May 10, 1932. F. SHIPMAN 1,857,882

CHANGEABLE SIGN FRONT

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Fig. 1.

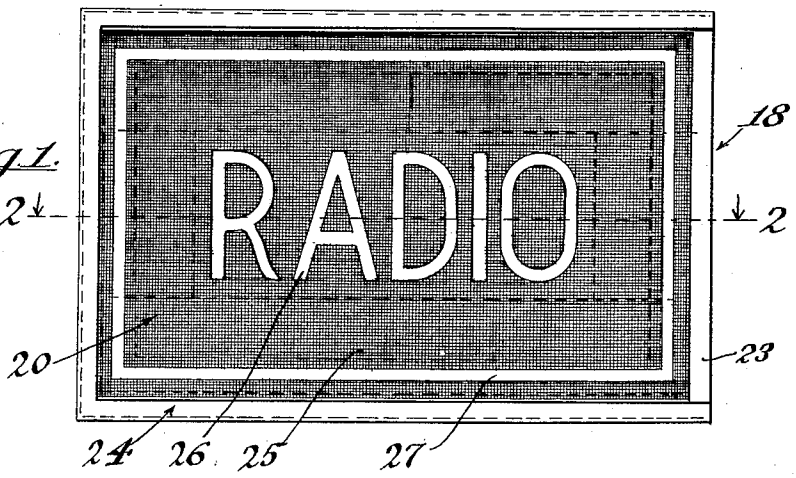


Fig. 2.

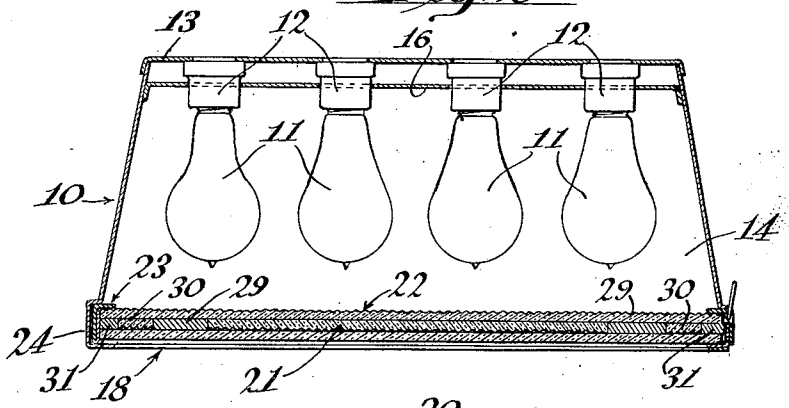


Fig. 3.

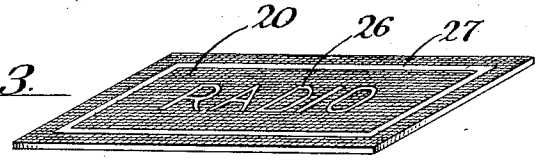


Fig. 4.

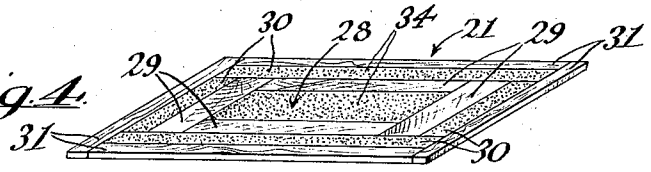
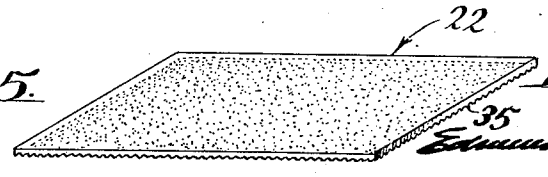


Fig. 5.



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Fig. 6.

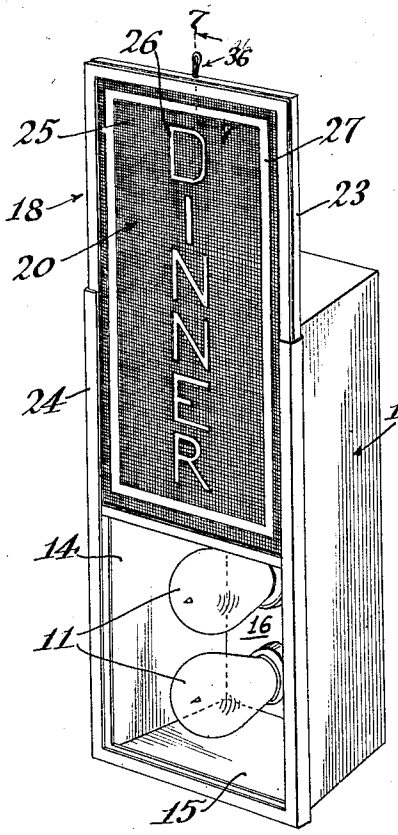


Fig. 7.

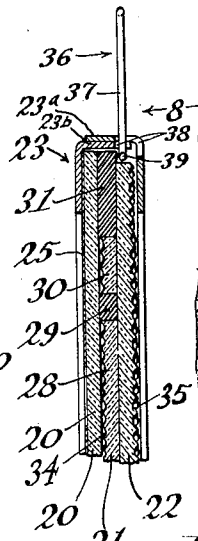


Fig. 8.

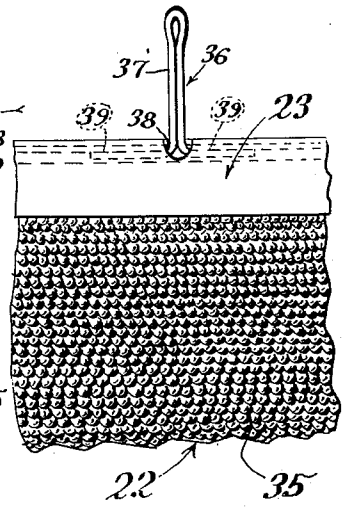


Fig. 12.

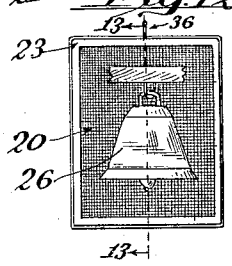


Fig. 13.

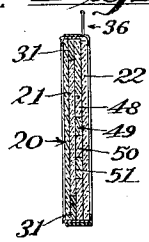


Fig. 9.

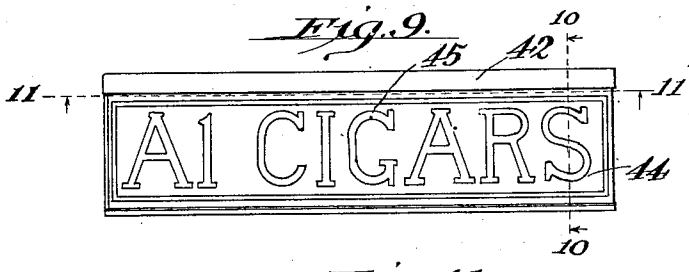


Fig. 10.

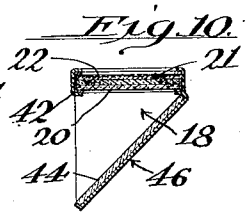
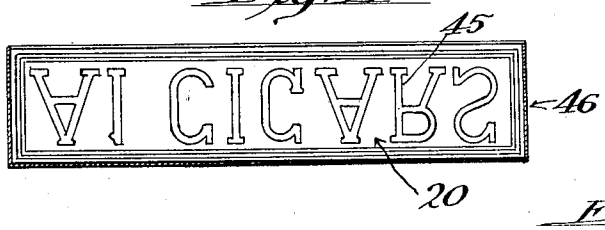


Fig. 11.



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UNITED STATES PATENT OFFICE

FREDERIC SHIPMAN, OF LOS ANGELES, CALIFORNIA

CHANGEABLE SIGN FRONT

Application filed August 1, 1930. Serial No. 472,276.

This invention relates generally to illuminated signs more specifically to an improved sign front.

The object of the present invention is to provide a sign front in which various color effects are produced by a composite plate interposed between an indicia and a diffusing plate.

A further object of the invention is to provide a sign front which may be easily and quickly interchanged in a lamp housing with another front of the same construction when it is desired to change the reading matter or advertising display.

A still further object of the present invention is to provide a sign front constructed in such a manner that light rays emanating from incandescent lamps or other sources of light in a housing will be evenly distributed thereover even though some of the lamps may cease to function.

Other objects and advantages will be apparent from the following description, reference being had to the accompanying drawings, in which—

Fig. 1 is a front elevation of the improved sign front mounted in a usual lamp box or housing.

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the indicia plate.

Fig. 4 is a perspective view of a composite plate.

Fig. 5 is a perspective view of the light diffusing plate.

Fig. 6 is a perspective view of the casing showing the improved sign front as it appears while being inserted or removed from the housing.

Fig. 7 is an enlarged detail section taken on line 7—7 of Fig. 6.

Fig. 8 is a rear elevation taken in the direction indicated by the arrow 8 of Fig. 7.

Fig. 9 is a front elevational showing the improved sign front associated with a mirror reflector.

Fig. 10 is a vertical section taken on line 10—10 of Fig. 9.

Fig. 11 is a horizontal section taken on line 11—11 of Fig. 9 in the direction indicated by the arrows.

Fig. 12 is a front elevation of a slightly modified form of the sign front.

Fig. 13 is a section taken on line 13—13 of Fig. 12.

Referring more specificallly to the drawings, 10 designates a casing in which is disposed a plurality of incandescent lamps 11 mounted in usual sockets 12 carried by the rear wall 13 of the said casing. The side walls 14 and end wall 15 of the housing, and a plate 16 disposed adjacent to the rear wall serve as reflecting surfaces.

The improved sign front generally designated at 18 comprises an indicia plate 20, a composite plate 21, and a light diffusing plate 22, placed together and mounted in a frame 23 which is removably mounted in a guide way 24 formed on the front of the casing.

Referring to Fig. 3 the indicia plate is formed of glass or other transparent elements, one side of which is covered with a thin layer of opaque material 25 except where the indicia 26 and other design indicated at 27 occur, this plate being preferably positioned in the frame with the opaque surface outwardly.

The plate 21 referred to as a composite plate consists of a plurality of pieces of colored glass or other transparent material, and strips formed of wood, fiber or the like placed together on top of the indicia plate in the following manner:

Referring more particularly to Fig. 4, a glass plate 28 is placed above the indicia 26, a plurality of wood or fiber strips 29 are positioned next to the plate 28, a plurality of glass plates 30 placed next to the strips 29 over the design, and another assembly of the strips 31 are placed around the plates 30.

Plates 28 and 30 are preferably of glass with roughened surfaces indicated at 34 and may be arranged to produce various color effects. Strips 29 and 31 hold the plates in their respective positions, also being opaque will prevent light from showing through the indicia plate on the opaque surface thereon should it become scratched accidentally, i. e. when the sign is illumined. These strips also

reduce the weight and cost of the sign front, especially so when manufactured in large quantities.

The diffusing plate 22 is formed of glass having a roughened surface 35, and is preferably placed in the frame with this surface towards the source of light.

The frame 23 is preferably formed of angular sections 23*a* and 23*b*, the flanges of which overlap and are held together by frictional contact, or other suitable methods of securement. In order to easily and quickly insert or remove the sign front from the lamp box a handle designated at 36 is provided, and is preferably formed of wire bent into an elongated loop 37. The loop 37 extends through slots 38 formed in the flanges, and is retained in place by its free ends 39 engaging inner walls of said flanges as clearly shown in Figs. 7 and 8.

After placing the sign front in the housing the handle may be turned inwardly, as shown in Fig. 2. From the construction it will be seen that by rearranging the strips and plates varied and ever changing color effects on the indicia may be produced from time to time at will.

Due to the roughened surfaces of the diffusing plate, and plates 28 and 30, the light rays passing therethrough will be evenly distributed, hence the indicia and designs will present a very brilliant appearance.

Referring to Figs. 9, 10 and 11 the improved sign front is shown in connection with a mirror reflector of usual form, the construction of the sign front being the same as above described.

The sign front is removably mounted in a frame 42 disposed at approximately 45 degrees to a mirror 44 which is mounted in a suitable frame 46, the indicia indicated at 45 on the plate 20 being reflected in the mirror as shown in Fig. 11.

Further remarkable color results can be readily obtained by using a double set of color plates between the indicia and the diffusing plate, as clearly shown in Figs. 12 and 13. To this end a plurality of colored glass plates designated at 48, 49, 50 and 51 are interposed between the plate 28 and the diffusing plate, the general arrangement and construction of the sign front being the same as above described.

I claim:

1. A sign front comprising a transparent indicia plate having transparent indicia formed in an opaque coating thereon, a colored transparent plate engaging said indicia plate on the opposite side to the opaque coating thereon and covering the area in which the indicia is formed, a plurality of opaque strips mounted on said indicia plate around said colored plate, a light diffusing plate mounted on said strips and colored transparent plates, and a frame holding said plates in assembled relation.

2. A sign front comprising an indicia plate formed of transparent material having the indicia formed in an opaque field on one side thereof, a glass plate having a roughened surface on one side thereof mounted on said indicia plate on the opposite side to the opaque coating and disposed above the indicia thereon, a plurality of non-transparent strips mounted on said indicia plate and covering the area outside of the indicia, a plate having a roughened surface on one side thereof mounted on said plates and non-transparent strips, and a frame holding said plates and strips in assembled relation.

3. A sign front comprising a transparent indicia plate having transparent indicia formed in an opaque coating thereon, colored transparent plates engaging said indicia plate, a plurality of opaque strips mounted on said indicia plate around said colored plates, a light diffusing plate mounted on said strips and colored transparent plates, and a set of colored plates disposed between the colored plate and the diffusing plate.

In testimony whereof I affix my signature.

FREDERIC SHIPMAN.