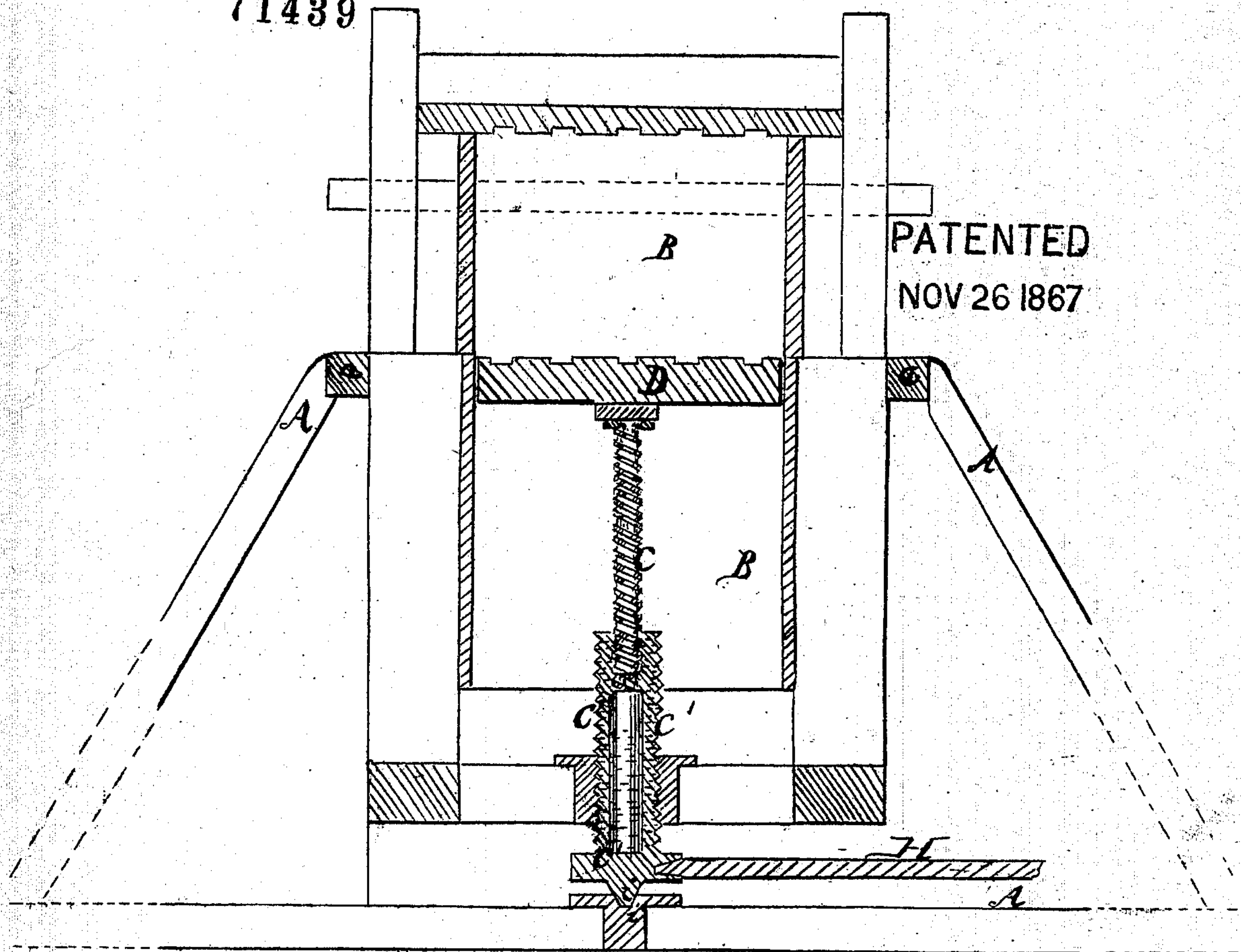


Barnabas B. Alfred. Cotton and Hay Press.

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PATENTED
NOV 26 1867



Witnesses:

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BARNABAS B. ALFRED, OF LA GRANGE, GEORGIA.

Letters Patent No. 71,439, dated November 26, 1867.

IMPROVED COTTON AND HAY-PRESS.

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, BARNABAS B. ALFRED, of La Grange, in the county of Troup, and the State of Georgia, have invented an Improved Cotton and Hay-Press; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable those skilled in the art to which my invention appertains to construct and use the same, reference being had to the accompanying drawings, forming part of this specification, and in which similar letters of reference indicate corresponding parts.

Figure 1 is a side elevation of my invention.

Figure 2 is a vertical cross-section through the centre of the same.

This invention consists in combining a double-acting compound screw with a follow-block and press-box in such a manner that, in addition to the power applied by the lever to the screw, the weight of the apparatus assists in compressing the cotton.

In the drawings, A represents a frame, supporting the press-box B of my improved press. D is the follow-block, working in the press-box by means of a screw, *c*, which screws up and down in a hollow screw, *c'*, below it, the latter being provided not only with threads on the inside of its walls, but others on the outside, running in a direction opposite to that of the threads of the upper screw *c*. The lower screw *c'* extends slightly below the bottom of the press-box, while its head is provided with sockets for the insertion of a handspike, H, by which to turn it.

The frame A is used only when the press is operated in the field as a portable press. When thus used, the lower end of the screw *c'* is provided with a journal, *i*, which steps in a socket, *i'*, fixed to the bed-timbers of the frame A.

When used as a stationary press, in a gin-house, the frame A may be removed, the pieces *a a* alone remaining. These pieces are fastened to the upper floor of the house, and the press-box is left to work up and down between them, as before. The power is applied at the bottom in the lower room, and the bale is removed from the top of the press in the upper room.

The construction of the cotton-press, thus described, is exceedingly simple, and its operation economical and effective. When the power is applied at the lever H, the follow-box descends, and the press-box, at the same instant, ascends. When the bale has been pressed by the two, thus acting together, a reversal of the operation prepares the press to receive the cotton for another bale. There is nothing to get out of order. The box, frame, and double screw constitute the whole; and while, in this combination, they make a press of great power, they make one, also, which cannot get out of order until the parts actually wear out with long use. A child can understand its operation, and can work it, within the limits of his strength, as well as a man.

It will be observed that, in a press of this construction, the weight of the press-box is utilized, acting in addition to the power exerted by the lever H, and assisting in compressing the cotton above the follow-block.

I do not confine myself to any particular means of causing the screw to operate the press and follow-block, but, in general, I attach a plate, *e*, to a strong frame, F, projecting down a few inches below the bottom of the press-box, and cause the outer threads of the screw *c'* to operate upon a female screw in this plate, thus moving the frame F, and with it the press-box. The plate *e* may be bolted or otherwise fastened to the frame F in any convenient manner.

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

The combination of the follow-block D and press-box B with a compound screw, *c c'*, resting on a pivot, *i*, and operating in such a manner that the part *c* screws up and down in the part *c'*, and the latter screws the press-box B up and down, at the same time causing the follow-block and press-box to move in opposite directions, with the united velocity of both the outer and inner threads of the part *c'*, in the manner and for the purposes specified.

B. B. ALFRED.

Witnesses:

A. E. BARBER,

F. L. HUNGERFORD.