

(No Model.)

J. S. PEIRCE.

MANUFACTURE OF ARTIFICIAL STONE BLOCKS.

No. 378,715.

Patented Feb. 28, 1888.

Fig. 1.

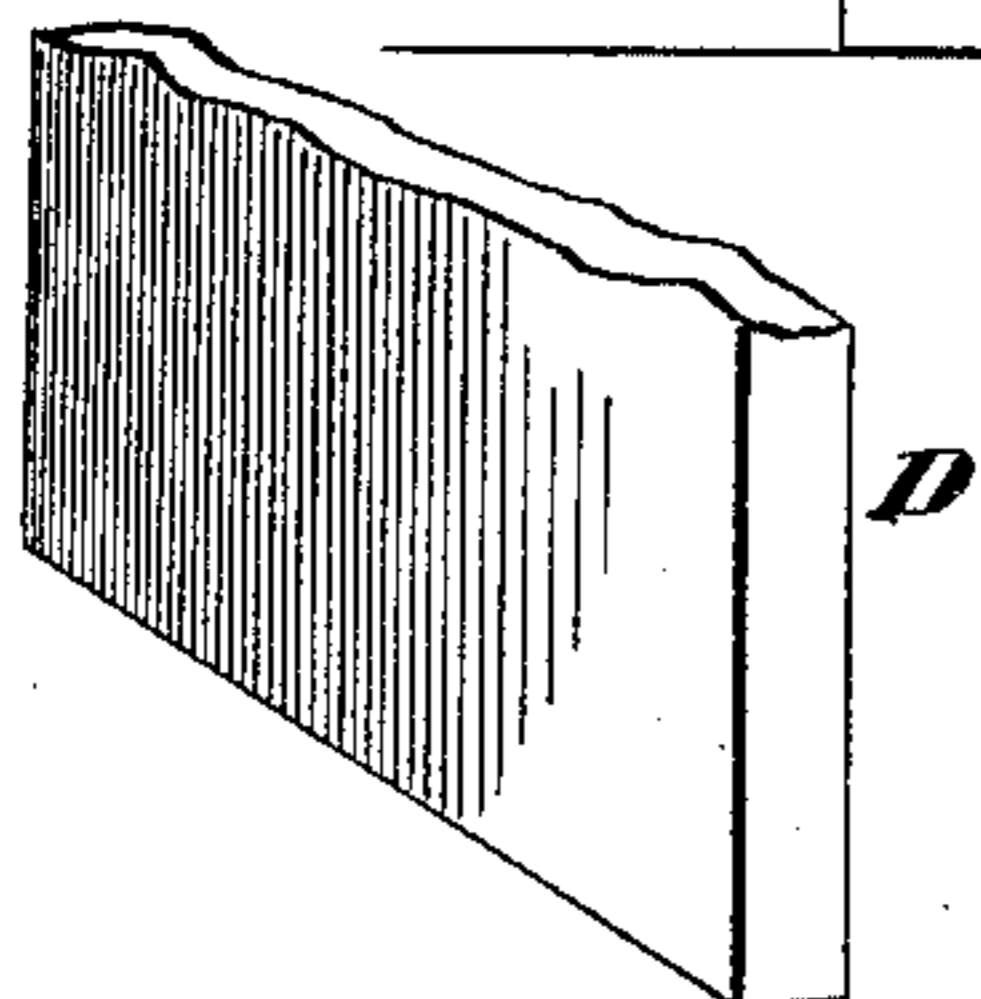
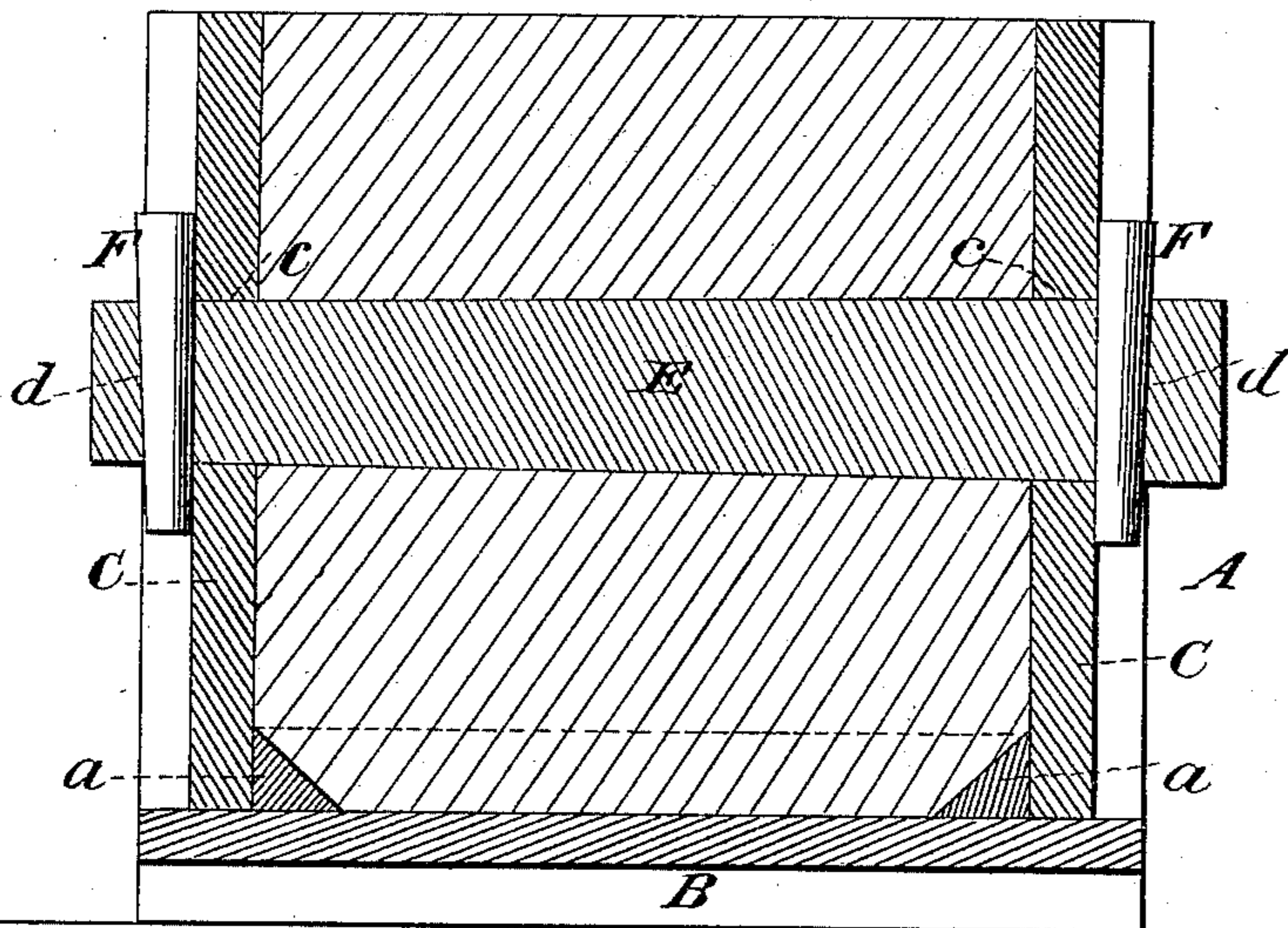


Fig. 2.

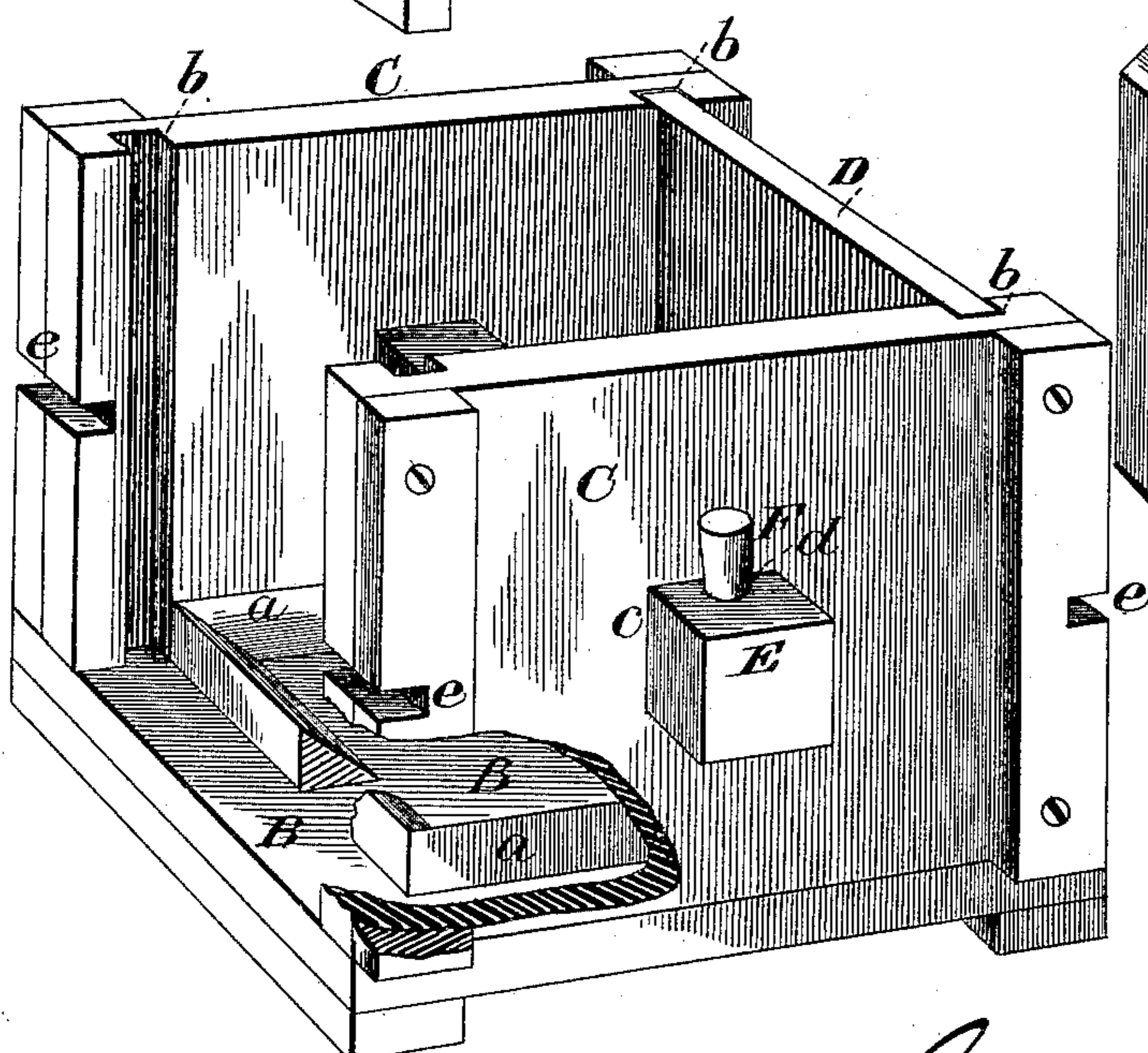
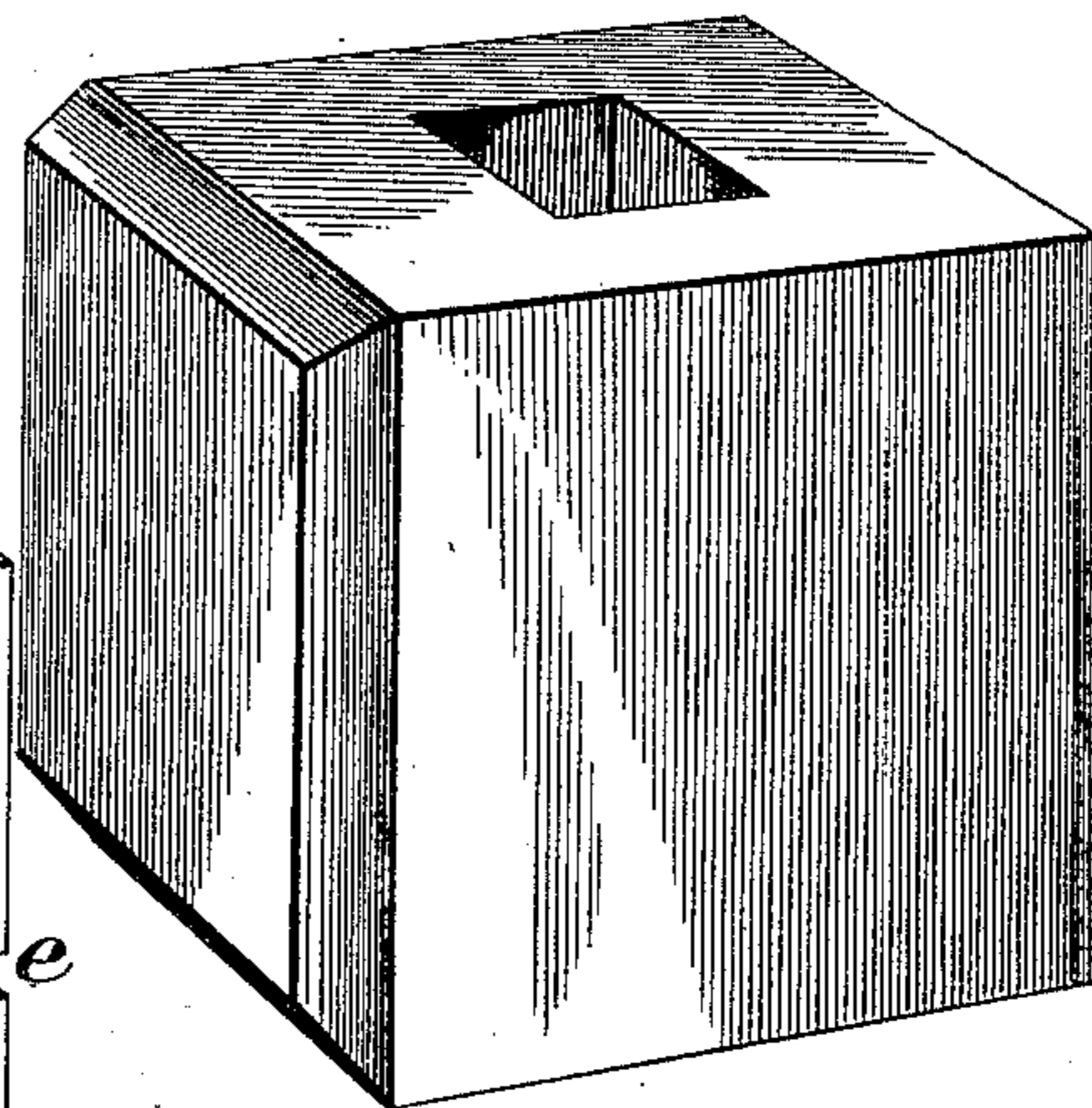


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

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MANUFACTURE OF ARTIFICIAL-STONE BLOCKS.

SPECIFICATION forming part of Letters Patent No. 378,715, dated February 28, 1888.

Application filed June 8, 1885. Serial No. 168,056. (No model)

To all whom it may concern:

Be it known that I, JAMES STANDWOOD PEIRCE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in the Manufacture of Artificial-Stone Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to artificial-stone building-blocks, and has for its object to construct the stone made of the ingredients and in the manner set forth in my patent of July 31, 1883, No. 282,219, so that the stone block will have through it a space for the circulation of air to prevent the settling or appearance of moisture on the surface or face of the stone, as is the case with most artificial-stone blocks where the stone is formed without the air-space.

I do not claim a hollow building-block, as my block is solid with an air-space through it from side to side, so that when the blocks are built into a wall with one above the other the air-space of one stone will be over and in communication with the other from the lower to the upper portion of the wall.

The stone block is usually formed with one air-space through it; but there may be more than one formed in a like manner.

In carrying out the invention there is usually used a mold with a core through the same to form the air-space, the said core serving to aid in holding the sides of the mold together, and being withdrawn when the mold is to be taken from the block. For illustration, the size of this core may be fourteen inches long and four (4) inches by three (3) in thickness and breadth to a cubic foot of stone. The dimensions of the core, however, may be varied.

Having stated the invention generally, I will now proceed to describe the same more in detail, and particularly specify the same in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section through the mold and composite block. Fig. 2 is a perspective view with one of the sides of the mold removed. Fig. 3 is a perspective of the molded block.

In the drawings, the letter A designates the mold, composed of a base, B, formed with strips *a* on its inner face, which strips are beveled from the upper edges downwardly and inwardly, so as to form beveled edges to the face of the composite block. On this base, against the outside of strips *a*, rest the two sides C of the mold, formed on their inner faces with vertical grooves or ways *b*, and the ends D, which fit into the grooves or ways *b* of the sides, also rest upon the base in like manner. The sides C are also formed with openings *c*, so that one opening will be directly opposite to the other, in order that a core, E, may pass through both from one side to the other. This core is of such length that it will, when in position, extend beyond both sides of the box, and its ends are formed with holes *d* for the passage of pins F, which draw the sides tightly against the ends of the end pieces, D, and thus clamp the four sides of the mold tightly together, and also hold the core in place. If desired, any other well-known clamping means may be used in addition, and for that purpose slots *e* are made in the corners of the mold, as shown, so as to receive any suitable band. The mold so constructed is filled with the composition to form the stone block.

The composition used is composed of cement, silicious sand, gravel or broken stone, calcined lime, powdered porcelain, and silicate of soda or potash, compounded as fully set forth in my Letters Patent of July 31, 1883, No. 282,219, to which reference is made for a more full and exact description thereof. The composition so prepared is placed in the mold and properly tamped to make the particles close and compact in their union, and after the composite block has sufficiently hardened for the removal of the mold one of the pins to the core is taken out and the core withdrawn, after which the two sides C are taken off, and then the end pieces, D, lifted away, and the composite block is ready to be taken from off the base B, when it appears as seen in Fig. 3.

Instead of filling in the composition over the core, it may be filled in up to the plane of the lower face of the core, and then the core be inserted and the composition filled in over it.

The core may be either the same dimensions from end to end or tapered, as desired.

The building-block made and applied as described forms a strong and substantial wall, on which the moisture so objectionable and so commonly appearing in artificial-stone building-blocks is prevented from forming.

Having described my invention and set forth its merits, what I claim is—

1. The mold for making artificial-stone blocks, composed of removable sides and base, strips *a*, and a removable core to extend through opposite sides of the mold and be removed without removal of the sides, substantially as described.

2. The combination of the base, the side pieces

formed with openings opposite to each other and having ways or grooves formed in their inner faces, the end pieces fitting into said ways, and the removable core passed through the openings in the side pieces and secured by pins passing through their ends, substantially as described.

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

JAMES STANDWOOD PEIRCE.

Witnesses:

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