Dec. 24, 1946. H. THOMSEN 2,413,157

BINDER

Original Filed May 29, 1943

Fig. 1

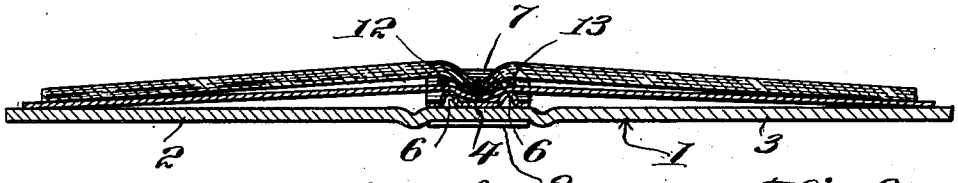


Fig. 2.

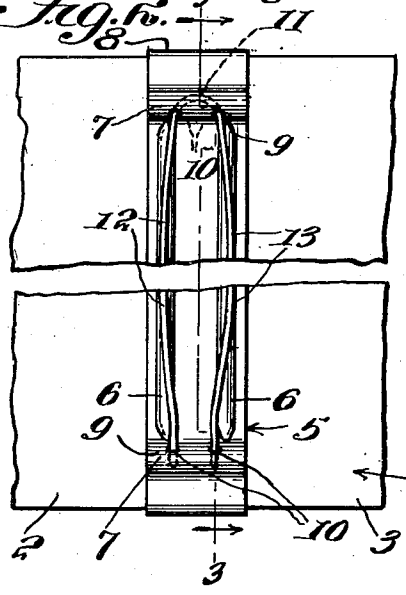


Fig. 3.

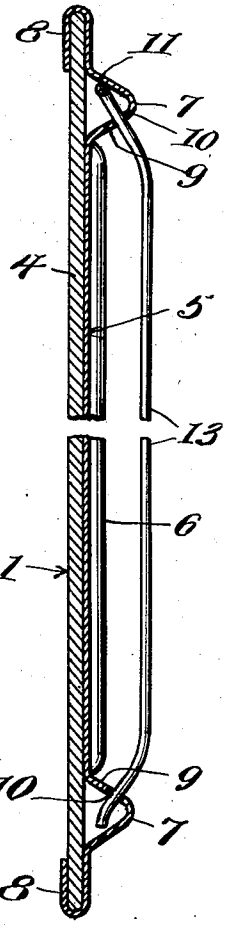


Fig. 4.

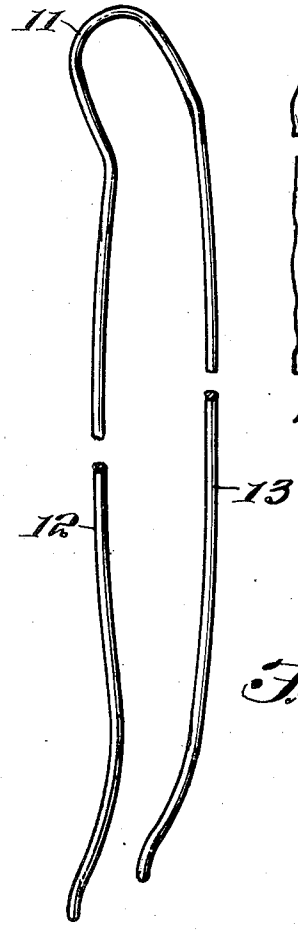
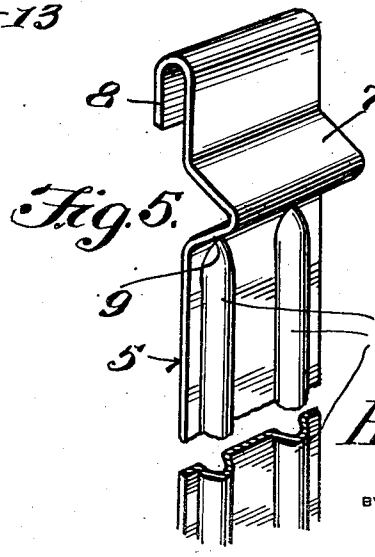


Fig. 5.



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ATTORNEYS

Patented Dec. 24, 1946

2,413,157

UNITED STATES PATENT OFFICE

2,413,157

BINDER

Hugo Thomsen, Washington, D. C.

Original application May 29, 1943, Serial No. 489,011. Divided and this application October 12, 1944, Serial No. 558,351

5 Claims. (Cl. 281—19)

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My present invention, in its broad aspect, has reference to improvements in binders for use with books, pamphlets, papers and the like, and especially to improved means for retaining the contents, such as books, pamphlets, and the like, in a cover element. My present application is a division of my Patent No. 2,365,607 granted December 19, 1944, and in connection herewith, attention is also called to my prior Patent No. 2,174,144 granted September 26, 1939. My present invention has to do with the provision of a unitary wire retainer bent substantially U-shaped and held at the bight in an improved backing strip of the type described in my allowed application, Serial No. 489,011. The U-shaped member is of spring metal and the legs form retaining elements for the book, pamphlet or the like, and have their free ends suitably retained. The U-shaped member is of inherently spring metal so that the free ends may be placed in retained position or released simply by bowing the legs.

Other, and equally important objects and advantages of my invention are: (1) to provide a binder having retaining means so associated with the binder body as to preclude disconnection or removal or loss of parts thereof; (2) to provide retaining means which will securely and firmly engage a book, pamphlet, or the like, and be removable when desired; (3) to provide a retaining means which is sturdy and durable, and (4) to provide a device which is simple in construction and practical and which can be manufactured and sold at relatively small cost. Other and equally important objects and advantages will be apparent from the detailed description and drawing, but changes in form, size, shape, construction and arrangement of parts may be made without departing from the spirit of my invention or the scope of the appended claims.

In the drawing wherein I have illustrated a preferred form of my invention:

Figure 1 is a plan view of my device applied to a cover;

Figure 2 is a view of the retaining means, per se;

Figure 3 is a sectional side elevation of my device;

Figure 4 is a perspective view of the U-shaped retaining member; and

Figure 5 is a perspective view, partly broken away, of the spring metal strip.

In the drawing wherein like characters of reference are used to designate like or similar parts throughout the several views:

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The numeral 1 designates a cover which has cover sections 2 and 3 and a center section 4 connecting the cover elements. An elongated spring metal strip 5 which is longitudinally reinforced by spaced corrugations or ribs 6 is disposed on the interior face of the center portion 4. This strip is folded upon itself adjacent each end as at 7 to form V-shaped protruding plaits or lugs. The ends of the strip are bent over as at 8 to engage over the end edges of the center portion 4 and clamp or engage down thereon to hold the strip on the cover. The inner walls 9 of each V-shaped projection or part 67 are provided with spaced openings 10. The structure above described is disclosed in my allowed application, Serial No. 489,011, and forms no part of my present invention except as it relates to the construction, form and arrangement of my U-shaped retaining member hereinafter described.

My U-shaped retaining member is formed of inherently spring metal wire having a bight 11 and spaced relatively parallel legs 12 and 13. In attaching my retaining device to the upper projection 7, the legs are preferably inserted through the openings 10 before the strip is placed on the cover. The legs are drawn down so that the bight 11 lies in the V-shaped projection against the back of the face 9 of the projection and the legs are of sufficient length to extend down and into the openings 10 of the lower projection. To seat the ends of the legs in the openings 10 or remove them, the legs 12 and 13 are bowed out; when they are released, a book or pamphlet may be inserted in the cover, the legs fitted across the same, preferably between certain leaves, or the like, and then re-engaged in the openings of the projection 7 to hold the cover, pamphlet and retaining means in assembly.

It is believed that the advantages and operation of my invention will be apparent from the foregoing, but it is again emphasized that interpretation thereof should only be conclusive when made in the light of the subjoined claims.

I claim:

1. In a binder, a backing member having a V-shaped projection adjacent each end, each projection formed with a pair of openings in one side thereof, a substantially U-shaped retaining member between the projections and having a bight portion lying intermediate of the sides of one projection with its legs through the openings therein, the free ends of said member being re-

movably retained in the openings of the other projection.

2. In a binder, a backing member having a projection adjacent each end, said projections being substantially V-shape in cross section and each provided with a pair of spaced openings in one wall, a substantially U-shaped retaining member between the projections and having a bight portion lying back of one wall of a projection with the legs extending through the openings therein, and the free ends of the legs engaged in the openings of the other projection and removable therefrom by bowing the legs.

3. The invention as defined in claim 2, wherein the U-shaped retaining member is formed of bent wire of spring metal, and in which the bight is substantially at right angles to the legs.

4. In a binder, a backing member having a V-shaped projection adjacent each end, and two spaced longitudinal ribs between said projections and two spaced retaining members removably secured in said projections and directly above the ribs.

5. In a binder, a backing member having a V-shaped projection adjacent each end and each provided with a pair of alined openings, said backing member having two longitudinal spaced ribs between said projections, a substantially U-shaped retaining member between the projections and one end having a bight portion lying back of one wall between the openings of a projection with the legs extending above the ribs and the ends thereof entering the openings in the other projection and removable therefrom by bowing.

HUGO THOMSEN.