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F. A. BOEDTCHER

ILLUMINATED SIGNAL FOR ELEVATOR INSTALLATIONS

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Fig. 1

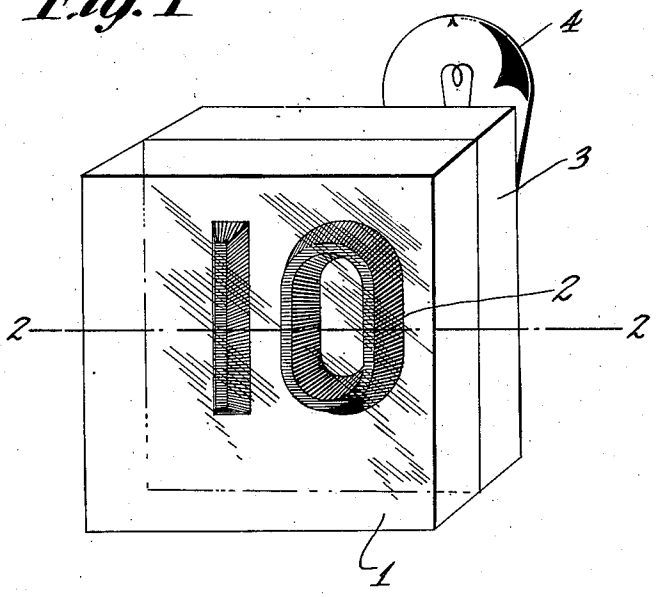
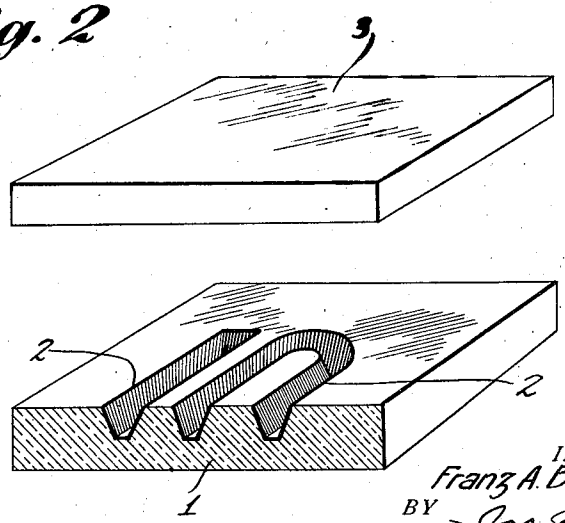


Fig. 2



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UNITED STATES PATENT OFFICE.

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ILLUMINATED SIGNAL FOR ELEVATOR INSTALLATIONS.

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This invention is an illuminated signal adapted to be used especially on panel boards and in connection with the position and direction indicating and car signaling systems of an elevator and has for its object a construction which may be made relatively small, but which will nevertheless be clearly visible under all conditions and in all places. Signals of this character frequently have to be made relatively small particularly when used on panel boards where space must be minimized and it is essential to obtain clear visibility even though the indicia exhibited by the signal may be relatively small.

The invention, in its preferred form, embodies a glass panel, the front face of which is preferably flat and in the back face of which is cast the indicia, either letter, word, symbol, character or combination thereof to the end that the said indicia is in the form of one or more recesses directly within the panel which, in practice, is made transparent and polished both on its front and rear face, so as to enhance its transparency and facilitate the passage of light therethrough without deleterious or harmful refraction.

The walls of the recess or recesses thus formed are coated with color which may be opaque in character, but is preferably translucent, so that light in back of the panel may be seen in color as viewed through the indicia.

Back of the plate in which the indicia are formed is positioned a second plate or sheet of glass, which may be frosted, but I prefer to use opal glass for this back plate and back of the back plate is positioned a lamp or other suitable source of illumination. As a result of this construction, the light from the source penetrates the opal back plate and the front plate showing the indicia standing out in apparent bold relief in color on a perfectly white background. The effect is not only highly pleasing but produces maximum visibility when seen from any angle.

Features of the invention, other than those specified, will be apparent from the hereinafter detailed description and claim, when read in conjunction with the accompanying drawings.

The accompanying drawings illustrate one practical embodiment of the invention, but the construction therein shown is to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 is a perspective view showing a construction embodying the present invention; and,

Figure 2 is a section perspective in the plane of the line 2—2 of Figure 1, showing the front and back plates separated in the interests of clearness.

Referring to the drawings, 1 designates the front plate or panel, which, in practice, may be of any suitable contour, but for the purpose of illustration is shown as rectangular. It is, in practice, usually cast and in the process of casting, one or more recesses or indentations 2 are formed in the back face thereof. These depressions are made relatively deep and may be of any suitable shape which will depend particularly upon the use of the signal. For the purpose of illustration, the signal is shown as for exhibiting the numeral "10" adapting it for use either on a panel board or in conjunction with an annunciator or a stop or position indicating signal to designate the tenth floor of the building in which the installation is made. In practice, however, any suitable words, symbols or other characters may be formed in the front plate 1.

The superficial surfaces of each recess 2 are coated with suitable coloring material, such for example as a liquid paint or dye, which, in practice, may be opaque, but I prefer to employ transparent coloring material.

After the plate 1 has been cast and recesses colored, both the front and rear face of the plate are polished to eliminate undesirable refraction and the plate is thereupon ready for assembly with a back plate 3, which, in practice, may be frosted glass, but is preferably opal glass. This opal glass gives a perfectly white background to the front plate 1 and is positioned tightly against the back of the front plate, so as to form a seal for the depressions 2 so that the entry of dust or foreign matter thereinto is precluded.

The two plates 1 and 3 are positioned face to face in a suitable frame or holder which is, in turn, mounted in front of an electric lamp 4 or other suitable source of light. The result is that the light shines through the opal back plate 3 and through the front plate 1 and the characters 2 recessed therein. When thus exhibited, the characters 2 appear to be in bold relief, in color and on a perfectly white background, so that un-

usual high visibility results and the signal may thus, when made even in the smallest sizes, be clearly seen under the most adverse conditions of size and position.

While the back plate is preferably made of glass as specified, I have found that a very satisfactory and cheap construction results if the back plate is made of celluloid either transparent or translucent, and preferably white celluloid is employed in practice in this connection. This gives a very cheap construction and inasmuch as it can be obtained in pure white a very nice contrast is had between the colored letters or numbers and this background. I have made some very effective signs by using white celluloid as a background and using gilt paint in the letters. Other material than celluloid or glass may be used and either may be white or colored.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:

A signal embodying a transparent front plate provided in its rear face with a depression constituting signaling indicia, translucent coloring matter coating said depression to impart the desired color thereto, a translucent back plate positioned in facial engagement with the rear of the front plate to cover and close the depression in the rear of the front plate and which back plate can be seen through the front plate and forms a backbround for the indicia, and a lamp positioned rearwardly of the back plate, for illuminating both the back plate and the indicia, and the colored indicia appearing as in relief.

In testimony whereof I have signed the foregoing specification.

FRANZ A. BOEDTCHER.