Dec. 30, 1924. 1,520,729

F. J. STOEWSAND

ILLUMINATED SIGN

Filed Dec. 4, 1922

Fig. 1.

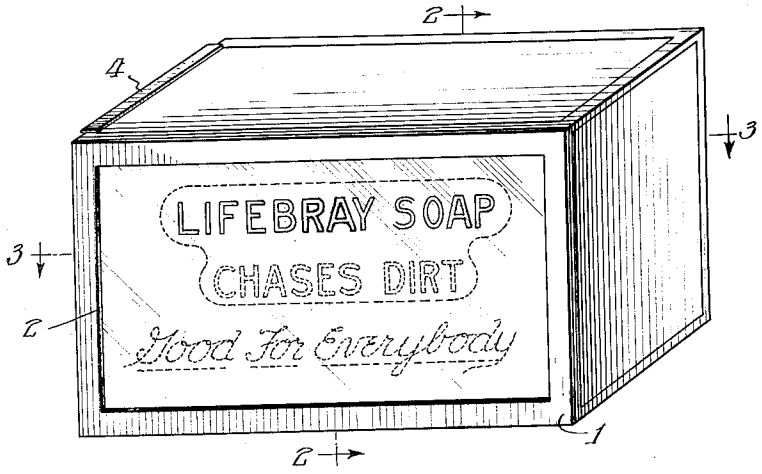


Fig. 2

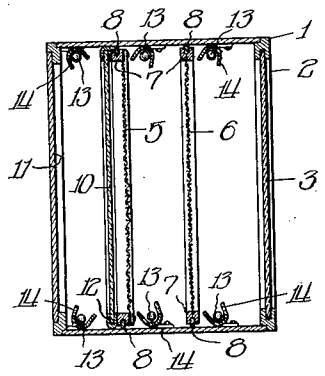


Fig. 4

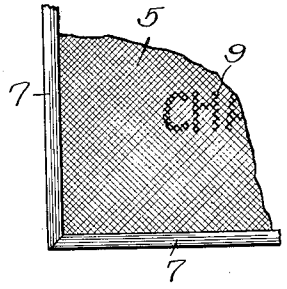
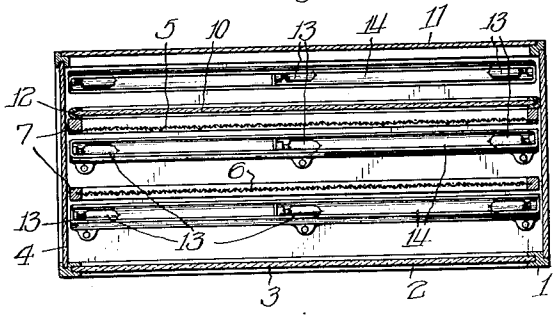


Fig. 3



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UNITED STATES PATENT OFFICE.

FREDERICK J. STOEWSAND, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE TWIN ELECTRIC SIGN COMPANY, A COMMON LAW COMPANY.

ILLUMINATED SIGN.

Application filed December 4, 1922. Serial No. 604,701.

To all whom it may concern:

Be it known that I, FREDERICK J. STOEWSAND, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in an Illuminated Sign, of which the following is a specification.

This invention relates particularly to an illuminated sign for advertising purposes, and the principal object of the invention is to provide a new and improved sign of this kind in which changeable screens can be used in connection with a display box, and lights to illuminate the screens to produce different effects depending upon which screens are illuminated. A further object of the invention is to provide improved means for illuminating the screens or a partially transparent back ground therefor. A further object is to provide an improved container for the illuminating apparatus from which the screens are easily removable. Other objects will appear hereinafter.

In the accompanying drawings, Fig. 1 is a perspective of a cabinet or container illustrating a combination of signs displayed thereby; Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1; Fig. 3 is a plan section taken on the line 3—3 of Fig. 1; and Fig. 4 is a detail of one of the screens.

In carrying out this invention a plurality of screens are provided each of which is painted or prepared on one side with a material which will not clog or fill up the screen but which will be displayed or made visible by a light shining on the coated portion of the screen. When the light appears back of the screen the coated portion thereof will not be visible, and the letters or figures on the face of the screen will only be visible from the front when this face is illuminated. Screens of this kind may be utilized alone, in combination with others of the same kind, and in connection with a back ground illuminated either as the screens themselves are or through the back of a partially transparent back ground, the transparent parts admitting light therethrough to display any sign or image desired.

Referring now more particularly to the drawings, a box or display cabinet 1 has a window aperture 2 at the front in which a glass 3 may be inserted. At one end it is open and provided with a slide 4 which can be raised from the top for withdrawing screens 5 and 6 and replacing them with others of the same kind. Each screen is mounted in a marginal frame 7, and the frame is slidable upon guides 8 at the top and bottom, the corresponding edges of the frames 7 being provided with grooves for receiving the guides 8 so that the screens will be held in their proper places.

Each screen may be coated or prepared as indicated in Fig. 4 by having letters 8, characters or scenic effects painted upon the outer face of the screen so that when viewed under sufficient light, the letters or characters will appear perfectly plain to an observer. The mesh of the screen is not clogged or filled with the paint so that if a light appears behind the screen the painted designation or characters on the front of the screen will not be visible and the illuminated part behind the screen will shine through without obstruction, except that of the screen itself. If desired, a portion of the screen may be omitted entirely, as indicated in Fig. 4.

Behind the screens a back ground 10 is usually provided which is made of glass or other transparent material coated with paint or some other substance which is not transparent, or only partially so, in order that the desired designation will be displayed thereby when a sufficient illumination is provided behind the back ground. A similar back ground may also be provided on the inside of the back 11 of the container itself by painting or the like in such a manner that the designation thereof will appear perfectly clear if it is sufficiently illuminated. In such a case the back ground 10 must be prepared with a view of displaying the matter on the back 11 if it is so desired. As shown, the back ground 10 supported by a marginal frame 12 is attached to the rear side of the frame supporting the screen 5.

In order to illuminate the screens a plurality of electric lamps 13 are disposed at the top and bottom of the container 1, and extending partially around these lamps are reflectors 14 which confine the rays thereof as nearly as possible to the front of the screen which they are intended to illuminate. Behind the member 10 are other lamps 13 at the top and bottom of the container with the reflectors 14 thereof turned toward the back of the member 10. If there is also a designation on the back 11, additional lamps and

reflectors are provided for illuminating it as well in the same manner.

In operation, the screens 5 and 6 and the back ground are prepared with a view of separately displaying some features or wording which can be seen by an observer, and usually with a view of supplementing or coordinating with the matter upon the other screens or back ground. In the simple example shown in the drawings, the words "Lifebuoy soap" may appear upon the back ground 10, the words "Chases dirt" upon the front of the screen 5, and the words "Good for everybody" upon the screen 6. It is obvious of course that the outer glass 3 may have some entirely different matter visible at all times included upon one of its surfaces. The lamps 13 are so connected that the back ground 10 or either of the screens 5 or 6 may be illuminated alone; or all of any two of them may be illuminated together. In practice it is usual to have the back ground 10 illuminated first, then to add the screen 5 and subsequently the screen 6, then to allow all to become dark, starting all over again. Any variation of this, well known to those in the sign business, may be employed without departing from the spirit and scope of the invention. The screens and back ground may be removed and changed or varied as desired, leaving the position of the container 1 the same. The container may be made in large sizes suitable for out door display or it may be in small sizes for window or counter display. The variation of the lighting of the separate screens or back ground is accomplished automatically by means well known in this art.

I claim:

1. In a sign of the class described, the combination with a plurality of foraminated screens, of coating material applied to one face of each of the screens and visible from one side thereof but not clogging the screens, an illuminated back ground behind the screens, and means at the edges of the screens and invisible from the front of the sign for separately illuminating the face of each of the screens.

2. In a sign of the class described, a receptacle having a front window, a slide at one end and guides at top and bottom parallel with the window, of a plurality of foraminated screens removably slidable into the container upon the guides, means on the face of each screen for forming letters or characters thereon without clogging the screens, a partially transparent back ground behind the screens, and means at the margins of the screens and invisible from the front of the receptacle for illuminating the back ground and the front faces of the screens separately so that the back ground and an illuminated screen is visible through the screen in front of it without displaying the matter upon the screen which is not illuminated.

3. In a sign of the class described, the combination with a plurality of foraminated screens, of coating material applied to the outer face of each of the screens and visible from this side thereof but not clogging the screens, an illuminated back ground behind the screens, means at the edge of the screens and invisible from the front of the sign for separately illuminating the outer face of each of the screens, and means forming a transverse guide upon which the screens are slidable for separately removing them from the sign.

FREDERICK J. STOEWSAND.