

No. 670,978.

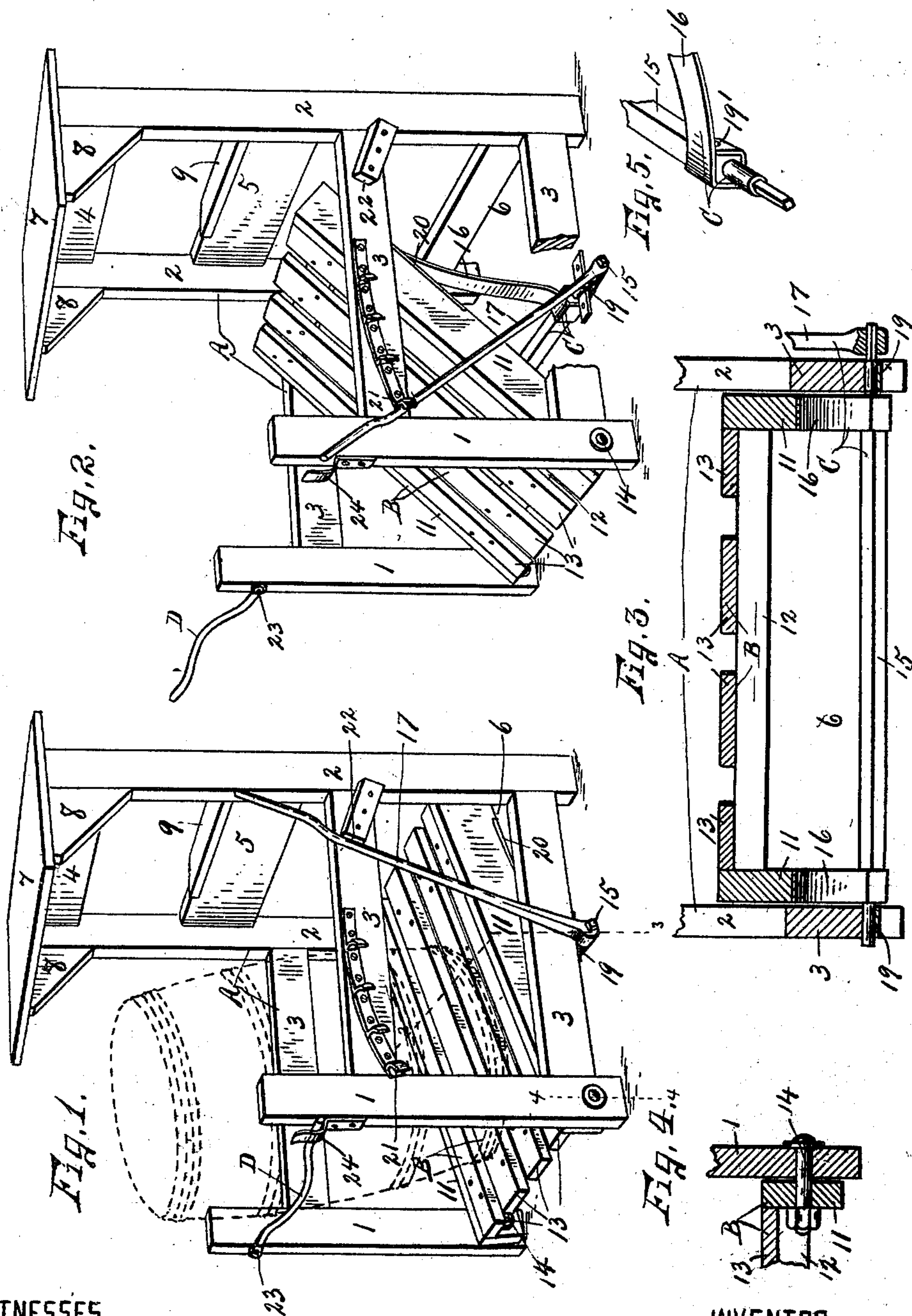
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C. W. YOUNG.

APPARATUS FOR HANDLING BARRELS, &c.

(Application filed Dec. 24, 1900.)

(No Model.)



WITNESSES.
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APPARATUS FOR HANDLING BARRELS, &c.

SPECIFICATION forming part of Letters Patent No. 670,978, dated April 2, 1901.

Application filed December 24, 1900. Serial No. 40,858. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. YOUNG, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and
5 useful Improvements in Apparatus for Handling Barrels and other Receptacles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention relates to apparatus for handling barrels and other receptacles, one object being to provide means for reducing to a minimum the expense of packing said receptacle with any desired commodity and
15 handling the same preparatory for storage or shipment, the further object being to permit the receptacle to be moved and supported in any desired position with the least possible labor and time during the process of packing.

20 To these ends the invention consists in the combination, construction, and arrangement of the parts of an apparatus for the purpose described, as hereinafter specified, and set forth in the claims.

25 Referring to the drawings, Figures 1 and 2 are perspective views of my invention, showing the moving wall in its opposite extreme positions, a barrel being shown by dotted lines in the first figure. Figs. 3 and 4 are sectional views taken, respectively, on lines 3-3
30 and 4-4, Fig. 1; and Fig. 5 is an isometric view of adjacent portions of the rock-shaft and one of the arms.

Similar reference characters indicate corresponding parts in all the views.

35 It is well known that in large factories, and particularly bakeries, the packing of merchandise in barrels and other large receptacles for storage or shipment is largely conducted by women and girls, and that owing
40 to the weight and cumbersomeness of said receptacles male helpers are generally employed for the purpose of shifting or moving the receptacles to such positions as may be required for speedily carrying out the process of
45 packing. My invention is designed to obviate the necessity and expense of these extra employees or helpers, and it consists, essentially, of a frame A, a movable supporting-base B, an
50 operating means C, mounted on the frame for controlling the position of the base B, and a

retaining-bar D, also mounted on the frame, for holding the receptacle in position upon the base B.

The frame A may be of any desired form or
55 construction, and preferably comprises front and rear upright standards 1 2, side bars 3, connecting the front and rear standards, and additional upper, lower, and intermediate tie-bars 4, 5, and 6, uniting the opposite rear
60 standards 2, the upper ends of said rear standards being connected by a suitable shelf 7, which is additionally supported by brackets 8. It is evident, however, that the intermediate bar 5 may also be provided with a shelf,
5 as the projection 9, if desired, the object of these shelves being to support any of the articles used in packing the receptacles, so that they be at hand when needed.

The movable supporting wall or base B is
70 mounted on the frame A, preferably between the side bars 3, and usually consists of an open frame having separated side bars 11, front and rear cross-bars 12 uniting the opposite ends of side bars 11, and separated
75 slats 13, arranged substantially parallel with the side bars 11 and having their opposite ends secured to the upper faces of the cross-bars 12. This base B is preferably pivoted at its forward end to the base of the frame A
80 by suitable pivotal bolts 14, passed through apertures formed in the lower ends of the front standards 1 and the adjacent ends of the side bars 11. It is evident from the foregoing description that the rear end of the base
85 B may be rocked upon the pivotal bolts 14 to any desired angle for supporting the barrel or other receptacle in an upright position or for causing said barrel to automatically slide
90 by gravity from the supporting-slats 13 when desired to remove the receptacle from the frame. The means for operating the movable base preferably consists of a rock-shaft 15,
95 arms 16 projecting from the rock-shaft, and a hand-lever 17. The rock-shaft 15 is preferably supported at its opposite ends in suitable bearings 19, which are secured to the lower face of the lower side bars 3 intermediate the front and rear standards 1 and 2,
100 and the arms 16 are usually secured at one end to the opposite ends of the rock-shaft 15 and extend rearwardly therefrom for engag-

ing the lower faces of the side bars of the movable base B, said side bars 11 being provided with wearing-plates 20 for receiving the ends of the arms 16 and preventing undue friction and wear of the bars 11. This rock-shaft is usually square except at the bearings 19, and the adjacent ends of the arms 16 are generally looped upon said square portions of the rock-shaft and secured thereto by suitable fastening means 19'.

The operating member or handpiece 17 preferably consists of an upright rod having its lower end secured to a projecting end of the rock-shaft 15 and its upper end adapted to rock forwardly and rearwardly into and out of engagement with suitable front, intermediate, and rear stop-shoulders 21 and 22, provided on the frame A, and each having a front engaging face for preventing rearward movement of the handpiece 17, and consequently holding the movable bottom wall B in its adjusted position.

The arms 16 and hand-lever 17 are so relatively secured to the rock-shaft that when the hand-lever is engaged with the front shoulder 21 the movable base B is held in its upper position for supporting the receptacle in convenient position for packing the merchandise in the bottom of the receptacle, and when said lever is engaged with the rear shoulder 22 said base is held in its lower position for filling in the upper layers of said merchandise, or said base may be tilted and held in either intermediate position during the process of packing the receptacle mounted thereon to suit the convenience of the operator.

The member D for retaining the receptacle in position during the process of packing usually consists of a bar having one end pivoted at 23 to one of the front standards and its other end movable into and out of engagement with a suitable locking-shoulder 24, secured to the other front standard.

When desired to remove the barrel, the operator swings the bar D upwardly upon its pivot 23 out of the path of movement of the receptacle, and the lever 17 is then rocked forwardly for elevating the rear end of the base B, and thereby causing the receptacle to slide by gravity upon the slats 13 to the floor or onto a car, (not illustrated,) which may be provided for carrying the barrel to any desired locality.

The operation of my invention will now be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be noted that some change may be made to the detail construction and arrangement of the parts of the invention without departing from the spirit thereof.

Therefore I do not limit myself to the precise construction shown and described.

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

1. An apparatus for handling barrels and other receptacles comprising a supporting-frame having separated stop-shoulders, a base pivotally connected at one end to the frame, and manually-operated means for raising and lowering the opposite end of said base, limited by said shoulders.

2. An apparatus for handling barrels and other receptacles comprising a supporting-frame, a rock-shaft journaled on the frame, a movable base having one end actuated by the rock-shaft, and a hand-lever secured to the shaft for rocking the shaft.

3. An apparatus for handling barrels and other receptacles comprising a supporting-frame having separated stop-shoulders, a rock-shaft journaled on the frame and provided with arms projecting therefrom, a movable base having one end mounted on the frame and its other end resting on said arms, and a hand-lever having one end secured to the shaft and its other end movable into and out of engagement with said stops for the purpose described.

4. An apparatus for handling barrels and other receptacles comprising a supporting-frame having separated upright standards for forming an opening, a movable retaining-bar mounted in the frame and spanning said opening, a tilting base mounted on the frame, and manually-operated means for tilting said base.

5. An apparatus for handling barrels and other receptacles comprising a supporting-frame having separated upright front standards, rear standards, a shelf mounted on the rear standards, a locking member, a retaining-bar having one end pivoted to one of the front standards and its other end movable into and out of engagement with the locking member on the other front standard, a rock-shaft journaled on the frame in proximity to the base of the front standards and provided with rearwardly-projecting arms, a base having its front end pivoted to the frame and its rear end resting on said arms, and a hand-lever having one end secured to the rock-shaft and its other end movable into and out of engagement with front and rear shoulders secured to the frame.

In witness whereof I have hereunto set my hand this 17th day of December, 1900.

CHARLES W. YOUNG.

Witnesses:

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HOWARD P. DENISON.