A. C. STRICKLAND.
Cotton and Hay Press.

No. 242,710. Patented June 7, 1881.
To all whom it may concern:

Be it known that I, ANDREW C. STRICKLAND, a citizen of the United States, residing at Anderson, in the county of Anderson and State of South Carolina, have invented certain new and useful Improvements in Cotton and Hay Presses; and I do hereby declare the following to be 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 or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of a press constructed according to my invention. Fig. 2 is a similar view of the same, with the baling-box removed and a portion of the frame and receiver-wall broken away. Fig. 3 is a top view of the press. Fig. 4 is a perspective view of the one side and one end wall of the baling-box. Fig. 5 is a partial transverse section on line x x, Fig. 3.

This invention has relation to improvements in presses for compressing cotton and other similar materials; and it consists in the construction and novel arrangement of parts, as hereinafter shown, described, and particularly pointed out in the claims.

In the accompanying drawings, the letter A designates the frame of my improved press, the said frame consisting of the sills A' and corner-posts A'; rising from the sills and connected at the top by cross-bars a, which support a head-block, B.

The letter C represents the receiving-box, supported permanently within the frame by the corner-posts.

Below the receiving-box is the baling-box D, having removable side walls, d, and end walls, d', and a stationary bottom, D', supported by the sills A'. At each end of the frame a brace-rod, B, connects the sills and head-block, passing through the cross-bars a, at the top, and through the projecting ends of the bottom of the baling-box. The side walls, d, of this baling-box have secured to their outer surfaces longitudinal bars f and f', the latterly lying along the lower edges of said walls, and having projecting ends, which fit removably in the notches g formed in the sills A', the former being located near the upper edges of the walls, and having projecting ends, which are to be engaged by the clamp-rods, as will presently appear. Across the bottom of the baling-box, near its opposite ends, are secured the cleats h, against which rest the lower ends of the end walls, d', of the baling-box, which extend upward to the bottom of the receiver C. In closing the baling-box the end walls are first placed in position with their lower ends against the cleats, and the side walls are then placed against the side edges of the end walls, the ends of the lower brace-bars of the side walls fitting in the notches g and the ends of the upper brace-bars of the side walls projecting outwardly beyond the end walls. The walls being thus located to compose the box, the clamps I, having their ends bent at right angles, as shown at i, are arranged across the outer surfaces of the end walls, with their bent ends extending downward over the ends of the bars f, and thus holding the side walls permanently in position. The cleats h prevent outward movement of the lower ends of the end walls, and their upper ends are prevented from moving outward by means of pins k, which project from the side walls into sockets in the side edges of said end walls, near their upper ends.

The letter L indicates the follower, from which extends upward the screw-rod M, which passes through a sleeve, O, loosely mounted in an aperture in the head-block, and provided with a collar, O', which rests upon a metallic bearing flush with the upper surface of said head-block. Concentrically upon the top of this collar is secured a gear-wheel, P, through a threaded central aperture of which also passes the screw-rod. This sleeve is provided with a flange, o', which projects under the lower surface of the head-block and prevents the sleeve from rising.

The letter Q denotes a worm meshing with the wheel P, and fixed upon a shaft, R, which has its bearings in brackets r, secured to the head-block. Upon this shaft is mounted and secured by feather and groove, so as to move longitudinally, a sleeve, S, upon which are fixed two bevel-gear wheels, T and T', with their teeth projecting inwardly, these bevel-gear wheels being at such a distance apart
that a small bevel-gear wheel, U, may rotate between them without engaging the teeth of either; but the sleeve may be so shifted as to bring either of the bevel-gear wheels T or T', as desired, into engagement with said small bevel-gear wheel U, which is fixed upon the end of the driving-shaft V, mounted in bearings in a bracket, v, which is secured to the head-block, and having fixed upon its outer end a belt-pulley, V', by which motion may be communicated to the driving-shaft from any suitable motor. The shifting of the sleeve S longitudinally is accomplished by means of a shifting-lever, W, pivoted to the head-block, and having its inner end bent upward and bifurcated to embrace the sleeve between the gear-wheels and extend into a peripheral groove formed in said sleeve. In order to locate this lever readily in position to hold the sleeve so that both of the gear-wheels T and T' will be out of engagement with the small gear-wheel U, a hole, w, is made in the edge of the head-block, and a removable pin, w', may be inserted in said hole to act as a stop for the lever.

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

1. In a baling-press, the combination, with the head-block B, having the transverse shaft V, provided with gear U, and driving-wheel V', mounted upon opposite ends thereof, and the shaft R, having gears T T' and worm Q, of the wheel P, engaging said worm, and having the threaded sleeve O, journaled in the head-block, the follower L, provided with screw rod M, passing through said sleeve, and wheel P, as shown and described.

2. In a baling-press, the combination, with the frame, having the head-block B mounted thereon, and provided with shafts R V, having wheels U V' T T', and worm Q, of the wheel P in contact with the worm, and having the threaded sleeve O, journaled in the head-block, the follower L provided with screw rod M, passing through the sleeve, and operated by the wheel P engaging the worm, as shown and described.

3. In a baling-press, the combination, with the receiving-box C and the frame A, having sills A', provided with bottom D' and notches g of the baling-box D, having removable sides and end walls, d d', the former provided with bars f f' engaging the notches and frame, and the walls d' resting with their lower edges against the cleats h of the bottom D', and the clamps I, as described, securing said box D together, as shown and described.  

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

ANDREW C. STRICKLAND.

Witnesses:
A. M. DUFFIE,
ROBT. MAYFIELD.