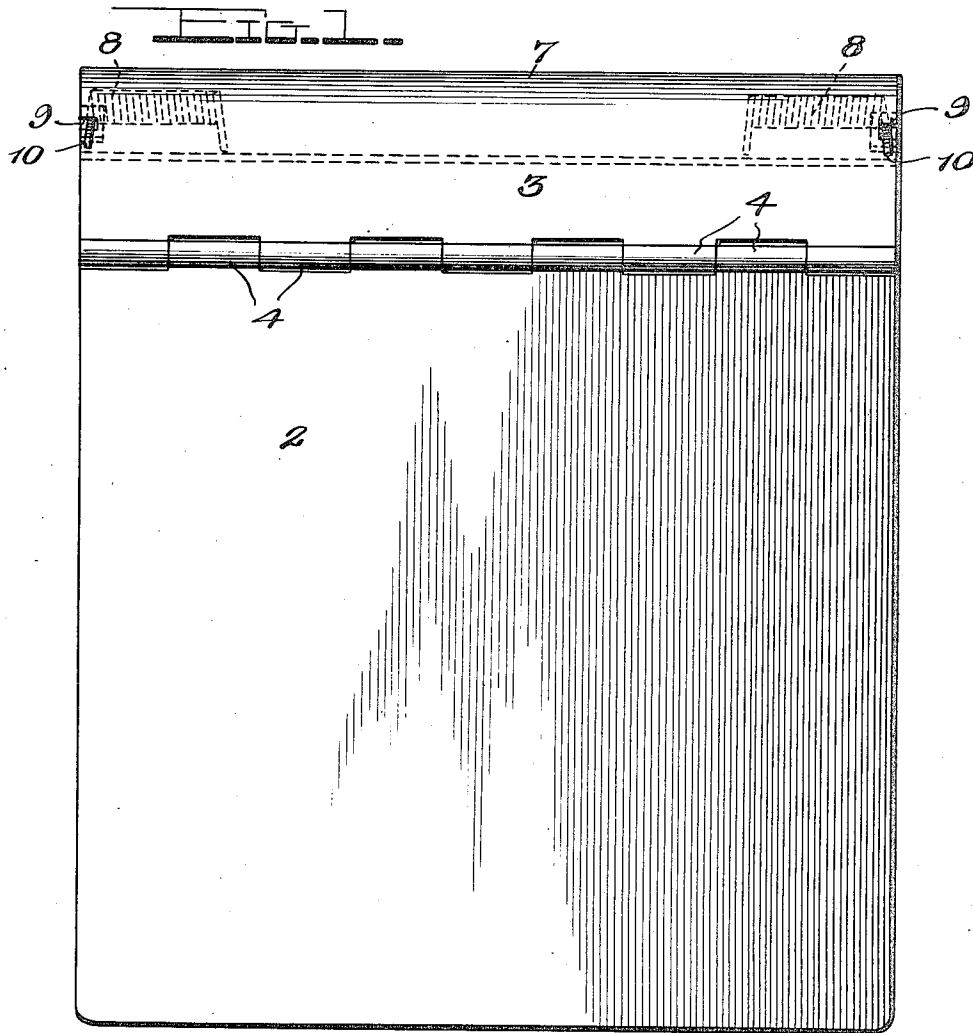
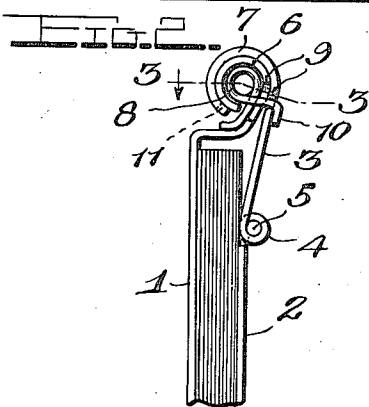
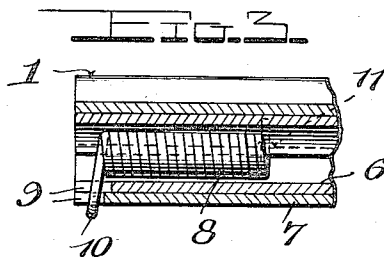


J. SCHADE.
 LOOSE LEAF BINDER.
 APPLICATION FILED JULY 17, 1917.

1,266,997.

Patented May 21, 1918.



Inventor

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UNITED STATES PATENT OFFICE.

JOHN SCHADE, OF HOLYOKE, MASSACHUSETTS, ASSIGNOR TO NATIONAL BLANK BOOK COMPANY, OF HOLYOKE, MASSACHUSETTS, A VOLUNTARY TRUST ASSOCIATION OF COPARTNERSHIP HAVING AS TRUSTEES J. W. TOWNE, F. B. TOWNE, E. S. TOWNE, J. M. TOWNE, AND F. W. WILSON.

LOOSE-LEAF BINDER.

1,266,997.

Specification of Letters Patent.

Patented May 21, 1918.

Application filed July 17, 1917. Serial No. 181,063.

To all whom it may concern:

Be it known that I, JOHN SCHADE, a citizen of the United States, residing at Holyoke, Hampden county, State of Massachusetts, have invented certain new and useful Improvements in Loose-Leaf Binders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in a loose leaf binder and more particularly to a sheet holder especially adapted for use on a desk for holding loose leaves which are inserted therein from time to time.

The primary object of this invention resides in a novel and peculiar hinge construction between the cover and base sections of the binder which will be neat and attractive in appearance and capable of an expeditious assemblage.

A further and important object is found in the mounting of a spring in the hinge, and the particular coöperation between the two.

Other objects will appear as the description progresses and those features on which protection is desired will be succinctly set forth in the appended claims, reference being had to the accompanying drawing wherein,

Figure 1 is a top plan view of a loose leaf binder embodying the present invention;

Fig. 2 is an end elevation of the hinge portion thereof; and

Fig. 3 is a fragmentary section on line 3-3 of Fig. 2.

Referring in detail to the drawing, the binder here depicted comprises a base section 1, a cover section 2, and a clamping section 3, the two latter sections having complementary hinge knuckles 4 that register to receive the hinge pin 5 for constituting a pivotal connection therebetween.

The rear edge of the base section is extended upwardly at right angles and thence outwardly, the same being rolled into scroll form to provide a hinge pin or shaft 6. The rear edge of the clamping section 3 is also rolled into scroll form about the inner hinge section 6 to provide an outer hinge

section 7 which is freely rotatable to a limited extent about said inner hinge section.

Arranged in each end of this scroll hinge is a coil spring 8 which has its inner end passing outwardly beneath the free edge of the scroll section 6 for bearing against the upturned rear edge portion of the base, as depicted in Fig. 2. The opposite or outer end of each spring is passed through registering end notches 9, formed in the end edges of the inner and outer hinge sections, and given a hook bend 10 which seats on the outer face of the clamping section. The free edge of the outer scroll section 7 is preferably formed with spaced recesses 11 in which the inner spring terminals are received on opening the clamp section.

In operation, the cover section is swung backwardly on to the clamping section and by resting one hand on the base section and pressing down on the free edge of the cover section with the other hand the clamping section will be swung away from the base section on the scroll hinge until limited by the inner spring terminals engaging in the notches 11 as well as the outer spring terminals being abutted by opposing walls of the registering notches 9. The loose leaves may then be readily inserted in the gap between the clamping and base sections.

This particular construction of hinge leaves the outer face of the top perfectly plain and attractive in appearance, the inner section being easily removed through a telescopic action. The disposition of the springs in the ends of the scroll hinge renders the construction exceedingly simple, each end bearing on a respective section to afford the proper resiliency and one terminal at least constituting a stop to determine the opening movement of the clamping section.

What is claimed is:

1. In a loose leaf binder, a base section having its rear edge portion turned upwardly and thence outwardly and rolled into scroll form, the free edge of the rolled part being spaced from the remaining portion, a clamping section having one edge portion also rolled into scroll form about the scroll part of the base section for relative rotation and having its free edge spaced from the base section and formed with

- spaced recesses, the end edges of the inner and outer scroll sections having registering notches, and a coiled spring arranged in each end of the scroll hinge thus formed and having its inner terminal bearing against the base section opposite a respective recess and its outer terminal passing outwardly through the registering end notches.
2. In a loose leaf binder, a base section having its rear edge portion turned upwardly and thence outwardly and rolled into scroll form, the free edge of the rolled part being spaced from the remaining portion, a clamping section having one edge portion also rolled into scroll form about the scroll part of the base section for relative rotation and having its free edge spaced from the base section and formed with spaced recesses, the end edges of the inner and outer scroll sections having registering notches, a coiled spring arranged in each end of the scroll hinge thus formed and having its inner terminal bearing against the base section opposite a respective recess and its outer terminal passing outwardly through the registering end notches, and a cover section hinged to the clamping section.
3. In a loose leaf binder, a base section having an edge rolled into scroll form, a clamping section having an edge rolled about the scroll part of the base section, and a spring arranged within the scroll hinge thus formed and bearing on the sections to hold the latter closed.
4. In a loose leaf binder, a base section having an edge rolled into scroll form, a flat clamping section having an edge rolled downwardly about the scroll part of the base section, and a coiled spring arranged within the inner scroll part for closing the sections and having one terminal constituting a positive stop for the opening movement of said sections.
5. In a loose leaf binder, a base section having an edge rolled into scroll form, a clamping section having an edge rolled about the scroll part of the base section, and a coiled spring arranged within the inner scroll part for closing the sections and having one terminal passing outwardly beneath the free edges of the scroll parts for engagement by the outer part to limit the opening movement of the sections.
6. In a loose leaf binder, a base section having an edge rolled into scroll form, a clamping section having an edge rolled about the scroll part of the base section, a coiled spring arranged within the inner scroll part for closing the sections and having one terminal passing outwardly beneath the free edges of the scroll parts for engagement by the outer part to limit the opening movement of the sections, and a cover section hinged to the clamping sections.
7. In a loose leaf binder, a base section having its rear edge portion turned upwardly and thence outwardly and rolled into scroll form, the free edge of the rolled part being spaced from the remaining portion, a clamping section having one edge portion also rolled into scroll form about the scroll part of the base section for relative rotation and having its free edge spaced from the base section, the end edges of the inner and outer scroll sections having registering notches, and a coiled spring arranged in each end of the scroll hinge thus formed and having its inner terminal bearing against the base section and its outer terminal passing outwardly through the registering end notches.

In testimony whereof I affix my signature.

JOHN SCHADE.

Witnesses:

J. M. Towne,
J. C. Marwin.