2 Sheets—Sheet 1.

N. J. WOLFE.

BRICK-MACHINE.

No. 175,808. Patented April 4, 1876.

Fig. 1.

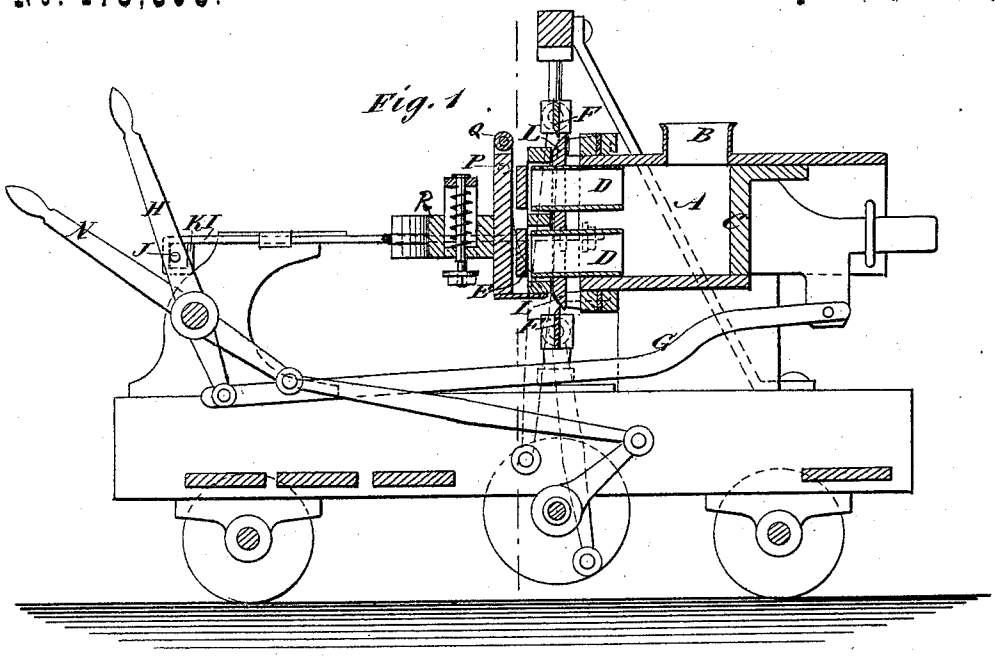
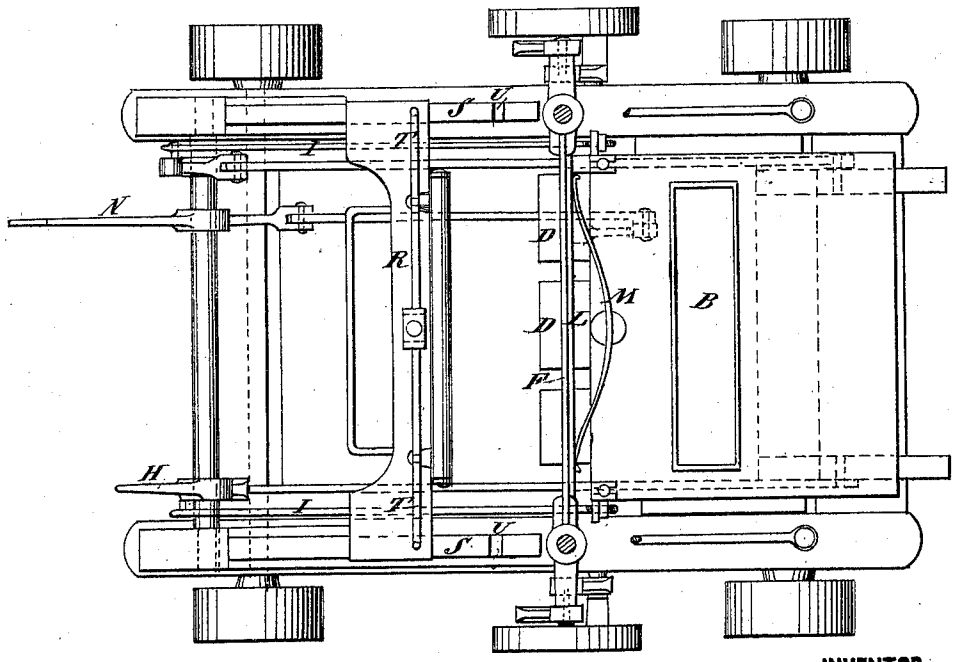


Fig. 2.



WITNESSES:

C. Nereux

John Goethals

INVENTOR:

N. J. Wolfe.

BY

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

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Fig. 3

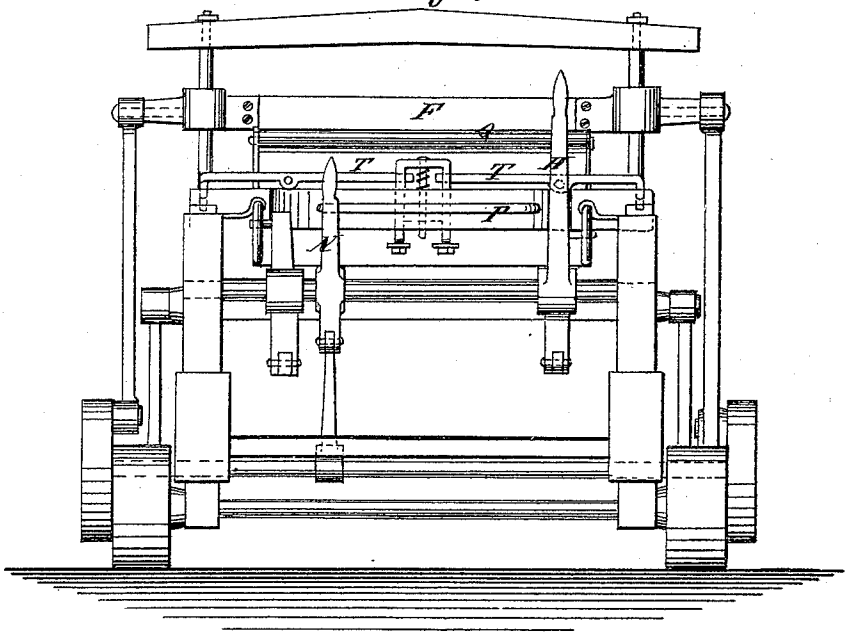
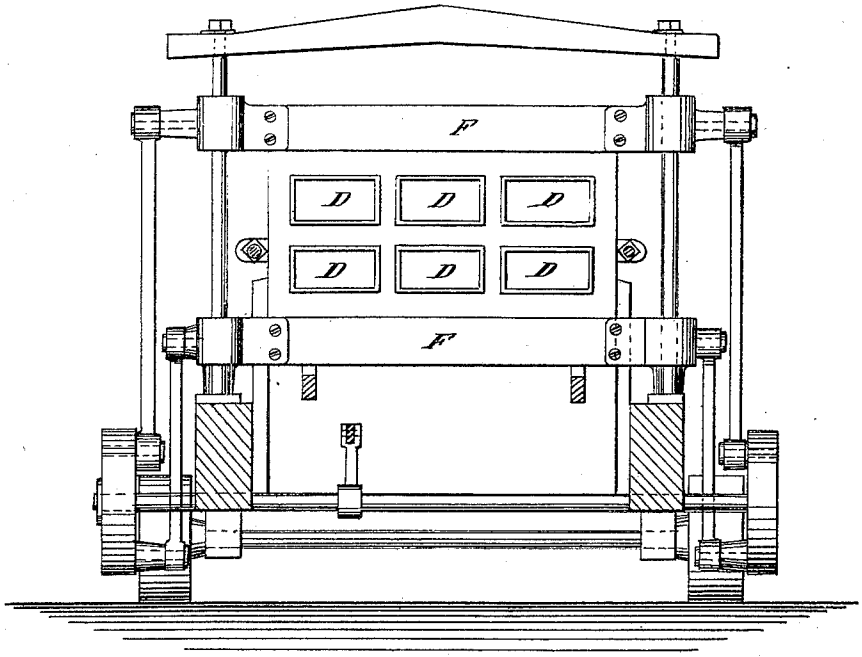


Fig. 4



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UNITED STATES PATENT OFFICE.

NEWTON J. WOLFE, OF CANAL WINCHESTER, OHIO.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **175,808**, dated April 4, 1876; application filed March 13, 1876.

To all whom it may concern:

Be it known that I, NEWTON J. WOLFE, of Canal Winchester, in the county of Franklin and State of Ohio, have invented a new and Improved Brick-Machine, of which the following is a specification:

This improved machine in a contrivance by which the mud is pressed into shaping-dies, which move forward into the brick-molds when the presser goes back for another batch of mud, and when the dies go back to receive the next batch from the presser, the shapes made by the dies are left projecting into the molds, and are cut off at the surface of the molds, forming bricks. The filled molds are then removed, and empty ones put in to be filled as before, and so on.

An essential advantage of the projecting of the dies into the molds consists in the delivery of the bricks in the molds without disturbing the sand with which the sides are sanded, to facilitate the removal of the bricks from the molds. This is effected by the dies being enough smaller than the molds to enter and return without touching the sides.

Figure 1 is a longitudinal sectional elevation of my improved brick-machine. Fig. 2 is a plan view. Fig. 3 is an end elevation, and Fig. 4 is a transverse section, taken on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the box or hopper, into which the mud is supplied through the mouth B. C is the presser for pressing the mud into the shaping-dies D, to be delivered by them into the molds E in the form of long bars, which, being cut off by the knives F, form brick. The presser slides forward and backward relatively to the dies, being worked by the rod G and hand-lever H. The dies also move toward the presser, to receive the mud, and then toward the molds, to deliver it into them after shaping it. They are also moved by the lever H and rods I. The stud-pins J, which connect the lever with the rods, have lost motion in the yokes K, about equal to the thickness of the bricks, so that before the dies go back the presser moves forward with the mud, which prevents the dies from withdrawing the shapes in them from the molds. When the dies are drawn back, the cutters F are forced up and down by the lever N, along the cutting-gage L, and cut off the ends of the bars of clay projecting from the dies into the box-molds. This gage is pressed forward against the molds by the springs M, to close around the mud-bars when the dies are withdrawn. The cutters press it back when they go down, and the springs press it forward again when the cutters go back. The brick-molds are supported on one edge by the holder P, in the top of which is a roller, Q, over which to pass the molds when withdrawing them with the bricks.

The holder is attached to a slide, R, moving on the ways S up to and away from the dies, and having a spring-presser holder, T, to keep it in position for receiving the bricks by dropping into the notches U in the ways S. The machine is mounted on wheels for being moved about readily from place to place.

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

1. The combination of the presser C, dies D, molds E, and cutters F, substantially as specified.

2. The presser C, dies D, and operating-lever H, combined and arranged to operate the presser and the dies simultaneously in opposite directions, substantially as specified.

3. The reciprocating mold-holder R, molds E, combined with the dies D and cutters F, substantially as specified.

4. The cutting-gage L, combined with the cutters F, dies D, and molds E, substantially as specified.

5. The dies D, coupled to the operating-lever H, by yoke K and stud J, arranged to allow the dies to rest a portion of the time the presser is moving up, substantially as specified.

NEWTON J. WOLFE.

Witnesses:

JAS. P. KRAMER,

CHARLES F. YOST.