J. C. DAWSON.

SHIFTABLE SHEET BINDER.

APPLICATION FILED NOV. 6, 1912. RENEWED APR. 22, 1914.

1,118,637. Patented Nov. 24, 1914.

Fig. 1.

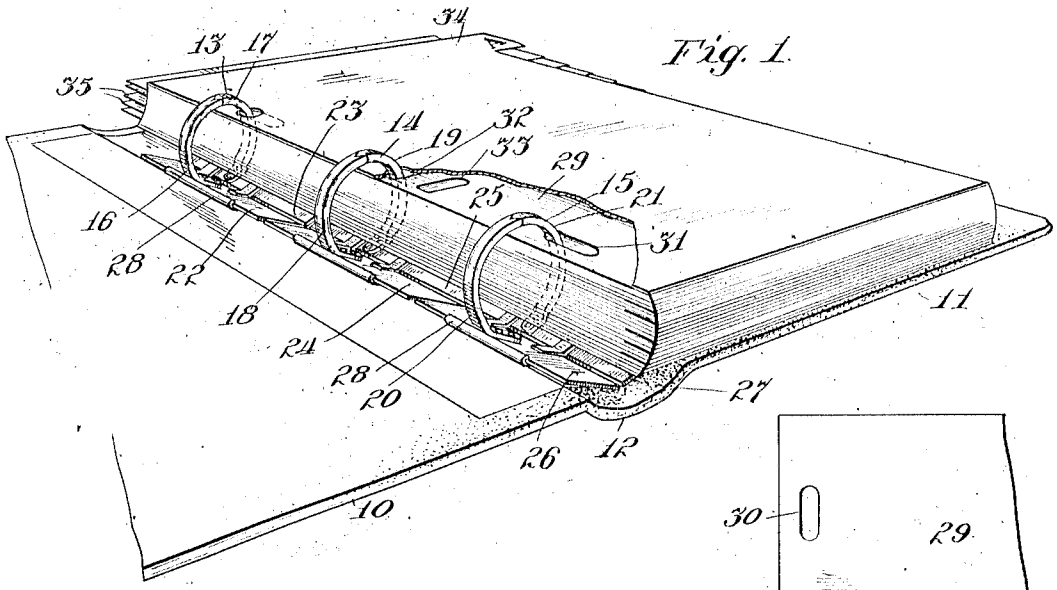


Fig. 3.

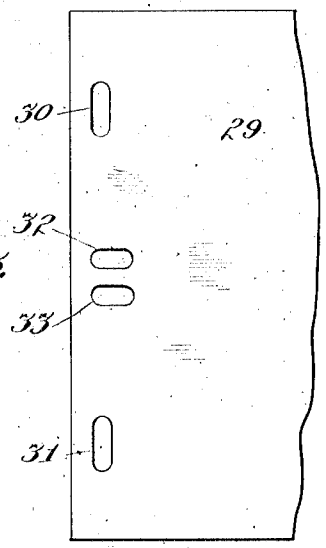
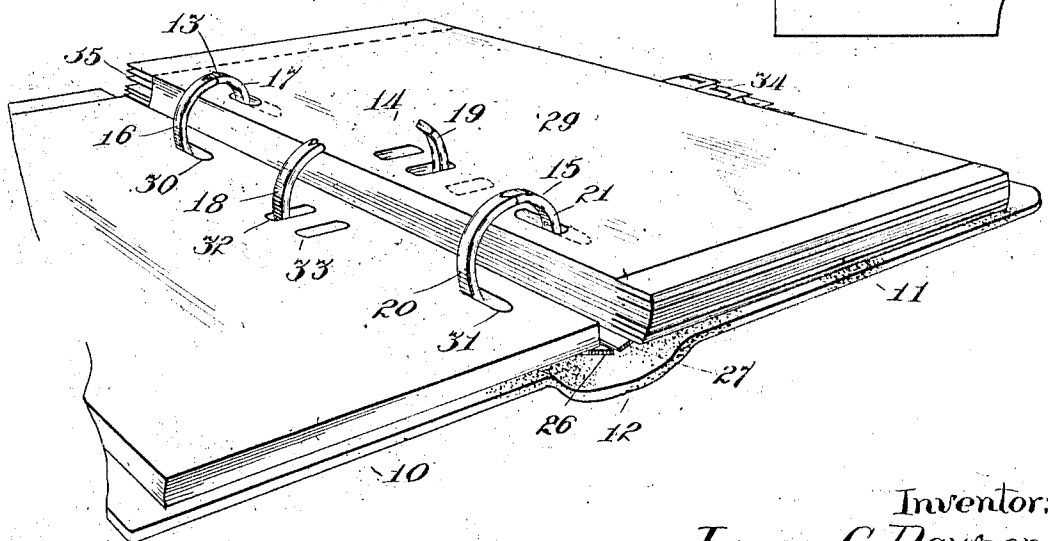


Fig. 2.



Witnesses:
Milton Lenoir
E. M. Klatcher

Inventor:
James C. Dawson,
By Gilleon & Gilleon
Attorneys

UNITED STATES PATENT OFFICE.

JAMES C. DAWSON, OF WEBSTER GROVES, MISSOURI.

SHIFTABLE-SHEET BINDER.

1,118,637. Specification of Letters Patent. Patented Nov. 24, 1914.

Application filed November 6, 1912, Serial No. 729,784. Renewed April 22, 1914. Serial No. 833,801.

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 Shiftable-Sheet Binders, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to loose leaf binders and to sheets therefor, and more particularly to such binders and sheets wherein provision is made for positively holding the sheets in a plurality of different adjusted positions in the binder. Binders and sheets of the general class referred to are intended to be used in connection with the keeping of accounts and for similar purposes. The shifting of the sheets of these binders has for its purpose to distinguish those sheets upon which new entries have been made from other sheets in the binder. The present invention has for its object to improve the construction of binders and sheets of this class, and particularly to provide binders and sheets of such construction that the shifting of sheets may be positively controlled and cannot occur accidentally.

In the accompanying drawing—Figure 1 is a perspective view showing a binder and sheets therefor embodying features of improvement provided by the invention: Fig. 2 is similar to Fig. 1, but shows certain of the parts in a different position; and Fig. 3 is a detail plan view of one of the sheets.

The drawings show the binder provided with covers 10 and 11. These covers are of well known construction and they are connected in the ordinary way by a flexible back 12. As is usual in the construction of loose leaf binders having covers of the form shown, the binder mechanism is mounted upon the flexible back 12.

The binder mechanism preferably comprises a plurality of filing members, as 13, 14 and 15. In the form of construction which is shown in the drawing each of these filing members is composed of a pair of mating movable prongs, as 16, 17, 18, 19 and 20, 21, forming a complete but openable ring. When constructed in this way, that is with all of the filing members 13, 14, 15 in the form of a complete ring or loop, it is desirable that at least one of the rings, as 14, be openable independently of the others. In the arrangement illustrated all of the rings are adapted for independent operation. To this end the prongs of which each ring is composed are mounted upon separate plates, as 22 and 23, 24 and 25, and 26, 27, respectively. The plates of each pair are shown as having pivotal engagement at their meeting edges and as being held in such engagement by a resilient retaining plate 28. This retaining plate embraces the several pairs of plates between its two side edges and the arrangement provides that during the operation of any one of the rings, as 14, the corresponding plates, as 24, 25, are moved across the plane of the two side edges of the retaining plate 28. The retaining plate 28 accordingly serves to yieldingly hold the parts of the rings, as 18, 19, in either the open or closed position.

The sheets of the binder are shown at 29. These sheets are apertured along one edge to receive the several filing members, as 13, 14 and 15, and preferably these apertures are so constructed as to permit the sheets to be shifted in the binder mechanism without disengaging them from the rings 13 and 15. To this end elongated apertures, as 30 and 31, are provided for receiving the rings 13 and 15, respectively. As shown, the longer dimensions of these apertures extend in a direction parallel to the adjacent edge of the sheet, whereby the shifting of the sheets is accomplished by moving them in the direction of the holding edge of the binder. The remaining filing member, as the ring 14, serves to positively hold the sheets in adjusted position. For this purpose two filing apertures, as 32, 33, are provided in the sheets for receiving the ring 14. Each of the apertures 32, 33 is of such restricted size as to prevent any movement of the sheets in the direction of the holding edge of the binder when the ring 14 is engaged with either of such apertures. Furthermore, the apertures 32, 33 are non-connecting. The sheets must accordingly be disengaged from the filing member 14 to allow them to be shifted. When the filing member 14 takes the form of a complete ring, as shown, this can only be accomplished by opening the ring. It is for this purpose that the binder mechanism is most desirably so

constructed as to permit the ring 14 being opened independently of the other rings, as 13 and 15.

When the parts, as 18, 19, of the ring 14 have a swinging movement for opening and closing the ring, the apertures 32, 33, are elongated in a direction transverse to the holding edge of the binder to permit such movement of the parts of the ring when engaged with the sheet.

In the use of the binder all of the sheets 29 will preferably be arranged upon the rings 13, 14, 15, with the ring 14 engaging the same aperture, as 32, of all of the sheets. Usually the sheets will be arranged between suitable guide or index leaves, as 34. When a new entry has been made on any one of the sheets 29, the ring 14 will be opened and the sheet disengaged from the ring 14 and shifted on the rings 13, 15, to a position in which one of its edges projects beyond the corresponding edges of the remaining sheets, as appears at 35, Fig. 1. The shifted sheet is then filed upon one of the parts 18, 19 of the ring 14 in its new position, and the ring closed. In the new position of the sheet the ring 14 is engaged with the other one, as 33, of the two apertures provided for receiving it and serves to positively hold the sheet to prevent its being returned to its original position. The new position of the sheet serves to differentiate it from other sheets upon which new entries have not been made, whereby reference to the new entry may easily be had. When a ready reference to the new entry is no longer required, as when the new entries have been posted at the close of a day's business, the ring 14 will be opened and the shifted sheet returned to its original position.

No stress is laid upon the shape of the rings 13, 14, 15, the specific arrangement provided for effecting their operation, nor upon the form of the covers 10, 11, 12, except as may be particularly pointed out in the appended claims.

I claim as my invention—

1. In a loose leaf binder, in combination, two pairs of mating relatively movable filing prongs, those of each pair forming a closed loop in one position and the movement of a prong of one pair for opening the loop being independent of the prongs forming the other loop, and a sheet having a plurality of non-connecting apertures any one of which may receive the prongs of the loop having the said independently movable prong and a slotted aperture for receiving the prongs of the other pair, the said non-connecting apertures being located at equal distances from different parts of the said slotted aperture.

2. In a loose leaf binder, in combination, two pairs of mating relatively movable filing prongs, arranged in parallel planes, the prongs of each pair forming a closed loop in one position and the movement of a prong of one pair for opening the loop being independent of the prongs forming the other loop, and a sheet running on the prongs of the last mentioned pair, said sheet having sliding engagement with said prongs for movement between two positions in a direction parallel to the plane of the sheet and transverse to the planes of the prongs and having engagement in one only of said positions with the prongs of the other pair fixed against such movement.

3. In a loose leaf binder, in combination, two parallel filing prongs, one thereof being laterally movable in a direction transverse to a line extending between the prongs, and a sheet having an aperture for receiving each of said prongs, the aperture for receiving the said movable prong being slotted in the direction of movement of the prong and the aperture for receiving the other prong being slotted in the direction of the said line extending between the prongs.

4. In a loose leaf binder, in combination, two parallel filing prongs, one thereof being laterally movable in a direction transverse to a line extending between the prongs, and a sheet having a plurality of non-connecting apertures for receiving the said movable prong, each of such apertures being slotted in the direction of movement of the prong, and an aperture for receiving the other prong slotted in the direction of the said line extending between the prongs, like parts of each of the first mentioned apertures being located at equal distances from different parts of the said aperture which is slotted in the direction of the said line extending between the prongs.

5. A shiftable sheet provided with a slotted filing aperture and with a pair of other non-connecting apertures each slotted in a direction transverse to the length of the first mentioned aperture and the two having like parts located at equal distances from different parts of the said first mentioned aperture.

6. A loose leaf provided with a pair of closed slotted filing apertures extending in relatively transverse directions and a part of one of said apertures being located in a line with the length of the other.

7. A shiftable sheet provided with a pair of slotted filing apertures extending in relatively transverse directions, a part of one of said apertures being located in line with the length of the other aperture and having its edge which is adjacent said other aperture located at a distance which is less than the length of the said other aperture from an edge of the sheet which is transverse to the length of the said other aperture.

8. In a shiftable sheet binder, in combination, a pair of sectional filing arches, one

side of one of the arches being laterally movable in the plane of the arch for opening and closing the arch, and a sheet slotted in two directions which are transverse to each other for filing on the arches.

9. In a shiftable sheet binder, in combination, a pair of sectional filing arches, one side of one of the arches being laterally movable in the plane of the arch for opening and closing the arch, and a sheet slotted in two directions which are transverse to each other for filing on the arches in one position and having an additional opening for receiving the said arch having the movable side in a different position of the sheet.

10. In a shiftable sheet binder, in combination, a pair of sectional filing arches, one side of one of the arches being laterally movable in the plane of the arch for opening and closing the arch, and a sheet slotted in two directions which are transverse to each other for filing on the arches in one position and having an additional opening slotted in a direction which is parallel to the planes of the arches for receiving the said arch having the movable side in a different position of the sheet.

JAMES C. DAWSON.

Witnesses:
M. A. MIGGINS,
H. C. RHODES.