2 Sheets--Sheet 1.

J. WHITELEY.

Brick-Machine.

No. 162,783. Patented May 4, 1875.

Fig. 1

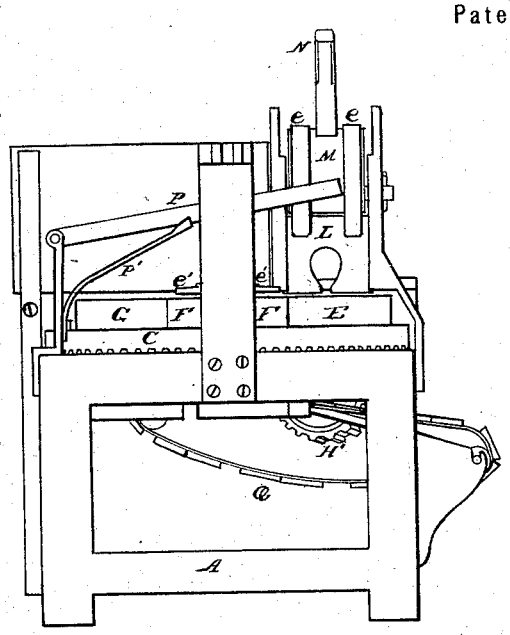
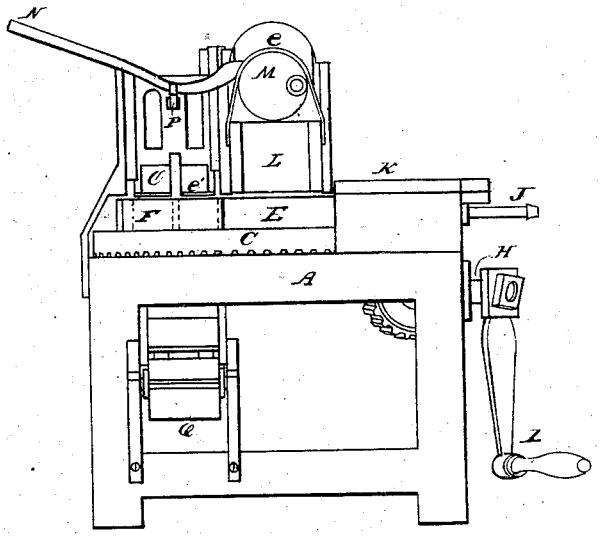


Fig. 2



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2 Sheets--Sheet 2.

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Fig. 3

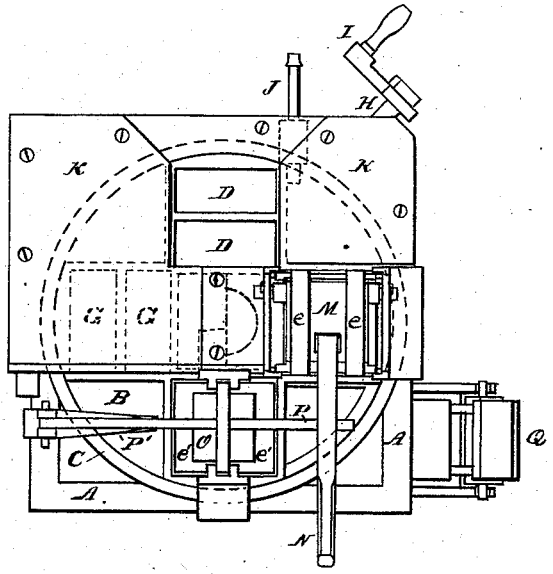
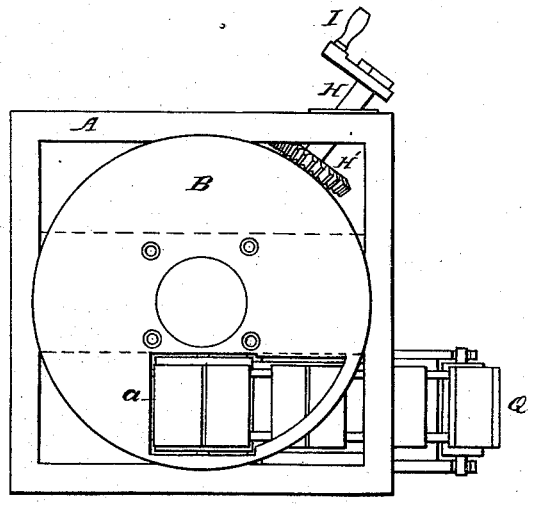


Fig. 4



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UNITED STATES PATENT OFFICE.

JOSEPH WHITELEY, OF DUNLAP, IOWA.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **162,783**, dated May 4, 1875; application filed February 18, 1875.

To all whom it may concern:

Be it known that I, JOSEPH WHITELEY, of Dunlap, in the county of Harrison and State of Iowa, have invented certain new and useful improvements in Brick-Making Machines, of which the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains, to make and use the same; reference being had to the accompanying drawing forming a part hereof, and in which—

Figure 1 is a rear elevation of my improved machine; Fig. 2 a side elevation of the same; Fig. 3 a top or plan view thereof; and Fig. 4 a like view, when the receiving-tables, press, ejector, and molds are removed.

Like letters of reference indicate like parts.

In the drawing, A represents the frame of the machine. B is a horizontal, fixed platform arranged across the upper part of the frame. This platform is circular or disk-shaped, and is open at *a*, as shown at Fig. 4. C is a wheel, cogged on its lower face, and carrying four sets of double, bottomless molds, D E F G. These molds are arranged as shown, and lie just above the platform B. H is a shaft carrying the cog-wheel H′, engaging the cogs of the wheel C. I is a crank by means of which the wheels H′ and C may be rotated. J is a spring-bolt or stop arranged to engage the molds one after another, as represented in Fig. 3, and hereinafter more fully explained. K is a receiving-table having an opening therein to expose one set or pair of molds at a time, as shown. L is a press-block constructed to enter the molds. M is an eccentric supported in uprights attached to the frame A. The block L is suspended from this eccentric by means of the flexible bands *e e*, and rides in ways in the uprights which support the eccentric. A hole or socket is sunken into the periphery of the eccentric to receive the lever N. The block L is arranged to enter one set of molds, while another set is exposed in the opening in the table K. O is the ejector. This ejector consists of a vertically-sliding gate arranged in ways attached to the frame A. The gate is provided with broad feet *e′ e′* constructed and arranged to enter a pair of molds during the downward movement of the gate. P is a pivoted lever passing freely through an opening in the gate of the ejector, and resting on the spring P′, thus supporting the feet *e e′* above the molds. The ejector is arranged directly over the opening *a* in the platform B, and enters one set of molds while the press L enters another. Q is an endless conveyer arranged below the opening *a*, and extending to, or a little beyond, one side of the machine, as shown.

In Fig. 2, one of the uprights which support the eccentric M is represented as removed, in order to more clearly show the parts which constitute the press.

In order to use my improved machine, a quantity of pulverized or crumbled clay is placed upon the table K. Approaches may be connected to this table, and so arranged that the clay may be wheeled to it from the bed in wheel-barrows. A workman, or filler, stands just to the right of the bolt or stop J, and fills the molds exposed in the opening of the table K, and then evens off with a straight-edge the clay in these molds. He now draws out the stop J, and turns the crank I in the direction indicated by the arrow, and releases the stop as soon as the filled molds begin to move away from the opening in which they are exposed. As soon as the next set of molds is fully in this opening, the movement of the machine is stopped by reason of the contact of these molds with the stop J. By this time, the first set of molds is directly below the press L. Another workman, or press-man, standing opposite the filler, depresses the lever N, thus firmly pressing the clay in the first set of molds, and then lifts the lever a little above the molds. At the same time, the filler fills the second set, and proceeds as before. The second rotation brings the first set of molds below the ejector, the second set below the press, and a third set into the opening in the table K, the fourth and last set being in the position indicated by the dotted lines at G G, Fig. 3. It will be perceived, from reference to Figs. 2 and 3, that the lever N is so arranged as to strike and depress the lever P during the downward movement of the former. The second time, therefore, that the lever N is depressed, the bricks will be ejected from the molds below the ejector, and fall upon the conveyer. A boy standing at the outer end of the conveyer

draws the latter toward that side of the machine, and as the bricks are thus presented they are removed from the conveyer, placed upon carrying-boards, and arranged upon a bench conveniently near the machine. The bricks may then be taken to the kiln.

The operation now described is repeated and continued until a sufficient amount of work is accomplished.

The machine is simple in its construction and operation, the bricks are prepared rapidly and easily, and the work is done in a superior manner.

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

1. The combination, substantially as specified, of the horizontal rotary and bottomless molds, the fixed platform B having an opening, *a*, therein, a press, and an ejector, for the purpose set forth.

2. The combination of the presser L, the eccentric M, the lever N, the flexible hands *e e*, and the molds, substantially as and for the purposes specified.

3. The combination and arrangement, in a brick-making machine, of the press-lever N and ejector-lever P, both operating together substantially as and for the purposes specified.

JOSEPH WHITELEY.

Witnesses:

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