P. Marvin,

Brick Machine.

No. 62,764. Patented Mar. 12, 1867.

Fig. 2

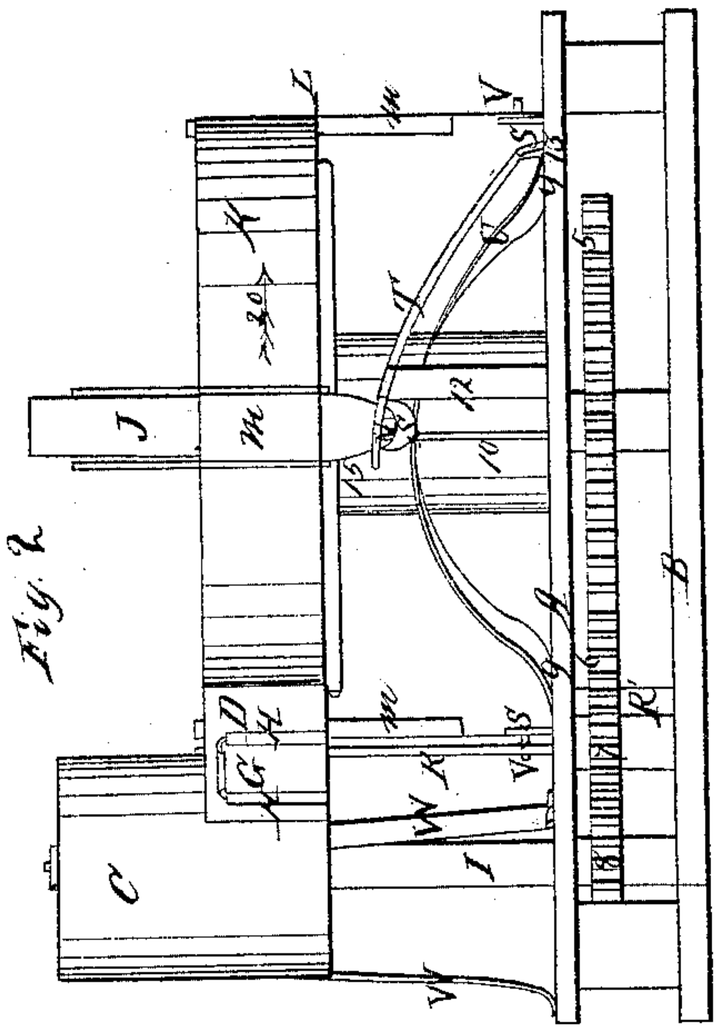


Fig. 3.

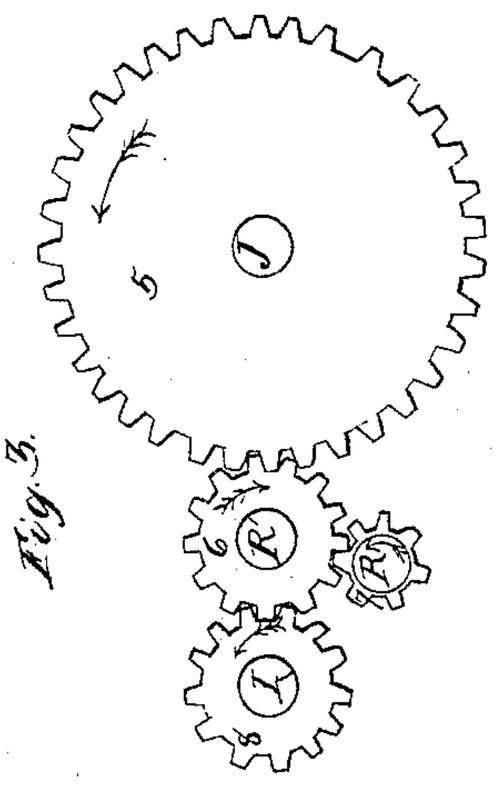


Fig. 1.

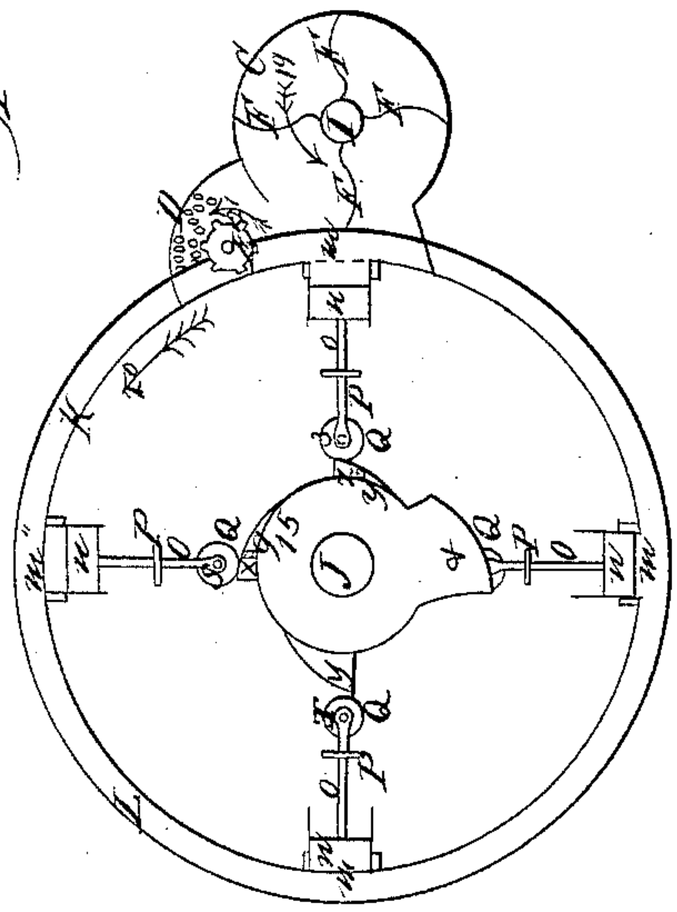
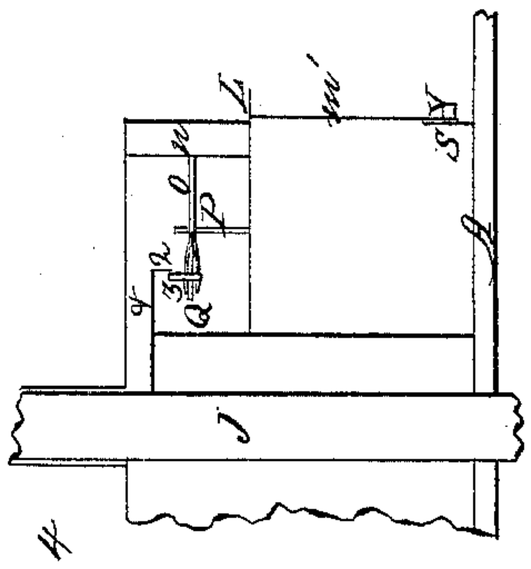


Fig. 4



Witnesses
Geo L Chapin
A Hayward

Inventor
Peter Marvin
By his attorney
Geo. L. Chapin

United States Patent Office.

PETER MARVIN, OF WARSAW, INDIANA.

Letters Patent No. 62,764, *dated March* 12, 1867.

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, PETER MARVIN, of Warsaw, in the county of Kosciusko, and State of Indiana, have invented a new and useful Improvement in Brick Machine; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a plan view of my machine.

Figure 2 is an elevation of the same.

Figure 3 is a plan view of the gearing used for driving the machine.

Figure 4 is a sectional elevation of one of the cams used for operating the dies and the door against which the brick is pressed.

The nature of my invention consists, first, in the use of curved arms, attached to the vertical shaft of the mixing-box, operated in combination with a winged or corrugated picker, for the purpose of mixing and forcing the clay into the moulds, and carrying the stone and extraneous matter into a suitable box, having a sliding door, from which it may be removed, and in the use of a central stationary drum, to which are attached cams, so arranged as to operate a series of dies working in the rim of a revolving wheel so constructed as to allow suitable moulds to be placed in its periphery, and also have sliding doors for opening and shutting said moulds, by means of suitable cams, for the purpose of allowing the clay to enter the moulds and the pressed brick to be forced out upon a suitable flange from which the brick may be removed.

The object of my invention is to construct a machine for making brick of damp clay, as it is taken from the bank, and press said brick hard enough to rack up on the yard without the necessity of being dried by the sun, and to arrange the cams for operating the dies inside of the moulds, for the purpose of pressing the brick with the least possible amount of power.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

A B is the substantial frame, which supports my invention, and is made of any material desired, and the two beds placed such a distance apart as to allow the gearing 5, 6, 7, 8, to operate freely. J shows the shaft and 15 the drum which support the revolving rim K, figs. 1 and 2. This rim has the flange L, for receiving the brick when forced out of the moulds *m*, made in said rim, and also guides for supporting the sliding doors *m'*, so that they may be opened by means of cam *t*, when it is required to fill the moulds, shown at *m*, with clay, and shut them, at the proper time for pressing the brick, by means of cam X. By this arrangement, the doors *m'*, will be open when passing the mixing box, and at the opposite side of the rim K, as seen at fig. 2, and will be closed at *m''* for the purpose of allowing the bricks to be pressed. *n* are the dies, operating in moulds *m*, and having the shanks *o* rigidly attached and passing through suitable holes made in the guides P. The shanks *o* are made long enough to properly work the dies *n* when the cams X, Y, Z, &, strike against the friction-rollers Q, pivoted to the inner ends of said shanks. The cams X Z are made adjustable by means of the keys 4 4, which are made wider at the top than the bottom, by which means one cam may be made to move the dies adjoining the mixing-box such a distance from the periphery of the rim K as may be necessary in order to fill the moulds *m* with the desired amount of clay for making brick of different thicknesses, and the other cam to move the dies *n* the proper distance to press brick of such a thickness as will correspond with the amount of clay received into the mould. The cam & is used for drawing in the dies *n* after they have been forced out by means of the cam Y. And to accomplish this, a projection or rim, 2, is made on the lower edge, as seen at fig. 4, for the purpose of passing over the pin 3, figs. 1 and 4. I is the shaft which supports the mixing apparatus F, arranged to operate in the box C. The mixers F are curved as seen at fig. 1, and are made to run in the direction indicated by dart 19, by which means the clay may be both mixed and forced into moulds *m*. The corrugated picker E, fig. 1, is made the same height as the mixers F, and is very important in carrying stone, &c., into the box D, from which it may be removed by means of the door G. If this picker, or a similar device, was not used in connection with my machine, it could not be operated, for the stone and extraneous matter would either stop or break the same.

Operation.

The power may be applied to the top of shaft J, which will cause the rim K to move in the direction shown by dart 20, and the picker in the direction indicated by the dart 21. The clay should be put in box C, after which the bricks can be taken off of the rim L as fast as pressed out of the moulds *m*. The door G may be raised from time to time so as to remove the stone from box D, when required.

Having thus fully described my machine, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the mixers F, picker E, and moulds *m*, substantially as set forth.

2. The cams X, Y, Z, &, in combination with dies *n*, moulds *m*, guides P, and rim L, substantially as and for the purpose set forth and described.

PETER MARVIN.

Witnesses:

GEO. L. CHAPIN,

A. HAYWARD.