

Jan. 14, 1930.

A. G. LOTTER
LOOSE LEAF BINDER

1,743,718

Filed Oct. 26, 1927

Fig. 1.

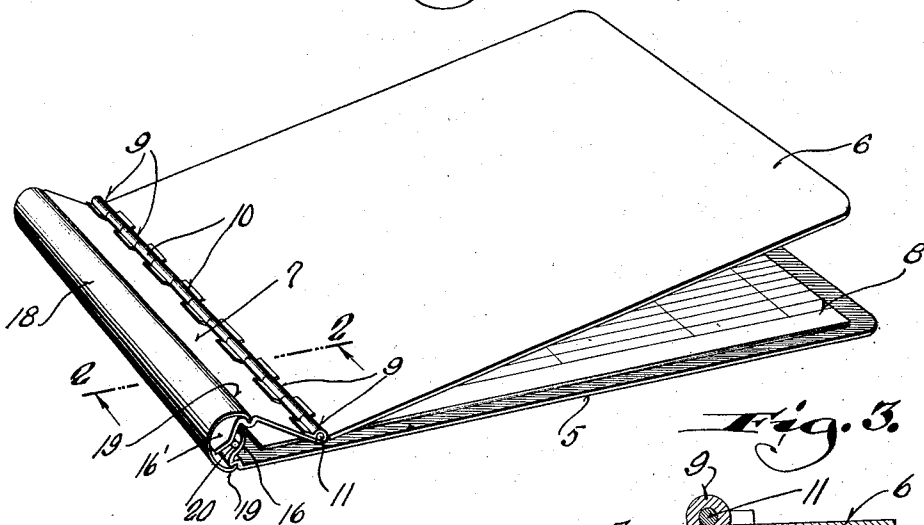


Fig. 2.

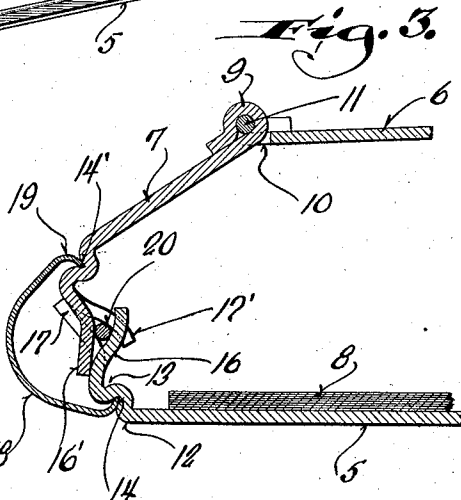
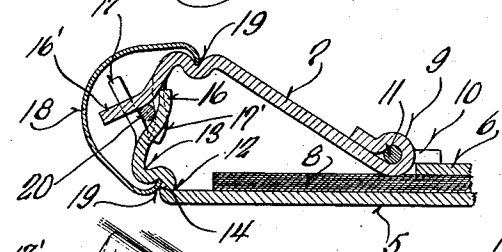
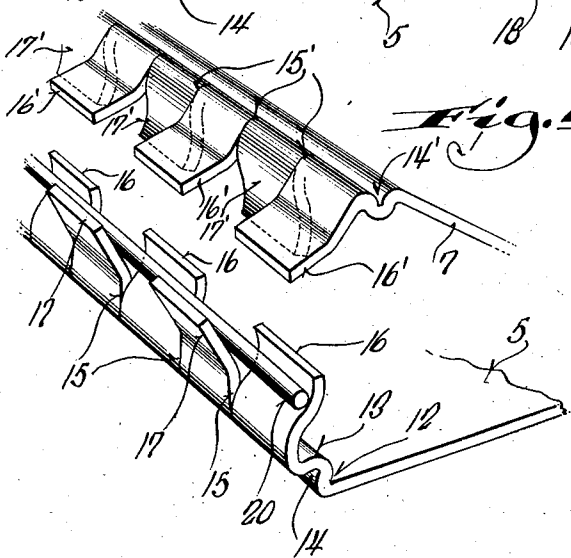


Fig. 4.



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ADOLPH G. LOTTER, OF MILWAUKEE, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS,
TO STATIONERS LOOSE LEAF CO., OF MILWAUKEE, WISCONSIN, A CORPORATION OF
WISCONSIN

LOOSE-LEAF BINDER

Application filed October 26, 1927. Serial No. 228,779.

This invention relates to certain new and useful improvements in loose-leaf binders preferably of the temporary type having a bottom cover member, a clamping member operable to hold leaves between it and the bottom cover member, and a top cover member carried by the clamping member and cooperating with the bottom cover member to protect the leaves.

It is an object of this invention to provide an improved and simplified connection between the bottom cover member and the clamping member whereby all wear is taken by a pintle or rod confined between the meeting edges of the members.

A more specific object of this invention resides in the provision of an improved device of the character described including two members having staggered off-set projections adapted to engage to provide a hinge connection, a spring for preventing separation of the projections and a rod disposed between the off-set staggered projections to form a pivot point therebetween.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a perspective view of one style of binder embodying my invention;

Figure 2 is an enlarged, fragmentary sectional view taken through the clamping head portion of the binder on the plane of the line 2—2 of Figure 1;

Figure 3 is an enlarged, fragmentary perspective view taken on the plane of Figure 3 and illustrating the binder in open position; and

Figure 4 is an enlarged, fragmentary perspective view with the parts separate to illustrate the novel hinge connection between the bottom cover member and the clamping member.

Referring now more particularly to the accompanying drawing, in which like numerals designate like parts throughout the several views, the numeral 5 designates a bottom cover member, 6 a top cover member, and 7 a clamping member to which the inner end of the top cover is secured and which provides means for clamping a body of leaves 8 between it and the bottom cover, in the manner best shown in Figures 1 and 2.

The outer marginal edge of the clamping member is provided with a plurality of spaced hinged butts 9 between which the hinge butts 10 of the top cover are secured by a hinge rod or pin 11. The rearward end of the bottom cover is directed upwardly, as at 12, and curved upon itself, as at 13, to provide a groove or channel 14 for the purpose described, that portion thereof outwardly of the groove 14 being longitudinally slit, as at 15, to form a series of forwardly and rearwardly directed lugs 16 and 17. The outer end portion of the clamping member 7 is correspondingly formed to provide a recess or groove 14' and lugs 16' and 17' disposed opposite the lugs 16 and 17, respectively, of the bottom cover member to dovetail therewith, in the manner illustrated in Figures 2 and 3. The engagement between the lugs provides a hinge connection between the members 5 and 7 which is maintained by an elongated spring 18 of arcuate shape in transverse section having its ends intumed, as at 19, to engage within the grooves 14 and 14'. Spring 18 at all times exerts a tension to maintain the hinge connection between members 5 and 7 and with the clamping member in the position illustrated in Figure 2, a line drawn through the ends of the spring will be inwardly of the pivot point between the members to press the binding member against the leaves 8 and with the clamping member in its position illustrated in Figure 3, a line drawn through the ends 19 will be rearwardly of the pivot

point to maintain the clamping member in its open position.

Friction and excessive wear between the lugs is eliminated and the ready manipulation of the clamping member is facilitated by the insertion of a rod or pintle member 20 between the staggered lugs or tongues and about which the clamping member 17 pivots. As clearly shown in Figures 2 and 3, the entire turning action between the lugs 16 and 17 and 16' and 17', respectively, is on the rod 20 reducing the wearing surface to a minimum and greatly improving the action of the binder.

As best shown in Figure 5, the lugs 16' of the clamping member abut the lugs 16 of the bottom cover and the lugs 17 abut the lugs 17' when the clamping member is full open to limit the opening movement of the binder.

What I claim as my invention is:

1. In a device of the character described, a member having a plurality of oppositely directed spaced lugs, a second member having a plurality of oppositely directed spaced lugs, a pivot rod adapted to be engaged by the lugs of both members, and spring means engageable with the members to maintain the same assembled with their lugs engaging the pivot rod.

2. In a device of the character described, a member having a plurality of alternately inwardly and outwardly directed lugs, a second member having a plurality of alternately inwardly and outwardly directed lugs staggered with respect to those of the first member, and adapted to be interlapped therewith, a pivot rod positioned between the lugs of both members, and spring means maintaining the members in position with their lugs engaging the pivot rod.

3. In a device of the character described, a member having a series of spaced inwardly directed lugs and a series of spaced outwardly directed lugs positioned between said inwardly directed lugs, the two series of lugs defining a trough, a rod positioned in the trough, a second member having a series of inwardly directed lugs and a series of outwardly directed lugs interlapped with the lugs of the first member and likewise engaging the rod whereby the rod forms a pivot for the members, and spring means maintaining the members in assembled position.

4. In a device of the character described, a member having a plurality of alternately inwardly and outwardly directed lugs, a second member having a plurality of alternately inwardly and outwardly directed lugs staggered with respect to those of the first member and adapted to be interlapped therewith, a pivot rod positioned between the lugs of both members, spring means maintaining the members in position with

the lugs engaging the pivot rod and at all times urging the members to either one of two positions, and stop means defining one position, said stop means being formed on the outwardly directed lugs of the members. In testimony whereof I hereunto affix my signature.

ADOLPH G. LOTTER.