

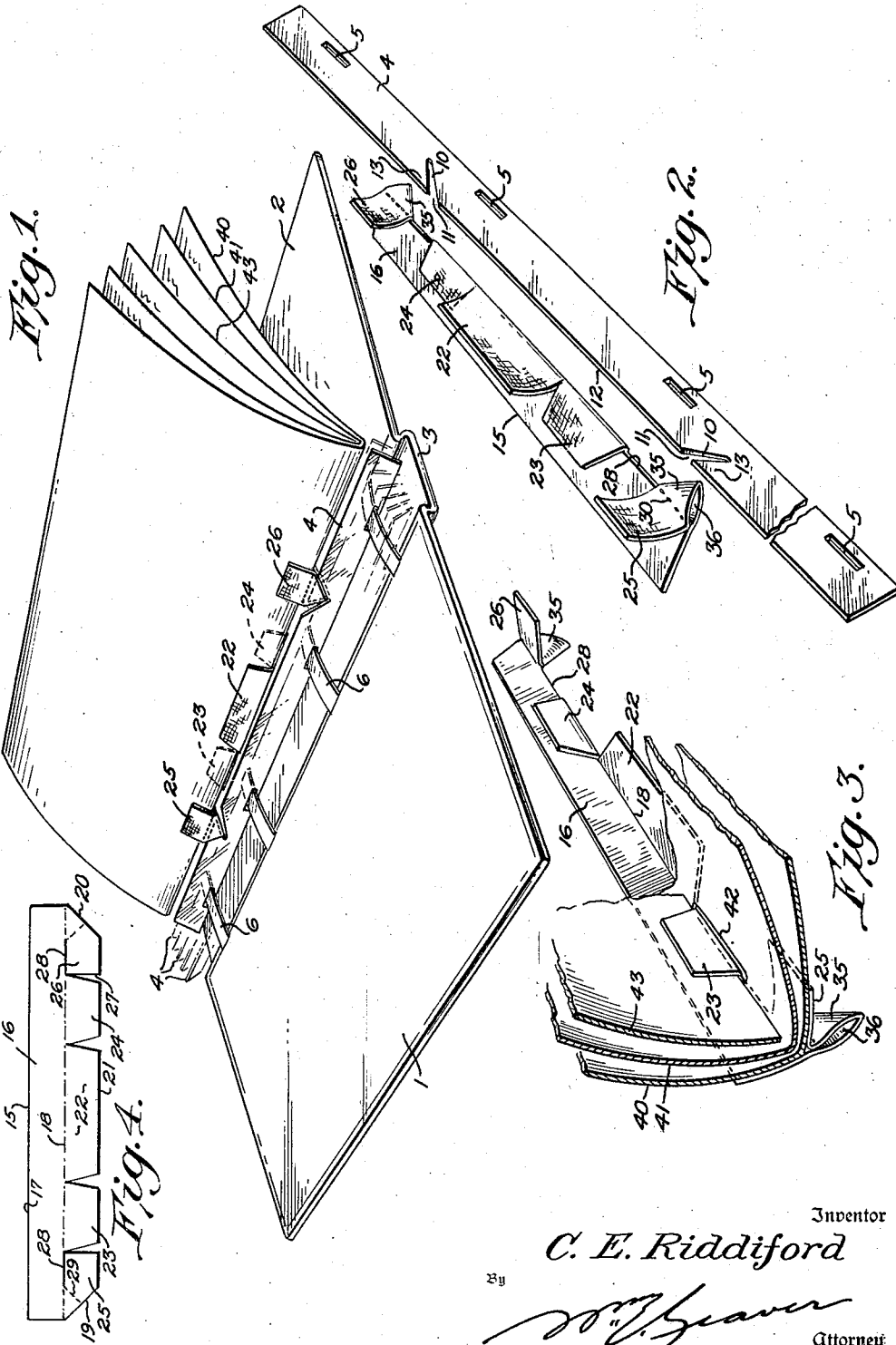
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BINDER

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BINDER

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This invention relates to binders for loose leaf books and the like, and has for its object to provide a construction simple in part and more efficient in operation than those heretofore proposed.

With these and other objects in view the invention resides in the novel details of construction and combinations of parts as will be disclosed more fully hereinafter and particularly pointed out in the claims.

Referring to the accompanying drawings forming a part of this specification in which like numerals designate like parts in all the views,—

Fig. 1 is a perspective view illustrating the invention;

Fig. 2 is a perspective view of the invention with the two main portions thereof separated to indicate more clearly how they are combinably formed;

Fig. 3 is a perspective detail illustrating how the separable tab member is applied to the plural sheets desired bound; and

Fig. 4 is a plan view of the separable tab member after it has been cut from sheet material and before it is formed ready for application to the leaves to be bound.

In the drawings 1 and 2 represent respectively the front and back covers of a binder which are flexibly joined as usual by the back board 3 which is preferably stiff. The specific invention resides in the means for securing leaves within the binder in interchangeable fashion and includes a plurality of similar long narrow rectangularly shaped and relatively fixed stub members 4 one of which is particularly indicated in Figure 2 and which may be made of any suitable material, preferably having an appreciable thickness to compensate for a plurality of leaves to be secured thereto. Each stub is provided with suitable impaling means securing the same in the binder and in the drawings this means comprises a plurality of spaced slits 5 adjacent one longitudinal edge of the stub and through each of which extends an anchor strap indicated at 6 in Figure 1. The anchor strap may be made of any suitable material which has strength and some flexibility in order to permit a slight movement of one

stub relative to the adjacent stubs. Leather has been found a desirable material for these anchor straps in that the ends thereof may be readily attached to the covers of the binder, but it may be desirable in some forms of binders to provide metallic anchor straps.

Each stub is provided with a pair of oppositely formed spaced notches or slits 10 each extending substantially halfway across the width of the stub at an angle of approximately 45° from the longitudinal edge 12 thereof opposite to the edge in which the slits 5 are formed, as clearly indicated in Figure 2, each notch being shaped to provide a relatively wide open mouth 11 for a purpose presently to appear. It will thus be seen that said notches create a pair of oppositely directed points or projections 13 upon which the separable member, presently to be described, may be secured, said projections extending toward each other and each lying wholly within the confines of the stub.

The device for holding a plurality of sheets or leaves to each stub member 4 is shown in development by the numeral 15 and at reduced size in Figure 4 of the drawings.

It is substantially rectangular, and preferably stamped as a blank from sheet fabric such as cloth which has been stiffened with any suitable sizing. It comprises a portion 16 which is truly rectangular and which extends from one longitudinal edge 17 to substantially the middle of the member represented in Figure 4 by the dot and dash fold line 18. The other half of the member would be rectangular in shape except that its end portions are cut off at substantially 45° angles to form the oblique edges 19 and 20, and a plurality of notches are cut inwardly from its other longitudinal edge 21, each notch extending to said fold line 18. These notches are so spaced as to provide a relatively large centrally disposed tab member 22 flanked by a pair of smaller tabs such as 23 and 24 which in turn are disposed between the central tab and the pocket forming end portions 25 and 26, one side 27 of the notches forming said last mentioned portions being formed perpendicularly to the longitudinal edge 21, all as will be clear from said figure.

Further the blank is provided with a cut 28 extending substantially half way from the apex of each outer notch toward the nearest end of the blank, said cut being along the fold line 18.

The result of this construction permits the end pocket forming members 25 and 26 to be turned over a 45° fold line indicated by the numeral 29 joining the end of said cut so that the aforementioned edge 27 will lie along the longitudinal edge 15, and the portion of the other longitudinal edge 21 belonging to the pocket forming member will lie along the end edge of the main blank, with the tabs 22, 23 and 24 folded over the line 18 in parallel superposed position with respect to the main rectangular portion 16, as somewhat indicated in the perspective view thereof in Figure 2. The members 25 and 26 are retained in folded position by a stitching 30 along the fold line 18 which stitching, however, extends only from the ends of the blank to the nearest end of the cut 28 also as clearly shown in Figure 2, said stitching being preferably made with fine wire. Thus there is formed a triangularly shaped pocket 35 at each end of the member 15, each pocket having its opening 36 outwardly disposed. The members 4 and 15 are made of such size that the projections 13 of the former will closely and snugly fit the pockets of the latter preventing any substantial longitudinal movement therebetween.

In application the leaves or pages desired bound are placed between the rectangular portion 16 and the several tabs 25, 23, 22, 24 and 26 of the blank, the inner surfaces of which have been provided with an adhesive which when moist will adhere to the outer surfaces of said leaves, the member 15 being so disposed on the leaves that the latter will be correctly positioned when secured in the binder.

One of the pockets 35 is then slipped over one of the projections 13 of an unused stub 4, and then the combined tab member and leaves are slightly flexed to cause the other pocket 35 to engage the other projection 13 of said stub, the inherent characteristics of the leaves causing them to straighten and assume a position in the plane of the stub after the flexing pressure has been removed.

It is often desired to file, in binders of this class, material such as sheet music or small pamphlets having plural pages which latter are too heavy to be supported by the outside paper covers alone, even though the several pages thereof are secured by the usual stitching or wire staples.

Further, as in the case of sheet music, it is very rare that the plural sheets are secured together and often there is an odd or half sheet in the piece of music which occupies a central position. In such examples as these

this particular invention is peculiarly adapted since it enables such a pamphlet or such music to be securely bound in the binder. It is only necessary to make slits with a knife or other suitable instrument along the fold or binding of the pamphlets or sheet music, through which slits the tabs 23 and 24 may be passed to be adherently secured to the innermost, or an inner, page, whereby the entire publication is firmly bound. Obviously the central tab 22 could be passed through the publication instead of the outer tabs 23 and 24, but it is preferable to utilize the outer tabs since they provide two points of securement. Figure 3 particularly illustrates the method of securing a piece of music wherein the two double sheets 40 and 41 are provided at their fold with correctly spaced slits one of which is indicated at 42 through which the tab 23 has been passed for adhesive securement to the middle single sheet 43, the central tab 22, the end tabs 25, and 26, and the long rectangular tab 16 of the separable member being adhered to the outer surfaces of the outside double sheet 40.

From the foregoing it will thus be seen that by this invention there is provided a leaf-holding element and a stub element for use in securing interchangeable leaves within a binder. The leaf holding means comprises the member 15 which is separable as contradistinguished from the stub member 4 which is relatively fixed with respect to the binder and the separable member is unitary, being cut from sheet material in such manner as to provide the plural tabs, the end ones of which are adapted to be folded over against the main tab portion 16 along the line such as 29 which is oblique to the major folded line 18; the end tabs being secured by stitching 30 to hold the same in folded position as well as to form the pockets 35.

The stub member 4 is impaled in any manner with respect to the binder and consists of a planar strip of comparatively rigid material substantially rectangular in shape and having straight sides, with cuts 10 extending inwardly from one edge creating the hook-like or projecting portions 13 which are reversely formed so as to be extensive in opposite directions. Further it should be particularly noted that the hook-like portions 13 lie wholly within the confines as well as the plane of the strip 4. Lastly the members 4 and 15 are so formed that the projections 13 will snugly fit the pockets 35 with the ultimate result that the inner edges of the held leaves will substantially abut the longitudinal edge 12 of the stub 4.

It is obvious that those skilled in the art may vary the details of construction as well as arrangement of parts without departing from the spirit of the invention, and therefore it is not desired to be limited to the fore-

going except as may be required by the claims.

What is claimed is:—

1. In a binder, means for securing leaves, said means including a leaf-carried member and a binder-carried member, the latter member having an angularly defined hook portion lying wholly therein and adapted to engage the leaf-carried member.
2. In a binder, means for securing leaves, said means including a leaf-carried member and a binder-carried member, the latter member having a notch cut therein from one edge defining an angular portion lying wholly within said member and adapted to engage the leaf-carried member.
3. In a binder, means for securing leaves, said means including a leaf-carried member and a binder-carried member, the latter member having a notch obliquely cut therein from one edge defining an angular portion lying wholly within said member and adapted to engage the leaf-carried member.
4. In a binder, means for securing leaves, said means including a leaf-carried member and a binder-carried member, the latter member having reversely and angularly defined hook portions lying wholly therein and adapted to engage the leaf-carried member.
5. In a binder, means for securing leaves, said means including a leaf-carried member and a binder-carried member, the latter member having a pair of notches cut therein from one edge defining oppositely directed angular portions lying wholly within said member said portions adapted to engage the leaf-carried member.
6. In a binder, means for securing leaves, said means including a member secured to said leaves and having pocket-forming tabs, and a rectangular strip constituting a stub member secured to said binder, said strip having a pair of notches cut in from one longitudinal edge thereof said notches forming hook-like portions extending in opposite directions, said portions adapted to engage said tabs on the leaf-carried member.
7. In a binder, means for securing leaves, said means including a leaf-carried member having a plurality of leaf holding tabs as well as a pair of tab extensions provided with a pocket, and a binder-carried strip constituting a stub having self-contained holding means adapted to engage said pockets.
8. In a binder, means for securing leaves, said means including a unitary member provided with tabs adapted to adhesively hold said leaves, two of said tabs having a pocket associated with each, and a binder stub having self-contained holding means adapted to engage said pockets.
9. In a binder, means for securing leaves, said means including a flexible member adapted to holdingly engage said leaves when folded over the inner edges thereof and provided with two tab portions so folded as to form a pair of pockets, and a binder stub having self-contained holding means adapted to engage said pockets.
10. In a binder, means for securing leaves, said means including a flexible member adapted to holdingly engage said leaves when folded over the inner edges thereof and provided with two tab portions so folded as to form a pair of pockets extending beyond said leaf edges, and a binder stub having self-contained holding means adapted to engage said pockets whereby said leaf edges and an edge of said stub will substantially abut.
11. In a binder, means for securing leaves, said means including a folded member secured to said leaves, and a stub adapted to be secured to said binder and having a retaining portion lying within the confines of the stub, said portion adapted to engage a fold of said member.
12. In a binder, a stub having oppositely directed holding prongs, and a leaf-securing member having pockets adapted to flexibly engage with said prongs.
13. In a binder, a stub having disposed in the plane thereof oppositely directed holding prongs, and a leaf-securing member having flat pockets adapted to flexibly engage with said prongs.
14. A loose leaf binder element, the same consisting of a substantially rectangular piece of flexible material adapted to be folded throughout the major portion of its length at substantially its middle, one of the foldable parts being divided by a pair of transverse cuts creating end tabs, each end tab partially separated from the other of the foldable parts by a cut joining one of said transverse cuts and the separated part turned through substantially 90° in folding the same over against said other foldable part, and stitching across each end tab in line with the major fold creating a pocket in each tab.
15. A loose leaf binder element, the same consisting of a substantially rectangular piece of flexible material adapted to be folded throughout the major portion of its length at substantially its middle, one of the foldable parts divided by a pair of transverse cuts creating end tabs, each end tab partially separated from the other of the foldable parts by a cut joining one of said transverse cuts and the separated part folded over against said other foldable part along a line oblique to the major fold, and stitching across each end tab to hold it in folded position as well as to form a pocket in each tab.
16. A leaf securing element for binders, the same comprising a folded member having gummed leaf-holding tabs and a stub-receiving pocket at each end.
17. A loose leaf binder element, the same consisting of a stub strip adapted to be secured in the binder and provided with cuts extending inwardly from an edge creating

hook-like portions for engagement with leaf holding means.

18. A loose leaf binder stub consisting of a substantially rectangular planar strip of comparatively rigid material adapted to be impaled with respect to the binder, and leaf engaging means structurally formed within the confines of said strip.

In testimony whereof I affix my signature.

CHAS. E. RIDDIFORD.

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