Aug. 11, 1931. A. J. CARDOZA 1,818,302

INDEX BINDER

Filed Dec. 11, 1929

Fig. 1

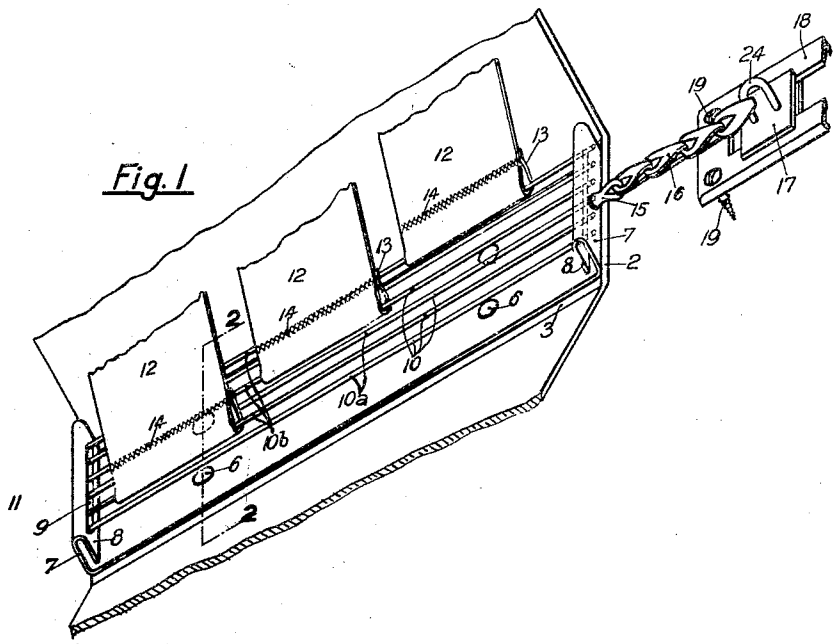


Fig. 4

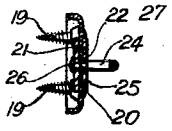


Fig. 3

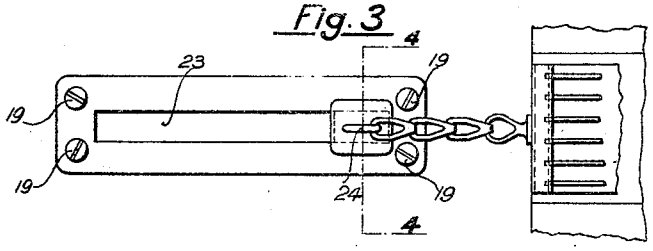
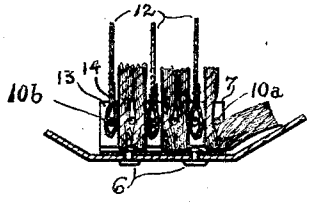


Fig. 2



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UNITED STATES PATENT OFFICE

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INDEX BINDER

Application filed December 11, 1929. Serial No. 413,234.

This invention relates to indexed temporary binders, and particularly the type for temporarily binding and indexing a plurality of magazines, telephone directories, or folds of papers, wherein the bound edge of the magazine or directory is relatively thick, or where the number of sheets is sufficient to create an appreciable bulk at the folded portion.

Binding of magazines, and other publications in temporary binders of various types, is well known. For purposes of description of this invention, the use thereof in connection with telephone directories is used as an example, though the invention may be used with equal facility for magazines and other publications.

These directories or publications usually comprise printed sheets bound by stapling or sewing at their rearward edge, and having a flexible cover. For ease of reference to these directories it is desirable to provide an index member between the several volumes. Heretofore, it has been customary to bind such publications in temporary binders of the removable spring bar type, and in so doing the spring bar is passed longitudinally between the pages and secured in the well known manner of inserting the ends of the spring bar in the terminal of the binder. The objection to this form of binder is that if the publications are bound tightly, side by side, in the binder, the reading matter adjacent the bound edge is obscured when the binder is opened; and if the publications are bound loosely, side by side, the bound edge turns on the binding rods and rides up on the abutting publication when the binder is opened, so that when the binder is again closed, there is a frictional resistance between the bound edge of one publication and the side of the abutting publication which prevents the binder from closing flat as it is intended to do. I have found that by the use of additional rods between the publications, the bound edge or fold is maintained in its proper position within the binder. I further utilize the rods between the publications as supports for index sheets, and by so doing I provide an index sheet which may be readily adjusted longitudinally of the binder, whereas if placed on the rod engaging the publication, such adjustment is apt to tear the pages of the publication. This structure also permits the insertion of the index at the front of each publication instead of intermediate thereof, and further provides an index which may be entirely removed from the rods for purposes of changing when the publication within the binder is changed. These index sheets should have sufficient grip on the rods to securely maintain them in placement, but should be yieldingly slidable longitudinal of the rod for purposes of adjustment in offset relationship relative to each other or removal entirely from the binder for changing. By providing an ovoidal loop at one end of the index sheet to engage the spring rod, a frictional grip on the rod is obtained on the minor axis while the major axis provides sufficient play to permit the index sheet to be yieldably mounted on the rod. The ovoidal loop of the index sheet also extends into the trough between bound edges of the publications and thus prevents the bound edges from riding up the side of the adjacent publication, when the binder is opened and acts as a guide to return the bound edge of the publication to its proper place when the binder is closed after having been opened.

One of the principal objects of my invention is to provide a temporary binder which will be adaptable to contain a plurality of publications. A further object is to provide between the volumes a series of index sheets which are normally fixed with relation to the volumes, but which may be moved longitudinally of the binder so as to avoid overlapping of the data on the index sheets; a further object is to provide means for holding the bound or folded edge of the volumes in fixed relation to the back of the binder when the binder is opened for reference; a further object is to provide means whereby the binder may be permanently attached to an upright support, such as a wall or telephone booth, and whereby the binder will be suspended by flexible means to lie par-

allel with the wall and yet have a range of elevation greater than the length of the flexible suspension means, since long chains or cords have been found very undesirable.

With the above mentioned and other objects in view, the invention consists in the novel construction and combination of parts hereinafter described, illustrated in the accompanying drawings and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

To more fully comprehend the invention, reference is made to the accompanying drawings, wherein—

Fig. 1 is a perspective of the invention.

Fig. 2 is a section on line 2—2 of Fig. 1.

Fig. 3 is a front elevation of the supporting member.

Fig. 4 is a cross section on line 4—4 of Fig. 3.

Referring more particularly to the several views of the drawings, wherein like characters of reference designate corresponding parts, A represents a binder cover generally, having sides 1, preferably of a stiff or rigid material, and joined to a back 2 by the usual flexible connections 3. Secured to the back is a plate 4, which preferably extends the length of the binder, as shown in Fig. 1. The plate 4 is secured to the cover back by any suitable means, such as rivets 6. In spaced relationship on the back plate 4 are flanges 7 turned back reversely upon themselves, as at 8, said turned portion 8 having therein elongated slots 9 substantially parallel with the back plate. A plurality of binder bars 10 of spring metal are provided for loose positioning of the ends thereof in the slots 9, as at 11. A portion of said bars, preferably the alternate bars, as indicated 10*a* are provided as binder bars, the remaining bars indicated 10*b* are provided to mount index sheets 12, which frictionally engage the bars and are slidable thereon and may be entirely removed therefrom for changing. These index sheets 12 have an ovoidal loop 13 at one end and are preferably made of flexible material, so that the transverse minor axis of the loop frictionally engage the rod and by reason of the major transverse axis of the loop not being in engagement with the rod there is sufficient play in the loop to provide yieldable sliding action of the index sheet relative to the rod. The end of the index sheet which is bent upon itself to form the loop, as at 14, is sewed, stapled or otherwise securely fastened to the sheet in any usual manner.

The flange 7 at one end of the binder mounts an eyelet 15 which may be rigidly or swivelly connected, and this eyelet has associated therewith a flexible means, preferably a link chain 16 by which the binder is connected to a member 17 which in turn is slidably mounted on a slotted support 18 and the support 18 is in turn secured to a wall, desk, table or other suitable object by means of screws 19.

The member 17 comprises a front plate 20 and a back plate 21 maintained in spaced relationship by an intermediate plate 22, said front and back plates being of greater width than the transverse width of slot 23 so as to extend beyond the longitudinal edges of said slot, as best shown in Fig. 4, the plate 22 being of lesser width than the transverse width of said slot, and having slidable contact with the sides thereof. The plates 20, 21 and 22 are securely maintained in their superposed relationship by a staple 24 which preferably has a pair of prongs 25 which pass through the said plates and are riveted on the rearward side of the back plate 21, as at 26, the prongs of the staple 24 being inset to form a shoulder 27 to engage the front plate 20 to prevent its forward movement.

The flexible member 16 is secured to the staple 24 at one end and to the eyelet 15 at its other end. Thus a support for the binder is provided whereby the binder may be used at any angle or any position, and providing also for the convenient movement thereof for reference purposes without the necessity of a long suspension means, and at the same time providing a means to prevent the binder from being removed from its intended place or stolen.

In operation of the binder, the bars 10 are removed from the binder by bowing them which draws the ends inwardly. The bars 10*a* are inserted between the leaves of a bound publication or fold of papers at the bound or folded portion and the binder rods re-positioned by bowing them in the same manner as they were removed. The bars 10*b* are removed and reinserted in the binder in the same manner as bars 10*a*, but with the index sheets mounted thereon, as above set forth. This arrangement provides for removable index sheets and the offset spacing thereof, and for indexing between the bound publications, instead of between the leaves thereof. The bars 10*b* being parallel to and in abutment against the bound edge of the publication, provides means to prevent the bound edge of the publication moving upwardly to ride against the side of the next adjacent publication when the binder is opened.

Having thus described my invention what I claim and desire to secure by Letters Patent is:—

1. In a binder of the character described,

the combination with a binder cover of a back plate attached to said cover and having upwardly and reversely bent terminal portions, said reversely bent terminal portions each being provided with an elongated slot parallel with the plane of the back plate, a plurality of loosely mounted spring rods extending between said terminal portions and extending into the slots thereof in side by side relationship, and a flexible index sheet mounted on one of said rods so as to have yieldable frictional engagement therewith and adapted to slide longitudinally on the rod and providing an ovoidal loop through which the rod extends, one portion of the ovoidal loop being adapted to extend between the bound portions of publications mounted on the said rods.

2. In a binder of the character described, the combination with a binder cover of a back plate attached to said cover and having upwardly and reversely bent terminal portions, said reversely bent terminal portions each being provided with an elongated slot parallel with the plane of the back plate, a plurality of loosely mounted spring rods extending between said terminal portions and extending into the slots thereof in side by side relationship, and an index sheet adapted to be mounted on one of said rods so as to have yieldable frictional engagement therewith and adapted to slide longitudinally on the rod, said index sheet being of flexible material having at one end thereof an ovoidal loop integrally formed of the same material adapted to receive within said loop one of said rods and grip the same frictionally and yieldably.

3. In a binder of the character described, comprising the combination of hingedly connected cover members, a back plate attached to said cover at the hingedly connected portion, said back plate having an upwardly turned lug at each of its opposite terminal portions, said lugs being adapted to engage a binder rod, a binder rod extending between said terminal portions and being releasable at an end thereof from engagement by the lug at said end, and a flexible index sheet mounted on said rod, said index sheet having portions thereof extending in opposite directions from the portion which engages the rod.

In testimony whereof I have signed my name to this specification.

ANTONE J. CARDOZA.