

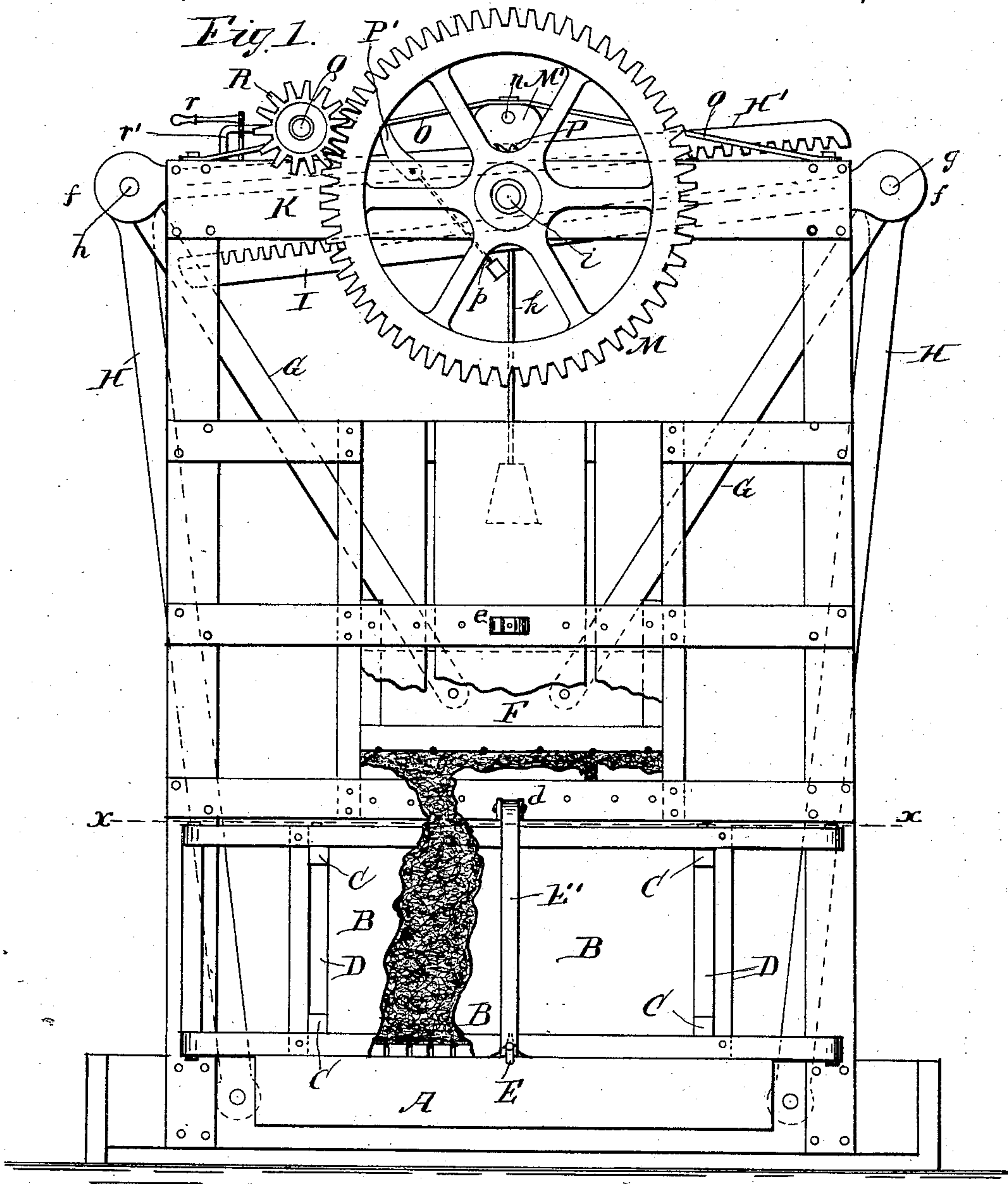
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4 Sheets—Sheet 1.

J. L. PRIDEMORE.  
COTTON PRESS.

No. 478,070.

Patented June 28, 1892.



*Fig. 6.*

WITNESSES:

*W. O. Crosby*  
*B. A. Slater*

*E*

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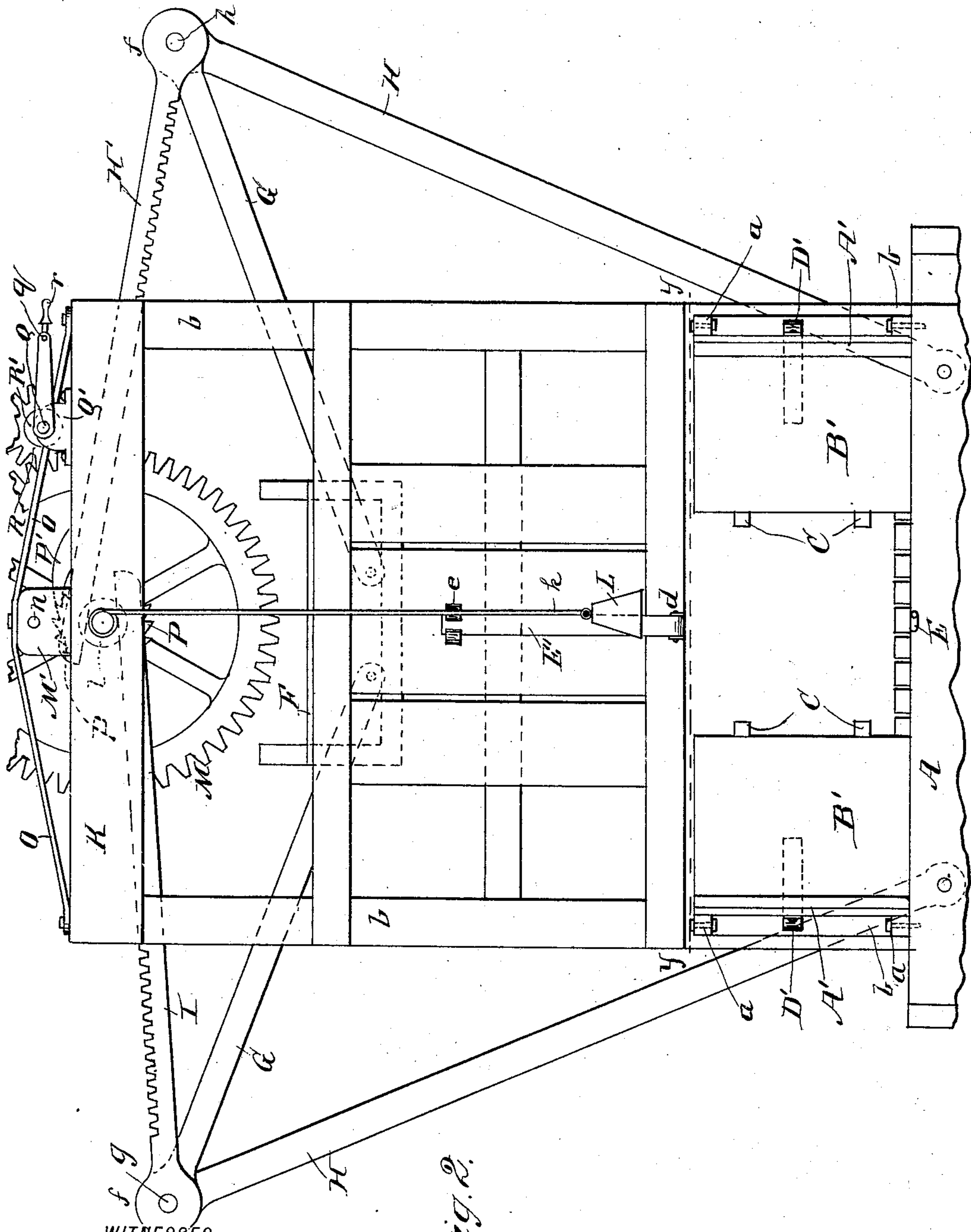
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Fig. 2.

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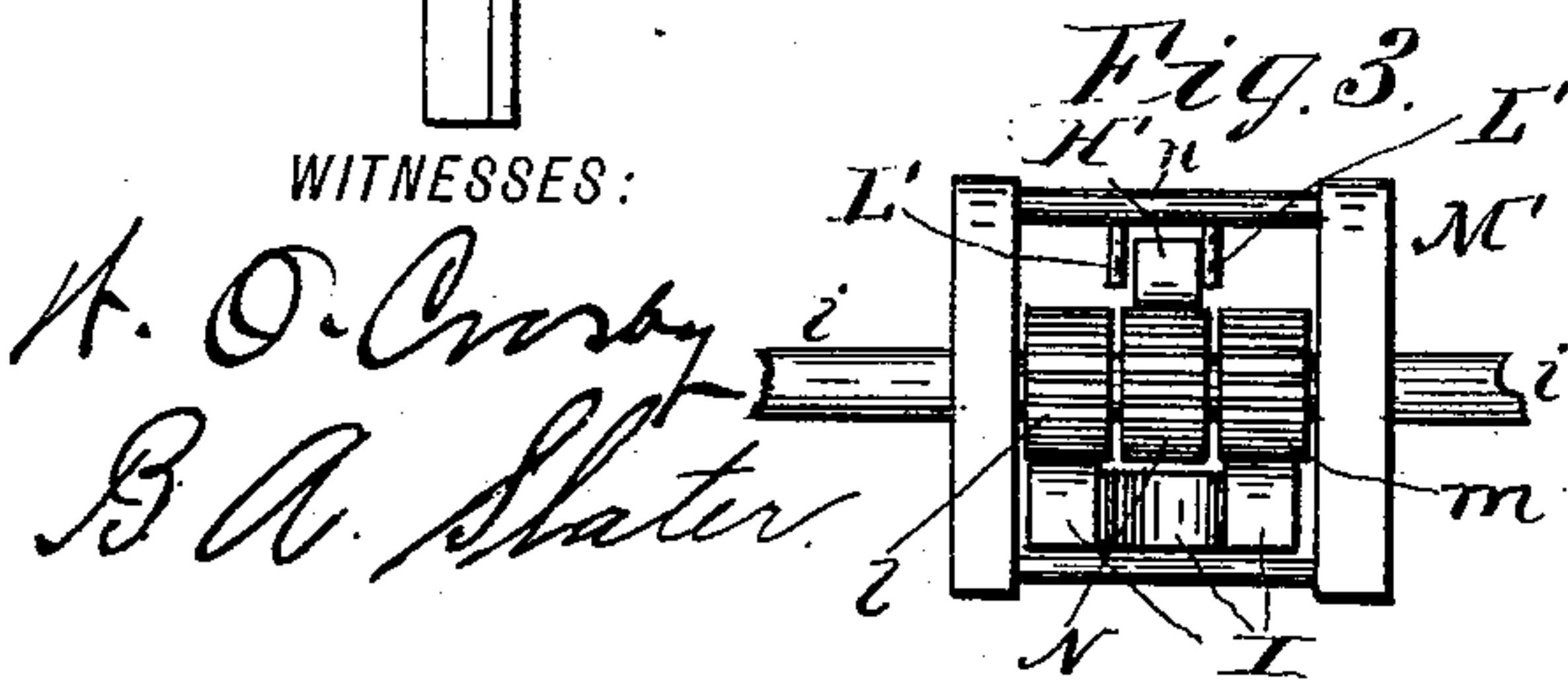
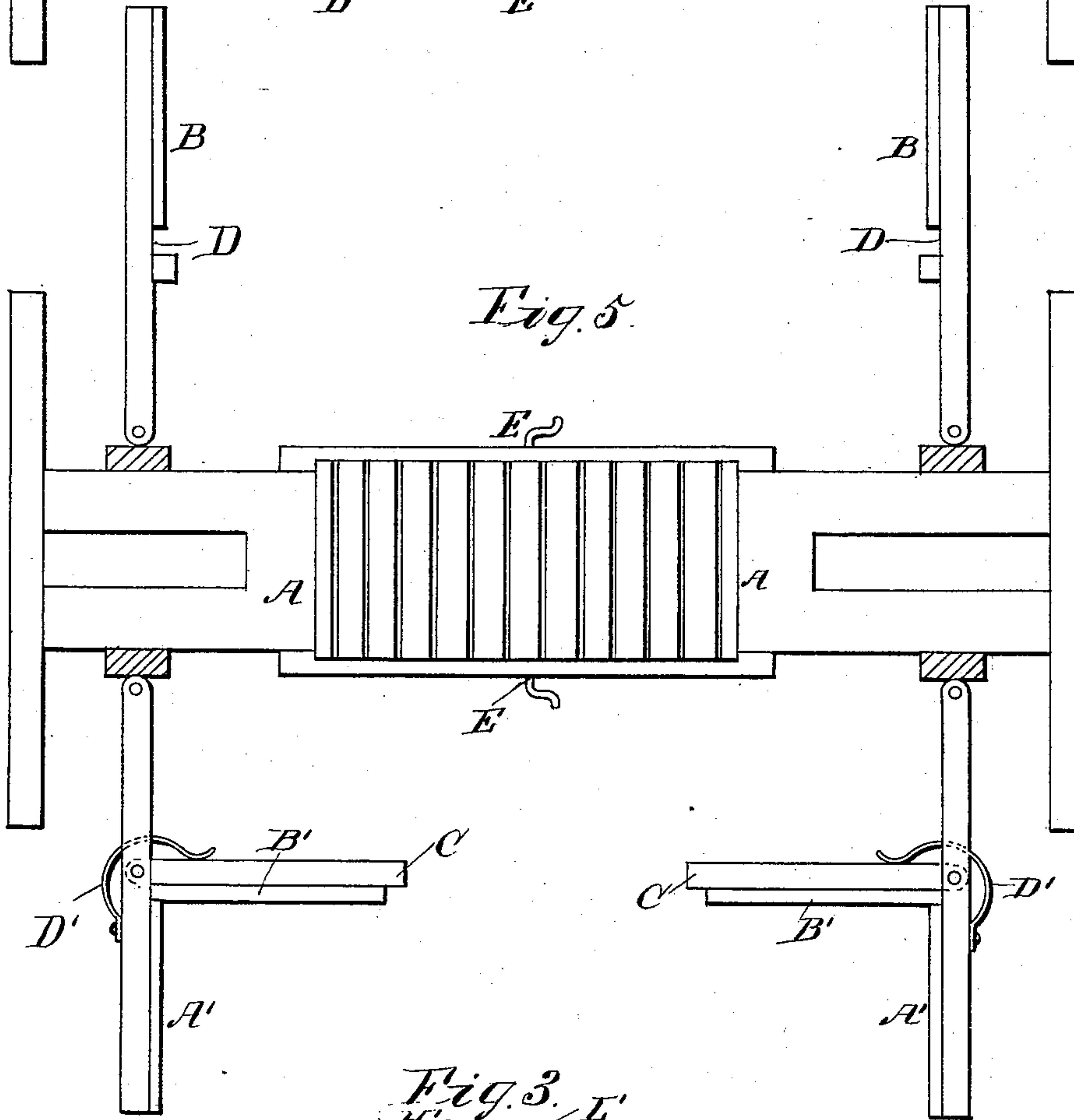
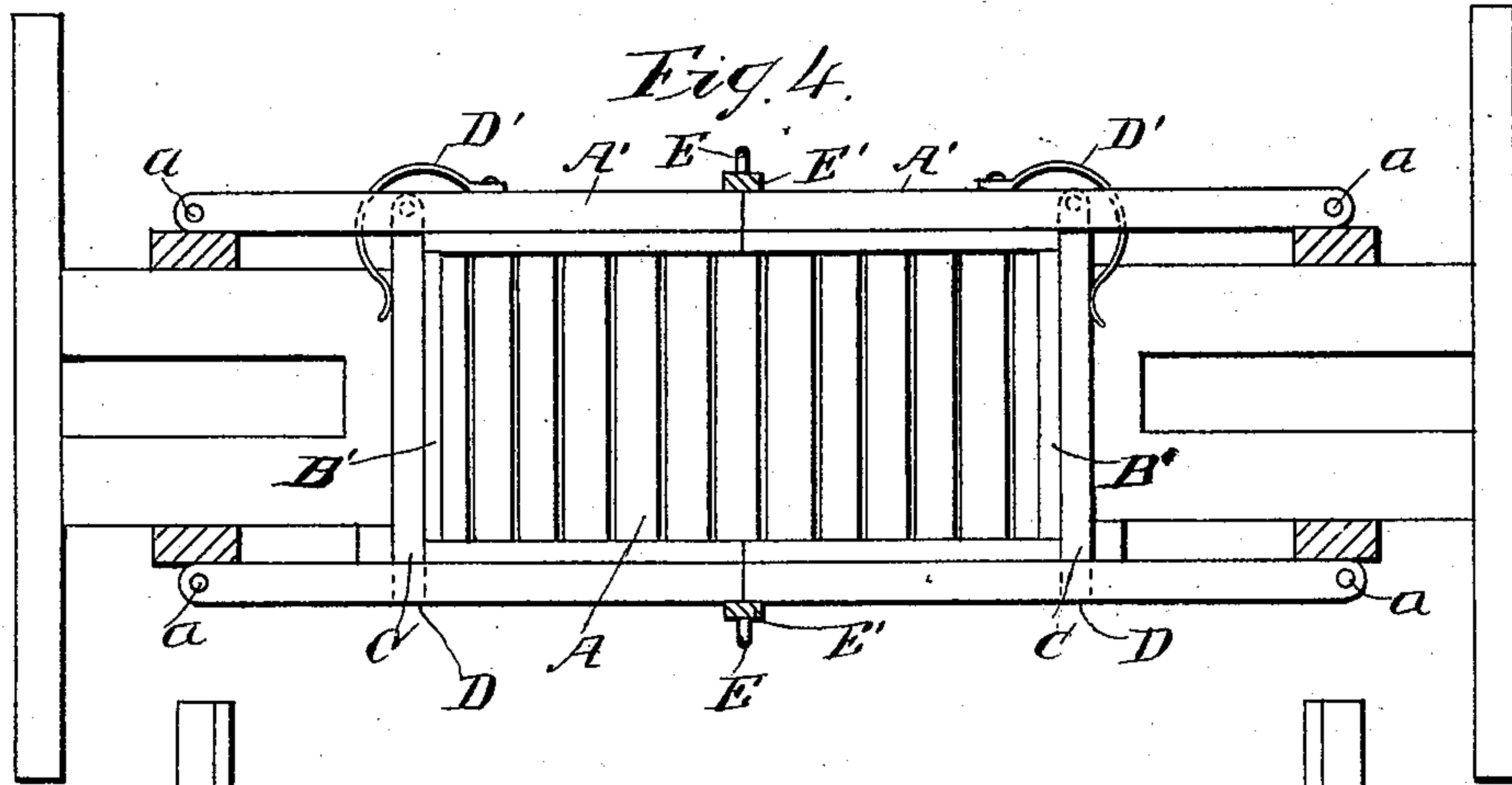
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(No Model.)

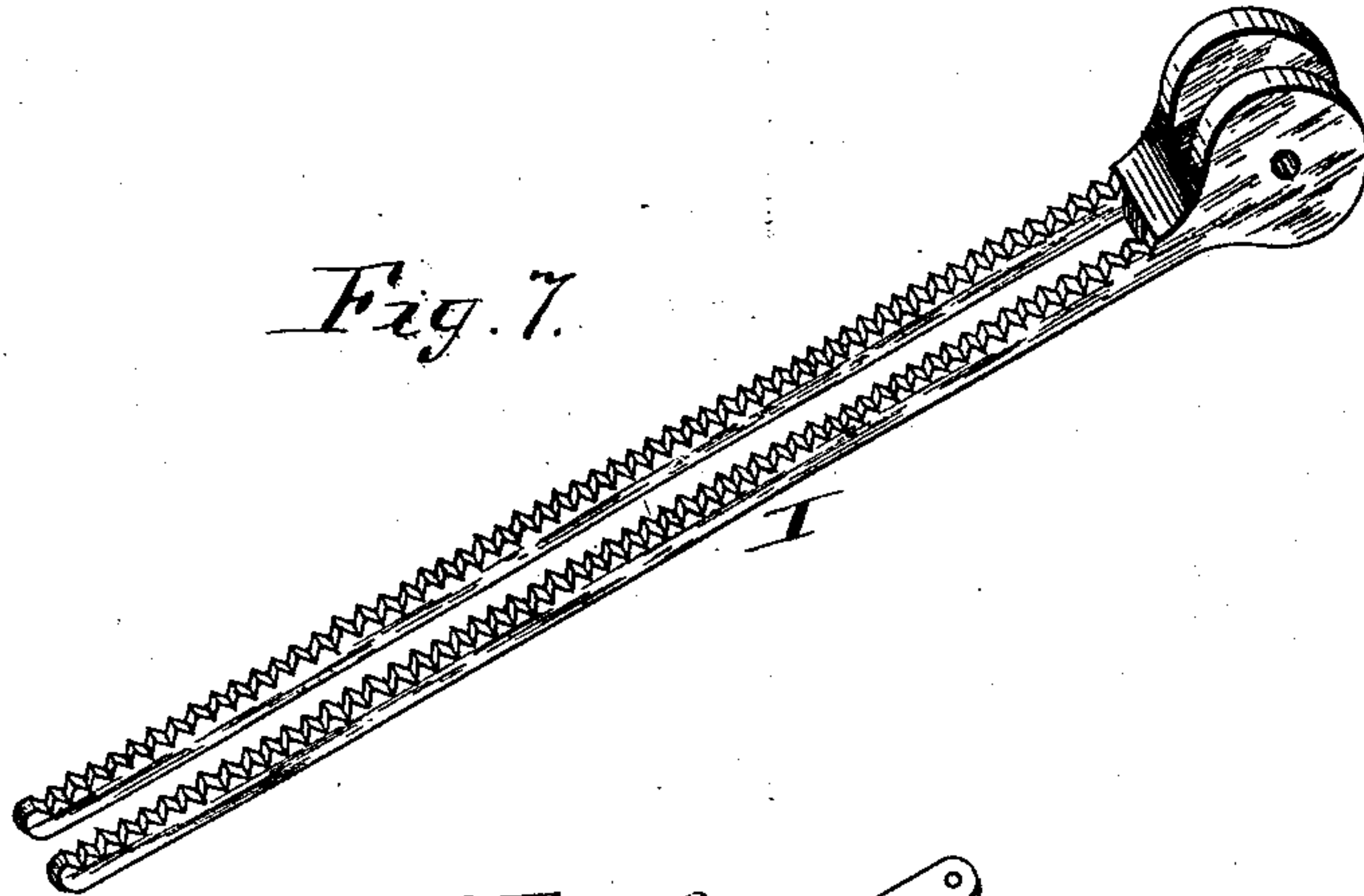
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J. L. PRIDEMORE.  
COTTON PRESS.

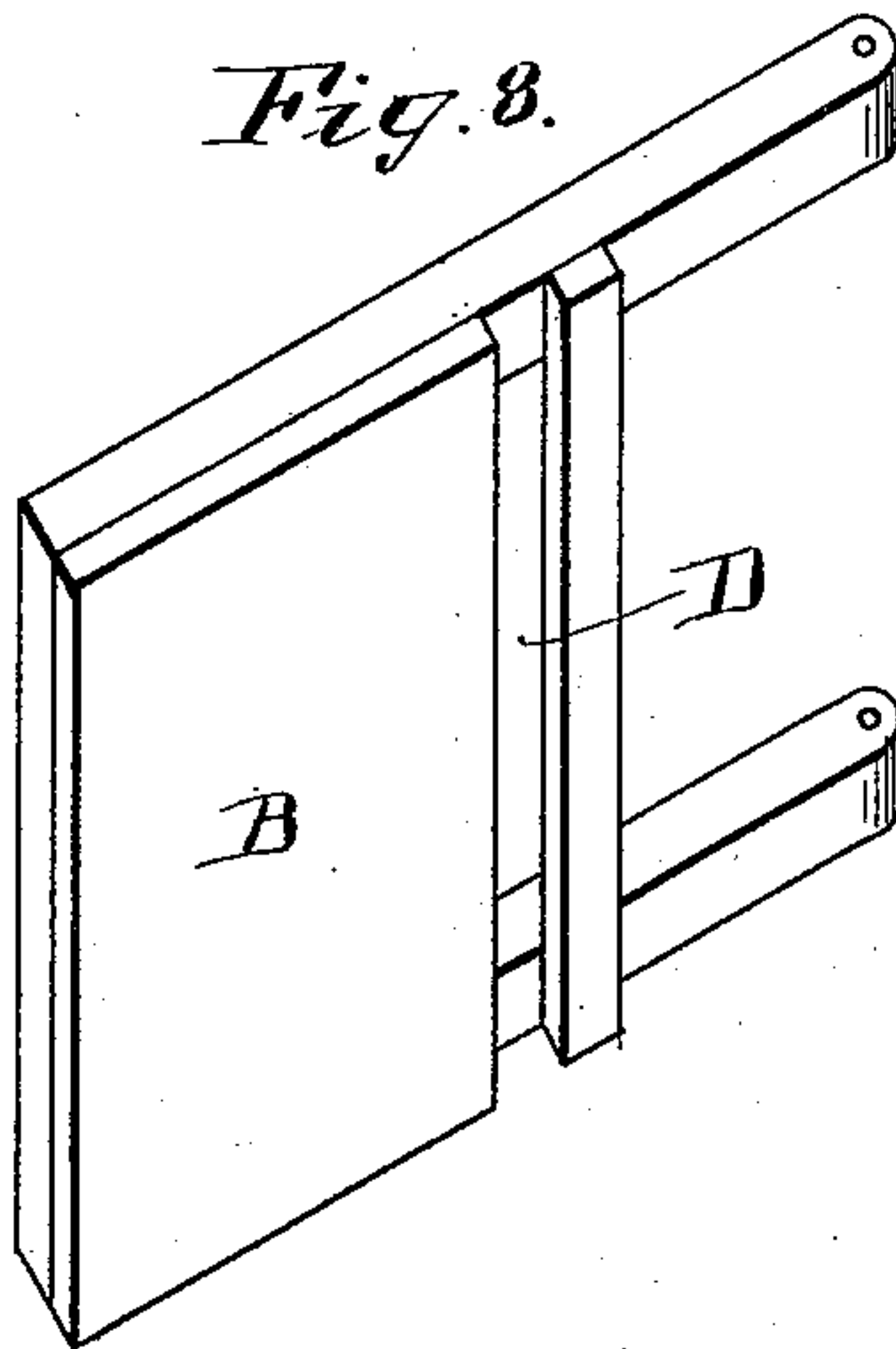
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*Fig. 7.*



*Fig. 8.*



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# UNITED STATES PATENT OFFICE.

JOHN L. PRIDEMORE, OF LINN, INDIAN TERRITORY.

## COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 478,070, dated June 28, 1892.

Application filed January 9, 1892. Serial No. 417,485. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. PRIDEMORE, a citizen of the United States, residing at Linn, in the Chickasaw Nation, Indian Territory, have invented certain new and useful Improvements in Cotton-Presses, of which the following is a specification.

This invention relates to the class of presses, and particularly to cotton-presses, and its novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings; and the object of the invention is to provide a cotton-press of great strength of pressure and durability which will press cotton into bales and discharge it by opening the doors of the compressing-chamber.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view partly broken, showing the follower descending upon the cotton. Fig. 2 is a view of the opposite side of the press from that shown in Fig. 1 with the doors open, the cotton discharged from the press, and the follower raised to its full extent. Fig. 3 is a detached end view of the yoke, showing the set of pinions located therein upon the shaft *i*. Fig. 4 is a sectional view taken on the line *x x*, Fig. 1, showing the compressing-chamber closed and the pitmen removed. Fig. 5 is a similar view taken on the line *y y*, Fig. 2, showing the compressing-chamber open. Fig. 6 is a detached view of the locking-rod. Fig. 7 is a perspective view of the double rack-bar. Fig. 8 is a perspective of one of the doors, showing the opening D.

The same letters of reference denote the same parts throughout the several figures.

A represents the base of the press, which forms the floor of the compressing-chamber. One side of the compressing-chamber is formed by the doors B, hinged at *a* to the up-rights *b* of the press-frame. The other side of the compressing-chamber is also formed by similarly-hinged doors A', and the ends B' of the compressing-chamber are hinged or pivoted to the frames of the doors A'. The frames C of the ends B' extend beyond either edge of the said doors A', so that such extension projects through an opening D (when the chamber is closed) in the doors B, so as to in-

terlock the doors B and A' and brace the ends B' against said doors.

D' is a stiff metal-plate spring, one end being secured to the doors A' and the other end bearing upon the ends B' for the purpose of keeping the ends hard against the cotton-bale as the doors A' are opened, so as to assist in discharging the bale from the compressing-chamber.

The locking device for the doors upon both sides of the press consists of the U-shaped rod E, which extends through the bed of the compressing-chamber, its ends projecting beyond the doors on either side of the press and formed S-shaped, so as to receive a locking-bar E', hinged at *d* to the press-frame. By turning this rod E the S-shaped portion disengages the end of the bars E', leaving them free to be thrown up and engaged by the catch-springs *e* on the side of the press.

To the follower F is pivoted a pair of connecting-links G, pivoted at *f* to the pitman H and the double rack-bars I by the pivot *g* on one end of the press and at the opposite end to the single rack-bar H' by the pivot-pin *h*. The pitmen H are pivoted in the lower frame of the press below the compressing-chamber.

In the center of the top side frame K of the press is journaled a shaft *i*, extending out on either side of the said frame, one end of such extension being provided with a cord *k* and weight L. The extension upon the opposite side has a large gear-wheel M, while the portion of the shaft *i* between the side frames K is provided with three pinions *l*, *m*, and N. The central pinion N engages the single rack-bar H', which extends over the top of the pinion N, while the pinions *l* and *m* mesh with the teeth of the double rack-bars I, which are underneath the set of pinions. It will be seen that while the double rack-bars are moving in one direction the single rack-bar is moved in the opposite direction, but both forcing the connecting-links and pitmen in opposite directions, thereby producing great force of pressure in the downward motion of the follower. By providing the shaft *i* with three separate pinions any one of them, when worn or unfit for use, can be removed and replaced by a perfect one without dispensing with the others.



The rack-bars I and H' are kept closely engaged with the set of pinions by means of a yoke M', located upon the shaft *i*, the top cross-bar *n* of the yoke being provided with 5 guide-arms L' for the purpose of keeping the single rack-bar confined to the middle of its own pinion N. The yoke has brace-rods O secured thereto, which extend out to near the ends of the press, where they are secured, so 10 as to keep the yoke in an upright position.

P denotes a ratchet secured to the shaft *i*, having a pawl P', provided with a counter-balanced arm *p*, so that when the pawl is thrown out of engagement with the ratchet it 15 will stay out until thrown in again by the operator. This ratchet serves to stop the movement of the shaft *i* as it is turned by the weight L to raise the follower.

Q refers to a supplemental shaft journaled 20 in the bearings Q' on the top frame of the press, and one end is provided with a suitable handle *q* or a pulley when the machine is operated by any other means than by hand, while upon the other end is secured a small 25 gear-wheel R, which meshes with the gear-wheel M. The shaft Q is also provided with a sliding clutch R', having a handle *r* and by means of which the clutch is moved into or out of engagement with the lugs S on the 30 gear-wheel R, so as to first operate the wheel M and hence the mechanism for forcing the follower down to press the cotton, and then after the cotton is pressed the clutch is disengaged with the gear R, and the said wheels 35 and mechanism are operated by the weight L, which moves the follower up again in position, leaving the compressing-chamber in condition to receive another supply of cotton.

It will be observed that by this construction 40 no power or manual labor is necessary to return the mechanism and the follower to its starting-point, as such power is created while the follower is on its descent by the cord secured to the shaft *i* being wound 45 thereon.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a cotton-press, the combination of the compressing-chamber having its sides formed 50 by hinged doors and its ends pivoted to the doors on one side of the press with the locking device, substantially as and for the purpose set forth.

2. The combination, in a cotton-press, of a 55 compressing-chamber comprising the hinged doors B, having the opening D, the hinged doors A', and the ends B', pivoted in the said doors A', so that the free edge of the ends engage the said opening when the doors upon 60 both sides of the press are closed, substantially as shown and described.

3. The combination, with a cotton-press, of the hinged doors A' and B, the portions pivoted in the doors B, and the plate-springs 65 secured at one end to the said doors B and their other end left free to engage the pivoted portions, so that when all the doors are closed they with the pivoted portions will form a compressing-chamber, substantially as shown 70 and described.

4. In a cotton-press, the combination, with the compressing-chamber, the follower, and the connections from the base of the compressing-chamber and follower to the rack-bars, of the shaft *i*, the large gear-wheel 75 located upon the shaft, the three pinions secured upon the shaft, the double rack-bar engaging two of the pinions below the shaft, the single rack-bar engaging the other pinion 80 above the said shaft, the supplemental shaft, the small gear-wheel secured upon the supplemental shaft and engaging the said large gear-wheel, and means, substantially as shown and described, for operating both shafts, for 85 the purpose set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOHN L. PRIDEMORE.

Witnesses:

JAMES F. SHERRILL,  
O. W. POTCHELL.