Q. J. HOKE.
BANDING PRESS.

No. 303,733. Patented Aug. 19, 1884.
To all whom it may concern:

Be it known that I, Quinton J. Hoke, a citizen of the United States, residing at Yorkville, in the county of York and State of South Carolina, have invented certain new and useful Improvements in Baling-Presses; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in baling-presses especially designed for baling cotton or other fibrous materials and it consists in the construction and arrangement of devices, substantially as hereinafter more fully described.

In the accompanying drawings, Figure 1 is a side elevation, Figs. 2 and 3 are an end elevation and a top plan view, respectively, and Fig. 4 is a vertical longitudinal section, of my improved baling-press.

Like letters denote like parts in the above figures of drawings.

A indicates a suitable frame, from which the compression box B and the lint-box C are supported, and consisting of two end transverse base-girts, a, two longitudinal girts, a', and four uprights, e, to which the base transverse and longitudinal girts are secured, and the lower ends of which form feet, upon which the press stands. To the upper end of each pair of uprights or standards e is secured a longitudinal girt, A', and a' near the upper edge of the lateral walls of the lint-box C are secured like girts, A. These girts A' A' project some distance beyond the opposite ends of the press, the former girts being braced together at each end by transverse brace-rods e', while the girts A' are braced to girts A' by crossed ties e', as more plainly shown in Fig. 2.

The compressed box B is so arranged upon the base of the frame as to adapt it for removal therefrom, except its bottom. To this end the side walls, b, are adapted to be seated in brackets b', secured to the girts e'. The end walls, b', are held at their lower edge by cleats or sills b', and at the upper end of the press-box the walls are held by headed tie-rods b', that pass through brace-bars b', secured to the lateral walls b' of said compressing-box, one end of said tie-rod being slotted for the reception of a wedge-shaped key, b', which is preferably attached to the brace-bar by a cord or chain to prevent its being misplaced or lost. If desired, the ends of the tie-rods may be screw-threaded for the reception of a nut, by means of which the walls of the press-box are secured in position.

It is obvious that the four walls of the press-box may be removed from a compressed bale by simply withdrawing the keys b' and withdrawing the rods b' from the brace-bars b', thereby affording an easy means for dismembering the compressing-box and taking and removing the compressed bale.

The bottom B of the compressing-box is provided with suitable grooves for the reception of the bale-ties, as is usually the case in presses of this class.

The lint-box C has its lateral walls c rigidly connected to the longitudinal girts A' A' at their upper and lower edges, respectively, the end walls thereof being composed of two wings, c', hinged to girts A', said wings being of such width as to leave, when closed, sufficient space between them for the operation of the follower-arms. The wings c' are held in a closed position by means of pivoted locking-bars D, the outer ends, d, of which are bent at right angles to engage the outer faces of said wings.

In Fig. 1 of the accompanying drawings I have shown two such locking-bars D—one on each side of the lint-box near its lower end—said bars being arranged to rotate in suitable bearings secured to the lateral walls of said box. It is evident, however, that four such bars may be employed on the lint-box—two near its lower end and two near its upper end—in which case the arms d of the upper rods may be held in proper position by removable stop-plugs d', as shown in Fig. 2.

E is the follower, the body f of which is of triangular form in cross-section, while its effective or compressing surface is composed of a plane surface of a length and width equal
to the interior length and width of the lint-box C and compressing-box B, and provided with grooves for the reception of the bale-ties, corresponding with the like grooves in the bottom of the compressing-box; or said effective or compressing surface may be formed of a series of plane surfaces, \( f' \), arranged upon the follower-body \( f' \), relatively to one another, so as to leave a space between each two surfaces \( f'' \), for the reception of the bale-ties. The follower \( F \) has at each end an arm, \( f'' \), that projects through the slot formed by the hinged wings \( e' \). To the outer end of each arm is hung from an eyebolt, \( g \), a segmental rack-bar, \( G \), by means of which and devices now to be described the follower is operated in its function of compressing the bale.

In suitable bearings, \( I \), secured to the base transverse girts \( a \), at opposite ends of the frame, in a line with the slots in the end walls of the lint-box, are pivoted the operating-levers \( H \), that are forked at their pivoted ends, or which ends are provided with slots \( h \) for the reception and passage of the segmental rack-bars \( G \). At their slotted portion the levers carry pivoted bails or pulls \( K \), that carry steel pins \( k \) at their outer end adapted to engage the teeth of the rack-bars \( G \), and upon the outer ends of the longitudinal base girts \( a' \) are pivoted locking or retaining bails \( L \), also adapted to engage the teeth of the rack-bars \( G \).

The operation of these devices is as follows:

The levers \( H \) are elevated so that their bails \( K \) will engage the lower tooth of the rack-bar \( G \). Said levers are then forced down, carrying the follower down also to compress the material previously introduced into the lint and compressing box. When the levers \( H \) are at the limit of their downward movement, the locking or retaining bails \( L \), that straddle said levers, and are of such length as to engage the rack-bars at points above the pulls \( K \), as shown in Fig. 4, are hooked to the rack-bars, and bails or pulls \( K \) are disengaged from the latter, and the operation repeated.

What I claim is—

1. In a cotton-baling press, the combination, substantially as shown and described, of the main frame \( A \), the lint-box \( C \), having its sides rigidly secured to said frame, and provided with end-gates hinged to said frame, the compressing-box \( B \), having its walls detachably connected with the frame and lint-box, means, substantially such as described, for receiving said walls in position relatively to the lint-box, the follower \( F \), and means, substantially such as described, for actuating said follower, for the purposes specified.

2. In a cotton-baling press, the combination, with the main frame, compressing-box, and superposed lint-box, having its lateral walls rigidly connected with said frame, and its ends walls arranged to swing outwardly, of the locking-bars pivotally connected with the lateral sides of the lint-box, and operating to lock the end walls closed, substantially as and for the purposes specified.

3. In a cotton-baling press, the combination, with the main frame, of the locking-bails \( L \), pivot thereto, the follower \( F \), segmental rack-bars \( G \), suspended from said follower, the slotted levers \( H \), and the bails and pulls \( K \), pivoted to said levers, said parts being arranged for operation substantially as shown and described.

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

QUINTON J. HOKE.

Witnesses:

S. L. DAVIDSON,
L. W. SMITH.