

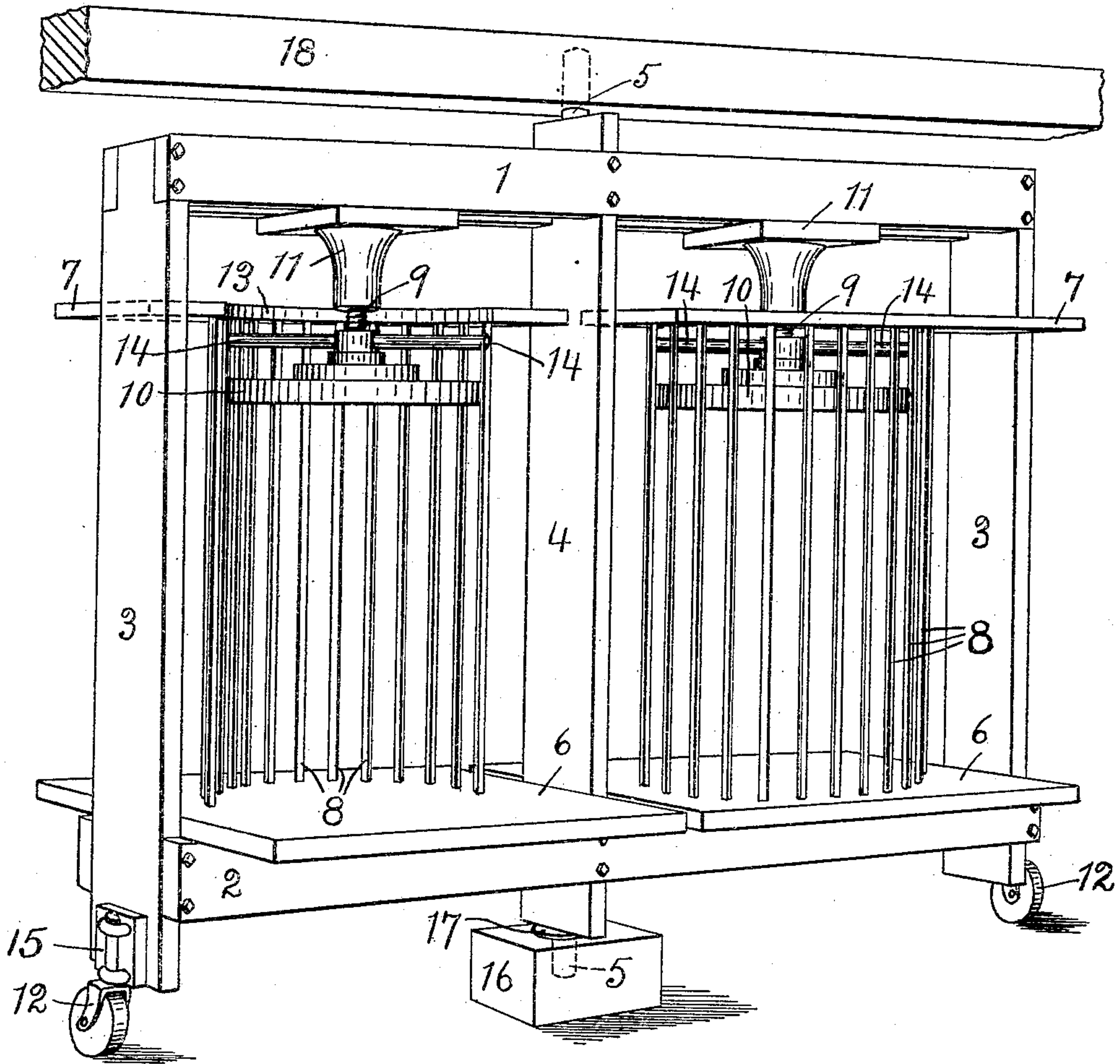
J. D. STOW.

BINDER.

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929,893.

Patented Aug. 3, 1909.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES D. STOW, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO ROLLIN THOMPSON, OF SPRINGFIELD, MASSACHUSETTS.

BINDER.

No. 929,893.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed January 13, 1909. Serial No. 472,020.

To all whom it may concern:

Be it known that I, JAMES D. STOW, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Binder, of which the following is a specification.

My invention relates to improvements in machines for holding and pressing together barrel heads while they are being bound into bundles to prepare them for shipment, and consists of twin stacking-platforms and presses arranged to rotate around an intermediate axis, as hereinafter more fully set forth.

The object of my invention is to provide a simple but efficient machine for binding barrel heads which greatly facilitates and expedites the operation, as will clearly appear from the following description. This machine makes provision for two operators to work together in the bundling operation, one binding while the other is stacking. I attain this object by the means illustrated in the accompanying drawing, which is a perspective view of a complete machine embodying a practical form of my invention.

From this drawing it will be observed that, in its general aspect, the machine comprises a bi-section frame revolvably mounted at its vertical center and supported at its ends by anti-friction members, and equipped with two overhead presses and with vertical backing members for the barrel heads, said backing members being constructed or arranged in segmental form, in cross-section, and opening in opposite directions.

Specifically the illustrated machine consists of a strong frame made up of top and bottom beams 1 and 2, respectively, and end pieces 3—3 which extend below said bottom beam; a vertical center piece 4 which extends both above said top beam and below said bottom beam, has center pins 5—5 at the upper and lower ends, and divides said frame into two parts or sections; floor pieces 6—6, for such sections, which are fastened on top of the beam 2; horizontal supports 7—7 which extend between said end pieces 3 and said center piece 4 and are offset laterally from each other; two sets of vertical rods 8 arranged in segmental order and extending from the floor pieces 6 below to the supports 7 above, and two press screws 9 with their heads 10 and the hangers 11 for

such screws. Casters 12—12 are attached to the end pieces 3 to support or assist in supporting the frame and the other parts and members at these extreme points on the floor. The floor pieces 6 constitute stacking-platforms for the barrel heads. The area of each support 7 is equal to about one-half that of either stacking-platform 6, and the two supports are located directly over the two stacking-platforms, but said supports cover opposite halves or sections of said platforms, as shown.

The rods 8 in each set connect one of the supports 7 with the platform 6 below, and they are arranged at intervals in the form of an arc of a circle which has the axis of the associated screw 9 for a center. These two sets of rods 8 constitute backings for the barrel heads, which backings open from opposite directions, as already intimated, and open on the longitudinal, central, vertical plane of the machine in this case. From this it will be understood why the supports 7 are offset as they are, instead of being placed end to end and in line. Each support 7 has a segmental cut 13 in its inner edge to accommodate the adjacent screw head 10 and the spokes or radial arms 14 by means of which said head is rotated.

The hangers 11 are secured to the underside of the top beam 1. The screws 9 are tapped into the hangers 11 in the usual manner. As noted above in somewhat different terms, the vertical center of each segmental backing made of the rods 8 coincides with the axis of the corresponding press screw.

In the present instance, the shank of each caster 12 is attached to its end piece 3 by means of a holder 15 fastened on the outside of such end piece at the base. The casters 12 may be omitted in some cases, or other anti-friction devices may be substituted.

The base of the center piece 4 is mounted on a floor block 16 into which the bottom pin 5 extends, a washer 17 being interposed between said base and block, and the upper pin 5 is received in a joist or fixed beam 18 above the machine.

It will now be seen that, with the pins 5 journaled as above stated for pivotal points, the entire machine can be revolved freely in either direction about the axis formed by said pins, the block 16 and washer 17 and the casters 12 serving as the floor supports for said machine, and the beam 18 maintaining

the machine in an upright position at all times.

Barrel heads are cut in a machine especially designed for that purpose, each head
 5 generally consisting of three pieces, and in practice the heads as fast as they are cut are stacked by an operator on one stacking-platform 6 against the backing which rises from that platform and which must, of
 10 course, open toward said operator. This stacking goes on until the pile of heads approaches the screw head 10 above when the operator grasps the arm 14 of said head and rotates the associated screw in the right di-
 15 rection to compress said pile tightly between the aforesaid stacking-platform and said head. Then the machine is turned half way around on its axis to present the other stacking-platform 6 to the first operator who im-
 20 mediately commences the formation of a new pile, and to bring the pile now under compression in front of a second operator who binds the heads thereon together in the usual manner, loosens the screw which confines
 25 said pile, and removes the bundle thus produced. One operation takes about as long as the other, so that by the time the second operator has removed the bundle of heads from his section of the machine the first operator
 30 has a new pile under compression in his section and the machine can be given another half turn to carry the last pile to the second operator and bring the empty section before the first operator. In this way the work is
 35 carried on much more expeditiously than was possible with the old style of binder which necessitated stopping the head-cutting machine, or header as it is known, while the operator bound together the stack or pile of
 40 heads. Now the header can run continually. Mention may be made, in passing, of the fact that, since barrel heads consist of several pieces, it is necessary to keep the parts of each head together, and to bundle the heads

with care. With my binder there is no trou- 45
 ble in doing these things.

Any kind of a press which is suitable for the purposes of this invention may be employed.

Various changes, in addition to those spe- 50
 cifically noted, may be made in the binder without departing from the nature of my invention.

What I claim as my invention, and desire to secure by Letters Patent, is— 55

1. A binder, of the class described, comprising twin stacking-platforms and presses and a support therefor mounted to rotate about an intermediate vertical axis, such platforms being provided with segmental 60
 backings for barrel heads, which backings are arranged side by side and open in opposite directions toward the longitudinal center of the binder.

2. The combination, in a binder of the 65
 class described, of a rotatable frame having a central vertical axial support and end supports, and stacking-platforms and presses carried by said frame, such platforms being provided with backings, for barrel heads, 70
 arranged side by side and opening in opposite directions toward the longitudinal center of the binder.

3. The combination, in a binder of the 75
 class described, of a rotatable frame having a central vertical axial support and end supports, stacking-platforms and presses carried by said frame, and suitably supported segmental backings for barrel heads piled on said platforms, such backings being ar- 80
 ranged side by side and opening in opposite directions approximately on the longitudinal center of the binder.

JAMES D. STOW.

Witnesses:

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 A. C. FAIRBANKS.