

O. H. BELDEN.
COTTON-PRESS.

No. 174,937.

Patented March 21, 1876.

Fig.1

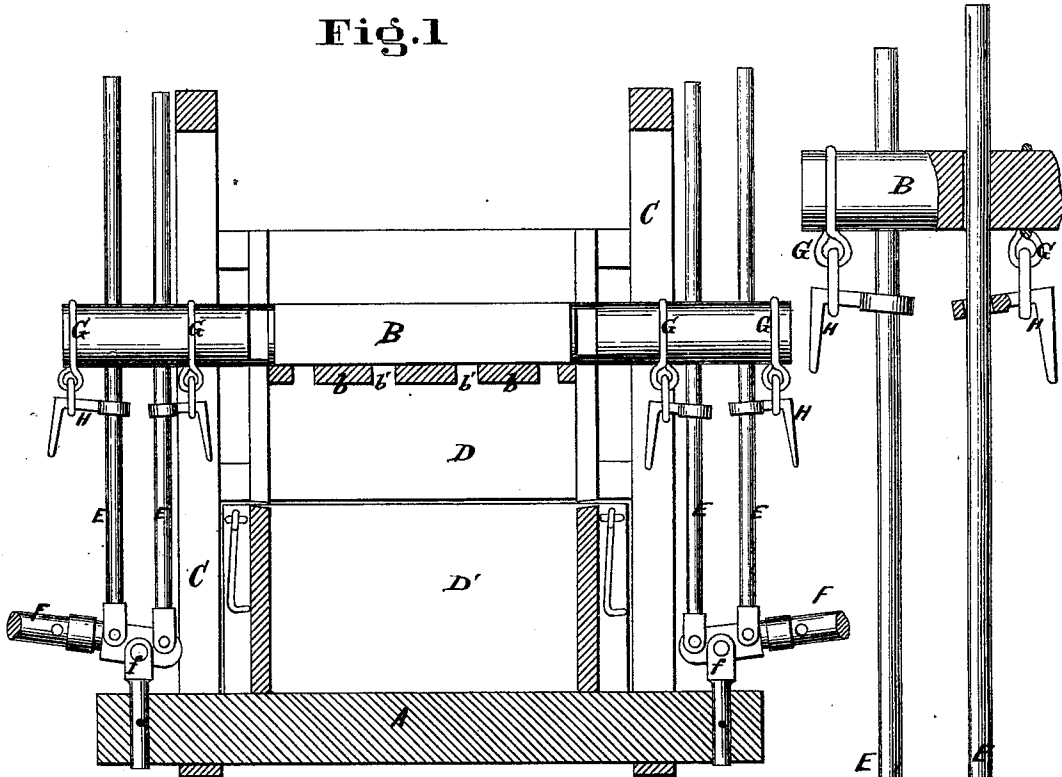
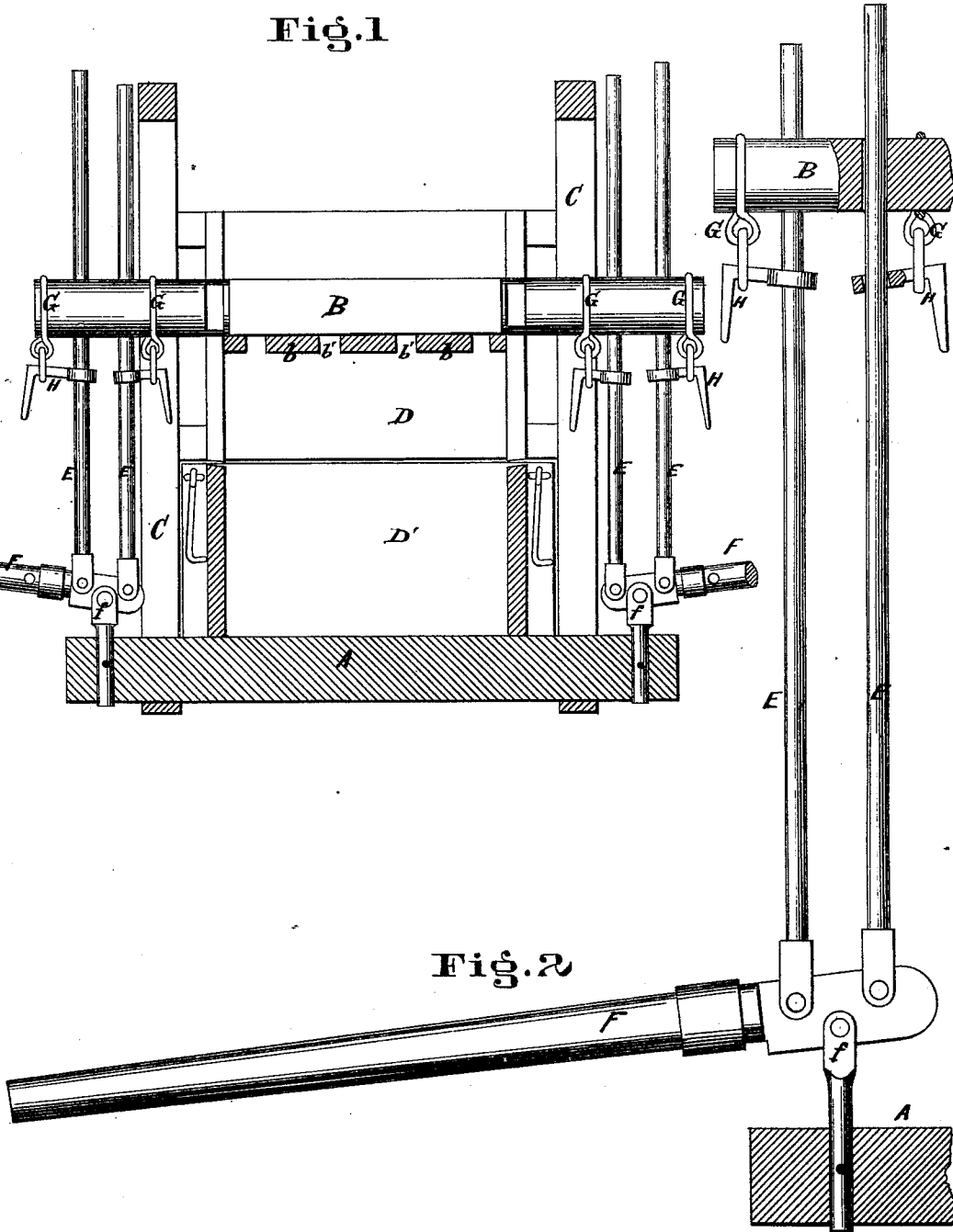


Fig.2



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OSRO H. BELDEN, OF NEWBURG, TENNESSEE.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **174,937**, dated March 21, 1876; application filed March 13, 1876.

To all whom it may concern:

Be it known that I, OSRO H. BELDEN, of Newburg, in the county of Lewis and State of Tennessee, have invented a new and useful Improvement in Cotton-Presses; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification.

This invention consists, mainly, in the combination of a pair of levers having two acting-rods, with a single movable beam and clamping-rings, the construction being such that the simultaneous movement of the levers at the ends in either direction will cause the beam to descend uniformly throughout its entire length.

In the drawing, Figure 1 represents a longitudinal sectional elevation of my improved press, and Fig. 2 an enlarged view of one of the levers and its actuating-rods, and also one end of the follower-beam and the clamping-rings attached thereto.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents the sill or base, constructed of any proper material having suitable strength, which is adapted to support the structure and receive the strain of compression. B represents a beam attached to or resting upon the follower *b*, having the usual spaces *b'*, as shown. C C represent the uprights or standards supporting the upper part of the frame. D represents the upper part of the filling-box, which is permanently secured to the standards and provided at its ends with a vertical slot or opening adapted to permit the follower-beam to have its proper movement. D' represents the lower part of the filling-box, the sides of which are formed of hinged doors, by means of which the bale, when compressed, may be readily removed. *f* represents a standard strongly secured at its lower end to the base A, in any proper manner, and provided above with suitable bearings for the pivot-pin of the lever. F represents the lever, which is pivoted near one end to the upper end of the standard *f*, as shown. E E rep-

resent rods of suitable size and material, which are pivoted, at their lower ends, to the lever F upon each side of the fulcrum, as shown. The upper ends of these rods may be caused to extend up through suitable openings in the beam B or to extend by it on either side, as shown. G G represent eyebolts, rings, or equivalent devices, by means of which the clamping-rings are permanently secured to the movable beam at its ends. H H represent these clamping-rings or clutches, each consisting of a suitable ring having a right-angle arm, as shown, which is loosely, but strongly, attached to the fastening device G of the beam, the part encircling the rod being made heavier than that portion upon the other side of the point of suspension, for the purpose of adapting it to clamp the rod when the latter moves in a downward direction, and to release the same when it moves in an upward direction.

The operation will be readily understood. The press having been properly filled, the levers, at the ends, are simultaneously operated for the purpose of bringing down the follower to compress the bale, the movements of the lever in either direction causing the beam to descend, the operation being substantially as follows: When the lever, at either end, is raised, the outer rod is, of course, lifted with it, the heavy ring encircling it permitting this movement without being affected by it. When, however, the lever descends, the ring, which, in consequence of its overbalanced position, cannot slip upon the rod but is securely clamped thereto, moves with it, and, consequently, pulls the beam down with it. When the outer rod, however, is moving in one direction, the inner rod is also moving in an opposite direction, so that the beam is being drawn in a downward direction at each movement of the lever.

Some of the advantages of this construction are as follows: The position of the lever and the person operating the same is permanently fixed, the necessary vertical movement being made by the beam and clamping-rings. The power is equally and uniformly applied at each end of the press, instead of at one point only, so that more persons can use the levers without inconvenience.

The construction is exceedingly simple, and not liable to get out of order, and yet very effective in its action.

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

The combination of a pair of levers, each

having two acting rods, with a single movable beam and clamping-rings, substantially as described.

O. H. BELDEN.

Witnesses:

WARREN SMITH,
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