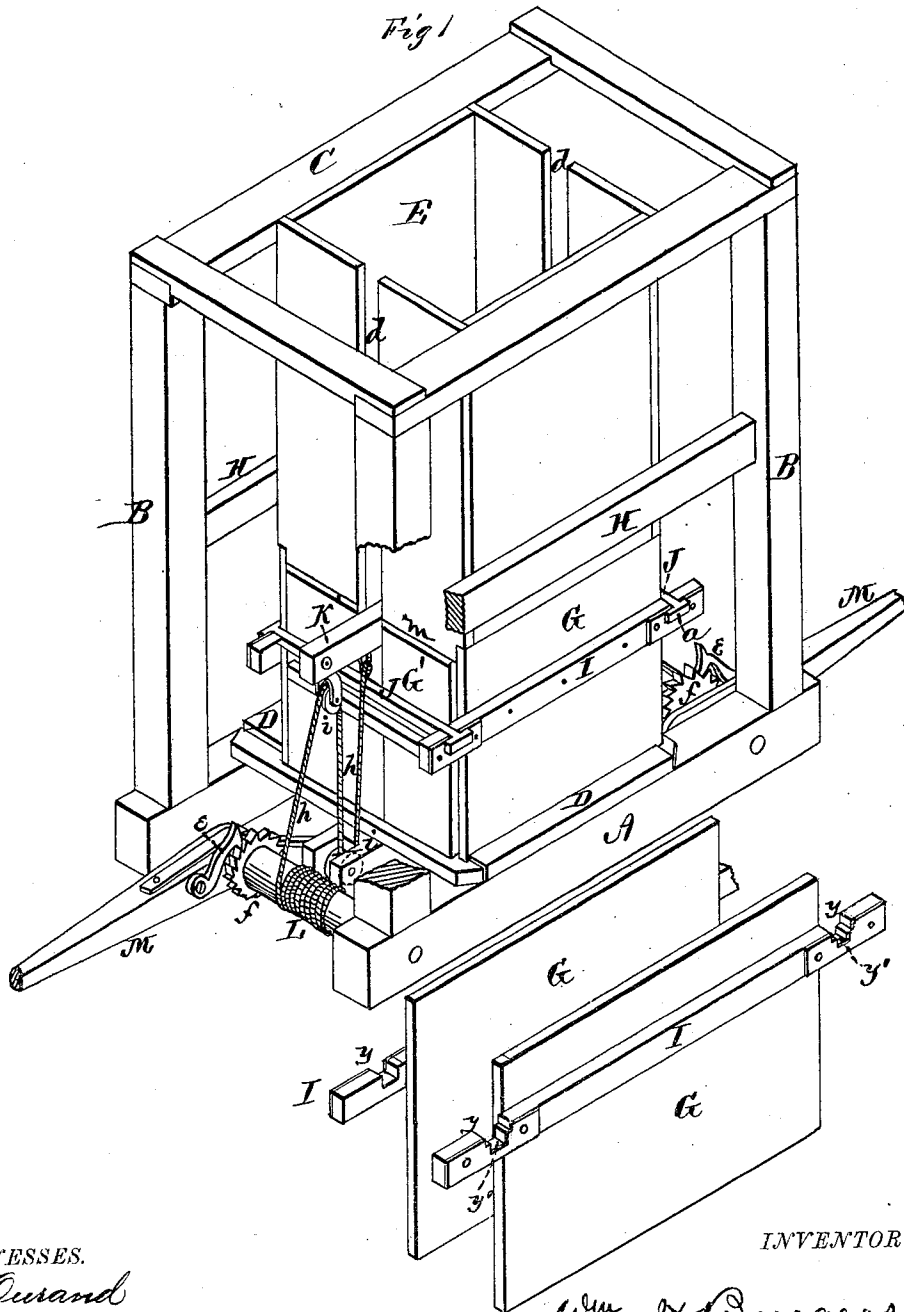


W. H. BURGESS.
Cotton-Presses

No. 149,988.

Patented April 21, 1874.



WITNESSES.

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C. L. Ewert,

INVENTOR.

Wm H Burgess,

Alexander Watson

By

Attorneys.

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Fig 2

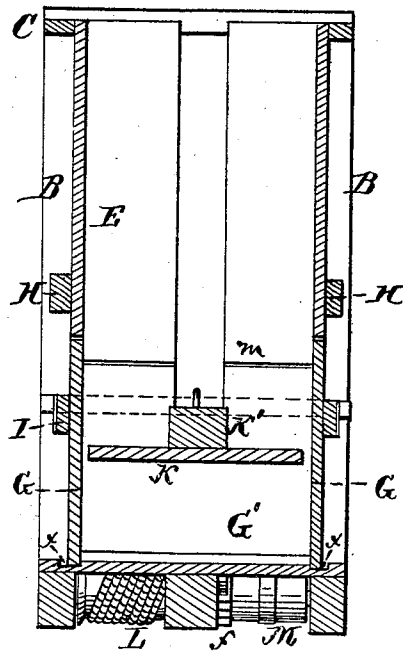
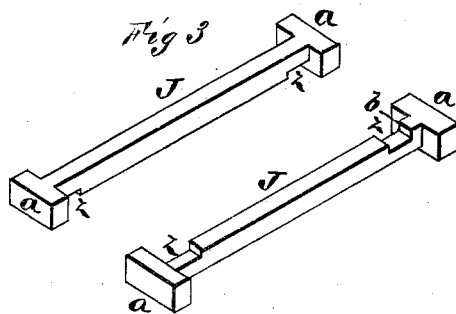


Fig 3



WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM H. BURGESS, OF JACKSON, NORTH CAROLINA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **149,988**, dated April 21, 1874; application filed March 10, 1874.

To all whom it may concern:

Be it known that I, WILLIAM H. BURGESS, of Jackson, in the county of Northampton and in the State of North Carolina, have invented certain new and useful Improvements in Cotton-Presses; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a cotton-press, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my cotton-press. Fig. 2 is a transverse vertical section of the same; and Fig. 3 shows the device for fastening the side doors of the bale box.

A A represent the two bed-sills, upon which are four corner-posts, B, connected at their upper ends by a frame, C. On the bed-sills A is placed a platform, D, forming the bottom of the bale-box. E represents the bale-box attached to the upper frame C, and to bars H H, which connect the corner-post B B on each side, as shown. Below these bars the box forms side doors G G, and end doors G' G'. The end doors G' fit in slots or grooves in the ends of the platform D, and the side doors G are placed in grooves *x* on the platform, which grooves are made half an inch wider than the thickness of the doors. Each side door G is provided on its outer side with a horizontal bar, I, the ends of which project beyond the ends of the door. Each end of each bar I has in its upper edge a notch, *y*, and these notches in one of the bars has a smaller notch, *y'*, in the bottom. The side doors are held in place by means of iron bars J J, having a T-head, *a*, at each end, and a notch, *z*, on the under side at each end, to fit in the notches *y* on the bars I. One of the notches *z* is made close to the head *a*, while the other is about an inch from it, forming a shoulder, *b*, as shown in Fig. 3. K represents the follower of the press, provided with a top beam, K', extending be-

yond the ends of the follower, and protruding through vertical slots *d*, made in the center of the end pieces of the box E its entire length. At each end of the frame-work in the sills A A is placed a windlass, L, provided at one end with a ratchet-wheel, *f*, and operated by means of a lever, M, having a pivoted pawl, *e*, to engage with the ratchet-wheel *f*. Around the windlass L is wound a rope, *h*, which passes upward around a pulley, *i*, swiveled to the under side of the follower-beam K', and the rope then passes down and around a pulley, *i'*, in the bottom of the frame-work, thence up to and secured to the follower-beam. The follower is raised by means of a rope passing around a pulley in the ceiling above the press, and then suspended a little to one side in order to admit the cotton. When the lower part of the box is filled, the perpendicular opening *d* at each end of the box is closed by setting up a board at each end, which is withdrawn when the bale is formed. Then the follower is placed on the cotton in the box, and by using the levers M the bale is pressed. But just as the pressure is applied the bars J are to be raised out of the bottom notches *y'*, so as to allow the doors G to open about one inch, until they are held by the heads *a*.

It will be understood that in all presses, after the material is forced down a certain depth by the follower, a great power is required to pack it in the space in the press-box, and that great strain is had thereby on the sides of the press-box, which will oftentimes so bend or break the parts as to render it useless, and cause continual repairs.

To this end the above devices have been constructed to obviate these defects. By means of the grooves *x* in the platform, the notched bars I I, and the headed bars J J, the follower is allowed to do the pressing without the great power usually employed, and the strain on the press-box relieved.

Each of the end doors G' is made in two parts, the dividing-line being vertical, so that when the follower is brought down one part of each may be removed, thus allowing the bale to be sewed up at the ends, which is a great advantage.

This press is substantial and durable, and by dispensing with much of the iron work used

to other presses renders it cheaper, as well as more durable.

One windlass only may be used by having a single rope passing over and around suitable pulleys, first at one end, and then at the other end, of the press.

The operation of this machine is substantially as follows: The follower being raised out of the box, and suspended by means of the rope in the ceiling, is held a little to one side, so that the box can be filled with cotton, the openings in the ends in the upper part of the box having previously been closed by a board at each end. When the box is filled the follower is placed on top of the cotton, after which the lever or levers are worked up and down, causing the hooked pawls *e* to engage with the ratchet-wheels *f*, and turn the windlasses *L*, whereby the follower is pulled downward, compressing the cotton. When the follower gets down a certain distance—say, half way, more or less—the bars *J* are lifted out of the notches *y'* into the notches *y*, allowing the

sides *G G* to spread a trifle on each side to relieve the excessive strain on the sides, but at the same time present a perfectly firm support to the cotton being pressed. When the bale is perfectly pressed the doors are opened, and the bale tied in the ordinary manner before removal.

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

The combination, with a baling-box, having doors *G G*, and the platform *D*, of the enlarged grooves *x x*, the bars *I I*, with notches *y y'*, and the bars *J J*, provided with heads *a a* and notches *z z*, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of January, 1874.

W. H. BURGESS.

Witnesses:

C. L. EVERT,
ROBT. H. GORDON.