

(No Model.)

P. K. DEDERICK.

BALING PRESS.

No. 271,811.

Patented Feb. 6, 1883.

Fig. 1.

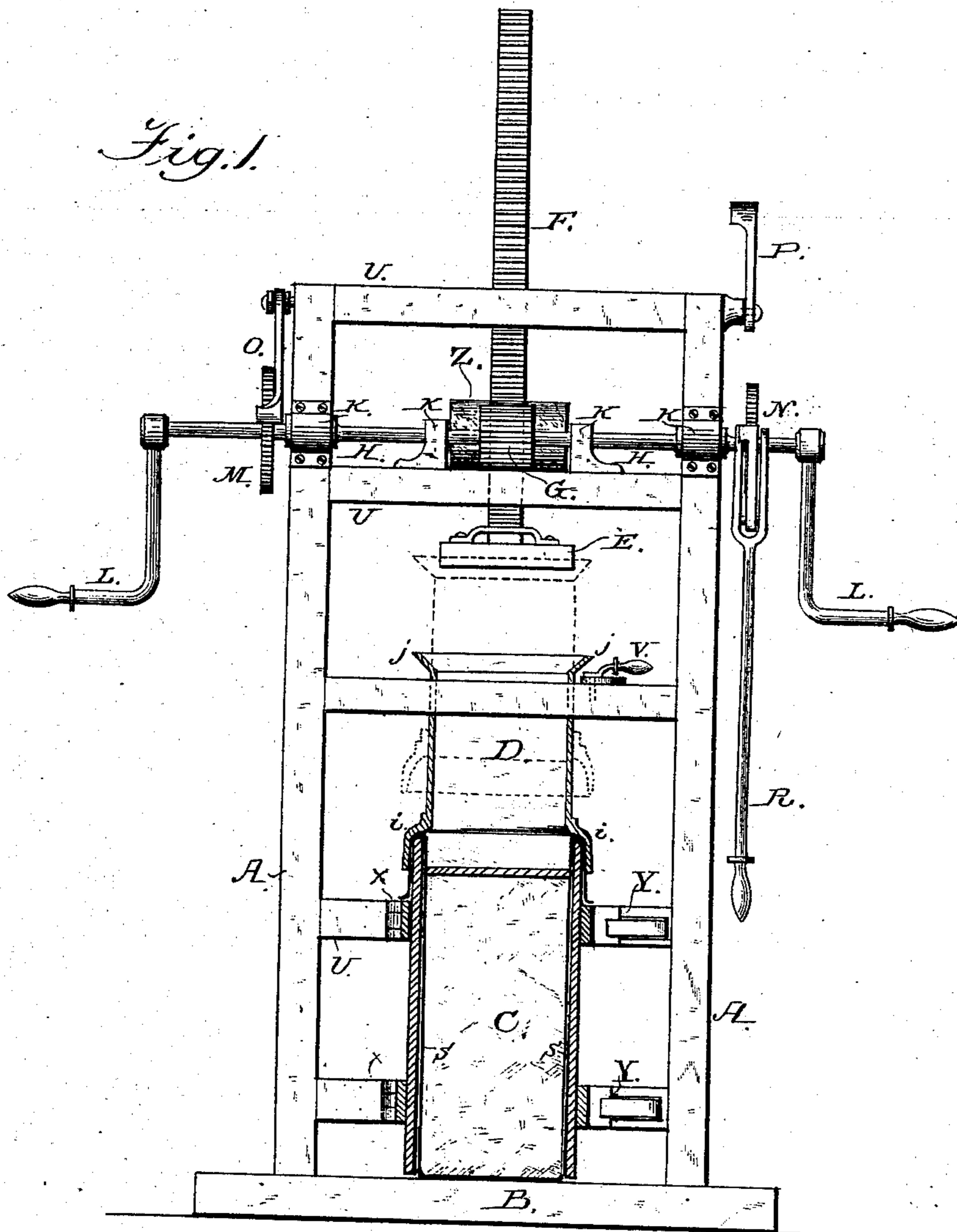
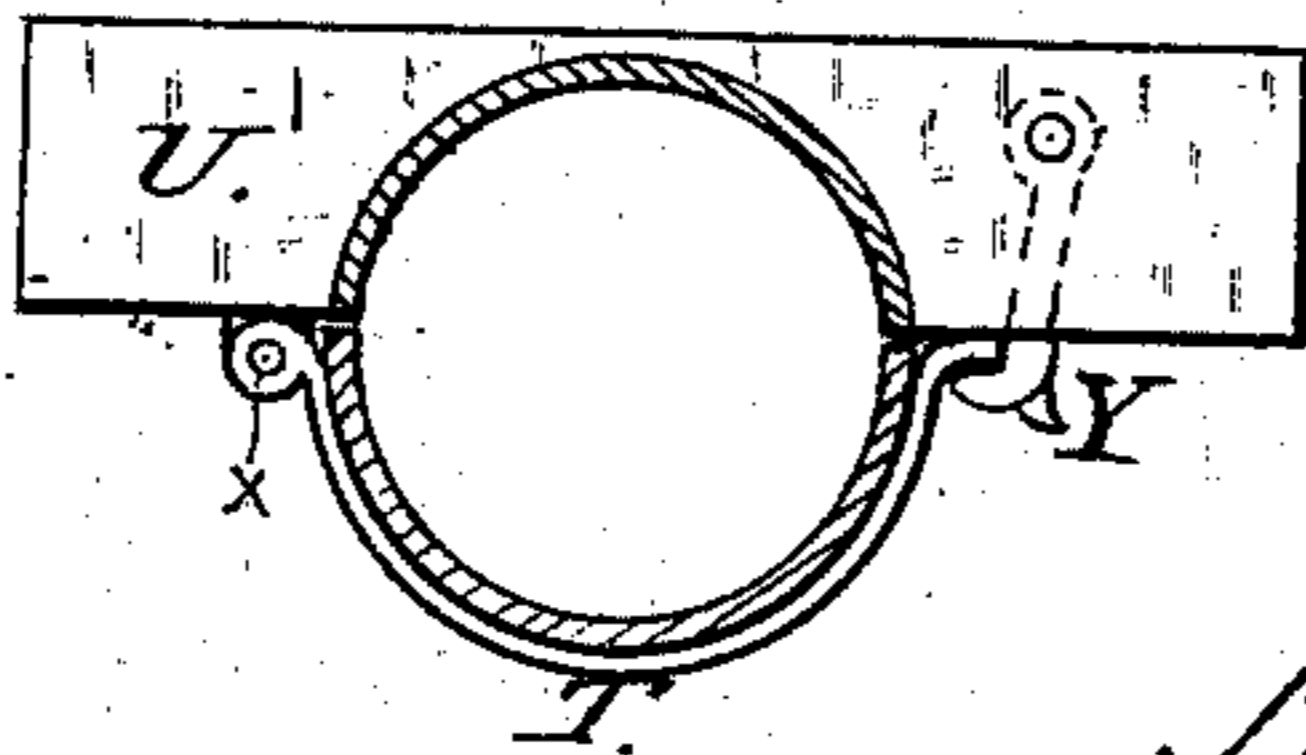


Fig. 2.



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BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 271,811, dated February 6, 1883.

Application filed September 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, PETER K. DEDERICK, a citizen of the United States, and a resident of Albany, Albany county, New York, have invented certain new and useful Improvements in Baling-Presses, of which the following is a specification.

This invention has for its object to provide means for packing into sacks material which does not require to be pressed very compactly, and particularly for so packing seed-cotton, in order to conveniently transport it to the ginners for ginning and subsequent compact baling.

The invention consists in the novel construction and combination of parts, which will be first described, and then pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is an upright side view of my machine. Fig. 2 is a sectional view of the clamp and door of the sack-holder.

Similar letters represent similar parts.

A A are the uprights or posts of the press; B, the base; C, the supporting-case; D, the receiving-case; E, the traverser; F, a rack; G, pinion; H, shaft; K, boxes; L, cranks; M N, ratchet-wheels; O P, pawls; R, hand-lever; S, sack; T, door of case; U, cross timbers of the frame.

Preferably I make the case round, although any other form will answer. The case C I construct preferably from tin or sheet-iron, as also the receiving-case D.

The sack S is of the size of the case C, and placed inside, with its open end lapped back over the outside of the case, as shown, and a band or strap of rubber or other material slipped over it to hold it in position; or it may be secured in any other manner.

The case D has a flange, *i*, projecting from its lower edge, so as to overlap the case C, and also firmly impinge the sack between the two cases, and the case D is a trifle smaller than case C, so that material as it moves down is not pressed against the fold or edge of the sack. The case D is also movable, so that it may be raised by hand or by means of a lever or a cam and occupy the position shown by the dotted lines, Fig. 1, enabling the operator to remove and secure or put in another sack.

When the case D is raised, it may be secured by the eccentric V, which is turned so as to bind it; or any form of cam will answer.

The case C is in two parts perpendicularly, and preferably hinged, so that one side forms a door, as shown at T, top view, and at two points, as shown at *x x*, and the opposite or outer end of the door is held in position by hooks *y*, or other well-known device for the purpose.

The traverser or piston E is made to fit closely in the case D, but loosely in the case C, and the case D is provided at its upper edge with a flange or guide, *j*, projecting outward, so as to guide the piston or traverser within the case.

To the piston or traverser E is firmly secured a rack, F, which is meshed with the pinion G on the shaft H, so that when the shaft is turned one way the traverser moves up and when turned the other way the traverser moves down.

Z is a friction-roller to support the back of the rack.

At first, when the material is loose, the cranks L will do the work rapidly; but when compact the hand-lever R is required. The hand-lever R works on a ratchet-wheel on the shaft H, and the lever is vibrated up and down like a pump-handle, and the pawls O P prevent backward movement of the shaft while the lever is raised to get a new hold. In running back or raising the traverser the crank is used, and the pawl P is dropped and engages with ratchet N to hold it up. A separate ratchet-wheel might be used, or the wheel M might be constructed so as to be used both ways, forming a double ratchet if preferred. The pressing is done against the head B, and the side T of the case C is opened to remove the filled bag, although, if preferred, an end door might be provided at B and the bag pushed out by the power and piston.

In operation the case D is elevated, as shown by the dotted lines, when the bag is placed in the case C, as shown, and secured. The bottom case and sack may now be filled, or the case D may be dropped to the position shown, and both cases be filled from the top. If desired, the rack and traverser might be so connected as to swing aside and admit a man to tramp in the seed-cotton. The cases being now full, the traverser E is moved down by the cranks

L until more power is required, when the hand-lever R is brought into play, and the operation continued until the cotton is forced within the case C, when the power is reversed, the case D raised, and the end of the sack brought together and secured, when it is removed through the side door, T. Retainers of any suitable form may be used in case C if desired; but I deem them unnecessary.

10 Greater power might be secured by the use of a toggle-joint instead of a rack and pinion for work where more power is required; but for the work I now have in view—viz., pressing seed-cotton—the rack and pinion are sufficient.

15 Tying-slots or other well-known means for binding bales might be added, so as to put bands on the sacks in more compact work; but the sack proves sufficient in seed-cotton.

It should be observed that without the outer casing, C, to give form to the package within the sack and to support the sack the sack would be pressed out of all shape, and likely bursted. In pressing in small sections the bag requires no support except where the section is pressed; but when pressed against a stationary head or resistance the sack requires supports its entire length.

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

1. The combination, with the lower package-forming case, of the upper case resting on said lower case, so as to confine an interposed sack, but of smaller diameter than said case, whereby the material to be pressed as it passes from the upper case to the lower case is prevented from catching against the fold or edge of the sack, substantially as described. 30 35

2. The combination, with the lower case, of the vertically-sliding upper case of smaller diameter, having the enlarged lower end encompassing the upper end of the lower case, and the reciprocating traverser, the whole arranged and operating substantially as described. 40

3. In combination with the lower package-forming case, the vertically-moving upper case, and the eccentric for clamping the upper case when raised, whereby to permit the lower case being opened for the removal of the filled sack while the upper case is locked in elevated position, substantially as described. 45

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