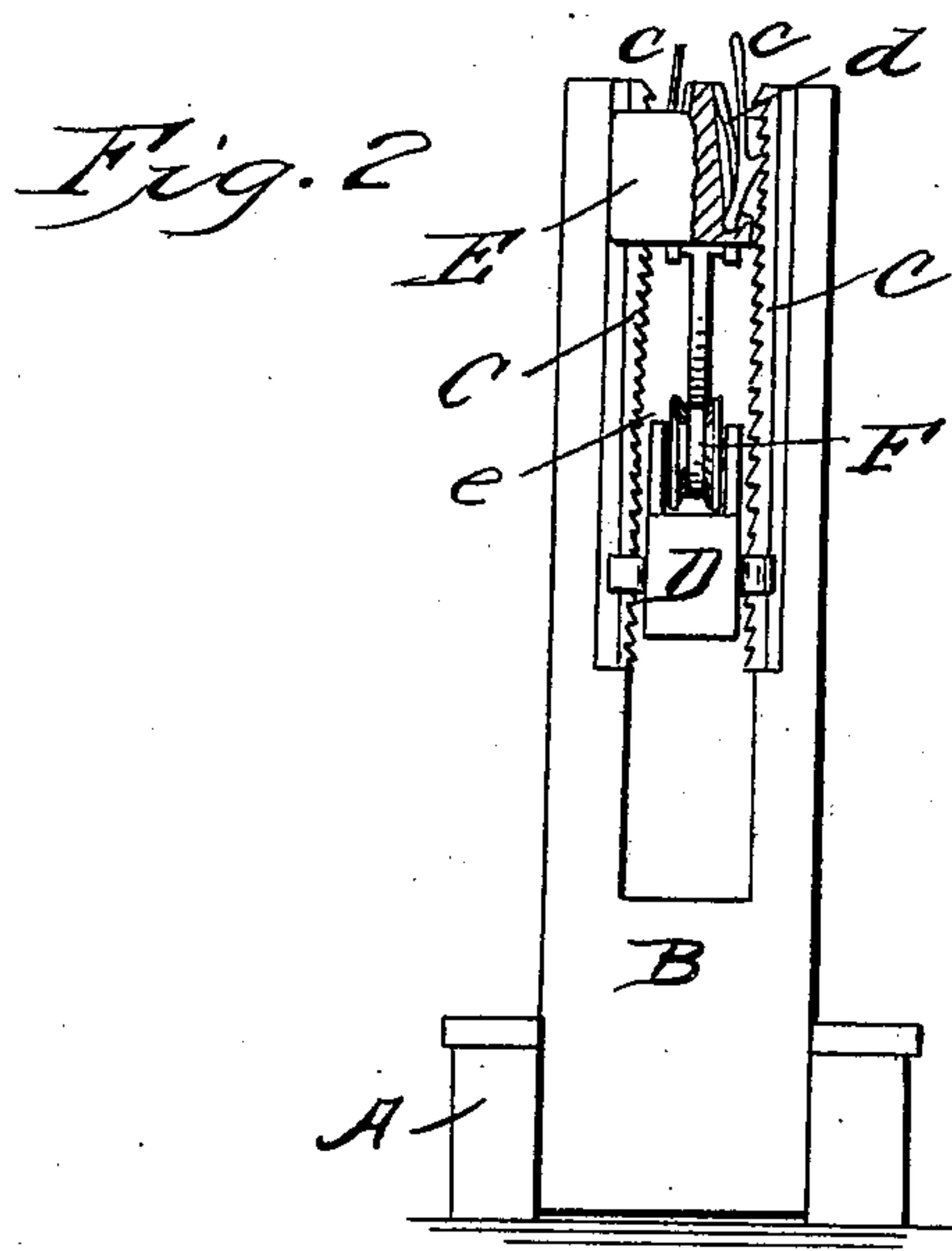
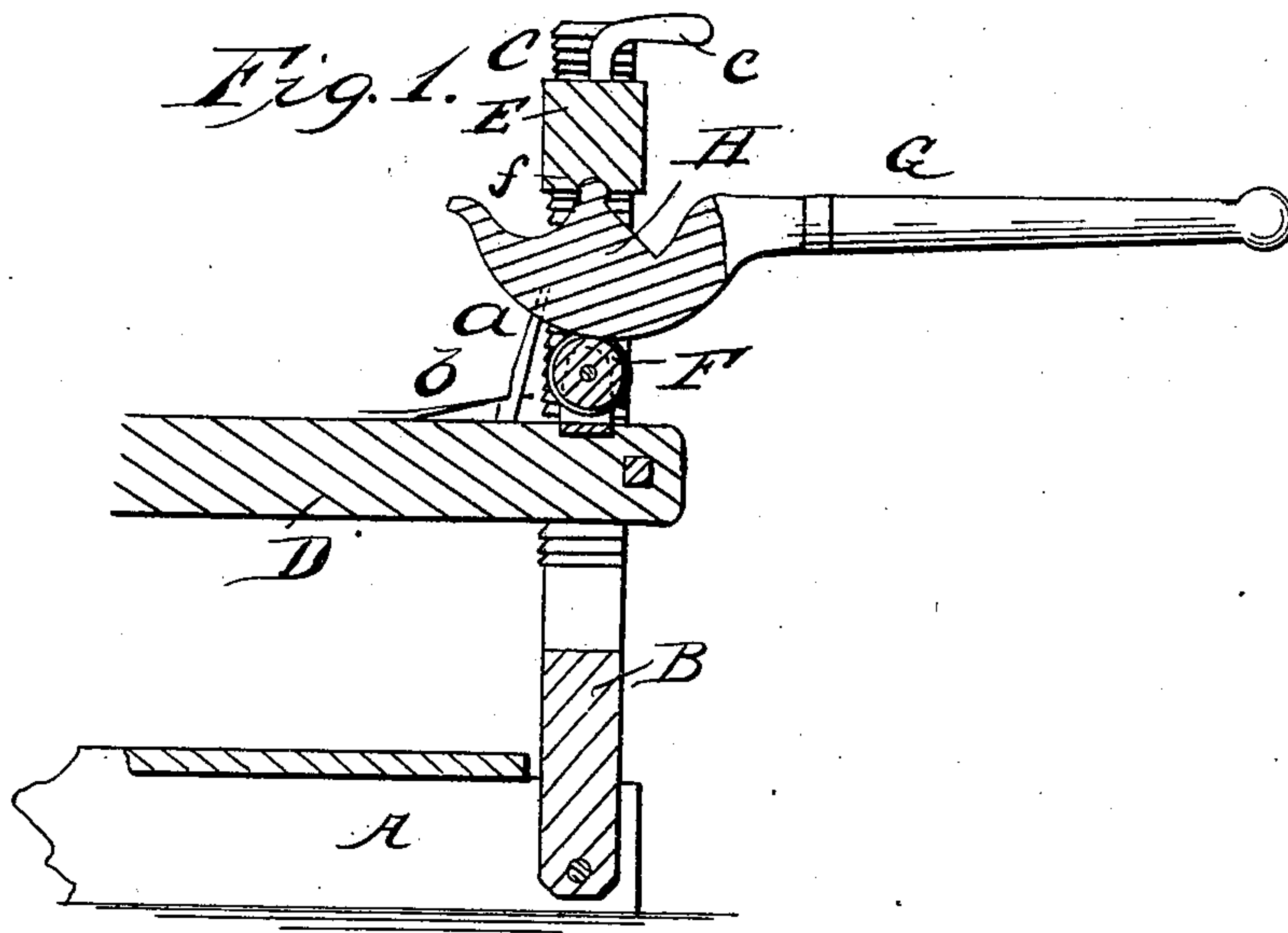


J. HUTCHINSON.
HOP PRESS.

No. 75,166.

Patented Mar. 3, 1868.



Witnesses:

P. J. Dodge
A. Pelletier

Inventor:
James Hutchinson
By Dodge & Munroe
his attys

United States Patent Office.

JAMES HUTCHINSON, OF FOND DU LAC, WISCONSIN.

Letters Patent No. 75,166, dated March 3, 1868.

IMPROVED HOP-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, JAMES HUTCHINSON, of Fond du Lac, in the county of Fond du Lac, and State of Wisconsin, have invented certain new and useful Improvements in Hop-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

My invention relates to presses for hops and similar purposes, and consists of new, useful, and certain improvements in the hop-press for which Letters Patent, dated July 16, 1867, No. 66,793, were granted to Newell Carpenter and myself, by which I am enabled to make it more efficient for the purposes for which it is designed. In the drawings—

Figure 1 is a view of a longitudinal vertical section, and

Figure 2 is an end view, with the handle of the lever left off, and a portion of the movable block broken away.

I construct the bed A, the upright, B, made by slotting a single piece of timber, or of two pieces, with a block interposed between their lower ends, and provided with the plates C, having ratchet-teeth on their interior surfaces and on their inner edges, as shown in figs. 1 and 2, and fully described in said Letters Patent, No. 66,793. The beam D, which is pressed down by the mechanical arrangement hereinafter described, is provided with the pawls *a*, which are held in place against the ratchet-teeth on the inner edges of the plates C by the springs *b*, as shown in fig. 1, and the movable block E is arranged to slide vertically in the upright, B, and is provided with the dogs *c*, which are held in place by the springs *d*, as shown in fig. 2, and described in said Letters Patent. Near the end of the cross-bar or beam D, on its upper side, and so as to be within the slot of the upright, B, I mount a roller, F, flanged or not, as may be desired, between two strong bearings, *e*, which are firmly attached to the beam D, as shown in figs. 1 and 2, and to the lower side of the block E, at *f*, I pivot the head, H, of the lever G. The lower side of the head, H, of the lever G, I shape or curve, so as to make it eccentric, about the point *f*, so that the distance from the point *f* to the lower side of the head of the lever will constantly increase on either side of a line running through the centre of the upright, B, when the lever stands at right angles to this upright, as shown in fig. 1. I provide each end of my press with this mechanical arrangement, and, in operating it, place the hops or other substance to be pressed between the bed A and beam D, then squeeze together the dogs *c*, if necessary, and drop the blocks F till the heads H of the levers come in contact with the rollers F, then work the levers by moving their handles up and down. As the head H is eccentric, as it moves backward and forward over the roller F, it will continue to press from one end of its curve to the other. As the beam D is pressed down, the pawls *a* move with it, and hold it in place. At the same time the block E follows down, and is held in place by the dogs *c*. Both ends of the press are worked at the same time. When the hops or other substance are sufficiently pressed, they are baled. The beam D is again adjusted by squeezing the dogs *c* and elevating or raising the blocks E, and the process repeated as before.

In the Letters Patent mentioned, the pressure was not constant, and ceased whenever the handle of the lever was elevated or lowered above or below a certain point. By the use of the eccentric-head H, as herein described, the pressure becomes greater as the handle of the lever is elevated or lowered, and its operation is rendered easier by the use of the friction-roller F, and in this way I am enabled to construct and furnish a press having great advantages over the one for which the Letters Patent were previously granted to me, and as being a great improvement on the same.

Having thus described my invention, what I claim is—

The improved mechanical arrangement for pressing hops and similar substances, consisting of the hinged lever G, with its eccentric-head H, block E, provided with the dogs *c*, in combination with the ratchet-plates C and beam D, provided with the roller F and pawls *a*, when constructed and arranged to operate as described.

Witnesses:

R. EBERT,
J. C. PERRY.

JAMES HUTCHINSON.