H. W. Stillman,

Brick Machine,

No. 24,962, Patented Aug. 2, 1859.

Fig. 4.

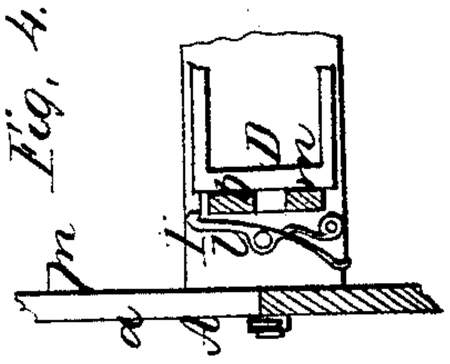


Fig. 2.

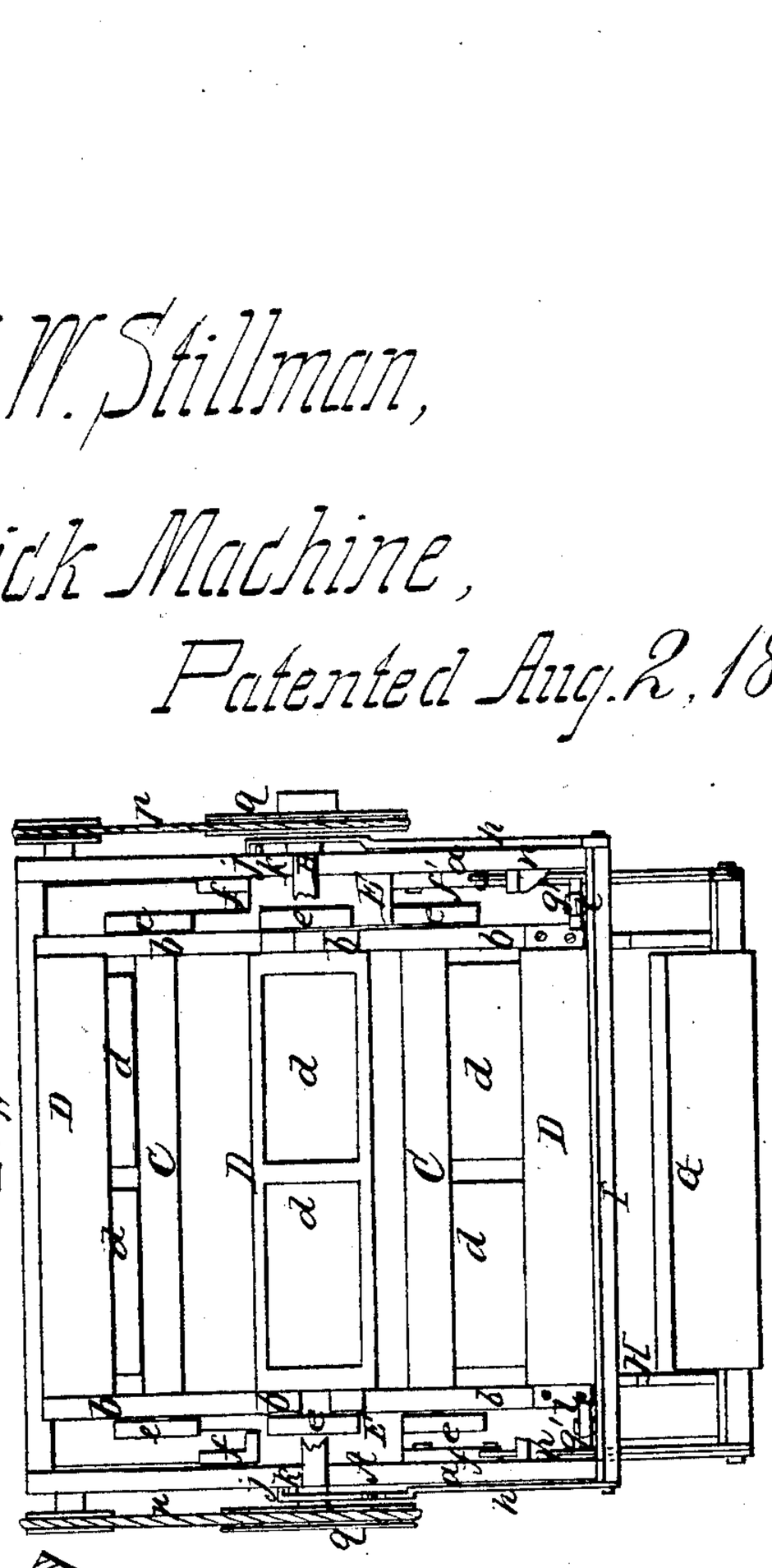


Fig. 1.

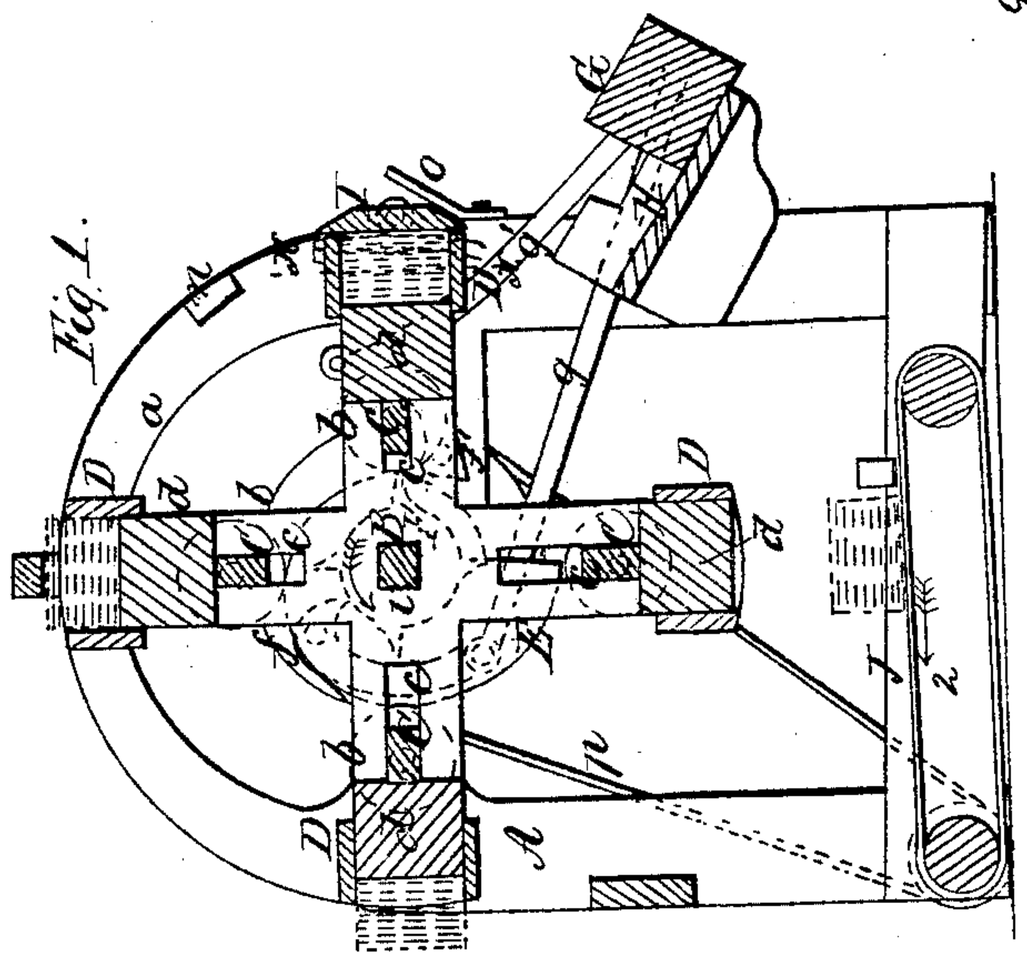
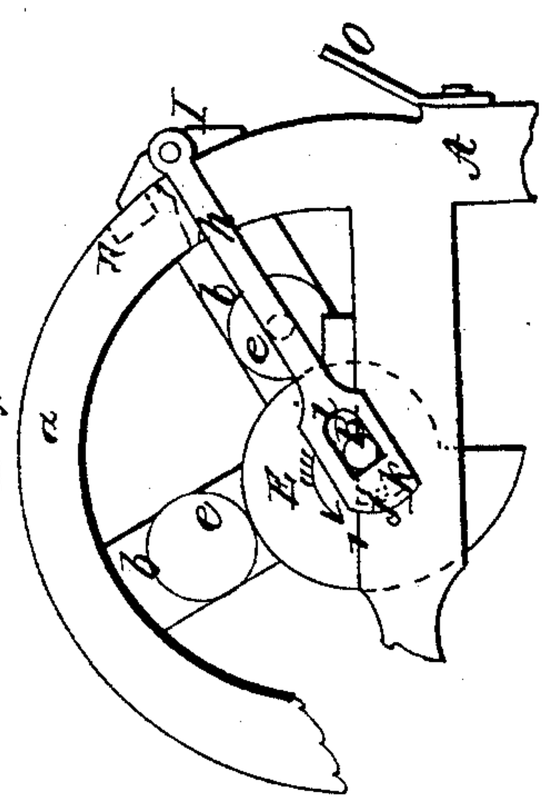


Fig. 3.



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UNITED STATES PATENT OFFICE.

H. W. STILLMAN, OF PORT WASHINGTON, WISCONSIN.

BRICK-MACHINE.

Specification of Letters Patent No. 24,962, dated August 2, 1859.

To all whom it may concern:

Be it known that I, H. W. STILLMAN, of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented a new and Improved Machine for Molding and Pressing Bricks; 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, in which—

Figure 1, is a side sectional view of my invention. Fig. 2, is a plan or top view of ditto. Fig. 3, is a side view of a portion of ditto. Fig. 4, is a vertical section of a portion of ditto, taken in the line *x*, *x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in the employment or use of a series of rotating molds provided with movable bottoms operated by eccentrics, in connection with a feeder and resisting plate the whole being arranged for joint operation as hereinafter shown, whereby a very compact and efficient machine is obtained.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a framing the lower part of which is of rectangular form the upper parts of the sides being of semi-circular form as shown at *a*. In the framing A, and concentric with the semi-circular tops *a*, of the framing a shaft B, is placed. This shaft is provided at each end with radial arms *b*, four arms are shown at each end of the shaft in the drawings, but any suitable number may be used. Each arm *b*, is slotted longitudinally a certain distance as shown at *c*, in Fig. 1, and in these slots the ends of bars C, are fitted and allowed to slide freely toward and from the shaft B. To the ends of the arms *b*, molds D, are attached, said molds being of the usual rectangular form, and to the bars C, plungers *d*, are attached, said plungers forming the bottoms of the molds and allowed to slide freely therein. The plunger or bottoms *d*, are equal in thickness to the depth of the molds.

To each end of each bar C, a roller *e*, is attached. These rollers rest on the peripheries of cams or eccentrics E, attached to each side of the framing. The form of these eccentrics is shown clearly in Fig. 3.

On each end of the shaft B, a wiper F, is placed, shown by dotted lines in Fig. 1, and the wipers act against arms *f*, *f'*, which are attached to the framing A, at each side and have a bar or feeder G, attached to them by rods *g*, *g'*, as shown plainly in Fig. 1. The bar or feeder G, is of rectangular form and works in an inclined box H, attached to the framing A.

I, is a plate which has a bar *h*, attached to each end of it. These bars *h*, are fitted on the shaft B, by means of oblong slots *i*, see Fig. 3, and the inner ends of the bars have each a ledge *j*, on their inner sides, said ledges being eccentric with the shaft B, and acted upon as will be presently described by pins *k*, attached to the framing A. The plate I, extends entirely across the framing A, and rests against the edges of the semi-circular tops *a*, *a*, of the sides of the framing. To the inner side of the plate I, two catches *l*, *l*, are attached, one near each end. Each catch has a spring *m*, bearing against its lower end, see Fig. 4.

To the semi-circular tops *a*, *a*, of the sides of the framing projections *n*, are attached, one to each, and to the front side of the framing A, brackets *o*, *o*, are attached to hold the plate I, when the same is depressed.

In the lower part of the framing A, an endless apron J, is placed, said apron being driven by belts p, from pulleys *q*, at the ends of the shaft B.

The operation is as follows:—The shaft B, is rotated in the direction indicated by the arrow 1, and the tempered clay falls in the box H, above the feeder G, which has a reciprocating movement communicated to it in consequence of the wipers F, F, acting against the arms *f*, *f'*, the arms *f*, as they are acted upon by the wipers raising the feeder G, in the box and the arms *f'*, throwing it back. Each time the feeder G ascends in the box H, it forces clay into a mold D, which passes at the proper time in line with the box H, to receive the clay and as the filled mold passes upward behind the plate I, the catches *l*, are by the springs *m*, forced over the ends of the arms *b*, and the plate is carried upward with the filled mold. The plungers or bottoms *d*, of the molds are, at this point, forced into the molds in consequence of the rollers passing around on the peripheries of the eccentrics E, and the plate I, is also slightly pressed inward and made to bear firmly on the face of the mold in consequence of the ledges *k*, at the inner ends of the bars *h*, passing over the pins *k*. The

clay therefore is compressed in the molds by means of the plungers or bottoms *d*, in connection with the resisting plate I. When the mold reaches the projections *n*, *n*, the plate I, is released from it in consequence of said projections *n*, actuating the spring *l*, and the plate I, falls back into the brackets *o*, by its own gravity to be again raised by the succeeding mold, and the previous mold as it passes around has the compressed clay or bricks forced from it by the plungers or bottoms *d*, the bricks falling on the apron J, which as it moves in the direction of arrow 2, conveys the bricks from the machine.

I do not claim broadly molds provided with plungers or movable bottoms for they have previously been used. Nor do I claim separately an endless apron for conveying the bricks from the machine, for they also have been used, but,

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

The combination of the revolving molds D, feeder G, and plate I, when arranged and operated in the manner described for the purpose specified.

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Witnesses:
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