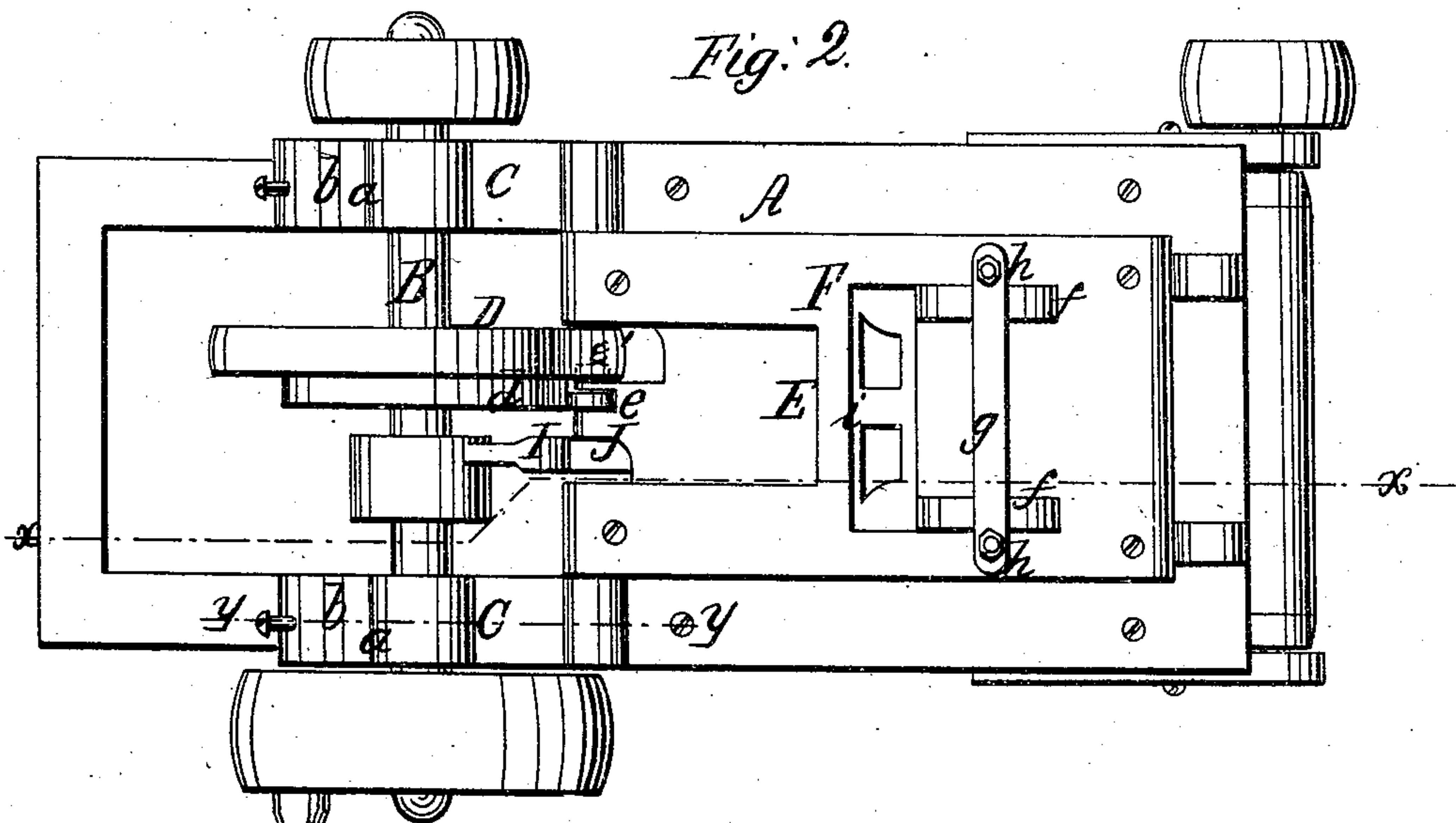
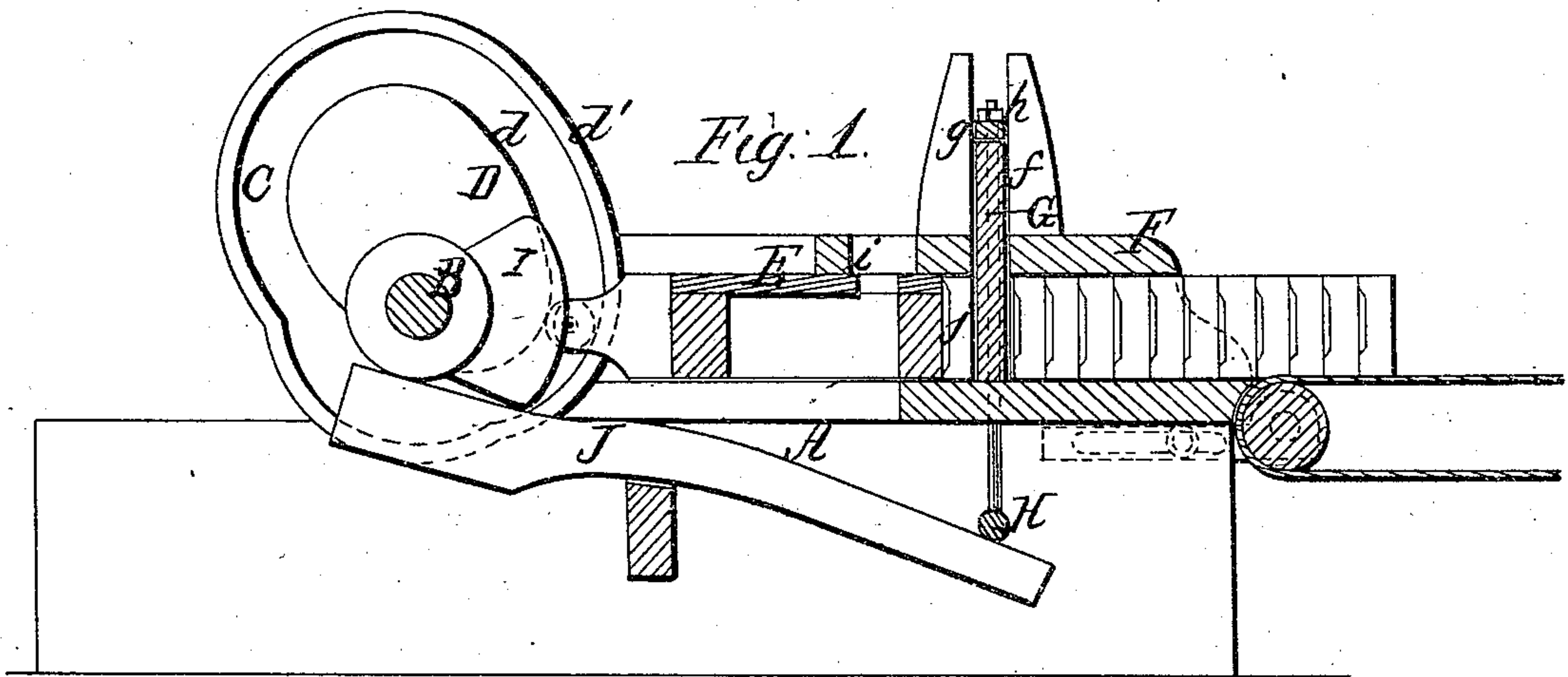


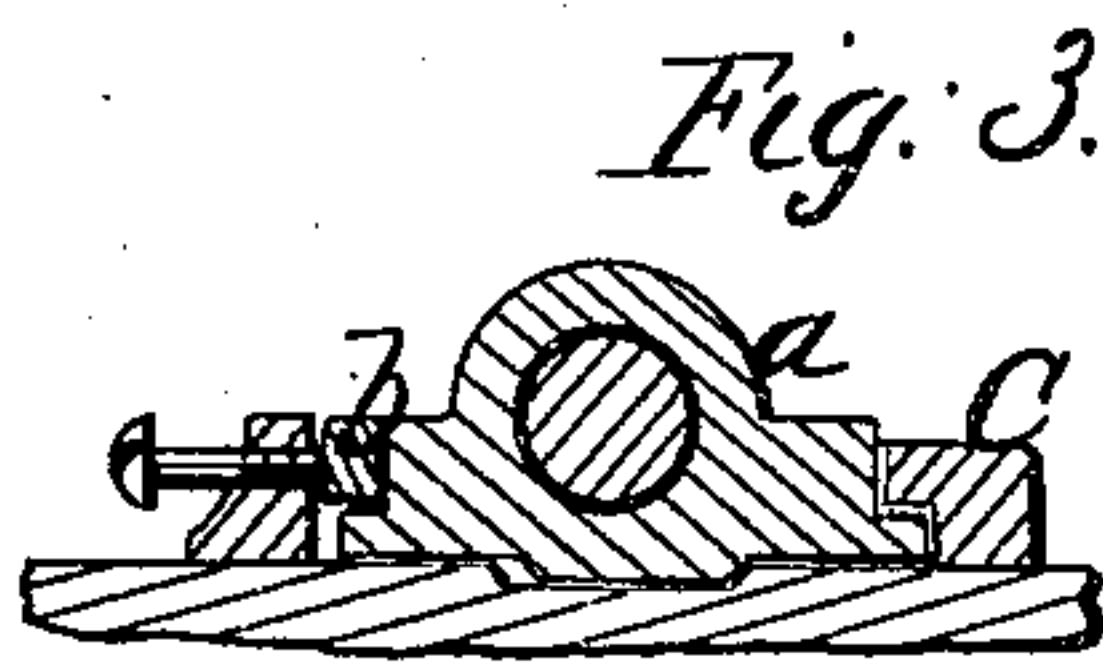
No. 68,494.

PATENTED SEPT. 3, 1867.

W. L. DRAKE,
BRICK PRESS,



Witnesses;
Theo Truske
J. A. Service



Inventor;
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United States Patent Office.

W. L. DRAKE, OF STURGIS, MICHIGAN.

Letters Patent No. 68,494, dated September 3, 1867.

IMPROVED BRICK-PRESS.

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, W. L. DRAKE, of Sturgis, in the county of St. Joseph, and State of Michigan, have invented a new and improved Brick-Press, and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and improved machine for pressing bricks after being moulded, either by machinery or by hand, and when sufficiently dry or hard to receive and retain an impression.

The object of the invention is to give the bricks a perfect shape, sharp or angular corners, and also give one side a concave surface, which is desirable in order to form interstices to receive and hold the mortar in laying a wall. In the accompanying sheet of drawings—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, fig. 2.

Figure 2, a plan or top view of the same.

Figure 3, a section of a portion of the same, taken in the line *y y*, fig. 2.

Similar letters of reference indicate like parts.

A represents a framing or support, constructed in any proper manner, to sustain the working parts, and B is a shaft, placed transversely on said framing, and fitted in suitable bearings C C, the boxes *a* of which have India rubber or other suitable elastic material *b* behind them, to admit of a lateral yielding movement of the shaft B, when necessary. On the shaft B there is firmly keyed, or otherwise secured, a double cam, D, formed by having an irregular curved groove, *c*, made in one side of a similar shaped plate, the groove *c* forming two cam surfaces *d d'*, one of which, *d*, acts against a friction-roller, *e*, in a plunger, E, and gives a shoving motion to the plunger, and the other, *d'*, works over another friction-roller, *e'*, attached to the same plunger, and draws the latter back, the surface *d'* being a lip, which works over or in front of the roller *e'*, the latter being within the groove *c*. The plunger E works in a box, F, on the framing A. The outer end of this box is open, and a slide or stop G works vertically in it between guides *f f*. This slide or stop extends entirely across the box F, and it has a bar, *g*, attached to its upper end, the ends of the bar projecting out beyond the sides of the slide or stop, and having vertical rods *h h* attached to it, which extend down through the sides of the box, and are connected at their lower ends by a bar, H. On the shaft B there is keyed, or otherwise secured, a cam, I, which acts against a lever, J, in the framing A, and causes said lever, at the proper time, to throw up the slide or stop G, the latter falling, by virtue of its own gravity, when the lever J ceases to act upon it. In the top of the box F there is an opening, *i*, through which the bricks to be operated upon are fed into the box.

The bricks are pressed one at a time, the slide or stop being down, and forming a bearing for one side of the brick, while the plunger E acts against the opposite side, and when the plunger E has been forced forward a requisite distance to subject the brick to the required pressure, the cam I acts against the lever J, which throws up the slide or stop G, and allows the plunger to force the brick beyond the slide or stop, the latter, as soon as the plunger is drawn back, dropping so as to be ready to serve as a bearing for the succeeding brick. The face of the plunger E is provided with a raised pawl or projecting surface, *j*, to give the sides of the brick with which it comes in contact, a concave surface, and also to insure the filling out of the bricks at their angles or corners. This will be fully understood by referring to fig. 1.

In case of a brick being rather too thick for the stroke of the plunger E, the shaft B, by means of the springs or elastic substances *b b*, is allowed to yield or give so as to enable the cam to complete its revolution without subjecting it or the plunger to any undue strain or pressure. The pressed bricks are carried from the machine by an endless apron, K, shown in red in fig. 1.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

The box F and plunger E, in combination with the slide or stop G, arranged to operate in the manner substantially as and for the purpose set forth.

Witnesses:

CREBILLION JACOBS,
IRA F. PACKARD.

W. L. DRAKE.