No. 682,851. Patented Sept. 17, 1901.

H. S. JONES.

LOOSE LEAF BINDER.

(Application filed Jan. 28, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

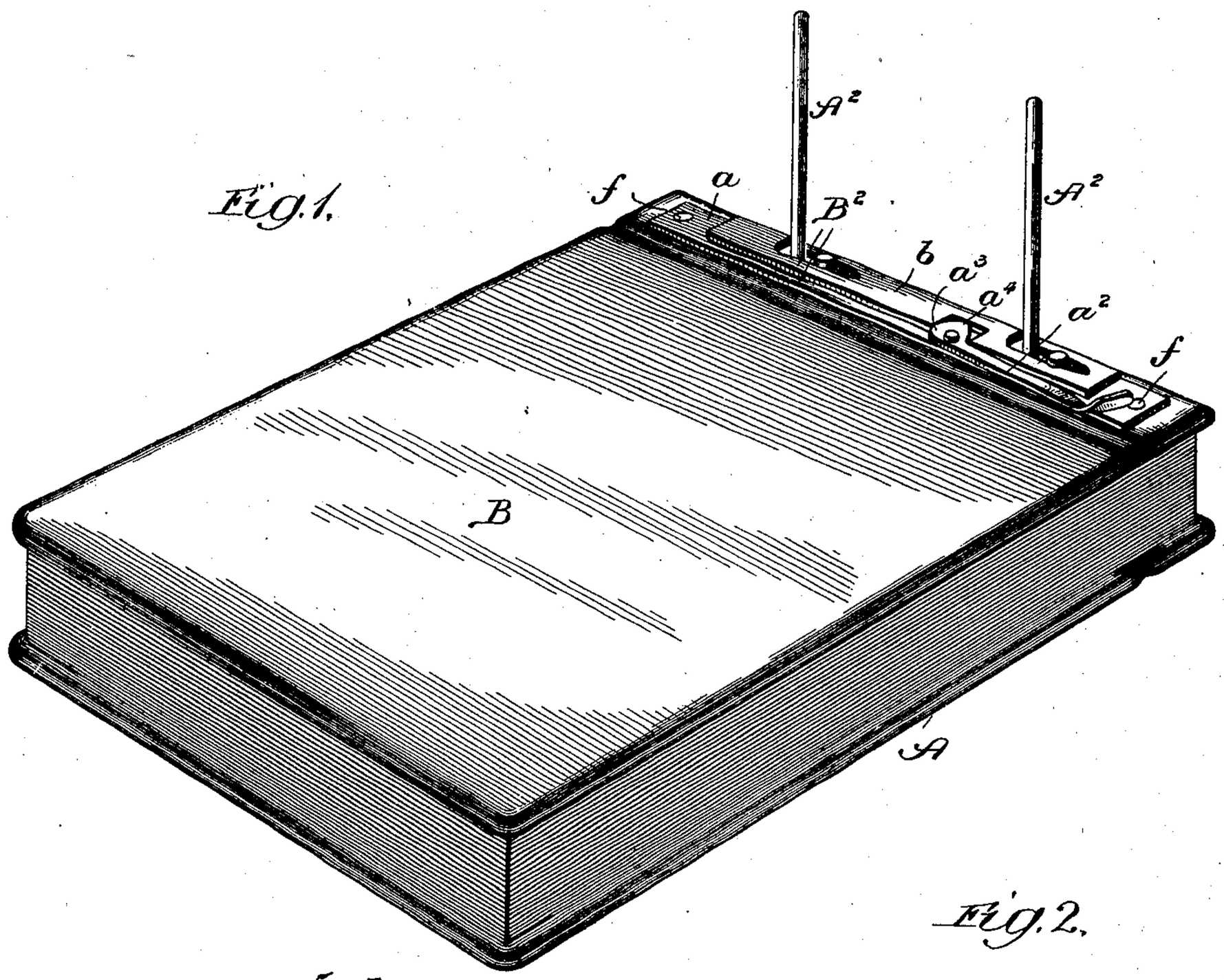

Fig. 2.

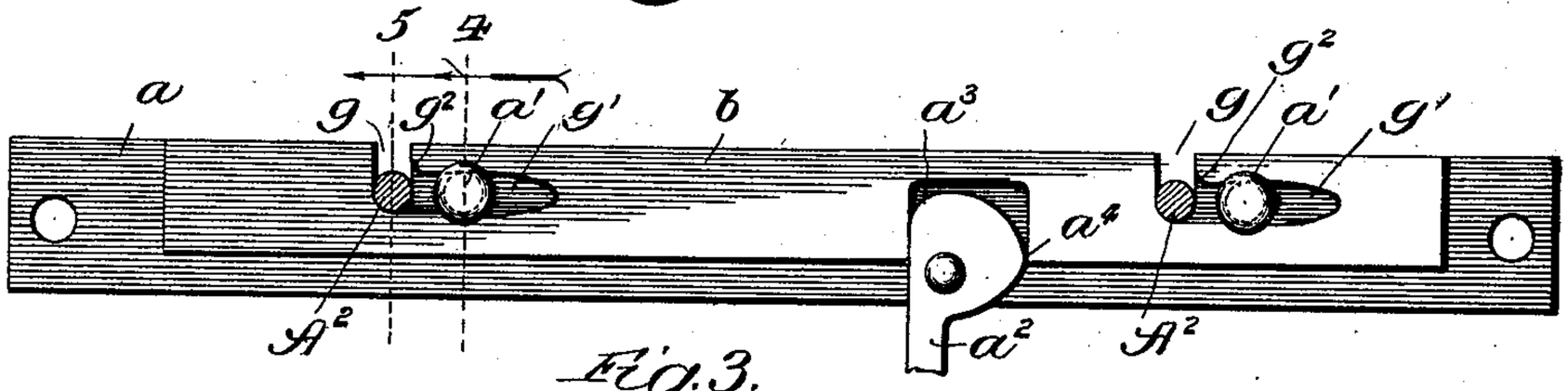

Fig. 3.

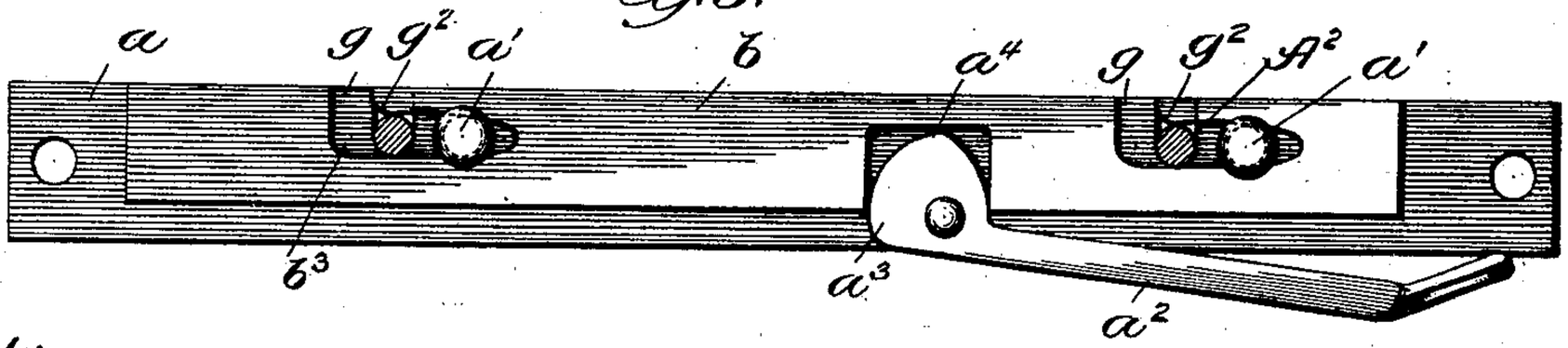

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Fig. 4.

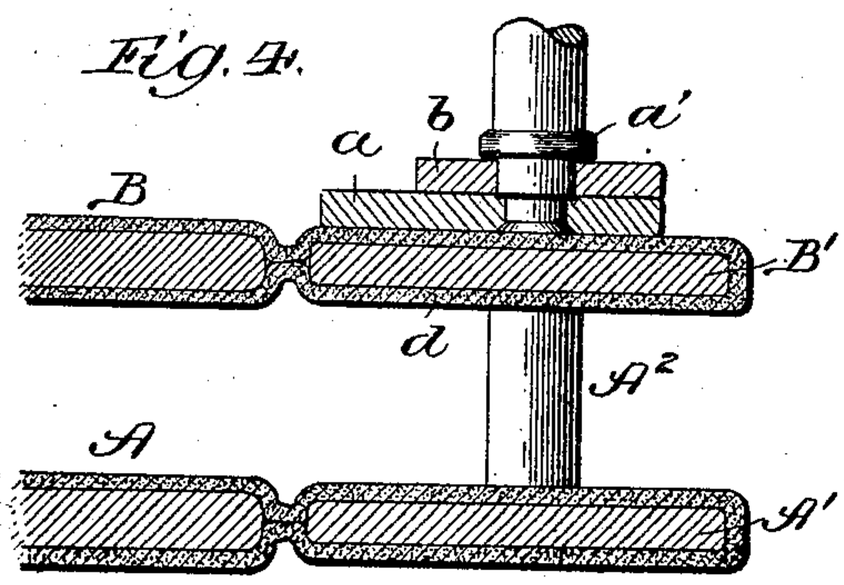

Fig. 5.

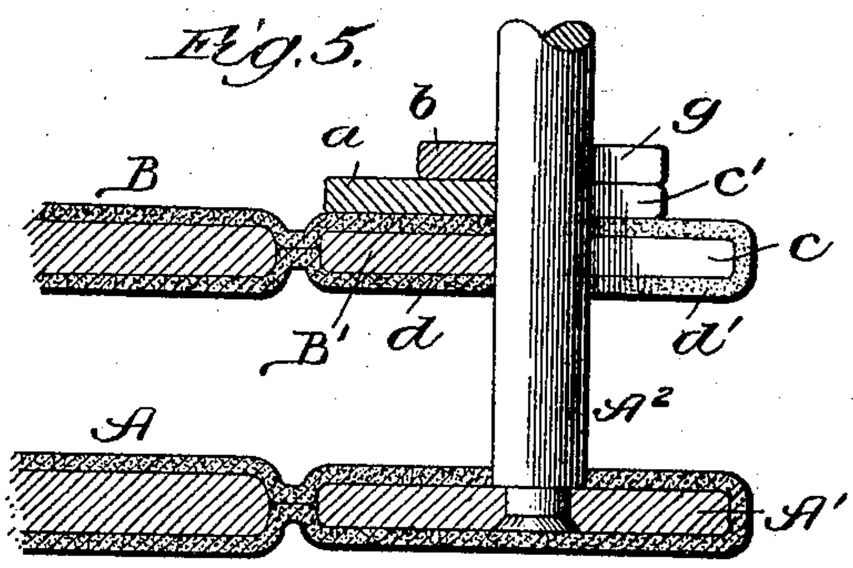

Fig. 6.

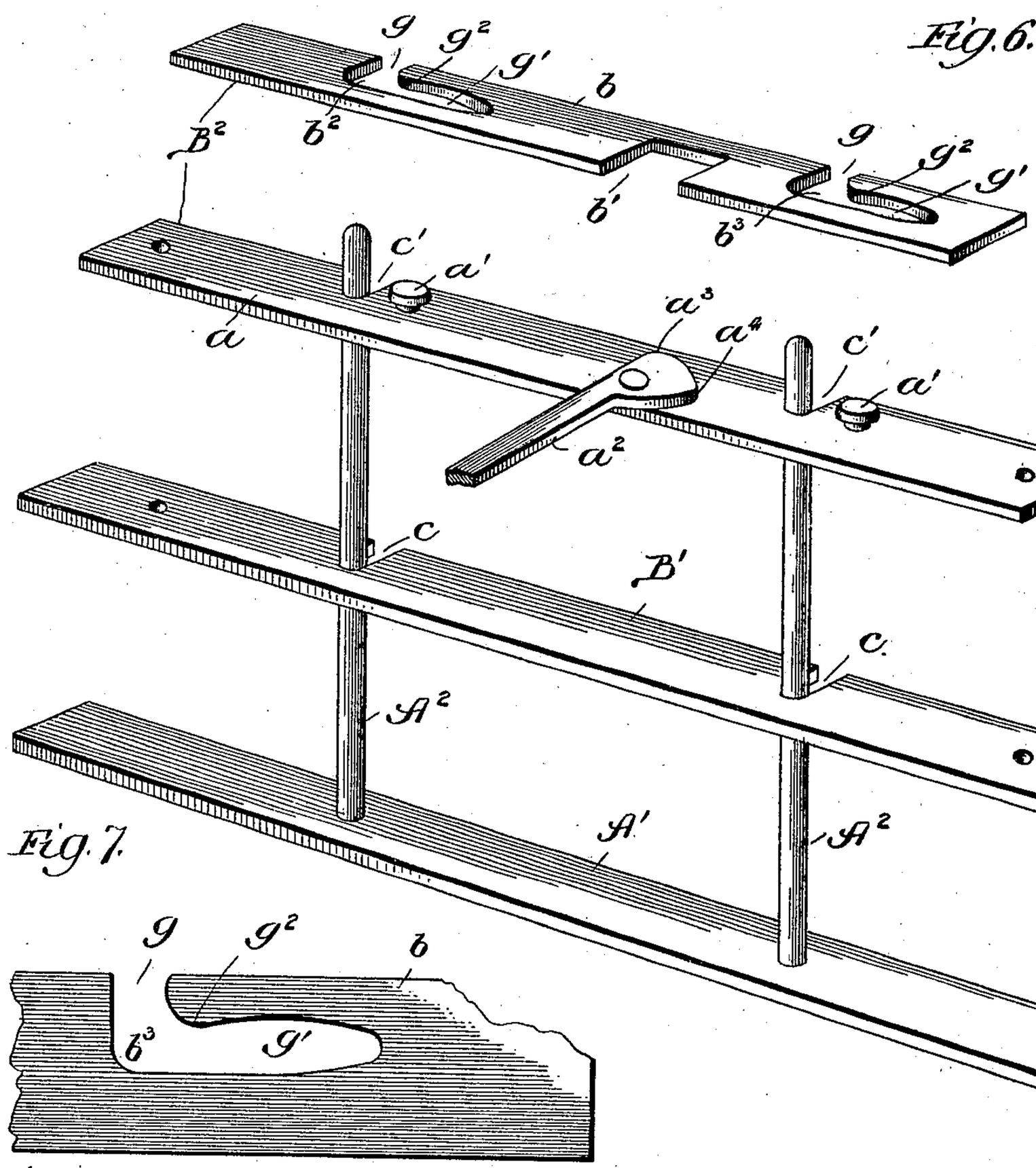

Fig. 7.

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UNITED STATES PATENT OFFICE.

HARRY S. JONES, OF CHICAGO, ILLINOIS, ASSIGNOR TO JONES PERPETUAL LEDGER COMPANY, OF SAME PLACE.

LOOSE-LEAF BINDER.

SPECIFICATION forming part of Letters Patent No. 682,851, dated September 17, 1901.

Application filed January 28, 1901. Serial No. 45,091. (No model.)

To all whom it may concern:

Be it known that I, HARRY S. JONES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Loose-Leaf Binders, of which the following is a specification.

My invention relates particularly to loose-leaf binders wherein are employed posts for receiving the leaves, the leaves being provided with perforations at their rear margins.

My object is to provide a binder of this nature of improved construction, particular attention being paid to the provision of a readily-removable top clamping-bar and cover-section for the binder.

My invention is illustrated in its preferred form in the accompanying drawings, in which—

Figure 1 is a view in perspective showing the binder in use; Fig. 2, a broken horizontal section illustrating the upper clamping-bar, the device for clamping the same to the binding-posts, and the means for actuating said device; Fig. 3, a similar view, but showing the movable slide employed for engaging the binding-posts in its locking position; Figs. 4 and 5, broken vertical sections taken as indicated at the corresponding lines of Fig. 2; Fig. 6, a perspective view illustrating the clamping-bars and the locking device for the upper clamping-bar, the parts being separated from each other; and Fig. 7, an enlarged broken plan view of the movable slide or locking-bar employed.

A represents the lower cover-section; A′, the lower clamping-bar; A^2, binding-posts projecting upwardly from the bar A′; B, the upper cover-section; B′, the upper clamping-bar, and B^2 a locking device connected with the upper clamping-bar.

The device B^2 comprises a bar *a*, provided with headed studs *a′*, an operating-lever a^2, provided with cam-shoulders a^3 and a^4, and a sliding bar *b*, provided with a rectangular cam-receiving recess *b′* and curved post-receiving recesses b^2 b^3. The portions of the recesses b^2 b^3 which extend longitudinally of the slide-bar *b* receive the studs *a′*, and the heads of said studs serve to prevent separation of the slide from its companion bar, as clearly shown in Fig. 4. The upper clamping-bar B′ is provided at its rear edge with post-receiving recesses *c*, and the member *a* of the device B^2 is provided at its rear edge with post-receiving recesses *c′*. In practice the bar B′ is covered with cloth *d*, as shown in Fig. 5, and the cloth is provided with slots *d′*, corresponding with the slots *c*. The member *a* of the device B^2 is secured to the upper clamping-bar at points *f*, as shown in Fig. 1. The slots b^2 b^3 comprise channels *g*, perpendicular to the rear edge of the bar *b*, and offset channels *g′*, extending in the same direction from the channels *g*. This is most clearly illustrated by Fig. 7, from which it appears that the channel *g′* is reduced somewhat in width near its junction with the channel *g*, thereby affording a locking-shoulder g^2, which shoulder springs past the center of the adjacent post when the parts are brought to a locking position.

From the foregoing description and from a view of Figs. 2 and 3 it will be readily understood that when the lever a^2 is in the position shown in Fig. 2 the shoulders g^2 are out of engagement with the binding-posts and the channels *g* are in registration with the slots *c c′*. With this position of the parts the cover-section B may be drawn forward and disengaged from the binding-posts. When the lever A^2 is moved to the position shown in Fig. 3, the slide is thrown to the left, thereby causing the shoulders g^2 to spring past the centers of the binding-posts. It is readily seen that the shoulder a^3 of the lever a^2 serves to engage one lateral wall of the slot *b′* to move the slide in one direction, and the shoulder a^4 serves to engage the other lateral wall of said slot to move the slide in the opposite direction.

It is evident that a great advantage is derived from having the upper clamping-bar provided at its rear edge with slots, permitting the attachment in the manner shown and described, thereby rendering it unnecessary to move the clamping-bar to the top of the posts when it is desired to take a sheet from the file, and it is also evident that it is an advantage of construction to have the member *b* of the locking device formed with the channel *g* and the channel *g′* branching therefrom

in the same direction, whereby the movement of the member *b* in one direction serves to effect a disengagement at both binding-posts, and movement thereof in the other direction serves to effect a locking at both binding-posts.

Changes in details of construction within the spirit of my invention may be made, and therefore no limitation is intended by the foregoing detailed description, except as shall appear from the appended claims.

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

1. In a loose-leaf binder, a lower clamping-bar having upwardly-projecting posts, an upper clamping-bar provided at its rear edge with slots receiving said posts, a slide provided with shoulders for engaging said posts, movement of said slide in one direction serving to effect a locking and movement of said slide in the opposite direction serving to effect an unlocking, and means for actuating said slide, substantially as described.

2. In a loose-leaf binder having upwardly-projecting posts, an upper clamping-bar having at its rear edge slots for receiving said posts, headed studs above said upper clamping-bar rigidly connected therewith, a slide having slots registrable with said first-named slots for receiving said studs and shoulders for engaging said binding-posts, and means for actuating said slide, substantially as described.

3. In a loose-leaf binder, a lower clamping-bar having upwardly-extending binding-posts, an upper clamping-bar having post-receiving slots at its rear edge, and a locking device for the upper clamping-bar comprising a member *a* rigidly connected with the upper clamping-bar and provided at its rear edge with post-receiving slots, a slide having longitudinal movement with relation to said member *a* and provided with slots registrable with said first-named slots and with shoulders for engaging said binding-posts and an actuating-lever connected with the member *a* and serving to move said slide, substantially as described.

4. In a loose-leaf binder, a member *a* provided with post-receiving slots, a member *b* provided with post-receiving slots, post-engaging shoulders and a cam-receiving recess, and a cam-lever a^2 pivoted to the member *a* and provided with cam-shoulders a^3, a^4, substantially as described.

5. In a loose-leaf binder, an upper clamping-bar provided at its rear edge with post-receiving recesses, a slide connected with said bar and provided with recesses *g* having offsets g' affording shoulders g^2, and means for actuating said slide, substantially as described.

HARRY S. JONES.

In presence of—
D. W. LEE,
ALBERT D. BACCI.