

W. A. OVERBECK.
LOOSE LEAF BINDER.
APPLICATION FILED APR. 6, 1912.

1,059,199.

Patented Apr. 15, 1913.

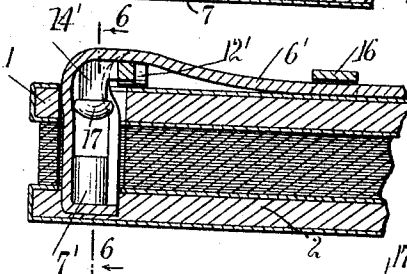
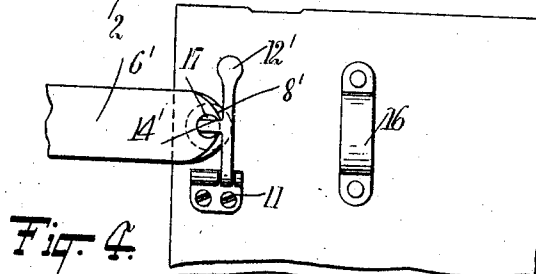
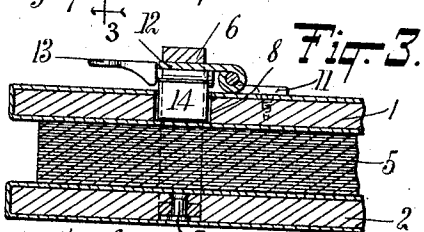
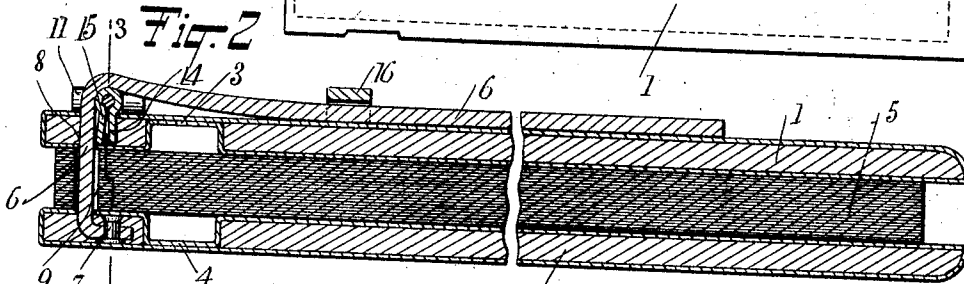
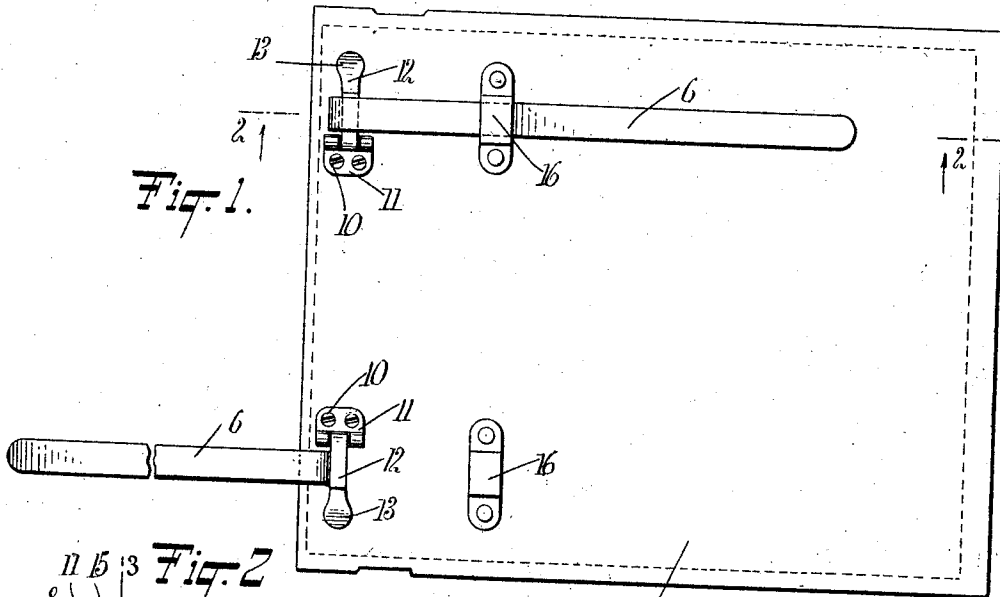
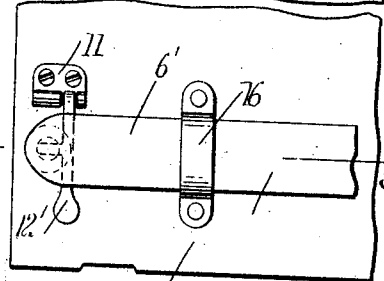
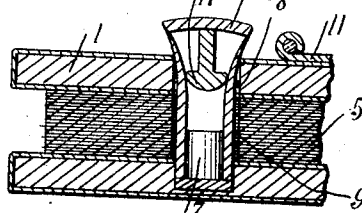


Fig. 5.



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LOOSE-LEAF BINDER.

1,059,199.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed April 6, 1912. Serial No. 688,963.

To all whom it may concern:

Be it known that I, WILLIAM A. OVERBECK, a citizen of the United States, and a resident of Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and Improved Loose-Leaf Binder, of which the following is a full, clear, and exact description.

My invention relates generally to loose leaf binders and more particularly it is directed to a structure marked by the elimination of metal parts and to one which is unlimited in its capacity.

The principal object of my invention is to provide a loose leaf binder which will open in a flat condition, the means for holding the leaves within the binder being improved in that such means is flexible, the construction and arrangement being such that the outfit will permit rough usage without being injured.

Other objects and advantages of the invention will appear as the description thereof proceeds, the new and useful features being particularly pointed out and included within the spirit and scope of the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a plan view of one form of binder; Fig. 2 is a vertical sectional view thereof on the line 2—2 of Fig. 1; Fig. 3 is a partial vertical sectional view on the line 3—3 of Fig. 2; Fig. 4 is a broken plan view of a modified form of locking device; Fig. 5 is a sectional view along the line 5—5 of Fig. 4; while Fig. 6 is a vertical sectional view on the line 6—6 of Fig. 5.

Referring particularly to Figs. 1 to 3 inclusive, the binder comprises any suitable covers 1, 2, each of which involves an intermediate flexible portion 3, 4, whereby the covers may be easily swung from closed to open position, the covers being adapted to retain a number of loose leaves 5 between them, the leaves being secured in position by means about to be described. Adjacent one edge portion of the cover 2, one end of a flexible strap 6 is suitably secured in position in any desired manner, preferably by means of a rivet 7, it being noted from Fig. 1 that the binder comprises a plurality of these flexible straps, preferably positioned

adjacent the top and bottom or opposite edge portions thereof. The corresponding end portion of the other cover 1 is provided with a plurality of openings 8 through which these straps 6 are adapted to be extended, it being noted that the leaves 5 between the covers are each provided with registering openings 9, whereby the straps may pass therethrough, the covers and the leaves being thus held together. In order to maintain the covers 1, 2, in proper position with respect to each other, no matter what the number of leaves between these covers may be, pivoted locking devices are carried on the outside of the cover 1, which locking devices are adapted to coact with the straps 6 and with the inside wall of the openings 8 through which these straps extend. Suitably secured to the cover 1 in any desired manner, preferably by means of screws or rivets 10, are the independent bearings 11, which carry the levers 12, one end of the levers forming convenient finger holds 13, the intermediate portion of the levers being provided with laterally extending or offset portions 14, 15, adapted to enter the openings 8 in the cover 1, after the parts have been positioned as shown in Fig. 2, the covers being fixed with respect to each other and separation of the parts being prevented, the straps being frictionally held in position by reason of the engagement of the lower ends of the offset portions 14, 15, which engage the inner wall of the opening 8 and the side of the strap 6; it will be noted that this frictional engagement with the parts is enhanced by separating the lower ends of these offset portions 14, 15, the upper ends thereof being fixed so that as the levers are moved in order to bring the offset portions into the holes 8, the ends of the parts 14, 15, will be placed under a certain amount of tension, whereby the securing is effected. In order to conveniently dispose of the free ends of the straps 6 when the book is in use, and to assist in holding down the levers 12 in locked position, suitable straps 16, preferably of metal, may be secured to the outside of the cover 1, suitably spaced from the end and adapted to receive the flexible straps 6, as shown in Fig. 1. The particular construction of the levers 12 and the finger holds 13, is not essential, although it may be stated that the main portion of the lever 12, together with the offset portions 14, 15, are preferably in-

tegral, the finger holds 13 having ends so shaped that they may be entered into the main portion 12 of the levers, as shown particularly in Figs. 2 and 3.

5 Referring particularly to Figs. 4, 5, and 6, it will be noted that the construction embodies certain distinctions over what is shown in Figs. 1, 2, and 3. The flexible strap 6 of the device of Fig. 1 is preferably
10 rectangular as shown; hence the openings 9 in the leaves are also preferably rectangular as are the openings 8 in the top cover 1. In the device of Figs. 4, 5, and 6, the strap 6', while rectangular adjacent the free end, is
15 sufficiently flexible to permit longitudinal bending or flexing, whereby the strap may be inserted into round openings 9' in the leaves and the round opening 8' in the top cover. The portions of the straps 6 and 6',
20 between the covers, are, in effect, posts on which the leaves are positioned, the covers being brought together with sufficient pressure between them; these posts are of sufficient rigidity to insure the maintenance of
25 the shape of the book, that is, there is no relative play between the parts when the book is carried about or when moved from open to closed position.

The locking devices shown in Figs. 4, 5,
30 and 6, and which perform the same function as the devices shown in Figs. 1, 2, and 3, are modified in certain respects in order to insure locking of the parts with the flexible strap or the round posts. The cover 1 is
35 provided with the round openings 8', previously mentioned, through which the straps 6' extend, which straps, it may be noted, are secured to the bottom cover 2, in any suitable manner, as by means of a plug 7' positioned therein. The bearings 11 are substantially similar in each construction, the
40 pivoted levers 12', however, being distinctive from the levers 12 in that the levers 12' are provided with lateral extensions 14', which project downwardly and terminate in
45 rounded heads 17. Referring particularly to Figs. 5 and 6, it will be noted that the width of these heads 17, or, rather, the diameter thereof is such that when they are
50 entered into the flexible posts, the sides of the posts will be spread sufficiently to closely engage the upper portions of the side walls of the openings 8' in the cover 1 in order that the parts will be securely held together and prevented from falling apart or
55 becoming loosened when the article is in use.

The inventive idea in either case is substantially the same, the modification pertaining rather to the particular construction of the locking devices, whereby the securing of the flexible posts may be affected. In some cases it may be more advantageous to use the rectangular form of posts and in other cases to use the circular form of post, consideration of size and weight of the binder

as an entirety determining largely the choice of these constructions.

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

1. A loose leaf binder comprising a plurality of covers, flexible elements extending from one of the covers, openings in the other cover through which the said elements extend, movable locking devices adjacent the said openings and adapted for engagement with the said elements in order to hold the covers relatively to the said elements when leaves are positioned between the covers, and means for retaining the free ends of the said elements closely adjacent the cover, whereby the engagement of the elements with the locking devices will retain the latter in locked position.

2. A loose leaf binder comprising a plurality of covers, flexible elements extending from one of the covers adjacent one end thereof, openings in the other cover through which the said elements extend, movable locking devices carried by the second cover adjacent the said openings, the said devices comprising portions adapted to extend into the openings for engagement with the said elements in order to hold the second cover in position, and means for maintaining portions of the said elements closely adjacent the locking devices, whereby movement of the devices is prevented.

3. A loose leaf binder comprising a plurality of covers, flexible elements extending from one of the covers adjacent one end thereof, openings in the other cover through which the said elements extend, the said openings being adjacent one end of the said cover, the covers being adapted to maintain perforated leaves between them, pivoted locking devices adjacent the said openings in the second cover, and adapted for engagement with the said elements in order to hold the covers relatively to each other, the said devices being positioned between the said elements and the other end of the cover, together with means for maintaining the free ends of the elements closely adjacent the cover, whereby the engagement between the elements and the devices prevents the latter from unlocking.

4. A loose leaf binder comprising a plurality of covers, flexible straps extending from one of the covers adjacent one end thereof, openings in the other cover adjacent one end thereof through which the said straps extend, pivoted locking devices carried by the second cover and adjacent the openings therein and having portions adapted for engagement with the said straps in order to prevent movement of the second cover relatively to the straps, portions of the straps extending over the locking devices and closely adjacent the second cover

for holding the locking devices in engagement with the straps, and means for maintaining such portions in such close position.

5 5. A loose leaf binder comprising a plurality of covers, flexible elements extending from one of the covers adjacent one end thereof, openings in the other cover adjacent one end thereof through which the said elements extend, movable locking devices
10 carried by the second cover adjacent the said openings and comprising portions adapted for engagement with the said elements whereby the relation of the second cover relatively to the first one is main-

tained, portions of the said elements beyond 15 the said points of engagement being adapted to be extended across the said locking devices and in engagement therewith and closely adjacent the second cover, together with straps carried by the said second cover for 20 retaining such portions in such engagement.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM A. OVERBECK.

Witnesses:

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EDMUND T. OLSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."