Jan. 1, 1935. H. ZIEMMERMAN 1,986,550

FOLDING DISPLAY

Filed Oct. 17, 1932

Fig. 1.

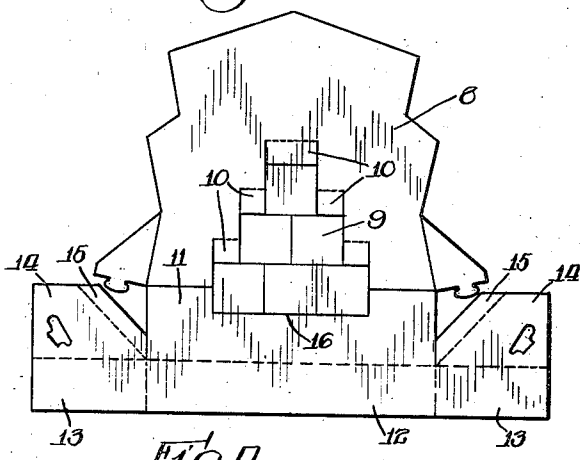


Fig. 2.

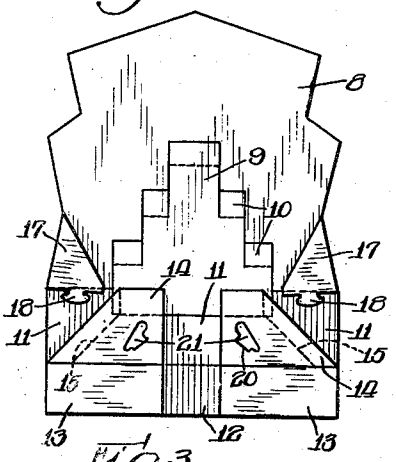


Fig. 4.

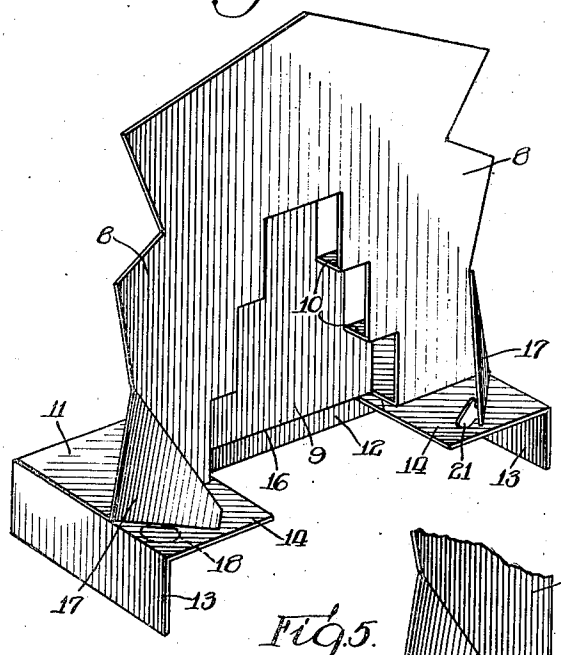


Fig. 3.

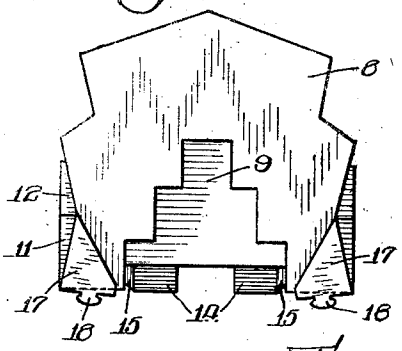


Fig. 6.

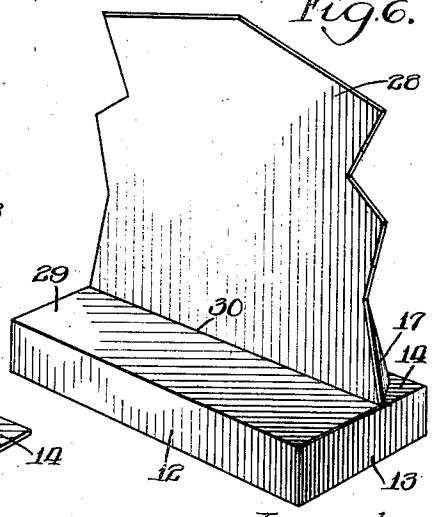
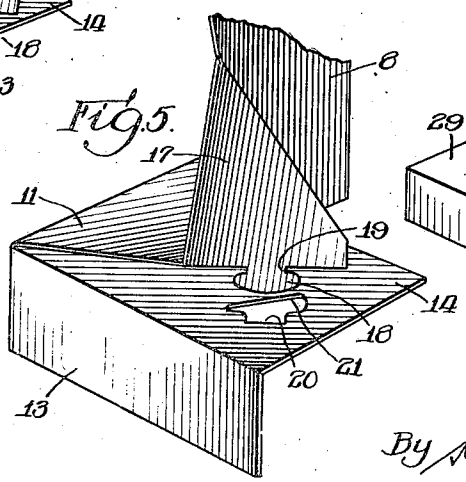


Fig. 5.



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UNITED STATES PATENT OFFICE

1,986,550

FOLDING DISPLAY

Henry Ziemmerman, Chicago, Ill., assignor to Chicago Cardboard Company, Chicago, Ill., a corporation of Illinois

Application October 17, 1932, Serial No. 638,145

15 Claims. (Cl. 211—157)

This invention relates in general to an advertising display and holder made of a single sheet of material and collapsible to fold compactly.

One of the principal objects of the invention is in the provision of a display in which a panel rises from a rectangular base, the lower edges of the panel being releasably locked to the base at the rear of the panel thereby firmly supporting the panel against tilting movement in either direction, drawing the parts of the base together and holding it in distended position.

Other features of the invention are, in providing a hollow rectangular base which has a solid and substantial appearance, in producing the ends of the base from an extension of the front piece and folding the ends inwardly against the portions which form the base in collapsing the display, in providing locking wings which are first inserted through openings and are then rotated at an angle to the side of the base for obtaining the locking movement, and in providing a supported panel of this kind in which a number of display shelves are projected from the face of the panel and collapsible thereagainst in folding to providing a support for articles of merchandise which are displayed by the panel.

Other objects of the invention will appear hereinafter, the preferred constructions being illustrated in the accompanying drawing.

In the drawing, Fig. 1 is a face view of a sheet or blank cut and scored to provide a display in accordance with the present invention;

Fig. 2 is a rear view of the display partially folded;

Fig. 3 is a rear view of the display with the base folded over against the front;

Fig. 4 is a rear perspective of the display in set-up or extended condition;

Fig. 5 is an enlarged detail of the locking means with the panel partially raised; and

Fig. 6 is a front perspective of a modified form in which there are no shelf projections at the front of the panel.

In this folding display a panel is supported from a substantial appearing base in upright position and in order to provide a support for articles of merchandise upon the panel itself it is necessary not only that the base be of substantial appearance but also that it shall have sufficient stability to support the panel in a rigid relation thereto and also to prevent the panel from tilting in either direction. It is therefore necessary to attach the panel to the base so that it will not rock upon its hinge in either direction. A rear easel would be too cumbersome and difficult to fold, but by adopting the locking devices at the lower edges of the panel, locating the panel intermediate the front and rear sides of the base, and by interlocking the locking wings with the base itself at the rear of the panel not only is the panel secured in place but also the base is held in its extended position and the entire display may be moved by simply grasping the top of the panel without any danger of the shelves of the panel or the base collapsing even though there are articles of merchandise supported thereon.

Referring now more particularly to the drawing, a single sheet of cardboard or other suitable material is cut and scored as shown in Fig. 1, to provide a display panel 8 of any suitable outside contour having an inner shelf forming portion 9 partially severed from the panel but connected thereto by double hinged spacers 10 so that this portion will extend in front of the panel as shown in Fig. 4, when the display is set up.

Hinged at the bottom 8 is a base having a top section 11 and a front section 12. At the ends of the front section are hinged wings comprising end pieces 13 for the base and hinged to these end pieces but severed from the top section 11 are connecting portions 14 having angular scored attachment portions 15 which are folded under and secured by pasting or the like to the under side of the top section 11 as shown more clearly in Fig. 2.

When the parts are folded flatly together, as shown in Fig. 2, the base sections are first folded together and then the base as a whole is folded over against the front of the panel as shown in Fig. 2. As the lower edge 16 of the shelf portion 9 extends into the adjacent edge of the top section 11 it will be seen that the movement of the base with respect to the panel in folding and unfolding the display will collapse or extend the shelf forming portion 9.

The attachment of the end forming wings of the base to the under side of the top section 11 causes the ends 13 naturally to assume their proper base forming positions when the base is unfolded with the panel extending above it, but to secure the panel in upright position it is provided with locking wings 17 at the lower edges thereof hinged at a slight angle to the side of the display so that when unfolded the lower end swings upwardly. At the lower edge of each wing 17 is a locking tongue 18 having a reduced or under-cut neck 19 adapted to engage in a reduced portion 20 of an opening 21 disposed in the

connecting portion 14 of the end wing so that in setting up the display the tongues 18 are raised above the openings 21 with the panel 8 and the top section 11 to which it is hinged as shown more clearly in Fig. 5, the tongues 18 are inserted through the openings 21 and the locking wings 17 are then rotated outwardly engaging the under-cut or neck portion of the tongues with the reduced portion 20 of the locking openings.

Thus the panel is locked to the base, the ends, front and top of the base are locked together, the panel is prevented from swinging upon its hinge in either direction, and the entire display is connected in its set up position.

To collapse the display the locking wings are disengaged by the reverse action, the base sections are folded together and the base and the panel are folded flatly together as shown in Fig. 3.

If desired, the shelf forming portion 9 may be omitted, leaving a plain display panel 28 as shown in Fig. 6, supported by a base structure as described, the top section 29 being hinged to the lower edge of the panel upon an unbroken hinge line 30. In both structures the panel is located intermediate the front and rear edges of the base so that the locking wings 17 may engage the base behind the panel and thus give additional stability to the display when it is set up.

The hinged wings at the ends of the front section 12, comprising the portions 13, 14 and 15 may be formed separately and glued or otherwise attached to the front section 12, and together form the support for the box base. By attaching the angularly disposed flap portion 15 to the under side of the top section 11 the sections 11 and 12 are connected together for automatic folding and unfolding, the setting up of the display upon its base automatically distends the supporting piece 13 at right angles to the front section 12 and to the top section 11 and holds it in place. In collapsing the sections these portions 13, 14 and 15 fold flatly against the sections 11 and 12 as shown.

I claim:

1. A folding display comprising a single sheet having a portion forming a box-like base, an upright display panel hinged thereto, and interengaging means formed of said sheet for connecting the panel to the base at the back of the panel.

2. In a folding display, a sheet having a portion extensible to form a hollow rectangular base, a panel hinged thereto intermediate the front and back to extend upwardly, and means located at the rear of the panel for interengaging and locking the panel to the top of the base to hold it uprightly.

3. A folding display comprising a single sheet having connected portions scored and foldable to form a hollow base with a front, top, and ends; a panel hinged to the top intermediate the front and back; and locking means hinged to the panel and having means adapted to interengage with the top at the rear of the panel for holding the latter uprightly.

4. A display comprising a single sheet having a connected supporting base and a panel; the base having hinged top and front sections, and side sections hinged at the ends of the front section, severed from the top section and the severed portions angularly scored and attached to the under side of the top section to fold flatly therewith and to unfold in the shape of a hollow support; and means for engaging the panel with the support.

5. A folding display having a base, a panel hinged to the top of the base intermediate the front and back thereof, and locking wings at the lower sides of the panel foldable downwardly and rearwardly to engage the base at the rear of the panel, the wings and base having co-operating tongues and openings.

6. A folding display comprising a base having a raised top, a panel hinged to the top intermediate the front and back thereof and adapted to stand uprightly, and locking means comprising wings at the lower sides of the panel foldable rearwardly and downwardly with downwardly extending locking tongues, and interengaging means comprising openings in the top of the base to engage the tongues.

7. A display structure according to claim 6 in which the locking wing at each side of the panel is hinged at an angle to and is foldable to engage the top of the base and has an undercut tongue to engage the opening in the base for holding the panel against swinging movement.

8. A folding display comprising a rectangular base having a top, front and sides; an upright panel hinged to the top intermediate the front and rear thereof, and locking wings at the lower edges of the panel foldable rearwardly and interengaging with the top of the rear of the panel.

9. In a folding display, a single sheet of material comprising a panel, a base to which it is hinged having a top section, a front section, side sections hinged at the ends of the front section and having folding portions attached to and foldable against the under side of the top in collapsing, the base sections folding together and against the face of the panel when the display is folded.

10. A folding display comprising a panel, a base having a box-like structure with a top piece hinged at its rear to the panel intermediate the front and rear of the base, a front piece hinged to the top and side pieces hinged to the ends of the front piece, and hingingly attached to the top to extend rearwardly of the panel thereof; and locking wings hinged at the lower edges of the panel and having tongues adapted to engage in openings in the rearwardly extending portions of the said side pieces.

11. In a folding display, a base, a panel hinged thereto intermediate the front and rear to extend upwardly, locking wings hinged at the lower edges of the panel and foldable angularly downward, each having an engaging tongue at its lower end, the base having an opening through which the tongue is inserted when the panel is locked, and the locking wing being rotated about its hinge to engage the tongue in the opening.

12. In a folding display according to claim 11, the locking tongue being undercut, and the opening having a reduced portion with which the undercut interengages when the locking wing is moved about its hinge.

13. In a folding display, a base having a top and a front hinged together to form a display step, and a support for the base hinged to the front and including an angularly hinged portion attached to the under side of the top which causes said parts to assume and maintain a step position in unfolding.

14. In a folding display, a step base comprising top and front sections hinged together, a support at the rear and below the sections hinged

to one of the sections and having an angularly folding portion affixed to the other section which moves the top and front sections into step position in unfolding and holds them in such position until they are folded.

15. In a folding display, a base having top and front sections hinged together, and a support connected thereto at the under and rear sides, the support having a portion hinged to one of the sections and an angularly hinged portion affixed to the other section to unfold the support at right angles to the top and front sections.

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