S. W. Bennett,

Brick Mach.

No. 92,778. Patented Jul. 20. 1869.

Fig. 1.

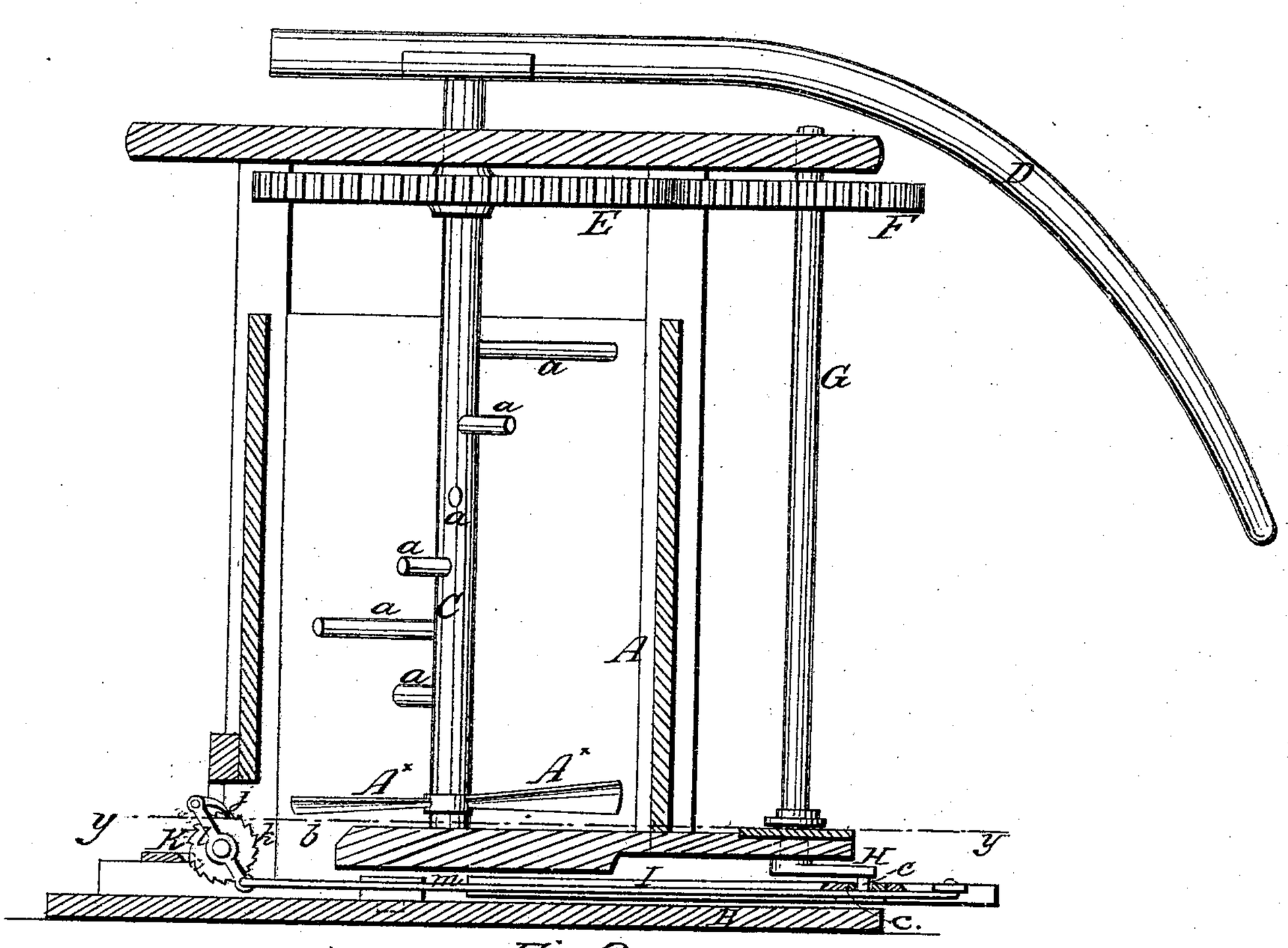
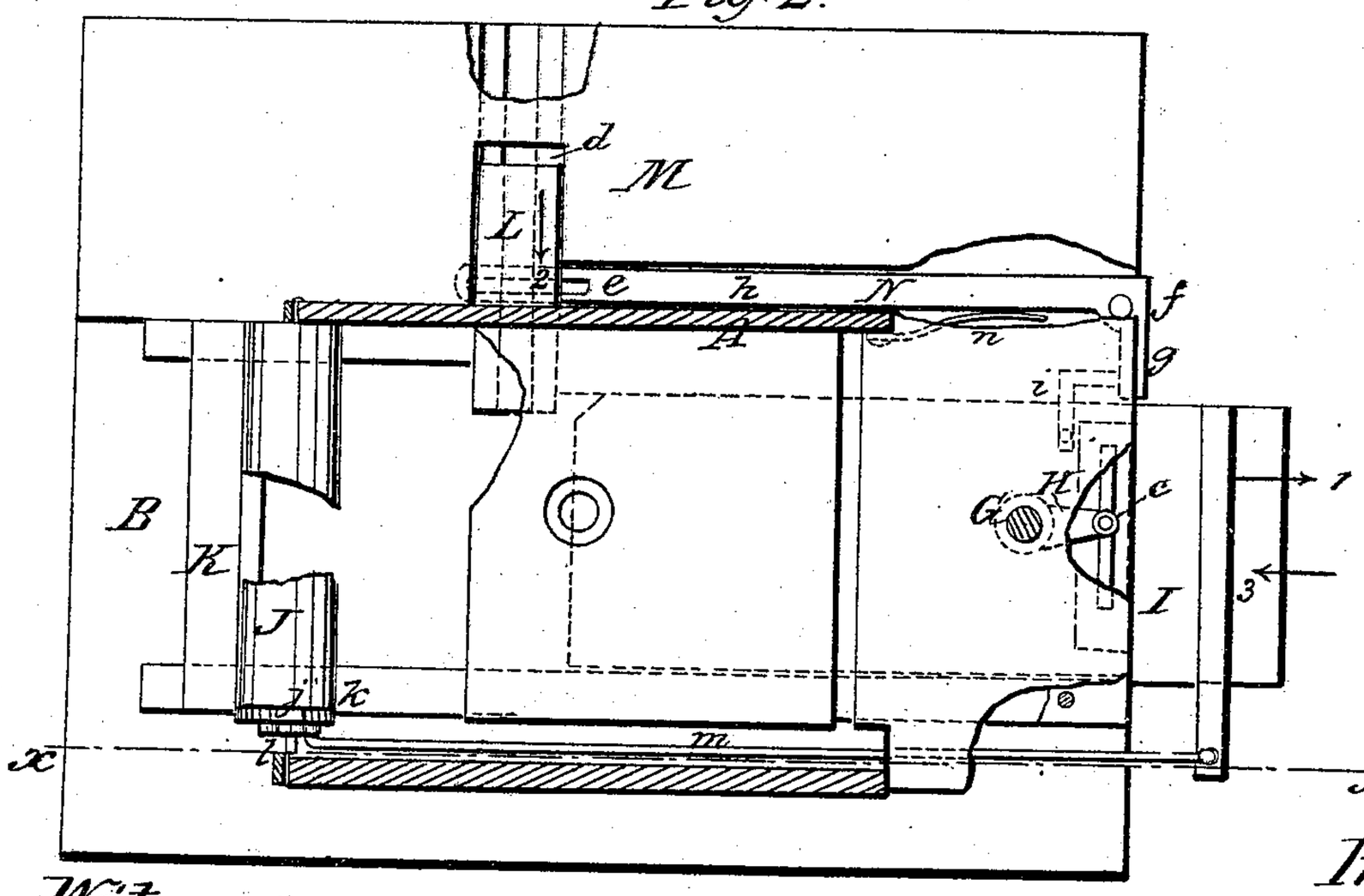


Fig. 2.



Witnesses

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S. W. BENNETT, JR., OF MONROE, LOUISIANA.

Letters Patent No. 92,778, *dated July* 20, 1869.

IMPROVED BRICK-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, S. W. BENNETT, Jr., of Monroe, in the parish of Ouachita, and State of Louisiana, have invented a new and improved Brick-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved machine for making bricks, and has for its object simplicity and economy in construction, rapidity of execution, and pressure-power requisite to form perfect bricks from well-tempered clay.

In the accompanying sheet of drawings—

Figure 1 is a vertical section of my invention, taken in the line *x x*, fig. 2.

Figure 2, a horizontal section of the same, taken in the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

A represents the box or case of the mud-mill of the machine.

This box or case is fitted on a suitable base, B, and has within it a vertical shaft, C, on the top of which a sweep, D, is secured.

The shaft C has a series of arms or blades, *a*, projecting from it horizontally, and in a spiral line from its upper to its lower part, (see fig. 1,) while on the lower end of the shaft there are secured spiral or screw-blades, A*, (three, more or less,) which serve to press the clay through an opening, *b*, into the mould underneath.

The clay, properly moistened, is placed, as usual, into box or case A, and the shaft C being rotated by horse or other power, the arms or blades *a* temper the clay, and at the same time, owing to their spiral attachment to the shaft, feed the clay down to the bottom of the box or case.

On the upper part of the shaft C there is keyed a spur-wheel, E, which gears into a pinion or smaller wheel, F, on a vertical shaft, G, at the outer side of the box or case A, the relative diameter of the wheel E and pinion F being such that the shaft G will make two and a half ($2\frac{1}{2}$) revolutions to one of shaft C.

On the lower end of the shaft G there is keyed a crank, H, the pin *c* of which works in an oblong slot in a horizontal slide, I, underneath the mud-mill.

This crank-wheel gives a reciprocating movement to the slide I, and the slide moves the moulds, one at a time, underneath a pressure-roller, J, placed at the lower part of one side of the case or box A, and also underneath a scraper, K, at the outer side of roller J.

The empty moulds are fed into the machine at one side of the same, and in front of the slide I, by means of a sliding plate, L, which works in a groove, *d*, in a platform, M, attached to the base of the machine.

This plate L is connected to a lever, N, by means of a pin passing through an oblong slot, *e*, in the lever, and said lever is of bent form, having its fulcrum at *f*, (see fig. 2,) and its short arm *g* is actuated from the slide I, the long arm *h* being connected with plate L.

The short arm *g* is acted upon by an arm, *i*, attached to slide I, the latter, as it moves in the direction indicated by the arrow 1, causing the plate L to move in the direction indicated by arrow 2, and feeding the brick-mould under the case or box A, so that it can be filled with clay, and also placing it in front of slide I, the latter, as it returns in the direction indicated by arrow 3, forcing the filled mould under roller J, which is rotated at this time by a pawl, *j*, engaging with a ratchet, *k*, attached to one end of the roller, the pawl being pivoted to a lever, *l*, which is operated from the slide I, in consequence of being connected therewith by a rod, *m*, as shown clearly in fig. 1.

The roller compresses the clay in the mould, and the scraper K removes the superfluous clay therefrom.

At the termination of the forward movement of the slide I, there is a dwell or cessation of movement sufficiently long to admit of an empty mould being placed or adjusted in front of plate L, ready to be shoved into the machine as the slide approaches the termination of its backward movement.

When the slide I moves forward and feeds a filled mould to the roller J, a spring, *n*, actuates the bent lever N, and throws the plate L back, to admit of an empty mould being placed in front of it.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The brick-press, with the gearing E F, shaft G, crank H, and slides I and L, constructed and arranged as described, and to operate in combination with the roller J and scraper K, in the manner and for the purpose substantially as set forth.

The above specification of my invention signed by me, this 14th day of July, 1868.

S. W. BENNETT, JR.

Witnesses:

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