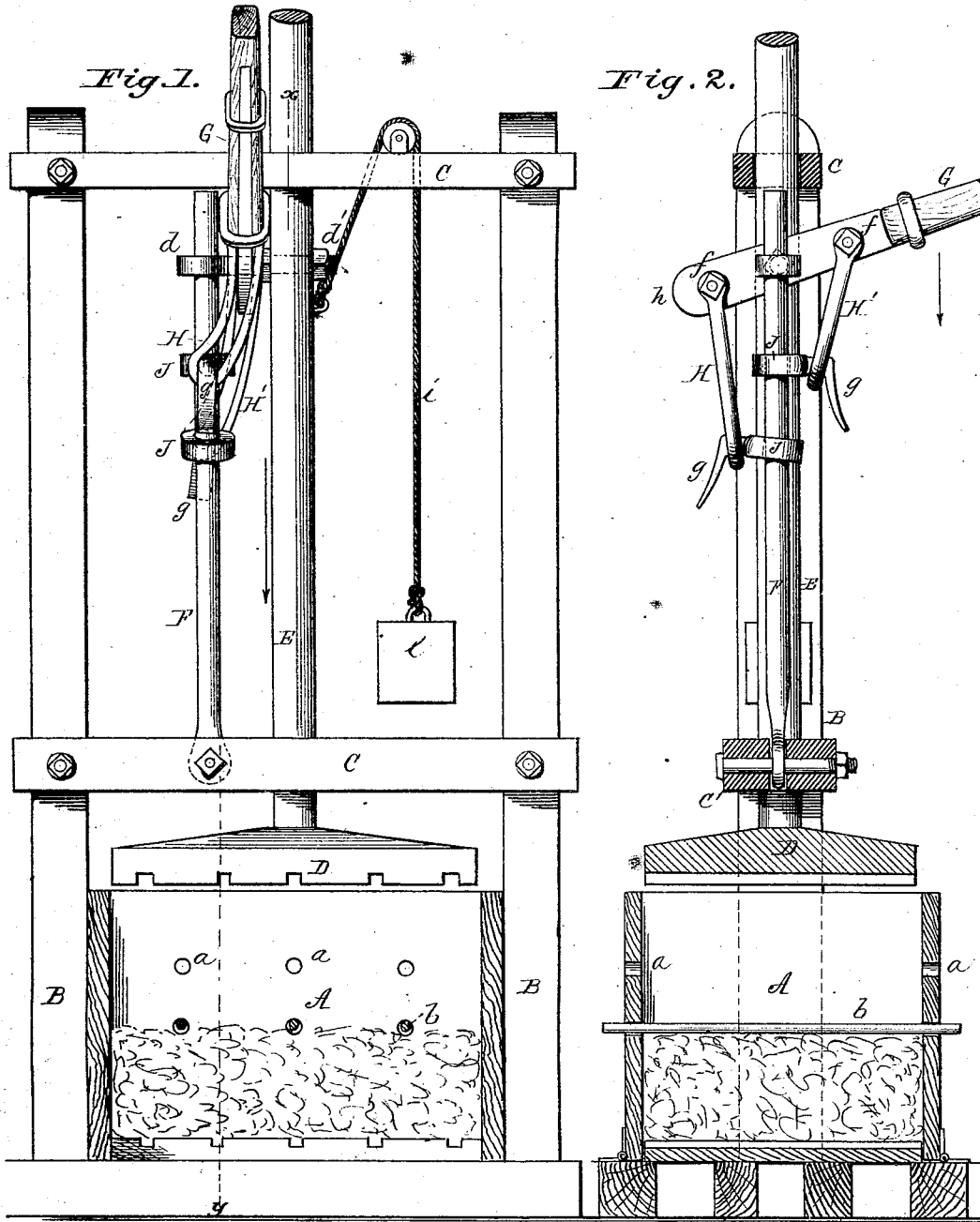


T. J. JENNE.  
Press.

No. 160,200

Patented Feb. 23, 1875



Attest:

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# UNITED STATES PATENT OFFICE.

THOMAS J. JENNE, OF GOUVERNEUR, NEW YORK.

## IMPROVEMENT IN PRESSES.

Specification forming part of Letters Patent No. 160,200, dated February 23, 1875; application filed February 5, 1875.

*To all whom it may concern:*

Be it known that I, THOMAS J. JENNE, of Gouverneur, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Presses, of which the following is a specification:

This invention relates to certain improvements in devices employed in operating the follower or platen of cotton and other presses, and the object is to furnish means whereby the operation of compressing the cotton or other material is accomplished in a most powerful, effective, and reliable manner.

To this end my invention consists in the combination with a press of any preferred construction, having a follower and a vertical stem properly guided, of a standard or post arranged parallel with the stem, on which are arranged sliding gripping jaws or pawls, which are connected with a pivoted lever arm or beam attached to the stem of the platen, and connected with the standard or post on which the gripping-pawls operate, in such a manner that when the lever arm or beam is depressed it will, through the medium of the alternating friction-pawls, carry the stem of the platen downwardly.

When the lever-arm is raised to repeat the operation, the upper gripping-pawl will, by frictional contact with the standard or post on which it is arranged, prevent the follower or platen and its stem from moving upward by reason of the expansion of the hay or cotton on the platen, and when the lever is depressed the lower gripping-pawl will, by friction on its standard, be fixed thereon, and the stem of the platen depressed by lowering the lever which is connected thereto for the purpose, the fulcrum of the lever being upon the lower gripping-jaw.

The connection between the lever and the gripping-pawls consists of two links pivoted to the lever on opposite sides of its pivot, and connected to studs or arms on the pawls, as will hereinafter more fully appear in detail.

In the accompanying drawings, Figure 1 is a front elevation of a press embodying my invention. Fig. 2 is a longitudinal vertical section of the same.

The press proper may be of any preferred or well-known form, embodying in its construc-

tion the usual box A for receiving and holding the material, a vertical beam, B, at each side of the box, and upper and lower cross-bars C C, connecting and supporting the beams. The follower D is provided with a vertical stem, E, which passes through the cross-bars, and by which it is guided. Each side of the box B is provided with a series of openings, *a*, so that when the cotton is compressed, bars *b* may be passed through the openings *a*, between the follower and the cotton or material pressed, so as to retain the latter in its compressed state while the follower is raised and more material placed in the box for repeating the operation.

To the lower cross-bar C is pivoted one end of a vertical standard or post, F, by means of a bolt, *c*, passing through the cross-bar and the lower end of the standard, and the upper end of the latter is passed through an eye in the end of a bolt, *d*, which is passed through the stem E of the platen or follower, and confined in place by a nut, *d'*; and on this bolt *d*, is journaled the operating lever or beam G, and to bolts *f f* on opposite sides of the pivotal bearing of the lever are attached depending links H, the lower ends of the same being passed under arms or studs *g* on circular gripping-pawls J, which are arranged upon the standard or post F. The opening through these gripping-pawls is of the contour or shape of the standard on which they are arranged to slide, and by their employment is accomplished the important results obtained by me, viz., a powerful means of depressing the follower to press the cotton or other material. By the connection of the gripping-pawls with the lever or beam in the manner stated, when the end of the lever is lowered in the direction of the arrow, Fig. 2, the short end *h* of the lever will draw upon the lower gripping-pawl and cause the same to firmly bite the standard, and by friction or the biting of the pawl on the standard at the opposite upper and lower edges of the opening through the pawl caused by its assuming an inclined position, the said pawl will be fixed in position and the pivot of the lever will descend, carrying with it the stem of the follower or platen, the fulcrum of the lever being the gripping-pawl, as is apparent. The depression of the lever will cause the up-

per pawl to approach the lower one, when, by raising the lever to repeat the operation, the upper pawl will become fixed in a manner similar to that described for the other pawl, and thus the follower and its stem are locked from an upward movement which would occur by the expansion of the material being pressed acting against the platen. When the lever is raised, its fulcrum is the upper pawl, and the short end of the lever will descend, allowing the lower pawl to slide down the standard or post on which it is arranged, in order to repeat the operation. It will thus be seen that the griping-pawls act alternately, and at every downward movement of the lever the stem of the platen is carried with it, and the platen depressed for a short distance, and by repeating or continuing such movements the material is compressed in the box in a most effective manner. The fulcrum of the lever, in depressing the follower, is in rear of its pivotal connection with the stem of the latter, and hence the device in its operation is rendered very powerful, as a lever of the first order is obtained.

When the pressing operation has been finished, and it is desired to raise the follower to remove the pressed material from the box, the arms or studs *g* of the griping-pawls are

pressed toward each other, and held so as to cause the pawls to cease biting the standard, when the follower, lever, and pawls can be raised—this being preferably accomplished by means of a cord, *z*, attached to the stem of the follower, and passing over a pulley journaled on the upper cross-bar, and having at its end a weight, *l*, which will, by its downward movement, raise the follower when pressure on the lever is released and the pawls not acting.

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

The combination, with the platen or follower *D* and stem *E* of a cotton or other press, of a pivoted lever, *G*, connected with said stem, and griping-pawls arranged upon a standard, *F*, parallel with the stem of the platen, and connected with the lever on opposite sides of its pivot, the whole being constructed and arranged to operate substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand.

THOMAS J. JENNE.

Witnesses:

GEO. W. CUSHING, Jr.,  
A. H. NORRIS.