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SIGN CONSTRUCTION

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2 Sheets-Sheet 1

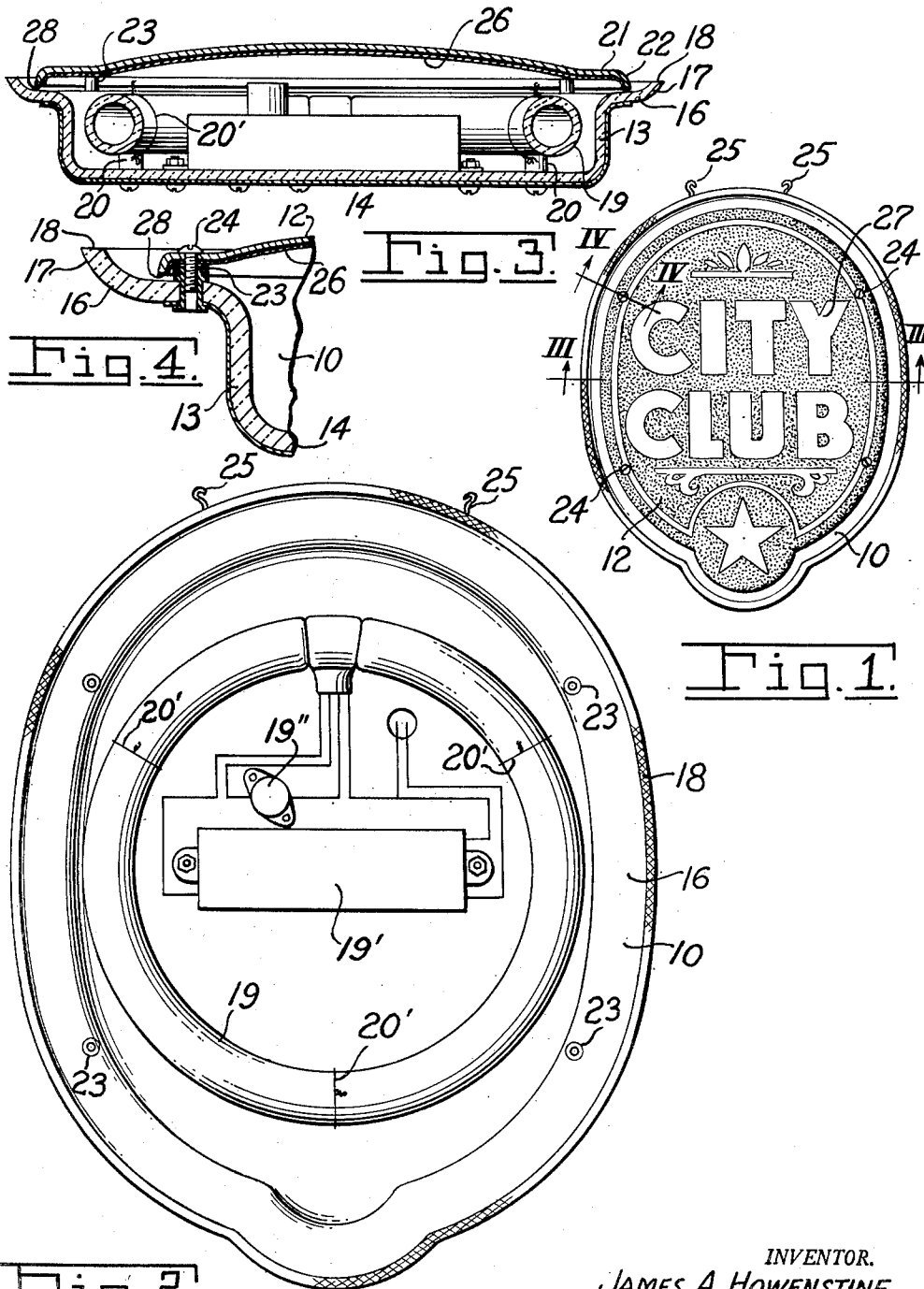


Fig. 2.

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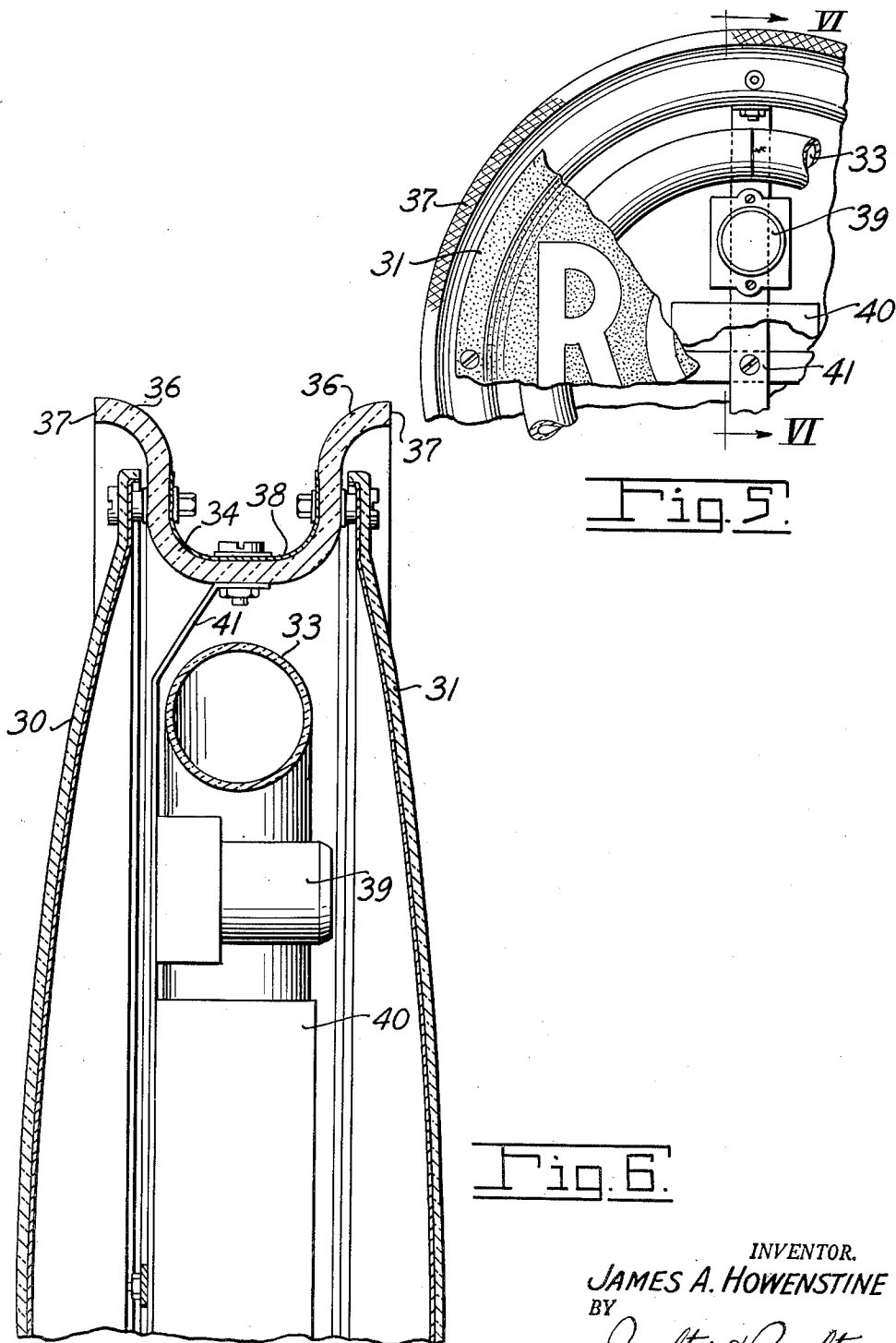


Fig. 5.

Fig. 6.

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5 Claims. (Cl. 40—130)

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This invention relates to a sign structure and more particularly, to a sign having an illuminated face bounded by decorative illuminated bands.

An object of this invention is to provide a sign having a decorative edge-lighted band surrounding the face at the outer rim thereof.

A further object of this invention is to provide a sign panel having a dish-shaped portion provided with a rim which is lighted by transmitted light.

A further object of this invention is to provide a sign structure in which a dish-shaped body member and a face plate that covers the opening of the body member are both provided with decorative illuminated bands.

The above and other objects and features of the invention will in part be apparent and will in part be obvious from the following detailed description, and the drawings, in which:

Figure 1 is a view in front elevation showing a sign constructed in accordance with an embodiment of this invention;

Fig. 2 is an enlarged view of the sign with the face panel thereof removed;

Fig. 3 is an enlarged view in section taken along a line III—III of Fig. 1;

Fig. 4 is a fragmentary enlarged view in section taken along a line IV—IV in Fig. 1;

Fig. 5 is a fragmentary view partly in front elevation and partly broken away and in section showing a sign constructed in accordance with another embodiment of this invention; and

Fig. 6 is a view in section taken on a line VI—VI in Fig. 5.

In Figs. 1-4 inclusive is shown a sign which includes a dish-shaped body member 10 and an arched face panel 12. As shown in Fig. 3, body member 10 is provided with a side wall 13 which projects substantially at right angles to back wall 14. At the mouth of the body member is provided a peripheral flange 16 extending radially outward thereof. Flange 16 terminates in a peripheral edge 17. Edge 17 projects forwardly from the main portion of flange 16 and outwardly at an angle of approximately 45° thereto and terminates in a front face 18. Face 18 is substantially perpendicular to the axis of the dish-shaped body member.

The body member is formed of transparent light-conducting material, such as the methyl methacrylate resin known as "Lucite" or "Plexiglas." The body member supports a circular fluorescent lighting tube or lamp 19 which illuminates the sign and appropriate electrical

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units 19' and 19'' for illuminating the lamp. The lamp is disposed in the cavity of the body member and rests on lugs 20. Lugs 20 are attached to the backing member and form supports for the wires 20'. The wires 20' extend around the lamp and hold the lamp in such position that light from lamp 19 enters flange 16 at the mouth of the body member and is transmitted or "piped" through the flange to face 18. Face 18 is roughened so that it is brightly illuminated by light transmitted from lamp 19.

The face panel 12 covers and closes the mouth of the body member 10. Panel 12 is outwardly arched for strength. At the edge of the central or main portion of panel 12 is provided a radially extending edge portion 21. Edge portion 21 terminates in a peripheral flange 22. Flange 22 is turned toward flange 16 substantially at right angles to edge portion 21. The face panel 12 is supported on spacers 23 and secured to flange 16 by screws 24. As shown in Fig. 4, each screw 24 passes through its spacer 23. The face panel so mounted is spaced from the body member.

The sign may be hung with the face plate and body member in upright position as shown in Fig. 1 by means of appropriate hangers 25. In this position, the face panel 12 forms the front of the sign.

Face panel 12 is formed of transparent, light-conducting material, which may be of the same type as employed in construction of the body member. The interior of panel 12 is covered with a layer or layers of translucent paint 26. The paint 26 may be applied in such manner as to form indicia 27 (Fig. 1).

The face 28 of flange 22 adjacent the flange 16 of the body member is unpainted, as indicated in Figs. 3 and 4, and is spaced a short distance from the flange of the body member, so that light from lamp 19 enters the face 28 and is piped through the flange 22 to illuminate the edge of the face panel, forming a decorative lighted border or band for the face 18.

Body member 10 with the exception of flange 16, may be covered with an exterior coating of paint or the like, of sufficient thickness to render it opaque. The first or inner coat of paint on the backing member may be of a white or other light color so as to reflect light from tube 19 forwardly toward the front panel. The light reflecting coat of paint is covered with an outer layer or coat of dark opaque paint. Since the flange 16 is clear or transparent, the face 18 thereof is brightly illuminated and has the ap-

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pearance of being unattached to either the sign face or body member. The front panel is illuminated in part by light transmitted therethrough and in part by the light piped through the edge thereof.

In Figs. 5 and 6 is shown a double-faced sign, the sign being provided with two face panels 30 and 31, both of which are illuminated by a single lamp 33. The face panels face in opposite directions as shown in Fig. 6 and are both attached to a common frame or ring 34. Ring 34 is of generally U-shape in section. Each leg of the U-shaped ring is provided with a flange 35, and each flange terminates in a face 37 facing in the same direction as one of the face panels. The ring is formed of transparent, light-piping material so that light from the lamp is piped to faces 37. Faces 37 are roughened to cause them to be brightly illuminated by the light piped thereto. As shown in the drawing, a layer of opaque paint 38 covers a portion of the outer surface of the U-shaped ring but terminates short of the flanges 35 so that light is not transmitted through the portion of the backing ring between flanges 35. When the sign is viewed from either side, one of the illuminated faces 37 surrounds but appears to be unattached to the sign.

Each of the face panels 30 and 31 of the sign shown in Fig. 5 may be similar in construction to the face panel of the sign illustrated in the other figures.

As shown in the drawing, the lamp 33, and electrical units 39 and 40 for illuminating the lamp, are attached to a cross shaped bracket 41. The ends of bracket 41 are attached to the inside of backing ring 34, as shown most clearly in Fig. 5. The sign can be hung by means of appropriate hangers, not shown, which may be attached to the outside of ring 34.

The sign structures described above and illustrated in the drawing, are subject to structural modification without departing from the spirit and scope of the appended claims.

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

1. An illuminated sign which comprises a one-piece dish-shaped body member of transparent, light-conducting material having a flange extending radially outwardly from the mouth thereof and a peripheral flange projecting forwardly and outwardly thereof, said peripheral flange terminating in a forwardly directed light-bleeding front face, a face panel of transparent material closing the mouth of said body member, said face panel comprising a main portion and a peripheral flange projecting at right angles to the main portion toward the flange of the body member, means for attaching the face panel to the body member in closely spaced relation thereto, the face panel terminating inboard of the light-bleeding face of the body member, a translucent coating on the inner face of the face panel, a lamp mounted in the body member, light from the lamp being transmitted through the peripheral flange of the body member to the front face thereof and through the flange of the face panel to produce a pair of spaced, edge-lighted bands surrounding the face panel, and an opaque coating on the body member, the coating on the body member terminating behind the flange of the face panel, whereby the portion

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of the flange of the body member which projects outboard of the face panel is clear, the main portion of the face panel being illuminated by light from the lamp transmitted therethrough.

2. An illuminated sign which comprises a one-piece dish-shaped body member of transparent, light-conducting material having a flange extending radially outward from the mouth thereof, a face panel of transparent material closing the mouth of said body member, said face panel comprising a main portion and a peripheral flange projecting at right angles to the main portion and toward the flange of the body member, means for attaching the face plate to the body member in closely spaced relation thereto, a translucent coating on the inner face of the face panel, a peripheral flange on the body member terminating outboard of the face plate in a forwardly facing light-bleeding face, and a lamp mounted in the body member, light from the lamp being transmitted through the flanges of the body member to the light-bleeding face thereof and through the flange of the face panel to produce a pair of spaced, edge-lighted bands surrounding the face panel, the main portion of the face panel being illuminated by light from the lamp transmitted therethrough.

3. A sign which comprises an annular member of transparent light-conducting sheet material, face members on opposite sides of the annular member to form a closed space therein, a light source mounted in said space, at least one of said face members being translucent, said annular member having a flange projecting outwardly from the rim thereof, said flange being adapted to receive edge light from the lamp, said flange terminating in a light-bleeding face substantially parallel to a plane passing perpendicularly through the axis of said annular member.

4. A sign constructed in accordance with claim 3 characterized by the fact that the annular member is of U-shape in section, the marginal edges of the legs of the U terminating in flanges substantially perpendicular to the legs, the outer edge of each flange being parallel to a plane substantially perpendicular to the axis of the annular member, and that the face members are translucent, the outer edges of said U-leg flanges bleeding light to produce the effect of an illuminated border for said face members.

5. A sign which comprises an annular member of transparent light-conducting sheet material having a central cavity, a lamp mounted in said central cavity, said annular member having an outwardly projecting main flange adapted to receive edge light from the lamp, a translucent face plate attached to the annular member and overlying the cavity of the annular member to be illuminated by the lamp, the annular member having a peripheral flange on the outboard edge of the main flange terminating outboard of the face plate in a light-bleeding face to form an illuminated ring outboard of the face plate and facing in the same direction as the face plate.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,915,511	Banse	June 27, 1933
2,296,746	Snyder	Sept. 22, 1942
2,556,779	Ross	June 12, 1951