To all whom it may concern:

Be it known that I, THOMAS EDWARD WOLFE, a citizen of the United States, residing at Hampton, in the county of Hampton and State of South Carolina, have invented certain new and useful Improvements in Cotton-Presses; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain novel improvements in cotton-presses of the continuous rotary kind, wherein two or more press-boxes are caused to rotate horizontally and intermittently, so that during the filling of a box directly from a cotton-gin or other source the pressing of the cotton in a box previously filled is simultaneously effected.

My object is to provide a substantial stationary supporting-block upon the base of the press, and to arrange such block in such a position that during the operation of pressing the pressure will be taken off the rollers and transferred to said block.

My improvements will be fully understood from the following description and claims, taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of the improved machine, wherein two press-boxes are employed in a horizontal rotative frame, also showing in detail part of the discharge-spout of a cotton-gin arranged to deliver the ginned or cleaned cotton directly into the press-boxes.

Fig. 2 is a vertical central section through the press, taken in the plane indicated by dotted lines xx on Fig. 1. Fig. 3 is a vertical section through the machine, taken in the plane indicated by dotted lines yy on Fig. 1. Fig. 4 is an inner view in detail of one of the press-frame standards, showing the notches and recesses therein.

Referring to the annexed drawings by letter, A designates the stationary frame, which in the present instance is composed of a base-platform A', two rigid uprights rising therefrom, and A", a horizontal beam rigidly braced to said uprights. Within this frame is applied a horizontal rotative frame B, composed of horizontal sill-beams B', vertical standards B", rigidly secured thereto, cross-braces B', secured to these standards, a top circular platform C, and a floor C', which latter is secured upon the sill-beams B', while the platform C is secured upon the upper ends of the standards B". This horizontally-rotative frame B is centrally supported upon a step e, and guided above by a central pivot-screw b, that is tapped through a bracket B', secured to the horizontal beam A'. By these means the frame B can be rotated horizontally about its vertical axis.

Within the frame B, I secure two vertical press-boxes E E, arranged diametrically opposite each other and equidistant from the vertical axis of the frame. The upper ends of the receiving stationary portions of the press-boxes are made flaring, as shown in Figs. 2 and 3.

The lower portions of the press-boxes into which the cotton is condensed into bales are respectively composed of a base e and four removable sides e', the lower ends of which latter are fitted into grooves d, and the upper ends are bevel matched at e to the corresponding lower beveled ends of the stationary sides of the press-box, as clearly shown in Figs. 2 and 3 of the annexed drawings. The upper beveled ends of the removable press-box sides e' are held securely in their places during the pressing operation by means of longitudinal bars e' e' and transverse bars e', forming locking-joints at the crossed ends, as shown in Fig. 1.

The standards of the press-box frame are 90 recessed at f and grooved at f', as shown in Figs. 1 and 4, to allow of the rear and front introduction and removal of the said bars e' e' e'. These locking-bars serve as braces to resist strain on the upper parts of the sides e' during the act of pressing cotton, and by removing the braces the pressed bale can be freed and taken from the press-box frame after being baled.

G designates a follower or packer, and G' its vertical shaft, which latter is guided by passing through the horizontal beam of the main frame A. Hydrostatic or other convenient power may be employed for giving the
vertical movements to said follower and its shaft.

During the operation of filling one press-box with cotton flowing directly from a cleaner or other source the cotton in the opposite press-box is being compressed and condensed, the bale removed, and the sides of the box returned to their places and locked, as above described.

Upon the floor of the frame A, I secure a raised support Q, upon which the sill-beam of the press-box in which the cotton is being pressed rests during the pressing operation. At each end of the sill-beam frame I employ a roller h, the object of which is to allow the press-box frame to be easily turned about its vertical axis, and at one end of the said sill-beam frame I employ a pivoted gravitating latch II, guided by a staple i, and provided with a latching-nose j, which will of itself engage in the recess of a block J, secured upon the floor of the main frame A. At k a recess is made in the said floor, the object of which is to prevent pressure upon a roller h, which is directly beneath the press-box in which the cotton is being condensed. It will be thus observed that the operation of filling one press-box takes place during the operation of condensing the material and removing the bales from the other press-box; also, that during the operation of pressing and condensing the cotton the press-box frame is rigidly locked and also supported solidly upon the block Q, the roller h adjacent thereto being relieved of the pressure by reason of its lying directly over the recess k in the floor of the main frame A.

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

1. The combination, in a horizontally-revolving duplex cotton-press frame, of roller supports or base therefor having a recess k and a rigid support Q in alignment therewith, whereby when the downward pressure of a follower upon the material in a box is caused the pressure will be resisted by the frame resting on said support, as specified.

2. The combination, in a rotative baling-press, of caster-wheel supports, a locking device, and a flooring provided with a recess k and a solid support Q on the flooring, as specified.

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

THOMAS W. EDWARD WOLFE.

Witnesses:

W. S. TILLINGHAST,
S. F. RAY.