

Mattix & McPherson.

Tile Mach.

N^o 91,951.

Patented Jun. 29, 1869.

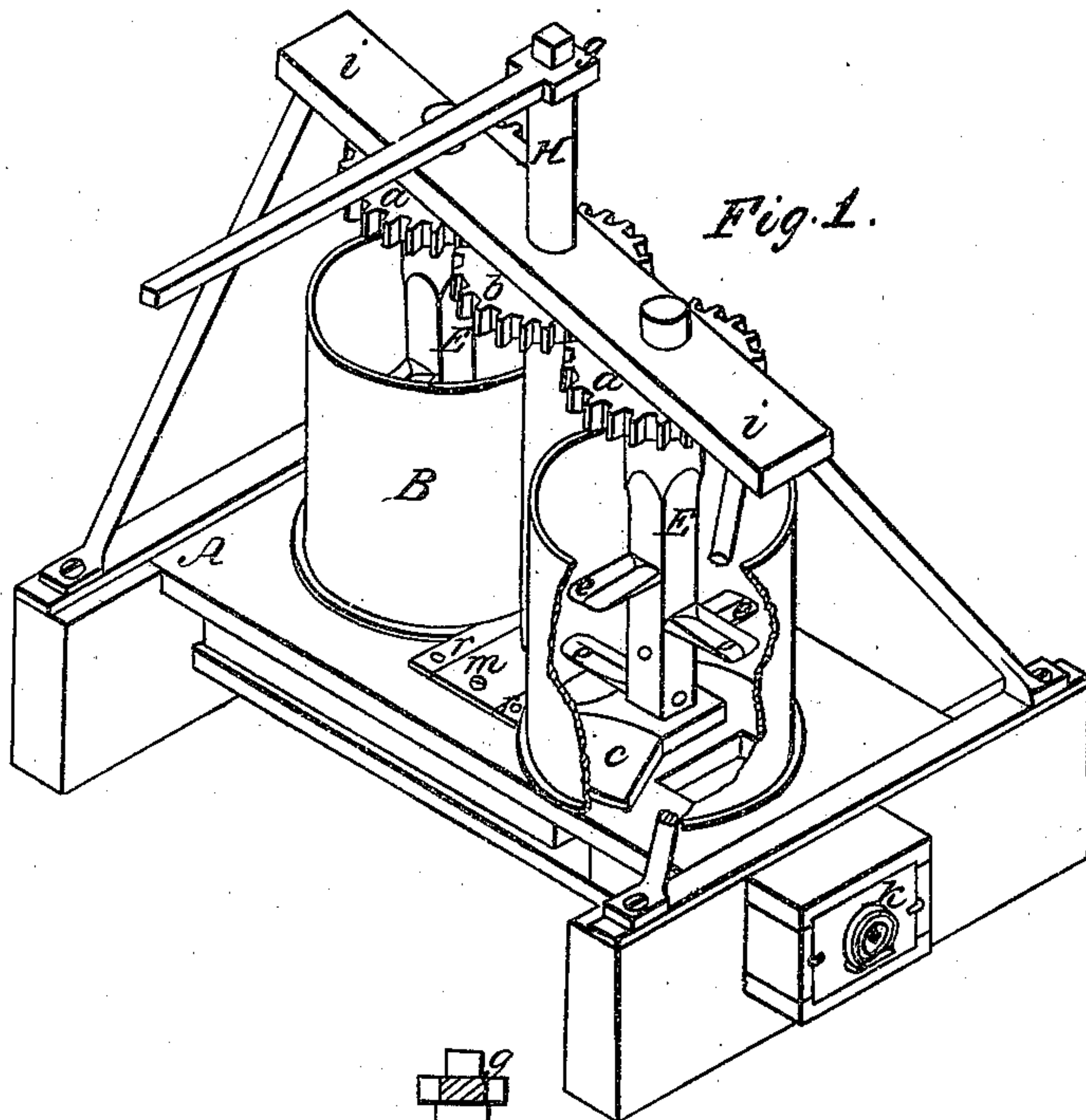


Fig. 1.

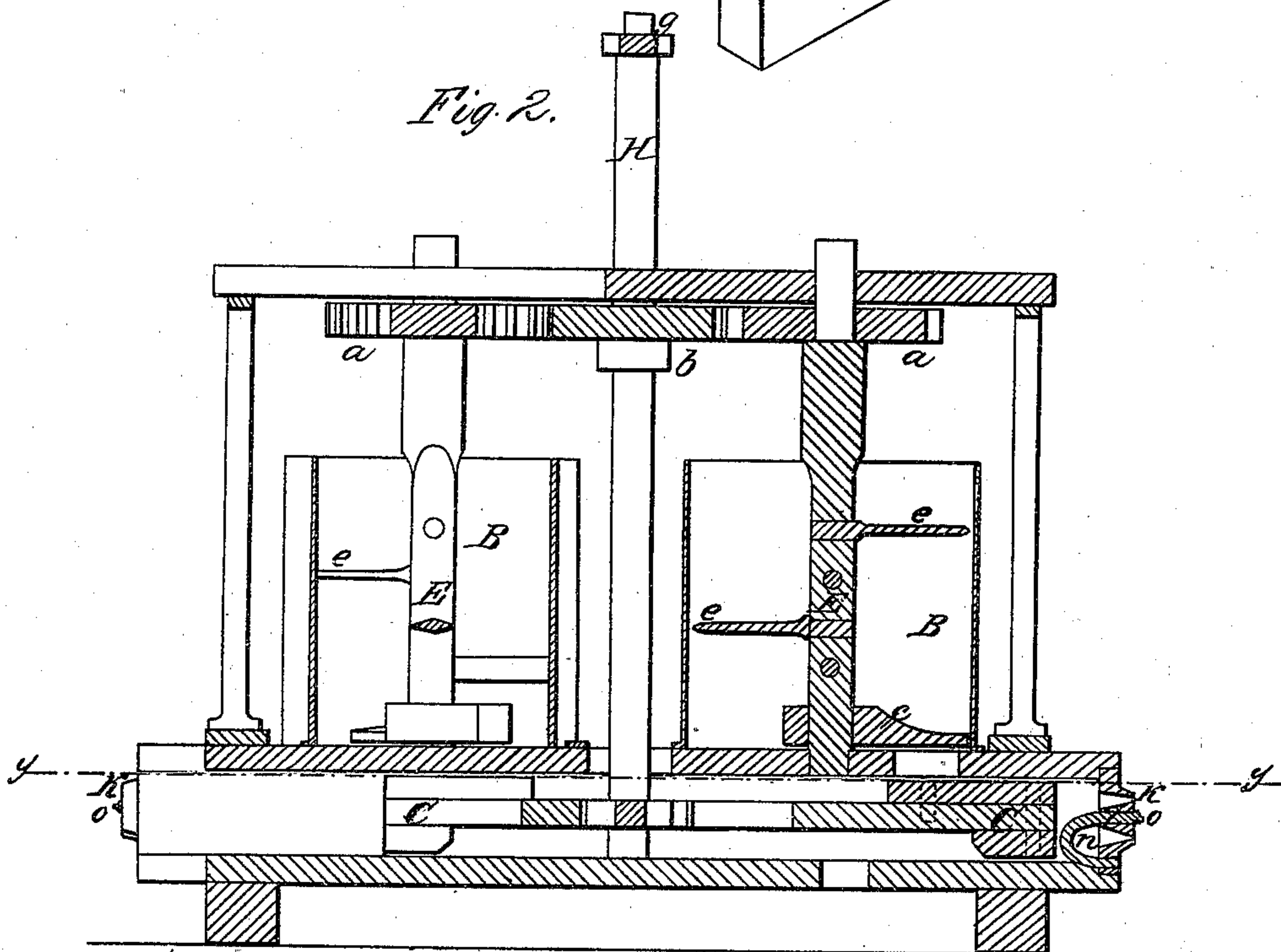


Fig. 2.

Witnesses;
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United States Patent Office.

SAMUEL MATTIX AND JAMES McPHERSON, OF CLINTON COUNTY,
INDIANA.

Letters Patent No. 91,951, dated June 29, 1869.

TILE-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 we, SAMUEL MATTIX and JAMES McPHERSON, of the county of Clinton, and State of Indiana, have invented a new and improved Tile-Machine, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of the tile-machine.

Figure 2 is a vertical sectional view on the line *x-x*.

Figure 3 is a longitudinal sectional view on line *y-y*.

Figures 4 and 5 are views of the die-plates.

Our invention has for its object to provide a cheap and rapid means of producing tiling, by simple and effective machinery; and consists in forcing clay, after proper preparation, through die-plates, by means of a toothed plunger, actuated by a segment of a cog-wheel working on a shaft.

To enable others skilled in the art to understand and use our invention, we will proceed to describe the manner in which we have carried it out.

In the said drawings—

A is a case, made of cast-iron, or other suitable material, upon which rest the hoppers B B, in which is placed the clay for making the tiles.

In box A works a double-headed plunger C, of the form shown in fig. 3, which has a cogged slot in its centre, running longitudinally.

The hoppers B B have each an opening in their bottoms, to admit the clay into the case below for the action of the plunger.

In each of these hoppers revolves a shaft, E, on which are arranged triangular knives *e e*, for the purpose of thoroughly mixing the clay.

At the bottom of each of these shafts is attached a cut-off, *c*, which governs the supply of the clay for the action of the plunger.

On the upper ends of the shafts E E are cog-wheels *a a*, having their bearings in the frame-work *i i*.

The main shaft H, having a lever-handle at *g*, passes

down through the middle of the frame-work *i i*, carrying a cog-wheel, *b*, which works the cog-wheels *a a*.

There is attached to the lower end of the shaft H, where it passes through the slot in the plunger C, a segment of a cogged wheel, R, so arranged that when the shaft is revolved, the cogs of the segment act alternately upon the cogged sides of the slot in the plunger, and force the plunger first in one direction and then in the other.

Inserted in each end of case A, are die-plates K K, through which the clay is forced, by the plunger C, to form the tile.

l is a core, attached to the die-plate, by means of the yoke *n*, (as seen in fig. 5,) on which it is secured by means of the button *o*, (as seen in fig. 4,) and is removable at will.

The opening in the case A, around the main shaft H, is closed by the notched slides *m m* running between the plates *r r*.

The case A has two openings in the under side, by which all the superfluous clay is ejected on the return stroke of the plunger.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The box A, hoppers B B, shafts E E, cog-wheels *a a*, knives *e e*, and cut-offs *c c*, in combination with shaft H, with its cog-wheel *b*, toothed plunger C, segment of cog-wheel R, and die-plates K K, with their cores *l l*, all constructed and operated substantially as described.

2. Also, the toothed plunger C and segment of cog-wheel R, in combination with the die-plates K K, with their cores *l l*, substantially as and for the purpose set forth.

SAMUEL MATTIX.
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Witnesses:

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