July 23, 1929. B. L. SHOEMAKER 1,721,839

DOOR FOR COMPRESSES

Filed June 15, 1928

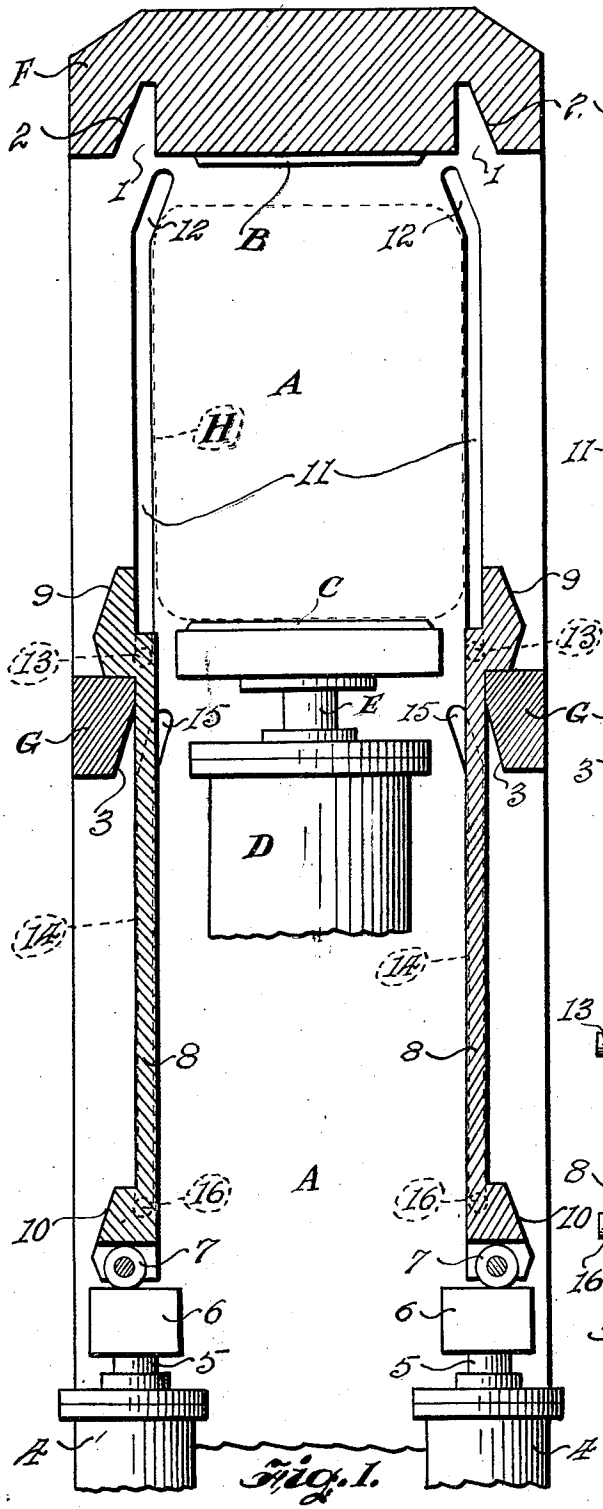


Fig. 1.

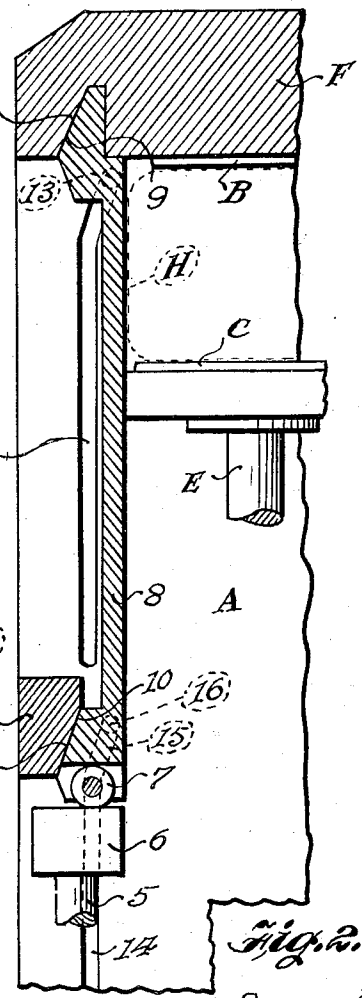


Fig. 2.

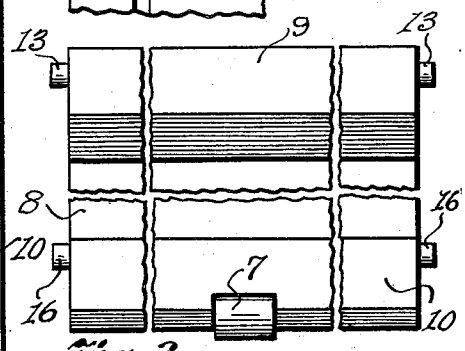


Fig. 3.

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UNITED STATES PATENT OFFICE.

BENTON LAFAYETTE SHOEMAKER, OF DALLAS, TEXAS.

DOOR FOR COMPRESSES.

Application filed June 15, 1928. Serial No. 285,704.

This invention relates to doors for compresses of the type that is used for compressing cotton for shipment.

The object of the invention is to provide a compress door which may be raised or lowered by the means of power, and, in addition to a vertical movement, has a lateral movement for the purpose of pressing the bale in from the sides, thereby further condensing the bale and giving it a better shape and proportion.

With this and further objects in view, which will definitely appear from the detailed description to follow, reference will now be had to the accompanying drawings forming a part of this application in which:

Fig. 1—is a vertical section of a press showing the upper and lower platen in usual form, and a bale of cotton in dotted lines in position to be pressed and my improved doors in section and in a lowered position.

Fig. 2—is a similar view to Fig. 1, but with my improved door in a raised position and showing its displacement laterally.

Fig. 3—is a front view of my improved door broken to conserve space but showing the vital elements thereof.

In the drawings similar reference characters refer to similar parts throughout the several views.

The character A represents the end of a compress, B is the top and stationary platen thereof against which the bale is pressed and C is the movable platen that exerts pressure against the bale—D is a cylinder and E is a piston for exerting force against the platen C.

Across the top of the press and connecting the two ends is the upper platen support F. On the under side of this support and running lengthwise thereof are cut channels 1 with beveled faces 2—G are close members on each side of the press and extend across and connect the two ends. These members have beveled faces 3. The cylinders 4 give power to the pistons 5, the ends of which are provided with blocks 6 on the upper surface of which the rollers 7 journaled in the lower end of the door 8 can move laterally. A beveled face 9 extending across the upper end of the door 8 is adapted to contact and slide against the beveled face 2 in the channels 1 in the platen support F. Similar beveled faces 10 extending across the lower end of the door 8 are adapted to contact and slide against the beveled faces 3 on the cross members G. Grooved ways 11 are cut in the ends of the press A and have laterally extended ends 12. These grooved ways are adapted to receive the lugs 13 on the upper ends of the doors 8 which travel therein. Similar grooved ways 14 with laterally extended ends 15 are adapted to receive the lugs 16 on the lower ends of the door 8. These lugs and grooves serve to hold the doors in vertical alignment and permit a vertical movement while the laterally extended ends 12 and 15 permit a lateral movement resulting from the beveled ends of the door coming in contact with the beveled surface on the press. It will be seen that as the doors move upward and their beveled ends contact the beveled surfaces on the press a lateral movement results against the sides of the cotton bale H, pressing it inward and further reducing its proportion.

While the structure described above is a preferred embodiment of my invention, it is, of course, evident that various modifications and changes could be made which would be within the spirit of this invention without departing from the scope of the following claims.

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

1. In a compress door, the combination with a compress, said compress having grooved ways cut on the inner surface of its end walls, said ways being vertical with their top ends laterally displaced towards the center of the press and adapted to receive a lug that travels therein, the top of said compress having channels cut on its under surface, said channels extending across the press from end to end and having their outer walls beveled towards the center of said press adapted to displace a beveled, sliding surface, upon contact towards the center of said press, said press having cross members extending across and connecting the ends of said press, said cross members being beveled on their inner faces, and adapted to displace a beveled sliding surface, upon contact towards the center of said press, substantially as specified.

2. In a compress door, the combination with a compress as set forth in claim 1, said door having beveled surfaces on its upper and lower ends extending across from side to side and adapted to contact, in its vertical

movement, a beveled surface on said compress and displace same, laterally, towards the center of said compress; said door having lugs extending outwardly from its four corners, said lugs adapted to travel vertically in grooved ways cut in the ends of said compress, a roller bearing in the center and on the lower end of said door adapted to bear upon the end of a piston and permit both a vertical movement and a lateral displacement of said door, substantially as specified.

In testimony whereof, I affix my signature hereto.

BENTON LAFAYETTE SHOEMAKER.