

F. L. Clark
Brick Machine.

N^o 10,432.

Patented Apr. 5, 1870.

Fig: 2.

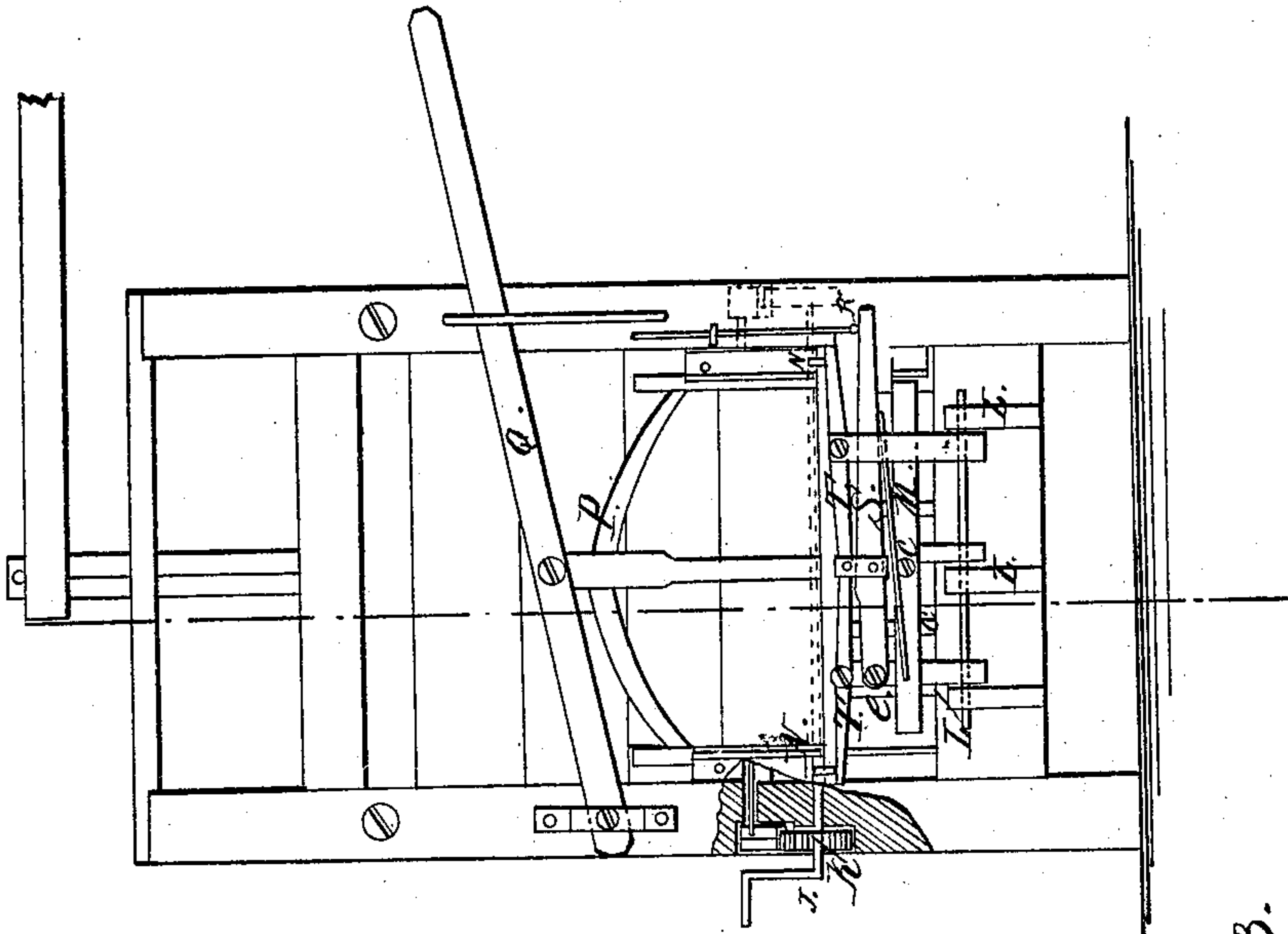


Fig: 1.

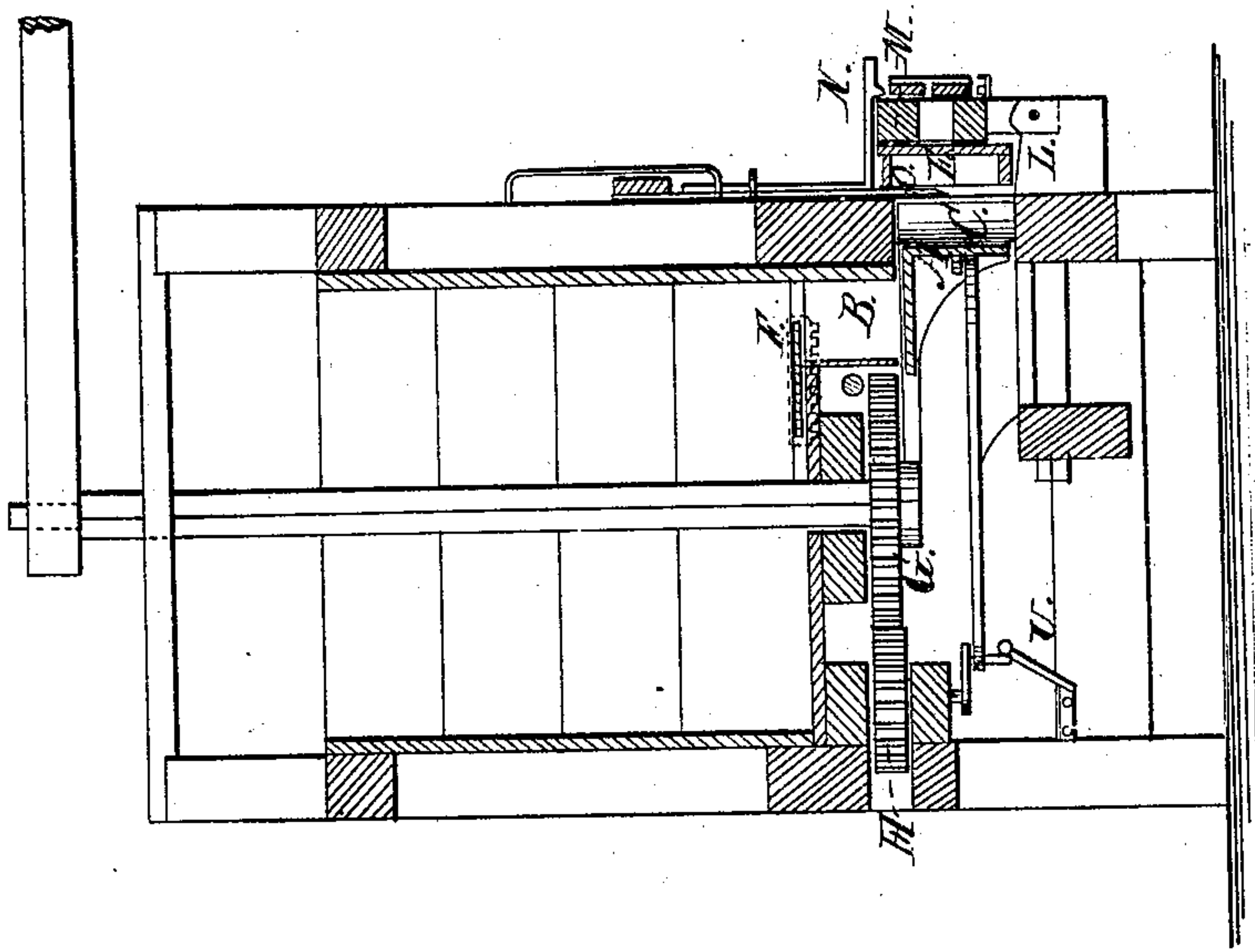


Fig: 3.



Witnesses
Chas. Nida
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United States Patent Office.

FREDERIC L. CLARKE, OF OAKLAND, ILLINOIS.

Letters Patent No. 101,432, dated April 5, 1870.

IMPROVEMENT IN BRICK-MACHINES.

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, FREDERIC L. CLARKE, of Oakland, in the county of Coles and State of Illinois, 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 others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in brick-machines, whereby it is designed to provide a simple and efficient arrangement for delivering the ground clay to the molds and pressing it therein, and for applying and removing the said molds, all as hereinafter more fully described.

Figure 1 represents a sectional elevation, taken on the line *x x* of fig. 2;

Figure 2 represents a front elevation, partly broken; and

Figure 3 represents a plan of the mold-box.

Similar letters of reference indicate corresponding parts.

I arrange a sliding presser, A, under the delivering-passage B, leading from the bottom of the grinding-mill at one side of the same.

This plunger or presser receives the ground clay in front, and forces it between the tapered dividing-plates C into the mold-boxes E, set in front of the said dividing-plates, which coincide in length, breadth, and position with the dividing-walls D of the mold-boxes.

The passage B is regulated in capacity by a sliding gate, F, so as to pass the requisite quantity of clay for filling the molds at one movement of the plunger.

The clay receives two actions of the press, the first pressing it into the spaces between the dividing-plates, which narrow toward the rear, the second forcing it from the said spaces into the boxes, and supplying a fresh batch to the said spaces.

The presser is operated by a crank and connecting-rod, deriving motion from a wheel, H, gearing with a spur-wheel, G, on the grinding-shaft.

The gate F is moved by a crank-shaft, I, and pinions K thereon.

The mold-boxes E are placed on bearings or supports L, and clamped up snugly against the frame in front of the dividing-plates C, to receive the clay by a hinged clamping-frame, M, secured and held against the force of the plunger by spring catches N, which take over the top of the frame M.

A vertically-sliding knife, O, connected to a gate, P, arranged in suitable ways, and provided with an operating-handle, is provided, to be forced down between the mold-boxes and the dividing-plates C, to separate the clay in the molds from that beyond, and to shape the bricks on one side.

When the lever Q of this knife-gate is pressed down, it strikes a stud of a spring rod, R, projecting over a spring lever, S, on the clamping-frame M, pressing it down and throwing up the tripping-levers T to disengage the spring catches N from the clamping-frame, to permit the mold-box to be removed for the substitution of another.

It is intended that one set of molds shall be filled by one movement of the plunger, and this may be geared to work faster or slower, as required, the speed being limited only by the ability of the attendants to supply and remove the mold-boxes.

An alarm-spring, U, may be arranged to be sprung by the driving-pinion H at each revolution, for striking a blow at the proper time, to indicate when to move the cutter for separating the clay and disengaging the clamping-frame.

Having thus described my invention,

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

1. The combination with the clamping-frame of the trip-levers T, lever S, spring catches N, and spring pressing-rod R, when arranged substantially as specified.

2. In combination with the devices of the above clause, the plunger or presser A and dividing-plates C, when arranged, constructed, and operating together, as herein shown and described.

F. L. CLARKE.

Witnesses:

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