G. SCHUBEL.

LOOSE LEAF BINDER.

APPLICATION FILED DEC. 17, 1919.

1,364,526. Patented Jan. 4, 1921.

Fig. 1.

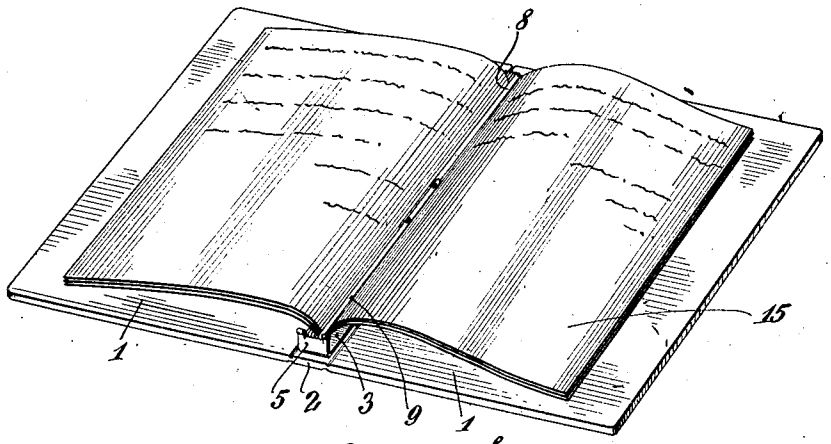


Fig. 2.

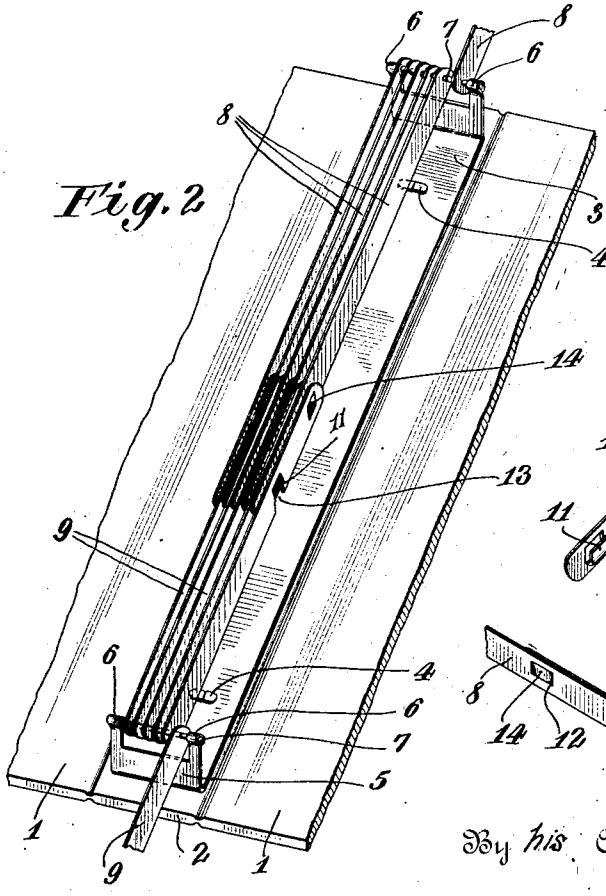


Fig. 6.



Fig. 3.

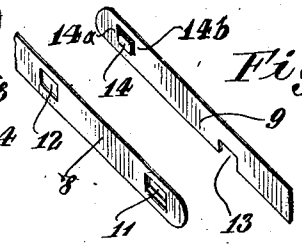


Fig. 4.

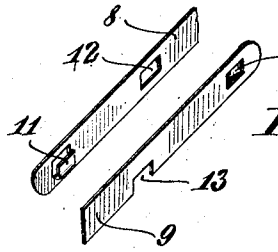


Fig. 5.

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LOOSE-LEAF BINDER.

1,364,526. Specification of Letters Patent. Patented Jan. 4, 1921.

Application filed December 17, 1919. Serial No. 345,629.

To all whom it may concern:

Be it known that I, GEORGE SCHUBEL, citizen of the United States, and resident of Ridgewood, in the county of Queens and city and State of New York, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

This invention relates to loose leaf binding devices, and has for its main object the provision of a novel mechanism by means of which leaves or sections composed of a number of leaves may be quickly inserted and retained between the covers of the book, or as quickly removed therefrom with little labor.

The above and other objects will become apparent in the description below, in which characters of reference refer to like-named parts in the drawing.

Referring briefly to the drawings, which form a part of this application, Figure 1 is a perspective view of my device illustrative of the manner in which it is used to securely retain loose leaves therein.

Fig. 2 is a perspective view, enlarged, of the loose-leaf grasping and retaining means, parts thereof being removed.

Fig. 3 is a perspective view, taken from one side, of a pair of coacting individual members of my device, parts of said members being broken away, and not shown.

Fig. 4 is a similar view of said members taken from the opposite side.

Fig. 5 is a perspective view of said members interlocked as when in use, and Fig. 6 is a view of a member with an alternative ear construction.

Referring now in detail to the drawings, the numeral 1 represents the usual stiff covers of a loose leaf container, the said covers being united by a central member 2. Secured to the inside of said member 2, by means of metal fasteners 4, is a flat frame or supporting member 3. The ends 5 of said member 3 are bent upward at right angles to the main portion thereof, and are provided with extending ears 6 which leave a crutch-like vacancy between said ears on each end 5; the said ears also provide eyes or bearings, as shown, for the reception of the pins 7.

Upon the upper pin (the term upper being used in relation to the showing on the drawings) 7 are mounted a number of members 8, and upon the lower pin 7 are mounted a similar number of members 9. These members are adapted to swing upon the said pins, and the ends of said members which overlap, referring to Fig. 2, are provided with releasable interlocking means as follows. The free end of each member 8 is provided, first, with a pressed out, outwardly and upwardly extending tongue 11. A short distance therefrom toward the pivoted end of each member 8 is a rectangular hole 12. Near the end of each member 9 a band-like portion 14 is pressed out of the body of the member 9, being kept intact with said body at the ends 14^a and 14^b of said band; the object being to provide a rectangular boss standing out from the body of the member 9 as seen at 14. Inward toward the pivoted end each member 9 is provided with a rectangular recess 13, the distance between the latter and the band or boss 14 being equal to that between the hole 12 and the ear 11, the said ear being adapted to engage the member 9 through the recess 13, and the boss 14 being adapted to pass into the hole 12.

Now, in use, a section of the interior of the book, as, for instance, a sheet folded at the middle so as to provide four pages, or any multiple thereof, is put in position as indicated in Fig. 1, and one of the pairs of the members 8 and 9 is then turned into contact with the interior of the fold of said sheet, whence the inner ends of said members are first slightly depressed and the ear 11 is placed in engagement with the recess 13, and immediately thereafter the boss 14 is inserted into the hole 12. Thereby, it is obvious, the fold or section of paper, 15, is securely and removably retained by the interlocking of the pair of members 8 and 9. As illustrated, a number of such pairs may be provided, so that a number of separate sections may at will be inserted or removed. It is this feature that I have availed myself of in conjunction with my directory of information, which comprises a number of sections 15 of different colors, each color indicative of the matter contained in its section, and new sections, containing the latest information, are added monthly, and any of the old may be removed at will. Although I have thus applied my present invention, I do not in any manner desire to limit the same thereto, for the present invention is applicable equally well to any form of loose-leaf container.

In Fig. 6 I have illustrated an alternative construction for the ear 11, indicated by the

numeral 21. The ear 21 is formed from an extending lug on the original piece of material 20, being bent upward as shown. This ear, as the ear 11, is adapted to fit into the recess 13 of the member 9. The recess 13 may, in this latter case, be omitted if desired, since the ear begins at the lower edge of the bar 20.

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

1. A device of the class described comprising a base having means to secure the same to a cover, the ends of said base extending upwardly therefrom, said ends being provided with pivotal means, members pivoted to each of said last-named means, those members on one of said ends adapted to engage and releasably interlock with those members on the other of said ends.

2. A device of the class described comprising a base having means to secure the same to a cover, the ends of said base extending upwardly therefrom, said ends being provided with pivotal means, members pivotally mounted to each of said last-named means, those members on one of said ends being provided with recesses and bosses, and those on the other of said ends being provided with ears and holes, the latter adapted to be engaged by the former so as to releasably interlock with the same.

3. A device of the class described comprising a base having means to secure the same to a cover, the ends of said base extending upwardly therefrom, said ends being provided with pivotal means, members pivotally mounted to each of said last-named means, those members on one of said ends being provided with bosses at their free ends and recesses at a distance therefrom, and those members on the other of said ends of said base being provided with ears at their free ends and holes at a distance therefrom, the opposite members adapted to releasably interlock by engagement of said ears with said recesses, and said bosses with said holes.

4. In combination with a book, directory, or the like, having sections therein adapted to be removed or replaced at will, a retaining means for said sections comprising a base having means to secure the same to the cover of said book or the like, the ends of said base extending upwardly therefrom, said ends being provided with pivotal means, members pivotally mounted to each of said last-named means and adapted to swing about one of said sections and to contact with the fold between leaves thereof, those members on one of said ends adapted to engage and releasably interlock those members on the other of said ends.

Signed at New York in the county of New York and State of New York this fourth day of December, A. D. 1919.

GEORGE SCHUBEL.