March 2, 1937. C. M. ANDRES 2,072,439

LUMINOUS INDICATOR

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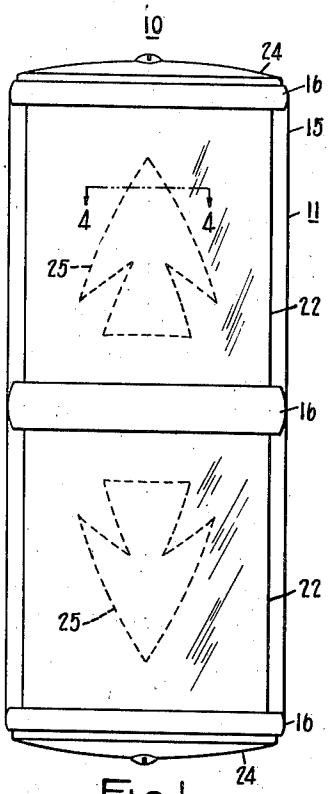


FIG. 1

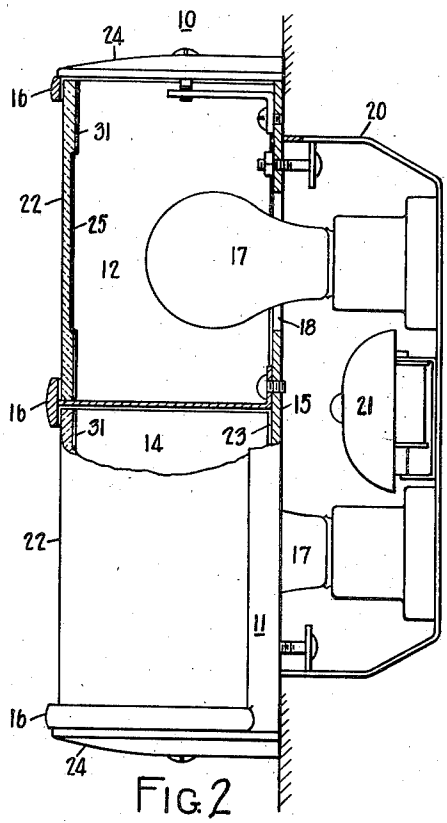


FIG. 2

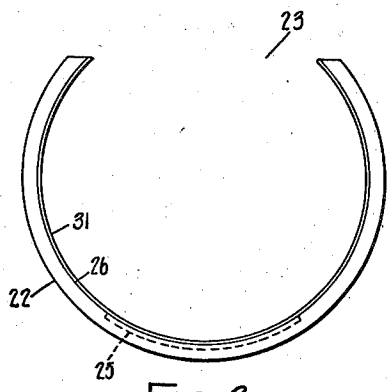


FIG. 3

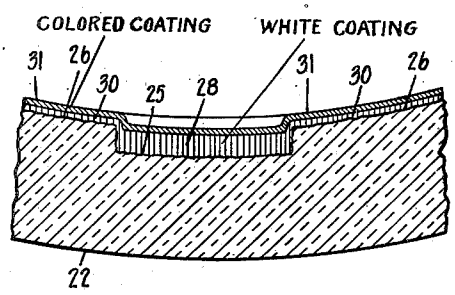


FIG. 4

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LUMINOUS INDICATOR

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2 Claims. (Cl. 40—130)

This invention relates to light transmitting material, and especially to light transmitting material for the luminous indicators of elevator installations.

Various kinds of luminous indicators are used in elevator systems to convey information relative to the operation of the elevator car. Such indicators usually employ a light transmitting material arranged to display an area of selected color or to cause a selected character or symbol to appear when illuminated. To avoid confusion on the part of passengers and attendants it is desirable that any character or symbol be legible only when the indicator for which it is used is illuminated.

One feature of the invention is the provision of a light transmitting material which presents a selected color effect when backed by an active source of light, and a different color effect when said source is not lighted.

A second feature is the provision of a light transmitting material which may be made to produce any one of a variety of different color effects.

A third feature is the provision of a light transmitting material which clearly displays characters or symbols when backed by an active source of illumination but not otherwise.

A fourth feature of the invention lies in the provision of a light transmitting material which is cheap to manufacture.

Other features and advantages of the invention will become apparent from the specification and appended claims.

The invention will be described by way of illustration as applied to a hall lantern for an elevator.

In the drawing:

Figure 1 is a view in front elevation of an elevator hall lantern having glass enclosures embodying the invention;

Figure 2 is a view in side elevation of Figure 1, with parts in section;

Figure 3 is an enlarged end view of one of the enclosures; and

Figure 4 is an enlarged sectional view taken along the line 4—4 of Figure 1.

Referring to the drawing, a hall lantern 10 is shown as provided with a housing 11 having upper and lower compartments 12 and 14. Housing 11 comprises a base 15 having ring portions 16 extending outwardly therefrom. Each compartment is provided with a lamp 17. The lamps project into the compartments through apertures 18 formed in base 15. The lamps are mounted on a bracket 20 secured to the rear surface of the base. A bell 21, preferably of the single stroke type for rendering an audible signal, may also be mounted on the bracket. When the lantern is mounted in the elevator corridor the bracket and parts thereon are concealed within the corridor wall.

Each compartment 12 and 14 is provided with a cylindrical enclosure 22 having an opening 23, as illustrated in Figure 3. Enclosure 22 is preferably made of transparent or translucent glass although other materials may be utilized. The enclosures are assembled inside the ring portions 16 of the housing with the openings 23 thereof positioned adjacent base 15. Removable cover plates 24 are provided at the top and at the bottom of the housing so that the enclosures may be inserted therein. An arrow 25 is formed on each of the enclosures. The enclosures are assembled in the housing with the arrow of the upper enclosure pointing in an upward direction and with the arrow of the lower enclosure pointing in a downward direction. When the lantern is positioned in the elevator corridor the enclosures are visible from all directions in the corridor.

It is preferred that the enclosures 22 appear white in color when the lantern is not lighted, with the enclosure for the upper compartment displaying a green color when the upper compartment lamp is lighted and the enclosure for the lower compartment displaying a red color when the lamp for that compartment is lighted. Such an arrangement will be described. Referring to Figure 4, which is a fragmental view in cross section of a portion of the enclosure for the upper compartment, the inner surface 26 may be roughened by sand blasting or any other suitable method. A depression the shape of an arrow 25 is formed in surface 26. A coat 30 of white enamel is applied to surface 26, several heavy coats 28 of white enamel being applied to the area of arrow 25 to render the arrow opaque. A coat 31 of green enamel is then applied over the coat of white enamel for the enclosure for the upper compartment. Red enamel is applied for the coat 31 for the enclosure for the lower compartment instead of green enamel. The enamels used preferably are of a pyroxylin lacquer base colored with pigments and are sprayed on. Each coat of enamel is baked for thirty minutes at 160° Fahrenheit between applications. The coat 30 of white enamel is of an applied density so that illumination is not materially reduced when the lantern is lighted and so that the coat 31 of green or red enamel is not noticeably apparent

through the glass when the lantern is not illuminated.

Assuming the lantern to be viewed from the outside, when lamp 17 for upper compartment 12 is illuminated the upper enclosure 22 appears green with its arrow 24 appearing distinctly darker and pointing in an upward direction. The lower enclosure 22 when illuminated by its respective lamp 17 appears red with its arrow 24 appearing distinctly darker and pointing in a downward direction. The distribution of light is even over the entire surfaces of the enclosures when the lantern is illuminated. In the absence of light in both the upper and lower compartments, the upper and lower enclosures present a milk white appearance with their respective arrows barely discernible.

The invention is applicable to various types of indicators, including those in which no character or symbol is displayed. The light transmitting medium may be of any shape which conforms to the design of the indicator. Other color combinations than those specifically described may be employed.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:—

1. In a luminous indicator, a light transmitting member having a covering of white translucent paint applied to its inner surface, a portion of said covering being thicker than the remaining portion to render it opaque, one of said portions being in the form of a selected symbol, a covering of translucent paint of a different color applied to the first named covering, said paints being of a density such that when said indicator is not illuminated, said member appears white without displaying said symbol, and when said indicator is illuminated, one of said portions appears a different color displaying said symbol.

2. In a luminous indicator, a light transmitting member having a covering of white translucent paint applied to its inner surface, a portion of said covering in the form of a selected symbol being thicker than the remainder to render it opaque, a covering of translucent paint of a different color applied to the first named covering, said paints being of a density such that when said indicator is not illuminated, said member appears white without displaying said symbol, and when said indicator is illuminated, said member appears a different color and said symbol is displayed.

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