

No. 672,044.

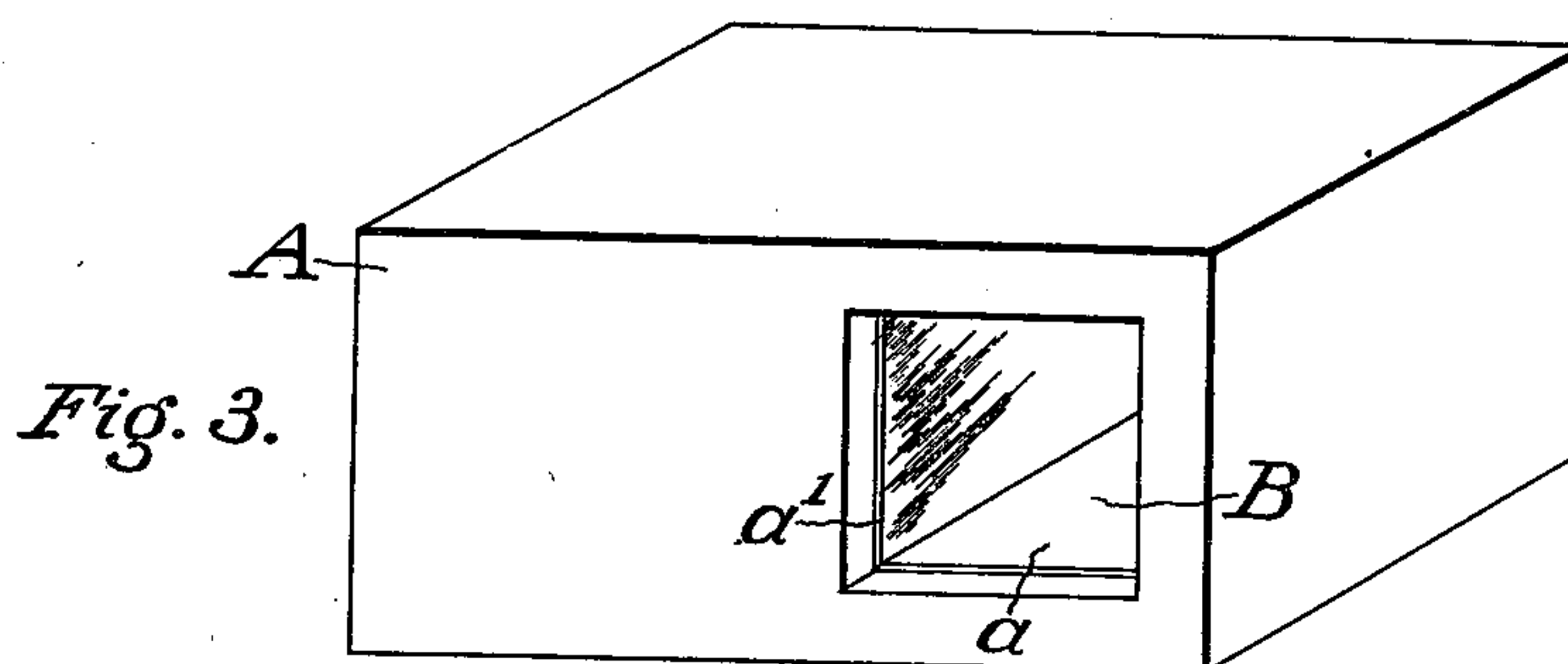
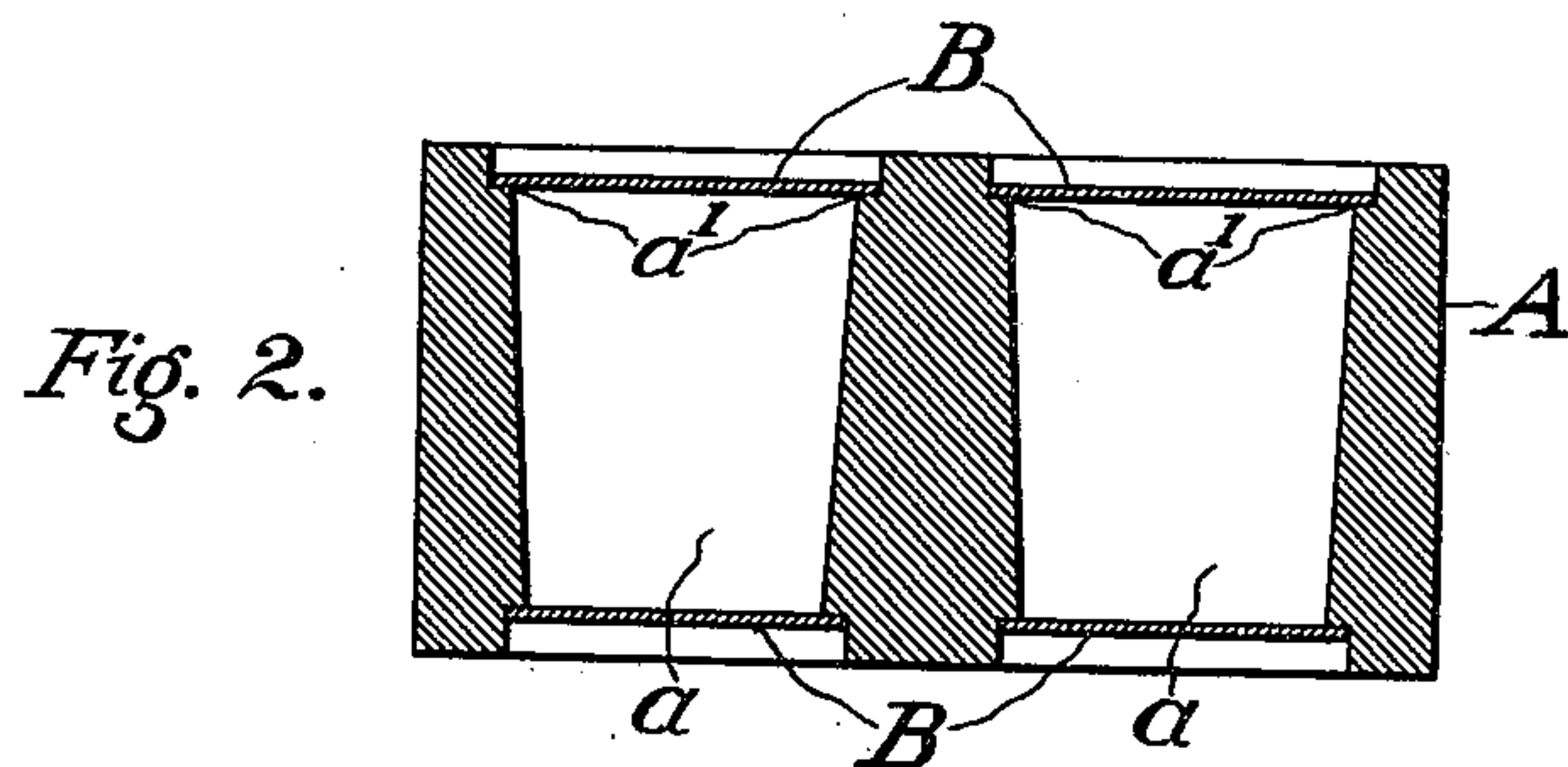
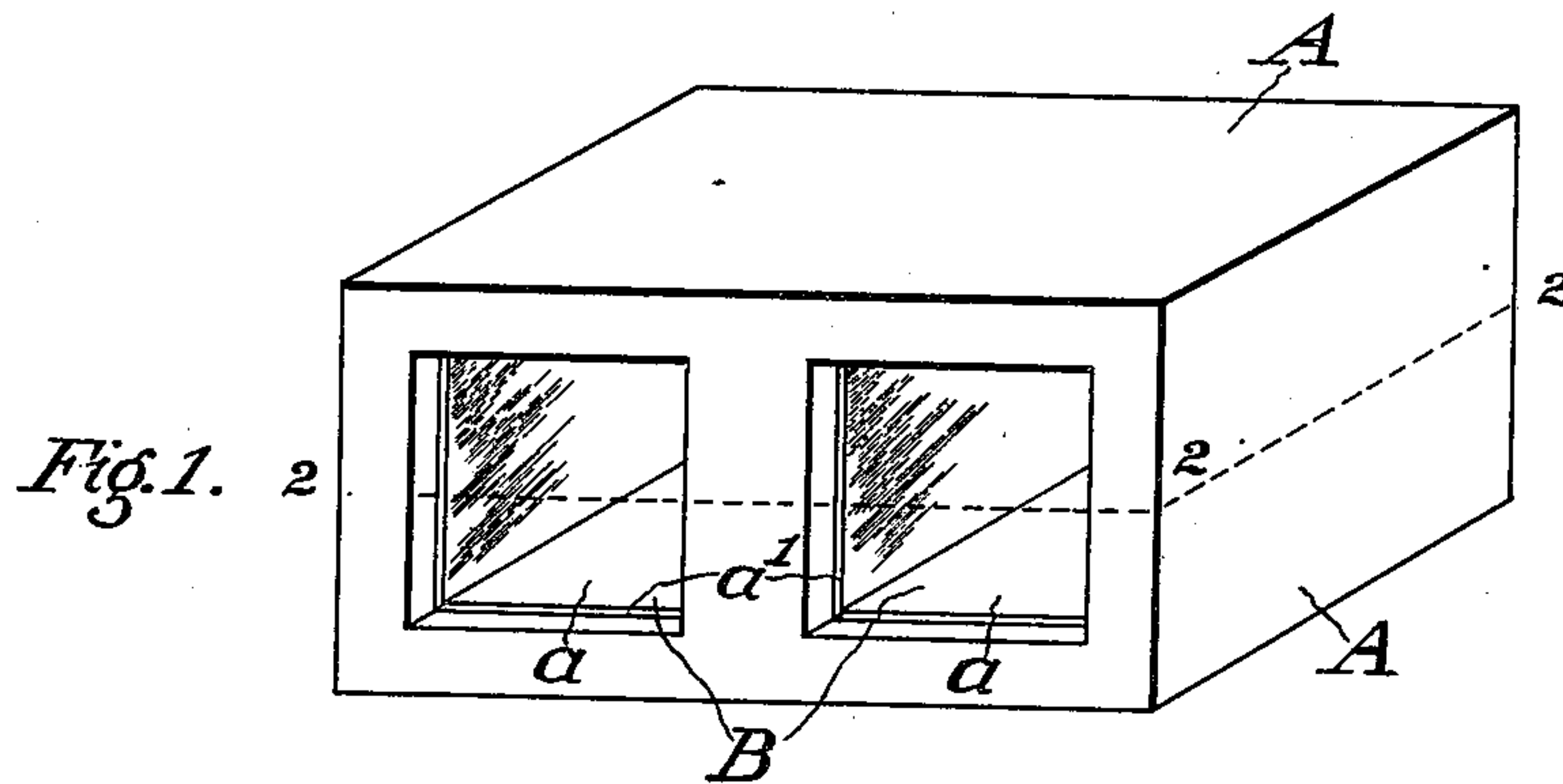
Patented Apr. 16, 1901.

A. STAPLES.
BUILDING BLOCK.

(Application filed Nov. 14, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES.
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Arthur Staples,
By Albert M. Moore,
His ATTORNEY.

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2 Sheets—Sheet 2.

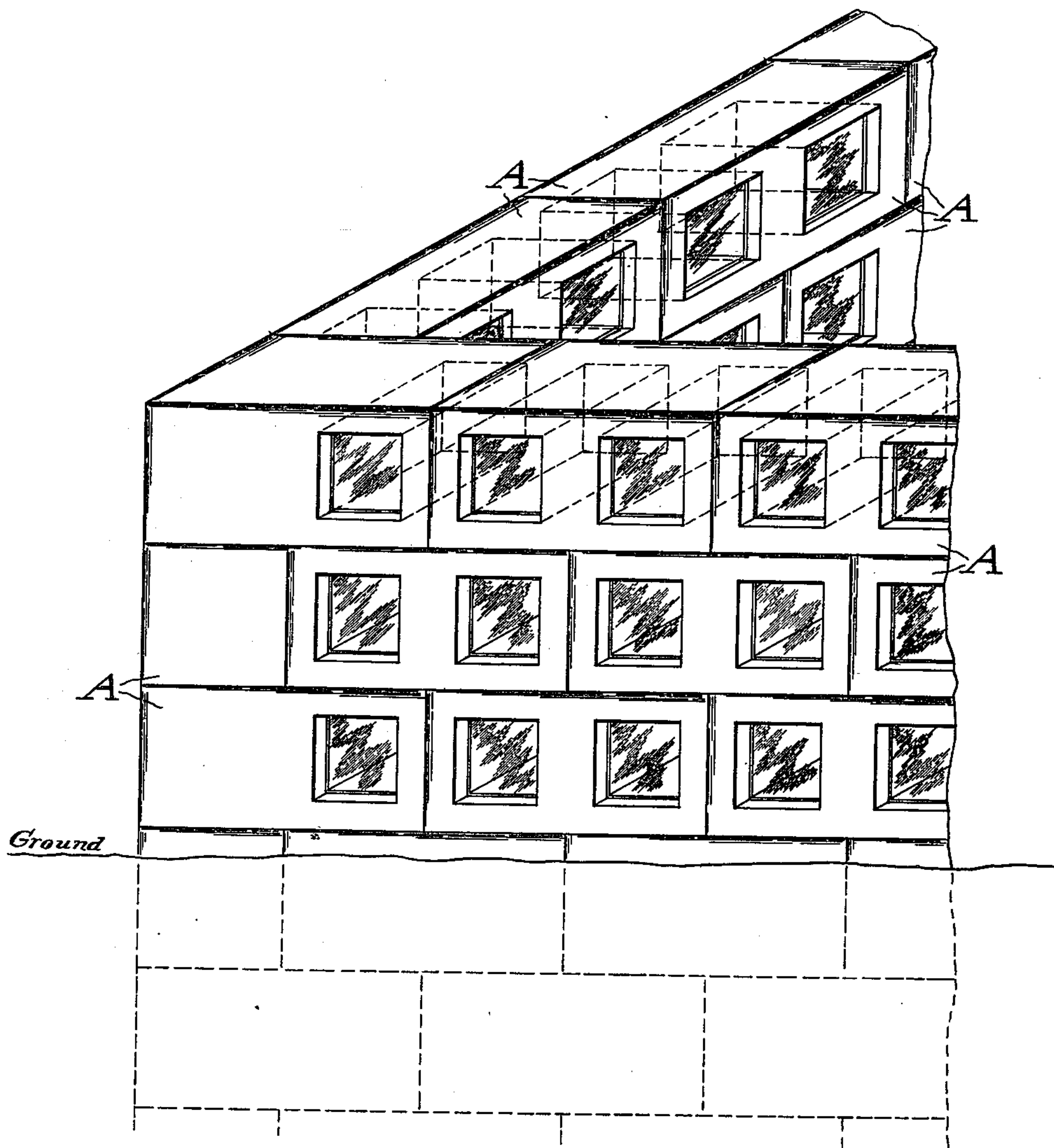


Fig. 4.

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UNITED STATES PATENT OFFICE.

ARTHUR STAPLES, OF LOWELL, MASSACHUSETTS.

BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 672,044, dated April 16, 1901.

Application filed November 14, 1900. Serial No. 36,462. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR STAPLES, a citizen of the United States, residing in Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Building-Blocks, of which the following is a specification.

My invention relates to building-blocks, and has for its purpose to furnish at moderate cost blocks from which buildings may be so constructed as to dispense with the usual windows and yet to admit the daylight.

I use a block formed of any suitable material, as Portland or other cement, clay, or any such materials as are employed in the manufacture of artificial stone, bricks, or tiles. I provide such blocks with lateral perforations closed by transparent or translucent material which will permit the passage of light, while preventing the admission of dust and vermin to the building constructed of such blocks. By closing each end of the perforations by transparent or translucent material an air-space adapted to prevent the conduction of heat may be secured without interfering particularly with the entrance of light. By dispensing with the ordinary wooden window sash and frame there is a great saving of repairs, especially in the case of cellar and basement windows situated near the ground, which are constantly exposed to dampness and dirt and soon decay. These blocks are especially adapted for workshops, where a soft and uniform light in all parts of the building is desired.

In the accompanying drawings, on two sheets, Figure 1 is a perspective view of a building-block constructed in accordance with my invention; Fig. 2, a horizontal section of the same on the line 2 2 2 in Fig. 1; Fig. 3, a perspective view of a block, one end of which is solid and the other perforated; Fig. 4, a perspective view of a wall built from such blocks.

A is a block, of any convenient size and external shape, adapted to be arranged with similar blocks to form walls of buildings or such other constructions as are commonly built of bricks or blocks.

My improved blocks differ from those heretofore used in having one or more lateral perforations or light-passages *a* formed in the

casting or molding of the block, as by the use of cores, which if a concrete of Portland cement and gravel or similar material be used may well be made tapering to facilitate the withdrawal of said cores. Where the apertures *a* are tapering, the blocks will be arranged so that the smaller ends of said apertures will be at the outer side of the wall to distribute light more perfectly and to give additional strength to the outer face of the wall.

When the blocks are to be used as binders at the corners of a building, the blocks may have a single light-passage *a*, as shown in Fig. 3, because only the aperture in one-half of the block could be utilized, one side of the block being covered by the next block in the same course. The omission of one aperture also gives a greater strength to the corner, and for this reason the block shown in Fig. 3 is preferably used for door-jambs. Of course where desired or useful solid blocks of suitable size and shape may be used in connection with the blocks herein described, as to support beams or at places where the light is unnecessary or undesirable. The apertures or perforations are closed by transparent or translucent material, preferably plates *B*, of plain window-glass, where it is desired to avoid obstructing the vision through the wall or of bull's-eyes or of corrugated, hammered, or roughened glass, where the principal object is to admit light to the room and properly to diffuse the same within the room. The glass may be secured in the perforations in any usual manner, preferably by placing the glass against a ledge *a'*, with which each aperture is provided, and then filling the angle between the glass and the adjacent end of said perforation with cement, just as putty is applied to secure the window-panes in an ordinary window-sash. I prefer to close each aperture at each end in the manner above described to prevent the accumulation therein of dirt and rubbish.

Obviously some of the blocks in the same wall may be glazed with transparent material for sight-openings, while the others are closed by merely translucent material to prevent vision, while admitting and diffusing light.

I claim as my invention—

1. A building-block provided with one or

more lateral light-passages extending from the outer to the inner face thereof.

2. A building-block, provided with one or more lateral light-passages extending from
5 the outer to the inner face thereof, said passages being closed by material pervious to the light.

3. A building-block, provided with one or more lateral light-passages extending from
10 the outer to the inner face thereof provided

with glass-supporting ledges and having glass arranged against said ledges and secured in place by suitable cement.

In testimony whereof I have affixed my signature in presence of two witnesses.

ARTHUR STAPLES.

Witnesses:

ALBERT M. MOORE,
FRANK E. EDMUNDS.