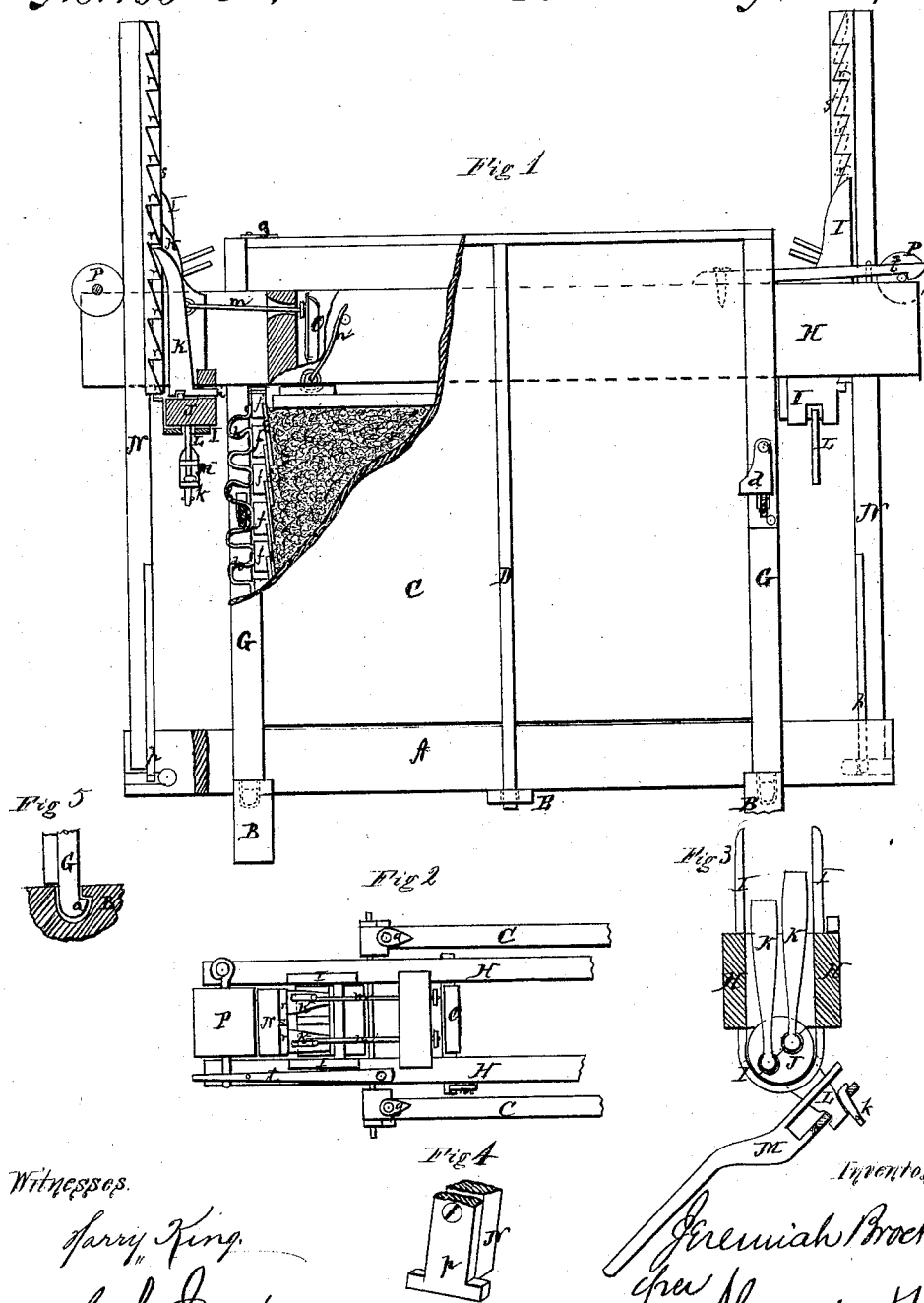


J. Brockway,

Non Press.

No. 106252.

Patented Aug. 9. 1870.



Witnesses.

Harry King.
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United States Patent Office.

JEREMIAH BROCKWAY, OF RICHLAND CENTRE, WISCONSIN.

Letters Patent No. 106,252, dated August 9, 1870.

IMPROVEMENT IN HOP-PRESSES.

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, JEREMIAH BROCKWAY, of Richland Centre, in the county of Richland and in the State of Wisconsin, have invented certain new and useful Improvements in HOP-PRESSES; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a hop-press, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side-view, part in section, of the entire press;

Figure 2 is a plan view of one end of the press;

Figure 3 is an enlarged view of the mechanism for operating the press;

Figure 4 is a perspective view of the lower end of one of the side pieces; and

Figure 5 is a section showing the mode of fastening the sides of the press.

A represents the bed of the press resting upon cross-bars, B B, which are provided with mortises or recesses close to the sides of the bed; said mortises or recesses being constructed as shown in fig. 5, for the insertion of hooks, *a*, formed upon the lower ends of vertical bars, G G.

The bars G G are secured to the ends of the sides C of the press, and, in the center of each side is another vertical bar, D, the lower end of which is wedge-shaped, and inserted in holes on a cross-bar, E, fastened to the under side of the bed A.

The hooks *a*, catching on the shoulders formed in the recesses of the cross-bars B B, hold the sides C C down, while they are held in their proper upright position by means of hooked iron bars, *b* *b*, passed through slots in the bars G G, and locked by means of pivoted keys, *d*.

The sides C C, with the bed A, and the end pieces, form the bale-box.

The end pieces are constructed in the following manner:

A series of bars, *f* *f*, are placed a suitable distance apart, and connected on their outer sides by straps, *h* *h*. On the inner side of each bar, *f*, is secured a plate, *e*, which extends downward and laps over the upper edge of the bar immediately below.

The folding end pieces *e* *f* *h* thus constructed are suspended by means of a button, *g*, on each corner of the box, the buttons entering slots in the upper bar or board *f*.

The box is now filled with hops and the press-beam H laid on top, when the buttons *g* *g* are turned away from the end pieces; when the beam is now pressed down, by the means hereinafter to be described, the end pieces close or fold up, and the operator is enabled to press clear down without stopping.

The press-beam H is composed of two parallel bars placed a suitable distance apart, and connected by cross-pieces. Near each end in the press-beam is placed a box or guide, I, the lower end of which is semicircular and extends below the beam, while the sides extend above, forming guides for the pawls which operate the beam.

In the lower end of the box I is placed a roller, J, the outer end of which is half cut away, and the pawls K K rest upon said cut-off portion, and a pin, *i*, extending inward from the lower end of each pawl, passes through the center of the incut portion of the roller.

From the roller J a handle, L, extends downward through a slot in the box I, said handle having a notch on each side, as shown in fig. 3.

A forked lever, M, the forks of which are slotted and provided with a drop-key, *k*, are then put on the handle L, the key dropping down to confine the lever in the notches on the handle. By means of the lever M the roller J is made to turn from side to side, giving the pawls an alternating up-and-down motion, that is, when one moves up the other goes down.

The pawls K K are, on their inner side, provided with rods, *m*, which pass inward through holes in one of the cross-pieces of the press-beam, and at their inner ends provided with heads, as shown. The pawls are pressed outward against an end-beam, N, by means of a pivoted block, O, held against the headed rods *m* by means of a spring, *n*.

The beam N is, at its lower end, provided with a T-shaped iron, *p*, the arms of which are inserted in grooves in the forked end of the bed A, and the inner side of said beam is provided with two sets of ratchet-teeth, *r*, separated by a vertical flange, *s*. The pawls K K work in said teeth, one on each side of the dividing flange *s*.

The beam N is held in the presser-beam H by a roller, P, the axle or shaft of which is pivoted on one side and held on the other side by a hook, *t*, so that said roller can readily be swung out of the way.

When the bale-box is filled, a board or follower, R, fitting within the box, is laid on the hops and the presser-beam laid on top of said board. Then, by working the levers M M, the press-beam is forced downward by the pawls K K operating in the ratchet-beams N N.

Having thus fully described my invention,

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

1. The folding or contracting end pieces, composed of the boards *ff*, straps *h h*, and plates *ii*, all constructed and arranged substantially as and for the purposes herein set forth.

2. The combination of the slotted guide-box *I*, roller *J*, and pawls *K K*, with pins *i i*, all constructed and arranged substantially as herein set forth.

3. The combination with the roller *J*, the handle *L*, lever *M*, and drop-key *k*, constructed and arranged substantially as and for the purposes herein set forth.

4. The arrangement of the pawls *K K*, headed rods *m m*, block *O*, and spring *n*, all substantially as and for the purposes herein set forth.

5. The beam *N*, provided with T-shaped iron *p*, double ratchet-teeth *r r*, and dividing-flange *s*, substantially as and for the purposes herein set forth.

6. The roller *P*, arranged as described on the beam *H*, its axle being pivoted at one end and held at the other end by the hook *t*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 4th day of May, 1870.

JEREMIAH BROCKWAY.

Witnesses:

H. A. EASTLAND,

A. C. EASTLAND.