

C. J. BEASLEY.
HAY AND COTTON PRESS.

No. 104,922.

Patented July 5, 1870.

Fig. 1.

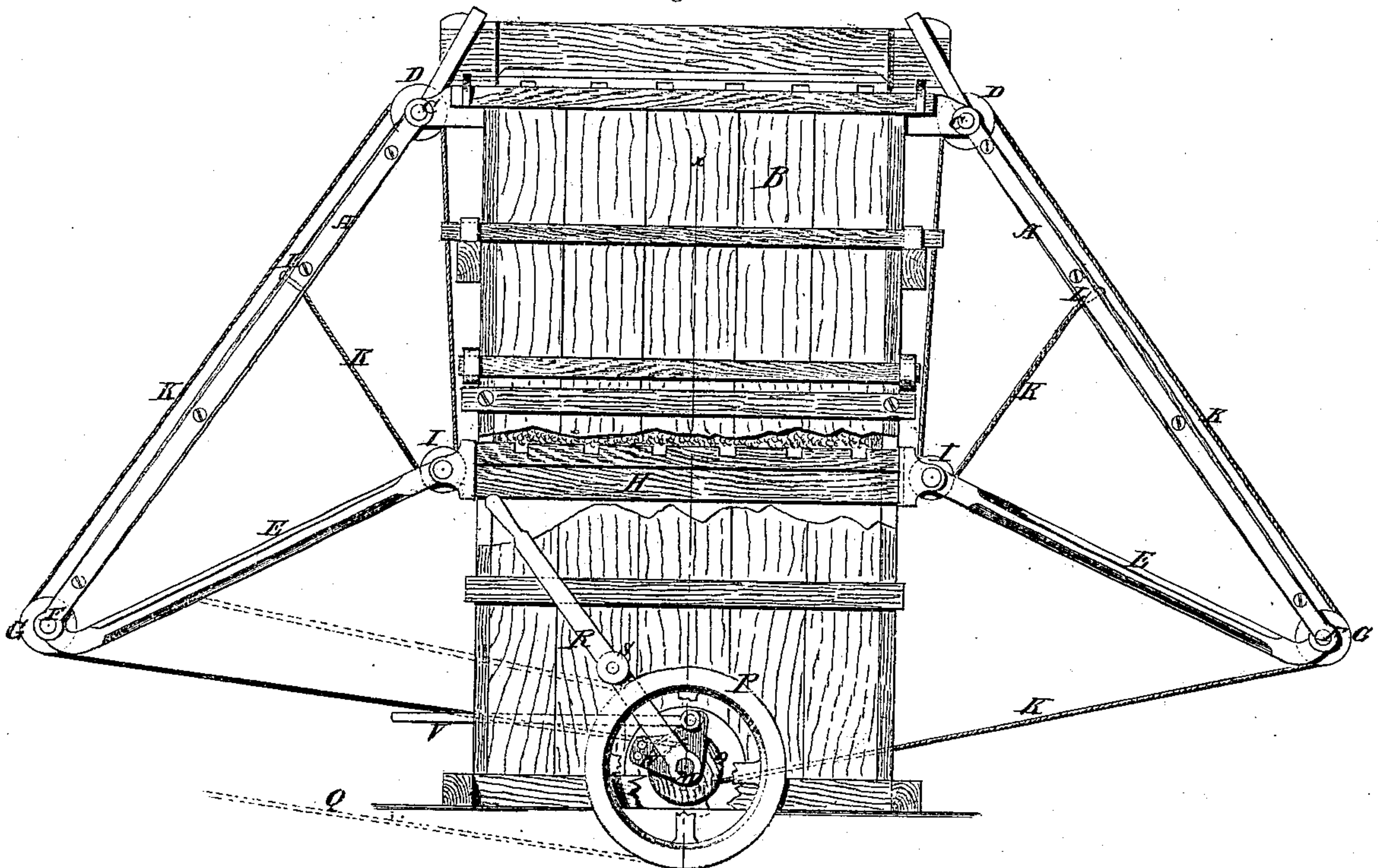
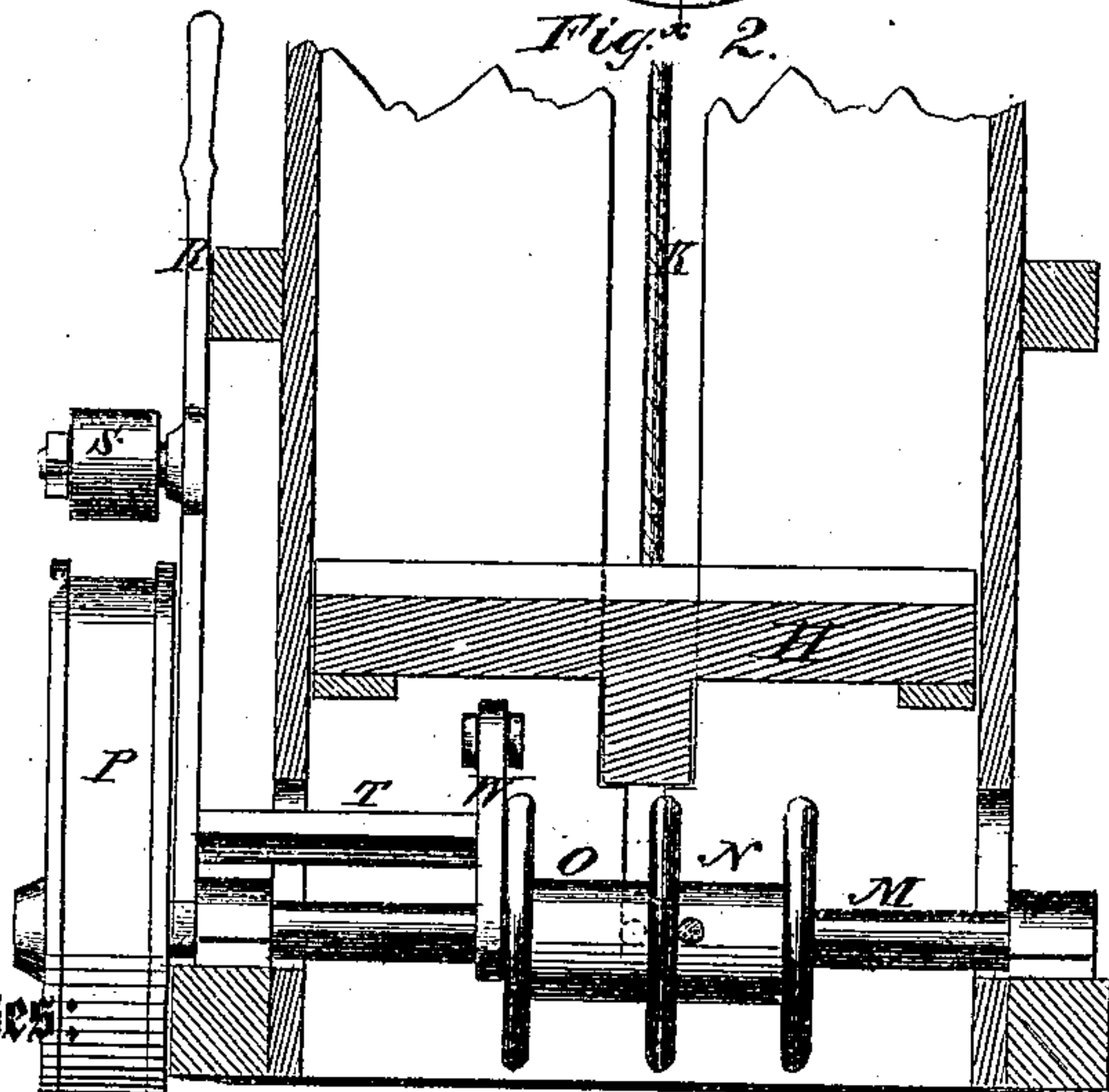


Fig. 2.



Witnesses:

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CHARLES J. BEASLEY, OF PETERSBURG, VIRGINIA.

Letters Patent No. 104,922, dated July 5, 1870.

IMPROVEMENT IN HAY AND COTTON-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, CHARLES J. BEASLEY, of Petersburg, in the county of Dinwiddie and State of Virginia, have invented a new and useful Improvement in Cotton and Hay-Presses; 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 power-presses for hay, cotton, and other like articles, and consists in an arrangement of jointed arms, cords, and pulleys, whereby the follower is made to move and the cords mainly, and at a quick motion at the beginning, and by the lifting action of the arms, and at a slower motion, and more powerfully, at the latter part of the movement, when the resistance increases.

It also consists in an improved arrangement of the belt-tightener for being automatically raised to let the belt slip, and stop the motion, when the follower is raised to the required height; also, for action as a brake, to regulate the fall of the follower, all as hereinafter more fully specified.

Figure 1 is a side elevation of my improved press, with some parts broken out, to show the interior arrangement, and

Figure 2 is a transverse sectional elevation, taken on the line *xx* of fig. 1.

Similar letters of reference indicate corresponding parts.

A represents long arms, jointed to the top of the vertical case B, at C, where they are provided with grooved rollers or pulleys, D. They hang downward therefrom, one on each of two opposite sides of the case, and at their lower ends they have other shorter arms, E, jointed to them at F, where they also have grooved rollers or pulleys, G. These shorter arms are jointed, at their other ends, to the follower H, one at each end; and at these joints they have pulleys, I.

The operating-cords K are attached to the long arms A at L, about the length of the short arms above the lower ends, and pass over the pulleys I; thence, over D and G, to the winding-shaft M, where their other ends are attached to the drums N O, respectively.

This shaft is placed transversely under the bottom of the case, and has a large belt-wheel, P, at one end, over which the driving-belt Q, shown in dotted lines, works, to wind up the cords, the said belt being driven by any competent power.

R is the belt-tightening lever, journaled on the

shaft inside the wheel, and having a roller, S, arranged on a stud, to be brought down on the face of the belt by turning the lever to the left, as shown in fig. 1.

T is an arm, attached to lever R, projecting under the case A, and attached to a plate, u, journaled on the shaft M, and having a bar or rod, V, attached to it, which projects through one side of the case toward and in the same plane with one of the sets of arms A F.

This rod will be thrust forward in this direction when the belt-tightener is turned down to cause the belt to act, and the end will be struck by the arm F when drawn up to the vertical position, and forced in, raising the roller S off the belt, allowing the latter to slip, and the machine to stop.

The turning of the drums by the belt will wind up the ropes, and raise the upper ends of the arms F, and the follower, mainly by the cord alone at the beginning of the operation, and until the short arms are past the angle of forty-five degrees, after which the force on the follower is mainly delivered by the end thrust of the short arms, due to the action of the lower ends being swung inward on the long arms A, the said swinging action, caused by the cords, being the only labor expended by the cords, or mainly so, at this time.

It will be seen that, during the latter part of the movement of the follower, very great force is expended upon it without increase or undue strain upon the cords.

The weight of the follower will cause it to run back again when the belt is free, and the hand-lever R and roller S may be used to control the said backward movement, by pressing on the belt, and causing it to check the motion of the wheel and drums in letting off the cords.

Having thus described my invention,

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

1. The combination, with the press-case and follower, of the arms A F, cords K, winding-drums, and the guiding-pulleys for the cords, all arranged and operating substantially as specified.

2. The combination, with the drum-shaft and belt-tightening lever, of the rod V, arranged to be acted on, for releasing the belt, by one set of the arms A F, all substantially as specified.

CHARLES J. BEASLEY.

Witnesses:

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