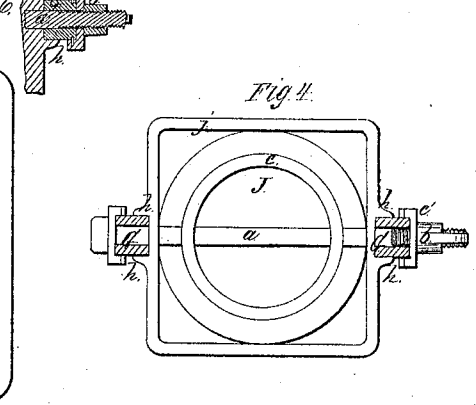
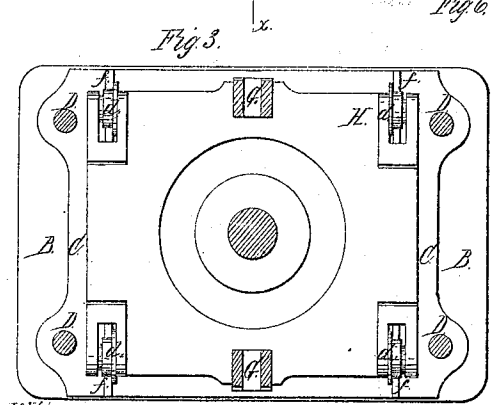
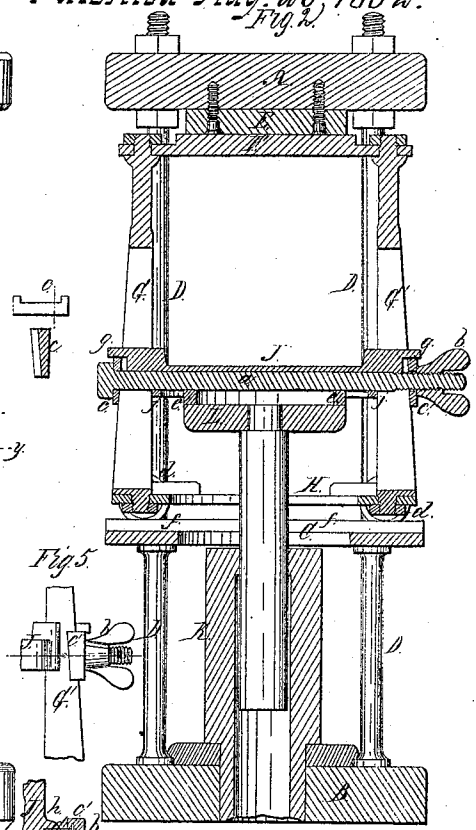
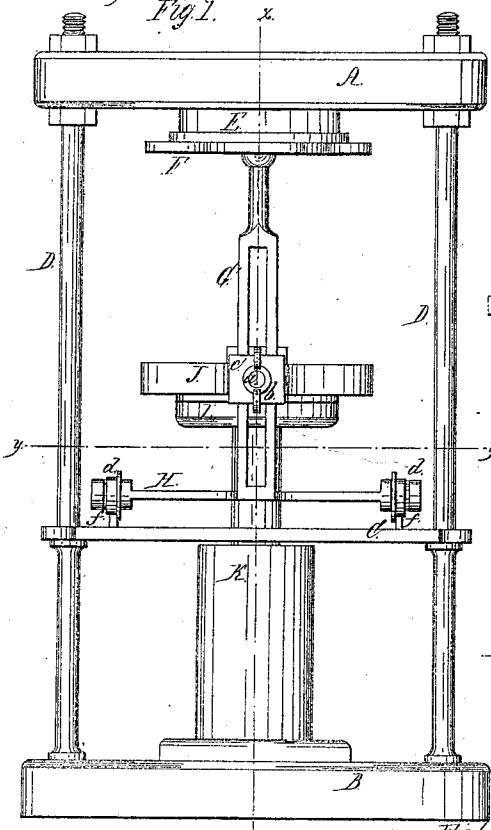


A. P. Cochran,

Tobacco Press.

N^o 36,276.

Patented Aug. 26, 1862.



Witnesses,
W. Robbins, M.D.
Ramsey & Co.,

Inventor,
Archibald P. Cochran
by his Attorney's
Robbins & Burr.

UNITED STATES PATENT OFFICE.

ARCHIBALD P. COCHRAN, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN RETAINERS FOR TOBACCO-PRESSES.

Specification forming part of Letters Patent No. 36,276, dated August 23, 1862.

To all whom it may concern:

Be it known that I, ARCHIBALD P. COCHRAN, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in the Retainers for Tobacco-Presses; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side view of a tobacco-press which is supplied with one of my improved retainers; Fig. 2, a longitudinal section in the line *x x* of Fig. 1; Fig. 3, a transverse section in the line *y y* of Fig. 1; Fig. 4, a plan of the under side of the platen of the retainer; and Figs. 5 and 6 are views showing portions of the retainer in detail.

The tobacco-press which is represented by the accompanying drawings is one which is perfectly adapted to the use of my improved retainer. This press is composed of the base B, the cap A, the intermediate platform, C, the posts D D, and the hydraulic press K, which may be constructed in any well-known manner. An opening in the central portion of the platform C allows the head L of the piston-rod of the hydraulic cylinder to pass through the same, and rails or ledges *f f* rise from the upper surface of said platform for the reception of the flanged truck-wheels *d d* of the retainer.

My improved retainer for tobacco-presses is composed of the base H, the cap F, the two tapering and slotted connecting-posts G G', the platen J, the transverse retaining-bar *a*, the screw-nut *b*, and the wedge-shaped and flanged friction washer-blocks *c c'*, the said parts being arranged and combined with each other in the following manner: The ends of the connecting-posts G G' are respectively united to the cap F and the base H of the retainer by means of screw-tenons and nuts in the manner represented in the drawings, or in any other safe and secure manner. The inner sides of the connecting-posts G G' are straight and parallel with each other. The outer surfaces of said posts have a uniform inclination from base to summit, and the lateral sides of each of these posts are straight and parallel with each other from end to end. The platen or follower J, which is placed between the cap and base of the retainer, is

guided in its upward and downward movements by the tongues *g g*, which pass from opposite sides of said follower through the slots in the posts G G' and by the ears *h h*, which embrace the lateral sides of said posts, as shown in Figs. 2 and 4. A flange, *j*, descends vertically from the border of the follower J, and a circular flange, *e*, descends from the under side of said follower, as shown in Figs. 2 and 4. The retaining-bar *a*, which passes through the slots in the posts G G', also passes through apertures in the flanges *j* and *e* of the follower J, as shown in Fig. 2. The shape of the flanged washer-blocks *c c'*, which are used upon the retaining-bar *a*, is represented in Figs. 2 and 5, the said blocks having inclined inner surfaces, which accurately fit and coincide with the inclined outer surfaces of the posts G G', while their outer surfaces descend vertically, thereby enabling the head of the retaining-bar *a* and the face of the nut *b* to act upon surfaces that are at right angles to the axis of the said retaining-bar, as shown in Fig. 2. An opening is formed in the base H of the retainer of sufficient size to allow the head L of the piston-rod of the hydraulic cylinder K to pass freely through the same. The said head L of the piston-rod of the hydraulic cylinder bears accurately against the circular flange *e* of the retainer-follower J. The retainer having been charged with its appropriate supply of prepared tobacco, and having been moved into its proper position within the frame of the hydraulic press, the piston-rod thereof is operated upon until the requisite degree of power is brought to bear upon the follower of the retainer, and then the nut *b* is turned until its action causes the washer-blocks *c c'* to bear closely against the outer surfaces of the posts G G'. Consequently, when the said follower is relieved from the action of the piston-rod of the press, the inclined shape of the outer surfaces of the posts G G' causes the rod *a* and the washer-blocks *c c'* to rigidly hold the follower in the desired compressing position. As soon as the said compressing action has been performed, the retainer is rolled out of the press upon the rails *f f*, and another retainer, supplied with a fresh charge of tobacco, is rolled into its place. After removing the charge of compressed tobacco from my improved retainer, the follower thereof will replace itself by gravity in a proper position for receiving a

fresh charge of tobacco by simply unscrewing the nut *b*. The body of the retaining-rod *a* being of a square shape, the washer-block *c*, which is acted upon by the head of said rod, will always be retained in the proper position for its flanges to embrace the sides of the post *G*. The washer-block *c'*, which plays upon the rounded screw portion of the retaining-rod *a*, may also be retained in a proper position for its flanges to embrace at all times the post *G'* by forming grooves in the lateral sides of said post and then securing pins in apertures in the flanges of said washer-block in such positions that they will work in the said grooves in the post *G'*, as shown by Figs. 5 and 6.

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

My improved retainer for tobacco-presses, the said retainer being composed of the base *H*, the cap *F*, the upwardly-tapering and slotted connecting-posts *G G'*, the follower *J*, the retaining-rod *a*, the washer-blocks *c c'*, and the screw-nut *b*, or the equivalents of said parts, when arranged, combined, and operating with each other, substantially in the manner and for the purpose herein set forth.

The above specification of my improvement in retainers for tobacco-presses signed and witnessed this 27th day of June, A. D. 1862.

A. P. COCHRAN.

Witnesses:

E. M. HURDLE,
A. McCONNELL.