Aug. 23, 1938. S. R. ROSENTHAL 2,127,619

BOOK ASSEMBLY

Filed Nov. 16, 1936 2 Sheets-Sheet 1

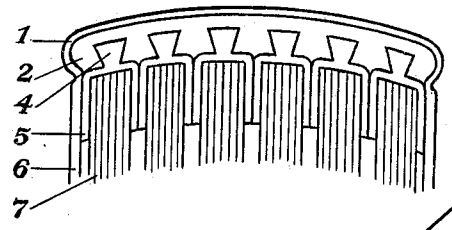


Fig. 2

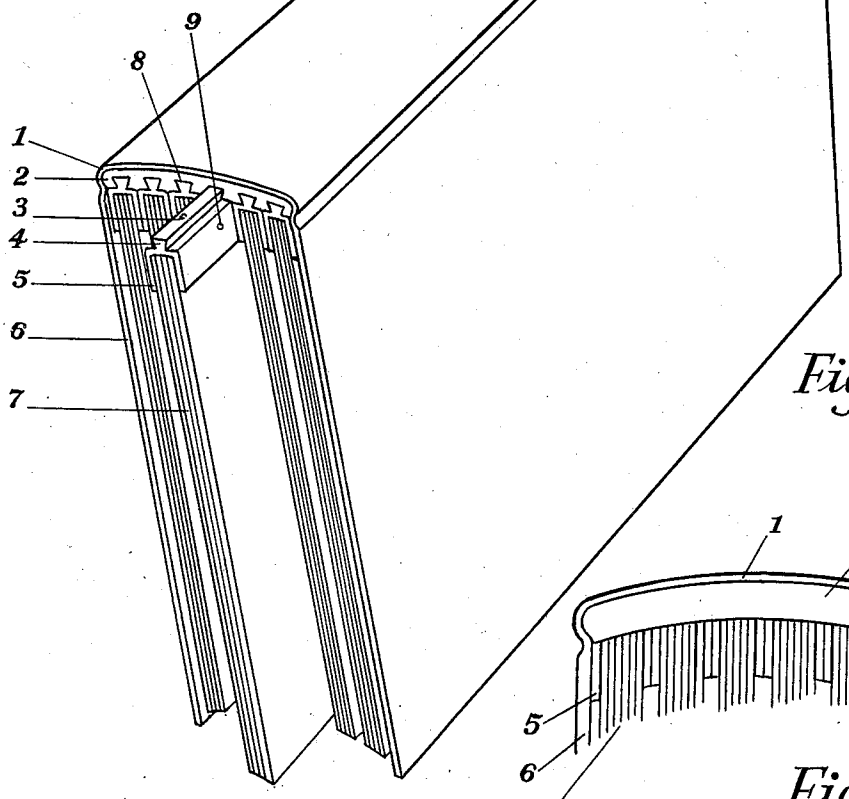


Fig. 1

Fig. 3

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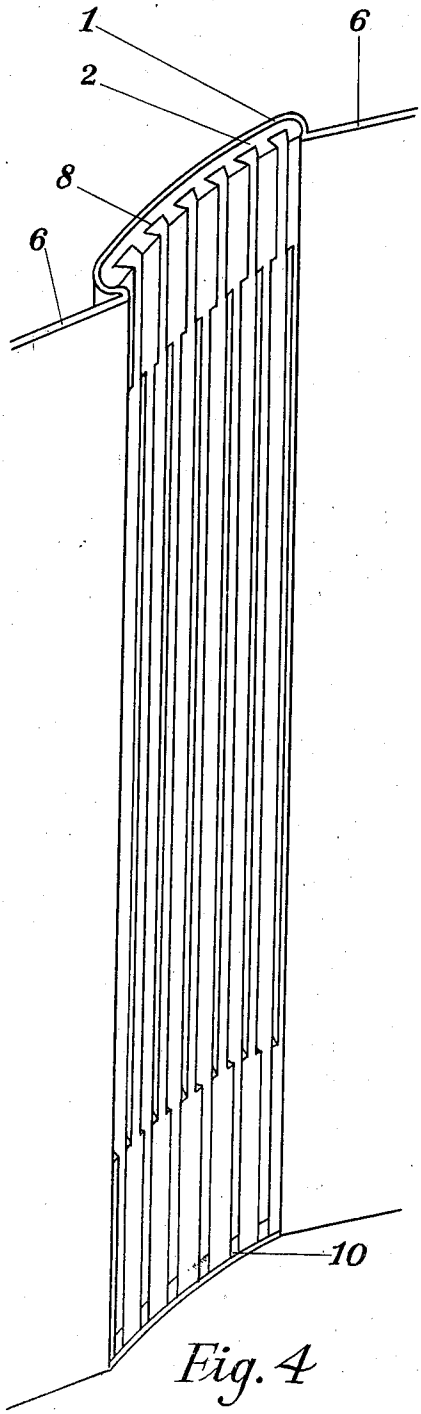


Fig. 4

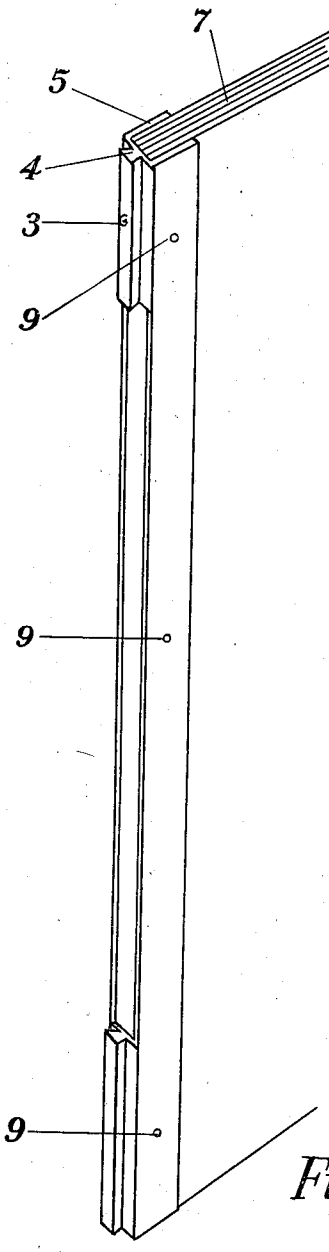


Fig. 5

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UNITED STATES PATENT OFFICE

2,127,619

BOOK ASSEMBLY

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Application November 16, 1936, Serial No. 111,036

1 Claim. (Cl. 281—17)

This invention relates to improvements in binders for groups of sheets and the like. The invention concerns itself especially with improvements in binders or holders of such construction and arrangement that the sheets may be retained in individual groups or signatures, such as the chapters of a book, and the signatures in turn may be placed and held in a suitable cover so that they are assembled into a complete assembly therein. Devices embodying the features of the present invention may therefore be well used for the group binding of various groups of sheets, such as the chapters of a book, or for the group binding of the divisible or classifiable material which it may be desirable to carry or retain within one single cover or protection, such, for example, as the various subjects of study of a student. Thus, one of the group binders may be used for mathematics, another for history, another for literature, etc., all of the group binders in turn being brought together within the assembly cover so that they are all retained in proper relationship.

One of the objects of the invention is to provide an arrangement such that the sheets of each group will be firmly retained in proper group relationship, so that by removing a group from the assembly cover it may be readily used for study as a separate assembly, of convenient size, and without having to remove any of the other material from the assembly cover. For example, when the features of the invention are used for the group assembling of the chapters of a book, each such chapter may be individually removed and read or studied, thus making it unnecessary to hold the entire book of material during the reading or studying process. Thereafter, when such chapter or group is completed, another may be removed from the assembly, the first one having been returned to the assembly cover, and thus the material will always be kept in proper condition, and properly related, but the various groups may be conveniently studied or read individually.

In connection with the foregoing, it is a further object of the invention to provide a construction of the signatures such that the sheets thereof will be well and firmly held together; and also an arrangement such that the various signatures will be easily inserted into or removed from the cover. Also, in this connection to provide an arrangement such that all of the signatures may be set into the cover from the top thereof, coming to a rest position at the bottom of the assembly cover, such that all of the signatures when so set into the assembly cover are nicely aligned, and the appearance is presented of a complete, orderly book.

Other objects and uses of the invention will appear from a detailed description of the same, which consists in the features of construction, and combinations of parts hereinafter described and claimed.

In the drawings:

Figure 1 shows a perspective view of a completely assembled device embodying the features of the invention, and in which there are provided six signatures, one of which has been partially removed from the assembly cover;

Figure 2 is a fragmentary top plan view;

Figure 3 shows a view similar to that of Figure 2, but showing the bottom of the device in fragmentary plan view instead of the top thereof;

Figure 4 shows a perspective view of the back of the assembly binder with the signatures removed therefrom, and with the covers opened out more or less fully; and

Figure 5 shows a perspective view of the back edge of the one of the signatures with its contained material, the edges of the same being cut away to shorten the figure.

The assembly binder includes the back 1 which is provided with the plate 2 having a plurality of longitudinally extending grooves 8 therein, said grooves being preferably dovetailed as indicated especially in Figures 1, 2 and 4. Each of these grooves is adapted to retain the tongue of a signature to be received and retained within the assembly binder. The back of the assembly binder is provided with the usual covers 6 which are hinged to the back of the binder in any suitable manner, the details of which need not be specified herein.

Each of the group binders or signatures includes, in the form of Figures 1, 2 and 5, a channel-shaped strip having the side flanges 5 between which the pages or leaves 7 are received and retained, said leaves being permanently secured to and within such strip in convenient manner, as by means of rivets 9. Each such channel strip is also provided along its back edge with a tongue 4 to be received within the groove of the back 2, so that the group binder may be readily slipped endwise into the assembly binder and will then be retained therein against pulling away.

Preferably, the strip for each group binder is made discontinuous, as far as the tongue 4 is concerned, leaving portions of said tongue at the upper and lower ends of the strip only, and the

central portion of the strip being formed solely of the side plates or portions of said strip, as shown in Figure 5. Likewise, the grooving of the back plate 2 may be made to conform to this feature as shown in Figure 4 in particular, so that when the group binder is set into place in the assembly binder the group binder will be properly held at its upper and lower ends. This feature also permits the group binder to be set into or removed from the assembly binder without having to perform the full lengthwise movement of the group binder, only such an amount of such movement being necessary as will release the group binder from the engagement with the tongue and groove connection.

In some cases it may be desirable to provide each signature with a button or catch such as shown at 3 in Figure 1, adapted to engage with a slight recess or depression properly formed in the back plate 2 of the binder, so as to prevent endwise movement of the signature except under sufficient urge.

Inasmuch as it is intended that the signatures shall be inserted into and removed from the assembly binder from one end thereof, I prefer to place a stop plate such as 10 at the lower end of the back plate 2, thereby closing the lower ends of the grooves, and preventing the signatures from falling out of the lower end of the assembly binder. This stop or end plate also serves to give the device a finished or completed appearance at that point, as well shown in Figure 3.

While I have herein shown and described only a single embodiment of the features of my present invention, still I do not intend to limit myself thereto except as I may do so in the claim to follow.

I claim:

In a device of the character described, the combination of an assembly binder including a back member and covers hinged thereto, and a plurality of signatures, means to individually connect said signatures to said assembly binder in removable fashion, said connecting means including for each signature an undercut groove formed on one member and a corresponding undercut tongue on the other member entering said groove endwise, together with a protruding catch member on one of said connecting members, and a corresponding recessed portion on the other of said connecting members engaging said catch member and releasably retaining said connecting members in assembled relation.

SOL R. ROSENTHAL.