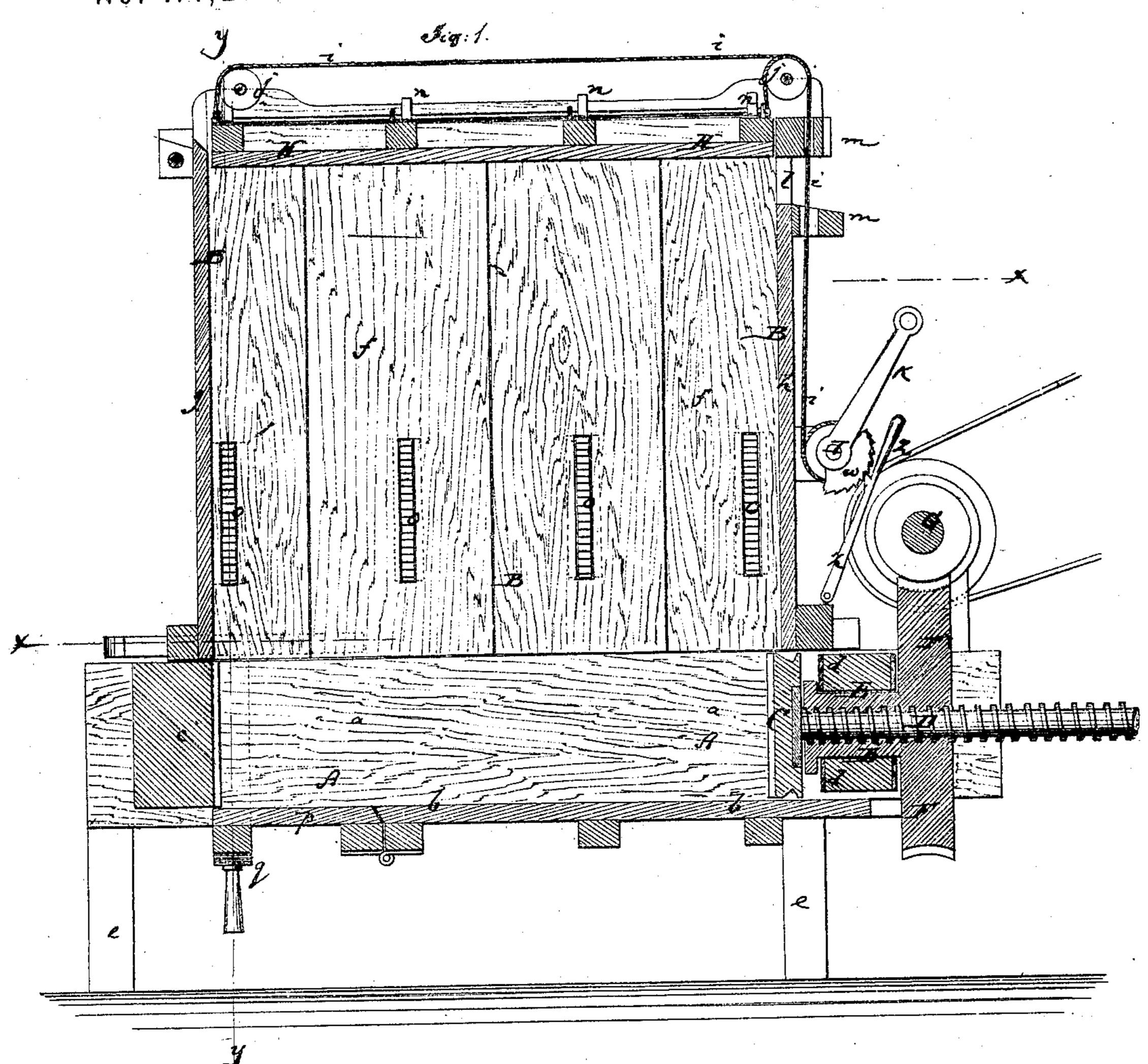
#### HENRY J. DAVIS.

Improvement in Cotton-Presses.

No. 114,271,

Patented May 2, 1871



Witnesses:

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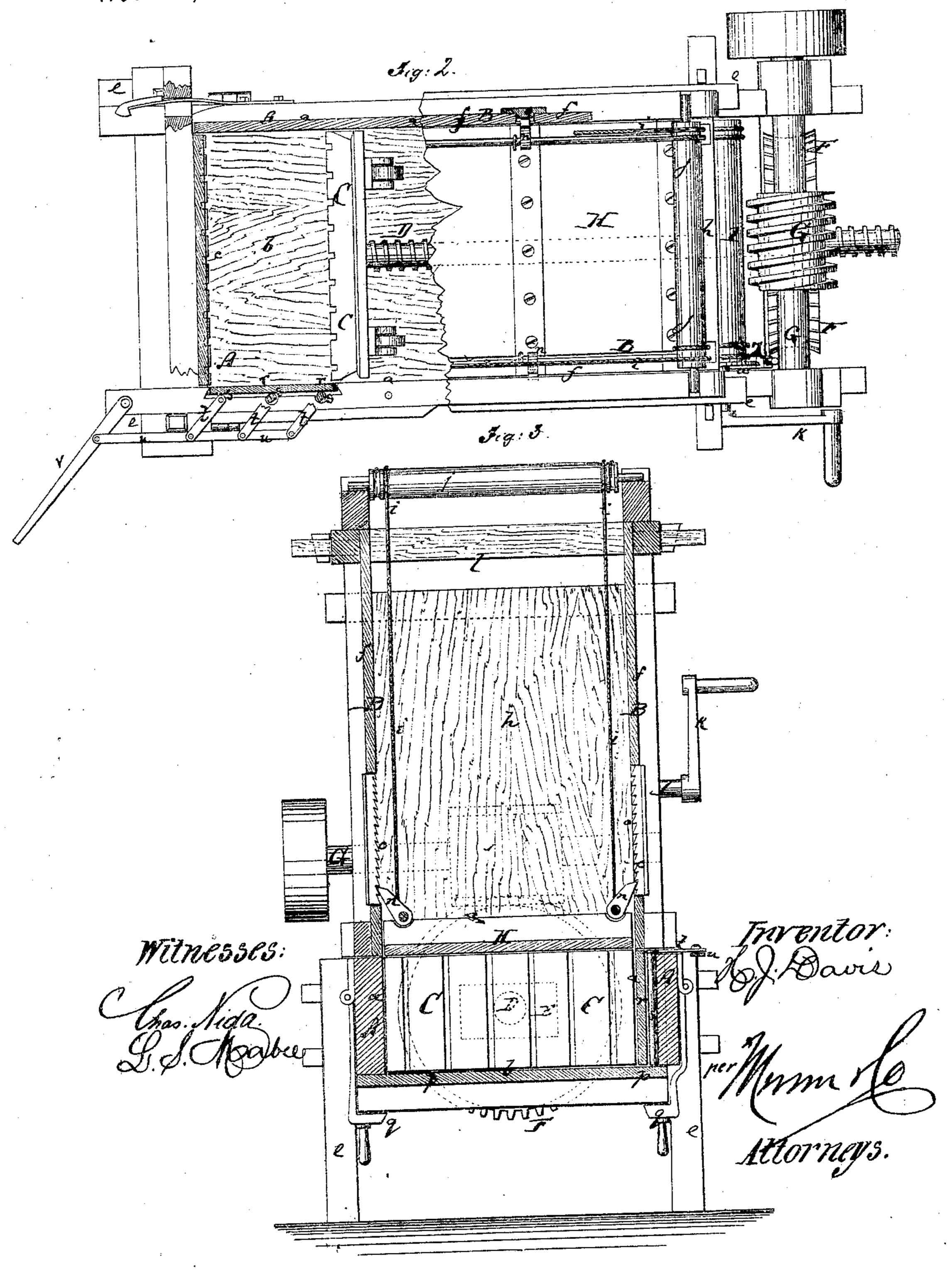
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## Improvement in Cotton-Presses.

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# UNITED STATES PATENT OFFICE.

HENRY J. DAVIS, OF WETUMPKA, ALABAMA.

#### IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. 114,271, dated May 2,1871; antedated April 26, 1871.

To all whom it may concern:

Be it known that I, Henry J. Davis, of Wetumpka, in the county of Elmore and State of Alabama, have invented a new and Improved Cotton-Press; 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, in which—

Figure 1 represents a vertical longitudinal section of my improved cotton-press. Fig. 2 is a horizontal section of the same, taken on the plane of the line x x, Fig. 1. Fig. 3 is a vertical transverse section of the same, y y,

Fig. 1, being the section-line.

Similar letters of reference indicate corre-

sponding parts.

The purpose of my invention is to improve upon the cotton-presses in common use, and particularly upon those employed in immediate conjunction with the gin.

I will first describe the invention in connection with all that is necessary to a full understanding thereof, and then clearly point it out

in the claim.

A in the drawing represents the frame-work of the press proper. It contains the sides a a and bottom b, as well as the ends c and d. This frame is supported on suitable legs or standards e e. B is a superstructure built up above the press proper. Its sides ff are in line with the sides a, and its one end, g, with the end cof the press; but its other end, h, projects inward from d as much as the thickness of the follower C. When the follower is drawn against the end d, as in Fig. 1, its face is about flush with the end h of the superstructure. The follower C, which is fitted transversely into the press, so as to be longitudinally and horizontally movable therein, is secured to the end of a screw-shank, D. The same is fitted through a rotating nut, E, which is part of or attached to a worm or toothed wheel, F, hung in the end of the press, as is clearly shown in Fig. 1.

When the wheel F receives rotary motion, by means of a worm, G, or other suitable mechanism, the nut is revolved with it, and causes the forward or backward movement of the fol-

lower, as the case may be.

H is the cover of the press. It is a board

or plate fitted into the superstructure B, and suspended by means of ropes or chains *i i*, which pass over rollers *j* that are hung in the

upper part of the case B.

The ends of the ropes *i* are secured to a drum, I, which is hung to the end of the press, and provided with a crank, *k*, by which it can be conveniently turned. When the drum is turned it winds up or unwinds the ropes, and serves thereby to elevate or lower the cover H. When the cover H is elevated, as in Fig. 1, it leaves the press and the upper case B together, so that the same may be filled with the cotton.

One end or side of the case B has near the top an elongated opening, l, through which the cotton can be directly inserted from a cotton-gin or other apparatus. I prefer to provide outwardly-projecting ribs m around the opening l, so that the same may fit well against

and form a continuation of the gin.

When a sufficient quantity of cotton has been inserted, the cotton is let down until it is close above the follower, as in Fig. 3. In this position it is locked by pawls n n that catch into toothed bars o o, which are fitted into the inner sides of the case B, as is clearly shown in Fig. 3. The cotton has by the descending cover been forced into the press, and can therein be compressed into a bale by moving the follower forward, as in Fig. 2. The bale, when tied, is discharged through an opening in the bottom of the press, the said opening being, during the operation of pressing, closed by a door, p, which is held up by a catch or catches, q.

In order to facilitate the discharge of the bale, I prefer to make that portion of one side of the press which is between the follower and the head c laterally adjustable. A series of small eccentrics, ss, hold the said piece r flush with the rest of the side a, to which it belongs. These eccentrics have cranks tt, which are connected by a rod, u, with a lever, v.

When the bale has been pressed the lever v is turned to withdraw the eccentric, and to thereby slacken the side r, which will tend to loosen the bale and to facilitate its discharge from the

press.

The drum I has a ratchet-wheel, w, so that the cover H can, by a pawl, z, be locked in any desired position.

One end, g, of the case B is or may be hinged, so that it can be swung open, if desired.

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

The series of vibratory eccentrics S, applied to the side r, in combination with the operative mechanism shown and described, to loosen the pressed bale preparatory to its discharge from the machine.

The above specification of my invention signed by me this 11th day of August, 1870.

HENRY J. DAVIS

Witnesses:
GEO. W. MABEE,
ALEX. F. ROBERTS.