No. 706,681. Patented Aug. 12, 1902.

S. McCOWN.

PRESS FOR PACKING BARRELS OR OTHER PACKAGES.

(Application filed Aug. 7, 1901.)

(No Model.)

Fig. 1.

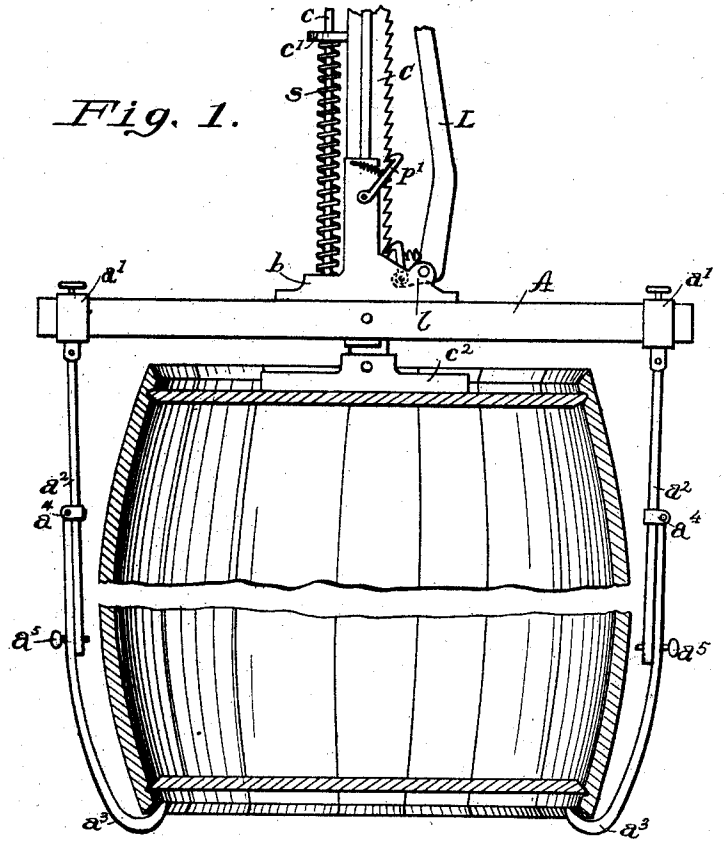


Fig. 3.

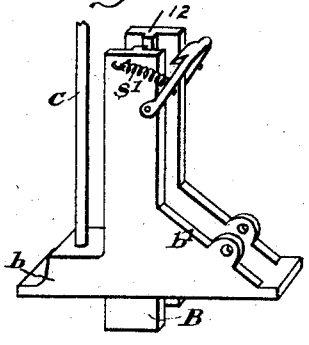


Fig. 2.

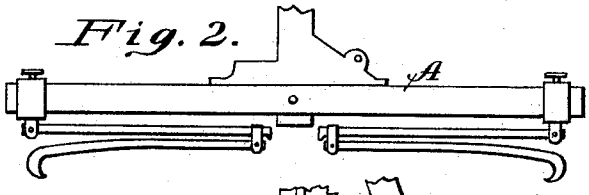


Fig. 4.

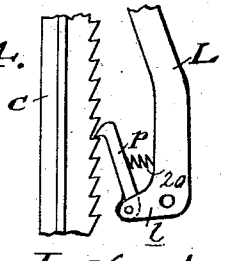
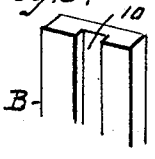


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

SYLVESTER McCOWN, OF ATHALIA, OHIO, ASSIGNOR TO GABE M. WEIL, LOUIS BROCKMAN, AND G. S. WEIL, COPARTNERS AS WEIL, BROCKMAN & COMPANY, OF CINCINNATI, OHIO.

PRESS FOR PACKING BARRELS OR OTHER PACKAGES.

SPECIFICATION forming part of Letters Patent No. 706,681, dated August 12, 1902.

Application filed August 7, 1901. Serial No. 71,186. (No model.)

To all whom it may concern:

Be it known that I, SYLVESTER McCOWN, a citizen of the United States, residing at Athalia, in the county of Lawrence and State of Ohio, have invented new and useful Improvements in Presses for Packing Barrels or other Packages, of which the following is a specification.

My invention relates to the class of presses used in connection with packing barrels or packages and sometimes known as "fruit-packers," "tobacco-presses," and the like, its object being to produce a simple, effective, compact, and portable apparatus adapted to be taken into the field or elsewhere and applied directly to the package whose contents are to be compressed. The apparatus is self-contained and is itself capable of being compactly folded for carriage and is also adjustable to any size package and is quick and effective in its operation.

To this end my invention consists in an apparatus embodying a slotted or perforated cross-bar adapted to be applied to a barrel or other package and be secured in position by adjustable tie-hooks extending to and engaging under the bottom thereof and a rack-bar carried vertically through the perforated cross-bar aforesaid and operated by a lever pivoted upon the cross-bar and pawls acting upon the rack-bar, which is normally upheld by a suitable spring.

The detailed construction and functional features will more clearly appear in the subjoined description.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the apparatus complete shown in use in the act of compressing the contents of a barrel. Fig. 2 is a side view of the cross-bar removed with the tie-hooks folded under for transportation. Fig. 3 is a view of the guide-socket and its attendant parts shown separate in perspective elevation. Fig. 4 is a detail showing the relation of the operating-lever and the actuating-pawl to the rack-bar. Fig. 5 is a detail of the upper part of one side of the guide-piece, showing the guide-groove.

Referring now to the drawings, A designates the cross-bar, upon the opposite ends of which are carried adjustable yokes a' a', from which are suspended extensible tie-rods a^2 a^2, provided at their extremities with hooks a^3 a^3. The tie-rods are preferably made in two parts, the lower section pivoted to the upper section by means of a sliding yoke a^4 a^4 and held in any desired position of extension by set-screws a^5 a^5, passing through suitably-arranged holes. The construction and arrangement of the tie-rods, as shown, permit them to be folded beneath the cross-bar when desired, as shown in Fig. 2. The cross-bar A is perforated centrally and vertically. Through the perforation of the same is fitted a guide-piece B, bolted to the top of the bar through a lateral flange b, cast with the guide-piece, as shown in Fig. 3. The guide-piece B is of rectangular cross-section horizontally and presents a rectangular channel open in front for the reception and play of the rack-bar. Above the flange b the two opposite sides only of the guide-piece are extended upward a short distance, leaving the guide-channel open at the back as well as at the front. In the opposite inner sides of the guide-piece vertical grooves 10, Fig. 5, are formed for the reception and play of a rack-bar C, adapted to fit the guide-channel and provided with longitudinal ribs at opposite sides to fit the grooves of the guide-piece. If desired, the rack-bar may be grooved and ribs 12 may be formed on the opposite sides of the guide-piece, as shown in Fig. 3. The front face of the guide-bar is provided with rack-teeth pointing upward.

There is also erected at the rear of the rack-bar and seated in and rising from the flange b a fixed vertical rod or standard c, which is embraced by a lug c', projecting from the rack-bar C. A coiled spring s upon the standard c and interposed between the lug c' and the flange b sustains the weight of the rack-bar and holds it normally in its upper position. Upon the flange b at the front of the rack-bar guide is formed a pillow-block to receive the pivotal bearings of a bell-crank lever L, to whose shorter arm l is pivoted a hooked pawl p, which engages the rack-bar,

as shown in Fig. 4. The long arm of the lever L is extended in any convenient direction for operation by the attendant. Immediately above the pawl p is arranged a yoke-pawl p', pivoted to the upper extension of the guide B and is normally held in engagement with the teeth of the rack-bar C by a suitable spring s'. A similar spring 20, attached in any convenient manner, holds the operating-pawl p to its work.

The rack-bar projecting downward in its guides through the cross-bar A is fitted with a removable head c^2, which being removed permits the rack-bar to be entirely withdrawn upward. When it is desired to transport the apparatus, the rack-bar may be thus removed and folded with the cross-bar B. The standard c and the lever-arm L are also made removable for convenience in folding and transporting the apparatus.

I claim as my invention and desire to secure by Letters Patent of the United States—

1. In an apparatus of the character indicated the combination of the cross-bar, a vertical guide rising from the central longitudinal portion thereof, a rack-bar operating in the guide, an operating-lever fulcrumed to the guide, a pawl to engage said rack-bar, and a spring proximate to and parallel with the guide and rack-bar and seated upon the base of the former, and upholding the rack-bar in its elevated position in relation to the cross-bar.

2. In an apparatus of the character indicated in combination with the cross-bar and the rack-bar operated vertically through the same, of pivotally-suspended tie-rods, yokes slidable thereon, hook members pivotally secured to said slidable yokes, and means for holding the hook members in adjusted positions on the tie-rods.

3. In an apparatus of the character indicated, the combination with the cross-bar and rack-bar, operated vertically in relation to the same, of the hooked tie-rods pivotally secured to the ends of the cross-bar and adapted when out of use to fold inward beneath the said cross-bar.

4. In an apparatus of the character indicated, the combination of the cross-bar, the guide-piece, B, provided with the flange b, the rack-bar, C, adapted to operate with the guide-piece, and provided with the perforated lug, c', the fixed standard, c, and the spring, s, coiled upon said standard, between the lug, c', and the flange, b.

5. In a portable apparatus of the character indicated, the cross-bar, in combination with tie-hooks pivoted to the ends thereof to fold inward, said tie-hooks being pivoted midway of their shanks to fold outward substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SYLVESTER McCOWN.

Witnesses:
R. B. MILLER,
WALTER A. KNIGHT.