

May 2, 1961

E. H. WOLFE

2,982,568

UPRIGHT DISPLAY BINDER

Filed Aug. 18, 1958

2 Sheets-Sheet 1

Fig. 1.

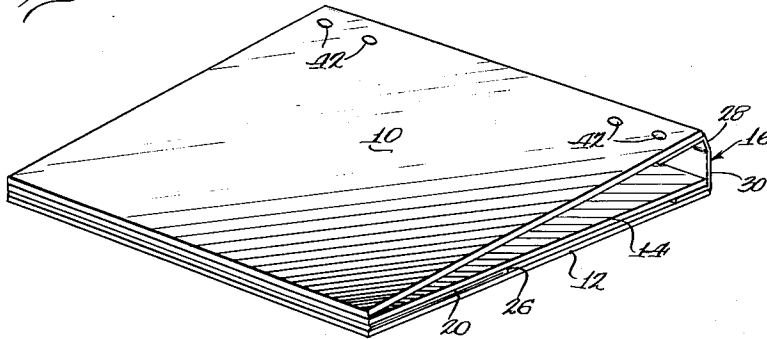
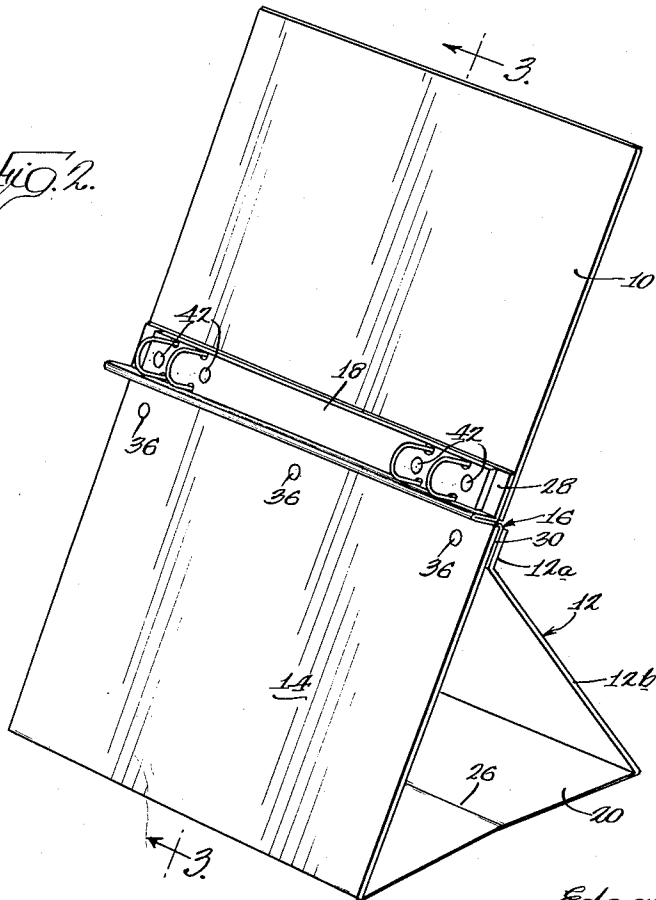


Fig. 2.



INVENTOR.
Edgar H. Wolfe
BY
*Brown, Jackson,
Boettcher & Diener*
Attys

May 2, 1961

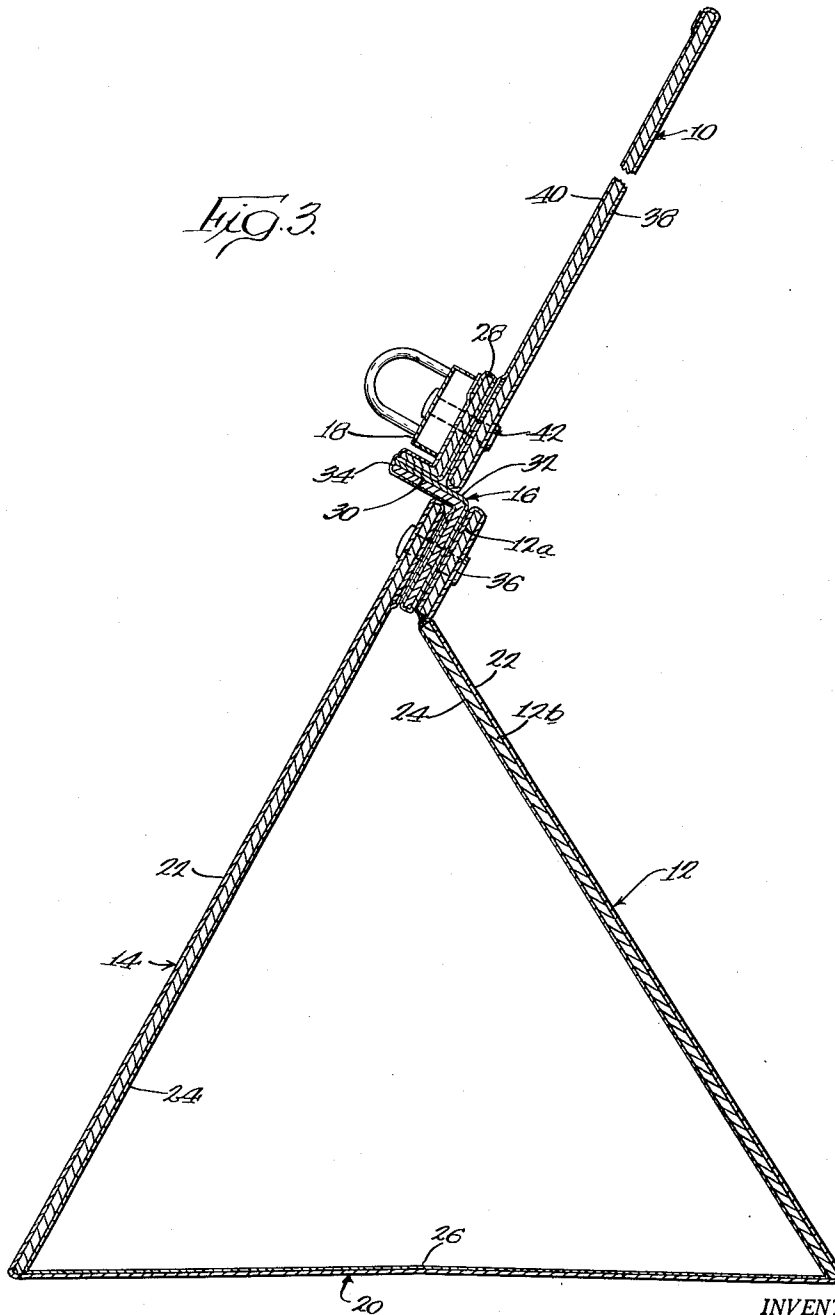
E. H. WOLFE

2,982,568

UPRIGHT DISPLAY BINDER

Filed Aug. 18, 1958

2 Sheets-Sheet 2



INVENTOR.
Edgar H. Wolfe
BY
Brown, Jackson,
Boettcher + Diemmer
Attys.

1

2,982,568

UPRIGHT DISPLAY BINDER

Edgar H. Wolfe, Winnetka, Ill., assignor to The Barrett Bindery Co., Chicago, Ill., a corporation of Illinois

Filed Aug. 18, 1958, Ser. No. 755,721

5 Claims. (Cl. 281—33)

The present invention relates to display binders, and particularly, to improvements in binders of the type adapted to support two sheets of display matter in an upstanding position one above the other in a substantially common plane thereby effectively to exhibit an unbroken double page illustration.

Binders of the general character described are known, the same having been disclosed in Patent No. 2,208,213 to Ericson and Patent No. 2,236,591 to Barrett. These known binders serve a very useful purpose in the art and have met with substantial commercial success. However, the same are relatively difficult and expensive to manufacture, and in use are subject to collapsing from their set-up position when inadvertently bumped or jarred.

The object of the present invention is to provide an improved binder of the type described that is economical and simple to produce and that will maintain its set-up position even under severe abuse.

More specifically, it is an object of the present invention to provide a binder of the type described having improved hinge means that facilitates setting-up of the binder in its upright position and firmly braces and retains the binder in such position.

In detail, it is an object of the invention to provide improved hinge means in binders of the defined character comprising a pair of rigid angle members hingedly connected along adjacent edges thereof in such manner as to be relatively movable through an angle of approximately 180 degrees from a position in which the members define a channel to a position wherein the hingedly connected legs of the members abut against one another and the other legs of the members extend in opposite directions from the plane of the abutting legs.

Another object of the invention is to provide a binder of the defined character including the hinge means above defined, a front cover board fixed to the said other leg of one of the angle members, an easel board fixed to the said other leg of the other angle member, and a rear cover board hingedly connected to the said other leg of said other angle member, said boards being superimposed in substantially coextensive relation and the channel defined by the two angle members forming the backbone of the binder in the closed position of the binder, said rear cover board being swingable away from said easel board to brace said easel board in an upright position with said angle members uppermost, and said front cover board being swingable through an arc of substantially 180 degrees relative to said easel board to bring the said hingedly connected legs of said angle members into abutting engagement and dispose said front cover board in substantially co-planar relation with and above said easel board, said angle members securely retaining said front cover board in its latter position.

A further object of the invention is the provision of an improved binder as above defined wherein the front cover board is formed and decoratively covered entirely separately of the other components of the binder and

2

is subsequently attached to said other leg of said one angle member, thereby to render production of the binder expedient and economical.

A still further object of the invention is the provision of an improved binder as described wherein said easel board and said rear cover board are covered by a single decorative sheet and said sheet includes a spreader portion extending between the lower or relatively movable edges of the two boards to limit separation thereof of cause said rear cover board securely to brace said easel board in its upright position.

In addition, it is an object of the invention to provide an improved method of producing a loose-leaf binder hinge as above described comprising the steps of laying two flat strips of metal side by side, gluing a covering material to the two strips thereby hingedly to connect the same, and subsequently bending each strip to angle form along lines parallel to their hinged connections.

Other objects and advantages of the invention will become apparent in the following detailed description of a preferred embodiment thereof.

Now, in order to acquaint those skilled in the art with the manner of making and using my improved display binder, I shall describe, in connection with the accompanying drawings, a preferred embodiment of the binder and a preferred manner of making the same.

In the drawings:

Figure 1 is a perspective view of my improved binder in its closed position;

Figure 2 is a perspective view of the binder in its set-up or upright position; and

Figure 3 is a vertical cross-section of the binder in its set-up position.

Referring now to the drawings, I have illustrated the preferred embodiment of my invention as being comprised of a front cover board 10, a rear cover board 12, an easel board 14 disposed between the cover boards in the closed position of the binder, a backbone defining hinge 16 which hingedly connects the front cover board to the boards 12 and 14, a binding mechanism or metal 18 mounted adjacent and parallel the hinge 16, and a spreader 20 extending between the lower edge portions of the rear cover board 12 and the easel board 14 for limiting separation of said edge portions.

According to the present invention, the easel board 14, the rear cover board 12 and the spreader 20 are formed as one subassembly of the binder. The easel board 14 constitutes a solid or rigid sheet of conventional board stock and is formed of a size slightly larger than the sheets of advertising or descriptive matter to be displayed by the binder. The rear cover board 12 is of the same size as the easel board, but is formed of two hingedly connected pieces, namely, a narrow mounting stub 12a defining the upper edge portion of the board and a major portion 12b. The exposed or exterior surfaces of the boards 12 and 14 are covered with a unitary sheet 22 of decorative covering material, such as simulated leather, and this sheet of material serves, first, to hingedly connect the portions 12a and 12b of the rear cover, and second, to of itself define the spreader 20 between the lower or outer edges of the boards 12 and 14. Also, I prefer to cover the interior surfaces of these components with a common or unitary sheet 24 of lining material. To facilitate folding of the binder to the closed position shown in Figure 1, the cover sheet 22 and the liner 24, in the portions thereof defining the spreader 20, are precreased centrally between and parallel to the lower edges of the boards 12 and 14, as indicated at 26. In view of their construction and make-up, the components 12a, 12b, 14, 20, 22 and 24 may be assembled conveniently and economically in a flat condition separately of the other components of the binder.

As best shown in Figure 3, the hinge 16 preferably comprises two hingedly connected angle members 23 and 30, both of which are preferably formed of metal stock. The two members are hingedly connected, in the preferred structure, by a unitary sheet 32 of exterior covering material, suitably the same material as employed for the sheet 22, and by a unitary liner 34, suitably of the same material as the liner 24. The members 23 and 30 are preferably of right angular form as viewed in cross-section and, due to the connection thereof, are relatively movable through an arc of approximately 180 degrees from the position shown in Figure 1, in which they define a channel and constitute the backbone of the binder, to the position shown in Figures 2 and 3 wherein the adjacent and hingedly connected legs of the angles abut against one another and the other legs thereof extend in opposite directions from the plane of the two abutting legs.

The downwardly extending one of the oppositely projecting legs is disposed between the upper edge portion of the easel board 14 and the stub 12a of the rear cover board 12, and these three parts are rigidly secured together by means of a plurality of rivets 36 extending therethrough. By virtue of this construction and assembly, the boards 12 and 14 and the spreader 20 define a triangle in which the rear cover board 12 securely braces the easel board 14 in an inclined upright position, preferably at an angle of about 65 degrees. Consequently in the open position of the binder, the oppositely extending legs of the angle members 23 and 30 extend at substantially the same angle as the easel board, i.e., 65 degrees, and the abutting legs of said members are inclined upwardly at the complement of said angle with the hinged connection of the abutting legs disposed uppermost.

To the exterior surface of the upwardly extending one of the legs of the hinge 16 is secured the front cover board 10. This board is adapted to be formed entirely separate of the other components of the assembly and is comprised, preferably, of a rigid sheet of a conventional board stock of the same size as the easel board 14, a decorative exterior covering sheet 38 and an interior liner 40. Due to its separate formation, the front cover board is manufactured economically and expediently. In addition, embossing of the same for purposes of decoration and identification is greatly facilitated since the embossing may be done directly on the flat single board prior to assembly thereof in the binder.

The binding mechanism or metal 18 may be of any desired type, a suitable form being illustrated, and the same is preferably mounted immediately above the hinged connection of the front and easel boards. Consequently, I prefer to mount the binding mechanism on the inner surface of the upstanding leg of the hinge 16 and the front cover board 10 on the exterior surface of this leg and to secure the three components together by a common set of fasteners or rivets 42. In the resulting structure, it is desired that the front cover board extend upwardly from the easel board 14 in co-planar relation therewith, and to effect this result, in view of the relative attachment of the oppositely extending legs of the two members of the hinge, I form the abutting leg of the lower member 30 longer than the abutting leg of the upper member 23 by a distance equal approximately to the combined thicknesses of the easel board and the lower angle member 30.

When the assembly is completed in the manner above described, the binder is readily folded into the closed position illustrated in Figure 1, wherein the three boards 10, 12 and 14 are superimposed on one another in co-extensive relation and the hinge 16 forms a rigid, neat, substantially square or right angular backbone for the binder, whereby the binder constitutes a compact and attractive carrying case for display matter and protects such matter from damage or mutilation. When a presentation is to be made, the binder is quickly and convenient-

ly set up in the position of Figures 2 and 3 simply by spreading the lower edges of the boards 12 and 14 to the limit permitted by the spreader, resting the binder on said edges and swinging the front cover 10 upwardly.

In the open position, the triangular base formed by the members 10, 12 and 20 securely supports the binder in its upright position and the hinge 16 securely retains the front cover in upwardly extending co-planar relation to the easel board, whereby a tall and effectively continuous surface is offered for display of unbroken double page illustrations. The pages of the display may be turned upwardly from the easel board or downwardly from the front cover board, the latter generally proving more effective. As set up, the front cover board projects rearwardly and upwardly from the hinge and the weight of the front cover thereby mitigates collapsing of the binder. Moreover, the hinge prohibits all relative movement of the front and easel boards other than relative arcuate movement, and due to the upward extension of its abutting legs, restricts movement of the front cover to upward swinging movement, whereby collapsing of the binder is effectively prevented even in cases of severe abuse.

The hinge 16 afforded by the present invention thus results in a much sturdier and more reliable upright display binder than has heretofore been available, and also accommodates, in accordance with this invention, production of the binder in a most economical and facile manner. In keeping with the keynote of economy, I prefer to utilize the form of hinge illustrated and described, although I realize that a conventional piano hinge could be substituted therefor if desired. Moreover, I prefer to produce my economical form of hinge according to an improved method which assures its formation in an economical and expedient manner and which comprises the steps of placing two flat strips of metal side by side, gluing covering and/or lining material to one and/or both sides of the two strips hingedly to connect the same, and subsequently, but while the glue is soft, bending the two strips to the right angular form illustrated and described herein along lines parallel to their hinged connection.

In view of the foregoing, it is apparent that all of the objects of this invention are attained in an expedient, economical and practical manner, and that an improved upright display binder is afforded which enjoys substantial advantages over prior efforts in the art.

While I have shown and described what I regard to be the preferred embodiment of my invention, and the preferred manner of making and using the same, it will be appreciated that various changes, rearrangements, and modifications may be made therein without departing from the scope of the invention, as defined by the appended claims.

I claim:

1. In a display binder, a front cover board, an easel board, two angle members having outer legs fixed to the rearward portions of said cover board and easel board respectively and inner legs projecting inwardly thereof, said inner legs of said angle members being hinged together at their inner edges, a rear cover board comprising a main portion and a stub strip hinged to the rearward edge of said portion and fixed to the rearward edge portion of said easel board, and spreader means connecting the forward edge portions of said easel board and rear cover board and limiting movement apart thereof to positions effective for supporting said easel board in display position at an upward and rearward inclination, said angle members having relative turning movement about the axis of said hinged connection therebetween effective for seating the inwardly extending leg of said front cover angle member on the inwardly extending leg of said easel board angle member with said front cover board extending upwardly substantially parallel with said easel board.

2. In a display binder, a front cover board, an easel board, two angle members having outer legs fixed to the

5

rearward portions of said cover board and easel board respectively and inner legs projecting inwardly thereof, said inner legs of said angle members being hinged together at their inner edges, a rear cover board comprising a main portion and a stub strip hinged to the rearward edge of said main portion, said strip being fixed to the rearward edge portion of said easel board and to the outer leg of said easel board angle member, and spreader means connecting the forward edge portions of said easel board and rear cover board and limiting movement apart thereof to positions effective for supporting said easel board in display position at an upward and rearward inclination, said angle members having relative turning movement about the axis of said hinged connection therebetween effective for seating the inwardly extending leg of said front cover angle member on the inwardly extending leg of said easel board angle member with said front cover board extending upward substantially parallel with said easel board.

3. In a display binder, a front cover board, an easel board, two angle members having outer legs fixed to the rearward portions of said cover board and easel board respectively and inner legs projecting inwardly thereof, said inner legs of said angle members being hinged together at their inner edges, a rear cover board comprising a main portion and a stub strip hinged to the rearward edge of said main portion, the inner leg of said easel board angle member extending over the rear edge of said easel board and the outer leg of said easel board angle member extending downward along the outer face of said easel board, said strip seating on said outer leg of said easel board angle member and being secured thereto, and spreader means connecting the forward edge portions of said easel board and rear cover board and limiting movement apart thereof to positions effective for supporting said easel board in display position at an upward and rearward inclination, said angle members having relative turning movement about the axis of said hinged connection therebetween effective for seating the inwardly extending leg of said front cover angle member on the inwardly extending leg of said easel board angle member with said front cover board extending upward substantially parallel with said easel board.

4. In a display binder, a front cover board, an easel board, two angle members having outer legs fixed to the rearward portions of said cover board and easel board respectively and inner legs projecting inwardly thereof, said inner legs of said angle members being hinged together at their inner edges, a rear cover board comprising a main portion and a stub strip hinged to the rearward edges of said main portion, the inner leg of said easel board angle member extending over the rear edge of said easel board and the outer leg of said easel board angle member extending downward along the outer face

6

of said easel board, said strip seating on said outer leg of said easel board angle member and being secured thereto and to said easel board, and spreader means connecting the forward edge portions of said easel board and rear cover board and limiting movement apart thereof to positions effective for supporting said easel board in display position at an upward and rearward inclination, said angle members having relative turning movement about the axis of said hinged connection therebetween effective for seating the inwardly extending leg of said front cover angle member on the inwardly extending leg of said easel board angle member with said front cover board extending upward substantially parallel with said easel board.

5. In a display binder, a front cover board, an easel board, two angle members having outer legs fixed to the rearward portions of said cover board and easel board respectively and inner legs projecting inwardly thereof, said inner legs of said angle members being hinged together at their inner edges, a rear cover board comprising a main portion and a stub strip hinged to the rearward edge of said main portion, the inner leg of said easel board angle member extending over the rear edge of said easel board and the outer leg of said easel board angle member extending downward along the outer face of said easel board, said strip seating on said outer leg of said easel board angle member and being secured thereto, the outer leg of said front cover board angle member seating on the inner face of the latter and the inner leg of said front cover board angle member being of less width than the inner leg of said easel board angle member by an amount substantially equal to the thickness of said easel board plus the thickness of the outer leg of said easel board angle member, and spreader means connecting the forward edge portions of said easel board and rear cover board and limiting movement apart thereof to positions effective for supporting said easel board in display position at an upward and rearward inclination, said angle members having relative turning movement about the axis of said hinged connection therebetween effective for seating the inwardly extending leg of said front cover angle member on the inwardly extending leg of said easel board angle member with said front cover board extending upward substantially in the plane of said easel board and seating at its lower edge on the inwardly extending leg of said easel board angle member.

References Cited in the file of this patent

UNITED STATES PATENTS

2,236,591	Barrett	Apr. 1, 1941
2,258,282	Ericson	Oct. 7, 1941
2,313,713	Lotter	Mar. 9, 1943
2,329,351	Korvin-Kroukovsky	Sept. 14, 1943