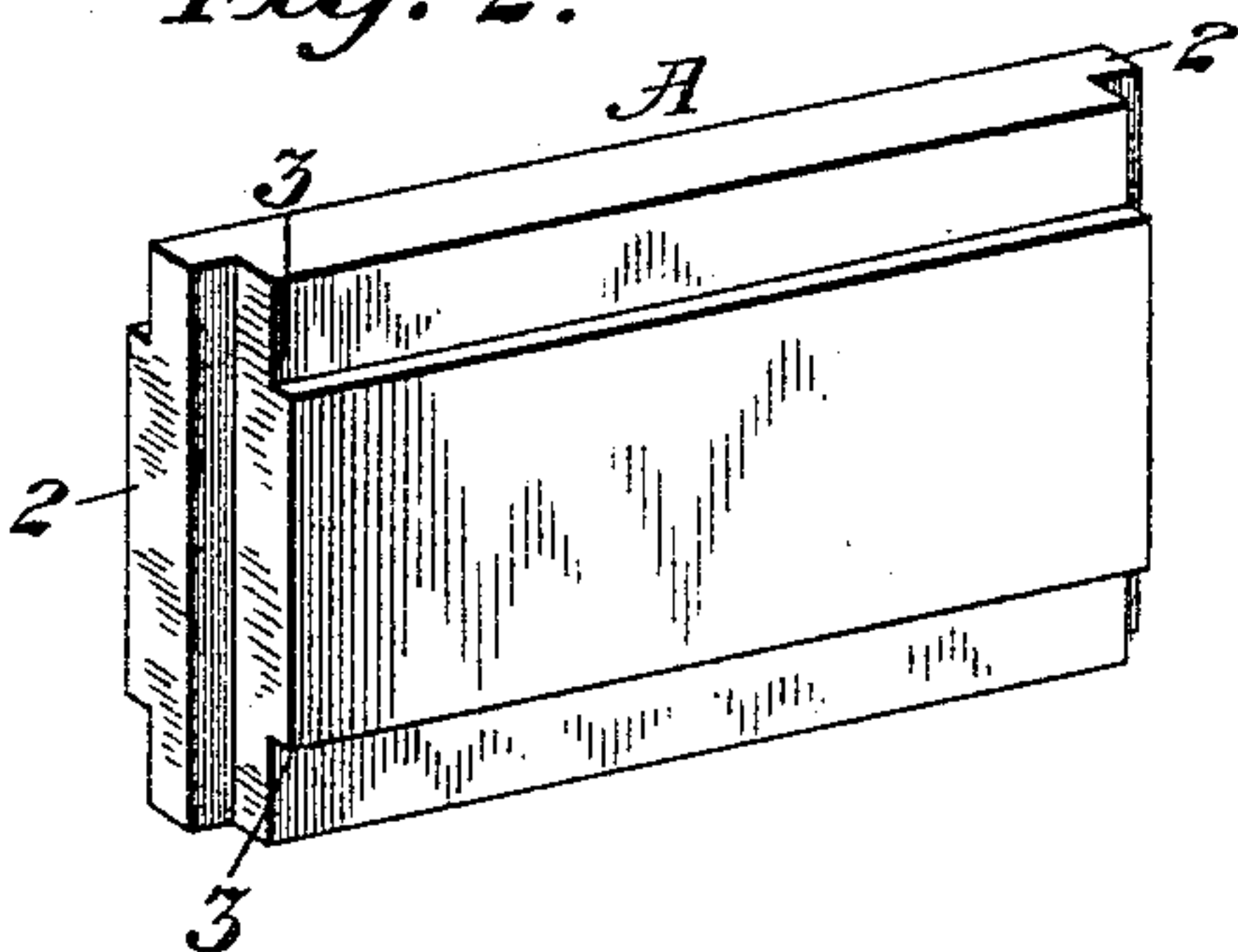


Fig. 3.

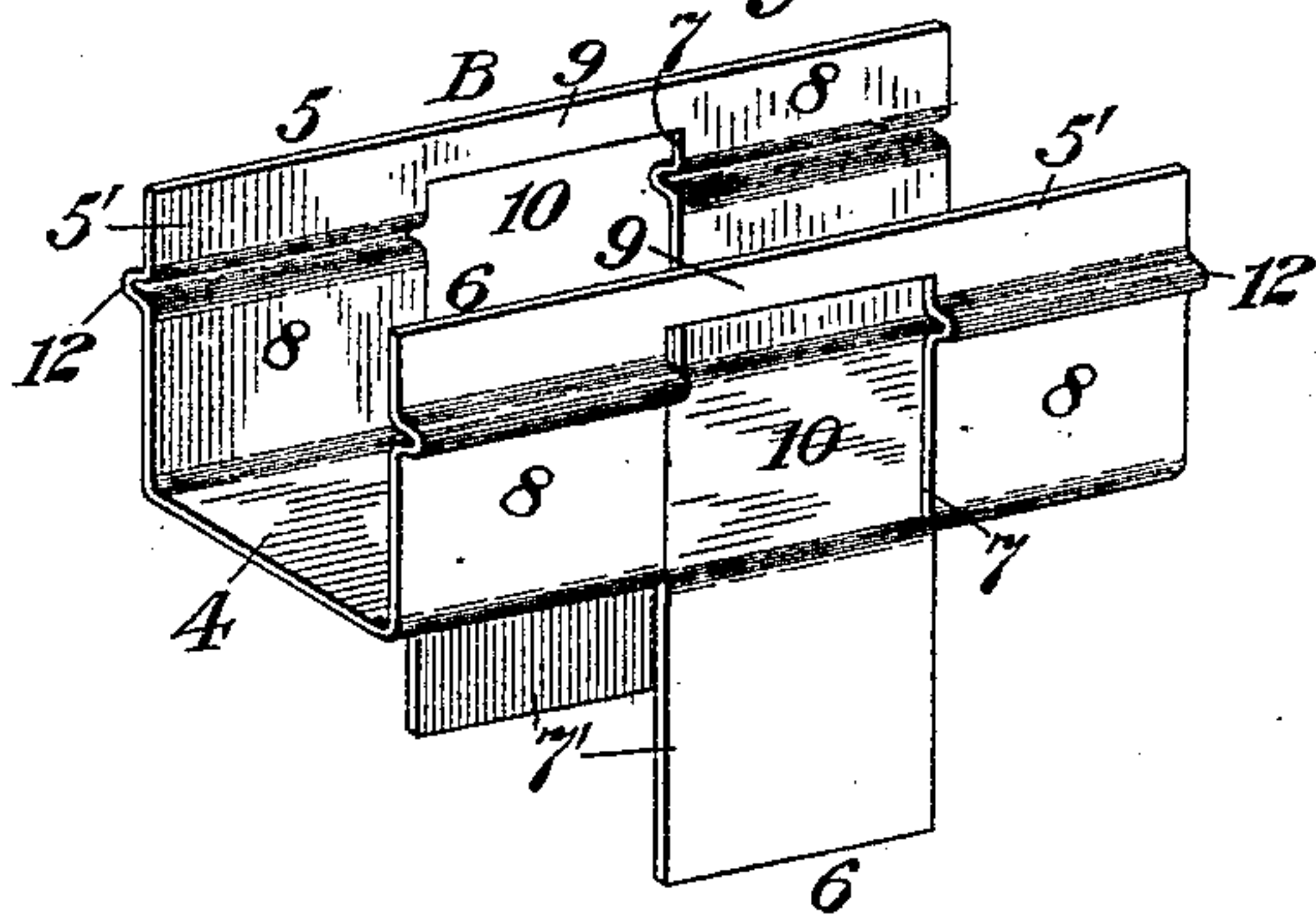


Fig. 4.

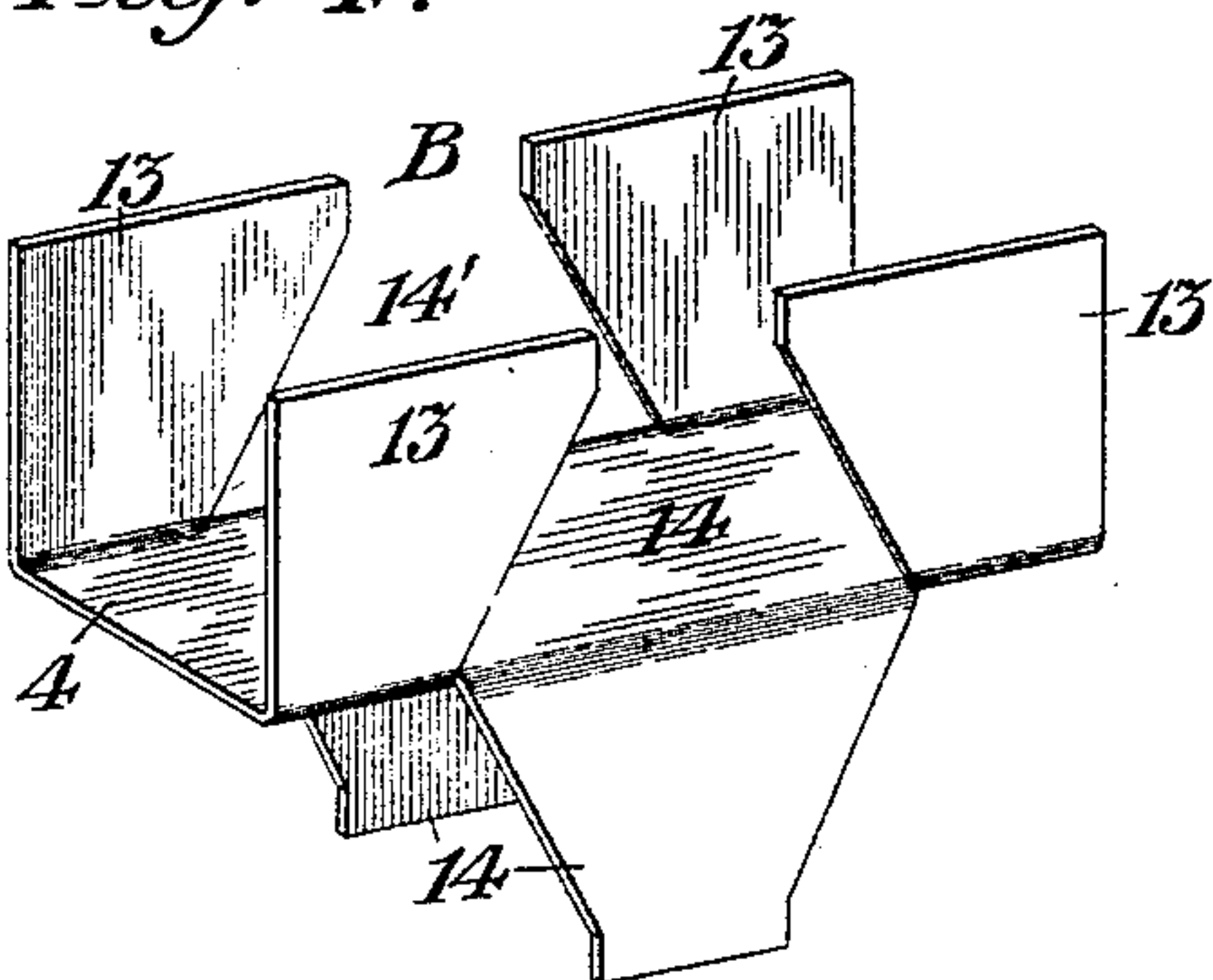
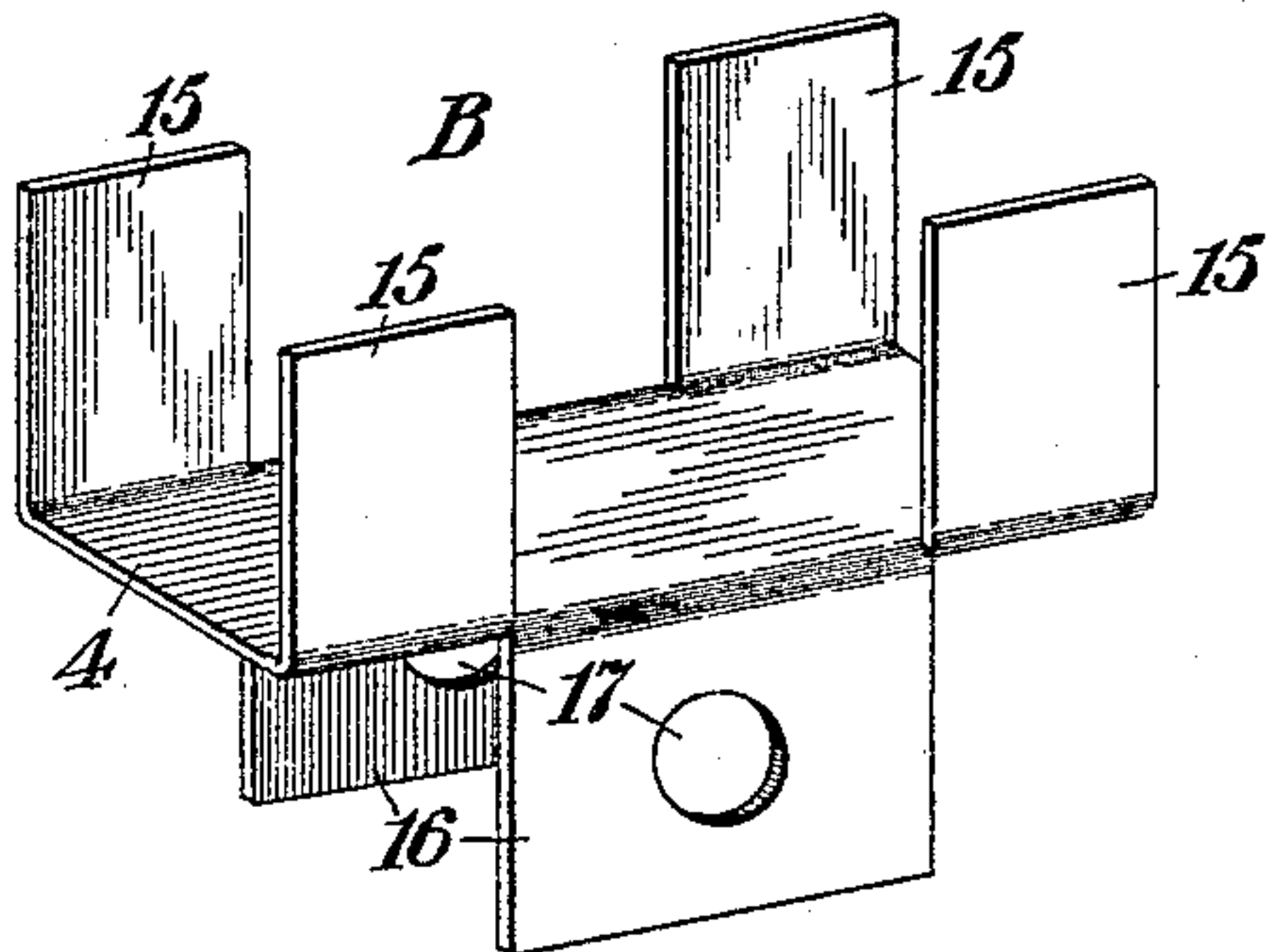


Fig. 5.



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# UNITED STATES PATENT OFFICE.

EDMUND KETCHUM, OF NEW YORK, N. Y.

## BUILDING-PARTITION.

SPECIFICATION forming part of Letters Patent No. 620,594, dated March 7, 1899.

Application filed September 22, 1898. Serial No. 691,575. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND KETCHUM, a citizen of the United States, residing in New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Building-Partitions, of which the following is a specification.

This invention relates to partitions or walls—such, for instance, as fireproof partitions or walls; and the object of the invention is to provide a structure adapted to be readily assembled and maintained in position without the use of uprights or cross-beams and without the use of mortar.

A further object is to provide improved means for maintaining the members or blocks comprising the partition in position relatively to each other.

In the drawings accompanying and forming part of this specification, Figure 1 is a perspective view of a portion of a partition assembled in accordance with the present improvement. Fig. 2 is a view of one of the members or blocks detached from said partition. Figs. 3, 4, and 5 illustrate different forms of block holding or clamping means.

Similar characters of reference designate corresponding parts in the different figures of the drawings.

As a preface to a further description of this partition it is to be understood that while the same is described herein as particularly adapted for use as a partition it may be used for various other purposes, if desired.

While I am aware that partitions or walls composed of a series of separate members or blocks have been patented, it is, however, the general practice to support the same by uprights and cross-beams. The object of the present invention, however, is to provide an improved fireproof partition which may be supported in position without the use of uprights or cross-beams and without the use of mortar and one which may be readily assembled in position with facility without the use of skilled labor, while the elements or members composing the same may be manufactured with comparatively little cost.

In the formation of this improved partition I provide a series of separate members or blocks which may be readily assembled in position. These blocks may be constructed

of any suitable material, such as plaster-of-paris or a composition of materials, whereby they are fireproof, and may be of a size suitable for the purpose for which they are to be used. Each of these blocks (designated in a general way by A) in the present instance is shown provided with a shoulder or projection 2 at each end thereof. These shoulders 2 extend from edge to edge of the block and are disposed at the same side thereof and are preferably of a thickness equal to one-half the thickness of said blocks. Each of the blocks is also provided with recesses or recessed portions 3, extending longitudinally from end to end of the block, two at each side thereof, whereby when the blocks are properly assembled two of said recesses, one at each side of the block, will communicate with like recesses in the companion blocks. These recesses thus form panels 3', extending lengthwise of the block, and may be so constructed, if desired, as to have substantially V-shaped inner portions, whereby in practice the plaster hereinafter described may enter such portions and be more firmly held in position. For the purpose of maintaining these blocks in position relatively to the floor or other support upon which they may rest and relatively to each other suitable holding or clamping means is provided, (designated in a general way by B.) In one form thereof this clamping means comprises a plate 4, of a width preferably corresponding to the thickness of the block at the longitudinal edges thereof, adapted to rest intermediate the edges of a pair of adjacent blocks, said plate having oppositely-extending wings or flanges 5 and 6. In the form shown in Fig. 3 this plate 4 is provided with a pair of flanges 5', extending from end to end of the plate, and a pair of oppositely-extending flanges 7' of decreased size or area as compared with the flanges 5'. In the formation of these flanges the blank may be cut away, as at 7, whereby the parts 7' may constitute one set of flanges, while each of the other set of flanges 5' comprises a pair of connected members 8, the connection constituting a bridge or reinforcing member 9. By this construction the flanges 5' are provided with openings 10 for the purpose hereinafter set forth. Each of the flanges 5' may be corrugated or provided with a projection 12, adapted for



the purpose hereinafter set forth. By the provision of these projections the width of the flanges 5' may correspond with the width of the flanges 7', if desired. In practice the flange 7' may be of increased width, if desired, as compared with the width of the members 8, forming a part of the flange 5', thereby affording greater bearing-surface on the blocks.

In the form of clamping member shown in Fig. 4 the plate 4 is provided at one side with four flanges 13, each of increased area at its free edge as compared with its point of union with the plate 4, so as to afford an increased bearing-surface on the blocks, and at the opposite side with a pair of flanges 14, each of increased area at the point of union with the plate as compared with its area at its free edge. By this construction it will be seen that the flanges 13, adjacent to their free edges, will have a relatively large bearing-surface on the block, while the flanges 14 will likewise have a relatively large bearing-surface on the blocks throughout the major portion thereof. This result may be secured by so cutting the blank as to form the flanges 14 substantially triangular, whereby each set of flanges may have an increased bearing-surface on the blocks without sacrificing any material part of the bearing-surface of the other set of flanges. In the form of clamping member shown in Fig. 5 the plate 4 is provided at one side thereof with four independent flanges 15, two at each end thereof, and at the opposite side with a pair of oppositely-extending flanges 16 of increased area or width as compared with the width of the flanges 15, each of said flanges 16 having an aperture or opening 17 therein of any suitable shape, for the purpose hereinafter set forth. In practice these clamping members may be of any suitable size, according to the size of the blocks to be used, and may be formed of any suitable material, such as sheet metal. These clamps may be formed as an integral structure or otherwise, as found desirable. In the present instance they are illustrated as struck out of sheet metal.

In assembling the blocks the lower row is disposed upon the floor or other suitable support, the shoulders 2 of each two blocks overlapping, and each pair of blocks adjacent to their ends resting in one of the clamps B—such, for instance, as that shown in Fig. 3—the flanges 7' of which are bent outwardly, whereby they are adapted to rest on and be secured to the floor by bolts or other suitable fastening means 18. The flanges 5' of the clamp fit within the recessed portions 3 of the blocks, the recesses being of such depth as to permit the flanges to be completely within the faces of the blocks. Upon this row of blocks a series of clamps are disposed, each preferably so disposed as to have that flange thereof having the greatest width over a joint in the lower row of blocks, whereby such flanges will overlap a pair of blocks a

relatively great distance. The next row of blocks is then placed in position to break joint with the first row, whereby the opposite set of flanges 7' will engage the blocks substantially near the middle thereof. From the foregoing it will be seen that each of the clamping members acts to clamp a pair of blocks of each row in position relatively to each other and to also clamp such blocks in position relatively to the block of another row, and so bind the blocks of each row against sidewise movement. After the structure has been assembled in the manner set forth the recesses intermediate each two rows of blocks may be suitably filled in with plaster 20, which ordinarily has greater rigidity than the blocks themselves, and therefore forms to a certain extent a stiffener or stiffening-bar intermediate each two rows of blocks and also completely covers up the clamps. When the form of clamp shown in Fig. 3 is used, the plaster will set around the corrugations or projections 12 and enter the openings 10, and so prevent movement of the clamps from their proper positions. When the form shown in Fig. 4 is used, the plaster will enter the triangular cut-out portion 14' thereof, which, owing to the proximity of the free ends of each pair of flanges, is in the nature of an inclosed aperture, whereby shifting of the clamp is prevented. When the form shown in Fig. 5 is used, the plaster likewise enters the apertures 17, and thus anchors the clamping members against movement.

From the foregoing it will be seen that this structure provides an improved break-joint partition comprising a series of independent blocks or members, which may be quickly assembled in position without the use of skilled labor, the blocks of each row of which overlap each other at the ends thereof, while each row of blocks is clamped without the use of mortar to a companion row of blocks by a rigid anchor, which clamping means is in turn reinforced by a strip of plaster, thereby preventing movement thereof, and which plaster also completely covers the clamps and fills in the recesses of the blocks, so as to present a flush surface for the outer coat or coats of plaster.

It will be understood that in the assembling of the blocks suitable holding means or clamping means, similar or otherwise to those shown in Figs. 3, 4, and 5, may be disposed in position to clamp the end of the partition and that also when necessary the blocks may be of different sizes, so as to permit their proper assemblage within the space in which the partition is to be built.

I claim as my invention—

1. A block having a pair of longitudinally-located panels, one at each side and of less width than said block, and each forming a pair of recesses adjacent to the longitudinal edges thereof, said block also having shoulders or projections one at each end thereof.

2. A block having a pair of longitudinally-



located panels, one at each side and of less width than said block, and each forming a pair of recesses adjacent to the longitudinal edges thereof, said block also having shoulders or projections one at each end thereof and projecting from the same side of said block.

3. A partition comprising a series of blocks disposed in rows, one row upon another, the blocks of each row overlapping at the ends thereof, and clamps for securing the blocks of one row in position relatively to a companion row, each of said clamps having a bearing engagement inside the exterior faces of said blocks and with two blocks of one row at the overlapping ends thereof and with a block of another row.

4. A partition comprising a series of blocks disposed in rows, one row upon another, each pair of rows having a longitudinally-extending recess at the outer side thereof and means for maintaining said blocks in position and having a part thereof adapted to rest within said recess.

5. A partition comprising a series of blocks disposed in rows, one row upon another, each pair of rows having a longitudinally-extending recess at each outside thereof and clamping means extending intermediate said rows and projecting into said recesses for maintaining said blocks in position.

6. A partition comprising a series of blocks disposed in rows one row upon another, the blocks of each row overlapping at the ends thereof, and each pair of rows having a longitudinally-extending recess at each side thereof, and a series of clamping means securing said rows in position and each compris-

ing a plate extending intermediate the adjacent edges of said blocks, and two sets of flanges projecting into said recesses.

7. A partition comprising a series of blocks disposed in rows, one row upon another, the blocks of each row overlapping at the ends thereof, and each pair of rows having a longitudinally-extending recess at each side thereof, and a series of clamping means securing said rows in position and each comprising a plate extending intermediate the adjacent edges of said blocks, and two sets of flanges projecting into said recesses, and stiffening means disposed in said recesses and over said flanges.

8. A clamping member for a partition comprising a plate having two sets of oppositely-disposed flanges, each flange of one set having an aperture therein.

9. A clamping member for a partition comprising a plate having two sets of oppositely-disposed flanges, the flanges of one set having increased area or width as compared with the flanges of the other set, and the flanges of one set having apertures or openings therein.

10. A clamping member comprising a plate having two sets of oppositely-disposed flanges, each flange of one set comprising a pair of members and a connection or bridge.

11. A clamping member comprising a plate having two sets of oppositely-disposed flanges, one set of said flanges having laterally-extending projections.

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