No. 777,932. PATENTED DEC. 20, 1904.

J. BARKER & W. N. WINFIELD.

LEDGER OR BINDER.

APPLICATION FILED AUG. 4, 1903.

NO MODEL.

Fig. 6.

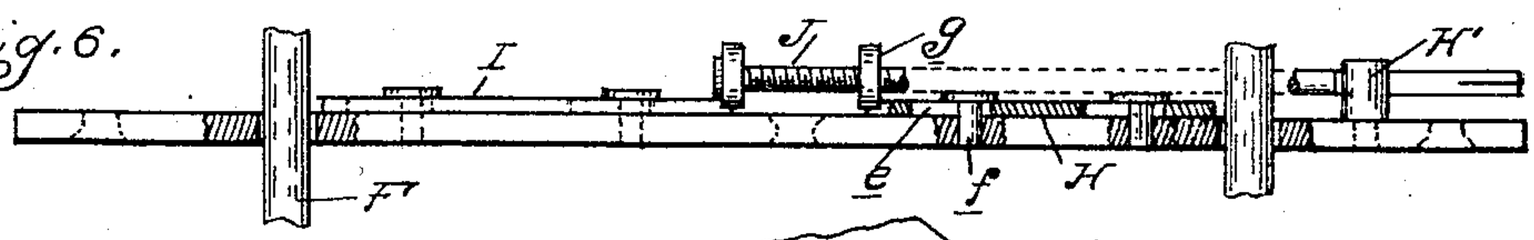


Fig. 2.

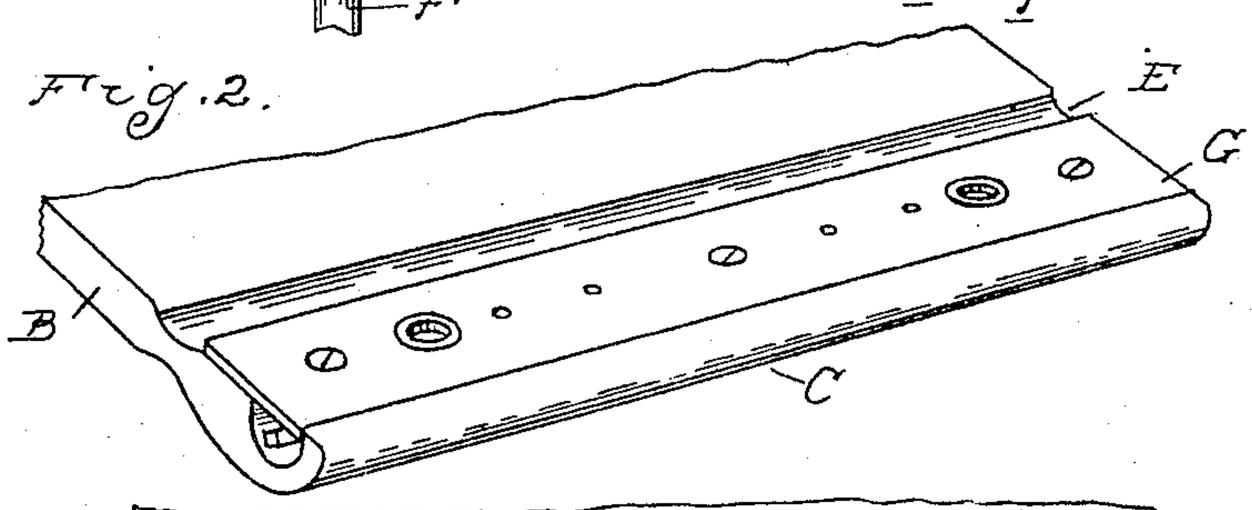


Fig. 3.

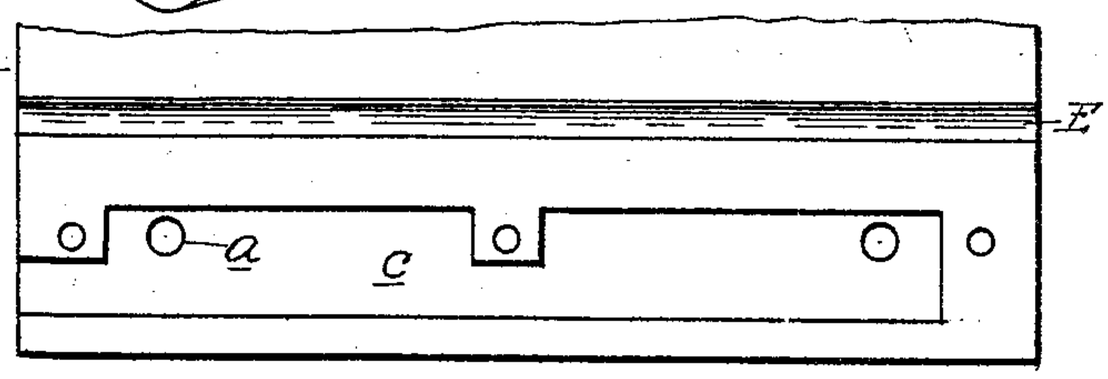


Fig. 4.

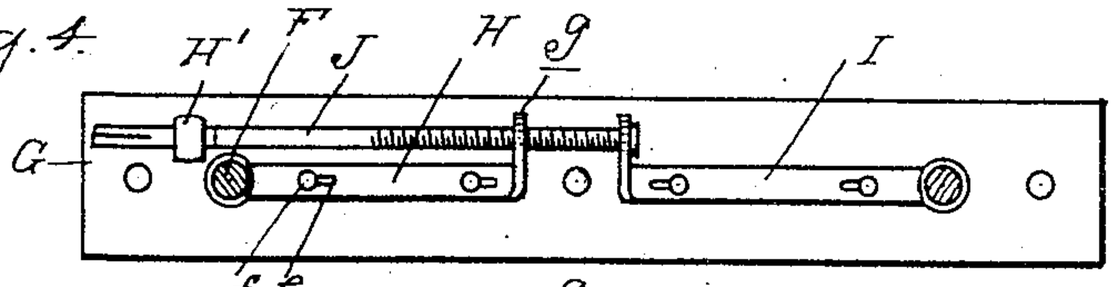


Fig. 5.

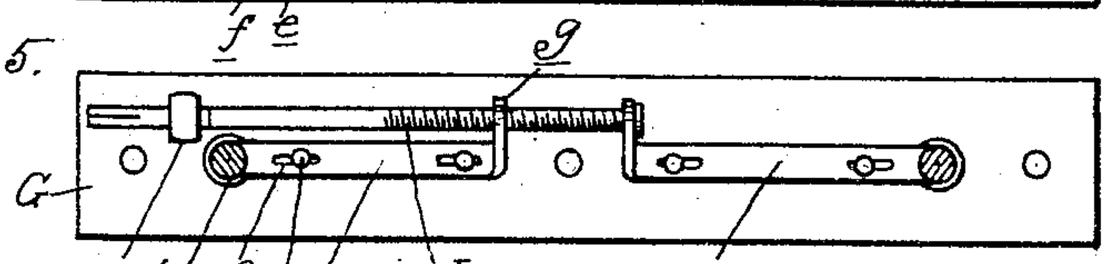
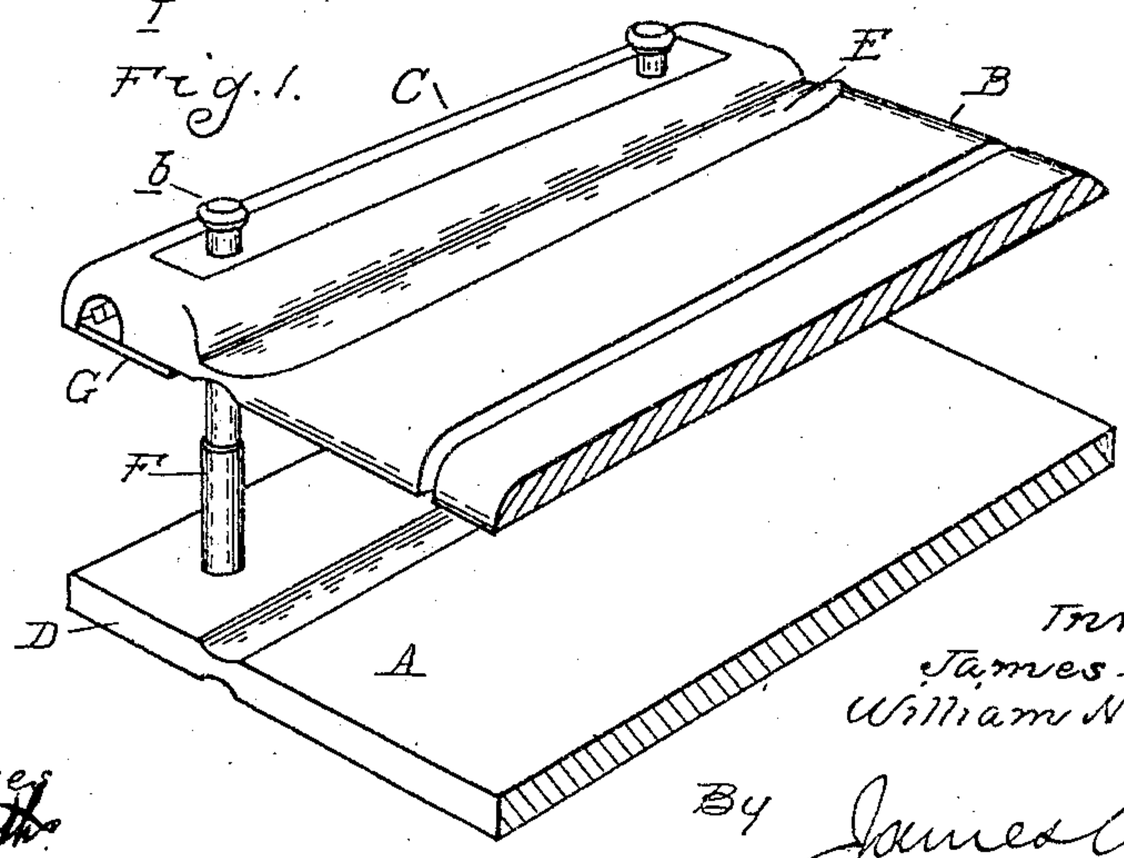


Fig. 1.



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No. 777,932. Patented December 20, 1904.

UNITED STATES PATENT OFFICE.

JAMES BARKER AND WILLIAM N. WINFIELD, OF DETROIT, MICHIGAN, ASSIGNORS TO THE RICHMOND & BACKUS COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

LEDGER OR BINDER.

SPECIFICATION forming part of Letters Patent No. 777,932, dated December 20, 1904.

Application filed August 4, 1903. Serial No. 168,175.

To all whom it may concern:

Be it known that we, JAMES BARKER and WILLIAM N. WINFIELD, citizens of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Ledgers or Binders, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates particularly to loose-leaf ledgers or binders wherein one of the covers or a clamping member is adapted to slidingly engage the binder-posts; and the invention consists in the novel and simple means for locking the cover or the clamping member to the posts.

The invention further consists in the peculiar arrangement and combination of the various parts of the locking mechanism and in other details of construction, as will be more fully hereinafter set forth.

In the drawings illustrating our invention, Figure 1 is a sectional perspective view of the ledger or binder. Fig. 2 is a view of the under side of a portion of one of the covers, showing the location of the locking means. Fig. 3 is a similar view, the locking mechanism being detached. Fig. 4 is a plan view of the locking mechanism. Fig. 5 is a similar view showing the parts in their locked position; and Fig. 6 is a view in elevation, some of the parts being broken away, of the locking device.

In construction the ledger is composed of the usual covers A and B, carrying, respectively, the clamping members C and D, which are connected to the covers by suitable flexible hinges E. Upon the clamping member D is arranged the binding-posts F, preferably two in number, and of the sectional type. The upper clamping member C is apertured, as at *a*, to receive the posts and permit of a sliding engagement of the upper cover thereon.

b represents caps for the posts.

The under face of the clamping member C is recessed, as at *c*, to receive the locking mechanism, which consists, preferably, of a plate G, adapted to be rigidly secured by screws or other like devices to the clamping member, locking-bars H and I, oppositely disposed upon the plate for sliding movement, and an operating member J for actuating the bars for the purpose of engaging the posts, and thereby locking the clamping member to which the plate is attached in its different positions of adjustment.

The locking-bars referred to are slotted, as at *e*, and are held in axial alinement on the plate G for sliding movement by suitable headed pins *f*. The outer ends of the bars are curved and preferably sharpened, so as to engage and grip the post in the manner indicated in Fig. 5. The inner bar ends are provided with ears or lugs *g*, arranged in proximity to one another and adapted to receive the operating member J, which in this instance is a screw-bolt. This bolt, as shown, has its outer end portion arranged within a bearing H′ upon the plate G for endwise sliding movement, and its extreme end is made hexagonal or square to receive a suitable key, by means of which the bolt is operated. The inwardly-projecting portion of the bolt is threaded to engage an internally-threaded aperture in the ear or lug upon the bar H, and at its extremity the bolt is swiveled within the lug upon the bar I in the manner indicated in Figs. 4 and 5.

In operation when it is desired to lock the upper clamping member to the posts the screw-bolt is rotated, by means of a key, in a direction to drive the locking members in opposite directions. Upon first rotating the bolt the bar H is moved toward and in contact with its binding-post, while upon continued rotation the locking-bar I is caused to grip its post, the bolt moving endwise through the bearing H′, as indicated in Fig. 5.

By so arranging the locking members that they will be capable of moving independently of each other it is always possible to have the bars properly grip the posts regardless of whether the latter are of the same diameter or of different diameters, and thus the upper cover or the clamping member will be effectively retained in its different positions. The

headed pins *f* serve as guides for the locking-plates, preventing their turning during their outward or inward movement and compelling them to slide in a common plane. Furthermore, it will be observed that in case repairs are necessary the entire locking mechanism may be readily removed from the binder cover or clamp in a simple manner by removing the screws or other securing devices which hold the plate in place.

What we claim as our invention is—

1. In a loose-leaf ledger, the combination with complementary clamping members, of binding-posts carried by one of said members and having sliding connections with the other and means for locking the slidable member to the posts, comprising a metallic plate secured to the inner surface of said slidable member, oppositely-disposed elongated thin flat locking-plates upon the metallic plate terminating at their outer edges in sharpened curved portions arranged to grip the inner sides of the posts, and a rotary member mounted for endwise movement and having swivel and threaded connections respectively with the locking-plates.

2. In a loose-leaf ledger, the combination with a clamping member, of binding-posts thereon, a complementary member slidable on the posts, a metallic plate secured to the inner face of the slidable member, oppositely-disposed slidable locking-bars upon the plate having curved sharpened outer edges engaging the posts, and upwardly-extending ears at their inner ends disposed at right angles thereto, pins on the plate engaging guideways on the bars, and a rotatable member mounted for endwise movement and having swivel and threaded connections respectively with the ears of the locking-bars.

3. In a loose-leaf ledger, the combination with a clamping member, of binding-posts thereon, a complementary member slidable on the posts, a metallic plate secured upon the under face of the slidable member, oppositely-disposed slidable locking-bars upon the plate intermediate the posts, guides for said bars compelling their movement in a common plane, an ear or lug projecting at substantially right angles from the adjoining end of each locking-bar, a stationary bearing on the plate near one end thereof, and a screw-bolt arranged within the bearing for endwise movement and having swivel and threaded connections respectively with the lugs upon the locking-bars, substantially as and for the purpose described.

4. In a loose-leaf ledger the combination with complementary clamping members, of binding-posts carried by one of said members and having sliding connections with the other, and means for locking the slidable member to the post, comprising flat oppositely-disposed slidable locking-plates, having curved sharpened outer edges for engaging the inner edges of the posts, guide members passing through slotted portions of the plates, and a rotary member mounted for endwise movement and having swivel and threaded connections respectively with right-angled extensions of the inner ends of said locking-plates.

5. In a loose-leaf ledger, the combination with complementary clamping members, of binding-posts carried by one of said members, and having sliding connections with the other, and means for locking the slidable member to the post, comprising elongated oppositely-disposed flat slidable locking-plates having means at their outer ends for engaging the posts, and upwardly-extended ears at their inner ends, said ears being at substantially right angles to the plates, and a rotary member mounted for endwise movement and having swivel and threaded connections respectively with said ears on the locking-plates.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES BARKER.
WILLIAM N. WINFIELD.

Witnesses:
W. N. WHITTEMORE,
H. C. SMITH.