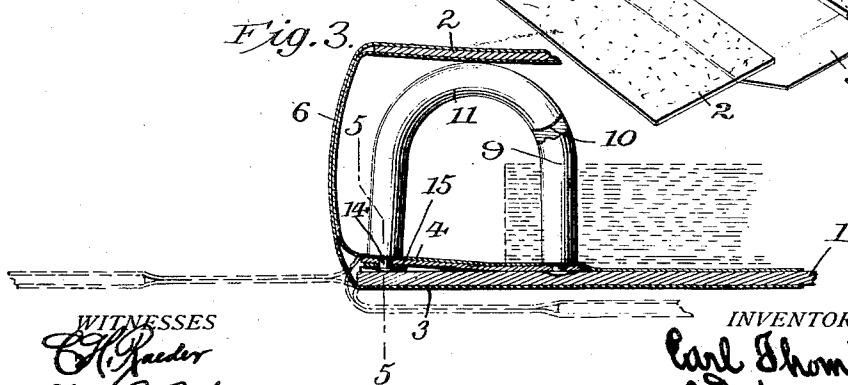
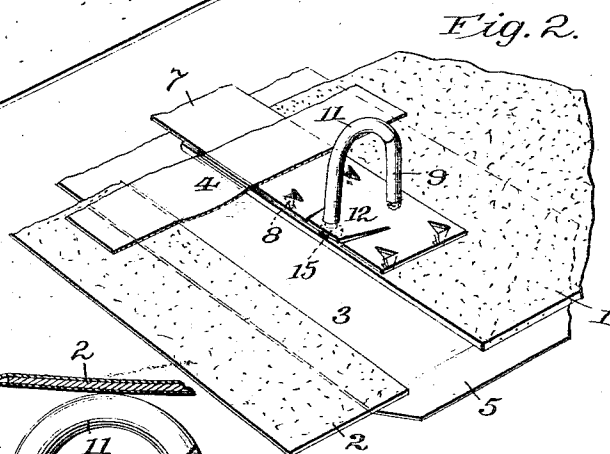
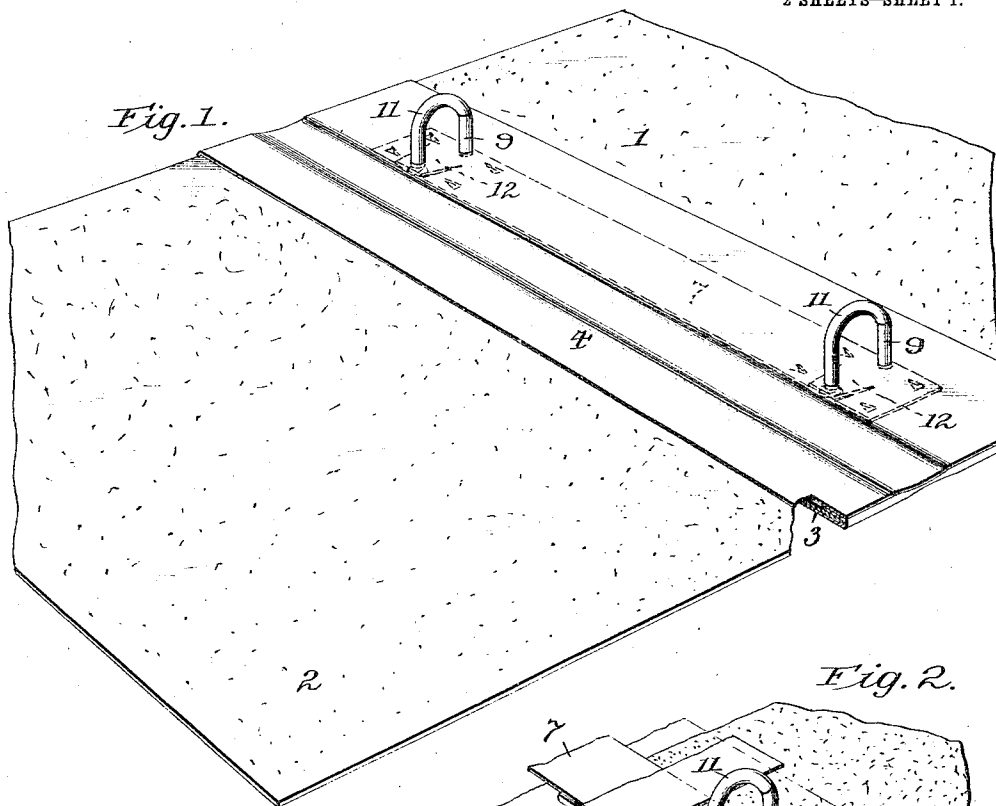


E. THOMPSON.
LOOSE LEAF BINDER.
APPLICATION FILED APR. 11, 1911.

1,051,527.

Patented Jan. 28, 1913.

2 SHEETS—SHEET 1.



WITNESSES
Chas. Haeder
Albert R. Popham

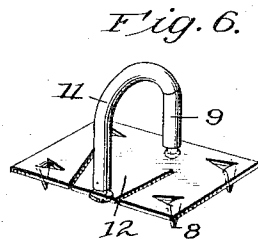
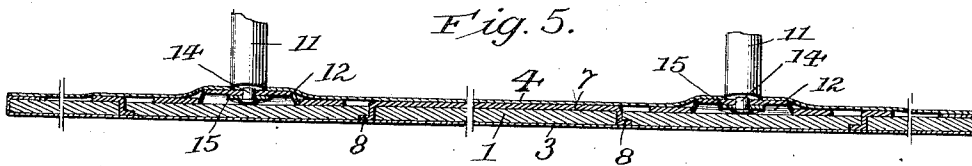
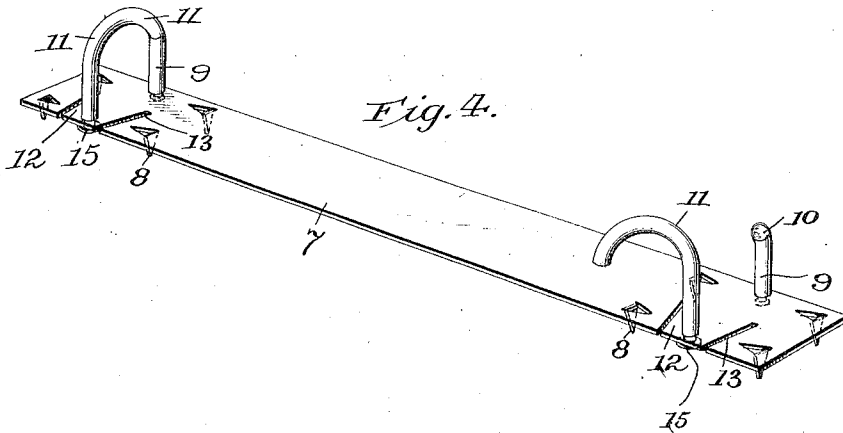
INVENTOR:
Carl Thompson
by Dodge and Sons
Attorneys

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2 SHEETS-SHEET 2.



WITNESSES
E. Rader
 Albert R. Pophins

INVENTOR:
Carl Thompson
 by *Dodge & Sons*
 Attorneys.

UNITED STATES PATENT OFFICE.

EARL THOMPSON, OF SYRACUSE, NEW YORK.

LOOSE-LEAF BINDER.

1,051,527.

Specification of Letters Patent.

Patented Jan. 28, 1913.

Application filed April 11, 1911. Serial No. 620,439.

To all whom it may concern:

Be it known that I, EARL THOMPSON, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

My present invention pertains to an improved loose-leaf binder.

The main object of the invention is to produce a simple and yet efficient binder and one which may be manufactured at such low cost that it may be placed in the hands of the many school-children who are now unable to afford the use of such a book or binder.

The present construction lends itself to a ready assemblage of the various component parts thereof by machinery which, of course, materially reduces the cost of its production.

In the drawings: Figure 1 is a perspective view of the binder, portions of the cover-board being broken away; Fig. 2 an enlarged detail view of a portion of the back; Fig. 3 a vertical sectional view enlarged, the section being taken through the back-board adjacent to one of the loops; Fig. 4 a perspective view of the loop-carrying plate; Fig. 5 a longitudinal sectional view, taken on the line 5—5 of Fig. 3; and Fig. 6 a perspective view of a loop mounted upon a separate plate, as contradistinguished from the construction shown in the other figures, in which the retaining loops are shown as mounted upon a plate common to all of such loops.

Referring to the construction shown in Figs. 1 to 4 inclusive, 1 denotes the base or back-board or under cover, which will preferably be made of relatively stiff and firm material, such as binders' board or the like, and 2 the cover-board, which may be made of the same or a lighter material, as preferred, and will be of the same size as the base-board. The adjacent edges of the boards 1 and 2 will be secured to each other by flexible strips 3 and 4, of linen, leather, or the like, the outer strip 3 being made of a length greater than the length of the boards 1 and 2 so as to provide tabs or ends 5 (see Fig. 2) which, as will be noted upon reference to Fig. 1, may be turned under the inner or upper strip 4, which is of a length approximately the same as that of the cover-

boards. The adjacent edges of the boards 1 and 2 are separated a distance substantially equal to the height of the paper-retaining loops, forming the back section, which may be designated by 6 (Fig. 3), permitting the cover-board 2 to be thrown over above the base-board 1 or inwardly beneath the same, both of such positions being indicated in dotted lines in Fig. 3. A plurality of paper-retaining loops will preferably be employed, and in the preferred construction such loops will be carried by a single metallic plate, as 7. In the present instance two of such loops are shown though, of course, it will be understood that a greater or less number may be employed, as occasion may require. In the ordinary book or binder, suitable for school purposes, two of such loops have been found sufficient, and the book is herein illustrated as provided with this number. The plate 7 will preferably be formed of spring sheet steel, and is provided, adjacent to each loop, with a plurality of prongs or tongues 8, struck out therefrom and bent downwardly. Each of the loops comprises a fixed post 9, the upper end of which is inclined inwardly toward the opposite member of the loop to a slight extent and is provided with a socket or depression 10 in its end. The other member of the loop comprises a hook-shaped post 11, the free or upper end of which is rounded to a slight extent, as shown in Fig. 3, and when brought opposite the post 9 finds its seat in the socket or depression 10. The lower end of the post 11 is reduced and is passed through the outer end of a tongue 12 formed upon the plate by sawing or otherwise cutting kerfs 13 in the plate, the outer end of the tongue preferably being narrower than the inner end thereof. This forms a spring support for the post 11, and when the parts are assembled causes said post to make a tight fit with the fixed post 9, said latter post being rigidly secured to the plate. In order that the swinging post 11 may be readily turned and yet not wear away too rapidly, its lower end is reduced, as at 14, and passed through a washer 15, which underlies the under face of the tongue 12. The reduced end is headed over the washer and a simple and effective swivel joint is thus formed. When the plate 7 is secured to the base board 1 by driving the prongs or tongues there- through and clenching the same, as is clearly shown in Fig. 5, the headed lower end of the

post 11 rests upon the upper face of the board and forces the free end of the spring tongue upwardly, thereby causing the end of the post 11 to make a close and intimate fit with the socket 10. Were it not for the spring tongue, the opening and closing of the loops would in time cause the parts to become so loose that the post 11 would swing around too freely out of its locking contact with the fixed post 9. By the employment of the tongue this is avoided, and it is found in practice that the parts will be closely seated when the loops are brought to their closed position.

As will be seen upon an inspection of Figs. 1 and 3 of the drawings, all of the metallic parts, with the exception of the posts 9 and 11, are covered by the strips 3 and 4, so that the binder presents a neat appearance, and furthermore, the use of the book or binder will not injure furniture by reason of the fact that it has no metal parts exposed.

In Fig. 6 there is shown a loop which is of the same construction as those shown in the previous figures, with the exception that it is mounted upon a short plate. Such plates may, of course, be used instead of the plate 7 heretofore described, but the longer plate is preferable by reason of the fact that the loops are always spaced the proper distance apart and are more readily assembled. Furthermore, such plate tends to stiffen the book and prevents it from being accidentally bent or broken.

It will, of course, be appreciated that the upper end of the post 9 might be rounded and the corresponding end of the post 11 socketed, but as this is a mere reversal of the construction above described, it is not necessary to illustrate the same.

Having thus described my invention, what I claim is:

1. In a loose-leaf binder, the combination of a supporting plate; a spring tongue carried thereby; a fixed post secured to the plate; and a swiveled post carried by the

tongue, said swiveled post being adapted to be swung into locking relation with the fixed post and to form therewith a closed loop.

2. In a loose-leaf binder, the combination of a plate formed of spring metal; a tongue formed as an integral portion of said plate; a fixed post carried by the plate; and a second post swiveled into the outer end of the tongue and adapted to be brought into locking engagement with the fixed post and to form a closed loop therewith.

3. In a loose-leaf binder, the combination of a base or back-board; a metallic plate secured to one face thereof adjacent to the back edge of the board, said plate being substantially coextensive with the length of the board; a plurality of spring tongues formed integrally with said plate; a plurality of loops carried by said plate, each loop comprising a fixed member and a hook-shaped member swiveled into the outer end of the adjacent tongue; a cover-board; and a back connecting said cover-board to the base or back board.

4. In a loose-leaf binder, the combination of a base board; a metallic plate provided with a series of prongs struck up therefrom, said prongs, when the parts are assembled, being passed through the base board and clenched against the under face thereof; a plurality of spring tongues formed integrally with said plate; a plurality of loops carried by said plate, each of said loops comprising a fixed post secured adjacent to the outer edge of the plate, and a hook-shaped post swiveled in the free end of the adjacent tongue; a cover-board; and a flexible back securing said cover-board to the base board.

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

EARL THOMPSON.

Witnesses:

EDWIN COLLINS,
ASA L. MERRICK.