L. M. MORDEN.

LOOSE LEAF BINDER.

APPLICATION FILED APR. 7, 1911.

1,037,293.

Patented Sept. 3, 1912.

Fig. 1.

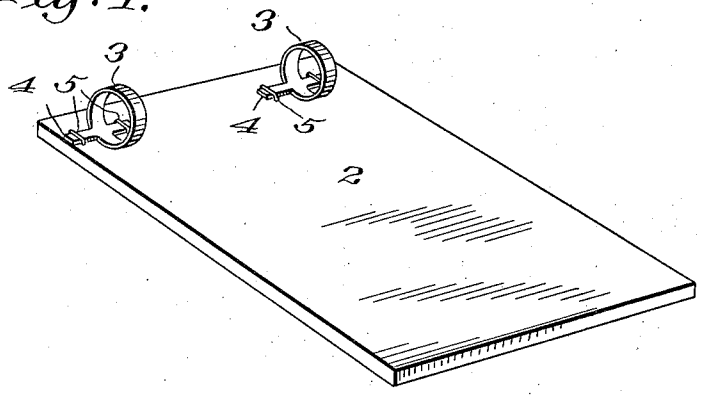


Fig. 2

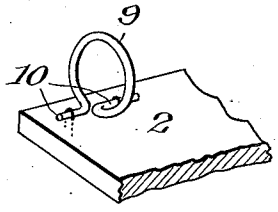


Fig. 3.

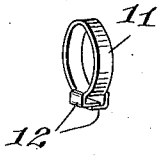


Fig. 4

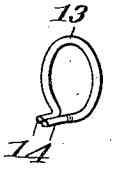


Fig. 5.

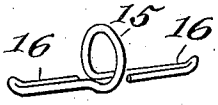
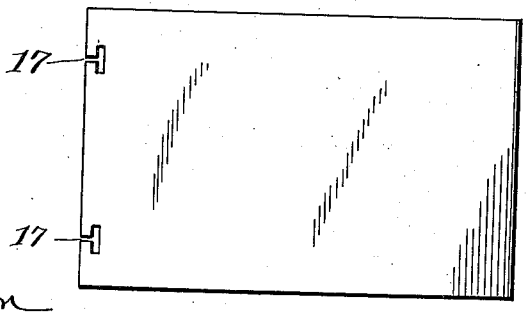


Fig. 6.



WITNESSES

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LOOSE-LEAF BINDER.

1,037,293. Specification of Letters Patent. **Patented Sept. 3, 1912.**

Application filed April 7, 1911. Serial No. 619,459.

To all whom it may concern:

Be it known that I, LUCENA M. MORDEN, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification.

This invention relates to loose leaf binders, the object of the invention being to provide a simple and effective means for holding leaves without the necessity of providing mechanism for opening or closing the rings, the primary object of the invention being to provide rings which may be readily attached to a back or other suitable support by some simple fastening means and which rings are of integral construction for the reception of leaves slotted at their edges.

A further object of the invention is the provision of an improved integral ring for the reception of slotted leaves, which ring will have a projection or projections integral therewith by means of which the rings may be readily attached to the back or support.

In the drawings accompanying and forming part of this specification, Figure 1 illustrates a perspective view of a support having a pair of these rings attached thereto; Figs. 2, 3, 4 and 5 illustrate different forms of integral rings which may be used, and Fig. 6 is a view of a slotted leaf for use with this improved form of ring.

Similar characters of reference indicate corresponding parts throughout the several figures of the drawing.

In the embodiment shown the support 2 has attached thereto usually a plurality of rings 3 of integral construction and provided with projections 4 extending either from one side as in Fig. 4 or from both sides as in the other figures for attachment to the support or back by some suitable fastening means, as by clips or staples 5, or threaded loops as found most desirable in practice.

In the form shown in Fig. 1 each integral ring 5 is provided with a pair of oppositely extending projections 4 extending from opposite edges of the ring, which projections are secured to the support by staples or loops 5. In this form the ring is made of metal ribbon.

In the form shown in Fig. 2 the ring 9 is of wire formation having its ends bent in opposite directions and provided with projections or extensions 10 for fastening the same to the support.

In the form shown in Fig. 3 the ring 11 is made of metal ribbon with the oppositely extending projections 12 bent upon themselves to form a loop for the reception of attaching means, which may be a threaded loop or any other suitable means.

In the form shown in Fig. 4 the integral ring 13 has its ends bent in the same direction to form projections 14 for the attachment of the ring.

In the form shown in Fig. 5 the ring 15 has its ends bent in opposite directions and then each upon itself to form projections 16 having upstanding ends. By forming the rings in this manner and slotting the leaves as by forming a T-shaped slot the necessity of providing mechanism for opening and closing the rings is avoided, since the leaves being slotted, as at 17, with the slots thereof communicating with the edge, the leaf may be inserted on to the rings and securely held. Thus, the necessity of providing mechanism for opening and closing the rings, as heretofore, is avoided, while the rings, being provided with integral projections, can be readily and effectively secured to the back or other means of support.

In the form shown in Fig. 5 the projections 16 form loops which can be readily slipped on to a wire, which latter would thus constitute the means for supporting the ring and the ring could be readily slipped along the wire to any desired position as occasion might require. The projections in the various forms thereof shown prevent the ring from rotating, especially should such ring be provided with a slot for the reception of the ordinary leaves, and thus the slotted portion of the ring would be maintained in its correct position for receiving and removing the leaves. In other words, the projections at the sides of the rings not only constitute a means for attaching the rings to a support when such is used, but prevent the rings from moving or tipping laterally on the support, or even when no support is used, for the projections with the leaves attached would rest upon a desk or other support and so hold the rings upright against tipping sidewise.

I claim as my invention:

1. In combination with a plurality of leaves having slots opening at the margin

thereof, of a plurality of integral rings each separate from the other for the reception of such slotted leaves without the opening of such rings, each of said rings having at its underside a laterally extending projection or projections extending transversely of the plane of the ring and centrally at the underside of such ring to prevent the tipping of said ring and by means of which the ring may be secured to a support.

2. A loose leaf binder comprising a support having a plurality of integral rings secured thereto one independent of the other, each of said rings having at its underside a pair of oppositely extending projections extending transversely of the plane of the ring and centrally at the underside of such ring and forming attaching means for attaching the ring to the support.

3. A loose leaf binder comprising a support and a plurality of integral rings secured thereto, each having a laterally extending bent part bent upon itself to form attaching means for securing the ring to the support.

4. A loose leaf binder comprising a support having a plurality of integral rings secured thereto one independent of the other, each having at its underside a pair of oppositely extending projections extending transversely of the plane of the ring and centrally thereof at its underside and each bent upon itself to form attaching means for securing the ring to the support.

Signed at Waterbury, Connecticut.

LUCENA M. MORDEN.

Witnesses:
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CLAYTON A. TYLER.