

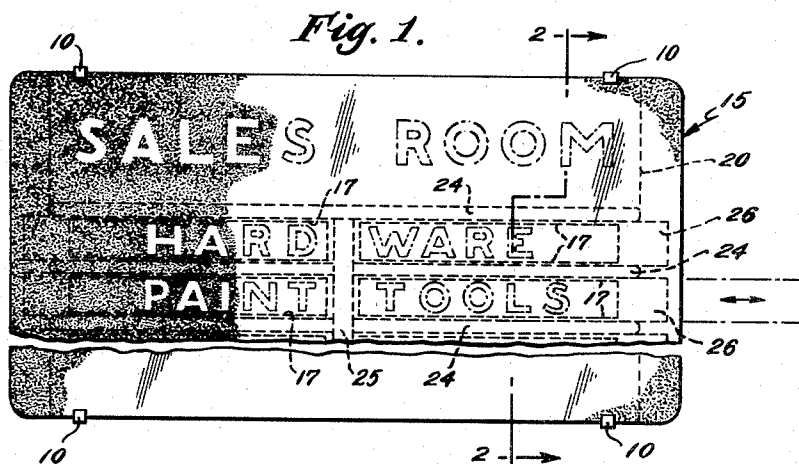
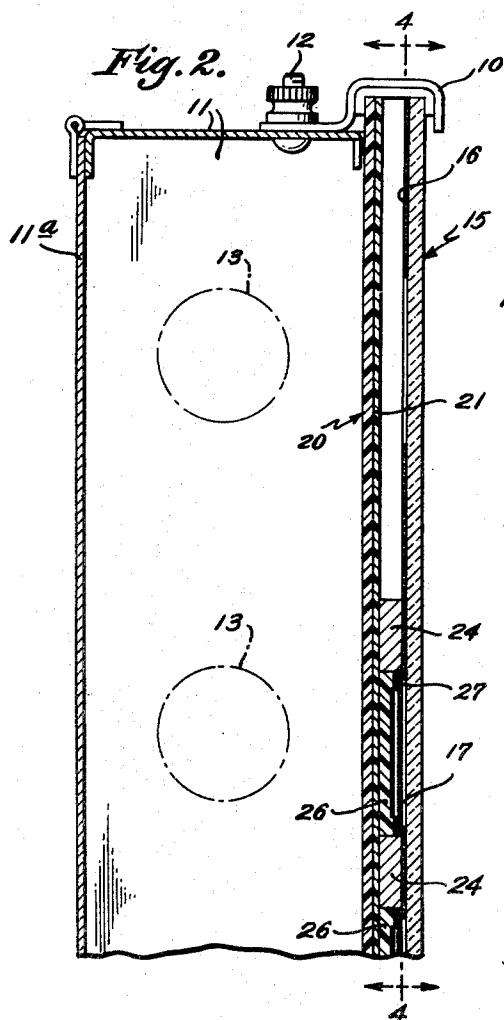
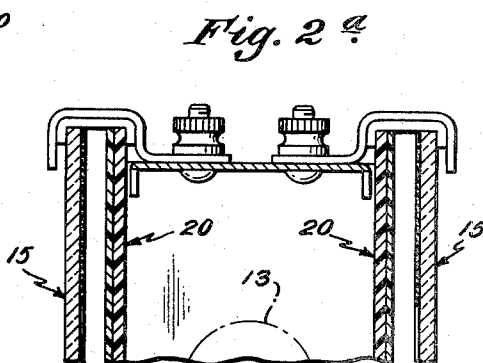
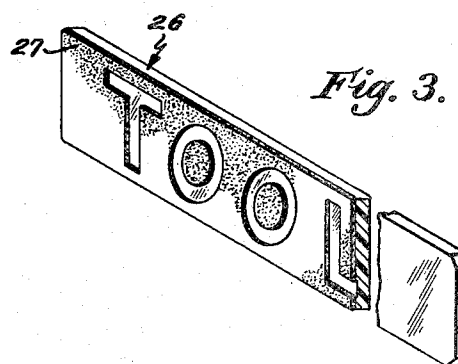
May 3, 1955

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ILLUMINATED TRANSLUCENT SIGNS

2,707,346

Filed Sept. 9, 1952

2 Sheets-Sheet 1



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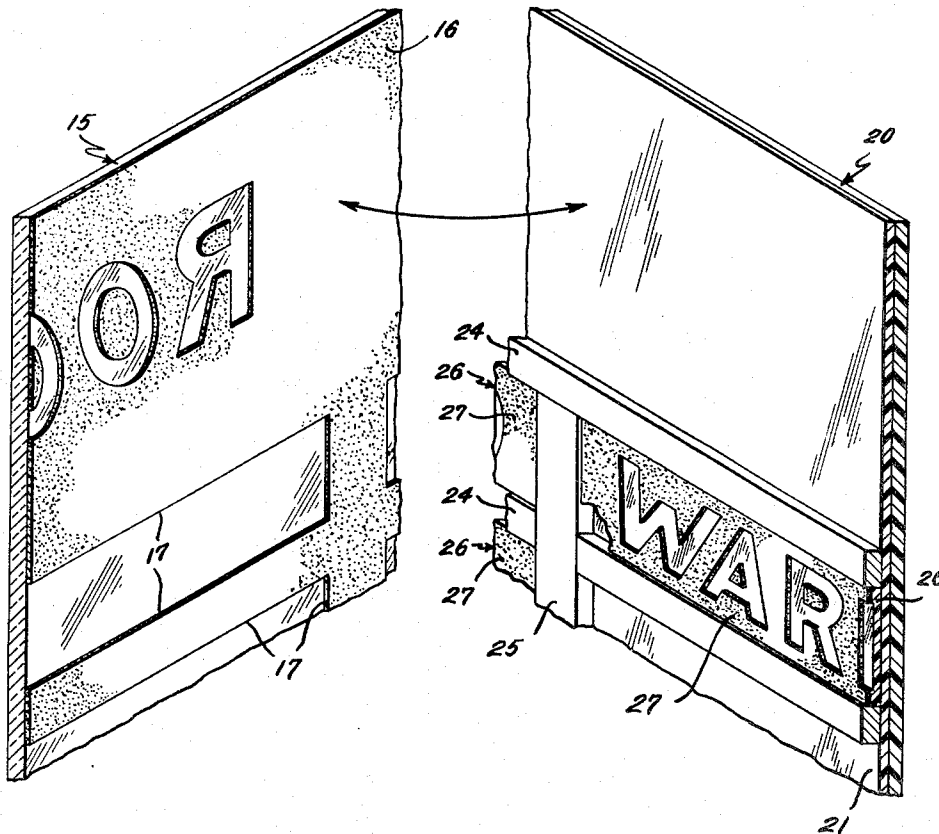
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Fig. 4.



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ILLUMINATED TRANSLUCENT SIGNS

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Application September 9, 1952, Serial No. 308,639

7 Claims. (Cl. 40—133)

This invention relates to illuminated translucent signs and particularly to a sign on which the insignia may be changed as desired with interchangeable panels.

My invention is particularly adapted to be used for an illuminated changeable item, directory board or sign. Heretofore, signs of this nature have had a cut-up appearance, with the outside surface broken by lines around the changeable panels, or they have had to be made as one integral sign, and the individual items could not be replaced. In the latter sign, to change one item, the entire sign had to be changed, and this made the changes very costly. However, I have succeeded in devising an illuminated translucent sign in which individual insignia may be readily changed as desired, by replacing an individual panel. At the same time the sign when lighted has the appearance of a one-piece integral sign, in that no lines or frames appear between the replaceable panels bearing the individual items. The result is an illuminated sign of attractive appearance, uniformly lighted, and having a front surface unbroken and unmarred by lines surrounding the various replaceable items. My sign thus has the appearance and desirable features of an integral sign, but individual items of the insignia can be replaced without making a new sign.

Distinctive and attractive features of my sign are that the characters are illuminated, and the background or field areas are opaque, making the characters stand out brilliantly and clearly; groups of characters are readily, slidably replaceable; when illuminated the characters appear to have been stenciled through one plane sheet of opaque background material; and when illuminated the face of the sign in which the lighted characters appear is devoid of all dividing lines, members, borders, edge-frames, partitions or seams, which would appear to separate the groups of changeable characters. In other words, by my construction the sign has the appearance of being one, integral sign, unbroken by dividing lines between the groups of characters, yet actually individual panels or groups of characters are interchangeable—a result never heretofore achieved or regarded as possible in previously existing signs.

Briefly my invention comprises a front panel of transparent material having an opaque surface thereon with windows provided therein, a back panel of preferably translucent light diffusing material, spacing strips spacing the front and back panels and forming guideways or slides above and below the windows provided on the opaque surface, and insertable strips of transparent material similar to the front panel, each having an opaque surface thereon on which the desired insignia may be cut, which strips are inserted from an edge of the sign between the spacers and in the windows provided on the opaque surface of the front panel. The panels are held in parallel relation and closely together by any suitable means, such as bolts, edge frames, clamps or the like, and are illuminated from a light source located behind the rear panel. It is understood of course that the opaque

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surfaces mentioned and the translucent light diffusing surfaces may be separate sheets if desired, without departing from my invention. It will be understood that a source of light such as fluorescent tubes or incandescent lamps are provided for illuminating the sign.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation, and it is not intended to limit the invention beyond the express language of the claims and the requirements of the prior art.

Additional advantages and objects of my device will be apparent in the following specification and accompanying drawings, in which:

Fig. 1 is a front elevation of my sign;

Fig. 2 is a fragmentary section on line 2—2 of Fig. 1;

Fig. 2a is a detailed section of a modified form of my sign used as a double-faced sign;

Fig. 3 is a perspective view of one of the lettered removable slides or strips; and

Fig. 4 is a fragmentary sectional view taken on line 4—4 of Fig. 2 with the panels separated.

In the drawings brackets 10 are held by a casing 11 and its hinged back 11a, which are made of metal or other suitable material. The casing 11 carries supporting studs or bolts 12. Provision is made for a source of light in the sign such as by fluorescent tubes generally indicated at 13 (Fig. 2). The front panel 15 is preferably a sheet of rigid transparent material such as glass or methyl methacrylate resin and which is preferably provided with an opaque surface coating on its back and sides such as paint, enamel, or lacquer indicated at 16. As stated above, the opaque surface 16 may be a separate sheet, if desired. Uncovered areas are provided in the opaque surface coating 16, which form windows or openings 17 through which the inserted insignia described below is seen and illuminated. A second or rear panel 20 of transparent material, such as glass or methacrylate resin is also provided, and with it a translucent light diffusing surface or material 21. As here shown the panels 20 and 21 are two separate sheets, but it will be understood that a single transparent or translucent light diffusing panel may be provided, if desired. The translucent light diffusing sheet is of a solid milky appearance or is otherwise treated as by frosting to diffuse any light rays about the entire surface of the panel 21. As shown diffuser sheet 21 is a vinyl resin plastic of milky appearance. Intermediate spacer strips 24 are further provided of any suitable material to space the front and rear panels 15 and 20, which may be adhesively attached to either or both the front panel 15 or surface 16, or the rear panel group 20 or 21. As shown in the drawings, spacers 24 extend horizontally and transversely across the sign and are spaced to frame on two or three sides the translucent areas or windows 17 provided in the opaque surface 16 wherever interchangeable insignia is desired. Horizontal spacers 24 may be further connected and reinforced by vertically extending connections 25 if desired, as shown in Fig. 4. Slidable strips 26 of transparent material such as glass or plastic similar to front panel 15 are further provided to slide and be inserted within the guideways formed by a pair of top and bottom horizontal spacers 24. Again the insertable strips 26 are provided with an opaque surface 27 similar to surface 16, in which the desired insignia may be cut as shown in Fig. 3. The opaque surfaces 27

on strips 26 when illuminated, should of course match in color the corresponding opaque surface 16 on front panel 15, but due to the loss of light from reflection, the opaque surface 27 of strips 26 will necessarily be of a different shade in color, when not illuminated from that of surface 16 on front panel 15 to present the same shade and appearance when illuminated. The required difference in shade or color is of course readily ascertained by experimentation. It will be readily understood, therefore, to change the insignia on the sign it is merely necessary to replace one of the removable strips 26. The insignia on the slidable strips 26 is of course seen through the windows or uncoated areas 17 provided in the opaque surface 16 behind the front panel 15. For proper illumination the windows 17 are necessarily slightly smaller in all plane dimensions than the over-all dimensions of the inserts 26 which are placed behind the windows, so that when in position, the edges of the inserts 26 are concealed behind the opaqued areas of surface 16, and there is no leakage of light. No streaks of light defining the edges of the inserts can thus be seen from the front of my sign, when illuminated. The insert strips 26 are inserted within the guideways provided by the spacers 24 from the side edge of the sign and preferably extend out slightly beyond the side edge of the rear panel 20 to permit their removal and replacement. It will be understood, however, that the insert strips 26 may be inserted in their guideways from the top, if desired, without departing from my invention.

It will, of course, be readily seen that when the sign is lighted as by means of fluorescent tubes generally indicated at 13 (Fig. 2) positioned behind the rear panel 20 that the light rays passing through the insignia cut in the opaque surfaces 27 on removable strips 26 and in the permanent surface 16 of front panel 15, will illuminate the sign. Obviously permanent insignia may also be provided on the opaque surface 16, as illustrated by the words "Sales Room" in Fig. 1.

In Fig. 2 my sign is shown with only one sign surface, but in Fig. 2a it is shown adapted for a double faced sign.

It will thus be seen that in this manner I have provided an illuminated sign in which the insignia may be changed as desired but which has the attractive appearance of a unitary and integral sign.

I claim:

1. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material, an opaque sheet behind said panel having windows provided therein, a rear panel of translucent light diffusing material spaced from said front panel, guides between said front and back panels forming supports above and below said windows, insertable strips of transparent material slidable in said guides and having an opaque surface on which desired insignia may be cut, and a source of light behind said rear panel.

2. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material having an opaque surface with windows provided therein, a rear panel of translucent light diffusing material spaced from said front panel, guideways between said front and back panels above and below said windows, removable strips of transparent material and having an opaque surface on which desired insignia may be cut, said strips being slidable in said guideways and behind

said windows, and a source of light behind said rear panel.

3. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material having an opaque surface thereon with windows provided in said surface, a rear panel of translucent light diffusing material spaced from said front panel, spacer strips between said front and back panels forming guideways above and below said windows, removable strips of transparent material slidable between said spacers and having an opaque surface on which desired insignia may be cut and a source of light behind said rear panel.

4. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material having an opaque surface thereon with windows provided within said surface, a rear panel of transparent material, a translucent light diffusing surface adjacent said rear panel, said rear panel being spaced from said front panel, guideways between said front and back panels above and below said windows, insertable strips of transparent material slidable in said guideways and having an opaque surface on which desired insignia may be cut, and a source of light behind said rear panel.

5. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material having an opaque surface thereon with windows provided within said surface, a rear panel of transparent material having a translucent light diffusing surface, spacers spacing said front and back panels and forming guideways above and below said windows, insertable strips of transparent material slidable in said guideways and having an opaque surface thereon on which the desired insignia may be cut, and a source of light behind said rear panel.

6. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material having an opaque surface thereon with windows provided within said surface, a rear panel of transparent material having a translucent light diffusing surface, spacers spacing said front and back panels and forming guideways above and below said windows, replaceable strips of transparent material insertable from an edge of said sign and slidable in said guideways, said strips having an opaque surface thereon on which the desired insignia may be cut, and a source of light behind said rear panel.

7. An illuminated sign having replaceable items of insignia, comprising a front panel of transparent material having an opaque surface thereon with windows provided in said surface, a rear panel of translucent light diffusing material spaced from said front panel, spacer strips between said front and back panels forming guideways above and below said windows, removable strips of transparent material slidable between said spacers and having an opaque surface on which desired insignia may be cut, the windows in said front panel being smaller in length and width than said removable strips, and a source of light behind said rear panel.

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