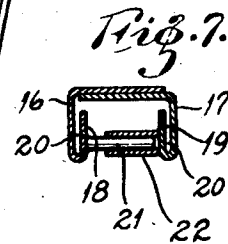
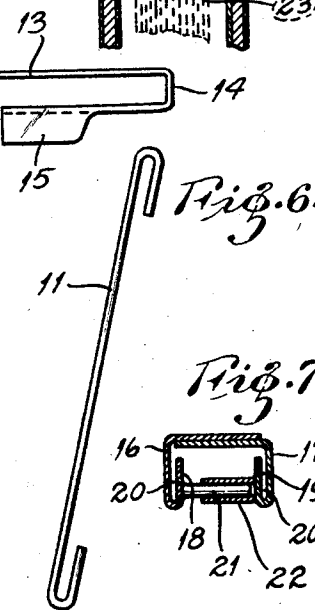
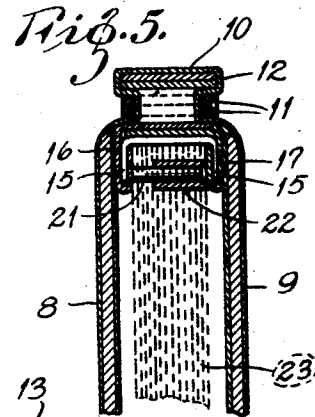
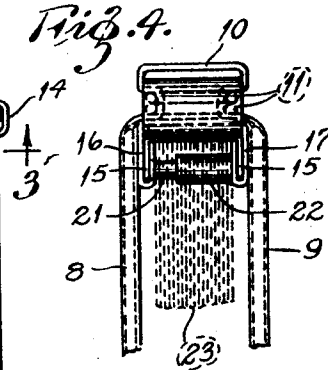
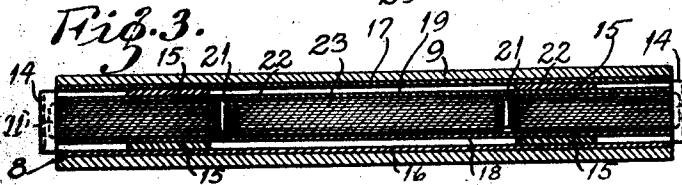
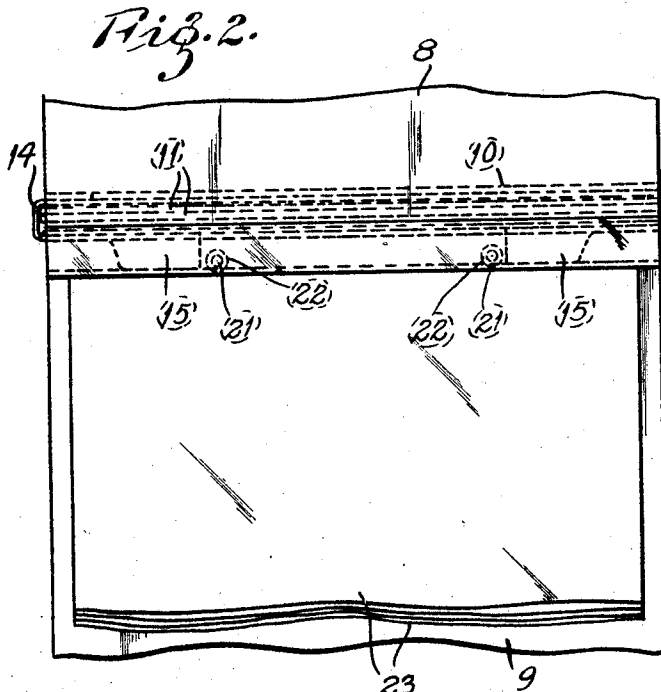
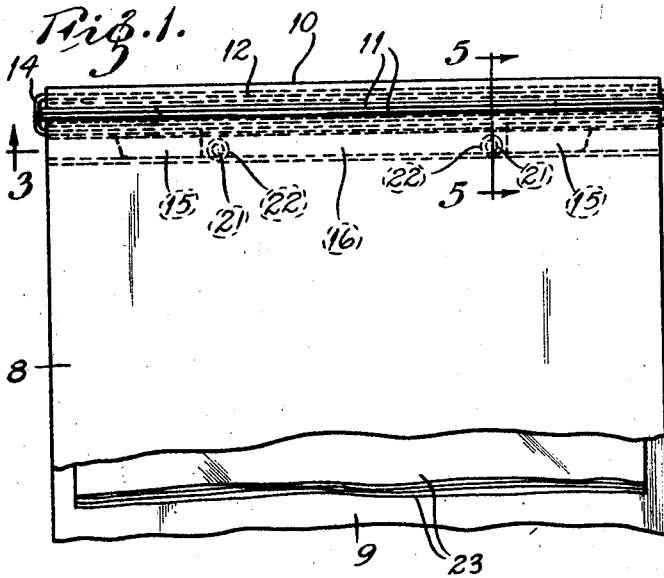


July 16, 1929.

C. P. BUTZ
LOOSE LEAF BINDER
Filed Jan. 7, 1929

1,720,997

2 Sheets-Sheet 1



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UNITED STATES PATENT OFFICE.

CHARLES P. BUTZ, OF ST. LOUIS, MISSOURI.

LOOSE-LEAF BINDER.

Application filed January 7, 1929. Serial No. 330,711.

My invention relates to improvements in loose leaf binders, and has for its primary object a loose leaf binder which is readily adjustable for a varying number of pages.

5 A further object is to construct a loose leaf binder in which the pages are securely held and in which no screws, rings or springs are employed for holding the pages.

10 A still further object is to construct a loose leaf binder in which the pages can be readily removed and new pages inserted without the necessity of employing tools for that purpose.

15 A still further object is to construct a loose leaf binder having a flexible back, which back is formed of one piece and is adjustable for various thicknesses of book.

In the drawings:

20 Fig. 1 is a top plan view of my device with parts broken away.

Fig. 2 is a fragmental view of the book in open position showing the manner of releasing the page holder.

25 Fig. 3 is a section taken on the line 3—3 of Fig. 1.

Fig. 4 is an enlarged fragmental edge view of the binder.

Fig. 5 is an enlarged section taken on the line 5—5 of Fig. 1.

30 Fig. 6 is a perspective view of one of the back clamps employed.

Fig. 7 is an enlarged cross sectional view of the page holder.

35 Fig. 8 is a perspective view of a modified construction of cover showing the holding members partially inserted in the pocket and the page holder members in perspective on said cover and partially assembled.

40 Fig. 9 is a perspective view of the cover with the page holding members assembled and in position thereon and one of the securing members ready to secure the page holding members together; and

45 Fig. 10 is a perspective view of one of the holding members.

In the construction of my device I employ a cover having a front member 8 and a back member 9. These members are preferably made stiff and are connected together by a flexible strip 10 which forms a hinge between the two covers so that the same can be opened without breaking over the cover. Passing partially around the back or hinge 10 are back clamps 11, which are in the form of double-ended books and which when placed in posi-

tion on the back form a pocket 12 for the reception of tongues 13 of the holding members 14. These holding members are substantially U-shaped and are provided on one end with wings 15. Located within the cover 60 are page holders 16 and 17. These page holders are substantially L-shaped in cross-section and have their ends 18 and 19 bent back upon themselves so as to form passageways 20 into which the wings 15 pass. 65

Carried by the turned-in portion 18 is a pin 21, which fits within a sleeve 22 carried by the turned-in portion 19.

It will be noted that the members 16 and 17 overlap so that the pin 21 telescopes into the 70 sleeve 22. The pages 23 are provided with the usual perforations which are of such a size as to readily pass over the sleeve 22.

It will be noted from Figs. 5 and 7 that the passageways 20 are unobstructed. In other 75 words, neither the pin 21 nor sleeve 22 extends into this passageway.

The assembling of the book is as follows:

The back clamps 11 are first placed in position on the back so as to form a pocket of sufficient width to receive the tongues 13 of the holding members. The holding members are pulled out as indicated at the right side of Fig. 2. Then the page holders 16 and 17 are separated and the pages placed over the sleeve 85 22 after which the pin 21 is inserted in the sleeve 22 and the members pushed together until they bear against the inserted pages. The holder is then placed within the covers and the holding members 14 pushed inwardly 90 so that the wings enter the passageways 20 thus preventing the members 16 and 17 from becoming separated.

From the foregoing it will be seen that no tools at all are necessary in order to secure 95 the pages within the covers.

As more pages are added to the binder, that portion of the holding members 14 containing the wings 15 is made wider and in order to compensate for this increase in width, the 100 tongues 13 are made narrower. Then when a wider holding member is used, the back clamps 11 are moved backward on the back or hinge member 10 thus decreasing the size of the pocket 12 thus permitting the back or 105 hinge to adjust itself in width corresponding as the book increases in thickness. In other words as that portion of the holding member having the wings is increased in width, the tongue 13 is decreased so as to permit the back 110

to expand readily and accommodate itself to the increased thickness of the book. By this construction I am enabled to use a one piece back which would otherwise not be possible if the pocket formed in the back for the reception of the tongues 13 were not made adjustable.

It will further be noted from Fig. 7 that the members 16 and 17 overlap on the rear end and thus form practically a U shaped member in which the perforated ends of the pages are located.

In Figs. 8 and 9 I have shown my cover in which a pocket is permanently formed by means of a row of stitching 24 and in this pocket the ends 13 of the holding members 14 are inserted. When the device is constructed in this manner it will be understood that the pocket is not adjustable and consequently the tongues or ends 13 of the members 14 must all be of a uniform width regardless of the width of the end having the wings 15.

While I have shown my device with only two sleeves and pins, I do not desire to limit myself to this particular construction as I may use more pins depending entirely, of course, on the size of the page.

Having fully described my invention, what I claim is:—

30 1. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers and having a pocket formed in said back, a plurality of pages removably located between said covers, and means including a member extending into the ends of said pocket for holding said pages within said covers.

40 2. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers and having, an adjustable pocket formed in said back, a plurality of pages removably located between said covers, and means including a member extending into said pocket for holding said pages within said covers.

50 3. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers, means for forming a longitudinally extending pocket in said back, a plurality of pages removably located between said covers, and means having a portion extending into said pocket for holding said pages within said covers.

55 4. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connect-

ing said covers, means for forming an adjustable pocket in said back, a plurality of pages removably located between said covers, and means including a member adapted to be inserted into said pocket for holding said pages within said covers.

65 5. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers, adjustable means for forming a pocket in said back, a plurality of pages removably located between said covers, and means having a portion thereof extending into said pocket for holding said pages within said covers.

70 6. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers and having a pocket formed in said back, a plurality of pages removably located between said covers, means for removably holding a plurality of perforated pages, means for securing said page holding means in position, said means including a member extending into said pocket for holding the pages within said cover.

80 7. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers and having a pocket formed in said back intermediate said covers, a pair of L-shaped members having passageways therein located within said covers, telescopic means carried by said L-shaped members and adapted to hold a plurality of pages, holding members including parts adapted to enter said passageways for detachably securing said L-shaped members together, and tongues integral with the same, said tongues adapted to enter said pockets for holding the pages in position within said covers.

95 8. A loose leaf binder comprising a pair of covers, a flexible back for hingedly connecting said covers and having a pocket formed in said back, a plurality of pages removably located between said covers, means having a member extending into said pocket for holding said pages within said covers, adjustable means for removably holding a plurality of perforated pages, means including L shaped members which carry said adjustable means, said means having a portion extending into said pocket for holding the pages, L shaped members, and telescopic means within said covers.

In testimony whereof I have affixed my signature.

CHARLES P. BUTZ.