March 8, 1927. 1,620,533

F. G. FULLGRAFF

DISPLAY DEVICE

Filed Aug. 11, 1923

Fig. 1.

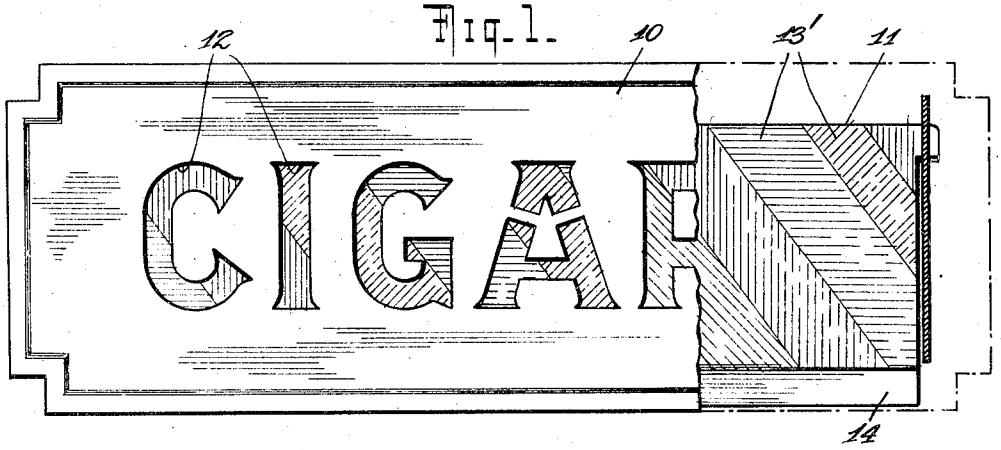
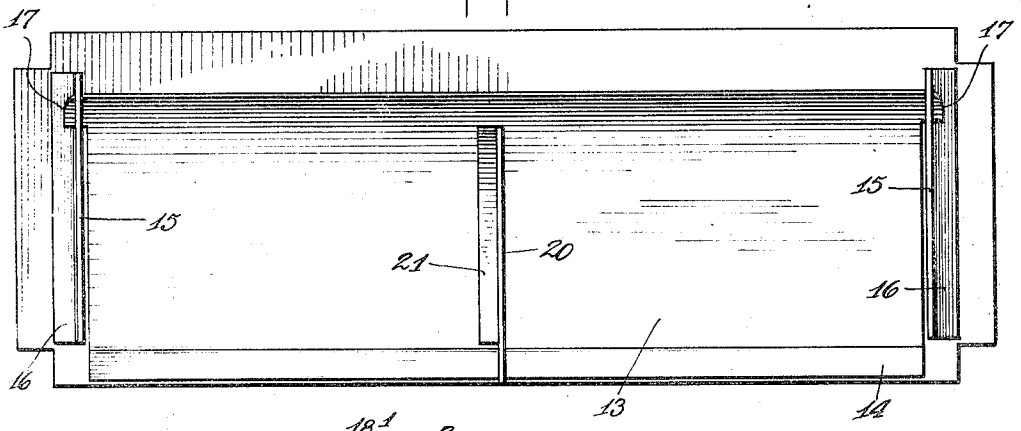


Fig. 2.



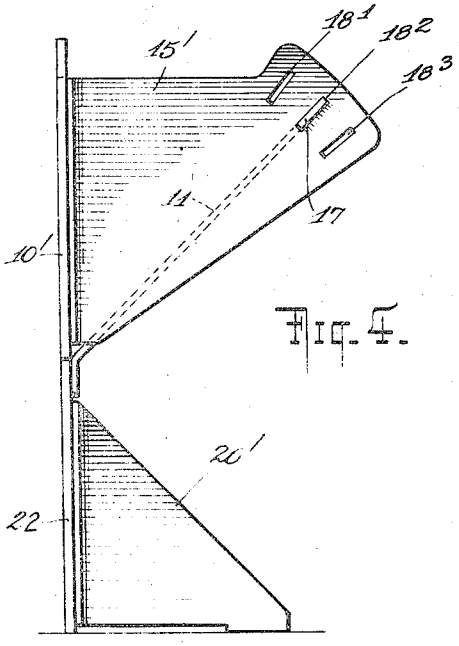
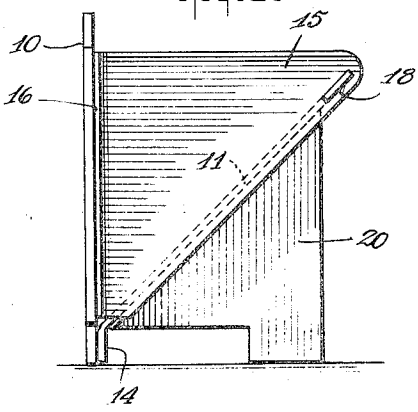


Fig. 4.

Fig. 3.



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UNITED STATES PATENT OFFICE.

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DISPLAY DEVICE.

Application filed August 11, 1923. Serial No. 656,948.

This invention relates to display devices and aims to provide an illuminated sign of striking and attractive appearance which can be manufactured at small cost and which can be folded for ease in transportation.

A feature of the invention consists in illuminating a sign by means of diffused light, such as day light, or artificial light used to illuminate a room, so that the sign may be evenly illuminated without providing the device with light-diffusing screens.

A further feature of the invention consists in illuminating a sign by means of a reflector having a colored reflecting surface, so that the sign may be given a colored appearance without the use of color screens.

A further feature of the invention consists in providing a display device including a light transmitting sign and a reflector and supports for the reflector all arranged so that the device may be folded flat for transportation.

A still further feature of the invention consists in providing adjustable means for positioning a reflector at any one of a number of different angles to a sign to be illuminated, so that diffused light from any convenient source may be reflected through the sign.

The nature of the invention may best be understood by a detailed description of the specific display devices embodying the invention which are shown in the accompanying drawing, in which:—

Fig. 1 is a front elevation of a display device showing the sign partly broken away;

Fig. 2 is a back elevation of the display device;

Fig. 3 is an end elevation of the display device; and

Fig. 4 is an end elevation of a modified form of the device.

The display device illustrated in Figs. 1, 2 and 3 comprises a sign 10 and a reflector 11. The sign is formed of a piece of stiff sheet material, such as cardboard, and contains openings 12 forming letters or other matter to be displayed. The reflector 11 consists of a piece 13 of stiff sheet material, such as cardboard, and a plurality of strips 13′ of differently colored tinsel paper pasted or otherwise secured to one side of the piece 13 to form a multi-colored reflecting surface. The reflector 11 is hinged at its lower edge to the back of the sign 10. In the form shown, the sheet 13 has a hinge flange 14 made integral therewith, and this flange is pasted or otherwise secured to the back of the sign 10 near the lower edge thereof.

End flaps 15 provide means for holding the reflector 11 at an angle to the sign 10. The end flaps 15 consist of pieces of stiff sheet material such as cardboard. They have hinge flaps 16 along their inner edges and these flaps are secured to the back of the sign 10 near the ends thereof. The reflector 11 and the end flaps 15 are provided with cooperating engaging means. In the form shown these means include tabs 17 projecting from the free corners of the sheet 13 and holes 18 formed in the end flaps 15 near their outer corners. The device may be provided with a supporting flap 20 to hold the sign upright. In the form shown in Figs. 2 and 3, the supporting flap 20 is provided with a hinge flange 21 which is secured to the back of the piece 13 near the middle thereof.

When the device is placed in display position the end flaps 15 are extended at right angles to the sign 10. The reflector 11 is inclined to the sign 10 and its tabs 17 are inserted in the holes 18 of the end flaps. The support 20 is extended at right angles to the sign and serves to hold the device with the sign in vertical position.

When the device is in display position diffused light from above, which may be either daylight or artifical light, enters the device through the open space provided between the upper edges of the sign and the reflector, strikes the tinsel strips 13′, and is reflected outwardly through the openings 12 in the sign. The letters formed by the openings 12 are thus evenly illuminated in different colors.

When the display device is to be transported the end flaps 15 are swung outwardly to a sufficient extent to release the tabs 17 of the reflector 11. The end flaps 15 and the support 20 are then folded in so that they all lie in substantially the same plane as the sign 10. The device may then easily be transported, or may be placed in an envelope for shipment.

In the modified device shown in Fig. 4 the end flaps 15′ are provided with a plurality of openings 18′, 18^2, 18^3. The tabs 17 of the reflector 11 may be inserted in any of these holes and thus the angle between the reflector and the sign 10′ may be varied. When the sign is placed in a store window and it is desired to utilize daylight entering

the window above the sign, the tabs 17 may be placed in the openings 18′ so that light reaching the reflector from in front of the sign will be reflected through the openings in the sign. If the light reaches the device from directly above, the tabs 17 are placed in the openings 18^2, while, if the light is behind the sign, the tabs are placed in the openings 18^3. In the form shown in Fig. 4, the supporting flap 20′ is hinged to the back of the lower portion 22 of the sign 10′ instead of being hinged to the back of the reflector.

From the above description it is apparent that the invention provides a simple and practical illuminated sign which may be constructed at small cost. I wish it understood, however, that the invention is by no means limited to the details of construction of particular embodiments which have been described in order to illustrate the invention.

What is claimed is:

1. A display device, comprising a sign having light transmitting portions forming the matter to be displayed, a reflector hinged at its lower edge to the back of said sign, and flaps of stiff sheet material hinged to the back of said sign at its ends, said reflector and said flaps being provided with cooperating engaging means and being adapted to fold flat against the sign.

2. A display device, comprising a wall of stiff, sheet material having a part with light transmitting portions forming the matter to be displayed, a reflector hinged at its lower edge to the back of said wall so that it may be folded against the wall or extended at an angle thereto, flaps of stiff sheet material hinged to the back of said wall along its ends and adapted to be folded against the wall or extended at right angles thereto, said flaps and said reflector being provided with cooperating engaging means, and a prop hinged to the device so that it may be extended to hold said wall in vertical position and may be folded in against the device.

3. A display device, comprising a sign of stiff sheet material containing openings forming the matter to be displayed, a reflector hinged along its lower edge to the back of said sign, tabs projecting outwardly from the ends of the reflector, and end flaps of stiff sheet material hinged to said sign along its ends and each containing a plurality of holes in which the tabs of the reflector may be inserted to hold it at different angles to the sign.

In testimony whereof I have hereunto set my hand.

FRANK G. FULLGRAFF.