

(No Model.)

F. C. GAMMONS.
COTTON BALING PRESS.

No. 553,486.

Patented Jan. 21, 1896.

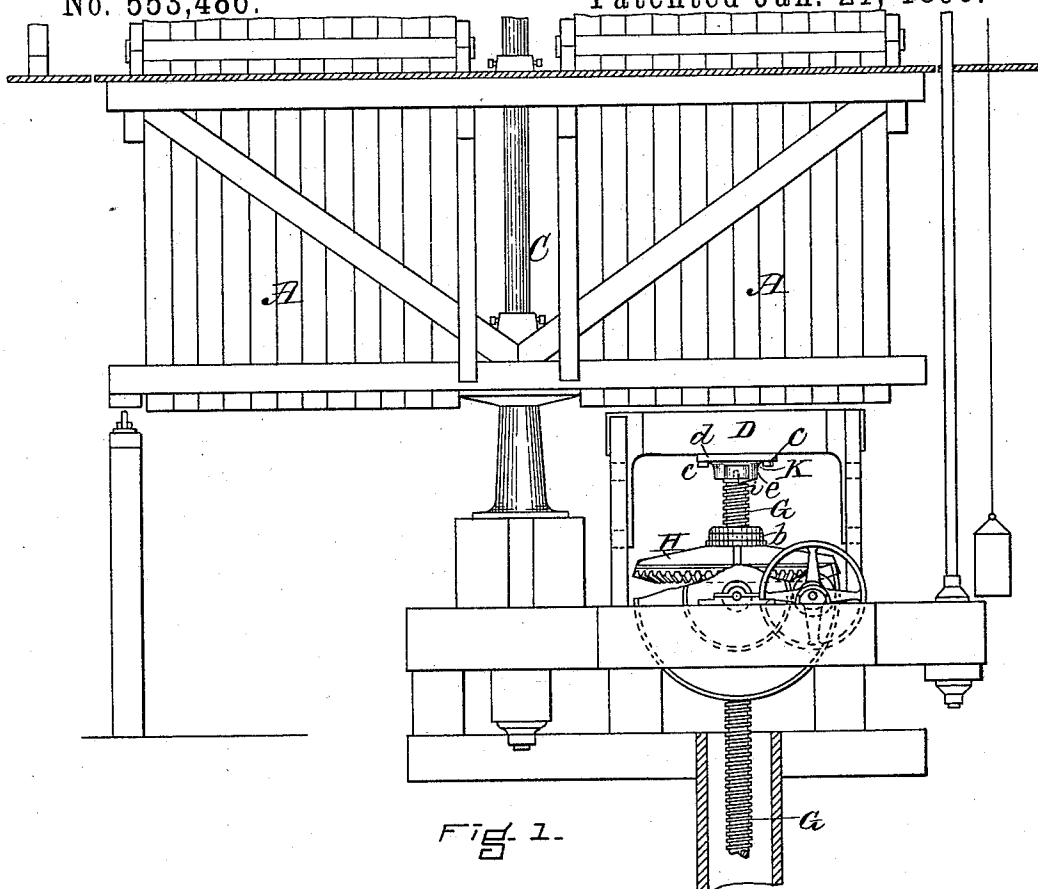
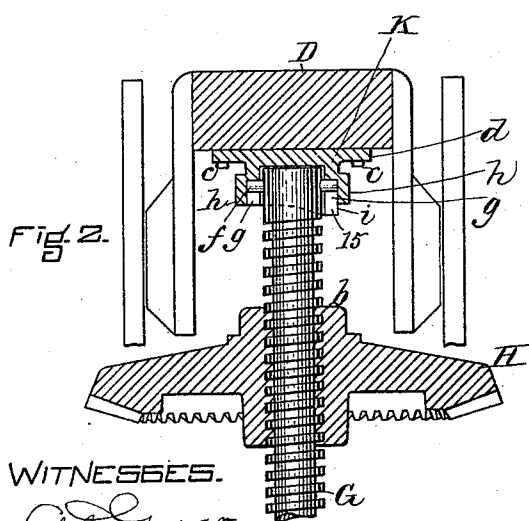


Fig. 1.



WITNESSES.

A. D. Moor.

B. L. Gardner.

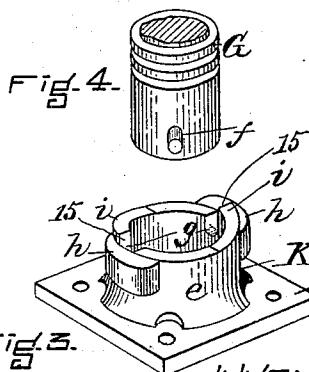


Fig. 3.

INVENTOR.

Ferdinand C. Gammons
by J. C. Schenck
Att'y

UNITED STATES PATENT OFFICE.

FERDINAND C. GAMMONS, OF BRIDGEWATER, MASSACHUSETTS, ASSIGNOR
TO THE EAGLE COTTON GIN COMPANY, OF SAME PLACE.

COTTON-BALING PRESS.

SPECIFICATION forming part of Letters Patent No. 553,486, dated January 21, 1896.

Application filed November 30, 1895. Serial No. 570,697. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND C. GAMMONS, a citizen of the United States, residing at Bridgewater, in the county of Plymouth and State of Massachusetts, have invented an Improvement in Cotton-Baling Presses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of a cotton-baling press having my improvement applied thereto. Fig. 2 is an enlarged vertical section through the follower, its operating-screw, and the shoe or socket on the under side of the follower for the reception of the upper end of the operating-screw. Fig. 3 is a perspective view of the shoe inverted. Fig. 4 is a view of the upper end of the operating-screw inverted.

In that class of cotton-baling presses in which a screw is employed to operate the follower within the press box or chamber, the screw, which passes through and is actuated by a threaded hub or nut on a master-wheel, has been provided at its upper end with a transverse pin, which, when the end of the screw in its ascent entered a tubular shoe or socket secured to the under side of the follower, engaged open vertical slots at the periphery of said socket in order to prevent the screw from turning within the same, the pin and slots permitting the screw when run down to detach itself from the shoe, and thus avoid breakage or injury in case the downward movement of the screw should not be arrested when the follower reached the limit of its downward movement. With this construction when the screw was started upward to press the cotton, it has been necessary to hold the transverse pin in a position to enter the said slots and keep the screw from turning until the pin has engaged the same, which is inconvenient and troublesome.

My invention has for its object to overcome this difficulty and to enable the pin to automatically engage the slots in the shoe as the operating-screw rises, without any care or attention on the part of the operator; and to this end my invention consists in providing

the vertical slotted shoe around its lower edge with inclined lugs or projections constructed and arranged to form a shoulder in line with one side of each slot to catch or intercept the pin at the upper end of the operating-screw and cause it to automatically enter said slots, as hereinafter set forth.

In the said drawings, my invention is shown as applied to a cotton-press of well-known construction, in which A A represents two press-boxes which are mounted upon a central vertical supporting-shaft C, and adapted to be rotated about the same as a center, whereby each press-box in its turn can be brought into a position over the follower D, which is forced up into said box to compress the cotton therein by means of a vertical screw G, which passes through and is actuated by a nut b, forming the hub or center of a master bevel-wheel H, which is driven by suitable power in a well-known manner.

K is a heavy cast-iron shoe, which is secured to the under side of the follower D by bolts c passing through its flange or upper portion d, the lower tubular portion e being open at its bottom for the reception of the upper end of the operating-screw G, which is provided with a transverse pin f, Figs. 2 and 4, the horizontally-projecting ends of which are adapted, as the screw is raised, to enter open vertical slots g in the shoe K, which is strengthened or reinforced at these points outside the slots, as shown at h h. The lower edge of the shoe K is provided with two inclined or cam-shaped lugs i i, of the form shown in Fig. 3, which are so constructed and arranged as to form a shoulder in line with one side of each slot g, which serves to catch or intercept the projecting end of the pin f of the screw G as the upper end of the latter enters the shoe, thus insuring the engagement of the said pin with the slots g, as required to prevent the screw G from being turned within the shoe by the friction of its operating-nut b. It will be seen that each lug i is inclined backward from one slot toward the other, and consequently in whatever position, other than exactly in line with the slots, the ends of the pin f are brought into contact with the lower edge of the shoe, they will, as the screw re-

volves, follow the inclined surfaces of the lugs *i* and come into contact with the shoulders 15, when the further elevation of the screw G will cause them to pass up into the slots *g* and thus prevent any further rotation of the said screw within the shoe. As the follower reaches the bottom of the press-box its descent is arrested by suitable stops, and if the screw G still continues to run down it will detach itself from the shoe K, as usual, to prevent breakage or injury of the parts, the pin *f* leaving the slots as heretofore.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a cotton-baling press, the combination with the vertically-operating follower-screw, of a tubular shoe for the reception of the upper end of the same, said shoe having vertical slots open at the bottom, and inclined lugs around its lower edge constructed and arranged to form a shoulder at each slot in line with one side of the same to catch a pin or projection on the screw, whereby the pin

is caused to automatically enter said slot, substantially as set forth.

2. In a cotton-baling press, the combination with the follower D, and its operating-screw G, the latter having a transverse pin *f*, at its upper end, of a tubular shoe or socket K, secured to the under side of the follower and having vertical slots *g*, open at the bottom for the reception of the ends of the pin *f*, and provided around its lower edge with inclined lugs *i*, *i*, arranged to form a shoulder at each slot in line with one side of the same to catch or intercept the pin *f*, whereby its ends are caused to automatically enter the said slots as the screw G, is raised, substantially as set forth.

Witness my hand this 22d day of November, A. D. 1895.

FERDINAND C. GAMMONS.

In presence of—

C. D. BRIDGES,
S. LUNDEE.