Feb. 18, 1936. E. F. LEXOW 2,031,373

LOOSE LEAF BINDER

Filed Jan. 30, 1935

Fig.-1

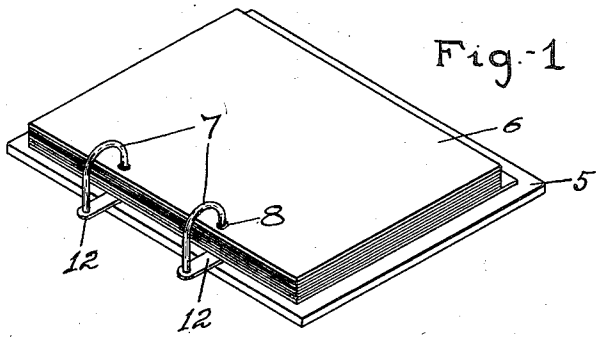
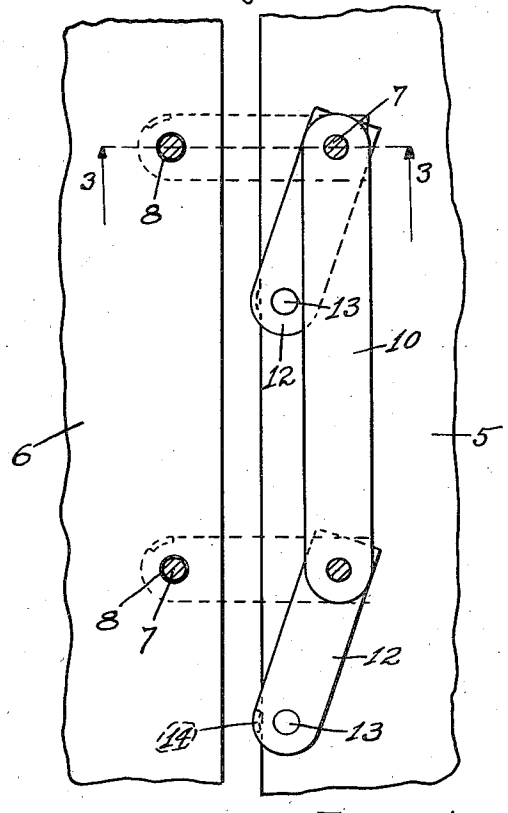


Fig.-2.



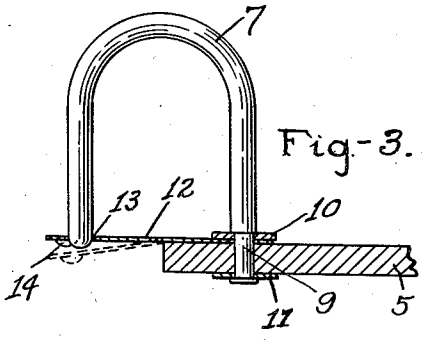


Fig.-3.

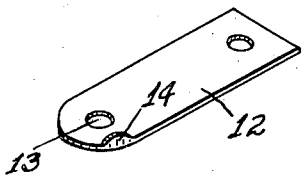


Fig.-4.

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LOOSE LEAF BINDER

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6 Claims. (Cl. 129—23)

This invention relates to loose leaf binders, particularly designed for use in keeping accounts and records of cash or sales transactions, although also adaptable for a multitude of other purposes where loose leaf record sheets are employed and where it is desirable to provide means for withdrawing, adding or substituting leaves from time to time; and the primary object is to provide a binder construction which is extremely simple, efficient, and practical in use, and which may also be manufactured at a comparatively low cost.

Further and more specific objects will be disclosed in the course of the following specification, reference being had to the accompanying drawing, wherein:

Fig. 1 is a perspective elevation of my improved binder, showing it as containing a sheaf or set of loose leaves to be used for record, accounting, or memorandum purposes.

Fig. 2 is an enlarged detail plan view of a portion of the binder, showing the leaves as shifted to the outer arms of the securing arches and with the retention clips moved to their inner or arch opening positions, the arch arms in this instance being shown in section.

Fig. 3 is a detail section on the line 3—3 in Fig. 2, but with the spring clip in its outer or closed position.

Fig. 4 is a detail perspective view of one of the retention clips removed from the device and turned bottom side up for purpose of illustration.

Referring to the drawing more particularly and by reference characters, 5 designates a substantially rigid back board to which are releasably secured and which normally rests the record sheets, designated by the numeral 6. The member 5 may of course be semi-flexible and is constructed of wood, metal or other suitable material, and might also be provided with an extension (not shown) for folding over to cover the record leaves 6, but is here preferably shown of single unitary construction and is referred to as the "back board" for convenience of description.

The leaves, sheets, or cards 6, which, as already indicated, may be printed in forms for any desired or specified purpose, and may also be of any required size, are movable and releasably secured to the back board 5 by a pair of arches or inverted U-shaped members 7, having inner legs rigidly secured in the board, adjacent one edge thereof, and outer legs which project beyond said edge of the board, the leaves or cards being perforated, as at 8, so as to be freely movable on the arches to pass over from one leg to the other of each arch.

In order to rigidly and permanently secure or mount the arches to the board I find it desirable to reduce the inner end extremities, as at 9, and pass these reduced end portions 9 through perforations in the board and through registering perforations in an upper metal strip 10 and a lower metal strip 11, which strips preferably extend from one arch to the other for reinforcing purposes. It is desirable to have the extensions 9 of such size or form as to tightly engage the strips 10 and 11 to prevent accidental rotation of the shank and thereby disturb the fixed positions of the arches. The shanks are fixed in place in any suitable manner such as by riveting or spot welding their bottom ends against the strip 11, the strip 10 in the meantime engaging the shoulders in the arch material resulting from and adjacent to the reduced ends 9.

The outer legs of the arches are releasably engaged and closed by spring clips 12, pivoted on the arch ends 9, and preferably disposed intermediate the board 5 and strip 10 so as to receive frictional resistance therefrom. The outer ends of the clips 12 are perforated as at 13 so as to releasably engage the lower ends of the outer arch legs, which ends are preferably rounded, as indicated in Fig. 3, so as to facilitate the engagement and disengagement of the clips with respect to them. Inasmuch as the spring clips are normally disposed at a level slightly above the lower extremities of the outer leg ends, they will be retained in closing positions by the spring action of the clip material; and when the clips are to be opened it consequently becomes necessary to slightly depress them, as indicated by the dotted lines in Fig. 3.

The purpose of opening the clips is to enable the outer arch legs to be sufficiently clear so that the leaves or cards 6 may be removed from the arches, and the necessary clearance is provided by swinging the clips to the full line positions shown in Fig. 2. It may here be noted, however, that the clips are preferably provided at their outer ends with small lugs 14, the purpose of which is to engage the edge of the board 5 to prevent the clips from being swung inwardly beyond the full line positions shown in Fig. 2. When the clips are in this position it is obvious that the leaves or cards 6 may be removed or new sheets may be added, as circumstances may require.

As soon as the necessary changes have been made the loose leaves or cards 6 are moved over

to the inner legs of the arches, as shown in Fig. 1, and the clips 12 are then returned to their outer or normal positions, whereupon the arch loops are closed so as to prevent any possibility of accidental removal of the leaves or cards when they are swung over to the outer arch legs, as is of course frequently necessary when the device is in use.

From the foregoing it will be seen that I have provided an extremely simple and efficient construction which has a large number of practical uses, and among its other advantages it may be noted that inasmuch as the arches 7 have their two legs continuously and integrally connected, there are no joints or openings forming edges as in many present constructions to tear or otherwise mutilate the sheets or leaves that must be frequently shifted from one leg to the other of each arch.

It will further be understood that various and suitable modifications may be made within the scope of the appended claims. Having now therefore fully illustrated and described my invention, what I claim to be new and desire to protect by Letters Patent is:

1. In a loose leaf binder, a back board, an inverted U-shaped leaf engaging member having one leg secured to the board adjacent one edge thereof and with the other leg disposed outwardly of said board edge, a spring clip pivoted to the inner leg for swinging and closing movement with respect to the other leg and for releasably securing the loose leaves on said member, and means for frictionally retaining the clip in adjusted position.

2. In a loose leaf binder, a back board, a pair of arched members for removably engaging the leaves, said members each having one end secured to the board adjacent one edge thereof and with the other end spaced laterally beyond said board edge, and retaining fingers pivoted to the first mentioned ends of said members and for movement in a plane parallel to the board, for closing engagement with the outer arched member ends.

3. In a loose leaf binder, a back board, a pair of arched members for removably engaging the leaves, said members each having an inner end secured to the board adjacent one edge thereof and with the other or outer end spaced laterally beyond said board edge, and retaining fingers pivoted to the inner member ends for movement in a plane parallel to the board, for closing engagement with the outer arched member ends, said fingers being resilient and for releasable engagement with said outer arched member ends.

4. In a loose leaf binder, a back board, a pair of arched members for removably engaging the leaves, said members each having one end secured to the board adjacent one edge thereof and with the other end spaced laterally beyond said board edge, and retaining fingers pivoted to the inner member ends for movement in a plane parallel to that of the board, for closing engagement with the outer arched member ends, said fingers being resilient and for releasable engagement with said outer arched member ends, and a reinforcing strip member secured upon one face of the board and connecting the inner ends of said arched members.

5. In a loose leaf binder, a back board, a pair of arched members for removably engaging the leaves, said members each having one end secured to the board adjacent one edge thereof and with the other end spaced laterally beyond said board edge, and retaining fingers pivoted to the board for movement in a plane parallel thereto, for closing engagement with the outer arched member ends, said fingers having stops engageable with the board to prevent inward swinging movement beyond predetermined positions.

6. In a loose leaf binder, a back board, a pair of arched members for removably engaging the leaves, said members each having one end secured to the board adjacent one edge thereof and with the other end spaced laterally beyond said board edge, strips connecting the inner ends of the arched members, and spring fingers pivotally secured to said inner member ends and swingable in a plane parallel to the board for releasable engagement with the outer ends of the arched members to close the same to prevent accidental removal of leaves therefrom.

EDWARD F. LEXOW.