

J. C. DAWSON.
 LOOSE LEAF BINDER.
 APPLICATION FILED MAY 17, 1912.

1,053,579.

Patented Feb. 18, 1913.

Fig. 4.

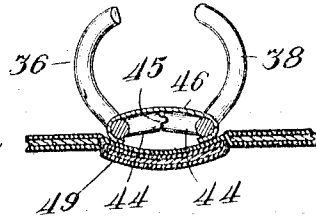


Fig. 1.

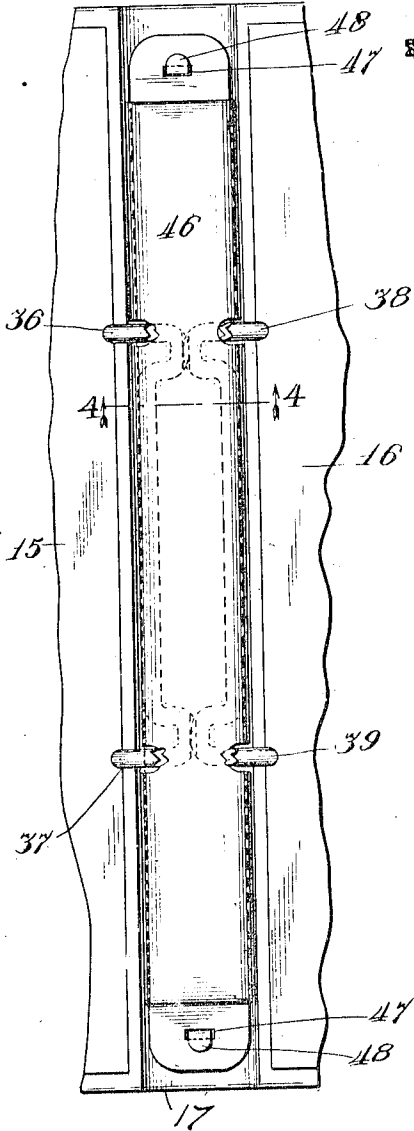


Fig. 2.

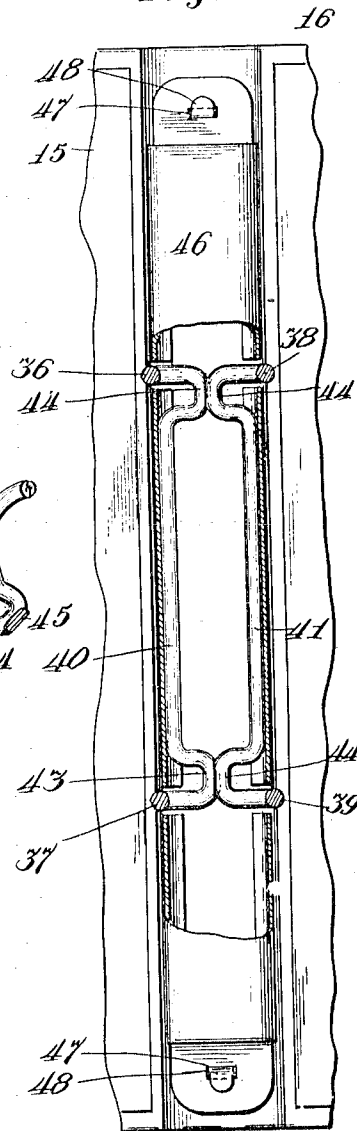


Fig. 3.

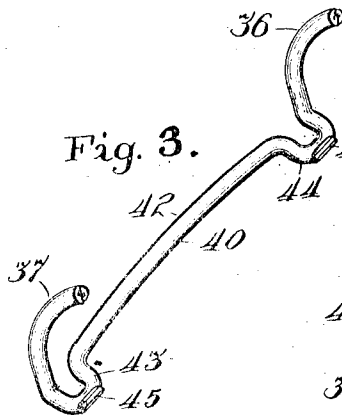
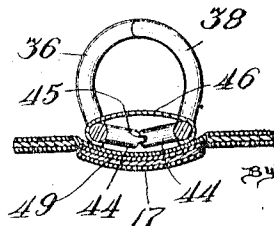


Fig. 5.



Witnesses
 Milton Lenoir
 J. A. Helmick

Inventor
 James C. Dawson,
 Gilson, Gieson
 Attorneys

UNITED STATES PATENT OFFICE.

JAMES C. DAWSON, OF WEBSTER GROVES, MISSOURI.

LOOSE-LEAF BINDER.

1,053,579.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES C. DAWSON, a citizen of the United States, and resident of Webster Groves, county of St. Louis, and State of Missouri, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to that type of loose leaf binders in which mating prongs are spring-closed, the spring action tending to deflect downwardly or beyond a center line the supports of the prongs.

The object of the present invention is to simplify the construction of binders of this type, the spring action being provided in the prong supporting elements themselves. The invention in its broader aspects may be embodied in structures specifically differing.

In the accompanying drawings Figure 1 is a detail plan view of the binder when open; Fig. 2 is a similar view, a portion of the cover plate being removed; Fig. 3 is a view in perspective of one of the spring bars and the prongs carried thereby; Fig. 4 is a detail section on the line 4—4 of Fig. 1, the prongs being open; and Fig. 5 is a similar view, the prongs being closed.

The binder comprises the usual side plates 15, 16, united by a limp hinge or back portion 17. Within the back 17 there is secured a metal plate 49, transversely concave.

The sheet-holding prongs 36, 37, and 38, 39, are integral with the bars 40, 41, respectively, and as shown are formed of wire. One of these elements is shown in detail in Fig. 10, detached from the binder. Its intermediate portion 42, constituting the spring bar proper, is outwardly bowed. At the ends of the bowed portion it is bent inwardly to form heels 43, 44, for engaging similar heels formed on the companion piece, the heels of one of these elements being grooved and those of the other element being brought to an edge to enter the groove, as shown at 45. The ends of the wire are bent backwardly from the heel portion and then curved upwardly to form the prongs. In this construction as illustrated the spring

bars are clamped between the downwardly folded edges of a cover plate 46, such edges serving as stops to prevent the outward movement of the bars, the width of this plate being equal to the combined length of the interengaged heels when the latter are in line, and hence when the heels are in this position the spring bars are straight. The prongs are made of such length that when the heel portions are in line their outer ends are partially separated. The elasticity of the spring bars tends to throw the heels either downwardly or upwardly, thus either closing or opening the prongs with a spring pressure. The ends of the plate 46 are flattened and apertured, as shown at 47, to receive lugs 48 struck up from a back plate 49 bound in to the back 17 of the cover.

The details of construction may be variously modified without departing from the scope of the invention, and I do not, therefore, desire to be limited to the particular forms shown and described.

I claim as my invention—

1. In a loose leaf binder, in combination, a back plate, a pair of rocking resilient bars normally tending to bow outward mounted on the plate, the ends of the bars reacting against each other, stops on the plate preventing the outward movement of the bows of the bars, and mating prongs carried at each end of the bars.

2. In a loose leaf binder, in combination, a back plate, a pair of rocking resilient bars normally tending to bow outward mounted on the plate, the ends of the bars reacting against each other, stops on the plate preventing the outward movement of the bows of the bars, mating prongs carried at each end of the bars, and means for holding the ends of the bars in engagement.

3. In a loose leaf binder, in combination, a back plate, a pair of openable mating prongs, and an oscillatable spring rod supporting each of the prongs, each of said rods extending laterally from the prong with which it is associated and having an anchorage remote therefrom.

JAMES C. DAWSON.

Witnesses:

WM. VERMEERSCH,
H. C. RHODES.