(No Model.)

R. L. ALEXANDER.

TOBACCO PRESS.

No. 257,454. Patented May 9, 1882.

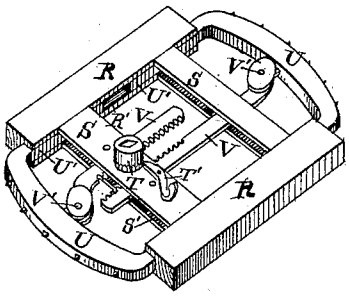


Fig. 3.

Fig. 1.

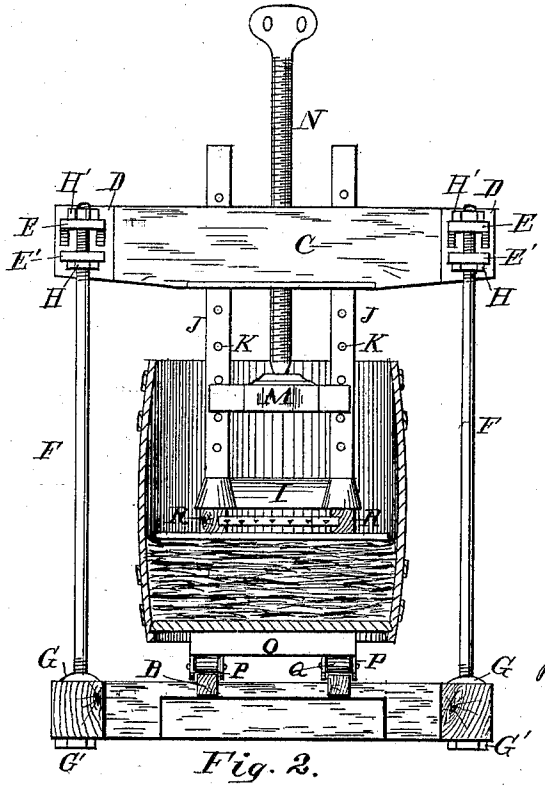


Fig. 2.

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UNITED STATES PATENT OFFICE.

ROBERT L. ALEXANDER, OF NEW LIBERTY, KENTUCKY.

TOBACCO-PRESS.

SPECIFICATION forming part of Letters Patent No. 257,454, dated May 9, 1882.

Application filed March 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. ALEXANDER, of New Liberty, in the county of Owen and State of Kentucky, have invented a new and useful Improvement in Tobacco-Presses, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side view of the tobacco-press, showing the tobacco tub or hogshead in section. Fig. 2 is an end view of the same with the tub in section, and Fig. 3 is an isometric view of the spreading-follower.

The object of this invention is to provide an efficient tobacco-press, constructed in such a manner as to enable the operator to speedily pack the tobacco-leaves in casks, hogsheads, or barrels for shipment, and, further, to provide a means whereby the packer can pack in two packs alternately, allowing the packed and pressed leaves in one partially-filled tub to be compressed while the other is being filled, and so on. At the same time the tobacco so compressed will be packed evenly. To do this it has been customary to fill one tub with leaves and compress the same. When thus compressed the tub is only partially filled, and it is necessary to allow the tub to remain in the press a certain length of time, so that the pressed tobacco will "set" before removing the pressure of the screw. In the meantime the packers lose considerable time waiting for the pressed tobacco to become compact. In this invention a follow-block capable of spreading within the tub is placed under the screw, and this is so arranged that when the press-screw has compressed the tobacco the required amount the follower is expanded, so as to come in contact with the inner walls of the tub and prevent the compressed tobacco from again expanding when the press-screw is removed, as will be hereinafter shown. It also provides for a track or guideway, and trucks for the track, so that the compressed tobacco may be handled with facility, all of which will now be described in detail.

In the accompanying drawings, A represents a square base or frame, of any desired size best adapted to the purpose.

B B represent the rails or tracks secured to the base A, as shown, projecting over the base A on both sides.

C is an elevated cross-beam of equal length with the width of the base A. This beam is provided at each end with a metallic head or thimble, D, or its equivalent, which has on each side one or more brackets or projections, E E′, through which the standards, supporting arms, or posts F pass. The upper ends of the posts F are screw-threaded, and are provided below the brackets E′ with jam-nuts H, and on the upper side of the brackets E are suitable nuts, H′, whereby the posts are or may be rigidly secured to the brackets and at the same time permit the beam C to be elevated or depressed a limited distance when desired. The lower ends of the posts F are also screw-threaded and pass through the base A. Jam-nuts G rest on the upper surface of the base A, and nuts G′ on the under side serve to tighten the posts.

O represents the frame of a truck, having the journal-bearing ears P projecting downward, between which the wheels or rollers Q are journaled. This truck is preferably made small enough, so that its dimensions diagonally will be less than the interior diameter of the tobacco tub or hogshead in which the leaf is to be packed. It will also be observed that the distance of the rails B from each other will in a measure be regulated by the size of the tub.

The cross-beam C has centrally a vertical screw-threaded shaft, N, such as is ordinarily employed in presses. The lower end of this screw has a cross-head, M, in which it revolves. The cross-head is, however, attached to the screw, so that it moves vertically therewith.

Below the cross-head M is a supplemental cross-head or follow-block, I, having at each end and permanently secured to the follow-block an upwardly-projecting arm or guide-piece, J. These arms pass through suitable mortises in the cross-beam, on opposite sides of the screw N, and also slide in gains J′ in the ends of the cross-head M. The arms J are provided with suitable holes, K, to receive pins L below or above the cross-head M, or both above and below the cross-head. The follow-block I is therefore adjustable to and from the material in the tub independently of the cross-head M. The object of this is to dispense with the use of a column of blocks under the cross-head or follow-blocks, as is now generally the

case, and to enable the packers to more expeditiously and easily prepare the press after being filled.

In addition to the usual follow-board as now used, I also employ the supplementary adjustable follow-board, which is shown in Fig. 3. This is composed of the two side pieces, R R, of suitable length, united by the cross-pieces S S. The frame thus constructed should be made of such dimensions that the diagonal measure is less than the interior diameter of the tub. The inner faces of the side pieces, R, are provided with grooves R′, which grooves receive the limbs U′ of the U-shaped pieces U. Centrally through one of the cross-pieces S is an arbor, T, provided with a small pinion (not shown) on the under side of the cross-piece S; or this pinion may be placed on the arbor at a point between the upper and lower cross-pieces, S S′. The upper end of the arbor is adapted to receive a key, and the periphery is provided with a rack and a pawl or catch, T′, so that it may be held at any point when the key is reremoved. The U-shaped pieces U are provided at a point midway between the side pieces, R, with ears, to which are hinged the rack-bars V V. These rack-bars project inwardly between the upper and lower cross-bars, S S′, on the opposite sides of the arbor T, so that their toothed edges mesh with the small pinion on the arbor. It will be observed that as the arbor is turned the U-shaped pieces move toward or from each other in the grooves R′.

The operation is as follows: The tubs are placed on their respective trucks, one on each end of the track. As soon as one is filled it is conveyed on the truck to a point under the screw N, and the common follow-board first placed on the leaf or material to be compressed. The supplementary follow-board is then placed on the common follow-board. The adjustable follow-block I is then drawn down so that it rests on the opposite side pieces, R R, as shown in Figs. 1 and 2, and the pins L placed through the arms J under the cross-head M. The material is then compressed by the screw in the ordinary manner. When sufficiently pressed the key is inserted in the arbor T and turned so that the U-shaped pieces recede from each other and bind against the opposing sides of the tub. The pawl T′ is now caused to engage with the rack on the arbor and the key removed. The adjustable follow-board thus holds the compressed material at this point, and the screw N is removed and the adjustable follow-block elevated and secured. In the meantime the other tub, having been filled, is ready to be moved under the screw, when the operation is repeated. While the second is being pressed the one first filled is held at the point of compression, and so on. It is obvious that two or more of these trucks may be employed, and where more than two are employed the track would have to be increased in length, so that sufficient time would elapse between the successive "fillings" to give the pressed material time to set before refilling. The follow-block is also used upon quitting work at night and at dinner-hour, or in case the tobacco should dry out, in the positions shown in Figs. 1 and 2.

Having described my invention, I claim—

1. In presses, a supplementary follow-board adapted, substantially as herein shown, to expand and bind against the opposing sides of a tub, hogshead, barrel, or similar receptacle, for holding the compressed contents of said receptacle, as herein set forth.

2. In presses, the adjustable follow-board, composed of the frame R S S′, having the grooves R′, arbor T, rack and pawl T′, and pinion, or their equivalent, in combination with the U-shaped pieces U, having hinged thereto the rack-bars V, all operating substantially as and for the purpose set forth.

3. In presses, a supplementary expanding and adjustable follow-board, as shown, in combination with a press, substantially as herein set forth.

4. In presses, the combination of the screw N, having at the lower end a cross-head, M, provided at each end with the gains J′, and the independently-adjustable follow-block I, having the guide-arms J, provided with holes K and pins L, substantially as and for the purpose herein shown.

In testimony that I claim the foregoing I have hereunto set my hand, this 13th day of March, 1882, in the presence of witnesses.

ROBERT L. ALEXANDER.

Witnesses:

WILLIAM B. BOND,

JOHN J. ALEXANDER.