

(No Model.)

F. HARTINGS.

BRICK MACHINE.

No. 341,653.

Patented May 11, 1886.

Fig: 1.

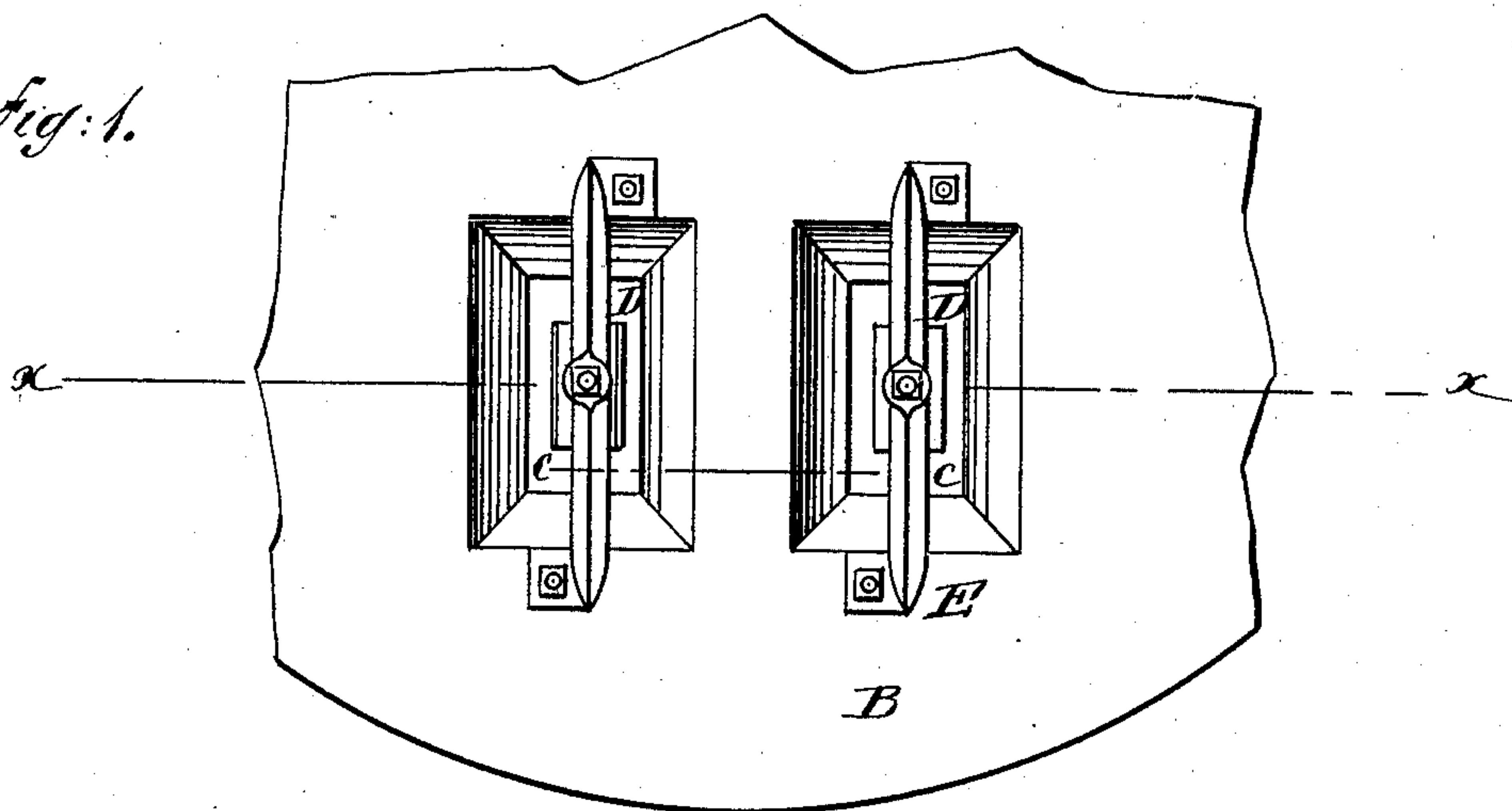


Fig: 2.

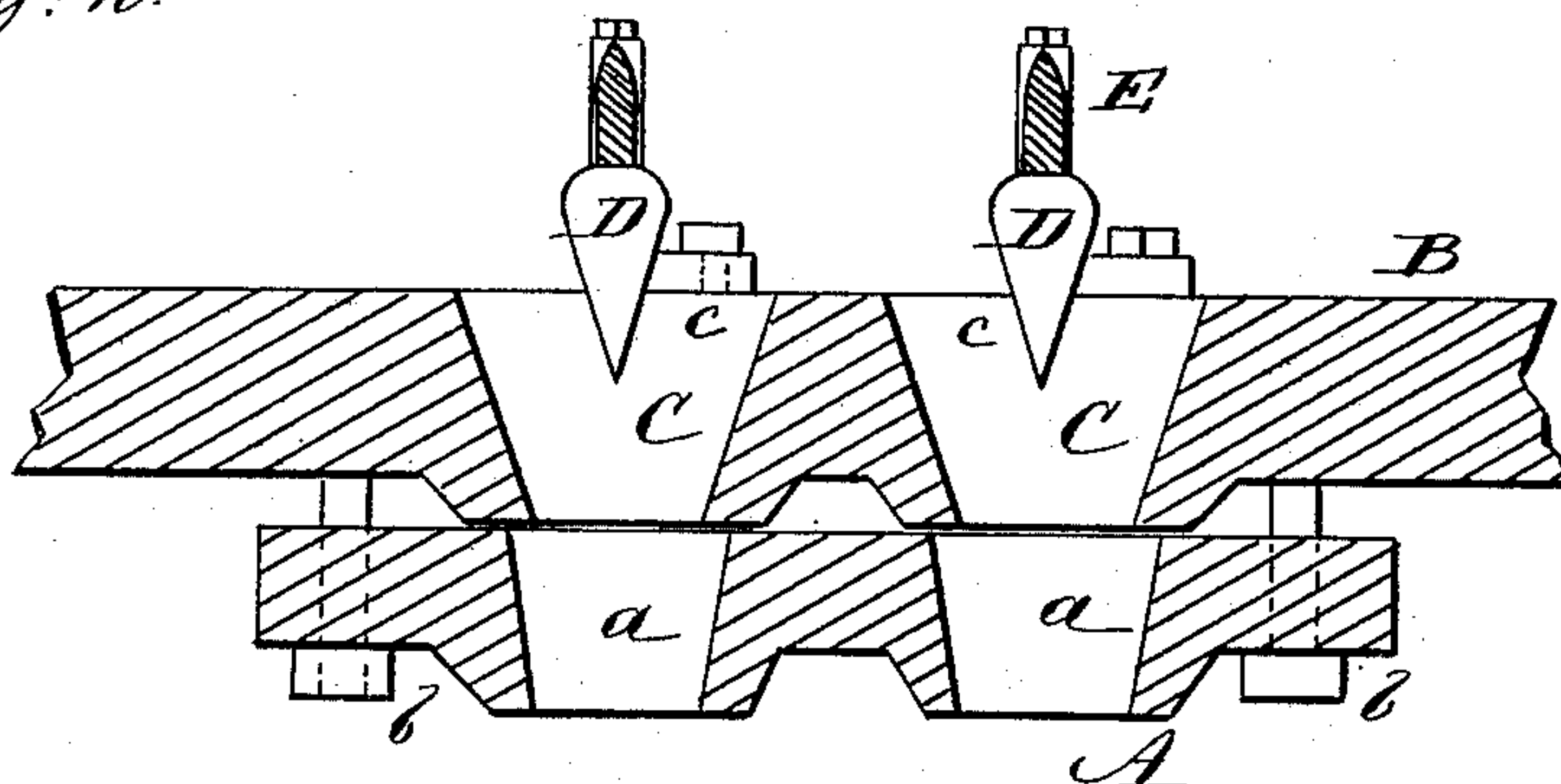
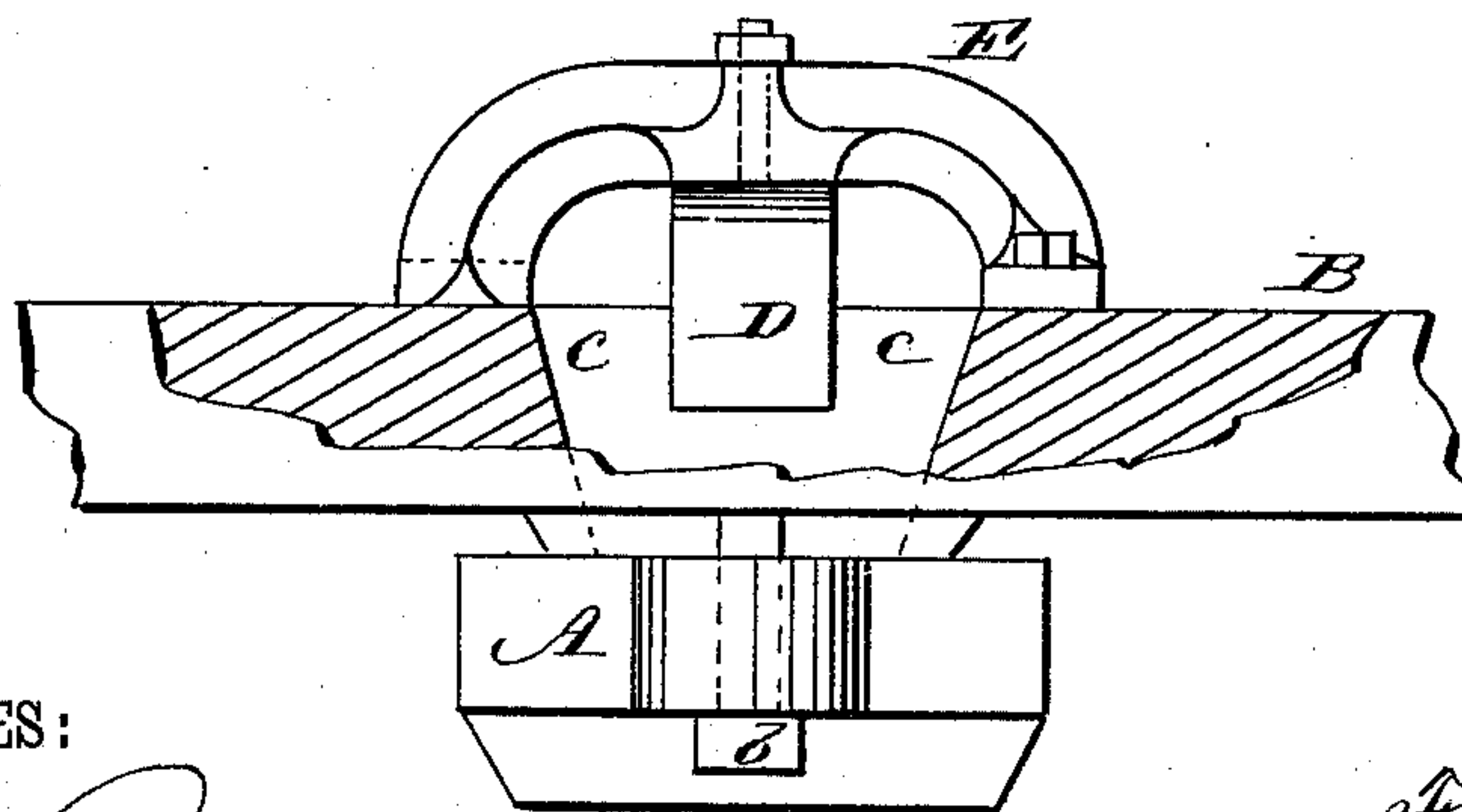


Fig: 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK HARTINGS, OF ST. ROSA, OHIO.

BRICK-MACHINE.

SPECIFICATION forming part of Letters Patent No. 341,653, dated May 11, 1886.

Application filed November 23, 1885. Serial No. 183,797. (No model.)

To all whom it may concern:

Be it known that I, FRANK HARTINGS, of St. Rosa, in the county of Mercer and State of Ohio, have invented a new and useful Improvement in Brick-Machines, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a plan view of part of a brick-machine embodying my invention. Fig. 2 is a vertical transverse section taken on line *x x* in Fig. 1. Fig. 3 is a side elevation, partly in section, of one of the brick-molds.

Similar letters of reference indicate corresponding parts in all the different figures.

The object of my invention is to provide a brick-mold in which the clay may be compressed in a homogeneous state, so as to give the brick the same density throughout, so that the brick when burned will not warp or twist, and so that it will better withstand the pressure to which it is subjected in the wall of which it forms a part.

The die A, through which the clay is forced to form the brick, is of the usual form, having tapering openings *a*, and is applied to the end plate, B, of the brick-machine and secured thereto by bolts *b* in the usual way. In the end plate, B, are formed tapering holes C, through which, in the operation of forming the bricks, the clay is forced and delivered to the die A, and a continual forward movement of the clay through the tapering holes C causes the clay to be forced through the die in a rectangular block, from which the bricks are separated by cutting by means of wire or otherwise.

In the process of brick-making as ordinarily conducted the clay is compressed by the sides of the die A, but the central portion of the mass being forced through the die is uncompressed and spongy. To remedy this defect and to insure the compression of the clay forming the central portion of the bricks, a wedge, D, smaller than the tapering opening C in the plate B, is supported centrally in each of the openings C by the yoke E, leaving around the sides of the wedge a space, *c*, through which the clay must pass in its way

out of the machine. The wedge D projects partly into the opening C with its thicker end outside of the opening and above the surface of the plate B, so that the clay when forced forward will be pressed against the sides of the wedge, and that portion of the clay forming the central portion of the brick will be compressed and rendered homogeneous before entering the tapering holes C, and the clay forming the middle portion of the brick, after leaving the sides of the wedge D, will close together and unite, and the further movement of the clay through the holes C of the plate B will only tend to complete the compression of the clay from the outside of the block which forms the bricks.

The yoke E extends to the ends of the opening C, and is secured to the plate B by means of bolts. The sides of the yoke are beveled and brought to an edge to facilitate the passage by them of the clay on its way to the discharge-openings C.

By means of my improvement bricks of a uniform quality which will not warp in the burning, and which will be homogeneous in their structure throughout, may be made in the ordinary brick-machine.

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

1. The combination, with the end plate, B, of a brick-machine, of wedges D, supported centrally in the discharge apertures C of the plate, substantially as herein shown and described.

2. The combination, with the end plate, B, of a brick-machine, of the wedges D, and yokes E, supporting the wedges centrally in the discharge-apertures, substantially as herein shown and described.

3. In a brick-machine, the combination, with the discharge-apertures for clay, of a central body for receiving the pressure of the portion of the clay forming the central part of the brick, substantially as herein specified.

FRANK HARTINGS.

Witnesses:

WILLIAM HARTINGS,
IGNATIUS L. UNTERBRINK.