

W. H. Paige,
Brick Machine,
No. 45,377, Patented Dec. 6, 1864.

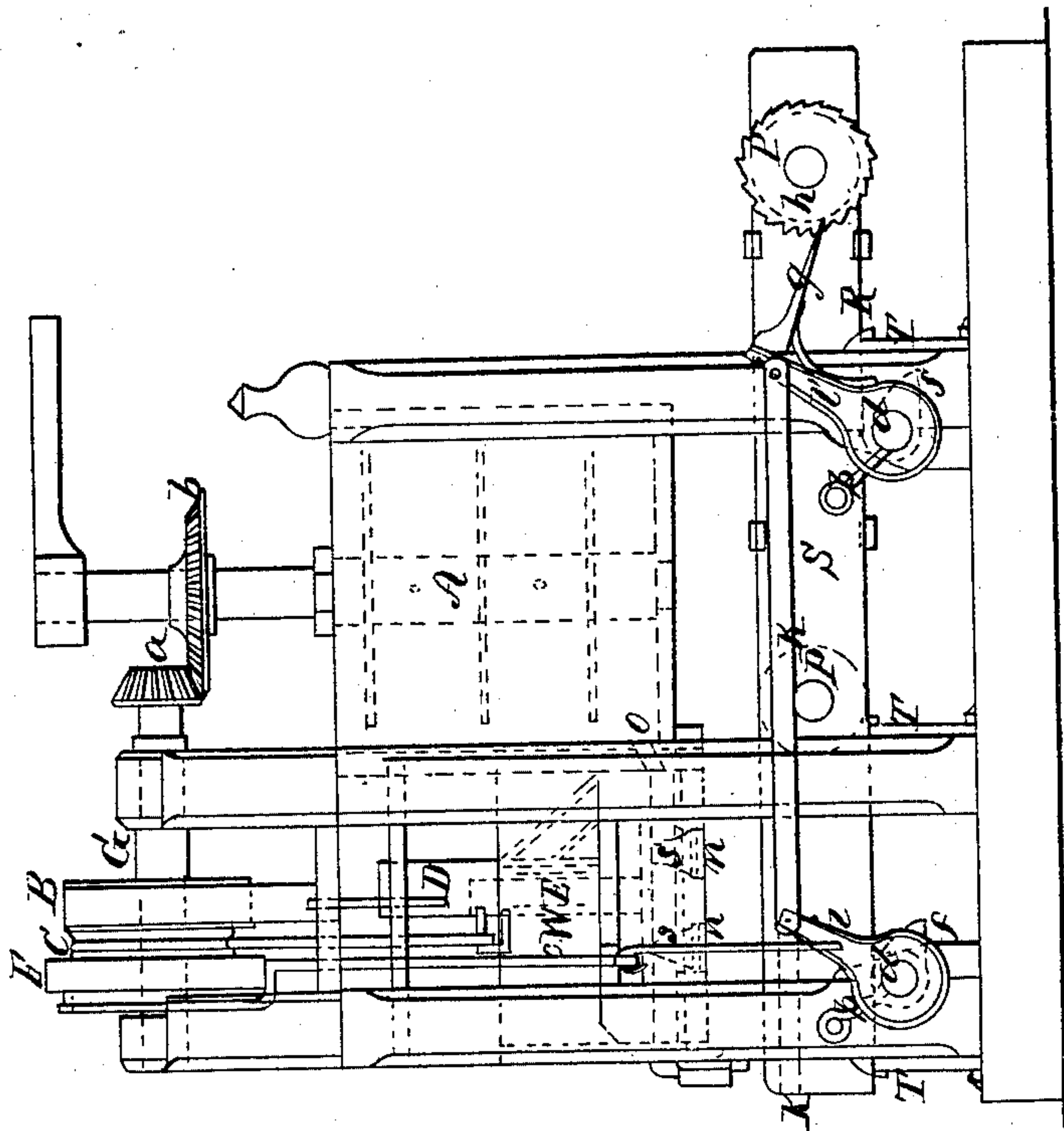


Fig. 2.

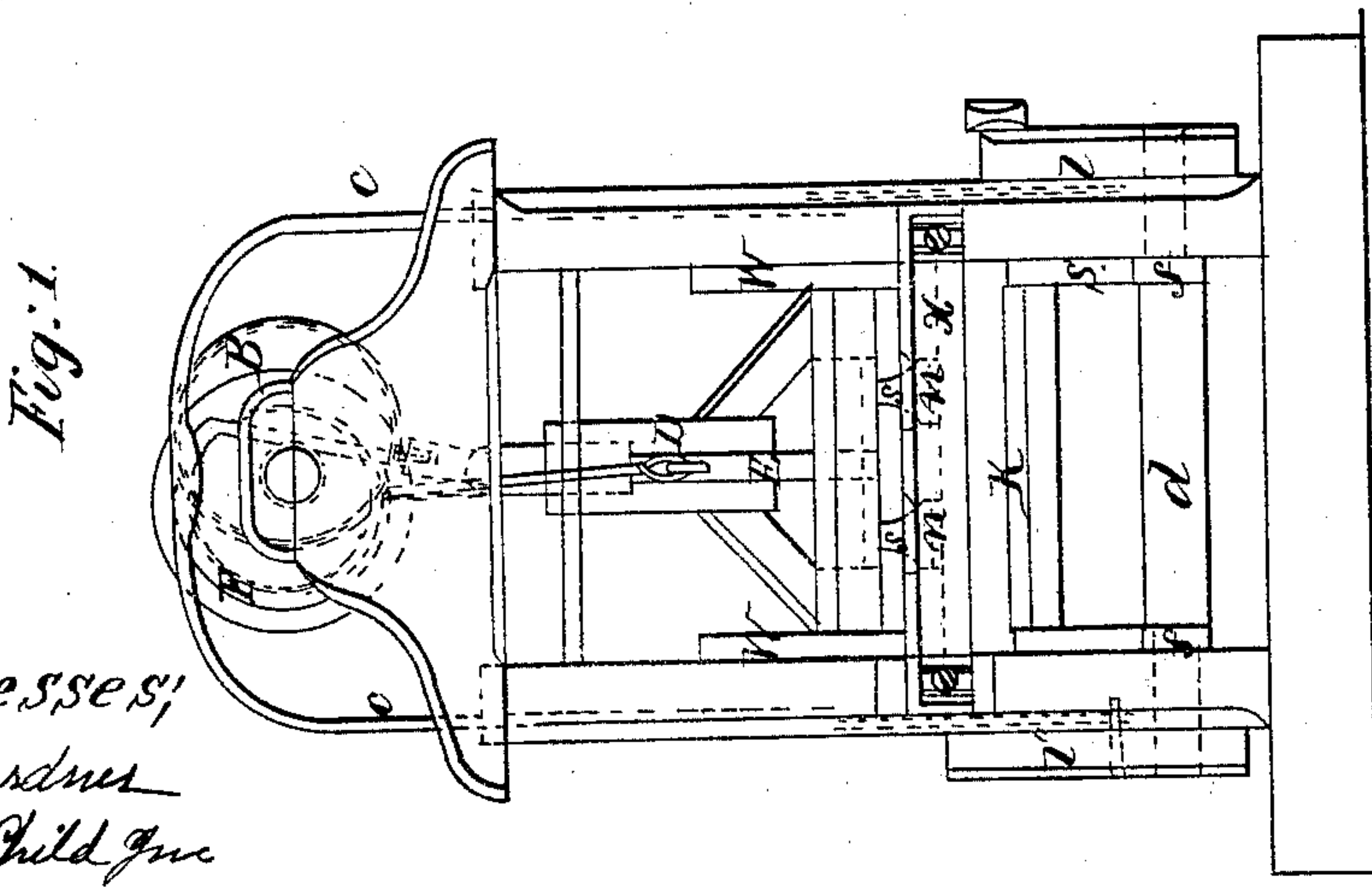


Fig. 1.

Witnesses;
J. J. Gardner
Elisha Child Jr.

Inventor;
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UNITED STATES PATENT OFFICE.

WILLIAM H. PAIGE, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO
HIMSELF AND ELISHA CHILD, JR., OF SAME PLACE.

IMPROVED BRICK-MACHINE.

Specification forming part of Letters Patent No. 45,377, dated December 6, 1864.

To all whom it may concern :

Be it known that I, WILLIAM H. PAIGE, of Springfield, county of Hampden, State of Massachusetts, have invented a new and Improved Machine for Making Bricks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Bricks are ordinarily made of two kinds, one known as "common" and the other "pressed," and as these are often made at the same manufactory it will be seen that a machine which will make both kinds with slight alteration is a great improvement on all before invented. This I claim as one of the features of my invention, besides simplifying the general arrangement of the machine, so as to greatly economize in the cost.

My machine may be described as follows:

In the drawings, Figure 1 is an end view; Fig. 2, a side elevation. Fig. 1 represents the machine having the front of the box W removed.

In front of the ordinary box or hopper A, in which the clay is ground, I place a countershaft, G, run by the bevel-gear *a b*, which operates by means of the eccentrics B C a double press, D E; also, on the same shaft the grooved cam F, which operates by means of the connection *c* and the arms *l l' l''*, the shafts *d d'* having the cams *f f' f'' f'''* and the ratchet *g h* operated by the same cam by means of the connection *k*, connecting the two levers *l l'*.

I will now describe the method of making pressed brick. These are merely common brick subjected to heavy pressure in a mold which confines the clay, and are thus made much more compact than the common. The clay is placed in the hopper A, as usual, and ground to the proper consistency. It now runs through the opening O into the box W and under the presses D E. These are now operated by the eccentrics B C, and the clay is first pressed into the openings *n n'* by the press D, and then the press E, having the pieces *s s'* attached to it, continues the pressure, when the clay is confined in the molds

K, except at the upper edges of the openings *n n*, which are beveled to allow the superfluous clay to escape. At the same time the movable bed, having on it the molds K, is brought up by means of the cams *f f' f'' f'''* on the shafts *d d'* against the bottom of the box W, thus confining the clay in this direction. When the clay is pressed, the bed falls, at the same time the ratchet *h* is operated on by the pawl *g*, and turns the roll P. As this is done, a new mold, similar to K, is placed on the band R and carried forward. As the roll turns, the mold K, containing the brick, is pushed out at the front, and the brick are taken to the kiln; the mold K is taken to the rear end of the machine to be run through again.

The operation of making common brick is generally the same, except that the pins *p p* are removed from the arms *l l' l''*, leaving them free to turn on the shafts *d d'*, so that the movable bed S is not operated, but rests on the pieces T T T, inserted for the purpose; also, the press E is removed and the opening in the press D filled so that the clay is simply pressed through the holes *n n* and into the mold K, which is run through as before. As this runs out, the scraper X strikes the top of the brick and makes them of a uniform thickness.

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

1. The combination of the box W, having suitable openings in its bottom, with the bed S, presses D and E, operated by the eccentrics B and C, or their equivalents, substantially as described.

2. The combination of the cam F, arms *l* l'*, connections C and K, pawl *g*, ratchet *h*, rolls P P', and band R, when used in the manner and for the purpose described.

3. The combination of the cam F, connection *c*, levers *l l' l''*, shafts *d d'*, cams *f f' f'' f'''*, and bed S, when used for the purpose described.

W. H. PAIGE.

Witnesses:

J. B. GARDINER,
ELISHA CHILD, Jr.