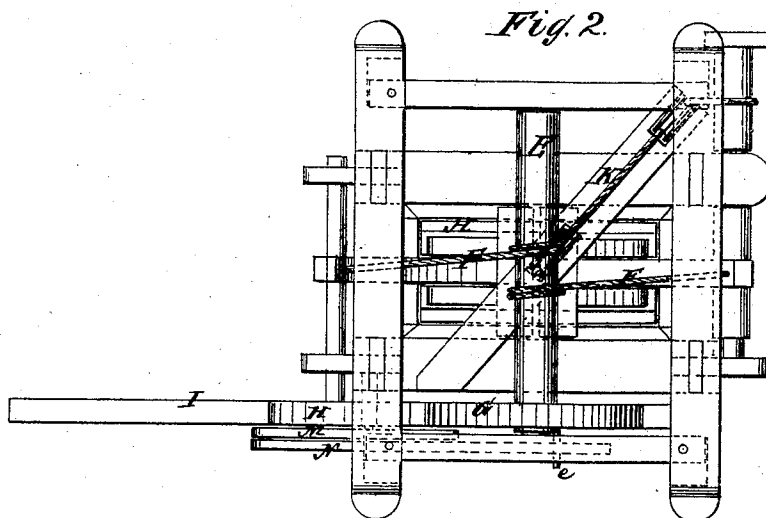
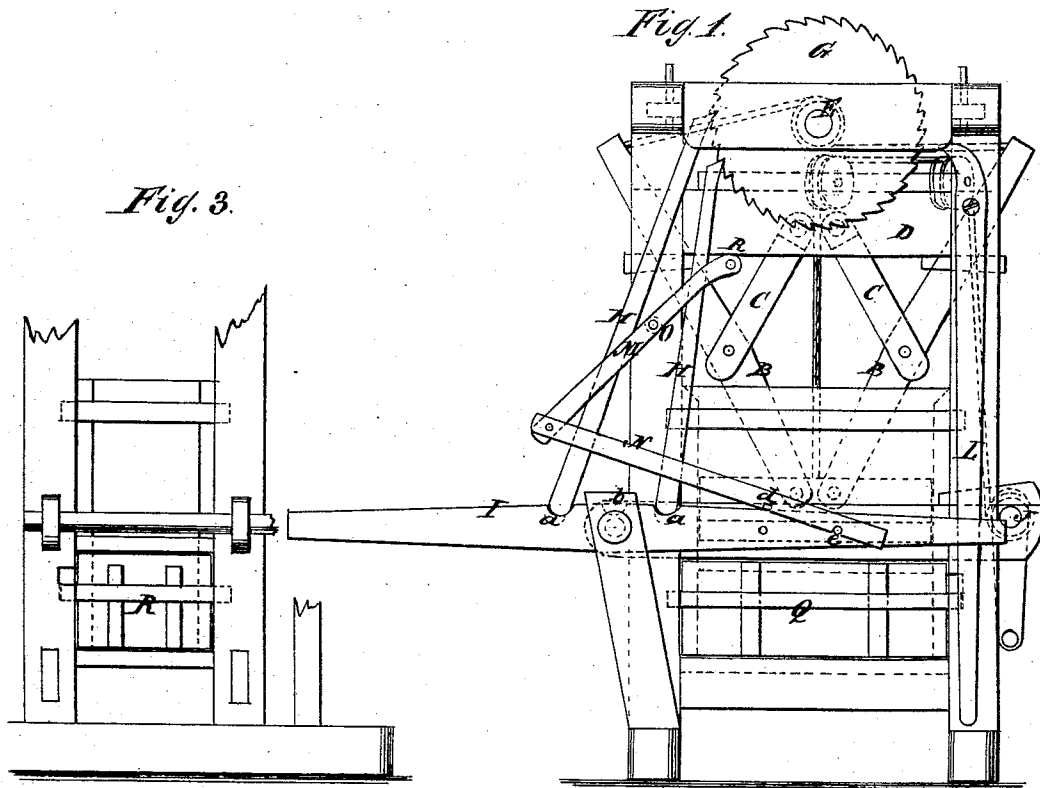


J. C. STOKES.
Cotton-Presses.

No. 157,241.

Patented Nov. 24, 1874.



WITNESSES:

E. Wolff
Chidgwick

INVENTOR:

J. C. Stokes
BY *Wm. H. [Signature]*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN C. STOKES, OF VILLANOW, GEORGIA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **157,241**, dated November 24, 1874; application filed April 11, 1874.

To all whom it may concern:

Be it known that I, JOHN C. STOKES, of Villanow, in the county of Walker and State of Georgia, have invented a new and Improved Press for Cotton, Hay, &c., of which the following is a specification:

My invention consists of a vertical press in which the follower is forced downward upon the matters to be pressed by toggle-jointed levers worked by an overhead windlass, which is operated by a double-acting brake-lever, pawls, and a ratchet-wheel arranged in a simple and efficient manner at one side of the frame, so that the power can be applied by one or more hands standing upon the ground or platform at the base of the machine.

The follower is raised by a hand-cranked drum and rope, the latter running up over pulleys at the top of the frame and down to the follower.

Figure 1 is a side elevation of my improved press. Fig. 2 is a plan view, and Fig. 3 is a detail in side elevation.

Similar letters of reference indicate corresponding parts.

A represents the follower, which is jointed to the levers B at their lower ends. These levers extend upward vertically, or nearly so, when the follower is down, and are jointed near or a little short of the middle to the short levers C, which, at their upper ends, are jointed to the beam D. The levers B are connected at the upper ends to the windlass-shaft E by ropes F, to be wound on and off together. The shaft is turned by a large ratchet-wheel, G, which is worked by the pawls H and double-acting brake-lever I, the wheel being fitted on the shaft and overhanging one side of the press, so that the lever is arranged near the bottom in a convenient position for being worked by hand. The pawls merely rest in notches *a* in the top of the lever, one on each side of the fulcrum, so that one pushes the wheel while the other is returning to engage it again. Another notch, *b*, is provided in the lever directly over the fulcrum, so that either one of the pawls may be shifted into it to act as a holding-pawl in case it may be desired to work the press by one person only.

By turning the windlass so as to draw the toggle-jointed levers B and C together, the follower is forced down with great power, which increases directly in the proportion that the levers are drawn together, and as the resistance increases by the compression of the cotton or other material in the box.

To raise the follower the pawls are disengaged from the ratchet-wheel and the windlass J is turned so as to wind up the rope K.

To release the pawls H from the force of the ratchet-wheel when it is subject to the reaction of the pressed substance, a holding-lever pawl, L, is arranged to force back the wheel, and then release it to be revolved in the reverse direction.

The pawls are held out of action by the rock-lever M and rod N, the lever being pivoted to the frame at O, and provided with a pin, P, so as to force the pawls back when the notch *d* of rod N is shifted back onto the pin *e*.

The doors Q and R of the case, for releasing and discharging the bale, are arranged at the bottom of the press-case, where it is more convenient to remove the bale than at the top.

The press is constructed mainly of wood, so that by obtaining a few parts of metal it can be erected on the plantation where it is required with such labor as may be readily procured in such places.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the brake-lever I, pawls H, ratchet-wheel G, shaft E, ropes F, and toggle-jointed levers C B with a press for hay or cotton, substantially in the manner described.

2. The combination of the holding-lever M, pin R, connecting-rod N, and pin *e* with the pawls H, substantially as specified.

3. The combination of the holding-lever pawl L with the ratchet-wheel G, in the manner described.

JOHN C. STOKES.

Witnesses:

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WILLIAM R. GUTHRIE.