

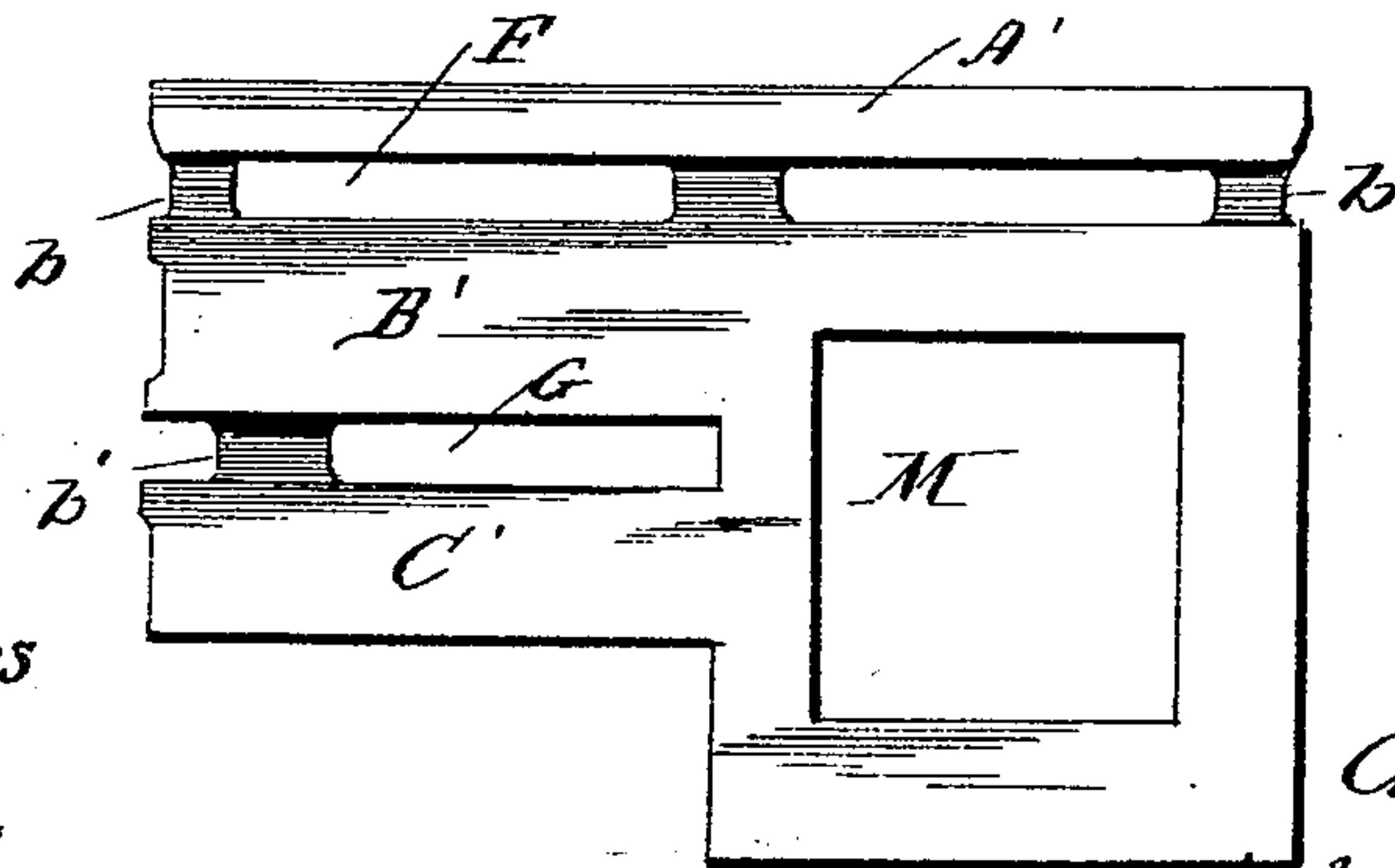
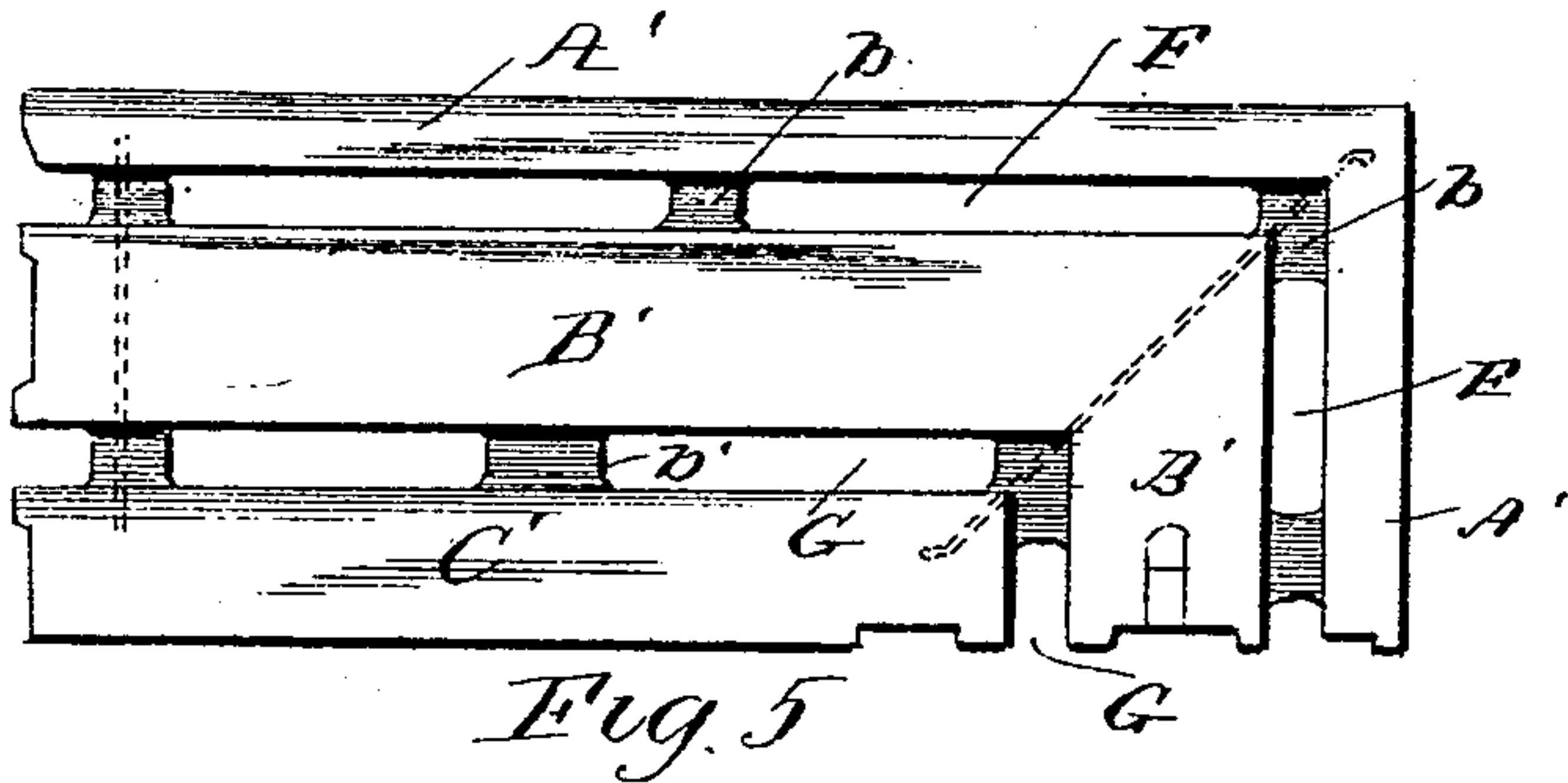
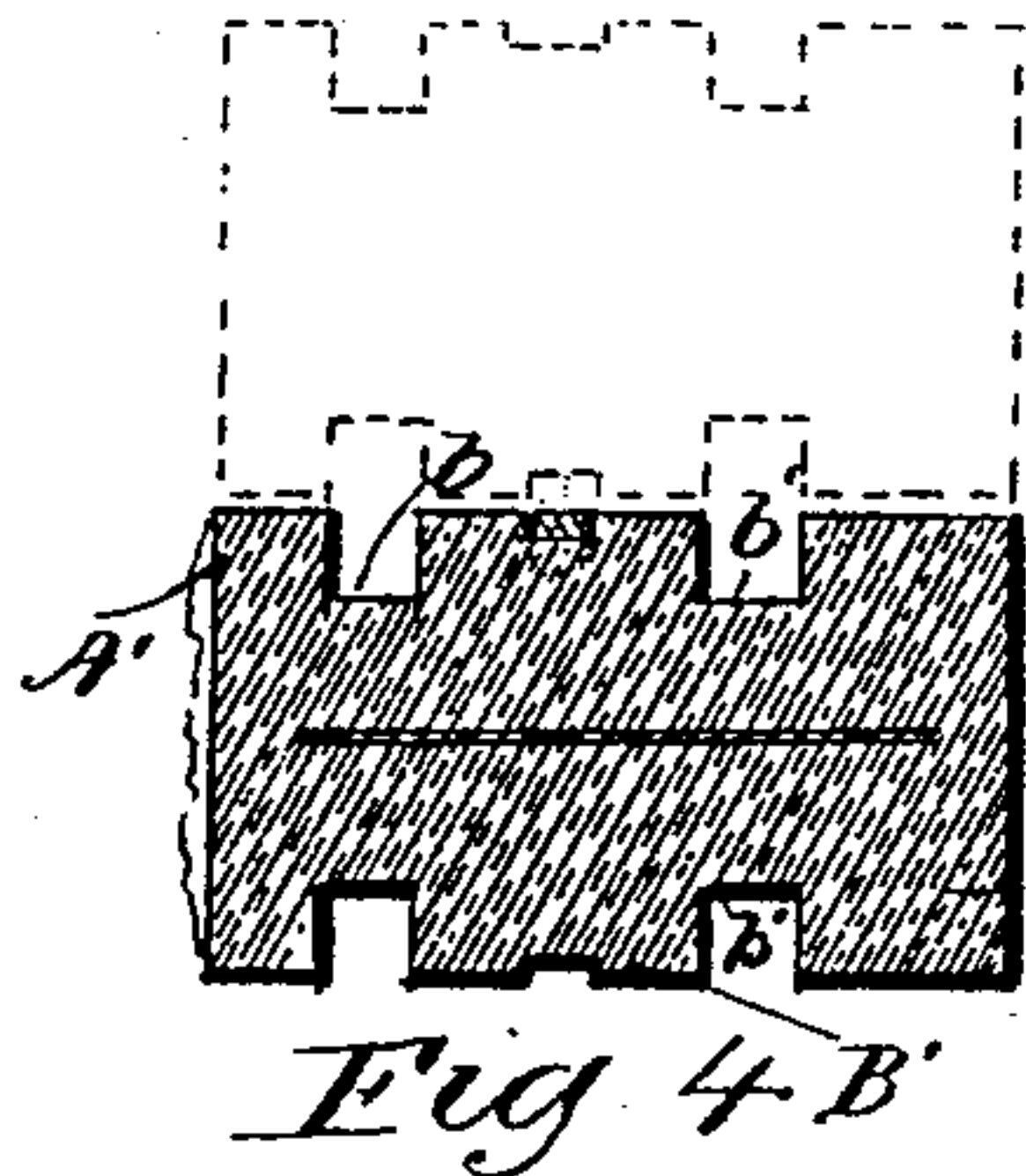
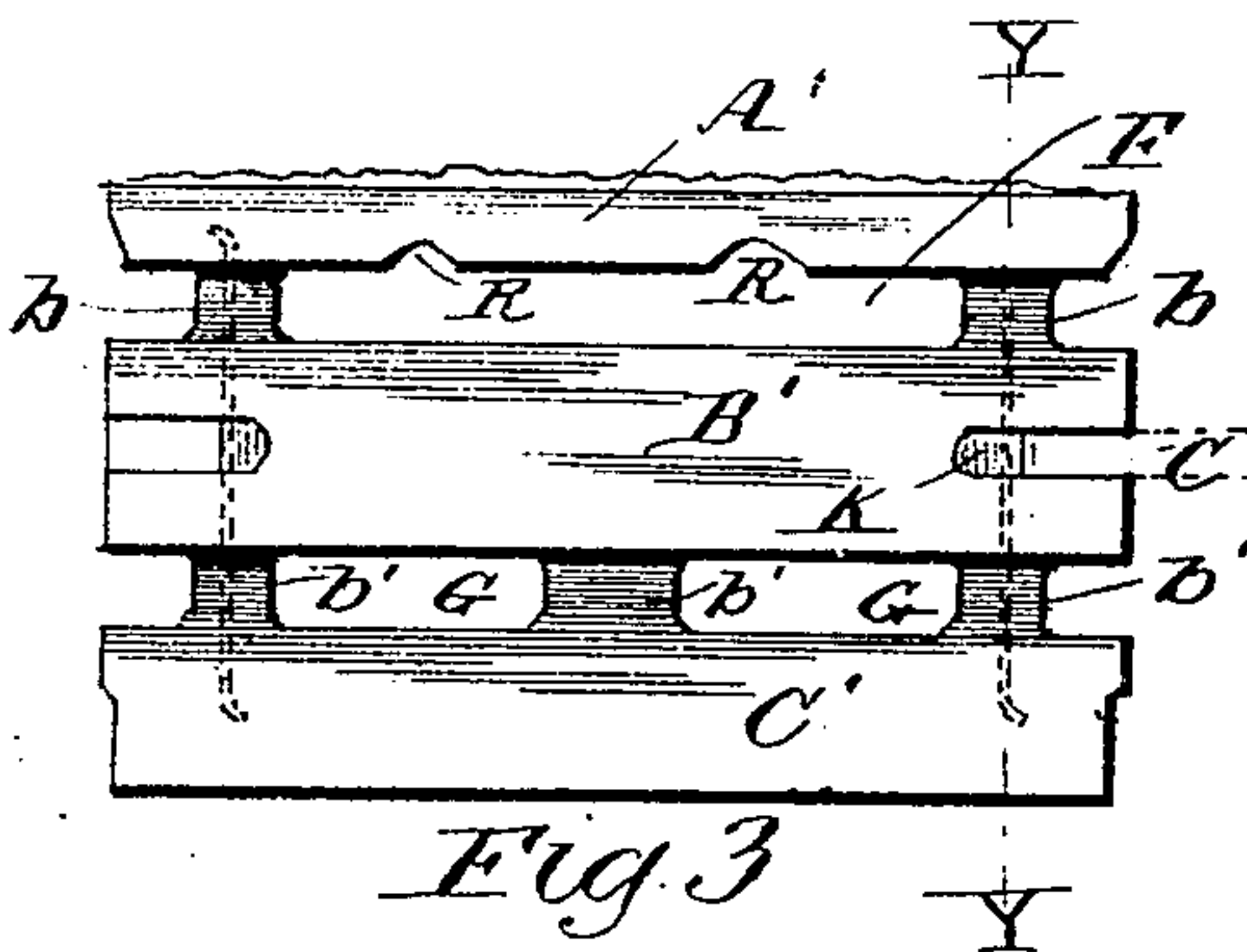
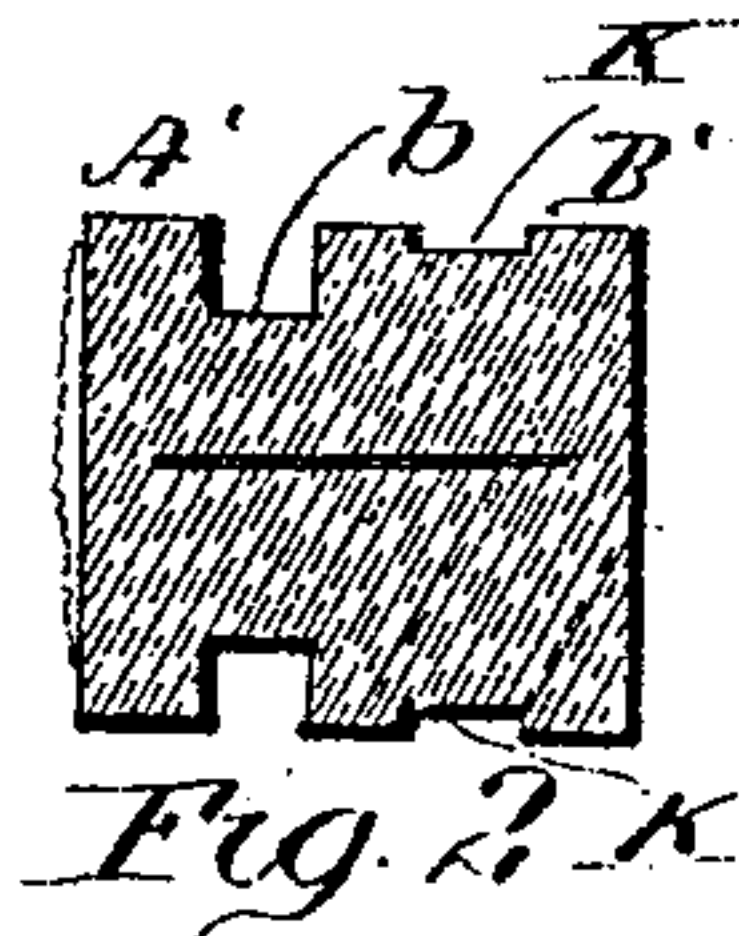
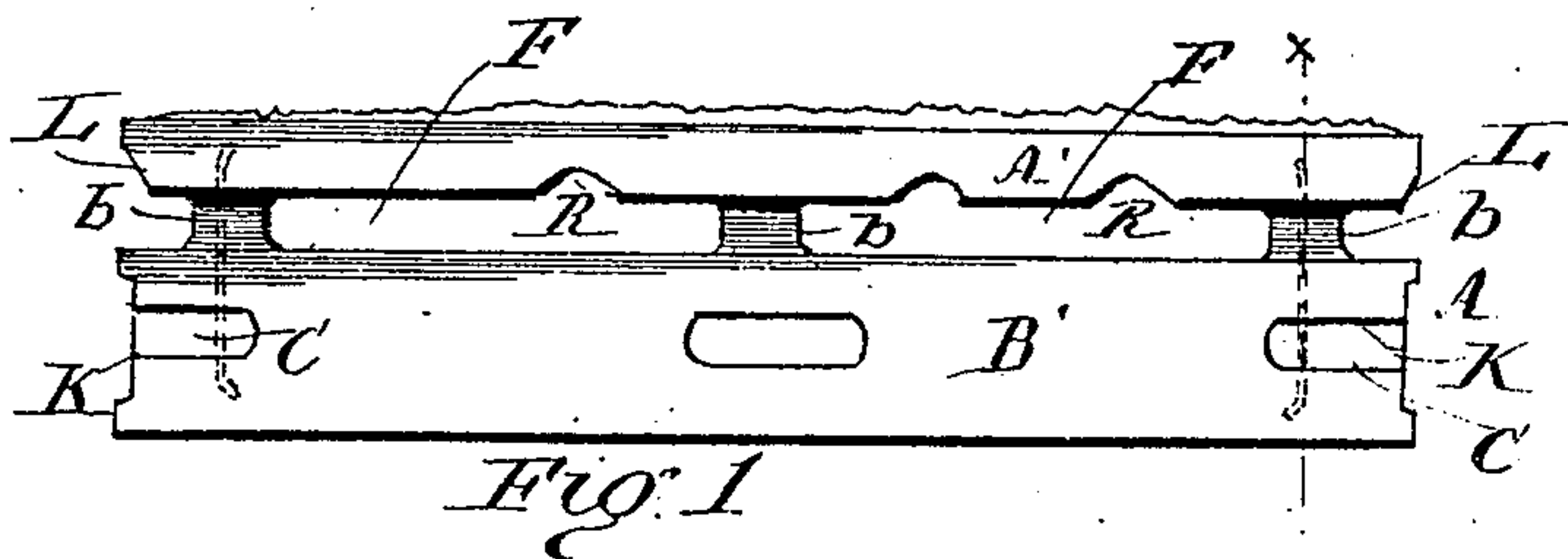
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DRAFTSMAN.

No. 859,119.

PATENTED JULY 2, 1907.

G. R. SCHMIDT.
BUILDING BLOCK.
APPLICATION FILED MAY 12, 1906.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES R. SCHMIDT, OF BALTIMORE, MARYLAND.

BUILDING-BLOCK.

No. 859,119.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed May 12, 1906. Serial No. 316,540.

To all whom it may concern:

Be it known that I, CHARLES R. SCHMIDT, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and
5 useful Improvements in Building-Blocks, of which the following is a specification.

The object of my invention is to provide a form of a block for hollow wall construction made of material or composition of materials, suitable for the purpose, and
10 shaped or formed in such a way as to reduce to a minimum the effects of that ever present and varying force of expansion and contraction and leaving the pressure bearing part of the wall, upon which the floor and roof rests, undisturbed by it.

15 While the difference in temperature from the heat of the rays of the sun during the day and the cold at night is detrimental to walls and especially concrete walls, the latter, and walls made of moisture absorbing substances are subjected to a still more serious strain
20 during freezing weather, when the moisture absorbed by these materials during freezing expands while the material itself contracts in a freezing temperature causing a bursting strain. To relieve this my block is made with a thin outer wall section which holds less
25 moisture than a thick block and is so constructed as to take up the expansion and contraction without imparting the strain to the inner or weight bearing walls.

Another object of my invention is to provide a hollow block so constructed that the air within the air
30 spaces can circulate not alone vertically but laterally as well, thereby keeping the temperature uniform in the air spaces throughout the wall.

A further object is to provide a strong, durable, simple and cheap building block, which can be quickly
35 laid without much skill and requires only a minimum amount of adhesive material to cement the blocks together.

Another object is to provide a building block in which the air can circulate around the corners within
40 the air spaces of the wall.

In a wall built of my improved blocks, if the rays of the sun heat the outer side of the house wall, the heat conveyed through the thin wall section will be distributed through the entire wall of the house, keeping
45 the inner wall section at a uniform temperature.

In the accompanying drawings. Figure 1 is a top view of a block for a thin wall. Fig. 2. is a section on line X—X of Fig. 1. Fig. 3. is a top view of a double air space wall. Fig. 4. is a section on line Y—Y of Fig.
50 3. Fig. 5. is a plan view of a corner block. Fig. 6. is a plan view of a chimney block.

As illustrated in the drawings, A, designates a building block embodying my invention, and made of any desired or suitable material, such as concrete, which
55 is molded to the required shape.

The particular form of the block shown in Figs. 1

and 2, is intended and adapted for thin walls, and consists of an outer section or member A', and an inner section or member B', which are united horizontally by the solid necks B, B, located at regular intervals apart and separated by air spaces F, F, extending vertically through the blocks. The necks or connecting walls b, b, are of less height than the members A' B', and thus, when the blocks are superposed in a wall, air chambers are left at the top and bottom
60 of each block, forming lateral communications between the air spaces F, and thus insuring a full free circulation of air throughout the entire wall between its outer and inner members. It is obviously within the scope and spirit of my invention to form lateral openings
70 through the necks b, b, for the circulation of air. The section or member B', has a vertical longitudinal groove or recess K at each end so that the blocks in alinement in a wall may be connected together or reinforced by iron plates or pieces C. 75

R, designates grooves formed in the inner surface of the member A', for the purpose of taking up excessive contraction and expansion. The ends of the member A' are preferably chamfered as shown at L, so that but a small surface of A' of one block is in
80 alinement with the member A' of the next block. Recesses m, m, are formed at the ends of the members or sections B' for the like purpose.

Figs. 3 and 4 illustrate a form of block intended and adapted for thick walls, and this form of block differs from that shown in Fig. 1, in having the additional
85 section or member C' united to the member B' by the transverse webs or necks b', b', similar to the necks b, b, and dividing the space between the members C', B' into vertical spaces G, G. The air spaces F, G, may
90 be multiplied to any desired extent in heavy walls.

In Fig. 5, I have shown a form of block, intended and adapted for corners or angles of walls, and having the members A', B', and intervening air spaces deflected at right angles to their longitudinal course, thus
95 forming continuations of the sections or members and air spaces for and through the side or lateral walls.

Fig. 6 illustrates a form of block embracing the essential features of the blocks shown in Figs. 1 and 3 but having in addition thereto an open ended enlargement
100 M, extending beyond the surface of the inner member of the wall, to provide a chimney or flue structure; this enlargement or flue structure may be located at the end, or between the ends of the blocks, and when the wall is built of blocks breaking joints, 105 some of the chimney or flue forming blocks may have the chimney enlargement divided, or halved so as to include the flue opening between two adjoining blocks.

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

1. A building block composed of a plurality of spaced

wall sections having a chimney or flue section formed therein and separated from the outer member by an air space, the walls being an integral part of the block.

- 5 2. A building block composed of three walls of different thicknesses with intervening air spaces, and laterally connecting vertical necks or webs, having its wall sections or members and intervening spaces deflected at an angle to the body of the block to form a corner block, and having its outer wall section thinner than the middle section.
- 10 3. A building block comprising three co-extensive, parallel spaced members or sections, and transverse connecting webs all made integral, the outer section or member being thinner throughout its length than the other members, and the thickest member located between the other
- 15 members.
4. A building block comprising an outer section and an

inner, weight-bearing, section the sections being spaced apart, the inner section being thicker than the outer section and the sections being connected by a web integral with both and intermediate of their ends.

5. A building block comprising an outer section and an inner weight-bearing section, the sections being spaced apart and the inner section being thicker than the outer section, and the sections being connected by a plurality of webs integral with both sections and of less height than the said sections. 20 25

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES R. SCHMIDT.

Witnesses:

ALBERT S. GILL,
LOLLIE BROOKE.