L. PATTERSON.

Brick-Machine.

No. 168,667.

Patented Oct. 11, 1875.

Fig. 1.

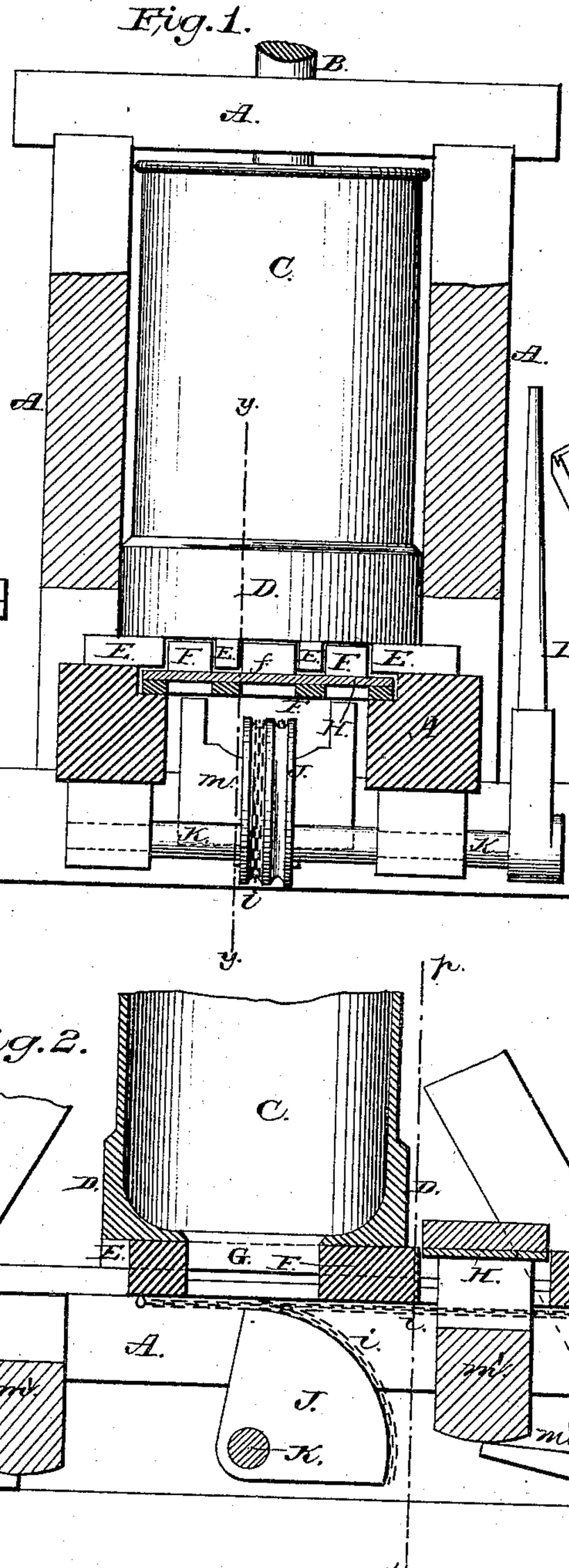


Fig. 3.

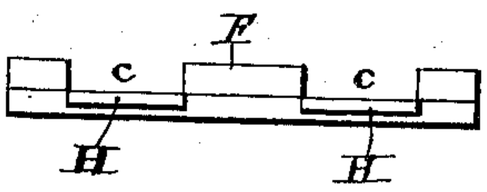


Fig. 3.

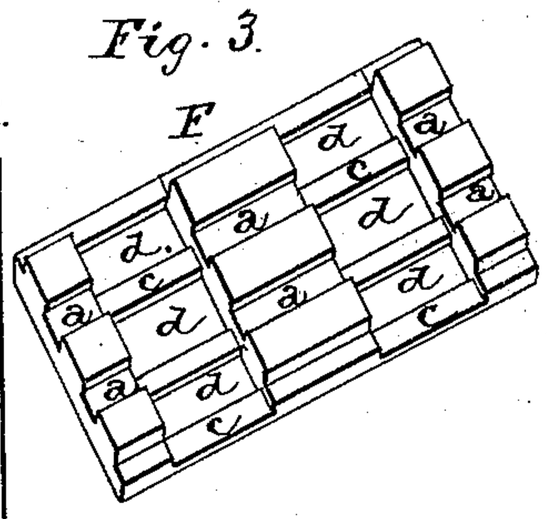
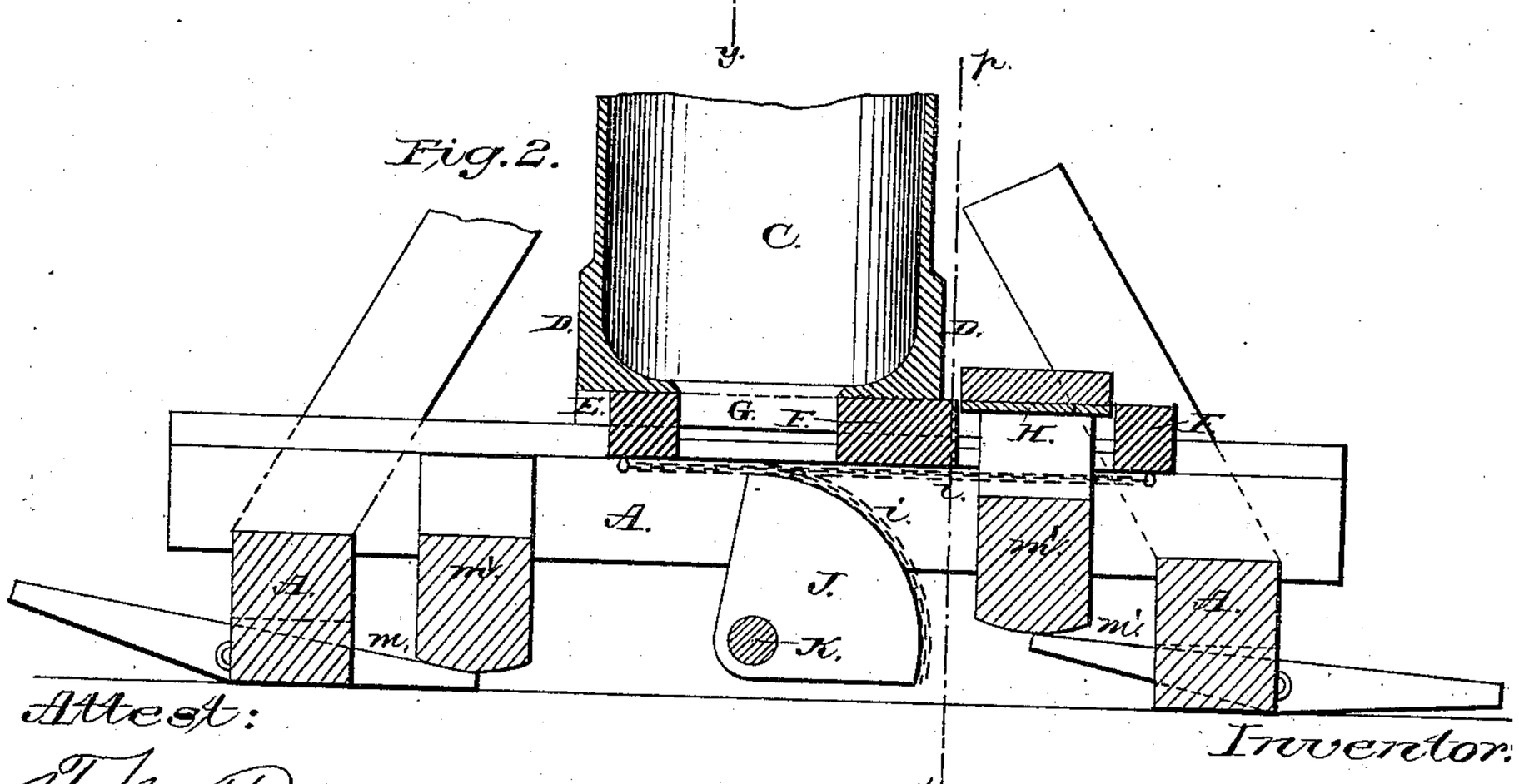


Fig. 2.



Attest:

F. H. Painter

J. K. Hunter

Inventor:

Samuel Patterson

UNITED STATES PATENT OFFICE.

LEMUEL PATTERSON, OF PARKER CITY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN K. HUNTER, OF SAME PLACE.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **168,667**, dated October 11, 1875; application filed May 19, 1875.

To all whom it may concern:

Be it known that I, LEMUEL PATTERSON, of Parker City, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Brick-Machines; 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 pertains 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.

My invention relates to an improvement in brick-machines; and it consists in the arrangement and combination of parts that will be more fully described hereinafter, whereby the molds are made to form a part of an attachment to the hopper, and the bricks are formed in the act of forcing out the clay. The bricks are deposited upon a sliding rack, and delivered alternately upon opposite sides of the hopper, where they are raised above the rack by means of a foot-lever.

Figure 1 is a side elevation, partly in section. Fig. 2 is a vertical section taken on the line *y y*, Fig. 1. Figs. 3 and 4 are views of the molds.

A represents a suitable frame-work; B, a vertical shaft that revolves in the hoppers C, and which has suitable devices attached thereto for tempering the clay and forcing it through the holes G in the bottom of the hopper.

The molds are formed either as a part of or an attachment to the hopper by means of the flanges E, which project downward from the bottom D of the hopper just the thickness of a brick, and the width of a brick apart. These flanges fit in the grooves *a*, that are formed in the top of the slide-rack F, which rack receives the bricks and delivers them alternately at each end of its movement.

Extending across the top of the rack, at right angles to the grooves *a*, are the two grooves *c*, in which the boards H are placed, to receive the bricks as they are formed in the molds above. The rack, as it is moved back and forth under the molds, alternately brings the grooves *c* just under the holes G, so that the bricks descend upon the boards, to be delivered alternately on opposite sides of the hopper to the workmen ready to receive them.

Through the bottom of the rack F, up into the grooves *c*, are made a number of holes, *d*, through which the bifurcated ends of the levers *m'* pass as they are pressed upward by the foot-levers *m*. The upper ends of the levers, pressing against the under sides of the boards, raise the boards and bricks up to the top of the rack, as shown in Fig. 2, ready to be carried away. Thus it will be seen that the molds are formed in the bottom of the hopper alone, and in the very act of forcing the clay out of the hopper. By this means all of the usual molds are dispensed with, and the bricks are delivered entirely free.

Journaled in suitable bearings in the bottom of the frame A is the lever K, which has an operating-lever, L, secured to its outer end, and the segment J fastened to it just under the center of the hopper. Attached to the two corners of this segment are the two chains *i*, which have their outer ends fastened to opposite ends of the slide-rack, F, so that as the lever is moved from side to side, the rack is drawn back and forth under the molds formed in the bottom of the hopper. By placing this segment just under the molds, at each of its movements the rack F is made to deliver a fresh charge of bricks.

What I claim is—

1. In a brick-machine, a hopper, C, having the molds formed in, or as an attachment to, its lower end, substantially as set forth.

2. In a brick-machine, the molds E, forming the discharge from the hopper, whereby the bricks are formed by the act of forcing out the clay, as described.

3. The rack F, having the grooves *c*, in which to lay the boards H, to receive the bricks from the molds, as shown.

4. The combination of the rack F and boards

H with the levers *m m'*, whereby the bricks are raised upward ready for delivery, as specified.

5. In a brick-machine in which the molds form a part of the hopper, the combination of the segment J, chains *i*, and rack F, whereby a charge of bricks is alternately delivered at opposite sides of the hopper, as set forth.

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

LEMUEL PATTERSON.

Witnesses:
E. H. RANDOLPH,
S. B. HARRISON.