

L. M. LESLIE.  
LOOSE LEAF BINDER.  
APPLICATION FILED APR. 4, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

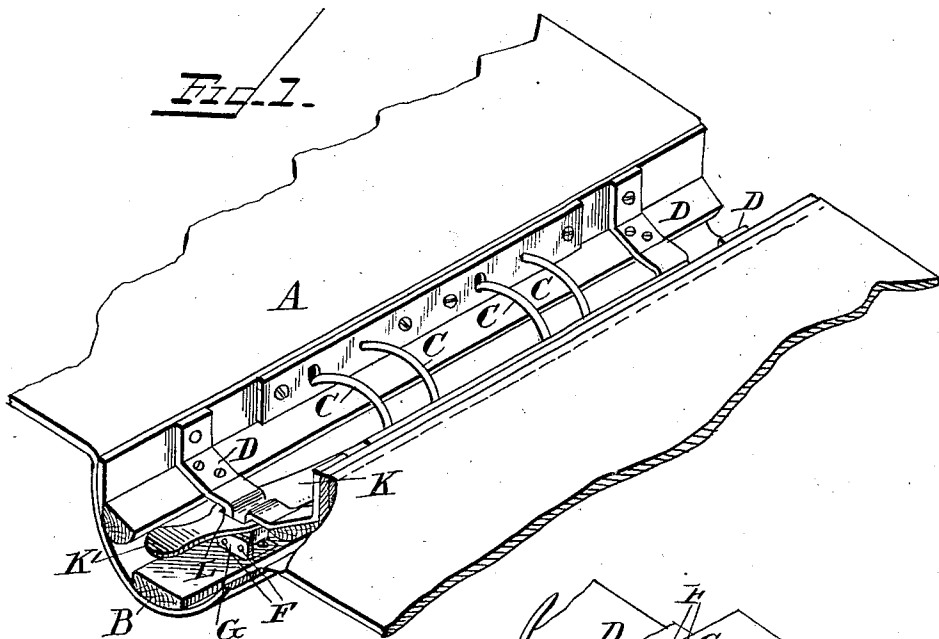


Fig. 1.

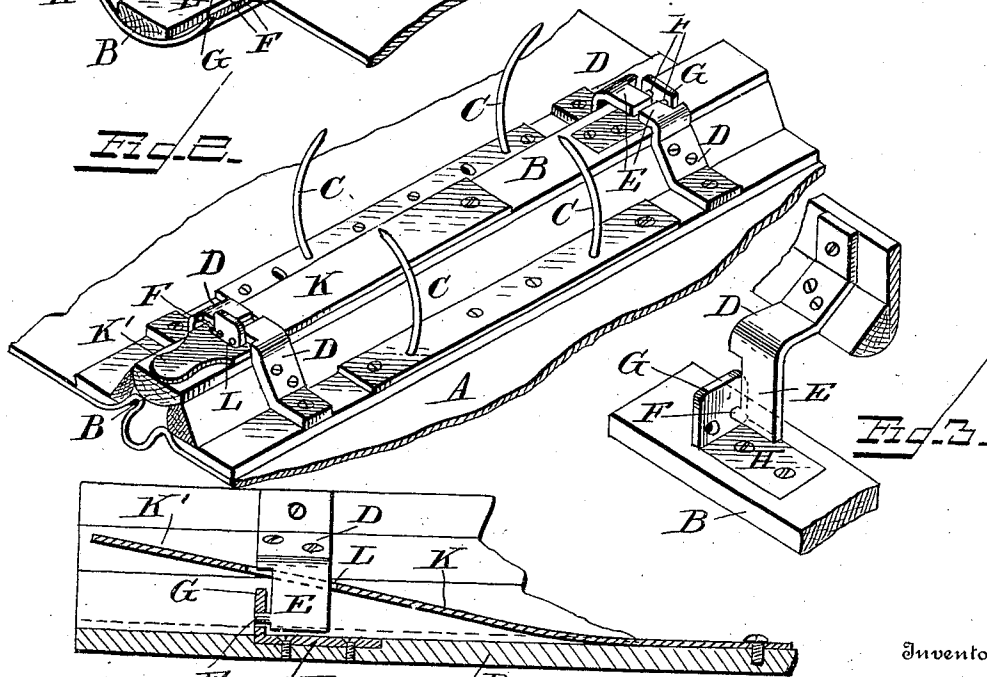


Fig. 2.

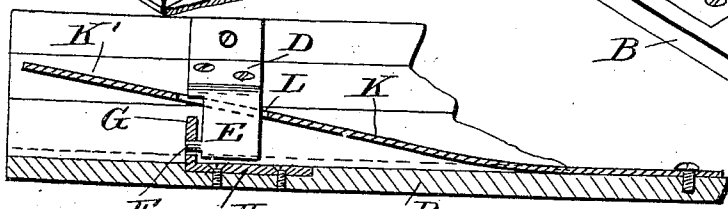


Fig. 3.

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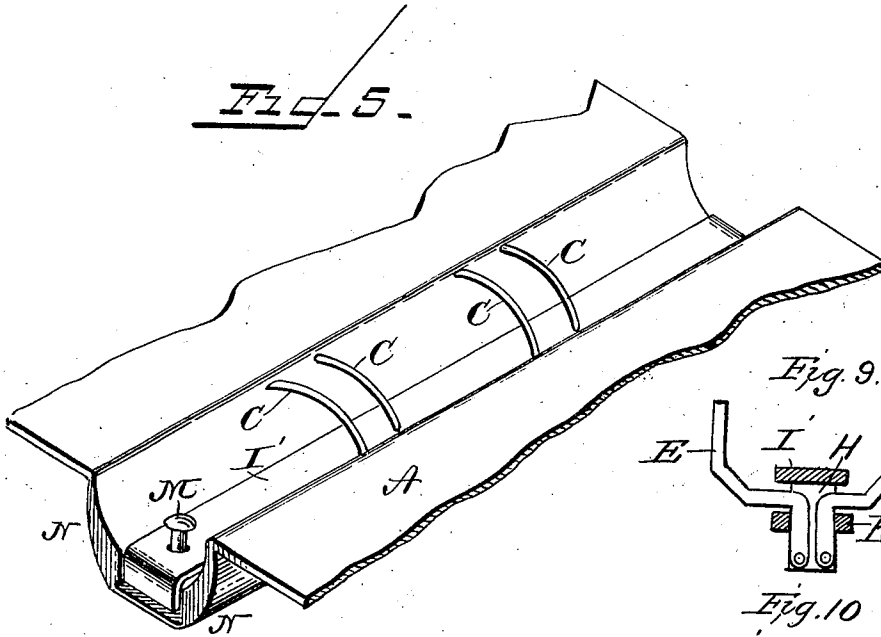
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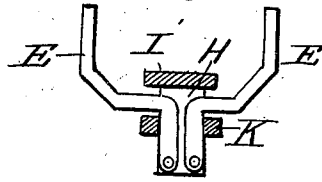
NO MODEL.

2 SHEETS—SHEET 2.

FIG. 5.



*Fig. 9.*



*Fig. 10.*

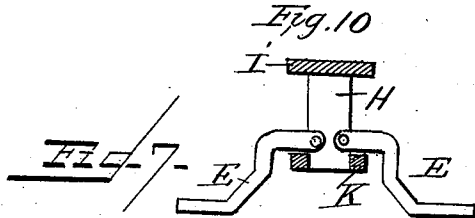


FIG. 7.

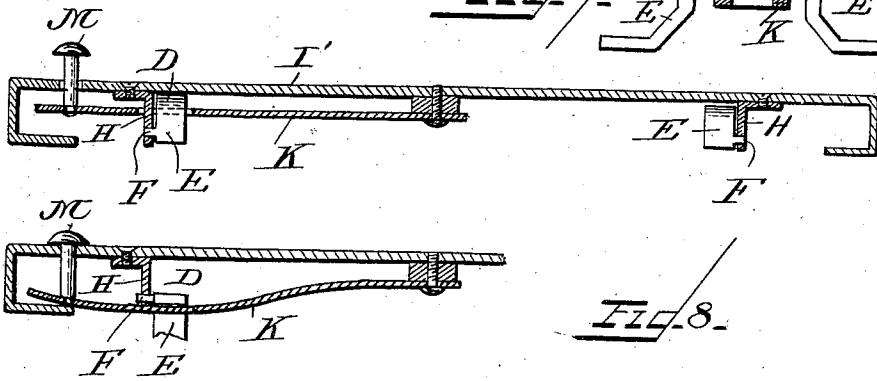


FIG. 8.

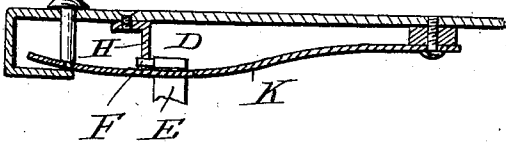
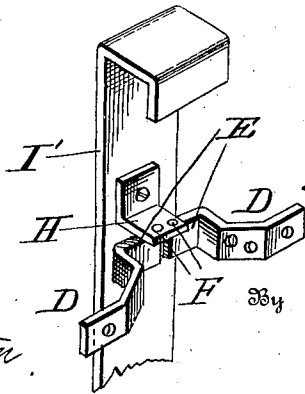


FIG. 6.



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# UNITED STATES PATENT OFFICE.

LEON M. LESLIE, OF LESLIE, NEW JERSEY, ASSIGNOR TO EDWARD H. FALLOWS, OF NEW YORK, N. Y.

## LOOSE-LEAF BINDER.

SPECIFICATION forming part of Letters Patent No. 774,093, dated November 1, 1904.

Application filed April 4, 1904. Serial No. 201,450. (No model.)

*To all whom it may concern:*

Be it known that I, LEON M. LESLIE, a citizen of the United States, and a resident of Leslie, in the county of Bergen and State of New Jersey, have made and invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

My invention relates to an improvement in loose-leaf binders especially for use in connection with flat-opening leaves, although it is understood that said invention may be applied to the binding of ordinary leaves. Such flat-opening loose-leaf binders are now in general use in banks and mercantile houses and are made up in various shapes and sizes for various purposes, such as ledgers, account-books, &c.; and the object of the present invention is to provide a novel construction of binder for loose or removable leaves which shall be simple in construction and which can be readily made separable to allow the removal and insertion of leaves therefrom.

The invention consists in the matters hereinafter described, and referred to in the appended claims, and particularly to the means for allowing the separation of the two covers of the back or binder to permit the removal and insertion of said leaves, said means comprising a novel arrangement for pivoting and holding the two backs or covers together and providing for locking them in closed position, but for their easy separation when desired.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a binder embodying one form of my invention, said figure illustrating the binder as closed. Fig. 2 is a similar view showing the binder open. Fig. 3 is a detailed sectional view illustrating the arrangement for pivoting the covers to the central member. Fig. 4 is a detailed view showing the operation of the spring. Fig. 5 is a view similar to Fig. 1 of the preferred form of my invention. Fig. 6 is a view similar to Fig. 3, but showing the preferred form of the invention. Figs. 7 and 8 are sectional views taken on a plane longitudinal of the

back piece, as shown in Fig. 5, showing the moving parts in their two positions; and Figs. 9 and 10 are cross-sectional views taken at right angles to the planes on which Figs. 7 and 8 are taken, showing the moving parts in their two positions.

In the drawings, and referring first to Figs. 1, 2, 3, and 4, A represents the ordinary backs or covers of a loose-leaf binder or book, and B the central backing-piece, the parts being all covered by the usual canvas or leather in the ordinary way. The insides of the backs or covers are provided with cooperating pins C or other members adapted to engage the leaves, the particular arrangement shown being that used in the well-known "Tengwall" binder, and therefore these parts need not be more particularly referred to. Attached to each inside portion of the back or cover and adjacent either end are the angle-pieces D, formed as shown and having downwardly-projecting ends E, cut away as shown, each having a projecting lug, as F, and separately pivoted to the vertical portion G of the bracket H, secured on the back piece B of the back of the cover. A plate-spring K is secured to the back piece B and at its outer end has a thumb-piece K' for manipulation by the operator. Adjacent the thumb-piece the plate-spring K is cut out to embrace the vertical portion G of the bracket H (which lies adjacent that end) and the ends E of the angle-pieces D. When the spring-plate K is in normal position, the sides L of the cut-out portion bear against the side faces of the ends E of the angle-pieces above the pivot-points thereof, and thus prevent their swinging on their pivots, no matter what strain may be applied, until the spring-plate K is depressed below the pivot-points, when said angle-pieces swing on their pivot-bearings and the backs or covers of the book fall away from each other.

Referring now to Figs. 5, 6, and 7, which illustrate what I consider as the preferable form of my invention, instead of the back piece I of Figs. 1 to 4, inclusive, I use the plate or piece I', which has the brackets H secured to its under face and also has the plate-spring K secured to its under face, this plate-

spring being manipulated to release the binder by the thumb-push M. The action of the spring on the pivoted projecting ends E of the angle-pieces D is the same as in the other form of my invention, these angle-pieces serving by their engagement with the brackets H to hold the plate I' in position.

Various minor modifications and changes in the construction may be made without departing from the spirit of my invention.

It will be seen that in the preferred form of my invention only two back pieces N, attached to the cover of the book, are used, these being united at the central portion by the leather or canvas covering of the book, the covers proper being hinged to said piece N and the angle-piece D being secured to the piece N. This makes a simple and comparatively cheap construction.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a loose-leaf binder, the combination with the opposing backs or covers, the cooperating leaf-engaging members, brackets secured to a back piece intermediate the opposing backs or covers, angle-pieces rigidly attached to the backs or covers, and pivoted to said brackets, and a movable locking device adapted to embrace said angle-pieces above the pivot-points to hold them in position, and to be moved below the plane of the pivot-points to release the angle-pieces; substantially as described.

2. In a loose-leaf binder, the combination with the opposing backs or covers, the cooperating leaf-engaging members, rigid pieces secured to the backs or covers and independently pivoted to a common support, and means for holding said backs or covers in closed position; substantially as described.

3. In a loose-leaf binder, the combination with the opposing backs or covers, the cooperating leaf-engaging members, rigid pieces secured to the backs or covers and independently pivoted to a common support, and a vertically-movable catch engaging the rigid pieces, and having movement above and below the pivots of the same to hold them or release them; substantially as described.

4. In a loose-leaf binder, the combination with the opposing backs or covers, and cooperating leaf-engaging members carried there-

by, rigid members on the backs or covers, rigid supports to which they are independently pivoted, and a vertically-movable lock or catch engaging the rigid members, and having movement above and below the pivot-points of said members; substantially as described.

5. In a loose-leaf binder, the combination with the opposing backs or covers, and cooperating leaf-engaging members carried thereby, rigid members on the backs or covers, rigid supports to which they are independently pivoted, and a vertically-moving lock or catch embracing the rigid members, and having movement above and below the pivot-points of said members; substantially as described.

6. In a loose-leaf binder, the combination with the opposing backs or covers, and cooperating leaf-engaging members carried thereby, a central back piece or plate, brackets thereon, rigid pieces secured to the backs or covers, and independently pivoted to the brackets, and a locking-lever embracing the rigid pieces, and movable above and below the pivot-points; substantially as described.

7. In a loose-leaf binder, the back pieces swinging toward and from each other, and having rigid members secured to each, and oppositely arranged, a central back piece to which the rigid members are independently pivoted, and a spring-controlled plate cut out to embrace the rigid members adjacent their pivot-points; substantially as described.

8. In a loose-leaf binder, the combination with the back pieces, the intermediate back pieces, the angle-pieces secured to the back pieces, and having the downwardly-turned ends with pivot-lugs thereon, the brackets on the intermediate back piece, having independent openings to receive the lugs, the spring-plate secured to the intermediate back piece and cut out to embrace the brackets and pivotal ends of the rigid pieces; substantially as described.

Signed at New York, borough of Manhattan, in the county of New York and State of New York, this 18th day of March, A. D. 1904.

LEON M. LESLIE.

Witnesses:

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