

Nov. 18, 1924.

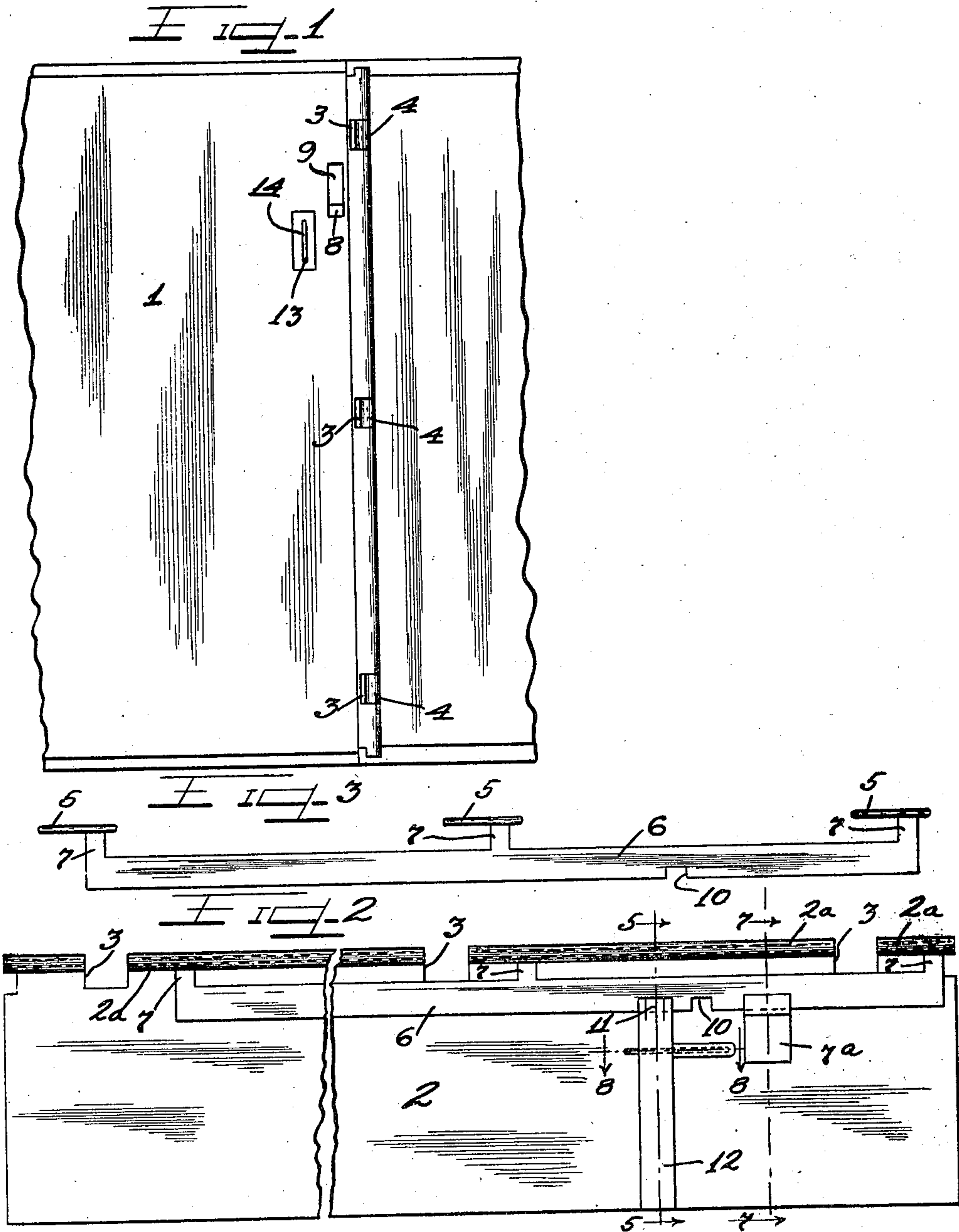
1,516,114

G. W. NEWMAN

LOOSE LEAF RECORD BINDER

Filed Nov. 12, 1921

2 Sheets-Sheet 1



WITNESSES

A. B. Marks
Charles H. Miller

INVENTOR

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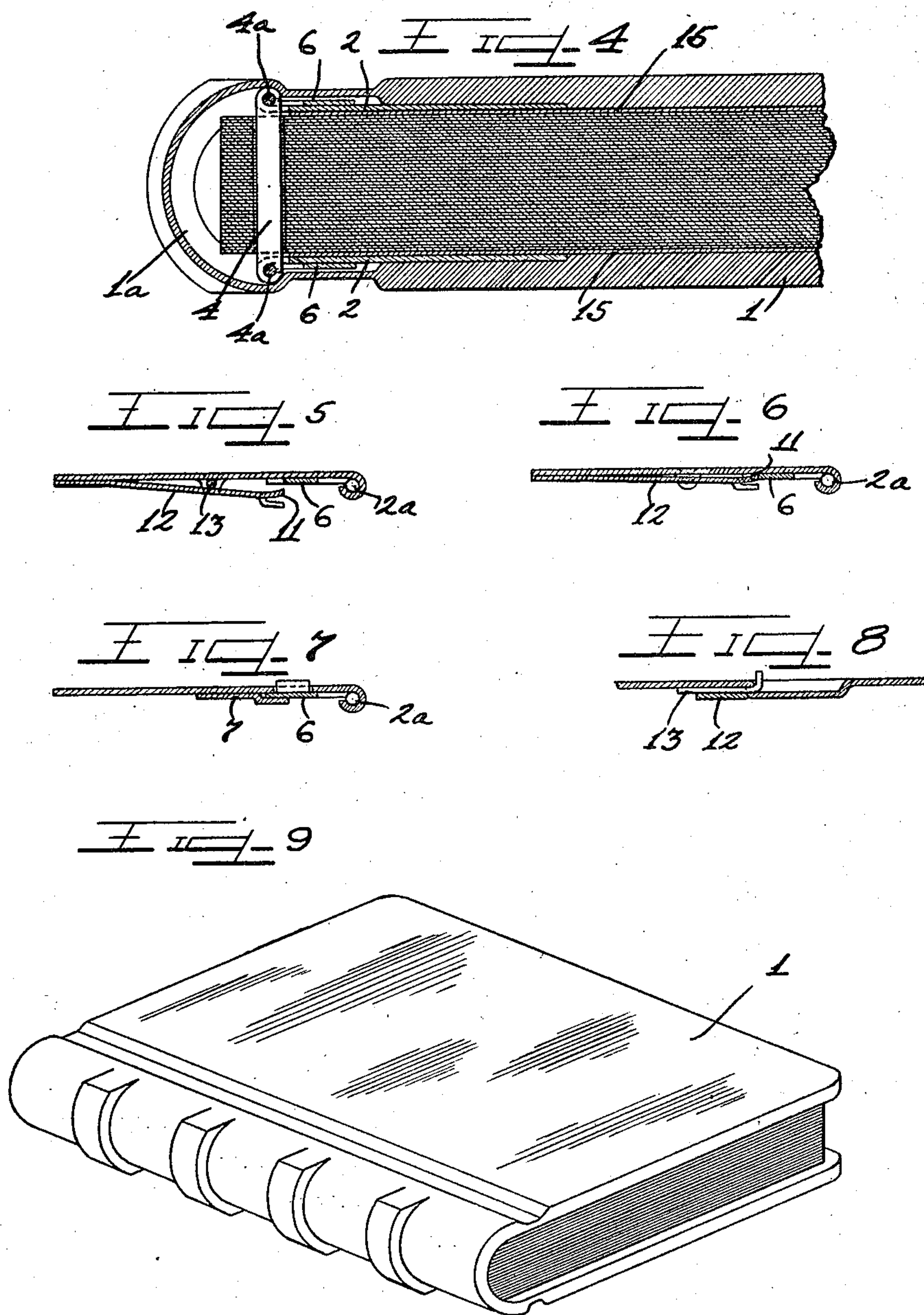
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WITNESSES

A. G. Marks

Charles W. Hill

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Att'y.

UNITED STATES PATENT OFFICE.

GEORGE W. NEWMAN, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WILSON-JONES LOOSE LEAF COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF MASSACHUSETTS.

LOOSE-LEAF-RECORD BINDER.

Application filed November 12, 1921. Serial No. 514,459.

To all whom it may concern:

Be it known that I, GEORGE W. NEWMAN, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Loose-Leaf-Record Binder; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

This invention relates to loose leaf binders preferably of that type in which records are adapted to be kept.

It is an object of this invention to provide a binder in which the record leaves can be readily inserted and removed from either the top or bottom and in which the record leaves can be permanently locked when desired.

It is a further object of this invention to provide a binder in which the cover is removably hinged to the stack of impaled leaves and to which it can be permanently locked or secured.

With these and other objects in view which will become more apparent in the following description and disclosures in the drawings, this invention comprises the novel mechanisms and combinations hereinafter described and more particularly pointed out and defined in the appended claims.

In the accompanying drawings which illustrate a preferred embodiment of my invention and in which similar reference numerals refer to similar features in the different views:

Figure 1 is an enlarged inner fragmentary plan view of a binder involving my invention.

Figure 2 is a rear plan view of a novel hinge member upon an enlarged scale involving my invention.

Figure 3 is a rear plan view of the slidable hinge pintle carrier removed from the hinge member upon an enlarged scale.

Figure 4 is an enlarged section through an assembled binder containing my invention.

Figure 5 is a section on the line 5—5 of Figure 2 upon an enlarged scale.

Figure 6 is a section similar to Figure 5 but with the lock holding element removed.

Figure 7 is a section on the line 7—7 of Figure 2 upon an enlarged scale.

Figure 8 is a section upon the line 8—8 of Figure 2 upon an enlarged scale.

Figure 9 is a perspective view of the completed binder.

In the accompanying drawings which illustrate one embodiment of my invention, the binder is represented as comprising covers 1 and a back 1^a which may be variously constructed to accommodate at suitable locations on the inner sides thereof the novel hinge members 2 which are attached thereto and which are provided with hinge connections adapted to removably engage the means used to impale the loose leaves and which hinge connections are adapted to be permanently locked in operative hinged position by releasable locking members when the binder is full or when it is desired to store the same for the purpose of keeping the records contained therein. While the present embodiment of my invention shows the cover removably hinged to both ends of the impaling means, it should be understood that it is not necessary to removably hinge the cover to both ends of the impaling means in all cases.

In the present instance, the hinge members 2 are constructed of thin metal plates, one of which is illustrated in Figures 1 to 3. As shown, one margin of the plate forming a hinge member is provided with spaced recesses 3 adapted to receive the impaling posts 4 and the spaced marginal edges thereof are rolled up to provide spaced tubular guideways 2^a for receiving the hinge connections which consist of hinge pintles 5 provided upon spaced arms 7 of a carrier or device 6 slidably supported upon the hinge member 2; the coiled or rolled walls of the guideways being sufficiently spaced from the plate member 2 to freely admit the arms 7. These pintles 5 are so spaced upon the carriers that they can be shifted to span the recesses 3 to hingedly engage the impaling posts 4. The pintle carrier 6

is slidably anchored to the hinge member 2 by means of a lug 7^a secured at one end to the hinge member 2 and provided with a raised lip or flange upon the other end for overlapping the device or carrier 6.

At an appropriate location and preferably opposite the lug 7^a the carrier is provided upon its side adjacent the hinge member with a finger operating lug or projection 8 (Figure 1) which projects through a slot 9 in the hinge member whereby the hinge connections may be shifted from the inner sides of the cover. The length of the slot 9 is designed with reference to the necessary length of movement required to shift the hinge connections from operative to inoperative positions with respect to the impaling posts and thuswise limits the movement of the carrier.

The hinge connections are adapted to be permanently locked in their operative position in hinged relation with the impaling posts when it is desired to preserve the binder and records thereof. For this purpose coacting locking means have been provided on the slidable carrier 6 and the hinge member 2 which can be brought into locking relation when the carrier has been shifted to operative hinged position. While the coacting locking means may assume various forms, for the purpose of illustrating my invention, I have shown a simple notch 10 in the shiftable pintle carrier 6 designed to receive a lug or projection 11 on a resilient locking tongue or member 12 secured at its outer end upon the hinge plate 2.

The locking tongue 12 is normally held above or in inoperative relation with respect to the notch 10 by means of a releasing element 13 normally confined beneath the locking member or tongue 12 and which can be withdrawn from the inner side of the cover to allow the member 12 to descend and engage the notch. For this purpose a narrow groove 14 is stamped in the hinge member 2 from the inner side thereof to a point adjacent the locking member 12 where an aperture is provided for receiving the element 13 which may be in the form of a pin having its outer end bent at right angles as shown in Figure 8, whereby the same can be readily grasped by the fingers and withdrawn lengthwise in the groove to release the locking member 12 for downward movement against the carrier 6, the locking projection 11 of which will immediately snap into the notch 10 of the carrier 6 and permanently lock the same in its operative position, when the said carrier has been shifted so that the hinge connections engage the impaling posts 4.

These hinge members are embedded beneath a lining 15 or the like in the inner rear portions of the covers 1 which are provided with recessed portions to receive the

same as shown in Figure 4 and extend preferably from end to end of the covers. The members are so constructed that the lugs 8 and releasing elements have their operating ends directed inwardly, the latter of which may be covered with a proper seal to be broken only when it is desired to withdraw the releasing elements 13 and permanently lock the binder.

The leaf impaling posts to which the cover is removably hinged are preferably of rectangular form with hinge eyelets 4^a at their ends in which the hinge pintles 5 freely fit for effecting a hinge connection between the covers and leaves of the binder. It should be noted with reference to Figure 1 that the eyelets of the impaling posts 4 fit in the recesses 3 of the hinge members 2 providing thereby a strong durable structure that cannot readily be distorted. In order to assemble the posts and cover, it is only necessary to position the impaling posts with their eyelets in the recesses 3 and shift the hinge connections to operative position whereby the pintles 5 will enter the eyelets in the impaling posts.

In the use of a binder involving my invention it is obvious that the leaves may readily be inserted or removed from either the top or bottom thereof by simply disconnecting either the top or bottom cover from the impaling posts by shifting the pintle carrier thereof to inoperative position; and when the capacity of the binder has been reached and it is desired to preserve the same with the records retained therein, the lock releasing elements may be withdrawn, whereby the locking members will spring downwardly so that the lugs 11 will engage the notches 10. As these locking members are located on the rear sides of the hinge members 2 with respect to the inner sides of the cover, it is obvious that they are inaccessible and cannot be released, so that the binder covers are permanently locked to the leaves, which cannot be withdrawn.

It will accordingly be apparent that I have invented a strong, durable binder, in which leaves can be readily inserted or removed from both the top and bottom, and in which the cover can be permanently locked to the leaves.

I am aware that numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted otherwise than necessitated by the prior art.

I claim as my invention:

1. In a loose leaf binder, a cover, a plurality of impaling posts, each connected at one of its ends to said cover, and means for pivotally connecting the other ends of said posts with said cover comprising a plate member secured to the inner side of said

cover and having pintle guideways, with spaced notches for receiving said impaling posts, a hinge member having pintles slidable in said guideway for engaging said posts, said hinge member having a notch, a resilient tongue attached at one end to said plate member, and removable means positioned under said tongue for normally holding the same in elevated position above said hinge member for the purpose described.

2. In a loose leaf binder, a cover, a plurality of impaling posts, and means for pivotally connecting and permanently locking said cover to said posts comprising a slidable hinge member for connecting said posts to said cover and having a notch, a resilient member fixed at one end with its free end normally lying over said slidable member, and removable means positioned under said resilient member for normally holding the same in elevated position, the removal of said means allowing said resilient member to flex downwardly for en-

gaging said notch and permanently locking said hinge member when the same is in operative engagement with said impaling posts.

3. In a loose leaf binder, a plurality of impaling posts, a cover hingedly connected at one side to said posts, a shiftable member for releasably hinging the other side of said cover with said posts, and means for permanently locking said shiftable member in its operative position comprising an element adapted for interlocking engagement with said member, and a releasable element normally in contacting engagement with said interlocking element for holding the same in its unlocking position.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

GEORGE W. NEWMAN.

Witnesses:

FRANK L. SEVERANCE,
HORACE W. SEVERANCE.