W. J. BLAIR.

Brick-Making Machine.

No. 197,539. Patented Nov. 27, 1877.

Fig. 1.

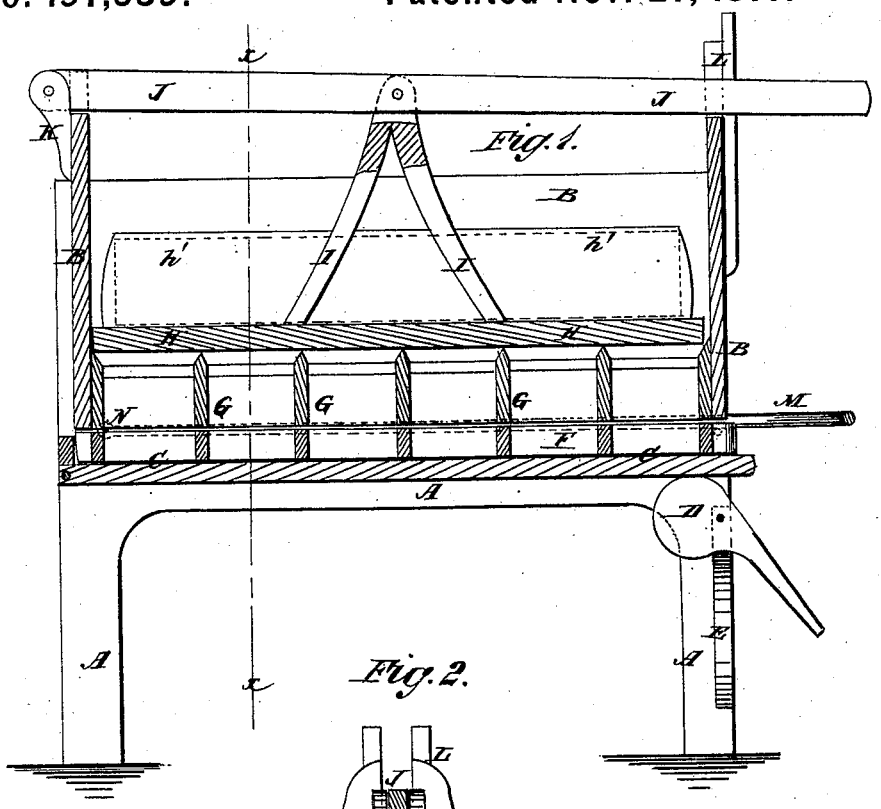
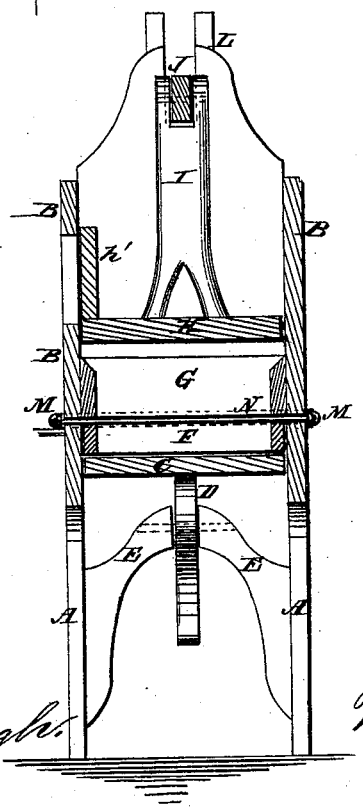


Fig. 2.



WITNESSES:

Francis McArdle.

J. H. Scarborough.

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BY Munn & Co

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UNITED STATES PATENT OFFICE.

WILLIAM J. BLAIR, OF OIL CITY, PENNSYLVANIA.

IMPROVEMENT IN BRICK-MAKING MACHINES.

Specification forming part of Letters Patent No. **197,539**, dated November 27, 1877; application filed August 24, 1877.

To all whom it may concern:

Be it known that I, WILLIAM J. BLAIR, of Oil City, in the county of Venango and State of Pennsylvania, have invented a new and useful Improvement in Brick-Making Machines, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved brick-making machine. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for making or molding brick, which shall be so constructed that the bricks can be molded rapidly, and which shall be simple in construction and convenient in use.

The invention consists in the combination of the pivoted bottom, the cam, the mold, the guide-partitions, the follower, the standard, and the lever with the box and the frame, as hereinafter fully described.

A is the frame of the machine, to which is attached a box, B. The box B is made with a loose bottom, C, which is pivoted at its rear end to the frame A, so that its forward end can be lowered for convenience in withdrawing the full mold and inserting an empty one. The forward end of the bottom C rests upon the cam D, so that it may be raised and lowered by operating the said cam D. The cam D is pivoted to brackets E, attached to the forward legs of the frame A.

F is the mold, which is divided into six compartments, more or less, each of the required size of a brick. The mold F is placed upon the bottom C, and in the box B are secured cross-partitions G, directly over the partitions of the mold F, to form chutes or spouts to guide the clay into the compartments of the mold F.

In the side of the box B, just above the partitions G, is formed a large slot, through which the prepared clay is introduced from the mill. The clay is pressed down through the spouts G into the mold F by the follower H, which fits into the upper part of the box B, and has a flange, *h'*, attached to its side edge, to close the slot in the side of the box B when the said follower is pressed down, and prevents any clay from entering the box B while the follower H is pressed down, and thus getting above the said follower.

To the middle part of the upper side of the follower H is attached the forked lower end of the standard I, in a slot in the upper end of which is pivoted a lever, J. The rear end of the lever J is pivoted to a bracket or arm, K, formed upon or attached to the rear end of the box B, and which may be the upward projection of the said end. The forward part of the lever J passes through a guide-slot in the upwardly-projecting forward end L of the box B, or in a standard attached to said end. The forward end of the lever L projects into such a position that it may be conveniently reached and operated by the attendant.

M is a U-rod, the arms of which pass along the opposite sides of the box B from its forward end. To the ends of the arms of the U-rod M is attached a wire, N, which passes through slots in the sides of the box B, at the upper edge of the mold F, so that when the U-rod M is drawn forward the wire N will pass along the top of the mold F, and will separate the clay in the said mold from the clay in the guide-spouts G, so that when the bottom C is lowered the filled mold F may be easily drawn out and replaced with an empty mold.

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

The combination of the pivoted bottom C, the cam D, the mold F, the guide-partitions G, the follower H, the standard I, and the lever J with the box B and the frame A, substantially as herein shown and described.

WILLIAM J. BLAIR.

Witnesses:

P. D. CORRIGAN,

F. S. YOUNG.