F. MICHEL.

BRICK-MACHINE.

No. 181,702. Patented Aug. 29, 1876.

Fig. 1.

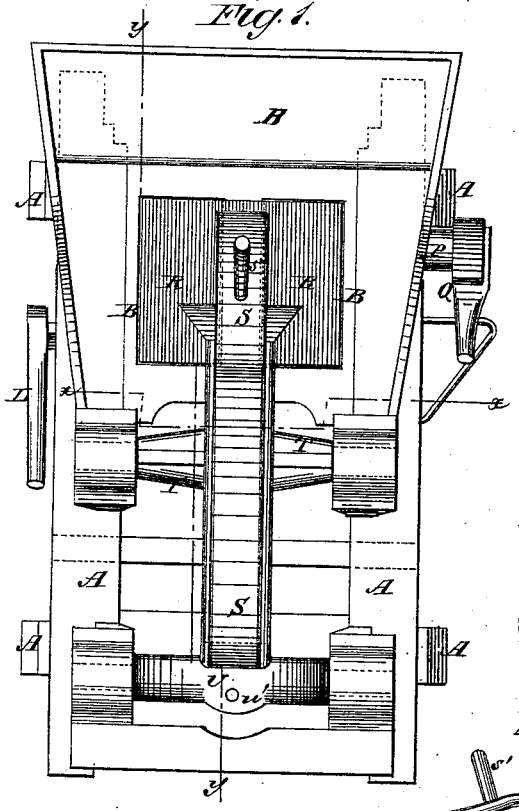


Fig. 2.

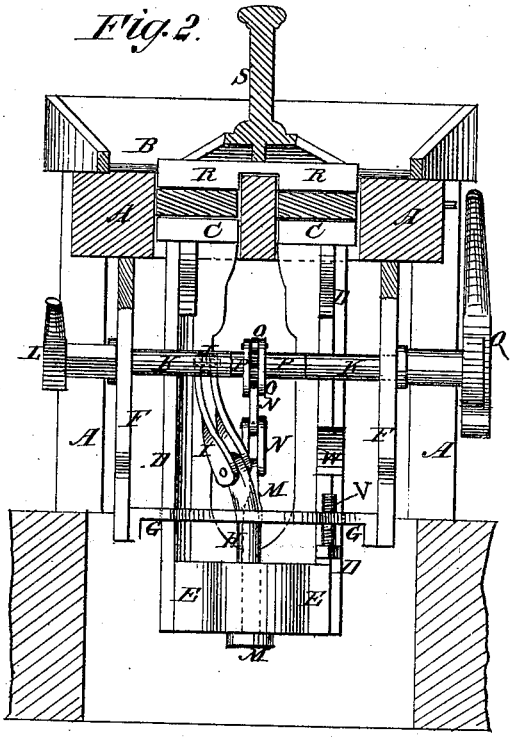
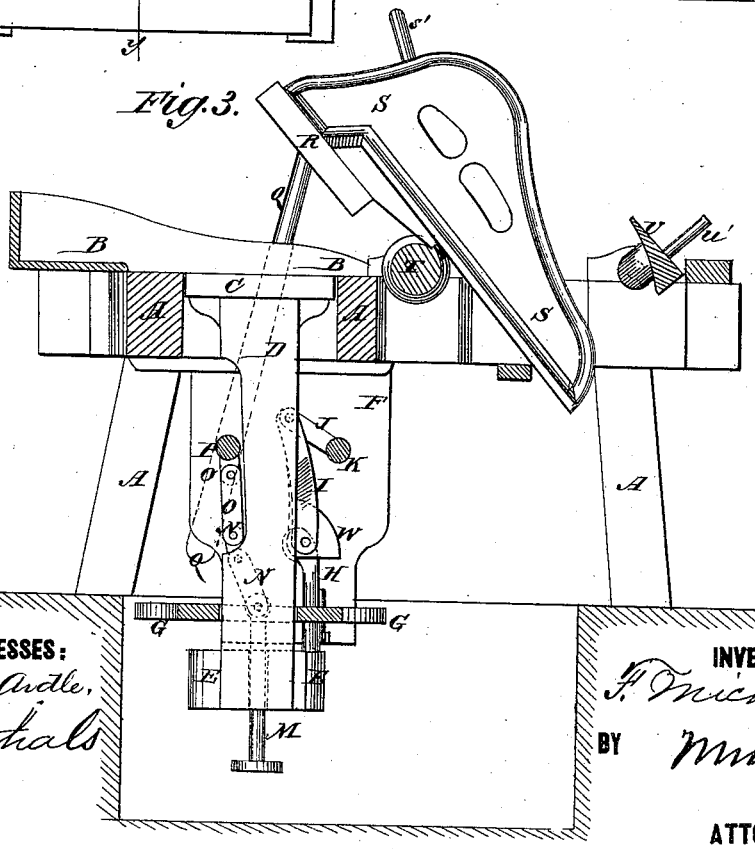


Fig. 3.



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UNITED STATES PATENT OFFICE.

FERDINAND MICHEL, OF DALLAS, TEXAS.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **181,702**, dated August 29, 1876; application filed July 31, 1876.

To all whom it may concern:

Be it known that I, FERDINAND MICHEL, of Dallas, in the county of Dallas and State of Texas, have invented a new and useful Improvement in Machine for Molding and Pressing Brick, of which the following is a specification:

Figure 1 is a top view of my improved machine. Fig. 2 is a vertical cross-section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a vertical longitudinal section of the same, taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved hand-machine for molding and pressing brick, which shall be simple in construction, convenient in use, and effective in operation, doing its work rapidly and well.

The invention consists in the combination of the followers, the bars, the block, the rods or studs, the links, the arms, the shafts, the levers, the cap-blocks, the lever, and the eccentric shaft with each other, and with the frame, the plates or frames, and the plate, as hereinafter fully described.

A is the frame of the machine, to the forward part of the top of which is attached a table or apron to receive the tempered clay, and from which it is fed into the molds. C are the followers, which enter the molds from below, and serve as bottoms to the molds when being filled. The followers C are attached to the upper ends of bars D, the lower ends of which are attached to, and held in proper relative position by, a block, E, which is weighted to withdraw the followers C when the pressure is removed.

F are plates or frames, the upper ends of which are attached to the side bars of the top frame A. The lower ends of the plates F are attached to a horizontal plate, G, through an opening in which the block E and bars D pass, and which serves as a guide for said bars. To the block E is attached a stud, H, to the upper end of which are pivoted the ends of two connecting or link bars, I, the upper ends of which are pivoted to an arm, J, rigidly attached to a shaft, K. The shaft K works in bearings in the plates F, and to its end is attached a lever, L, so that by operating the lever L the followers C may be forced up to press the brick, and to raise them out of the mold after being pressed. Through a hole in the block E passes a rod, M, which has a head formed upon its lower end, below the block E, and to its upper end are pivoted connecting links or bars N. The upper ends of the links N are pivoted to an arm, O, attached to the shaft P, which works in bearings in the frames or plates F, and to its end is attached a lever, Q, so that by operating the lever Q the followers C may be forced up to press the brick and raise them out of the molds after being pressed.

The levers L Q are upon the opposite sides of the machine, so that they may be used by two men at the same time to press the brick; or one may be operated by one man to press the brick, and the other may be operated by another man to raise the pressed brick out of the molds.

R are the cap-blocks, against which the clay is pressed by the followers C to press the brick. The cap-blocks R are attached to the forward end of a lever, S, attached to a rock-shaft, T, which rocks in bearings attached to the frame A. To the rear part of the frame A is pivoted an eccentric shaft, U, which may be turned forward beneath the rear end of the lever S, to resist the pressure against the cap-blocks R when the bricks are being pressed, and which may be turned back to allow said cap-blocks to be raised, for putting in the clay and removing the pressed brick.

The eccentric shaft U is provided with a handle *w'*, and the lever S is provided with a handle, *s'*, for convenience in operating said parts.

The thickness of the bricks is regulated by a set-screw, V, which passes up through the plate G, and against the forward or upper end of which strikes a projection, W, formed upon or attached to one of the bars D, so as to limit the descent of the followers C in the molds.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

The combination of the followers C, the bars D, the block E, the studs or rods H M, the links I N, the arms J O, the shafts K P, the levers L Q, the cap-blocks R, the lever S, and the eccentric shaft U with each other, and with the frame A, plates or frames F, and the plate G, substantially as herein shown and described.

FERDINAND MICHEL.

Witnesses:
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