

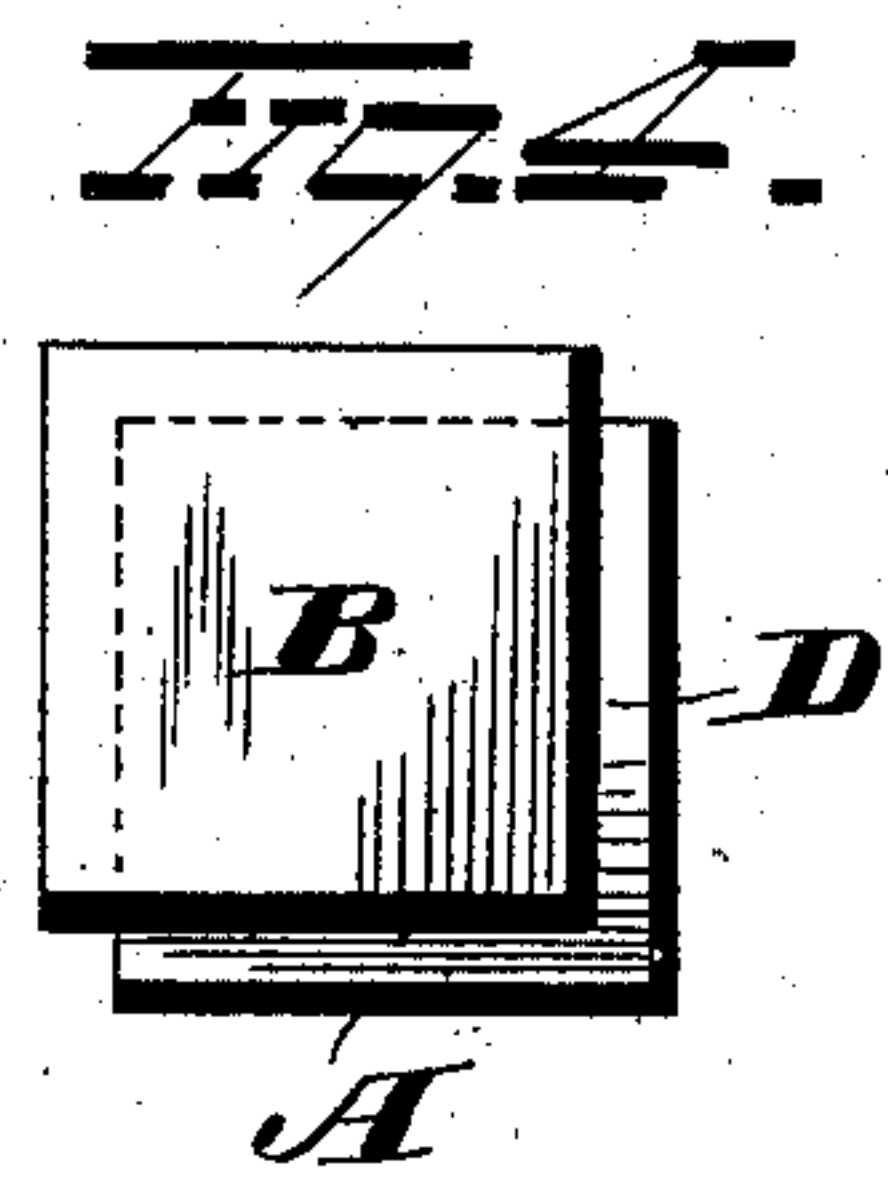
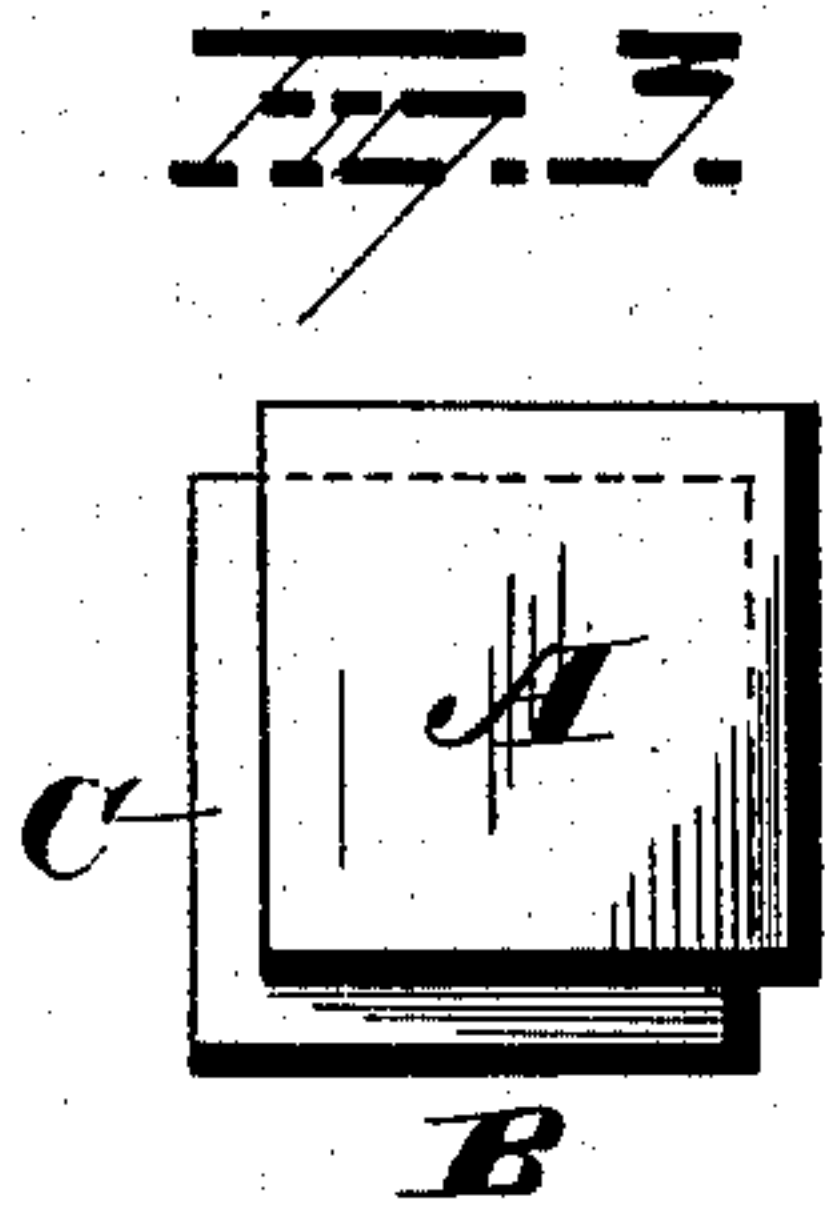
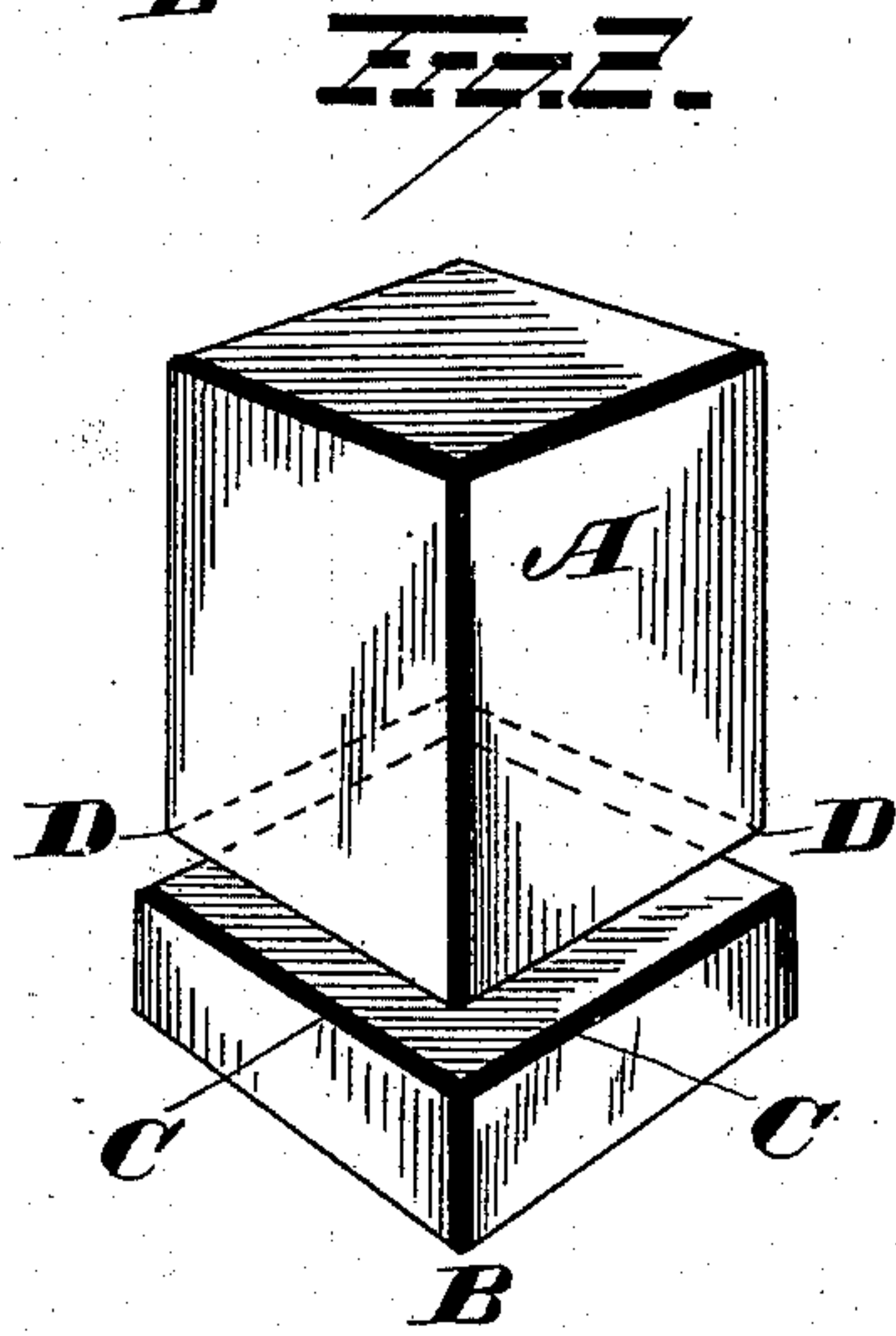
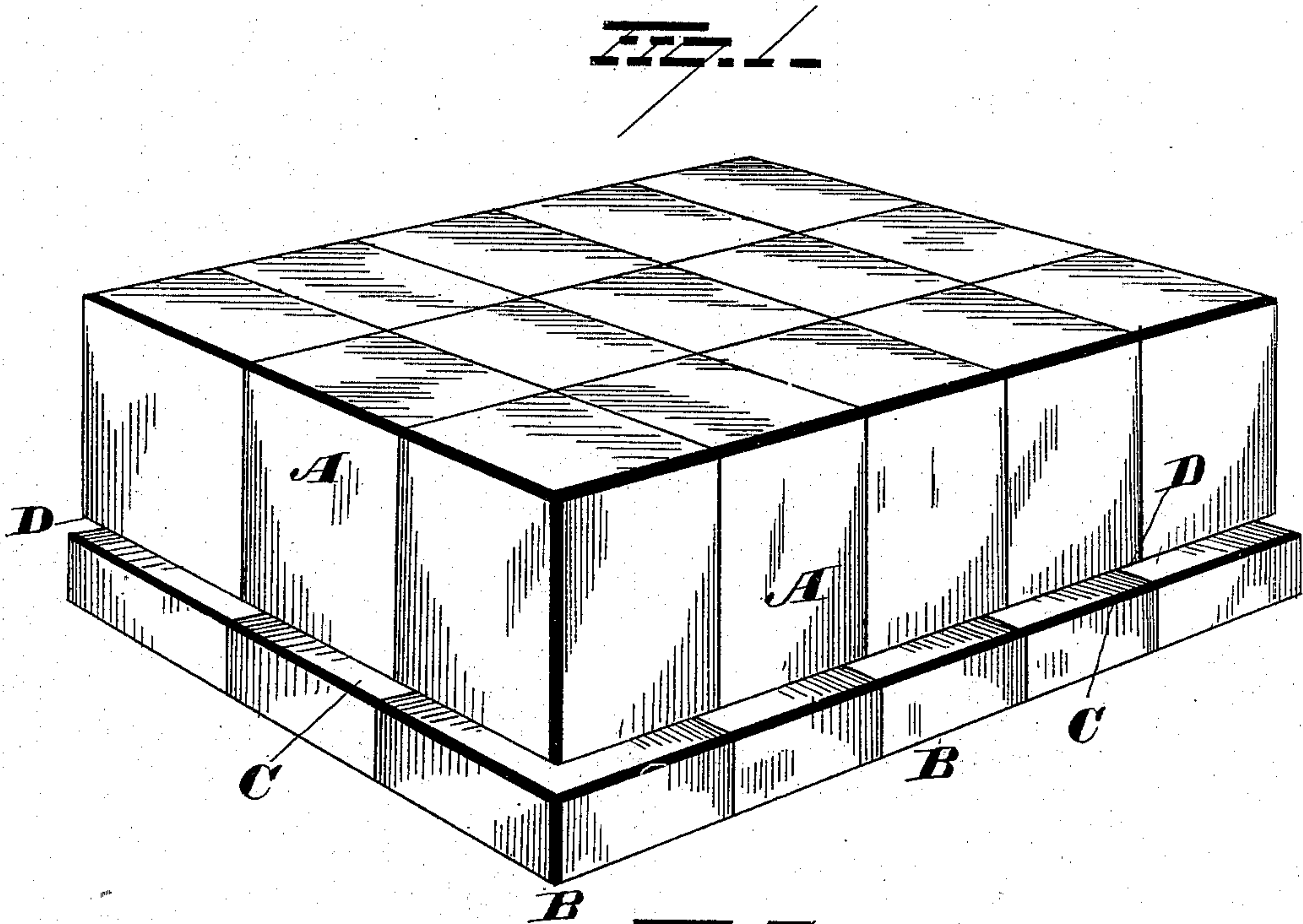
(No Model.)

W. Q. ADAMS.

BRICK.

No. 270,274.

Patented Jan. 9, 1883.



WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM Q. ADAMS, OF PORTSMOUTH, OHIO.

BRICK.

SPECIFICATION forming part of Letters Patent No. 270,274, dated January 9, 1883.

Application filed October 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM Q. ADAMS, of Portsmouth, in the county of Scioto and State of Ohio, have invented certain new and useful Improvements in Bricks; 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, reference being had to the accompanying drawings and to letters of reference marked thereon, which form a part of the specification.

My invention relates to an improvement in furnaces, and more particularly to linings for the bottoms thereof, the object being to adapt the bricks of which the lining is composed to be interlocked, whereby they are prevented from being floated by the molten metal.

A further object of my invention is to produce lining bricks of novel form which shall be durable and efficient in use and adapted to be easily molded and interlocked.

With these objects in view, my invention consists in a lining for the bottoms of furnaces, said lining being composed of counterpart interlocking bricks, each brick consisting of a rectangular top having a bottom of the same shape offsetting from it in such manner as to form two projecting and two undercut shoulders, respectively adjacent to each other and parallel with the sides of the top portion.

In the accompanying drawings, Figure 1 is a view in perspective of a section of the bottom lining of a furnace, said lining being composed of interlocked bricks formed in accordance with my invention. Fig. 2 is a view in perspective of a single brick, and Figs. 3 and 4 are respectively views in top and reverse plan thereof.

A is the rectangular top, and B the bottom, of a lining-brick constructed in accordance with my invention, the said portions being of any desired proportional length. The bottom portion, B, which is of the same shape and area as the top portion, is arranged to offset

therefrom and form the projecting shoulders C and the undercut shoulders D, which respectively interlock with the undercut and projecting shoulders of adjoining bricks. Inasmuch as the bricks are all counterparts of each other, they may be molded in the same mold, and, moreover, as they are very simple in form, the molding operation requires only ordinary skill and is easily conducted. Also, by reason of their simplicity they are very readily grouped together and interlocked when being laid in the bottom of the furnace, fitting closely together and forming an even surface. Being locked in position, there is very little opportunity for them to move and open interstices between them. Should this occur, however, and permit the molten metal in the furnace to work between and below them, it could not float them by reason of their being interlocked, the confusion, the damage, and the loss of time entailed by floating bricks in the metal being avoided.

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

A furnace-lining composed of counterpart interlocking bricks, each brick consisting of a square top portion and a rectangular bottom portion, the latter being made of much less thickness than the top portion, and molded therewith so as to project outwardly therefrom on two sides, while the top portion overlaps the bottom portion on two sides, whereby the principal thickness of the lining is formed by the top portions of the lining-bricks, while the comparatively thin lower portions serve to bind together the lining, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of October, 1882.

WILLIAM Q. ADAMS.

Witnesses:

H. C. TURLEY,
C. L. TURLEY.