Aug. 14, 1945. H. D. FALLS 2,382,556

BINDER

Filed Feb. 23, 1944 2 Sheets-Sheet 1

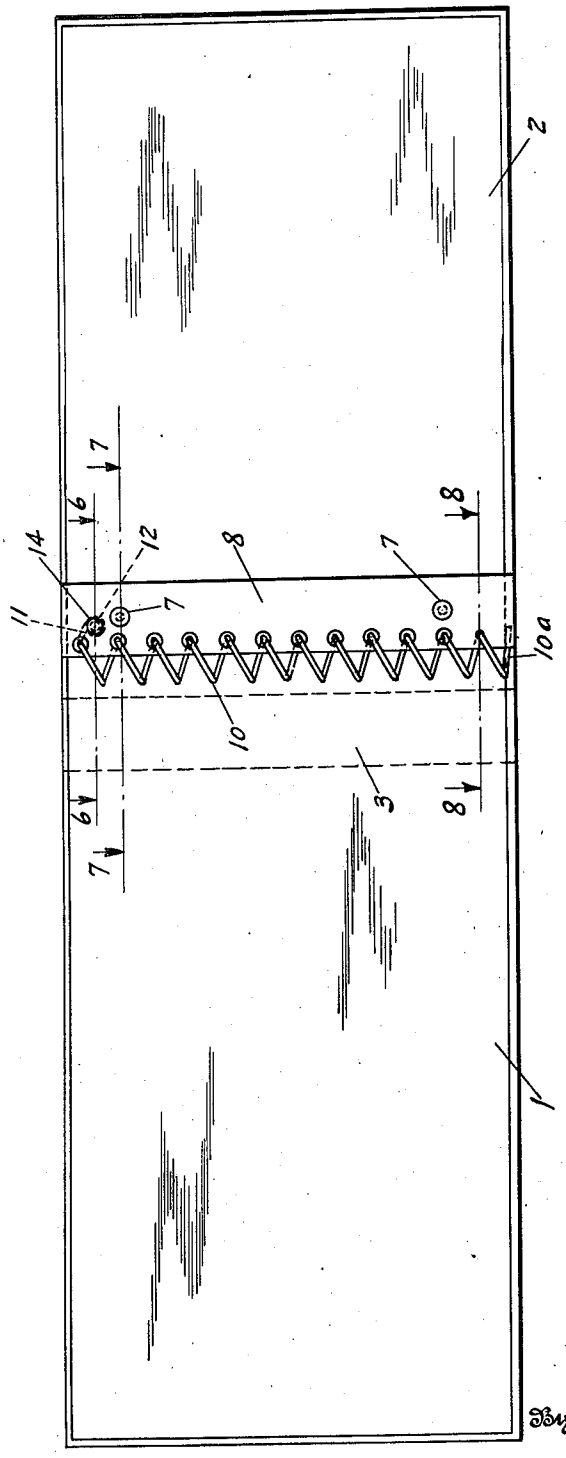


Fig. 1.

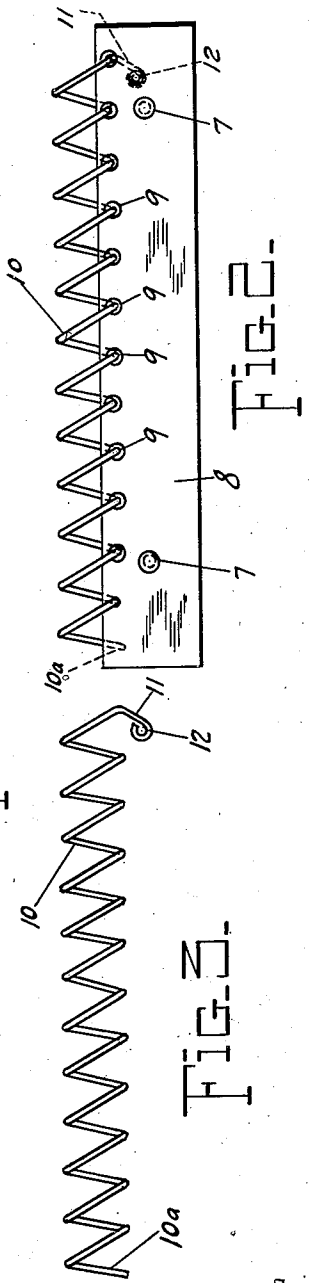


Fig. 2.

Fig. 3.

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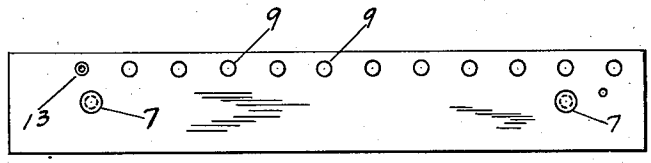


Fig. 4

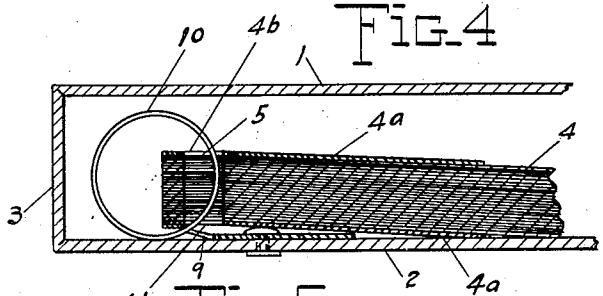


Fig. 5

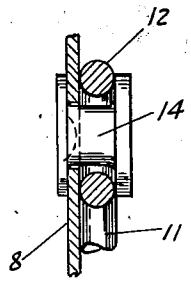


Fig. 6

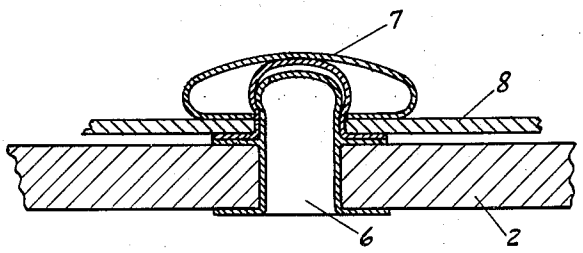


Fig. 7

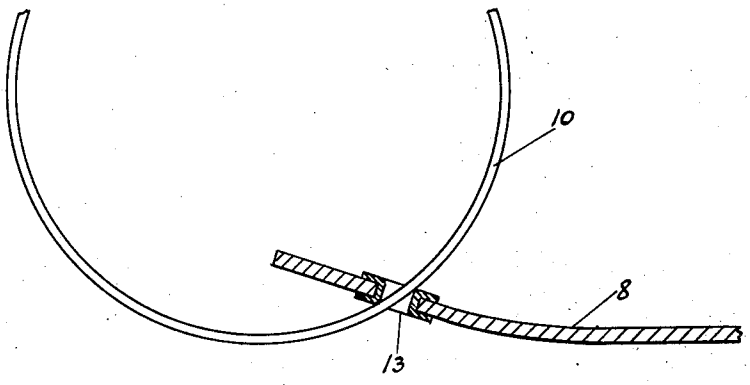


Fig. 8

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2,382,556

UNITED STATES PATENT OFFICE

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BINDER

Harry D. Falls, Cleveland, Ohio, assignor to Wm. Exline Inc., Cleveland, Ohio, a corporation

Application February 23, 1944, Serial No. 523,562

2 Claims. (Cl. 281—19)

This invention embodies certain novel improvements in so-called loose-leaf binders, particularly of the type employed for checkbooks or holders, or the like. My improvements pertain primarily to the means for holding the original filler or subsequent refills of checks or loose leaves in the binder cover, such means being of the class wherein a spiral retaining wire or wires are employed for connecting the checks or loose-leaves together and to the binder cover proper.

In articles of the class of this invention as heretofore devised, the construction of the spiral retainer wire or wires has been such as to make for some difficulty in originally inserting or threading the retainer into the openings, usually punched, of the leaves, or pages, or checks, whatever they may be. According to my invention, therefore, it has been one of my objects to overcome the foregoing difficulty by utilizing a spiral retainer in which the coils are relatively large and are passed through relatively large openings that are preferably drilled in the pages or leaves of the filler or refill section of the binder. Making the coils, as well as the openings, large, facilitates and renders easy the original threading of the retainer for connecting the leaves of the filler section, and a further novel feature of the invention lies in providing a holding member, to which the spiral retainer is attached, and which holding member is adapted to be detachably secured to the lower side of the binder proper.

By reason of the provision of relatively large openings in the leaves section of the binder enabling the easy application thereto of the spiral retainer, the leaves section would ordinarily have a tendency to swing or wobble in the binder, in handling, unless provision is made against this undesirable action. With the above in mind, I have provided special means for attaching the spiral retainer to the holding member so as to prevent the undue wobbling or shifting bodily up and down of the leaves section with the retainer when said section is received in and detachably secured to the lower side of the binder.

As a part of my invention, I preferably utilize a holding member which is attached to the binder by means of spring snap fasteners, though in lieu thereof there may be utilized penetrating fasteners of the McGill type, or like types should be desired.

My invention involves other details of construction which may be more fully apparent upon reference to the following description and accompanying drawings, in which:

Figure 1 is a plan view of a binder which is generally of known construction and illustrating the detachable holding means including the spiral retainer, as when applied to the binder, the leaves or check filler being omitted for purposes of rendering clear the construction of the parts above mentioned.

Figure 2 is a detail plan view of the detachable holding member and spiral retainer, as when assembled after the leaves are connected with the retainer, but in this view the leaves are again omitted for clearness.

Figure 3 is a detail view of the spiral retainer alone.

Figure 4 is a plan view of the holding member alone.

Figure 5 is a fragmentary sectional view showing the complete assembly of the parts including the leaf or check-book section, the cover or binder proper, and the detachable holding means by which the leaf or check section is connected to the cover.

Figure 6 is a fragmentary sectional view taken on the line 6—6 of Figure 1, showing the manner of securing one end of the spiral retainer to the holding member.

Figure 7 is a fragmentary sectional view taken on the line 7—7 of Figure 1, bringing out more clearly the snap fastener connection between the holding member and the lower side of the binder cover.

Figure 8 is an enlarged sectional view taken on the line 8—8 of Figure 1, bringing out more clearly the engaging eyelet for the free end of the spiral retainer by which swinging or shifting of the retainer and check or leaf filler is prevented in conjunction with the fastening means between the opposite end of the retainer and holding member.

Referring first to Figure 5 which shows practically all of the main parts of the invention in an assembled condition, the binder cover is shown to comprise the upper side 1, the lower side or base 2, and the back portion 3, all made as conventional in this art, and preferably of relatively heavy cardboard suitably covered with any kind of finishing material if desired. The check or leaf section of the binder is generally designated at 4 and is referred to as the filler or refill leaf section hereinafter.

Figure 5 shows how the leaves of the filler 4 are provided with relatively large openings 5 at the hinge portions thereof, said openings being preferably drilled for economic manufacture of the filler section, though punching may be resorted to if necessary, but equipment for the

latter purpose is usually more expensive than drilling.

On the base or lower side 2 of the binder cover there are preferably attached the male members 6 of snap fasteners, and the female members 7 of these fasteners are applied as seen in Figures 1, 2, and 4 to the holding member 8 and spaced apart to correspond with the spacing of the female members 7 on the cover member 2. The holding member 8 is preferably made of a relatively narrow long piece of fiberboard or other material having a certain degree of stiffness for ease of handling. This member 8 is provided near one edge with a series of openings 9 and said openings, generally speaking, are of the same size as the openings 5 in the leaves of the filler section 4.

To be used in connection with the holding member 8 I provide the spiral retainer 10 which consists of a piece of wire coiled helically with coils of uniform size and relatively large as compared with the thickness of the filler section 4 as seen in Figure 5. At one end, see Figure 3, the retainer member 10 is provided with an extension 11 formed into a small loop 12, the extension 11 being projected from the first or upper loop of the retainer as seen in Figure 1 at an angle so as to lie relatively flat beneath the holding member 8 near one end of the latter, the upper end, as illustrated in Figure 1, this for a purpose to be later described.

At the end of the holding member 8 opposite that adjacent to which the parts 11 and 12 are disposed and in the opening 9 at such end is applied an eyelet 13, the eye of which is relatively small so as to snugly engage the adjacent spiral portion of the retainer 10.

The foregoing sets forth the constructional features of parts of my invention, which involve primarily the holding member 8 and the retainer 10, and I will now describe the manner of assembly of these parts in conjunction with the binder cover and the filler section 4 composed of leaves. Preferably the filler section 4 is provided with stiffening boards 4a above and below the stub or hinged portion of the latter for convenience in manipulation and for protection, to a certain degree, of these hinged portions (stub portions where checks are employed for the leaves) in the handling of the filler section in the use of the binder.

When the filler section composed of the leaves 4 and parts 4a is assembled with the desired quantity of leaves used for filling a certain binder cover of predetermined thickness, the various leaves and parts 4a have their openings 5 and the openings 4b for the members 4a alined or coincident with one another. The holding member 8 is disposed beneath the assembled parts 4 and 4a with its openings 9 similarly alined with the openings 5 and 4b. Thereupon the retainer is next threaded through the openings 5, 4b and 9 by inserting the free end 10a of the retainer into the uppermost openings of the parts having such openings. Using the loop 12 and extension 11 as a handle means, the retainer is rotated causing the free end 10a and the coils of the retainer to engage in the various spaced openings referred to, said free end passing through all of the openings and thus permitting the coils of the spiral retainer 10 to interlock in the openings in assuming the final condition as seen in Figure 5 and as seen in Figures 1 and 2, except in the latter two figures the parts 4 and 4a are omitted. When the retainer 10 has been fully engaged with the parts 4, 4a and 8, the extension 11 and loop 12 will be finally positioned beneath the member 8 and is riveted thereto as seen in Figure 6 by means of a rivet 14. Any suitable fastening equivalent to the rivet 14 may be used if desired, and this fastening might be detachable, though a detaching function is not needed or used.

As seen in Figure 1, when the parts are assembled in the manner described, the free end 10a of the spiral retainer will extend beneath the holding member 8 and will be covered thereby so as not to project in a manner such as would cause scratching of the hand in the use of the assembled binder and filler.

As previously indicated, since the openings 9 and 5 and 4b are relatively large in comparison with the diameter of the wire of the spiral retainer 10, the application of the retainer to the parts with which it is interlocked or connected is rendered very easy and may be quickly performed. Since, however, the upper parts of the retainer designated 11 and 12 are fixed by the fastening means 14 and since the lower end of the retainer as seen in Figure 1 is passed through the eyelet 13, the retainer is thus bodily held against undue or free movement in so far as its connection with the parts 4, 4a, and 8 is concerned. This prevents any up and down swinging, wobbling, or shifting of the filler section 4 on the cover of the binder, incident to any movement of the retainer in an obvious manner. The filler section is, of course, attached to the lower side 2 of the binder by merely engaging the female members 7 of the fasteners with the male members 6.

When the filler section of the binder has been entirely used, and with reference to filler sections that comprise check leaves this is accomplished when all the checks have been used from said section and there remain only the stub portions, the filler section, whether it comprises entire leaves or only the stub section, may be quickly disengaged from the binder cover by detaching the fasteners 7 and 6, thus separating the handle 8 from the part 2 of the binder. Then the filler section may be removed from the binder and stored away as may be required by the particular practice of the place where the invention is used.

To re-equip the binder with a fresh filler of checks, or leaves, or the like, the assembly of the filler section, including said leaves, the retainer 10, and the holding member 8, will merely be emplaced in the cover of the binder and the snap fasteners of the parts 8 and 2 joined together quickly, whereupon the filler section is ready to be used as a fresh filler for the binder.

Within the provision of the invention there may be substituted for the snap fasteners 6 and 7 any suitable detachable fasteners that may pass through corresponding openings in the parts 8 and 2. However, snap fasteners are preferably employed as best suited for the purposes of the invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is—

1. In a refill binder of the class described, in combination, a cover base member, a detachable holding member, detachably connected to said base member, a leaf refill section, said holding member and refill section having hinge openings formed therein, a spiral retainer member composed of a series of helical loops threaded through the openings of the holding member and refill sec-

tion for connecting said parts together, the said openings being relatively large in proportion to the diameter of the material of the spiral retainer, an end of the spiral retainer being fixedly attached to the holding member, and the said holding member having its opening at the opposite end of the said fixed portion of the spiral retainer provided with an eyelet relatively snugly fitting the retainer, whereby undue shifting movement of the refill section and holding member in relation to the retainer is prevented.

2. In a binder of the class described, in combination, a cover base member, a holding member connected to said base member, a leaf section, said holding member and leaf section having hinge openings formed therein, a spiral retainer member composed of a series of helical loops threaded through the openings of the holding member and leaf section for connecting said parts together, the said openings being relatively large in proportion to the diameter of the material of the spiral retainer, an end of the spiral retainer being fixedly attached to the holding member, and the said holding member having its opening at the opposite end of the said fixed portion of the spiral retainer provided with an eyelet relatively snugly fitting the retainer, whereby undue shifting movement of the leaf section and holding member in relation to the retainer is prevented.

HARRY D. FALLS.