May 6, 1941. F. A. SUNDERHAUF ET AL 2,241,075

DISPLAY

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Fig. 1

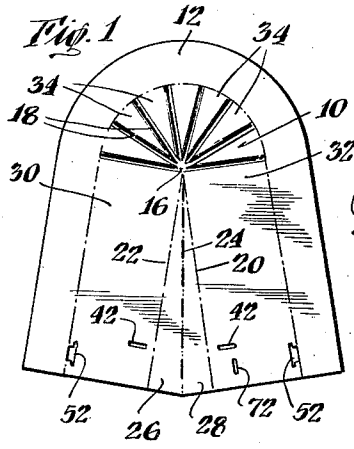


Fig. 2

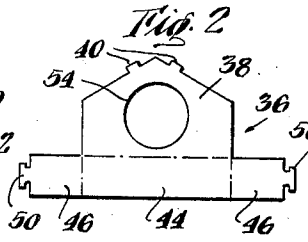


Fig. 3

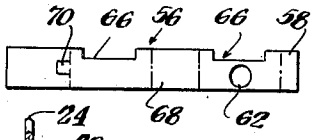


Fig. 5

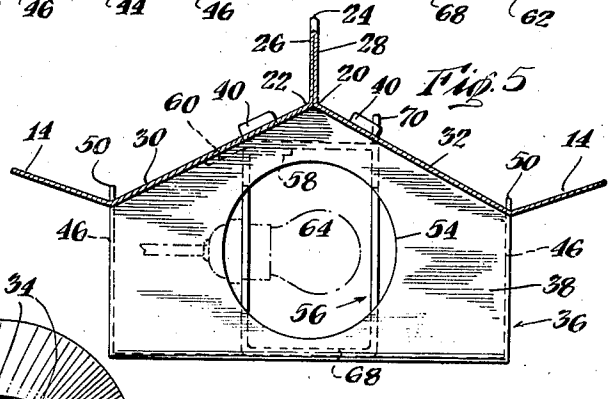


Fig. 4

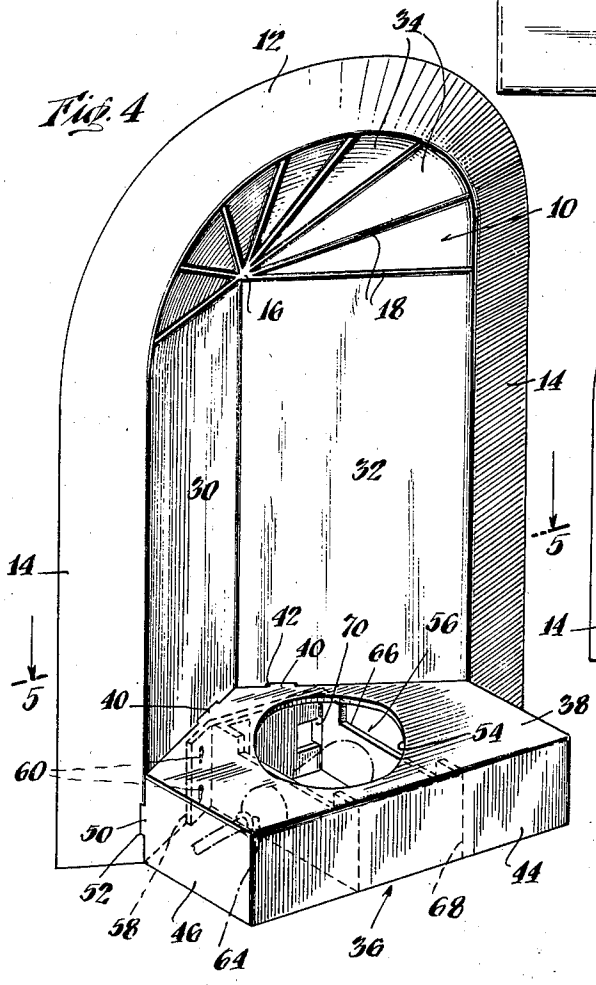


Fig. 6

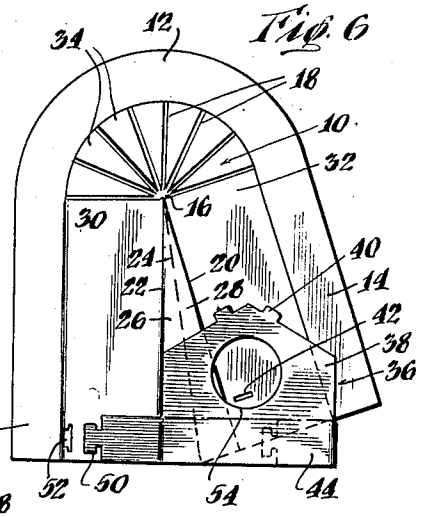


Fig. 7



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DISPLAY

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Fig. 8

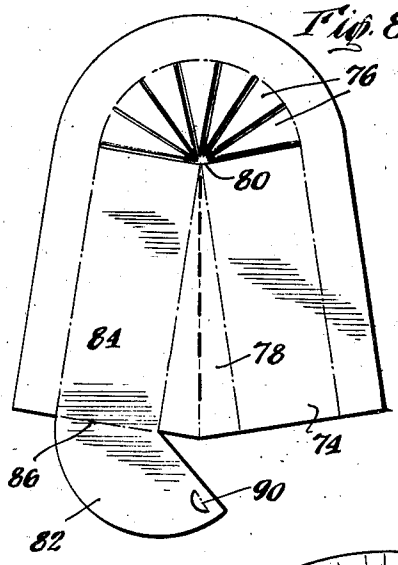


Fig. 10

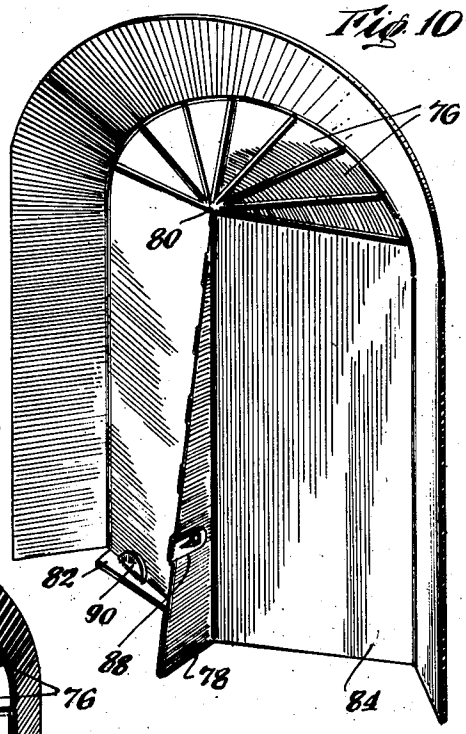
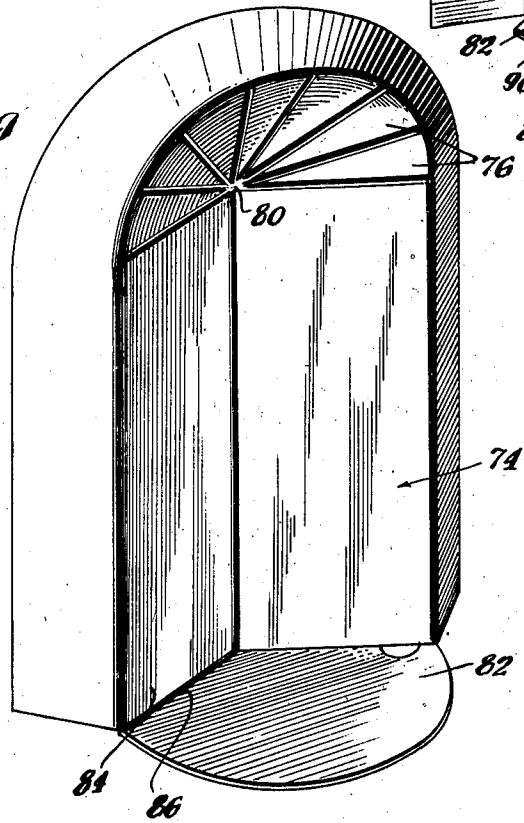


Fig. 9



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DISPLAY

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Application March 27, 1939, Serial No. 264,414

5 Claims. (Cl. 248—152)

This invention relates to new and improved flat collapsible display for merchandise, particularly bottled goods, the parts of which may be constructed economically by modern die cutting methods from a light stock, such as cardboard, which stock preferably is covered by a metallic foil.

Heretofore a vast number of flat collapsible displays have been suggested and while some have achieved considerable success; nevertheless, most have been open to the criticism that they have been either difficult to die cut or die score, difficult to assemble, bulky to ship, or unattractive, and some have been open to all these criticisms.

Therefore, it is an object of our invention to cheaply and economically produce a die cut and scored flat collapsible display, which ships in a convenient form flatwise, which is particularly ornamental and attractive, and which is easy to assemble.

It is a further object to produce such a display as is described which will be provided with angulated reflective panel surfaces, preferably by means of surfacing cardboard with a highly reflective material, such as aluminum foil.

It is a further object of our invention to provide such a collapsible metal foil covered cardboard display which may be shipped flat and which is easy to assemble and when assembled forms a strong and stable display structure suitable for day and night display purposes, it being feasible to supply such a structure as we will presently describe, with means of illumination, preferably an ordinary electric light bulb, colored or otherwise. Such displays, when properly fabricated, are attractive and compel the attention of prospective buyers.

These and various other objects and advantages will be readily understood from the following description taken in connection with the accompanying drawings of the preferred embodiments of the invention in which modifications may be made without departing from the inventive concepts defined in the appended claims.

In the drawings:

Fig. 1 is a plan view of a blank suitable for forming the main body portion, or rear portion of a display made in accordance with my invention.

Fig. 2 is a plan view of a platform, or front portion, associated with the display portion illustrated in Fig. 1.

Fig. 3 is a plan view of an easel, or merchandise supporting member for association with the members shown in Figs. 1 and 2.

Fig. 4 is a perspective view of the assembled display.

Fig. 5 is a section taken on the line 5—5 of Fig. 4.

Fig. 6 is a plan view of the display illustrated in Fig. 4, when the same is in knock-down form, flatwise for convenient shipping.

Fig. 7 is a cross-section taken of a stock of aluminum foil covered cardboard, suitable for forming the members illustrated in Figs. 1 and 2.

Fig. 8 is a plan view of a modified form of our invention.

Fig. 9 is a perspective view of the assembled blank shown in Fig. 8 and Fig. 10 is a rear perspective view of the display illustrated in Fig. 9.

In these figures, which will now be described for illustrative purposes only, a main body portion or reflective display portion 10 is formed in a semi-rounded shape, as indicated, with a rounded top or marginal panel portion 12, and with an angulated bottom portion 14.

We provide an attention compelling so-called "optical center," identified as 16, in the main body 10 by running die scored radial lines from center 16 upwardly and outwardly to the marginal panel 16 of the display, such radial lines being identified as 18; these lines also aid in folding the main body portion 10 as will hereinafter be described.

Also radiating from center 16 are three additional lines, namely 20 and 22, which are die scored and line 24 which is die scored and die cut in alternate portions as this forms a main fold line and permits segmental panel portions 26 and 28 to be folded one against the other forming a segmental tuck, and permitting the main reflective panel portions 30 and 32 to be in angulated position one to the other as shown in the assembled display, particularly, Figures 4 and 5: as will be readily recognized from the drawings, such a disposition of parts gives a strong and stable display wherein the segmental tuck aids in maintaining the display upright: also placing panel portions 26 and 28 together under pressure tensions the remainder of the display in such a way as to bow the top and marginal panel 12 slightly backwardly, and creates a group of reflective segmental panels, identified as 34, lying in slightly different planes, which segmental panel portions 34 materially add to the attractiveness of the display, helping the main reflective panel portions 30 and 32 materially.

Accordingly, it will be observed main body portion 10 is formed from a single flat blank by prop-

er die scorings and cutting, and that the assembled blank is suitable for flat shipment.

Platform member **36**, as indicated in Fig. 1, has a main body portion **38** which lies in a horizontal plane when the display is assembled, the said body portion **38** having two locking flaps **40** for insertion in slots **42** in main body portion **10**. Platform member **36** also is provided with a front panel portion **44** and two end flaps **46**, each of which is provided with T-shaped locking flaps **50** for insertion in T-shaped locking slots **52**, provided in main body portion **10**. Also, platform portion **36**, if desired, may be formed with a central opening **54** which may act as a collar for the bottom of a bottle or merchandise (not shown).

Easel portion **56**, of more or less conventional design, so long as the same is flat collapsible, is provided additionally to unit platform member **36** and main body member **10**. The easel member may be so arranged that the same when assembled will form a rectangle, indicated in Fig. 4, with an attachment flap **58** which may be stapled as indicated at **60** to the main body member **10**. Also, easel portion **56** serves to materially stiffen the display and make the same stable, and if desired may be provided with an opening **62** to accommodate an electric bulb fixture indicated as **64**; also easel member **56** may on its opposite sides be notched as at **66** in such fashion that a bottle or other merchandise may be inserted through circular opening **56**, or other form of opening and so that such bottle or merchandise will rest on easel member **56** in a desired manner.

It is essential, from a practical standpoint, that the three portions, main body portion **10**, platform member **36** and easel portion **56** be assembled so that the same are flat collapsible and yet may be easily put together in upright position for counter or window use. The particular stapling or locking slots illustrated for joining these members serve particularly well for this purpose, although the same may obviously be varied. Platform member **36** may be joined to easel member **56** by an adhesive applied to panel member **44** so as to join it with portion **68** of the easel member **56**.

As indicated, easel member **56** may have a tab **70** which projects through slot **72** of main member **10**. This gives stability to the display.

Fig. 7 is a fragmentary cross-section of a preferred lamination of aluminum foil and cardboard stock joined by an adhesive, suitable for the fabrication. A 30 point board with a .00035 overcoating of aluminum foil has worked well, the display being stable and strong and such stock can be die scored and die cut and tensioned in the form indicated very easily.

Any article of merchandise placed upon platform member **36** is reflected in the reflective panels **30** and **32** in a pleasing and attractive manner, it being possible by the angular dispositions of the panels and the placing of the merchandise to obtain excellent advertising effects. If desired, an electric light bulb **72** may be employed for base illumination when the merchandise is a bottle or transparent or translucent material.

The modified form of our invention illustrated in Figs. 8, 9, and 10 embodies a flat one-piece display of a general character similar to main body portion **10** in Fig. 1, except that the modified form does not require any separate platform or easel member. In these figures a flat blank **74** is die cut and die scored to form the radial panels **76** and the segmental tuck **78**, the panels and the tuck meeting in a central portion indicated as **80**. This is similar to main body portion **10** already described, except that this modified form **74** has a base portion **82** integral with panel portion **84**, the two being hingedly connected by means of die scoring line **86**. When display is assembled the segmental tuck may be folded and maintained in position by metal or other clip of any conventional design indicated as **88**, and the base portion **82** may be located in position in front of member **74** by means of a locking lug indicated as **90**.

It will be understood that while the illustrated forms of the invention, which we have described, represent preferred embodiments, we do not wish to limit ourselves to the structures as shown, since it is obvious that the same may be varied considerably without departing from the spirit of the invention as described and claimed in the appended claims: the display can be utilized with or without electric illumination, and with the merchandise resting upon platform **38** or upon the easel member, the essence of our invention being a flat collapsible or knock-down display of the type described wherein the main body member is arranged with segmental body panels and wherein the main body portion does not lie in the same vertical plane.

We claim:

1. In a flat collapsible display, a main body portion collapsible substantially flatwise in a single horizontal plane or adapted for upright assembly, a segmental tuck in said main body portion having its apex in the body portion intermediate the sides thereof and its bottom toward the bottom of the main body portion, a platform member and connective locking means for said main member and said platform member, said body member when collapsed being flat, but adapted for folding along said segmental tuck to tension and to circumflex the main body member in to at last two intersecting planes intersecting one another approximately at the segmental tuck, and with the segmental tuck portion approximately perpendicular to the body member and adapted to support the display in upright position.

2. A display as defined in claim 1 which further includes a die scored marginal portion upon the sides and top of said body member adapted to flex rearwardly when the main body portion is under tension, and radial die scorings extending from the apex of said segmental tuck to the marginal portion.

3. In a flat collapsible display, a main body portion collapsible substantially flatwise in a single horizontal plane or adapted for upright assembly, a segmental tuck in said main body portion having its apex in the body portion intermediate the sides thereof and its bottom extending to the bottom of the main body portion, said body member when collapsed being flat, but adapted for folding along said segmental tuck to tension and to circumflex the main body member into at least two intersecting planes intersecting one another approximately at the segmental tuck, and the said segmental tuck when folded adapted to aid in maintaining the display in upright position, said tuck, when the display is assembled, being approximately perpendicular to the body portion and adapted to support the display in upright position.

4. A display as defined in claim 3 which further includes a die scored marginal portion upon the sides and top of said body member, radial die

scorings extending from the apex of said segmental tuck to the marginal portion to form radial segmental panels upon assembly, the said display being arranged so that the marginal portion is tensioned flaringly backwards when the display is assembled.

5. In a one-piece die scored and die cut flat collapsible display, a main body member collapsible generally flatwise and foldable in at least two vertical planes, a foldable segmental portion integral therewith having its apex intermediate the top and bottom of the body member with the base of the segmental portion extending to the bottom portion of the main member, a flat collapsible platform hingedly connected with said body member, and connective means for assembling the display so that the main member is generally upright and the platform member forms a platform and so that the segmental foldable member is folded and the body member is tensioned into at least two generally vertical planes, the said segmental portion when folded, being adapted to aid in maintaining display in upright position, said segmental tuck being approximately perpendicular to the body member.

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