C. Gardiner,

Cotton Press.

No. 5332. Patented Oct. 16, 1847.

Fig: 1.

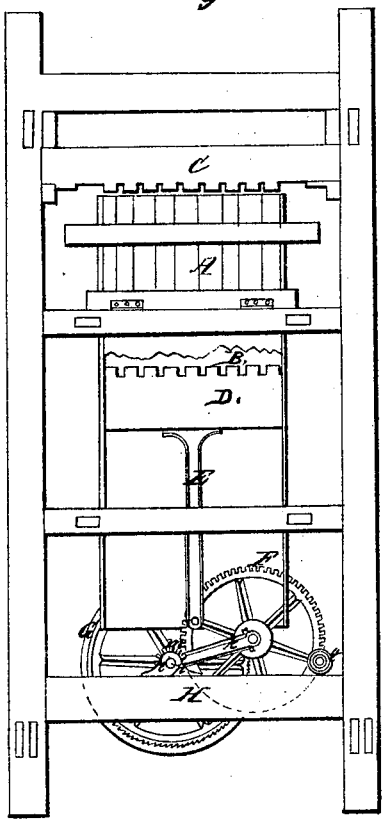
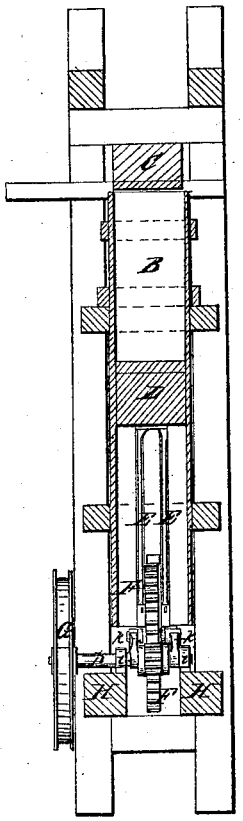


Fig: 2.



UNITED STATES PATENT OFFICE.

CHAS. GARDINER, OF NEAR RICHMOND, ALABAMA.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **5,332**, dated October 16, 1847.

To all whom it may concern:

Be it known that I, CHARLES GARDINER, of Richmond, in the county of Dallas and State of Alabama, have invented a new and Improved Cotton-Press; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation with a part of the cotton-box broken out, and Fig. 2 is a vertical transverse section through the same.

Similar letters indicate like parts in both the figures.

B is the box in which the cotton or other substance is placed to be pressed. A is a door opening into the box B, through which the bales are removed after they have been pressed. C is a strong beam placed over the box B, against which the cotton is pressed. D is the platen or follower of the press.

The platen is operated by the following combination of parts:

G is the driving-wheel, to which power is applied for operating the platen, to which it is connected in the following manner: *p* is the driving-shaft, to which the wheel G is secured. *m* is a pinion on the driving-shaft *p*. F is a cog-wheel meshing into the pinion *m*. E E are legs descending from the center of the platen D on each side of the cog-wheel F, to the sides of the periphery of which their lower ends are connected by a joint-pin. The cog-wheel F has a movable axis, which is connected to the driving-shaft *p* by the arms *k k*. Bearing fulcrum-rollers *t t* are secured to journals projecting from each side of the periphery of the cog-wheel F directly opposite that portion of the same to which the platen-legs E E are connected. The rollers *t t* rest and traverse upon the beams H H. *i i* are the boxes in which work the journals of the driving-shaft *p*. When power is applied to the driving-wheel G, the pinion *m* imparts a rotary motion to the cog-wheel F upon its axis, at the same time causing the axle of F to ascend, being retained in its relative position in connection with the driving-pinion by the arms *k k* and the bearing fulcrum-rollers *t t*, by which compound movements of the cog-wheel F motion is imparted to the platen through the medium of its legs E E. This combination, it will readily be perceived, is very compact, allowing a wide latitude of movement to the platen, and the power applied to the platen is progressive where it is desirable that it should be—viz., during the last half of its movement—from the point that the arms *k k* reach a horizontal position until they arrive at a vertical position.

Having thus fully described my improved cotton-press, what I claim therein as new, and desire to secure by Letters Patent, is—

The manner in which I communicate motion and power from the driving-shaft *p* to the platen D through the medium of the pinion *m*, cog-wheel F, connecting-arms *k k*, platen-legs E E, and fulcrum bearing-rollers *t t*, combined and operating with each other substantially in the manner herein set forth.

CHARLES GARDINER.

Witnesses:

R. S. FLETCHER,

JOHN STRACHAN.