2 Sheets—Sheet 1.

S. B. FRANK.

BRICK-MACHINE.

No. 183,150. Patented Oct. 10, 1876.

Fig. 1.

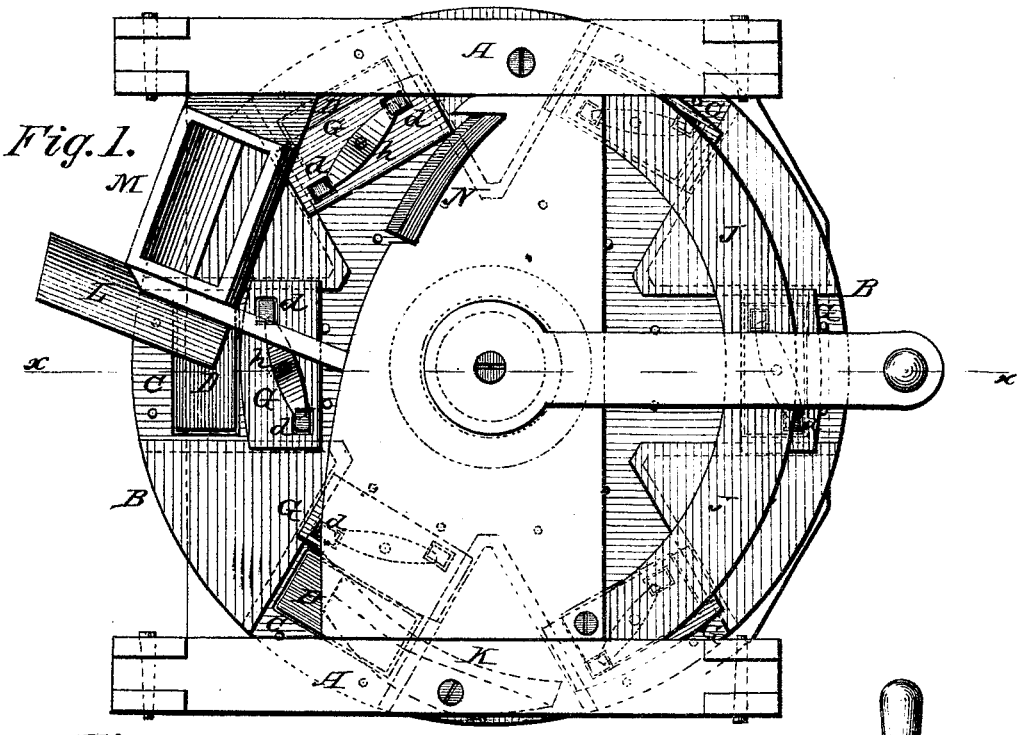
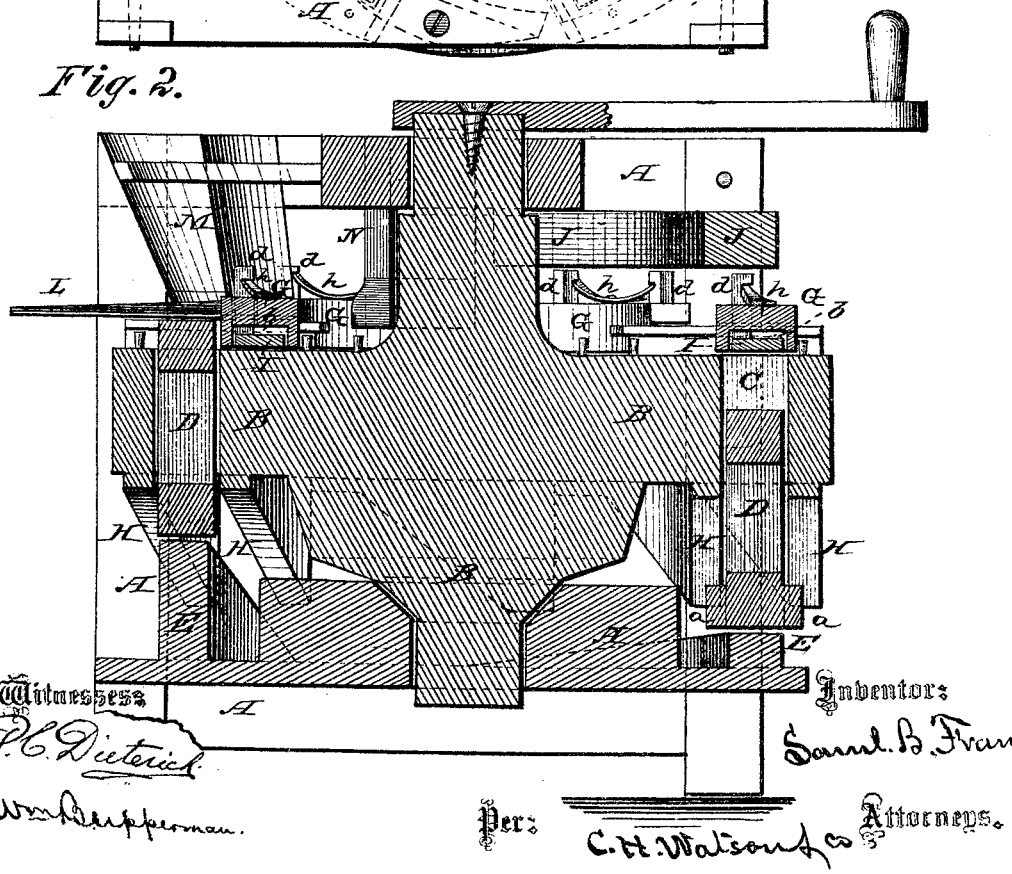


Fig. 2.



Witnesses:
P. C. Dieterich
Wm. Pepperman.

Inventor:
Saml. B. Frank

Per: C. H. Watson & Co Attorneys.

2 Sheets—Sheet 2.

S. B. FRANK.

BRICK-MACHINE.

No. 183,150. Patented Oct. 10, 1876.

Fig. 3.

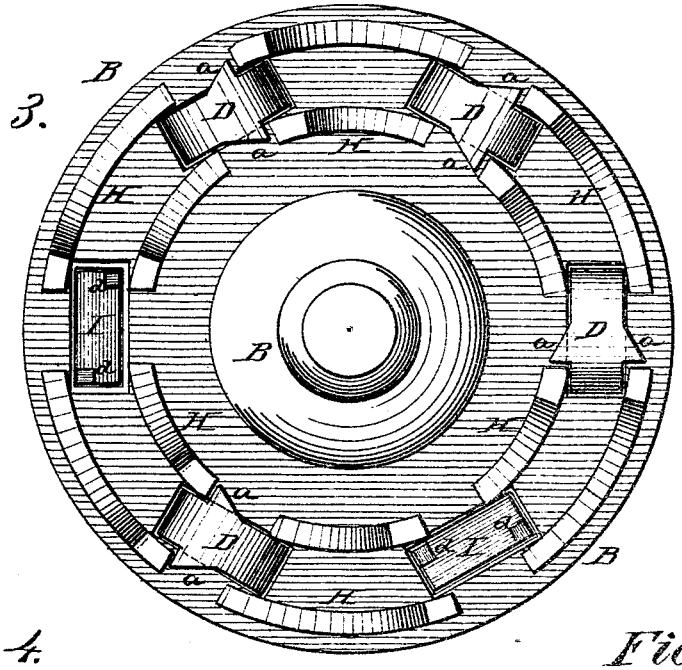


Fig. 4.

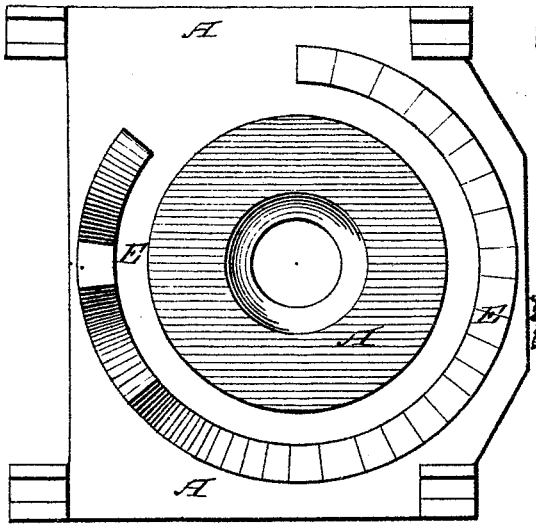


Fig. 5.

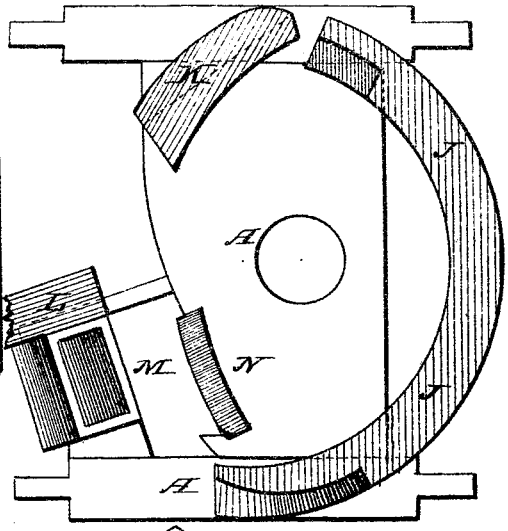


Fig. 6.

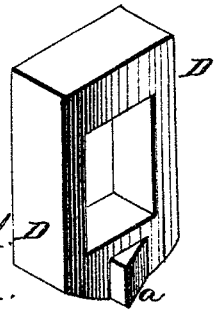
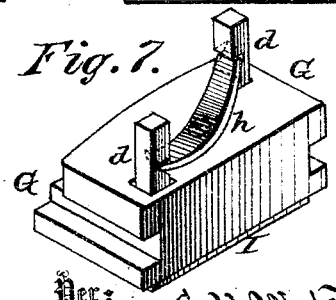


Fig. 7.



Witnesses:
P. C. Dieterich
Wm. B. Kepperman.

Inventor:
Saml. B. Frank

Per: C. H. Watson & Co. Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL B. FRANK, OF LILLARD'S MILLS, TENNESSEE.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **183,150**, dated October 10, 1876; application filed July 17, 1876.

To all whom it may concern:

Be it known that I, SAMUEL B. FRANK, of Lillard's Mills, in the county of Marshall and State of Tennessee, have invented certain new and useful Improvements in Brick-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a rotary brick-machine, as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a plan view of my brick-machine. Fig. 2 is a vertical section of the same through the line *x x*, Fig. 1. Figs. 3, 4, 5, 6, and 7 are detailed views of parts thereof.

A represents a square wooden or cast-iron frame, in the center of which the main cast-iron wheel B revolves horizontally, it being mounted upon a vertical shaft to which the power is applied. Near the outer edge of the wheel B is formed a set or series of molds, C, which may be of any number desired, according to the size of the wheel. These molds are cast in the wheel, and may be increased in number by making two or more concentric series of them side by side. In each mold C is a cast-iron follower, D, of proper size to fit freely therein, and of sufficient length to extend downward and rest upon the inclined plane E, which is of the same circle as the molds in the wheel. These followers are supported or held in perpendicular position by braces H behind them, cast on the main wheel, and operating against lugs *a a* on both sides of the followers. Each mold C is provided with a sliding cover, G, which moves radially in suitable guides, and is provided with a depression, *b*, in the under side corresponding exactly with the size of the mold, and of sufficient depth to receive a cast-iron block, I. This block has two pins, *d d*, passing through the top of the cover, and placed at diagonally opposite corners, and extending upward to a cast-iron circle, J, secured to the frame above, which circle is inclined so as to press the pins *d* downward, and force the block I into the mold. A steel spring, *h*, is attached in the center on the top of the cover, with its ends inserted in notches on the pins *d*, so as to raise the block I into the recess *b* in the under side of the cover, when the pins pass from under the circle J.

As the main wheel rotates the covers G are moved off the molds by passing against an incline, K, secured to the frame above just at the time when the followers D reach the highest point of the inclined plane E below, and the followers are then immediately raised by the sudden rise of said circular inclined plane, and raise the finished brick out of the mold. The bricks as they are thus raised out of the molds are slipped upon a smooth plate, L, of iron, and are to pass off on an endless apron which may be extended to any desired length.

The empty molds then pass under the hopper M containing the brick-clay, and are refilled, the followers having descended to the lowest point, and as the molds emerge from under the hopper a second incline, N, moves the covers over the molds, and the pressure is given by the inclined planes J and E above and below simultaneously.

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

1. The recessed sliding cover G, provided with the block I, pins *d d*, and spring *h*, substantially as and for the purposes herein set forth.

2. The combination of the followers D, the covers G with spring-blocks I, and the inclines E and J, for simultaneously pressing the brick both from above and below, as set forth.

3. The inclines K and N, arranged as shown, in combination with the sliding covers G, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

SAMUEL B. FRANK.

Witnesses:

WASHINGTON T. ELLIOTT,

WILLIAM H. CHEEK.