

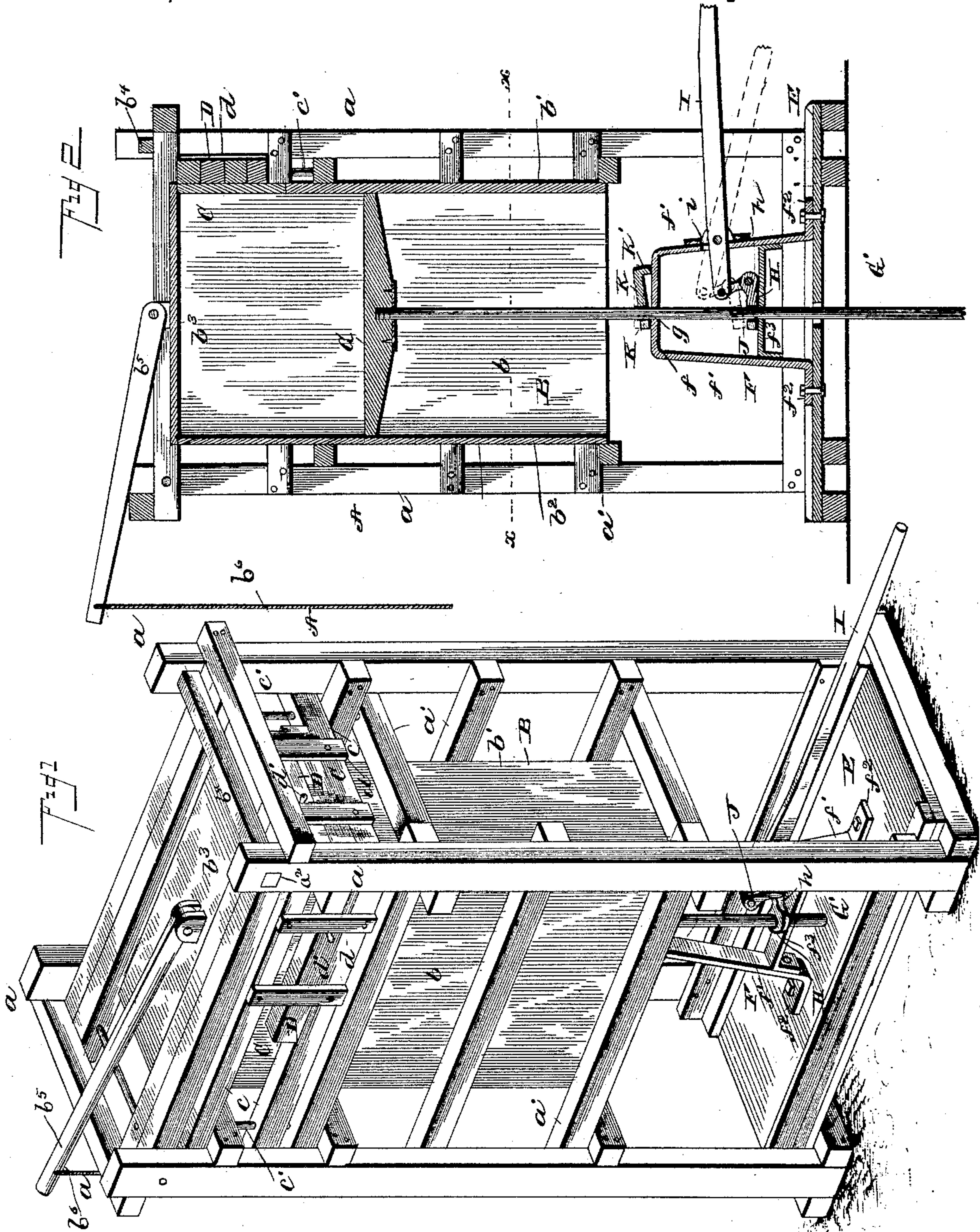
(No Model.)

2 Sheets—Sheet 1.

H. G. KLOCKMANN.  
BALING PRESS.

No. 450,942.

Patented Apr. 21, 1891.



Witnesses

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John Emrie  
Chas. J. Litterer,

Inventor

Henry G. Klockmann.  
By his Attorney, J. R. Littell,



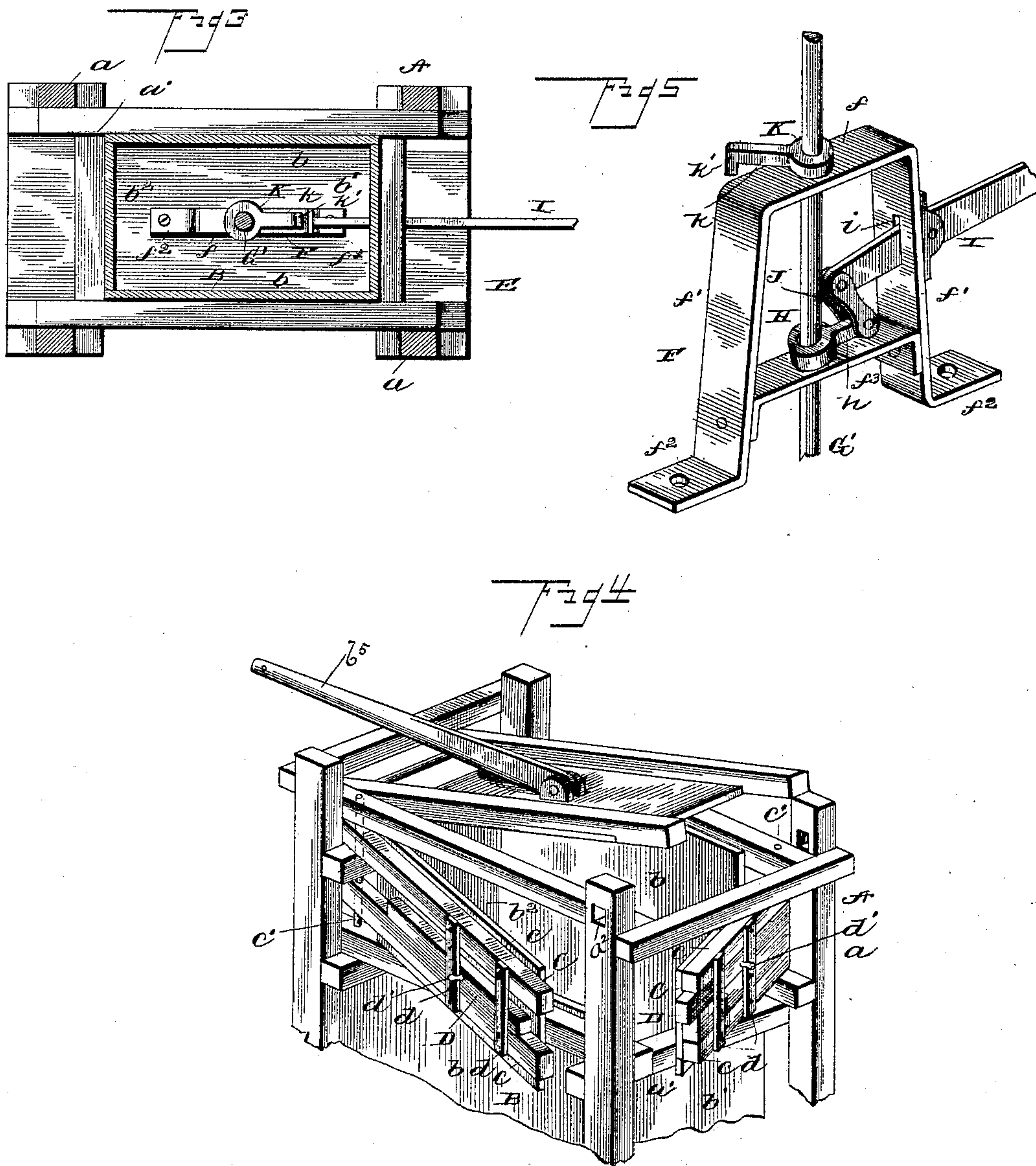
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Witnesses  
*John R. Little*  
*Chas. J. Little*

Inventor  
*H. G. Klockmann*  
By his Attorney,  
*J. R. Little*



# UNITED STATES PATENT OFFICE.

HENRY G. KLOCKMANN, OF LA GRANGE, TEXAS.

## BALING-PRESS.

SPECIFICATION forming part of Letters Patent No. 450,942, dated April 21, 1891.

Application filed October 20, 1890. Serial No. 368,697. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY G. KLOCKMANN, a citizen of the United States, residing at La Grange, in the county of Fayette and State of Texas, have invented certain new and useful Improvements in Baling-Presses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved baling-press; and it has for its object to provide a baling-press which will possess advantages in point of simplicity and inexpensiveness in construction, ease of operation, and general efficiency.

In the drawings, Figure 1 is a perspective view of a baling-press embodying my invention. Fig. 2 is a vertical longitudinal sectional view thereof, the operation being illustrated in dotted lines. Fig. 3 is a horizontal sectional view on the line  $x x$ , Fig. 2. Fig. 4 is a detail perspective view of the top of the baling-chamber, the doors being thrown open. Fig. 5 is a similar view of the plunger-operating mechanism, the locking-collar being thrown out of operation.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the frame, comprising four uprights  $a$ , connected and braced by a series of cross-beams  $a'$ .

B designates a vertically-disposed baling box or chamber located between and secured to the adjacent cross-beams  $a'$  and extending from the top of the frame to within about one-third the height of the latter from the bottom. This baling box or chamber is rectangular in cross-section and is formed by side walls  $b b$ , front and rear walls  $b' b^2$ , respectively, and a top door  $b^3$ , all of said walls being preferably solid. The front and one of the side walls terminate some distance from the top, leaving openings through which the bales are adapted to be removed. These openings are provided with doors C C, comprising each an upper and lower horizontal beam  $c c$ , hinged at one end to the adjacent cross-beams  $a'$  by a bolt  $c'$ , said beams  $c$  projecting beyond the adjacent uprights  $a$ , and abut thereagainst when the doors are closed to obviate further inward movement of the latter.

For locking the doors in closed position, horizontally-sliding bolts D D are provided, disposed between the beams  $c$  and guided by strips or plates  $d d$ , connecting said beams. These bolts slide one above the other at the inner faces of the adjacent upright  $a$ , and are provided with outwardly-projecting lugs or bolts  $d' d'$  for operating the same. The top door is locked by means of a bar  $b^4$ , sliding in apertures  $a^2$  in the adjacent uprights  $a$ , and said door is also provided with a lever  $b^5$  for opening the same, the lever being pivoted upon the door and projecting over the contiguous cross-beam  $a'$  and carries an operating-cord  $b^6$ .

Upon the lower cross-beams  $a'$  is disposed a platform E, and upon this platform, below the bale-box, is mounted a frame F. The latter comprises a horizontal top portion  $f$ , from which extend two downwardly-divergent standards  $f' f'$ , terminating in outwardly-projecting horizontal extensions  $f^2 f^2$ , bolted or otherwise secured to the platform. Between the standards  $f'$  is bolted a horizontal brace  $f^3$ .

G designates the plunger, corresponding to and fitting within the bale-box. From the bottom of the plunger projects a vertical plunger-rod  $G'$ , working in coincident openings  $g g$ , provided therefor near the center of the horizontal portion  $f$  of the frame F and the brace  $f^3$ .

For elevating the plunger and retaining the same against backward movement, mechanism is employed which will now be described. Upon the plunger-rod, between the horizontal top portion of the frame F and the brace  $f^3$ , is loosely disposed a collar H, provided at one side with a projecting lug  $h$ . I designates a lever journaled near one end to one of the standards of the frame F, said end projecting through a slot  $i'$ , provided therefor in the latter. This inner end of the lever is pivotally connected with the lug of the collar H by links J J. A second collar K is also disposed upon the plunger-rod above the horizontal top portion of the frame F, said collar being provided at one side with a lug  $k$ , having at its outer end a downward extension  $k'$  at right angles thereto. The office of said collar will hereinafter appear.

The operation and advantages of my in-



vention will be readily understood by those skilled in the art to which it appertains. The bale-box is filled through the doors C, after which they are closed and locked. To compress the bale, the free or outer end of the lever is depressed, causing the collar connected therewith to be drawn at an angle to the plunger-rod, binding it thereto, and thereby carrying the same throughout the upward movement of the collar. Previous to the operation of the lever the collar K is arranged with the extension  $k'$  resting upon the top portion of the frame F. As the plunger-rod is raised through the means and manner described, the collar K assumes a horizontal position to permit the free passage of the plunger-rod therethrough; but when pressure is released from the plunger-rod for the purpose of bringing the lever in position for another stroke the plunger, by reason of the expansion of the contents of the bale-box and by gravity, exerts a tendency to backward movement. Such movement, however, throws the collar K below a horizontal position, causing the same to bind against the plunger-rod and arrest further backward movement thereof, as clearly shown in Fig. 2. After the bale has been formed and tied the lever is depressed sufficiently to release the collar K, when the latter is thrown round, disengaging the extension  $k'$  thereof, and the plunger is thus permitted to assume its normal position.

After the bale is completed the doors are thrown open and the bale removed.

I claim as my invention—

1. In a baling-press, the combination, with a baling-box essentially rectangular in cross-section, of doors arranged at the top thereof, at the front, and one of the sides, said doors being hinged at diagonally-opposite corners of the box, and the locking-bolts carried near the free end of each door, said bolts being adapted to slide across each other and engage the inner faces of one of the beams of the frame when the adjacent ends of the doors are brought in contact, substantially as shown and described.

2. In a baling-press, the combination, with the four-sided baling box or chamber and the supporting-uprights, of the doors arranged at the top thereof, at the front, and one of the sides, said doors being hinged at diagonally-opposite corners of the box, the locking-bolts carried at the free end of each door, the top door, the locking-bar sliding through apertures in the uprights, and the lever for operating the top door, all arranged and adapted to operate substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY G. KLOCKMANN.

Witnesses:

JNO. S. RADFORD,

JOHN SCHUHMACHER.