

(No Model.)

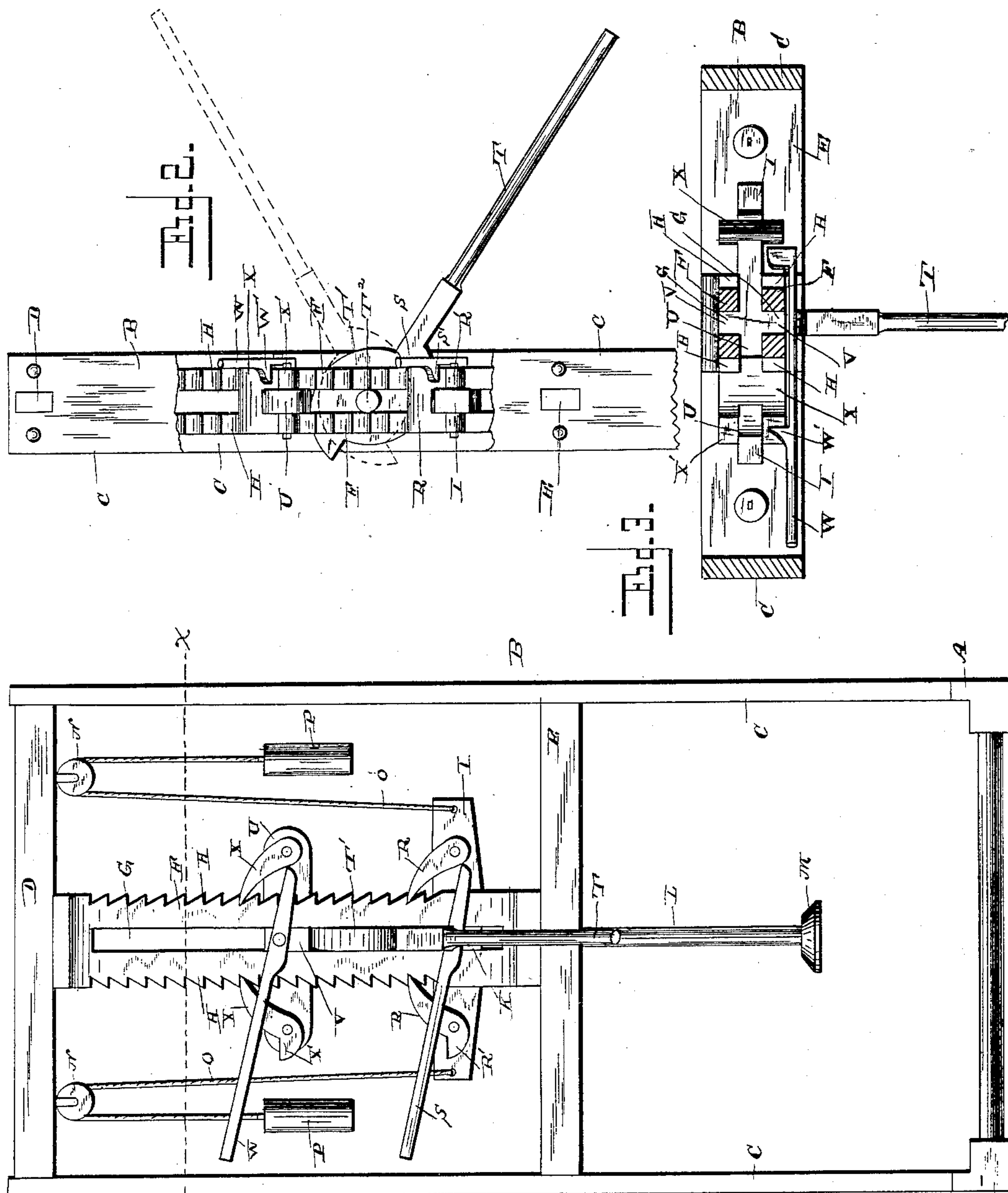
2 Sheets—Sheet 1.

J. R. WEBSTER

BALING PRESS.

No. 358,902.

Patented Mar. 8, 1887.



Witnesses

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(No Model.)

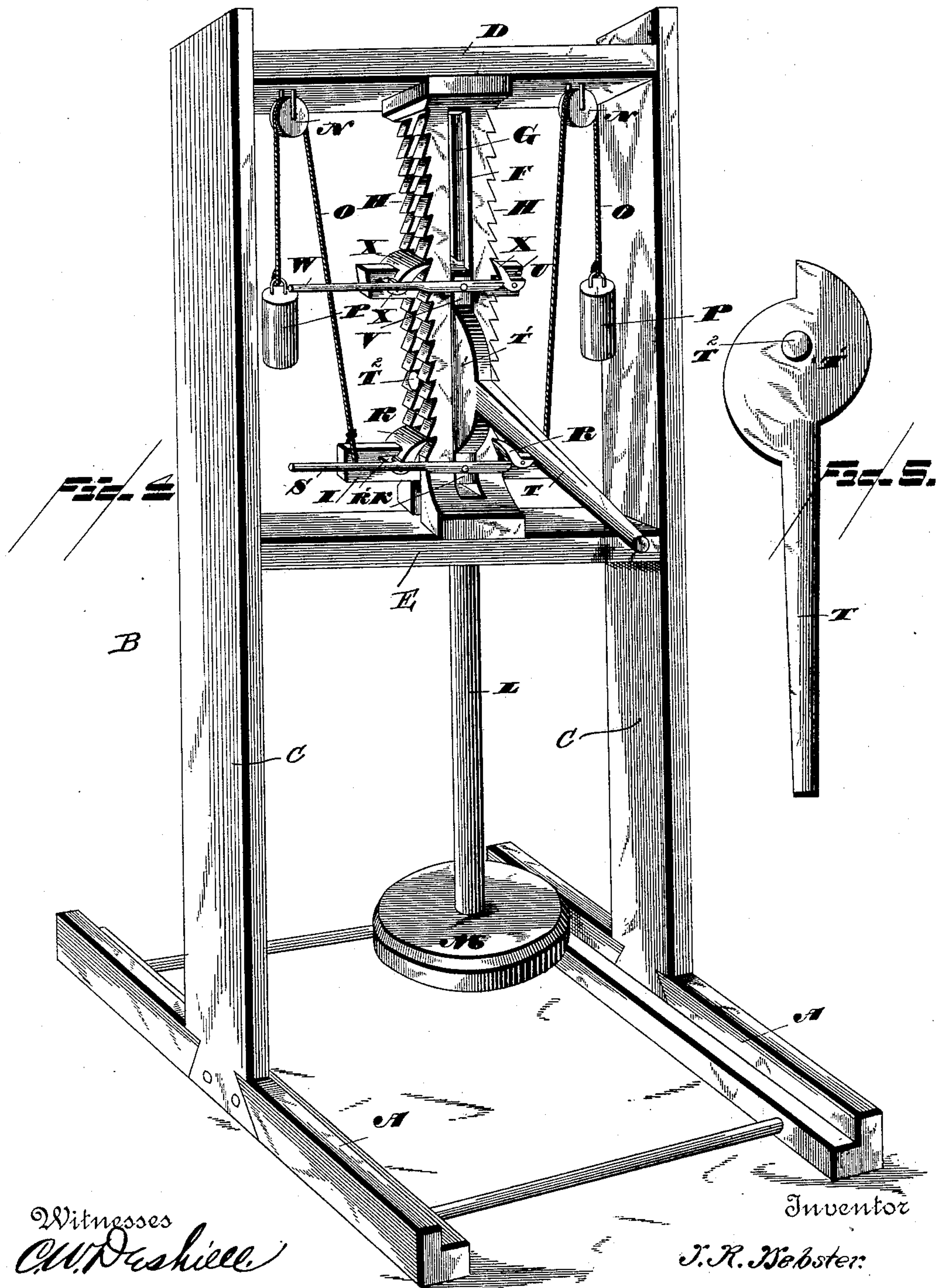
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# UNITED STATES PATENT OFFICE.

JOSEPH RICHARD WEBSTER, OF WORTHVILLE, KENTUCKY.

## BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 358,902, dated March 8, 1887.

Application filed November 15, 1886. Serial No. 218,939. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH RICHARD WEBSTER, a citizen of the United States, residing at Worthville, in the county of Carroll and State of Kentucky, have invented a new and useful Improvement in Baling - Presses, of which the following is a specification.

My invention relates to an improvement in baling-presses; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a front elevation of a press embodying my improvements. Fig. 2 is a side elevation of the same with a portion of the frame broken away. Fig. 3 is a horizontal section taken on the line *xx* of Fig. 1. Fig. 4 is a perspective view of the press. Fig. 5 is a detail view of the cam-lever.

A represents a rectangular base or ground frame, from the center of which rises a vertical frame, B, comprising the vertical standards C, the cross-beam D, connecting the upper ends of the standards, and the cross-beam E, connecting the standards at a suitable distance below the beam D.

F represents a pair of vertical bars, which connect the central portions of the beams D and E. These bars F are arranged at a suitable distance apart, and are provided with vertical slots G, which are in line with each other. The outer edges of the bars F are provided with the downwardly-extending ratchet-teeth H.

I represents a cross-head, which is arranged between the vertical bars F, and is provided at its center, on opposite sides, with projecting lugs or shoulders K, that enter the slots G. From the center of the cross-head I depends a vertical rod, L, that is provided at its lower end with the plunger or follower M.

No press-box is here shown in which the plunger or follower works, as the said press-box may be of any desired suitable construction.

On the under side of the beam D, near the ends thereof, are grooved pulleys N. To the ends of the cross-head I are attached ropes O, which pass over the pulleys N, and to the depending ends of the said ropes are attached weights P.

R represents a pair of pawls, which are piv-

oted to the cross-head I, and are adapted to engage the ratchet-teeth H. One of the said pawls is provided near its lower end with a rearward-extending shoulder, R'.

S represents a lever, which is pivoted to the outer side of one of the shoulders or lugs K, and the said lever extends across the front side of one of the bars F. The short arm of the lever S bears against the inner side of one of the pawls R, and the long arm of the said lever has a shoulder or offset, S', which is adapted to bear on the upper side of the shoulder R' of the other pawl.

T represents a lever, which is provided at its inner end with an eccentric cam, T'. This cam extends through the slots G, and from the center thereof, on opposite sides, project trunnions T<sup>2</sup>, which bear between the bars F. The cam also bears upon the upper side of the cross-head I.

U represents a cross-head, which is arranged between the vertical ratchet-bars F and bears on the upper side of the cam of the lever T. This cross-head U is provided at its center, on opposite sides, with lugs or shoulders V, that extend into the slots G, and to the face of one of the said lugs or shoulders is pivoted a lever, W, which is similar to the lever S, and has its long arm provided with an offset or shoulder, W', that is similar to the offset or shoulder S'.

X represents a pair of pawls, which are pivoted to the ends of the cross-head U and engage the ratchet-teeth H. One of the said pawls is provided near its lower end with a rearward-extending shoulder, X'.

The operation of my invention is as follows: By moving downwardly on the long arm of the lever W the pawls X are tripped from the ratchet-teeth, and by moving downwardly on the long arm of the lever S the pawls R are tripped and disengaged also from the ratchet-teeth. As the weight of the weights P exceeds that of the cross-heads, the follower or plunger, and the cam-lever, the said cross-heads, cam-lever, and follower or plunger are raised to the upper side of the frame B. As soon as the levers W and S are released the pawls X and R become engaged with the ratchet-teeth. In order to cause the follower or plunger to be lowered, the lever T is turned from the position indicated in dotted lines in Fig. 2 to the



position indicated in solid lines in the said figure, thereby causing the cam to force the lower cross-head, I, and the plunger downwardly on the ratchet-bars. The pawls R then engage  
 5 the ratchet-teeth, so as to prevent the weights from raising the cross-head, and the lever T is then turned upwardly, which causes the cross-head U to slide downwardly between the ratchet-bars a distance corresponding to the space  
 10 in which the cross-head I is previously lowered. The pawls X immediately, by their own gravity, engage the ratchet-teeth, and the lever T is then operated, as before described, thereby causing the cross-head I and the plun-  
 15 ger or follower to be again lowered; and this operation is repeated until the cross-head I reaches the beam E.

Having thus described my invention, I claim—

20 1. The combination, in a press, of the ratchet-bars F, the cross-head I, having the pawls to engage the ratchet-teeth, and the plunger or follower attached to the said cross-head, the cam-lever T, bearing on the cross-head I and  
 25 free to move between the ratchet-bars, the cross-head U, bearing on the cam-lever and having the pawls to engage the ratchet-teeth, the levers to disengage the pawls from the ratchet-teeth, and the weights to raise the  
 30 cross-heads and the cam-lever when the pawls are tripped, substantially as described.

2. In a press, the combination of the vertical ratchet-bars F, having the slots G, the

cross-head I, having the lugs K, working in the said slots, the said cross-head being arranged 35 between the ratchet-bars, the follower or plunger depending from the cross-head I, the weights connected to the said cross-head to raise the latter, the pawls R, pivoted to the cross-head I and adapted to automatically en- 40 gage the ratchet-teeth, the lever T, having the eccentric cam extending through the slots G and bearing on the cross-head I, the said cam having the trunnions projecting between the ratchet-bars, the cross-head U, arranged be- 45 tween the ratchet-bars and bearing on the upper side of the cam, and having the shoulders V, entering the slots G, the pawls X, pivoted to the said cross-head U, to engage the ratchet-teeth, and the levers to disengage the pawls R 50 and X from the ratchet-teeth, for the purpose set forth, substantially as described.

3. In a press, the combination of the cross-head I, carrying the follower, detents, pawls, or dogs for the cross-head, a cam-lever, T, act- 55 ing against the cross-head, weighted devices for the cross-head I, and detents or pawls for the lever T, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in pres- 60 ence of two witnesses.

JOSEPH RICHARD WEBSTER.

Witnesses:

T. L. HARRISON,  
 G. V. MAY.