

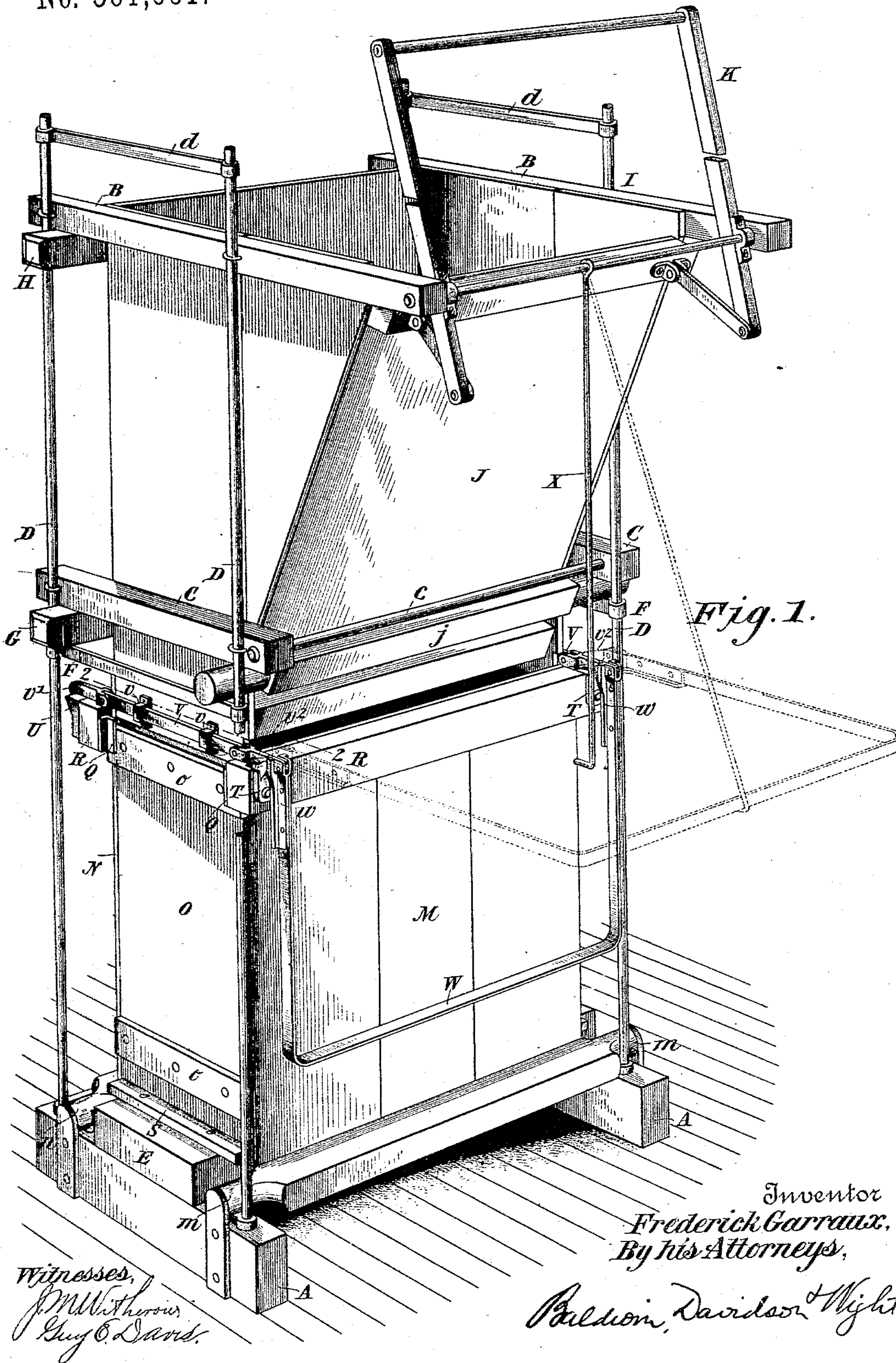
(No Model.)

2 Sheets—Sheet 1.

F. GARRAUX.
COTTON PRESS.

No. 561,661.

Patented June 9, 1896.



(No Model.)

2 Sheets—Sheet 2.

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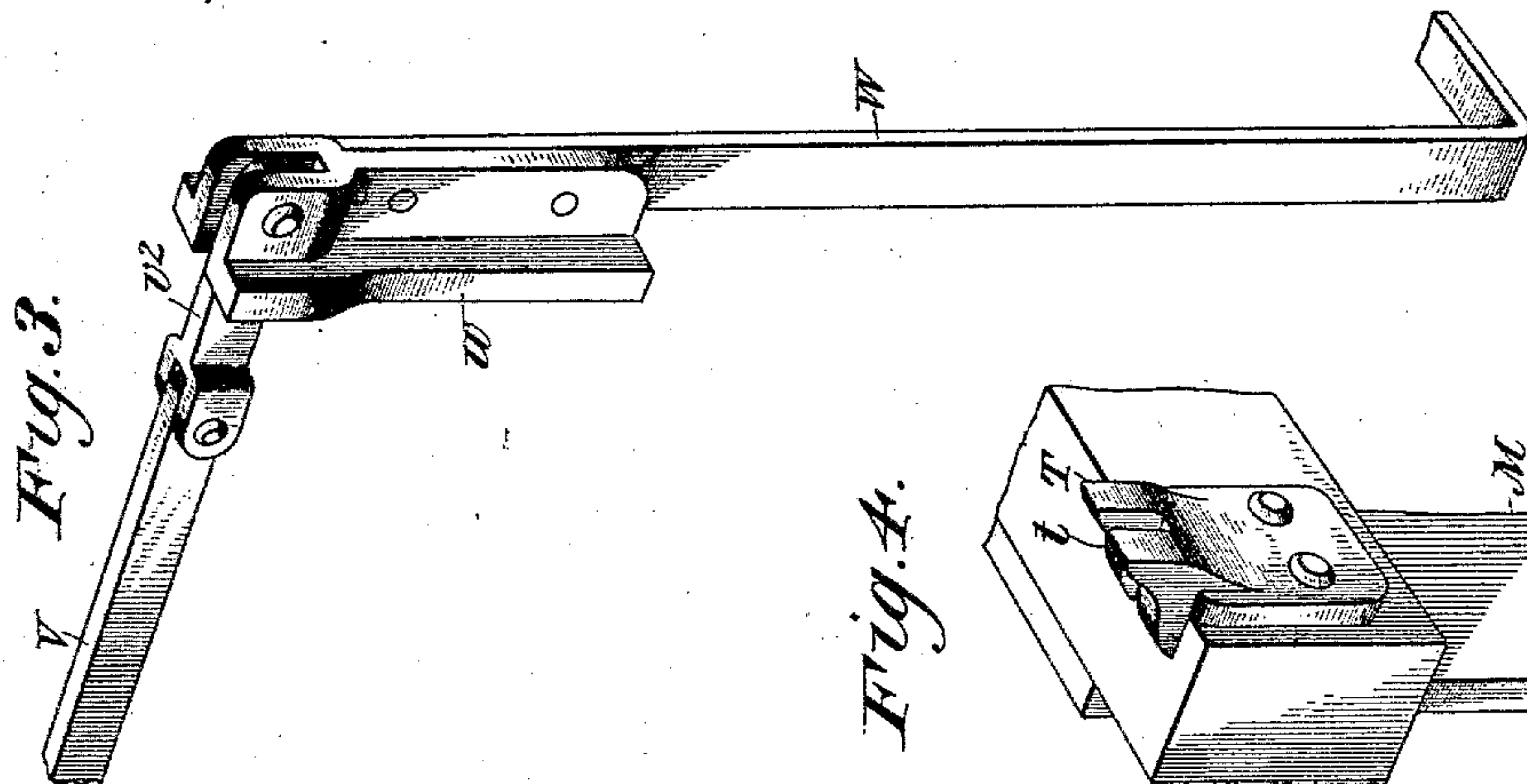


Fig. 4.

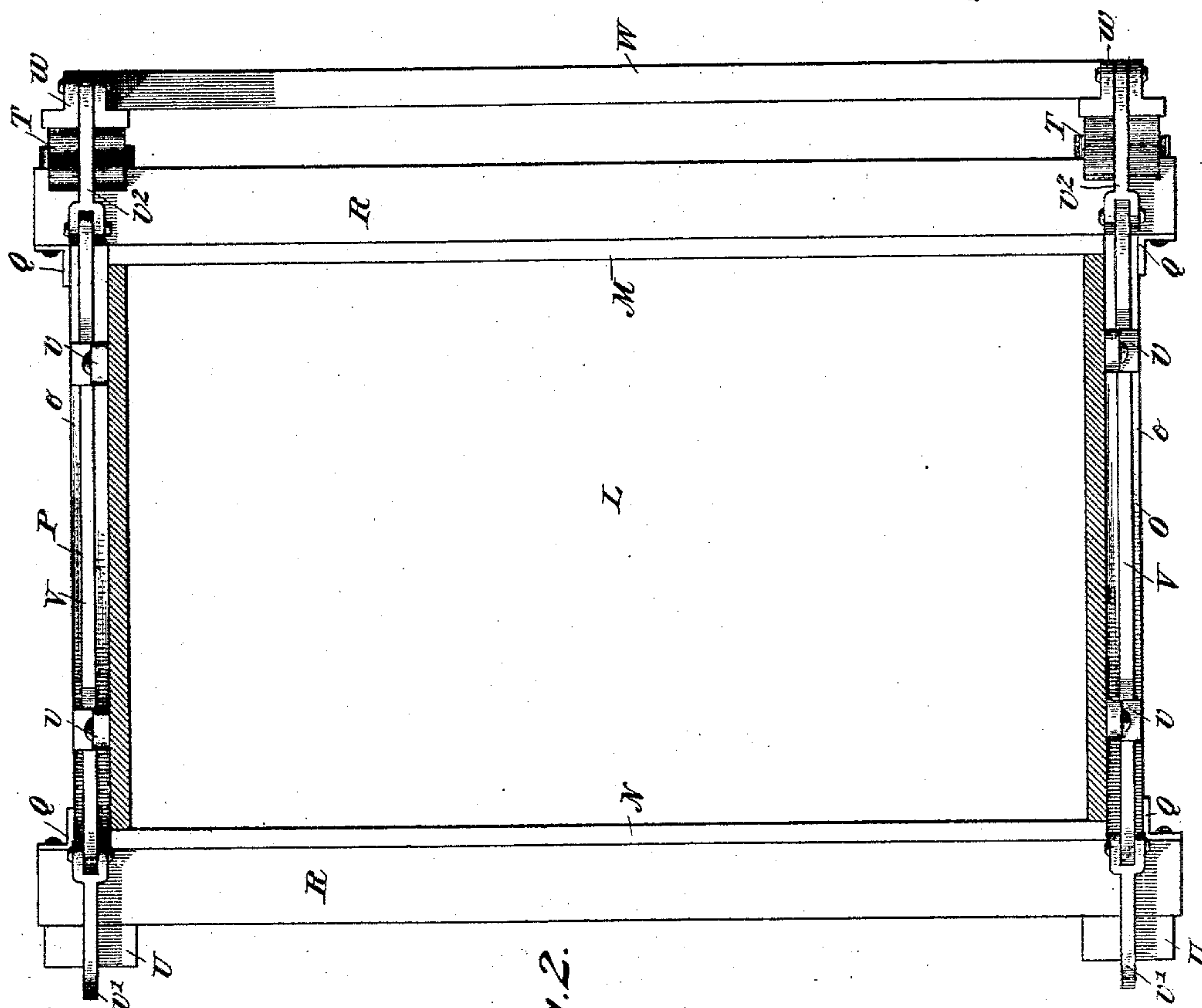
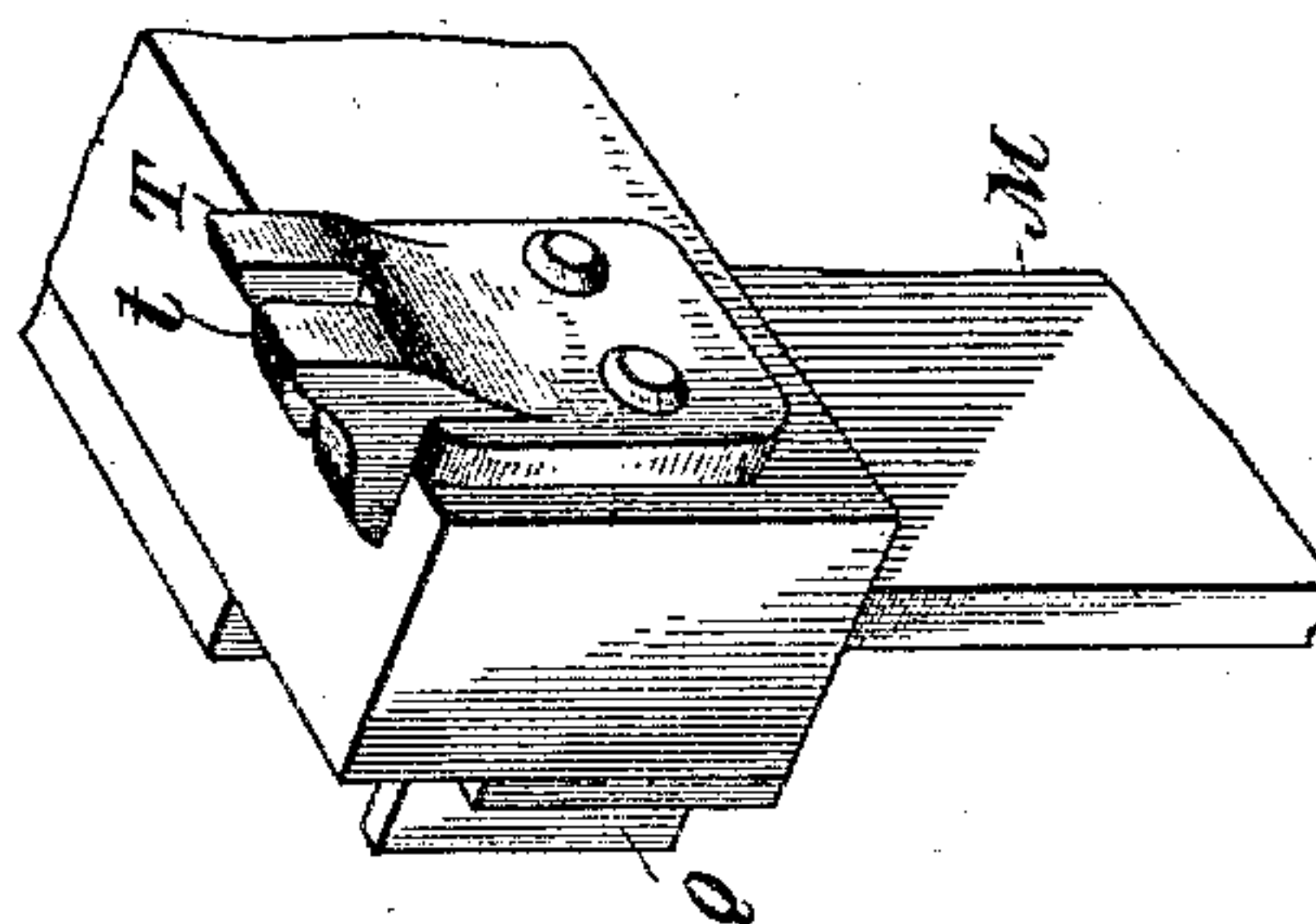


Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK GARRAUX, OF ATLANTA, GEORGIA, ASSIGNOR TO THE WINSHIP MACHINE COMPANY, OF SAME PLACE.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 561,661, dated June 9, 1896.

Application filed March 19, 1896. Serial No. 583,880. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK GARRAUX, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Cotton-Presses, of which the following is a specification.

My invention relates to that class of baling-presses in which the sides or doors of the baling-chamber are separable for the purpose of opening the baling-chamber to apply the bales and to remove the bale.

My invention particularly relates to the devices for locking and unlocking the doors, and my object is to more securely lock and more readily unlock the securing devices.

In the accompanying drawings, Figure 1 shows a perspective view of so much of a cotton-press as is necessary to illustrate my invention. Fig. 2 shows a transverse section on the line 2 2 of Fig. 1. Fig. 3 is a detail view, on an enlarged scale, showing part of the locking mechanism. Fig. 4 is a similar view of another part of the locking mechanism.

The sills A are secured to the top beams B and to the cross-beams C by upright rods or posts D. These posts are connected at their upper ends by bars *d*. The cross-beams C are tied together by rods *c*, and the sills are connected by the bottom piece E of the press. Rods F connect the posts D together on opposite sides of the press, and on these rods is supported a cross-beam G. A cross-beam H at the top of the press is secured to the posts D beneath the beams B. This construction just described is common and does not form part of my present invention.

The hopper I is open at top and bottom. Three of its sides are stationary, while its front side J is hinged or pivoted at *j*. This hinged side J may be opened and closed and locked in either its opened or closed position by means of a swinging frame K, of well-known construction.

The baling-chamber L is open at top and communicates with the hopper I. The bottom is closed by the cross-piece E, the front M is hinged in bearings at *m* on the sills A, and the back door N is hinged at *n* in bearings above the sills A. The two sides O and

P need not be hinged, but are separable from the front and back sides. They are preferably provided with battens *o* at their upper and lower ends. The top battens are adapted to fit behind brackets Q, secured to the cross-beams R on the upper ends of the front and back doors M and N. At their lower ends the sides O are adapted to fit behind cross-pieces S, secured to the bottom piece E. The front door M is provided with brackets T, constructed as shown particularly in Fig. 4. These brackets are secured to the top beam R at opposite ends, and are slotted at *t* for a purpose hereinafter to be described. The beam R on the back door of the press is provided with brackets U, adapted to receive hooks on the locking devices now to be described.

On each side of the press, above the side doors and outside the baling-chamber, there is a sliding bar V, arranged to move back and forth in guide-brackets *v*. At one end of each bar is hinged a hook *v'*, adapted to engage with a bracket U. At the opposite end of each bar V is hinged a link *v*², adapted to extend into the slot *t* of the bracket T. The outer end of each link is hinged in a casting *w* on the end of a swinging frame W.

Fig. 1 shows the baling-chamber closed and by full lines shows the locking devices in position to securely hold the four doors of the baling-chamber closed and adapted to receive the strain of the press. The dotted lines show how the securing devices are unlocked. It will be observed that when in their locked positions the hooks *v'* engage with the brackets U and the links *v*² extend through the slots *t* of the brackets T, the castings *w* bearing against the front of the brackets T. The pivots of the frame W are in line with the sliding bars V when the press is locked, and pressure on the doors will not cause the disengagement of the locking devices. When, however, the frame W is raised to the position shown by dotted lines, the links *v*² will be lifted out of the slots *t*. The front door M may then be removed and the bars V will slide backward, relieving the strain on the hooks *v'*, which may then be readily disengaged, and afterward the side doors may be removed.

In reassembling the parts the back door N

is first placed in position and then the end doors are set up. Lastly, the front door is put in position, then the hooks v' are made to engage with the brackets U, and then the links v^2 are engaged with the brackets T.

The frame W may be held in an elevated position by a hooked rod X, which may be attached to the upper part of the press or to any other convenient object.

The precise manner of constructing the frame of the press or of mounting the doors is not important, as my invention relates exclusively to the devices for locking and unlocking the doors. It will be observed that the devices are self-locking—that is to say, when the frame W is elevated to the position shown in dotted lines the doors are unlocked, but when depressed to the position shown in full lines all of the doors are simultaneously locked by this one movement of the frame. Internal pressure does not tend to lift the frame W and thus unlock the doors, because the pressure is in line with the pivots of the frame and does not tend to swing this frame in either direction.

I claim as my invention—

1. A baling-press provided with separable doors secured by bars sliding in guides on the frame of the press and having the hinged locking devices at their opposite ends detachably connected with the doors, and a frame for securing and disengaging the locking devices, substantially as described.

2. A baling-press having separable doors and provided with locking-brackets at their upper ends, in combination with the sliding bars, the hinged locking devices at opposite

ends of the bars adapted to engage with the locking-brackets but separable therefrom and a swinging frame for disengaging said locking devices from the brackets, substantially as described.

3. A baling-press having separable doors and provided with sliding bars having hinged hooks and hinged links adapted to engage with securing devices on the doors but which are separable therefrom, and a swinging frame pivotally connected with the links, substantially as described.

4. The combination, in a baling-press, of the separable doors, the bars sliding in guides at the sides of the press outside of the baling-chamber, hooks on the bars adapted to engage with brackets on the doors and a swinging frame pivotally connected with the bars in line with their longitudinal axes, substantially as described.

5. The combination of the separable doors, the brackets on the back door, the slotted brackets on the front door, the bars sliding in guides secured to the baling-press outside the baling-chamber, hooks hinged to the sliding bars and adapted to engage with the brackets on the back door, links pivotally connected with the sliding bars and engaging with brackets on the front door, and a swinging frame connected with the pivoted links, substantially as described.

In testimony whereof I have hereunto subscribed my name.

FREDERICK GARRAUX.

Witnesses:

S. R. JACOBS,
R. E. RUSHLORD.