

(No Model.)

J. H. KONEFES.
BRICK MACHINE.

4 Sheets—Sheet 1.

No. 271,873.

Patented Feb. 6, 1883.

Fig. 2.

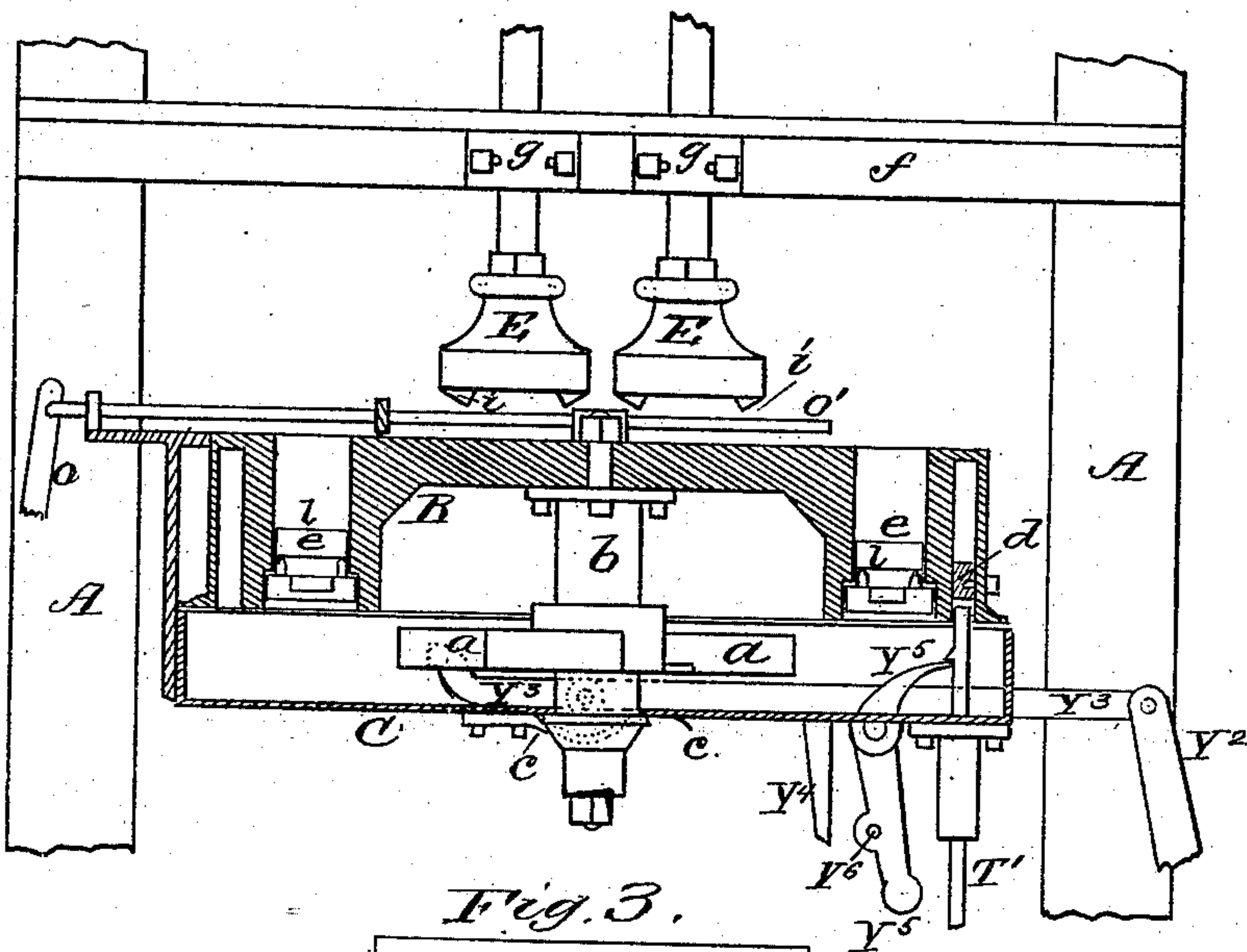


Fig. 3.

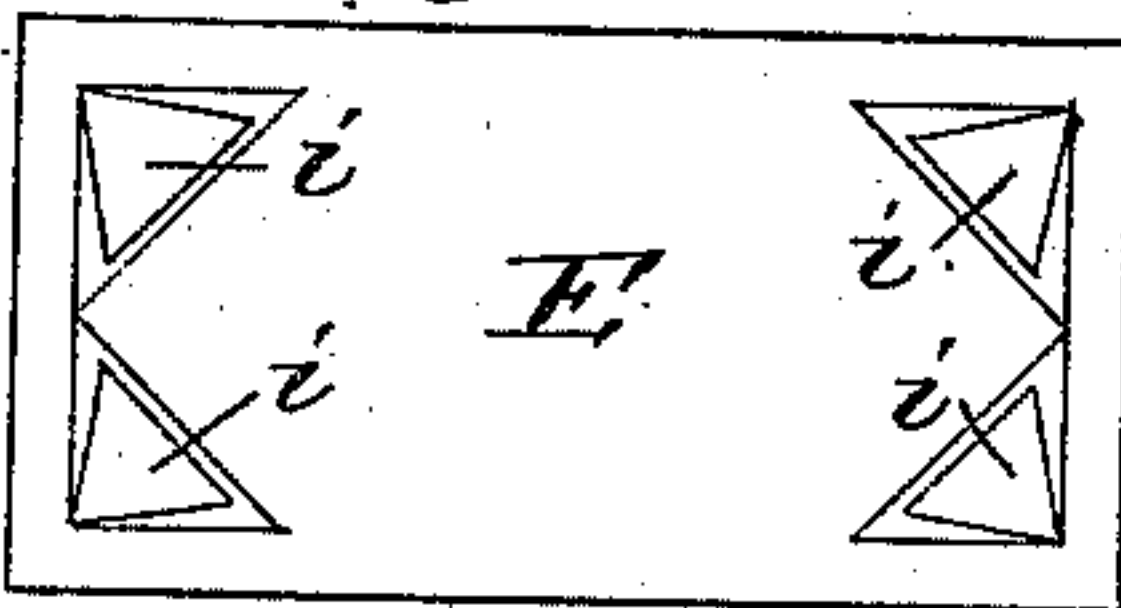
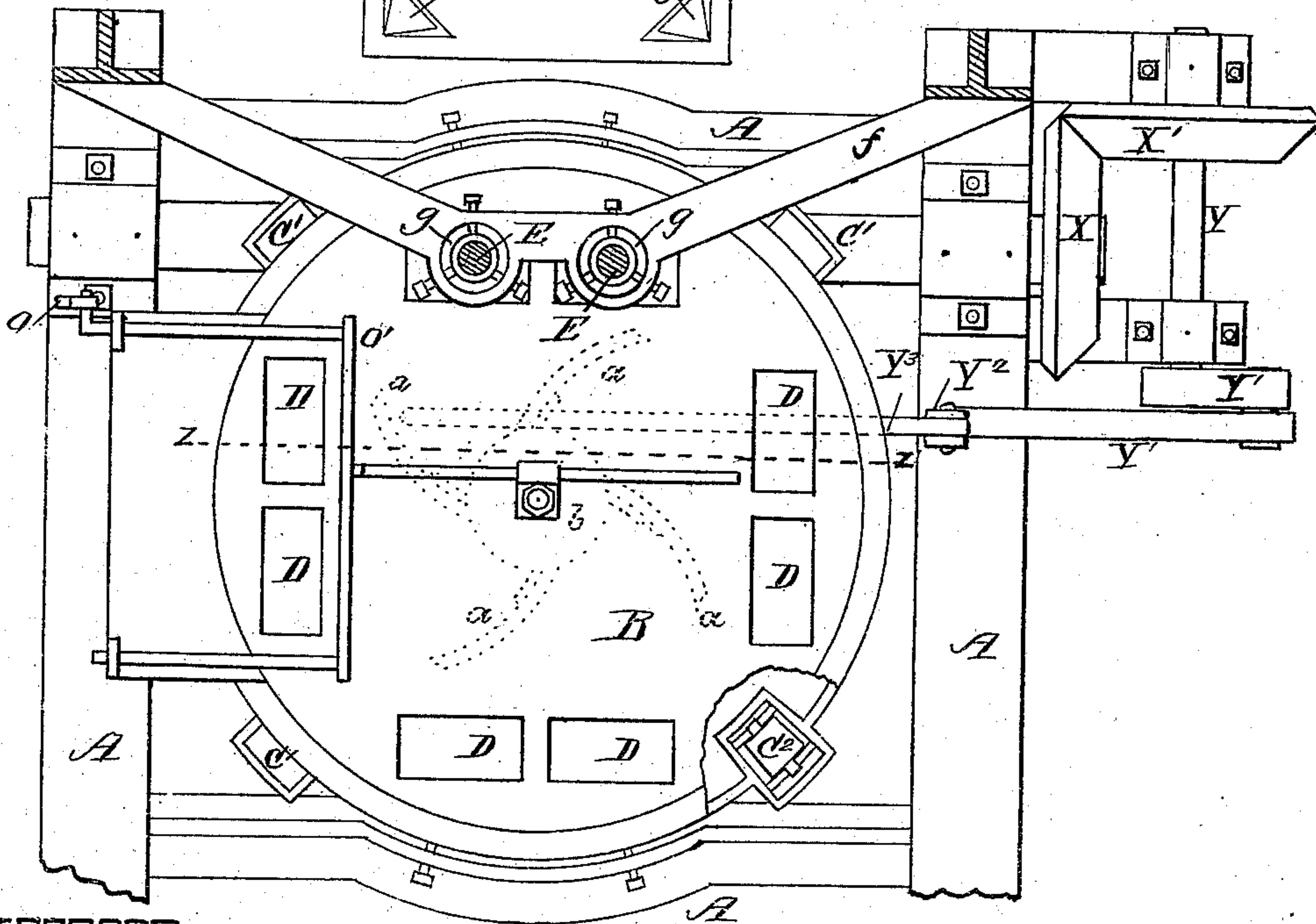


Fig. 1



WITNESSES

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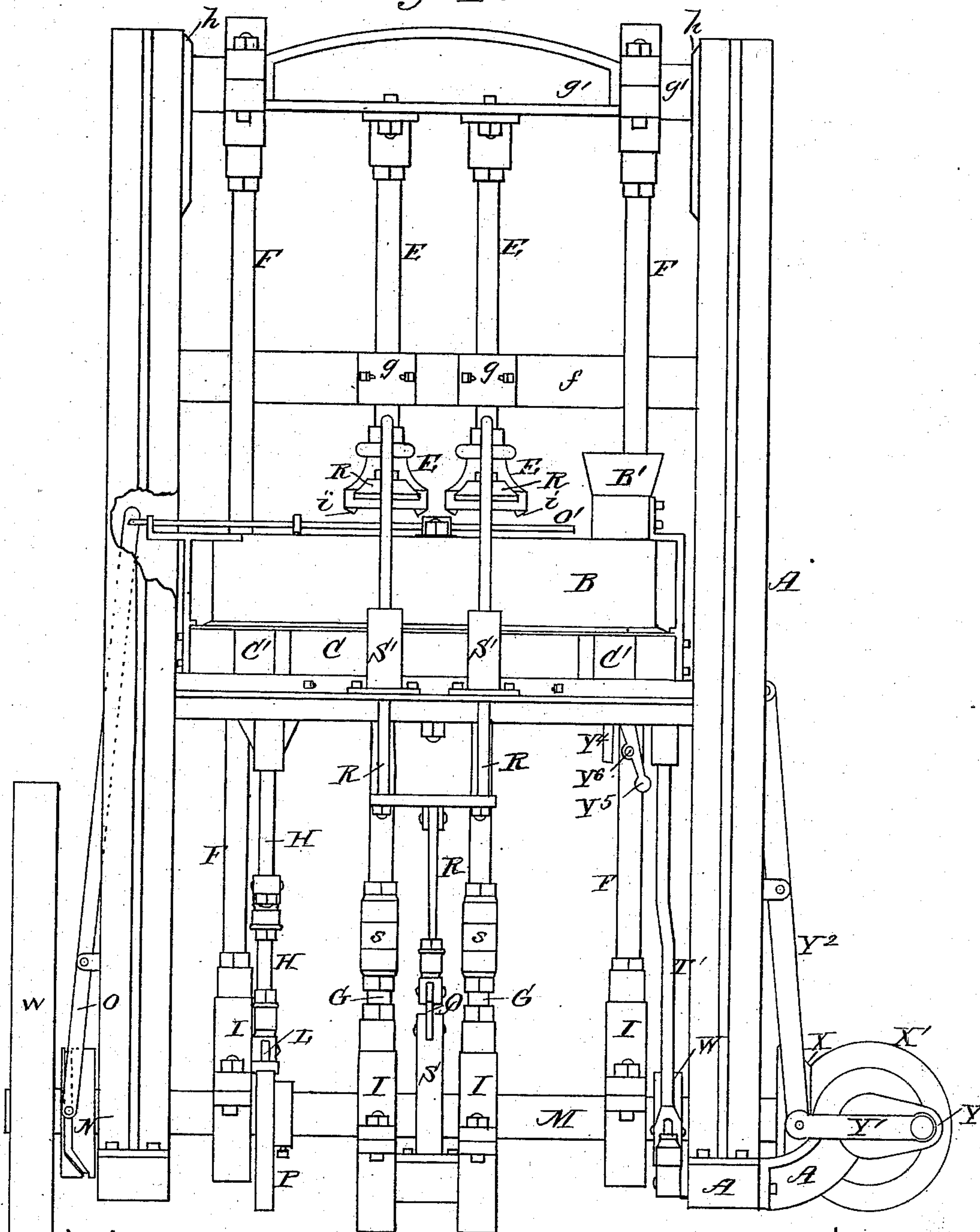
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Fig. 4.



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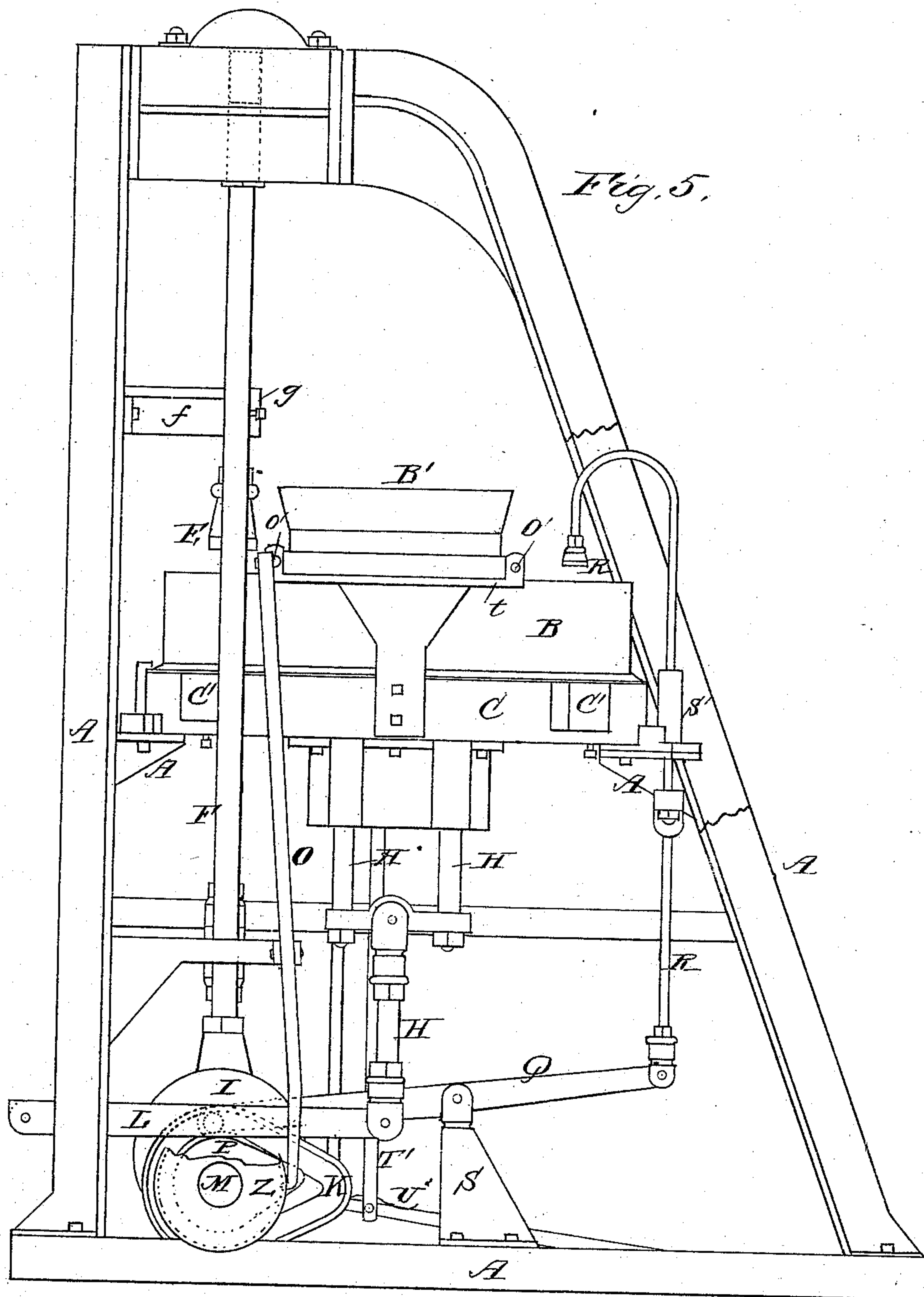
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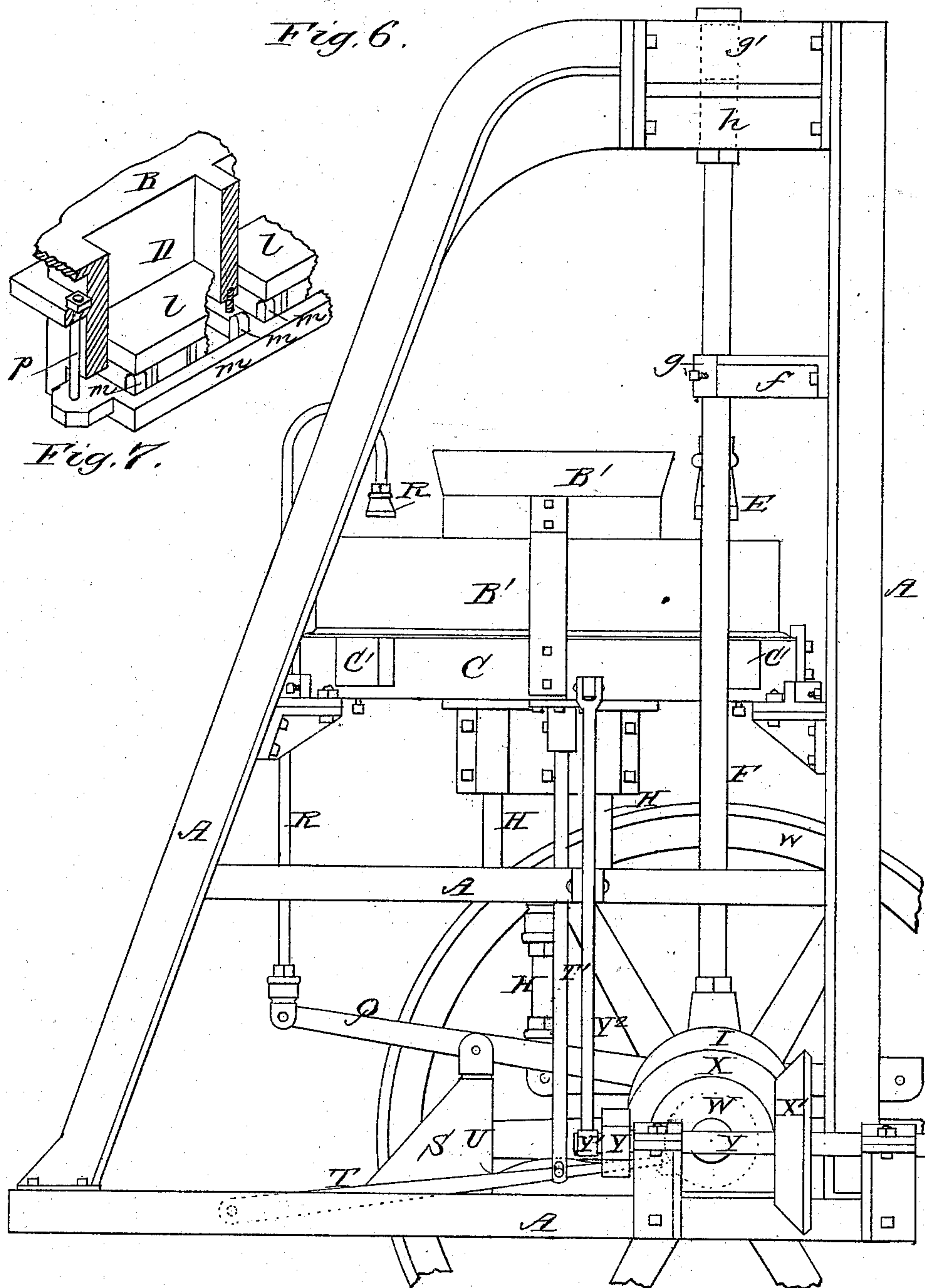
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UNITED STATES PATENT OFFICE.

JOHN H. KONEFES, OF QUINCY, ILLINOIS, ASSIGNOR OF ONE-HALF TO
HENRY W. MEAD, OF SAME PLACE.

BRICK-MACHINE.

SPECIFICATION forming part of Letters Patent No. 271,873, dated February 6, 1883.

Application filed July 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. KONEFES, a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Brick-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a plan view, partly in section, of the mold-table, showing the location of the molds and the interior construction of the table. Fig. 2 is a sectional elevation taken on line *z z* of Fig. 1; Fig. 3, a detail plan view of the upper plunger-die; Fig. 4, a front elevation of the machine; Fig. 5, a side elevation thereof; Fig. 6, a similar view of the reverse side; and Fig. 7 a detail view, in perspective and partly in section, of a portion of the machine.

The present invention has relation to certain new and useful improvements in brick-machines; and it consists in certain details of construction and mode of operation, substantially as shown in the drawings, hereinafter described and claimed.

In the accompanying drawings, A represents the frame, consisting of the base and upright standards, also brackets and cross-bearing bars upon which the stationary table or bed C is placed; and B is the revolving or molding table located above the bed C, said table having above it a hopper, B'.

The molds D, within the table B, may be of the usual construction, although I prefer them of the form shown, the upper pressing-plungers, E, being located above the molding-table, as shown in Fig. 2.

The side rods, F, are attached to eccentric I, at the lower end thereof, and at the top to shaft *g*, the lower pressing-plungers being shown at G; and H are the plungers which deliver the bricks out of the molds.

I represents the eccentrics, and K is the side-slotted cam attached to main shaft between the two center eccentrics, a lever, L, being attached to standard of the frame A and plunger H.

The main shaft of the machine is represented

at M, to which is attached the face-slotted cam N, a lever, O, traveling in said cam, and is connected at its upper end to a forked plunger, O', which, in connection therewith and the cam K, deliver or pull the bricks, after they have been raised up out of the molds, onto the apron *t*.

Attached to the main shaft M, between the outside and center eccentrics and under lever L, is a cam, P, said cam, in connection with the lever and plunger H, delivering the bricks out of the molds.

The lever Q has a friction-roller pin traveling in the slotted cam K, said lever having connected thereto a plunger, R, used in pushing loose bottom *l* down.

The lever Q is pivotally connected to a bearing, S, and the plungers R, pass through boxes S'.

The slotted cam K, in connection with lever Q and plungers R, will push down the loose bottoms.

The lever T is connected to the plunger T' and raises the latter, a spring, U, being disposed between said plungers.

Attached to the main shaft is a lift-cam, W, which has a lip, as indicated by dotted lines, Fig. 6, said shaft also having a bevel-gear, X, and a similar gear which meshes therewith is attached to crank-shaft Y, said shaft having at one end a pitman, Y', and lever Y².

The jointed plunger Y³ is used in turning the mold-table by pushing against the circular arms *a* until the table B is moved around one-quarter distance, when, at about the full stroke of plunger Y³, the lift-cam W will begin to raise the lever T and press upon the spring U, thus lifting lock plunger or bolt T' close up to table B, and at full stroke the plunger T' will be forced up suddenly into the socket *d* by the action of the spring, and by so doing the table B will be locked to table C. The lever will be raised higher until the lip on said cam will have passed by lever T. The latch Y⁵ will then have caught under the lip of bolt or plunger T', and in so doing will hold lever T suspended.

A bolt, Y⁴, is fastened to plunger Y³, and traveling with the same in a groove in the bottom of table C, a latch, Y⁵, being hung at the bottom of said table, and has fastened to it a bolt, Y⁶. As the plunger Y³ travels back

it will pass back under circular arms *a*, the point will drop down through an opening in the table C onto the spring *c*, and the same will at the end of the return-stroke elevate the plunger Y³ into position. The bolt Y⁴ will then have opened the latch Y⁵ by means of pressing against bolt Y⁶, and thus let lock bolt or plunger T' drop and unlock table B.

A cross-bar, *f*, is attached to the standard of the frame A, the same having two sleeves, *g*, adjusted by set-screws, which guide plungers E to their proper place.

The side rods, F, and plungers E are fastened to the upper shaft, *g'*, said shaft traveling up and down in groove or bearing *h* as the shaft M turns eccentric I.

In Fig. 3, E represents one of the plungers in detail, having the three-cornered beveled dies *i* fastened thereto, they being so shaped as to press more clay toward the corners, thus making them equally solid with the balance of the brick.

In referring to Fig. 7, the molds D of the table B have loose bottoms *l*, which rest upon adjustable carriers *m*, adapted to be raised or lowered, and in so doing the molds D will receive less or more clay, said adjustment being effected by screw bolts *p*.

The plungers G can be shortened or lengthened by suitable couplings, *s*, and the machine is provided with an apron, *t*, to receive the bricks as they are pulled off the table B, the main driving-wheel being represented at *w*.

As will be seen from the above description, the machine consists principally of a stationary and revolving table fastened together by a center pin, the pressing power being accomplished by eccentrics, which have sufficient throw to allow the table to revolve about one-quarter revolution as they leave the molds and before they re-enter.

The machine is also so arranged that the mold can receive from four and a half inches to five and a half inches in depth of clay without changing the throw of the eccentrics, all that is necessary being to raise or lower mold-bottom carrier and to lengthen or shorten either the upper or lower pressing-plungers, and by that means a brick can be pressed of two and one-half inches thickness as solid as those of two and one-quarter inches thickness.

The table B has fastened to it a center post, *b*, to which the arms *a* are connected, and C² are frictional rollers in the bearing C'.

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

1. In a brick-machine, the stationary table C, in combination with the revolving mold-table B and the plungers E, said mold-table

and plungers being connected to mechanism, substantially as set forth, whereby the two are operated jointly, substantially as and for the purpose set forth.

2. In a brick-machine, the stationary table C and revolving mold-table B, in combination with the plungers E G H, constructed to operate substantially as and for the purpose specified.

3. In a brick-machine, the stationary table C, having the circular or curved arms *a*, connected to the center post, *b*, in combination with the mold-table B, jointed plunger Y³, lever Y², the cam W, and lever T, substantially as and for the purpose set forth.

4. In a brick-machine, the stationary table C and the revolving table B and plungers E, in combination with the plungers G H, forked plunger O', rods F, eccentrics I, slotted cams K N, and lever O, substantially as and for the purpose set forth.

5. In a brick-machine, the stationary table C, curved arms *a*, jointed plunger Y³, bolt T', cam W, spring U, in combination with the revolving mold-table B, bolt Y⁴, latch Y⁵, and springs *c*, substantially as and for the purpose specified.

6. In a brick-machine, the combination, with the revolving table B, of the plungers E, carrying the three-cornered beveled dies *i*, substantially as and for the purpose specified.

7. In a brick-machine, the revolving table B, having the loose bottoms *l*, arranged within the molds D, in combination with the adjustable carriers *m*, substantially as described.

8. In a brick-machine, the mold-table B, having loose bottoms *l*, resting upon the adjustable carriers *m*, in combination with the plungers R, slotted cam K, and lever Q, for pushing down the loose bottoms of the molds, substantially as and for the purpose set forth.

9. In a brick-machine, the combination, with the plungers E, carrying the three-cornered bevel-dies *i*, of the revolving table B, with loose bottoms *l*, arranged within the molds D and resting upon adjustable carriers *m*, substantially as and for the purpose described.

10. In a brick-machine, the combination, with the tables B C, plungers E G H, and the forked plunger O', of the several cams, eccentrics, shafts, and gearing for operating them, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN H. KONEFES.

Witnesses:

PHIL. F. PIERCE,
JOS. FAERBER.