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H. R. HOWARD

1,853,615

FOLDING DISPLAY

Filed May 15, 1929

Fig. 1.

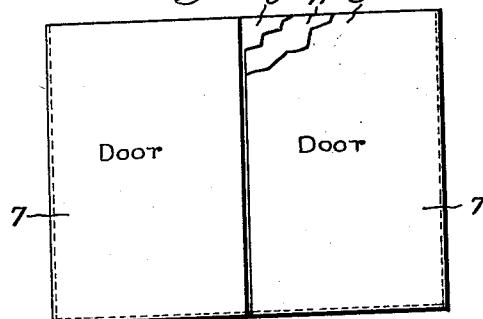


Fig. 2.

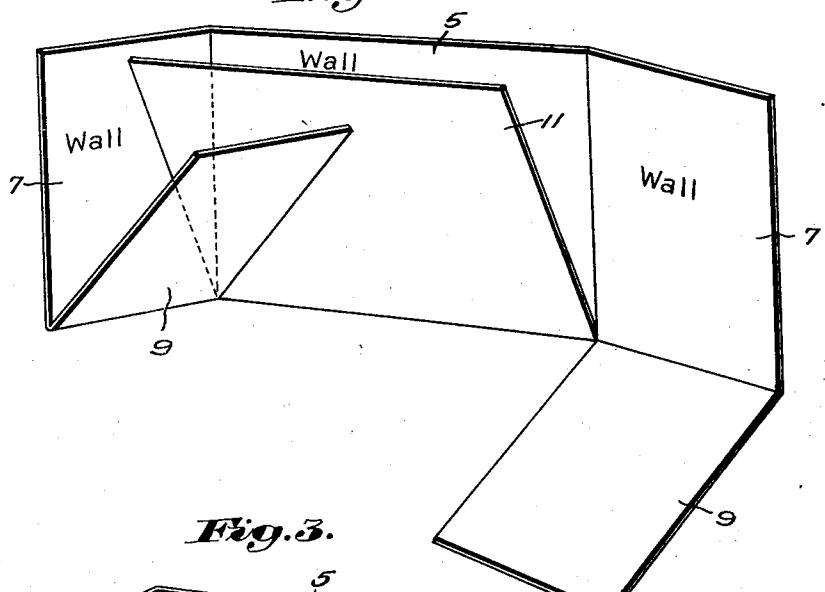
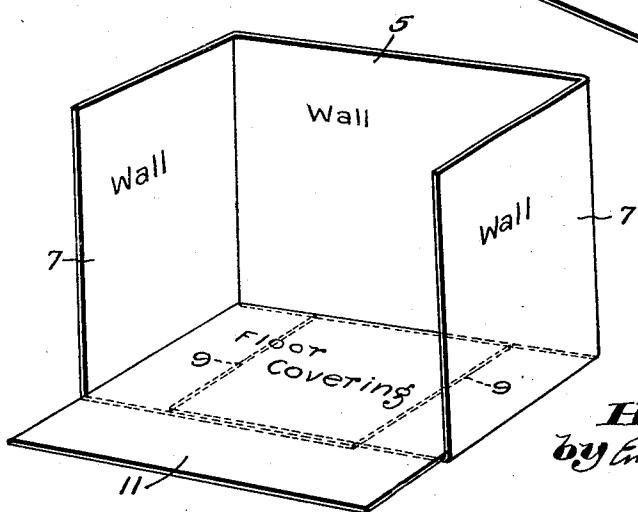


Fig. 3.



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UNITED STATES PATENT OFFICE

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FOLDING DISPLAY

Application filed May 15, 1929. Serial No. 363,329.

This invention relates to display devices which collapse or fold into a relatively small compass for shipment or storage and are erected for display into a three-dimensional structure. The object of the invention is to provide a simple and effective device of this kind having advantages which will be apparent from the description.

The invention will be well understood by reference to the following description of the illustrative embodiment thereof shown by way of example in the accompanying drawings, wherein:

Fig. 1 is a plan of the folded device with parts successively broken away;

Fig. 2 is a perspective showing the parts partially unfolded to disclose the structure; and

Fig. 3 is a perspective of the erected display.

In the example of my invention illustrated the device is constructed from a single piece of relatively light cardboard and the hinge lines or folding lines to be referred to are formed by simple creases in this piece, but obviously the device might be constructed of one or more pieces hinged together in any desired manner within the scope of the invention in its broader aspects. Referring to Fig. 2, the sheet of material comprises a back panel 5 to either end of which are hinged the lateral panels or wings 7 constituting with the panel 5 a triptych. The wings 7 may be of the same height as the panel 5 and are preferably of half the width so that they may fold over and cover the same, as shown in Fig. 1. Along the lower edges of the wings 7 are hinged flaps or flanges 9 foldable in face to face relation with the same so as to be infolded between the same and the back panel when the device is collapsed or alternatively to lie at right angles thereto, as shown in Fig. 3. These flanges 9 may be of the same size or smaller than the wings 7. At the lower edge of the back panel 5 is hinged a flap or flange 11, conveniently of the same size or at least not greater and of a height desirably at least equal to the width of the flanges 9.

To erect the device the wings 7 are folded forwardly from the back panel 5 and the

flanges 9 assume a horizontal position in which they may overlap as shown, the flange 11 swings downwardly on top of these wings and by its weight frictionally pressing these against the support on which the device is placed maintains the parts in the position shown in Fig. 3. When the device is collapsed, the flange 11 folds up against the face of panel 5, the flanges 9 against the faces of wings 7 and the lateral portions then fold in, the flanges 11 and 9 being received and enclosed between the back panel 5 and the wings 7 forming a flat packet, as shown in Fig. 1. In the example shown the hinge lines of the various flaps are aligned, constituting a substantially continuous crease across the width of the blank since in the thin material from which the illustrative example of the invention is supposed to be constructed no substantial offset is required to accommodate flanges 9 beneath flange 11 in the erected position of the device shown in Fig. 3.

I have indicated one manner of utilizing the device by the legends inscribed on the parts in the accompanying drawings. Thus the back 5 and wings 7 on their inner surfaces may be provided with suitable designs or pictures constituting in the erected position of Fig. 3 a three-dimensional representation of a scene. For instance, this might be a room as indicated in the drawings by the inscription "Wall" on these parts. The face of flap 11 which is exposed in the erected position of the parts may have a suitable design thereon complementary to the design on the triptych, for instance, a rug or other floor covering for the room, as indicated by the inscription in Fig. 3. As shown in Fig. 1 the backs of flaps 7 could be delineated to represent doors, thus giving the effect of opening the doors to gain access to such a room. It will be understood that this, however, is exemplary merely. When the device is used to display a pictorial representation in this manner, the lateral flaps and the bottom of the central flap or base panel 11 provide convenient places to receive descriptive printed matter, leaving the outer surfaces free, if desired.

When constructed of relatively light ma-

terial, the device may serve as a folder adapted to be sent through the mails in the form shown in Fig. 1 without necessarily utilizing additional wrapping, and the back 5 of the central panel 5 may serve as a convenient location for an address.

I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive; reference being had to the appended claims rather than to the foregoing description to indicate the 15 scope of the invention.

I claim:

1. A foldable display device constructed of sheet material of such rigidity as to permit it to be erected in self-sustaining position to 20 present a back, a base and sides extending between the back and base, said device comprising a triptych, the elements thereof having flaps along their base edges adapted to unfold substantially at right angles thereto, 25 the lateral flanges being overlaid by the central flange in the set-up position whereby said elements are maintained in erected position.

2. A foldable display device constructed of 20 sheet material of such rigidity as to permit it to be erected in self-sustaining position to present a back, a base and sides extending between the back and base, said device comprising a central sheet and lateral wings 25 hinged thereto and foldable thereon to cooperatively cover the same, flanges on said wings foldable in face to face relation to the same to be infolded between the same and said sheet or alternatively to project at right angles thereto, and 30 a flange on the central sheet of a height at least equal to the width of said first flanges foldable in face to face relation to the same to be covered by said wings or alternatively 35 to project at right angles thereto to overlie said first flanges in their projected position and by its weight to maintain the wings at angles to the central sheet.

3. A display device comprising a back 30 panel having wings hinged at its ends and designs thereon representing, when the wings are folded forwardly from the back panel, a three-dimensional representation of a scene, flanges hinged to the lower edges of 35 said wings, a base panel hinged to the lower edge of said back panel resting on said flanges in the unfolded position of said device and by its engagement therewith positioning the wings, said base panel having a representation 40 thereon complementary to the scene.

4. A foldable display device constructed of 35 sheet material of such rigidity as to permit it to be erected in self-sustaining position to present a back, a base and sides extending between the back and base, said device com-

prising a triptych consisting of a central panel, lateral wings infolding to cover the same, the inner faces of said elements displaying a representation, and flaps hinged to 70 respective edges of said elements foldable to lie between the panel and wings and unfolding to a horizontal position when the wings are extended forwardly from the panel and in such position presenting overlapping parts and cooperatively serving to maintain the 75 device erected.

5. A foldable display device constructed of sheet material of such rigidity as to permit it to be erected in self-sustaining position to 80 present a back, a base and sides extending between the back and base, said device comprising a central sheet and lateral wings hinged thereto and foldable thereon, flanges on said wings foldable in face to face relation to the same to be infolded between the 85 same and said sheet and alternatively projectable at right angles thereto, and a flange on the central sheet foldable in face to face relation to the same and alternatively projectable at right angles thereto to overlie said first flanges in their projected position and by its weight to maintain the wings at 90 angles to the central sheet.

In testimony whereof, I have signed my 95 name to this specification.

HAROLD R. HOWARD.

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