Jan. 1, 1929. 1,697,644

F. O. GREEN

BOOK

Filed Feb. 25, 1928 2 Sheets-Sheet 1

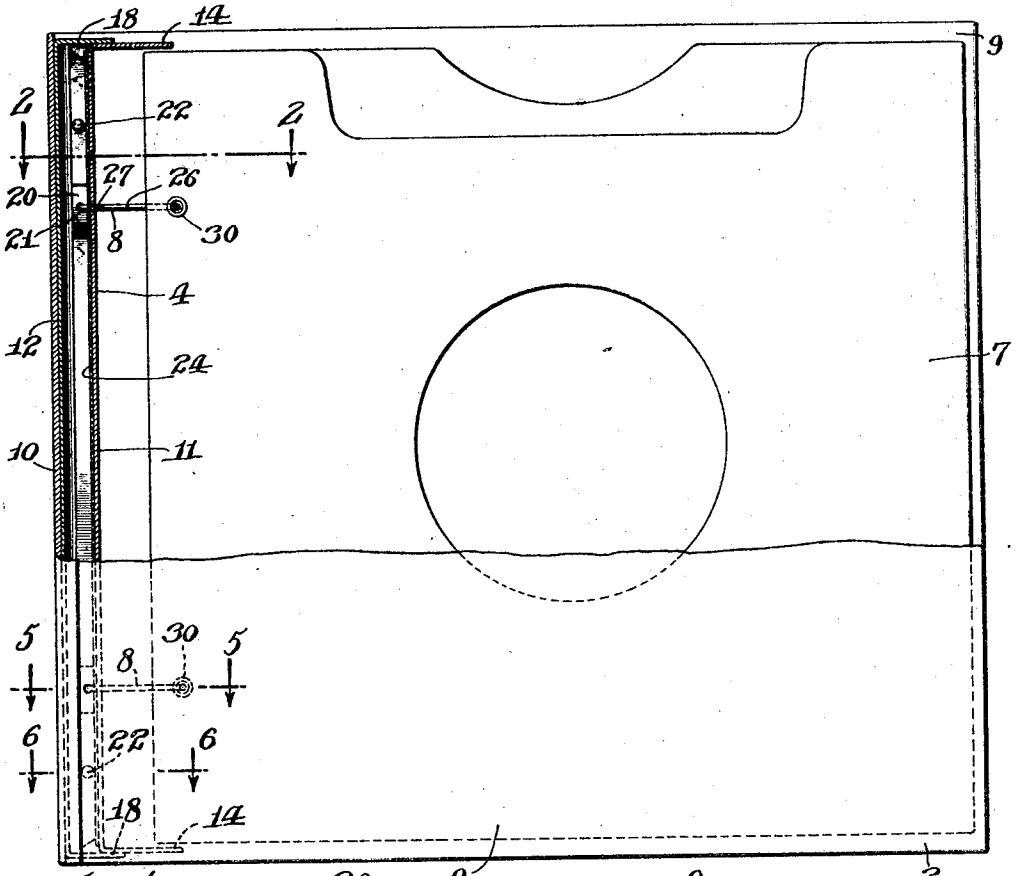


Fig. 1.

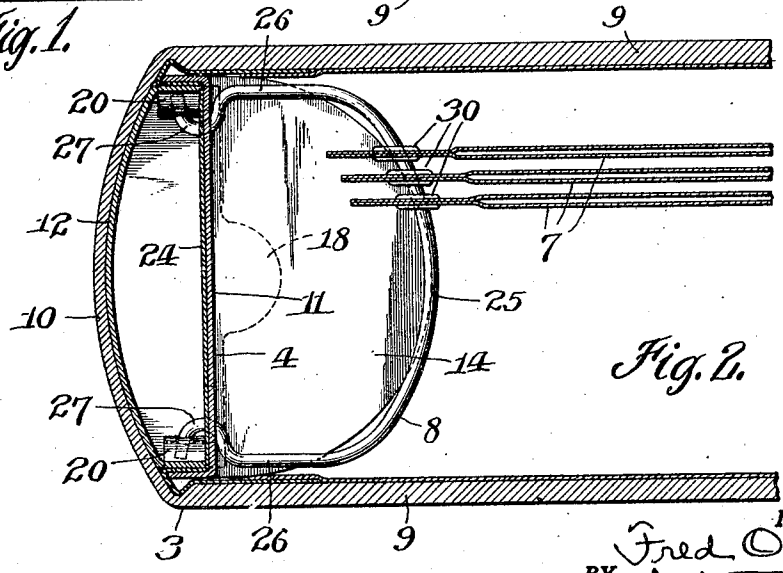


Fig. 2.

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Fig. 3.

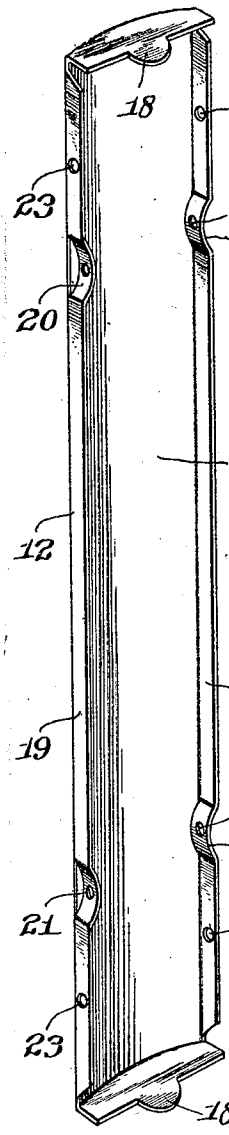


Fig. 4.

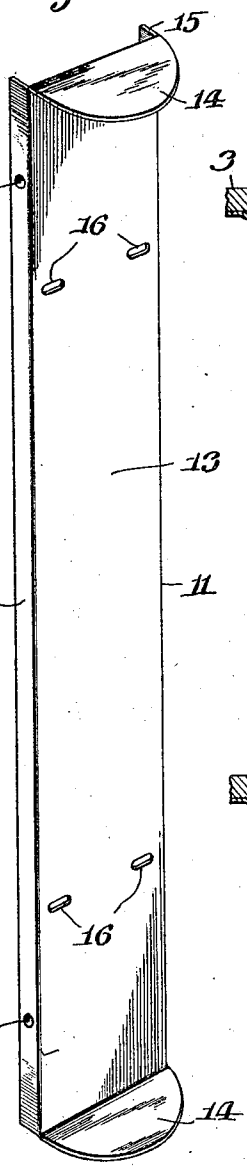


Fig. 5.

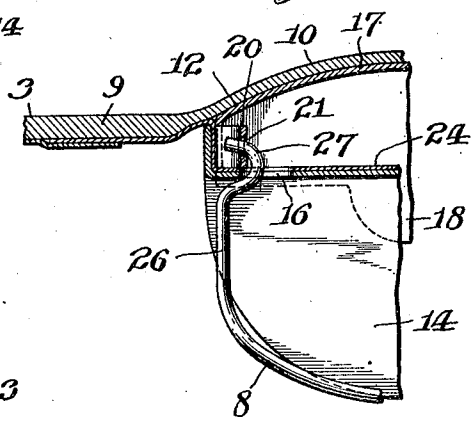


Fig. 6.

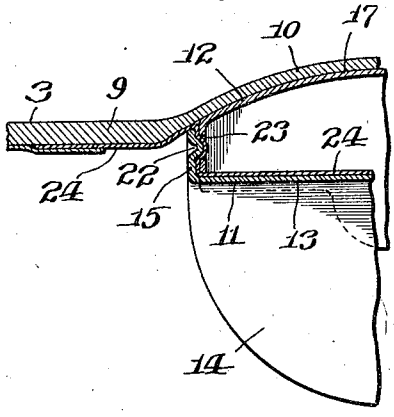


Fig. 7.

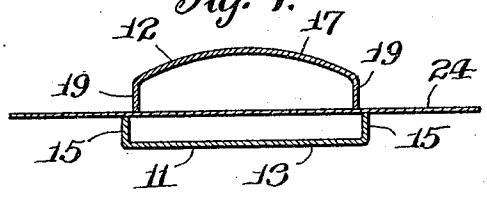
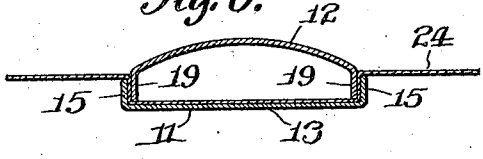


Fig. 8.



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UNITED STATES PATENT OFFICE.

FRED O. GREEN, OF HOLMESBURG, PENNSYLVANIA, ASSIGNOR TO NATIONAL PUBLISHING COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

BOOK.

Application filed February 25, 1928. Serial No. 256,874.

This invention relates to improvements in books or albums and has for its object the provision of a novel, strong, durable and inexpensive back member provided with means for connecting the leaves of the book or album thereto.

With the foregoing object and related objects in view the invention resides in the novel construction, combination and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, illustrating the invention,

Figure 1 is a side view partly in section of a book or album embodying my invention.

Figure 2 is an enlarged section thereof on line 2—2 of Fig. 1.

Figure 3 is a perspective view of the back section of the inner back member.

Figure 4 is a perspective view of the front section of the inner back member.

Figure 5 is an enlarged sectional detail, on line 5—5 of Fig. 1, showing a side member of the cover member in the open position.

Figure 6 is an enlarged sectional detail, on line 6—6 of Fig. 1, showing a side member of the cover member in the open position.

Figure 7 is a sectional view showing the two sections of the inner back member and the connecting member or sheet for connecting the inner back member to the cover member showing their relative positions just before they are assembled into final form.

Figure 8 is a view of the parts shown in Fig. 7 after the same have been assembled in final form.

Referring to the drawings, my improved book includes an outer cover member 3, an inner back member 4, a plurality of leaves 7 and connecting members 8 for connecting the inner edge portions of the leaves 7 and the back member 4.

The cover member 3 comprises side members 9 and a back member 10 hingedly connected at its sides to the rearward portions of the side members 9.

The inner back member 4 comprises front and back sections 11 and 12, respectively, each formed of sheet metal and shaped as clearly shown in Figs. 3 and 4.

The front section 11 is in the form of a longitudinally extending plate like body 13 provided with forwardly projecting end flanges 14 at its top and bottom, and it is provided with rearwardly projecting side flanges 15 at its longitudinal edge portions. The plate like body 13 is provided with suitably arranged openings 16 extending therethrough for the reception of the end portions of the connecting members 8, as will be presently explained.

The back section 12 is in the form of a longitudinally extending plate like body 17 provided with forwardly projecting end flanges 18 at its top and bottom and it is provided with forwardly projecting side flanges 19 at its longitudinal edge portions. The side flanges 19 have suitably arranged inwardly bowed portions 20 provided with apertures 21 therein for the reception of the end portions of the connecting members 8, as will be presently explained.

In assembling the front and back sections 11 and 12 of the inner back member 4, the side flanges 19 of the back section 12 are entered between the side flanges 15 of the front section 11 and the end flanges 14 of the front section 11 are entered between the end flanges 18 of the back section 12 in abutting relation thereto; and assembled, rounded projections 22 on the inner opposing surfaces of the side flanges 15, formed by indenting the outer surfaces thereof, enter registering holes or openings 23 in the side flanges 19 and thereby lock or hold the two sections 11 and 12 firmly together. The flanges 15 and 19 of the sections 11 and 12 occupy positions in close parallel relationship when the sections are assembled and the resiliency of the metal forming the sections permits the flanges 15 and 19 to be sprung slightly out of normal condition to permit the rounded projections 22 to be sprung into registry with the openings 23 after which the return of the flanges to normal condition causes the projections 22 to enter the openings 23 and lock the sections.

Before assembling the front and back sections 11 and 12 of the inner back member 4, a flexible sheet 24 of strong and durable material such as fabric or leather is laid across the back section 12 as shown in Fig. 7, so that the side portions of the sheet will extend outwardly from the sides of the sections 12. The sections 11 and 12 are then forced together, folding the sheet 24 between the side flanges 15 and 19 at each side of the back member 4, as shown in Fig. 8, thereby causing the side flanges to clamp the sheet 4 firm-

ly between them and thus secure the sheet to the back member with the side portions of the sheet extending outwardly from the sides of the plate like body portion 17 of the back section 12 and forming, in effect, outwardly extending flexible continuations thereof. The sheet 24, being flexible, is forced into the openings 23 of the flanges 19 by the projections 22 of the flanges 15, as shown in Fig. 6.

The plate like body portion 17 of the back section 12 of the inner back member 4 is made rounded, as shown, and it is of substantially the same size as the back member 10 of the cover member 3, and it is fitted snugly against and glued to the inner or forward surface thereof. The inner back member 4 is additionally secured to the cover member 3 and held firmly in place by the projecting side portions of the sheet 24 which are glued or otherwise suitably secured to the cover member. The projecting side portions of the sheet 24 extend over the side members 9 of the cover member 3 and over the hinged connection between the side members 9 and the back member 10 and thus not only strengthen and reinforce such hinged connections but form additional hinged connections between the sides of the inner back member 4 and the side members 9 of the cover member.

The side members 9 of the cover member are formed of stiff pasteboard as is usual in book construction, and the back member 10 is made more flexible than the side members 9 so that it will readily conform to the curvature of the back section 12 of the inner back member 4, and when all the parts are secured together by the connecting sheet or member 24, the back 10 of the cover member is supported by the inner back member 4 and the whole presents a strong and durable book or album construction.

The connecting members 8 are formed of relatively stiff spring wire, each being shaped as clearly shown in Fig. 2 and comprising a loop 25 having legs or side portions 26 which terminate in hooks 27 having outwardly directed free end portions. The hooks 27 extends through the openings 16 of the inner back member 11 and also through registering openings in the sheet 24, and the free end portions of the hooks 27 extend into the apertures 21 formed in the side flanges 19 of the back section 11 of the inner back member.

The openings 16 are made in the form of slots of a width equal to or slightly in excess of the diameter of the wire forming the members 8 and the legs 26 of each member 8 may be sprung toward and from each other within the slots or openings 16. By springing the legs 26 of each member toward each other, the hooks 27 may be withdrawn from the apertures 21 and the hooks withdrawn from the openings 16 for detaching the connecting members 8 from the inner back member 4. Normally the distance between the two legs 26 of each member 9 is slightly greater than that shown in Fig. 2 so that after each member 8 has been applied to the back member 4 by springing the legs 26 toward each other and inserting the hooks 27 through the openings 16 and into the apertures 21, the outward spring pressure of the legs 26 will hold the hooks 27 firmly within the apertures. When the connecting members 8 are in place they project forwardly from the inner or forward surface of the back member 4 substantially at right angles thereto, and undue up and down rocking of the members 8 on their hooks 27 is prevented by the engagement of the hooks with the side walls of the slots or openings 16.

The rearward edge portions of the leaves 7 are provided with holes or apertures therein through which the connecting members 8 are threaded, permitting the leaves to hinge upon the members 8 and to slide thereon from side to side of the back members and to lie flat against each other and against either side member 9 of the cover member 3 when the book or album is open so that it may be opened as desired between any two adjacent leaves 7.

Leaves 7 may be made in any desired form for their intended purpose and any desired number of leaves within the capacity of the book or album may be placed therein. As herein illustrated, the leaves 7 are made in the form of envelopes or pockets open at their tops for the reception of phonograph disc records or other articles; and when the leaves are made in this form my improved device constitutes a very desirable record album. By detaching the connecting members 8 from the back member 4 and thereafter replacing them, some or all of the leaves or envelopes 7 may be easily and quickly removed from the book or album or other leaves or envelopes may be added to them and placed within the book as desired.

The holes or apertures in the leaves 7 are formed by metal eyelets 30 which prevent wear upon the leaves and permit them to slide freely along the connecting members 8.

The rearward edge portions of the leaves or envelopes 7 extend into the space between the end flanges 14 of the back member 4 in close relation to the flanges so that the flanges will assist the connecting members 8 in supporting the leaves 7 and retaining them in place within the book.

I claim as my invention:

1. In a book, a back member comprising front and back sections having abutting end flanges holding them together against longitudinal relative displacement, the front section having a longitudinally extending plate-like body provided with rearwardly project-

ing side flanges at its longitudinal edge portions, the back section having a longitudinally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, said flanges of the two sections being provided with means for holding the sections together, a plurality of leaves, and means adapted to connect the leaves to the back member.

2. In a book, a back member comprising front and back sections, the front section having a longitudinally extending plate-like body provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudinally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, the flanges of one section having projecting parts extending into openings in the other section and preventing the displacement of one section from the other, a plurality of leaves, and means adapted to connect the leaves to the back member.

3. In a book, a back member comprising front and back sections, the front section having a longitudinally extending plate-like body provided with rearwardly projecting side flanges at its longitudinal edge portion, the back section having a longitudinally extending plate-like body provided with forwardly projecting end flanges and forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, the front section having end flanges projecting forwardly between the end flanges of the back section, said flanges of the two sections being provided with means for holding the sections together, and leaf-impaling means carried by the back member.

4. In a book, a back member comprising a back wall, a front wall provided with openings therein, and parts provided with apertures therein between said walls, in combination with leaf-impaling members having end portions extending through said openings and into said apertures.

5. In a book, a back member comprising front and back sections, the front section having a longitudinally extending plate-like body having openings therein and provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudinally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions located between the side flanges of the front section and having apertures therein, said flanges of the two sections being provided with means for holding the sections together in combination with leaf-impaling members having end portions extending through said openings and into said apertures.

6. In a book, a back member comprising front and back sections, the front section having a longitudinally extending plate-like body provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudinally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, said flanges of the two sections being provided with means for holding the sections together, one of said sections having forwardly projecting end flanges, a plurality of leaves movable between said end flanges, and means connecting the leaves and the back member.

7. In a book, an outer cover member comprising a back and side members hingedly connected thereto, an inner back member adjacent to the back of the cover member and comprising front and back sections, the front section having a longitudinally extending plate-like body provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudinally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, said flanges of the two sections being provided with means for holding the sections together, a connecting member extending between said sections and having side portions extending from the sides of the inner back member and attached to the cover member, and leaf-impaling means carried by the inner back member.

8. In a book, an outer cover member comprising a back and side members hingedly connected thereto, an inner back member adjacent to the back of the cover member and comprising front and back sections having abutting end flanges holding them together against longitudinal relative displacement the front section having a longitudinally extending plate-like body provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudinally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, said flanges of the two sections being provided with means for holding the sections together, a connecting member extending between said sections and having side portions extending from the sides of the inner back member and attached to the cover member, a plurality of leaves, and means connecting the leaves and the inner back member.

9. In a book, a back member comprising front and back sections, the front section having a longitudinally extending plate-like body provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudi-

nally extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions between the side flanges of the front section, the flanges of the front section having rounded projections on the inner surfaces thereof extending into holes in the flanges of the back section and preventing the displacement of one section from the other, and leaf-impaling means carried by the back member.

10. In a book, a back member comprising front and back sections provided with means to hold them together, the front section having a longitudinally extending plate-like body having openings therein and provided with rearwardly projecting side flanges at its longitudinal edge portions, the back section having a longitudinal extending plate-like body provided with forwardly projecting side flanges at its longitudinal edge portions located between the side flanges of the front section and having inwardly bowed portions provided with apertures spaced from the side flanges of the front section, in combination with leaf-impaling members having end portions extending through said openings and into said apertures.

In testimony whereof I affix my signature.

FRED. O. GREEN.