IMPROVEMENT IN COTTON AND HAY-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOSEPH K. DAVIS, of Monticello, in the district of Fairfield, and State of South Carolina, have invented a new and improved Cotton and Hay-Press; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an end view, a portion of the wall having been broken away.

Figure 2 is a top view.

Figure 3 is a perspective view, representing the press-box open.

This invention relates to that class of cotton and hay-presses in which the bale is formed at the top of the press, the platen being worked upward by means of two vertical screw-rods. Such presses must, of necessity, have doors through which to get into the upper end of the press-box, as well as a cover, which can be removed when occasion requires; and

My invention consists in certain improvements in the construction and fastening of the doors and cover, whereby they can be more advantageously operated than hitherto, for the purpose of securing a more economical construction of the press, and greater convenience in its operation.

In the drawings—
A A' A' is the frame;
B, the press-box;
C, the screw-rods;
D, the levers, by which said rods are operated; and
E, the platen.

All these parts are constructed in the ordinary manner, and may be varied in form, size, or in any other respect, according to the judgment of the builder or proprietor.

The upper end of the press-box is formed by two side-doors, M N, together with the cover O, as hereinafter set forth, my improvements relating entirely to these parts. The doors M N are exactly alike, each consisting of a lateral piece, m or n, covering the whole side, a horizontal bar, m', attached to the part m or n, and projecting slightly beyond, and two end pieces, m'' n'' covering half of each end of the box. And when the two doors are brought to a vertical position, the ends m'' n'' come together and close up the tube.

The cover O is hinged to the frame at o, so that it can be raised out of the way, and fastened back by a hook, k, as shown in fig. 3. When down, it is fastened by means of two (more or less) bars, W W, connected to the cover by a staple and pin, r, at one end, and extending under the cross-beam A A' of the frame at their other end, as shown in fig. 2.

This cover lowers down upon the upper edges of the doors, so as to rest thereon. The doors may, however, be opened or closed when the cover is down, the upper edges of the parts m'' n'' being rounded, as seen at e e, so that the corners will not hit the cover and prevent them from working.

When the box is closed up, and the platen is to be raised, to compress the lint, the two opposite doors M N are clamped together, by means of hooked rods, J J, placed over the projecting ends of the parts m'' n'', as seen in fig. 1.

To prevent the ends of the bars m'' n'' from wearing, and at the same time to prevent the rods J J from slipping or being forced off, through the outward pressure of the cotton, or by any other accident, I attach to the bars metallic plates, I I, having a flange, i, at their outer ends. The rods are retained by the flanges, thereby holding the end doors firmly in place.

The bars m'' n'' are arranged near the upper edge of the doors, so that the rods J J confine the end pieces m'' n'' near their upper edge, they being kept from swinging out at the lower edge by means of the cross-pieces A A' of the frame.

The operation of this press is simple and convenient. It is generally arranged in the press-room, in such a manner that the lower edges of the side-doors come about on a level with the floor of the room, and when turned down, rest in a nearly horizontal position upon it.

The platen is screwed down, the cover raised and fastened up, and the doors opened, as shown in fig. 3. The press-box is then filled with cotton, hay, or other material to be compressed, after which the doors are raised and fastened by the rods J J, and the remaining portion of the box is then filled, and the cover is lowered and fastened by the bars W W. The platen is then forced up, and the bale formed. The bal-covering, binding-ropes, &c., are, of course, employed in the usual manner.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The bars m'' n'', combined with the hooked rods J J, metallic plates I I, and end flanges i i, in the manner and for the purpose set forth.

2. The hinged cover O, in combination with the removable bars W W, confined at one end, when in use, by the pins and staples m n, and at the other end by the cross-bar A A', substantially as and for the object set forth.

To the above specification of my invention, I have signed my hand, this 14th day of August, 1869.

JOSEPH K. DAVIS.

Witnesses:
CHAS. A. FETTLE,
S. C. KENSON.