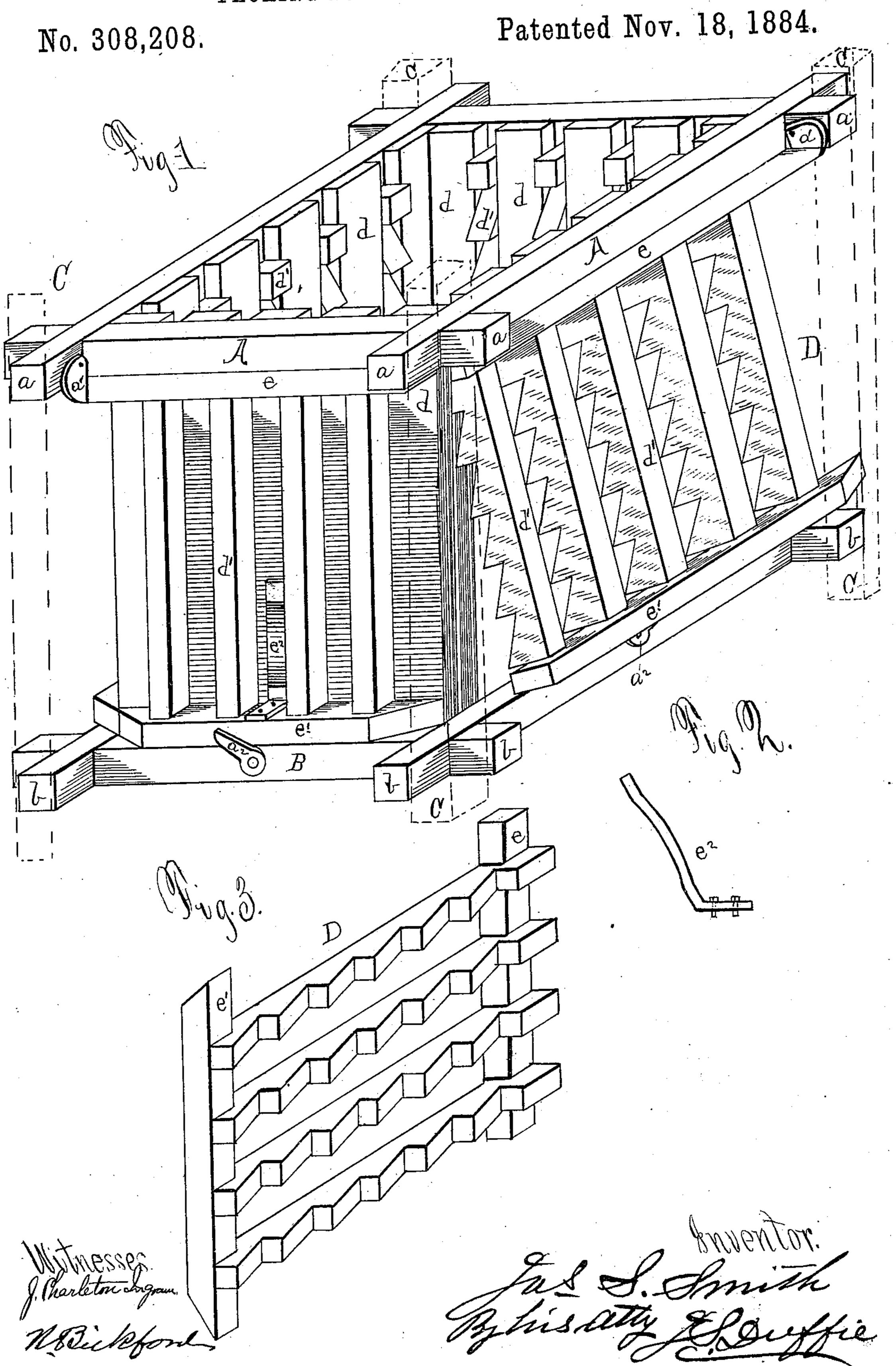
J. S. SMITH.

## PACKING BOX FOR COTTON PRESSES.



## United States Patent Office.

JAMES S. SMITH, OF BEEBE, ARKANSAS.

## PACKING-BOX FOR COTTON-PRESSES.

SPECIFICATION forming part of Letters Patent No. 308, 208, dated November 18, 1884.

Application filed September 27, 1884. (No model.)

To all whom it may concern:

Beit known that I, James S. Smith, a citizen of the United States, residing at Beebe, in the county of White and State of Arkansas, have invented certain new and useful Improvements in Packing-Boxes for 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 and figures of reference marked thereon, which form a part of this specification.

My invention has relation to packing-boxes for cotton-presses; and it consists in the novel construction and arrangement of its parts.

Figure 1 is a perspective view of the same, showing one of the side doors open and the others closed. Figs. 2 and 3 are detailed views of the same.

of the same. My invention is described as follows: I make two strong frames, A and B, of solid beams of wood, their ends a and b projecting and clamp-25 ing the four parts of the cotton-press, represented by the dotted lines C. On the inside of the frames A and B are secured smooth planks d, which run perpendicularly and to the upper face of frame A from the lower '30 face of the frame B. Between the planks dare left slots or spaces through which the ratchets d' of the swinging or sword doors D pass, and extend about a half inch inward beyond the inner face of the said planks. The 35 swinging ratchet or sword doors D are made of an upper beam, e, and a lower beam, e', into which are set ratchet-beams d', with the holding side of their teeth downward, so that ! when the cotton is tramped into the box they 40 hold it down. There are four of these doors, one at either end and one on either side of the box. They are secured to the frame A at their upper ends by hinges a', and are held into place by locks  $a^2$ . When the cotton is 45 tramped into the box and all things ready to | ismake the bale, the locks a<sup>2</sup> are turned down

spring  $e^2$  has its lower end turned out and is so fastened by means of screws to the upper face of beam e' of the ratchet-door D, and its up-

and the springs  $e^2$  throw the doors out, as is

shown by the right-side door in Fig. 1. The

per end rests against the outer face of the upright planks d.

I claim that my ratchet press-box is constructed so as to admit of swinging ratchet or 55 sword doors which, when closed into the slotted box, makes the inside just suited to the holding down of cotton tramped into the box by man or by a machine.

The principle of tramping lint-cotton into 60 a cotton-box is to tramp altogether on the sides of the box, and the friction between the cotton and the sides of the box being the only means of holding the cotton down and cotton-lint being of a very spongy nature re-65 quires all press-boxes to be made of undressed lumber, the inside of which will soon wear smooth, and then the remedy is to keep the sides wet to create friction enough to hold the lint down.

In many instances the box is hacked on the inside with an ax to keep it rough. The water is injurious to the lint so packed, and it is often called "water-packed cotton." Running the follow-block down to press the lint into a 75 bale, when the box has wetted sides or is rough from other means, causes great friction on the sides, taking much more power to form a bale, when, if sides of press-box were smooth, it would take much less power.

I claim that a man can tramp as much more cotton into my press-box in half the time, and with much more ease than in the ordinary boxes.

In using my box screw-pins can be made 85 shorter and thereby stronger.

After the lint has been tramped into my box in sufficient quantity to make a bale the lock that holds the doors in place should be lowered, when the spring will immediately shove 90 the ratchet or sword doors out and hold them so. The box is then smooth and ready to make the bale.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, 95 is—

1. The cotton-press box consisting of the frames A B, having extended ends a b, grasping the posts C, being lined with smooth boards d, with a space between each for the roo entrance of the ratchet-teeth d' of the ratchet-door D, substantially as shown and described.

2. In a cotton-press box, the ratchet-door D, consisting of the beams e e', and ratchetbeams d', hinged to said box at its upper end by hinges a', and locked in place at its lower end by lock  $a^2$ , substantially as shown and described.

3. The combination of the cotton-press box, as above described, with ratched door D, hinged to said box by hinges a', and locked into place by lock a², its ratchets d' passing to the inside of said cotton-press box through the spaces left between the planks d and

spring  $e^2$ , its lower end secured to the upper face of the beam e' of the ratchet-door D, its upper end resting against the outer face of 15 one of the planks d, substantially as shown and described, and for the purposes set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

JAMES S. SMITH.

Witnesses:

A. W. Bumpass,

J. M. BATTLE.