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C. H. WAMSER

2,769,263

ILLUMINATED SIGNS

Filed March 30, 1954

2 Sheets-Sheet 1

Fig. 2.

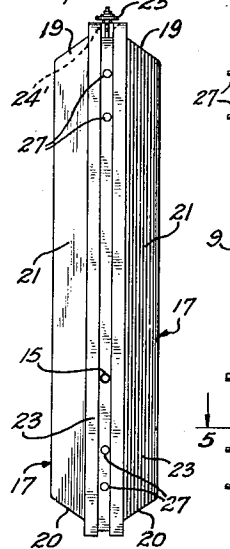


Fig. 1.

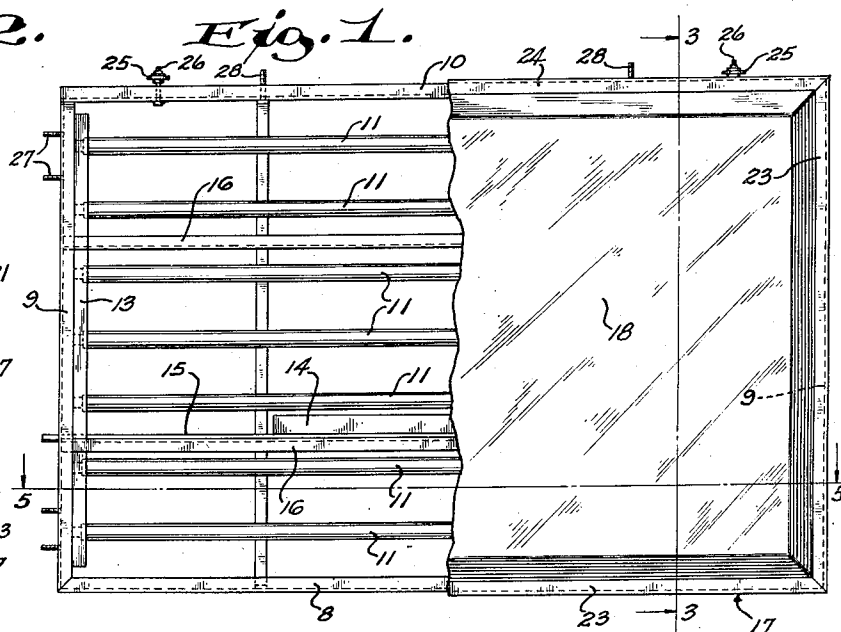
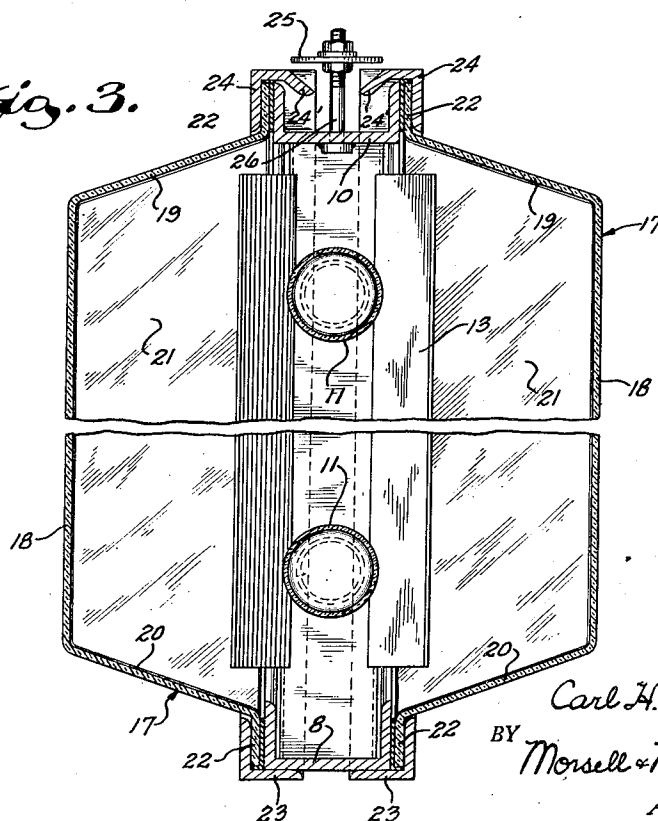


Fig. 3.



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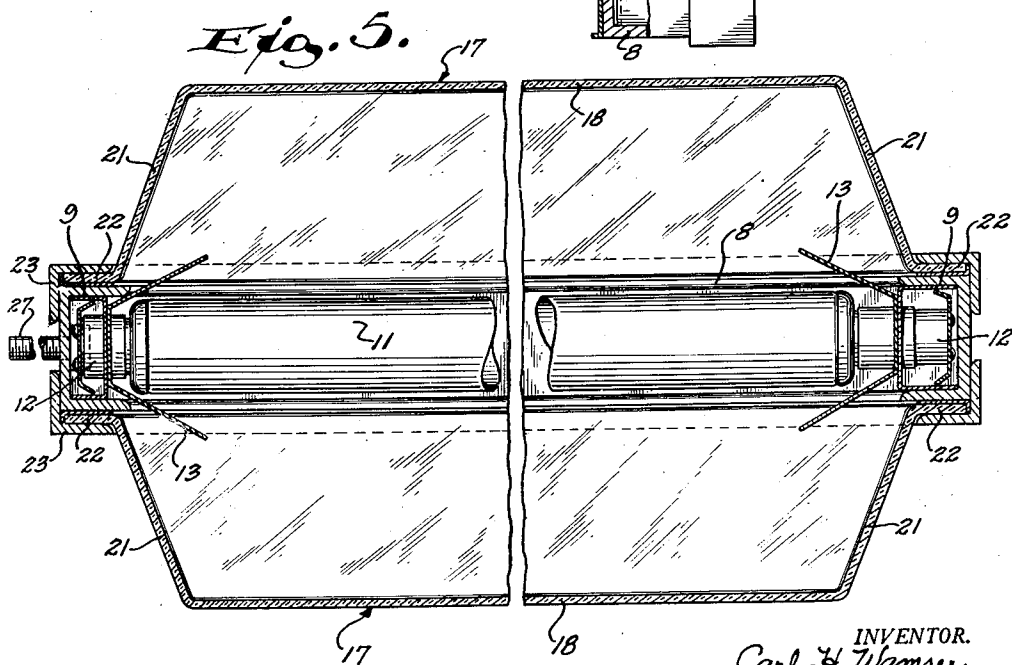
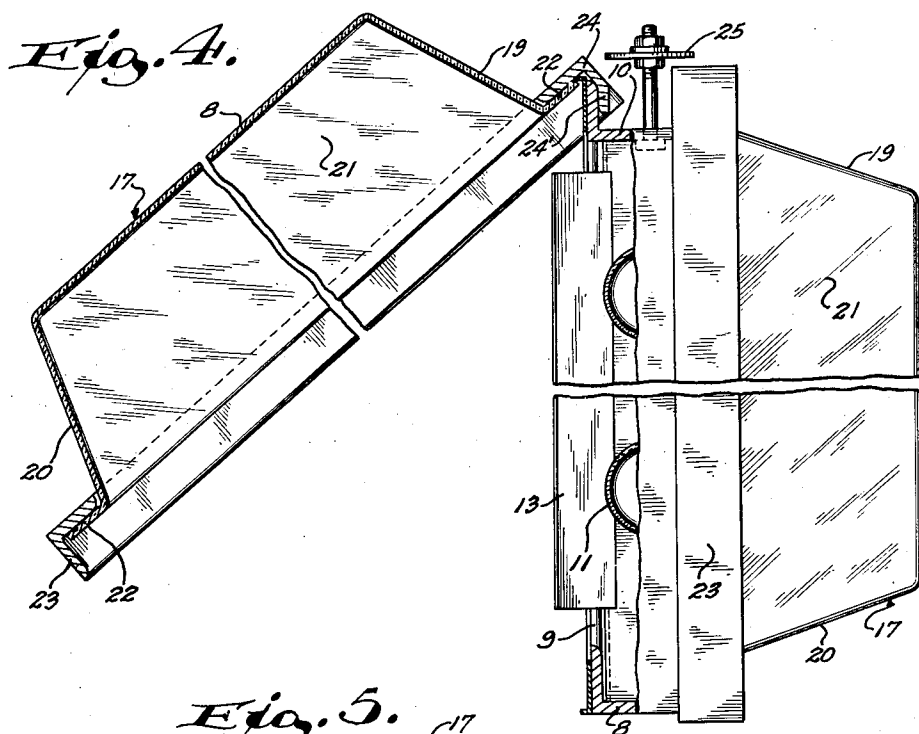
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ILLUMINATED SIGNS

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4 Claims. (Cl. 40—132)

This invention relates to improvements in illuminated signs, and more particularly to the frame or casing construction of a relatively large type of electric, illuminated sign for display and advertising purposes.

Illuminated signs for display purposes are customarily large, bulky, and heavy and are usually mounted in elevated positions. The hollow interior of an illuminated sign of this type houses the tubes, lamps and ballasts and means must be provided to afford access to the interior of the sign casing for servicing or replacing the elements housed therewithin and for cleaning the interior surfaces of the translucent faces of the sign. In conventional illuminated sign structures the opposed translucent faces of the casing are mounted for movement to permit access to the interior of the sign and the movement of such faces is customarily relative to an annular intermediate drum or divider, which drum or divider, in the conventional illuminated sign structures is of relatively wide sheet metal which requires interior reinforcement by heavy structural steel members. The wide sheet metal drum, besides requiring substantial interior reinforcements, covers and obliterates to a large extent the angled translucent end portions of the sign casing faces. Furthermore in many of the conventional structures the top member of the sheet metal drum or divider carries conventional hinges by which the exposed translucent faces of the casing are mounted for swinging movement relative to the drum.

With the foregoing in mind it is a general object of the present invention to provide an improved illuminated sign construction wherein an annular structural steel framework is utilized as the drum or divider, eliminating the need for substantial interior reinforcements, said framework being relatively narrow with a minimum of exposed metal surfaces around the body of the sign casing, whereby the angled end portions of the translucent faces remain substantially exposed.

A further object of the invention is to provide an illuminated sign construction wherein the top horizontal bar of the annular frame or drum is in the form of an upwardly directed channel which has its opposite flanges hookingly engaged by downturned flanges on the upper margins of the casing face frames, thereby fulcruming the upper edges of the face frames on the top portion of the drum frame for hinging movement to provide ready access to the interior of the sign.

A further object of the invention is to provide an illuminated sign of the character described which is strong and rigid, which is simple to manufacture and assemble, which provides simple and effective hinged mountings for the opposite translucent faces of the sign casing with a minimum of parts and material, which presents a neat and attractive appearance, which provides for maximum exposure of the translucent faces, including their angled end portions, and which is well adapted for the purposes described.

With the above and other objects in view the invention consists of the improved illuminated sign, and

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its parts and combinations as set forth in the claims, and all equivalents thereof.

In the accompanying drawings in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a front view of the improved illuminated sign with a portion of a translucent face broken away to show structural details of the interior of the sign;

Fig. 2 is an end view of the improved illuminated sign;

Fig. 3 is a vertical sectional view taken on line 3 of Fig. 1 and on a larger scale;

Fig. 4 is an enlarged end view of the sign with part being broken away and shown in section and illustrating the manner in which one of the face frames may be hingedly swung outwardly to afford access to the interior of the sign; and

Fig. 5 is an enlarged longitudinal horizontal sectional view taken on line 5—5 of Fig. 1.

Referring now more particularly to the drawings it will appear that the drum or divider of the improved illuminated sign takes the form of an open rectangular frame of relatively heavy channel iron members including a bottom longitudinal drum frame member 8 with the channel thereof directed upwardly; end drum frame members 9 having their lower ends integral with and secured to the opposite ends of the lower horizontal frame member 8 and extending upwardly thereof, the channels of said end frame members 9 opening inwardly; and a top horizontal drum frame member 10 mounted on the upper ends of the frame members 9 and having its channel upwardly opening.

Within the drum or divider formed by the channel members 8, 9 and 10 are a plurality of spaced apart longitudinally extending fluorescent tubes 11 or other illuminating lamps whose opposite ends are mounted in suitable electrically connected sockets 12 mounted within the channels of the end frame members 9. The end frame members 9 also support baffles 13. The numeral 14 designates a conventional ballast box which may also be mounted within the drum frame and an electrical outlet is indicated by the numeral 15. If the sign is a relatively large one the drum frame may be reinforced in a simple manner by elongated structural steel reinforcing elements 16 having their opposite ends secured within the channels of the vertical end frame members 9.

Each face of the open drum frame or divider is adapted to be closed by a translucent pan-like member indicated generally by the numerals 17. The major portion of each pan-like member 17 is formed of a sheet of translucent plastic material shaped to provide a front face 18 which in practice may bear lettering or other advertising indicia to be illuminated by the tubes 11 within the drum frame; integral top and bottom surfaces 19 and 20 extending angularly from the upper and lower margins of the front faces 18; and integral angularly outwardly directed end surfaces 21. The peripheral portions of the pan-like members 17 are provided with flanges 22. The flanged periphery of each pan-like member 17 carries angle iron members 23 and 24. The angle members 24 extending horizontally across the top portions of the pan-like members 17 are of slightly different formation than the angle iron members 23, as will appear from Figs. 3 and 4 and for a reason hereafter to be explained. The flanged peripheral portions of the pan-like members 17 are secured within the angled members 23 and 24 by any suitable means as by clips (not shown). The angle iron members 24 across the horizontal top portions of the pan-like members 17 are adapted to seat on the upper edges of the upright channel flanges of the top member 10 of the drum frame and are additionally provided with inwardly, downwardly directed lips 24' which,

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in the normal closed positions of the pan-like members 17, extend downwardly into the channel 10. These downturned lips 24' form retaining hooks and additional bearing surfaces when the pan-like members 17 are hingedly swung outwardly to open the sign for access to the interior of the drum frame, as shown in Fig. 4, the pan-like members being susceptible of having their angled members 24 fulcrum on the upper edges of the channels of the member 10 with the lips 24 ultimately contacting the upright portions of the channel 10 to limit the outward swinging movement. Displacement of the fulcrumed angled portions 24 of the pan-like members from the edges of the channel 10 is prevented by plates or discs 25 spacedly and adjustably mounted on the upper ends of vertical bolts 26 mounted in the channel 10.

When the pan-like members 17 are closed relative to the drum frame, the angle iron members 23 substantially overlap outer face portions of the channel members 8 and 9 of the drum frame as best shown in Figs. 2, 3 and 5. The upwardly directed top channel 10 of the drum frame, besides forming the fulcrum engagement for the angle members 24 of the pan-like members, provides a catch basin for water or rain which might otherwise seek to enter the interior of the sign structure, which water or rain is free to flow out of the opposite ends of the top channel 10, which are open, as shown in Fig. 2.

Elongated display signs of the type under consideration are susceptible of being mounted or suspended as desired. For this purpose either or both of the end frame members 9 of the drum can have anchored therein outwardly directed hanger bolts 27 and the top channel 10 may likewise have anchored therein upwardly directed hanger bolts 28.

The improved illuminated display sign provides a simple but strong structure in that relatively heavy, but narrow, structural metal angles and channels are used for framing the peripheral portions of the pan-like members 17 and for forming the divider or drum. The result is that as viewed from the exterior there is a minimum of exposed metal but the banding effect formed by the metal framework is relatively narrow and provides for a maximum exposure of all surface portions of the translucent plastic face material which is especially advantageous in respect to the ends of the structure. As shown in Fig. 2 the arrangement provides for a maximum exposure of the tapered end faces 21 of the translucent material which enhances the attractiveness and effectiveness of the sign.

In the improved sign structure the top upwardly facing channel 10 of the drum frame serves a three-fold purpose. In addition to forming the top structural member of the drum frame its vertical side flanges permit the hooking swingable mounting thereon of the angled frame members of the pan-like members 17 and the open channel 10 additionally serves as a basin or reservoir for water. Due to the simple hinged or fulcrumed mounting of the pan-like member 17 which normally close the assemblage either or both may be easily swung to an open position, as shown in Fig. 4, to permit access to the interior of the sign for replacements, repairs, cleaning or servicing.

The improved illuminated sign is of simple and novel construction and is well adapted for the purposes set forth.

What is claimed as the invention is:

1. In a display sign construction, a rectangular metallic frame forming a drum, the top element of said drum frame having an upwardly projecting flange, a pan-like member for closing a face of said drum frame, said pan-like facing member including a dished sheet of translucent material with a rectangular flanged peripheral portion and metallic collar members carried by the flanged peripheral portion of the sheet material, the collar member

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along the top edge of the sheet material flange being angled and hookingly engaging the upwardly projecting flange of the top element of the drum frame to provide for hinging movement of the pan-like facing member on the drum, and a plate supported from the top element of said drum frame spacedly over the collar member along the top edge of the sheet material flange to prevent displacement of the latter during hinging movement of said pan-like member.

2. In a display sign construction, an open rectangular metallic frame of narrow channel members forming a drum, the channel member forming the top of said drum frame opening upwardly, the other channel members of said drum frame opening inwardly, a pan-like member for closing each face of said drum frame, said pan-like facing members each including a dished sheet of translucent material with a rectangular flanged peripheral portion and metallic angle members carried by the flanged peripheral portions of the sheet material, the angle member along the top edge of each dished sheet being angled outwardly and downwardly to hookingly engage a flange of the top channel member of the drum frame to provide for independent hinging movement of the pan-like facing members on the drum to afford access to the interior of the drum from either side thereof, the transverse dimensions of the pan-like facing members being substantially greater than the transverse dimension of the drum frame whereby the entire periphery of the sign provides substantial display surfaces laterally of the drum frame.

3. A casing for a display sign, comprising a pair of pan-like members each including a dished sheet of translucent material with a rectangular flanged peripheral portion and metallic collar members carried by the flanged peripheral portions of the sheet material, the collar member along the top edge of each dished sheet being angled outwardly and downwardly and the open flanged sides of the dished sheets facing each other in spaced relation, a narrow open rectangular metallic frame interposed between the open flanged sides of the dished sheets, spaced upwardly directed flanges formed on the top element of said frame hingedly engaged by the angled collar members on the top edges of the dished sheets, the other collar members on the dished sheets overlapping end and bottom portions of said interposed metallic frame in the normal positions of said dished sheets, and a plate supported by the top element of said frame above the angled collar members on the top edges of the dished sheets and overhanging the same.

4. In a display sign casing of the type which includes a pair of pan-like members each having a dished sheet of light permeable material with a rectangular peripheral portion and angle iron collar members carried by the peripheral portions of the sheet material, the angle iron member along the top edge of each dished sheet having its top flange angled downwardly and the open collar-carrying faces of the dished sheets facing each other in spaced relation, an open rectangular frame of channel iron members interposed between the open flanged sides of the dished sheets, the vertical sides of the channel of the top element of said frame being upwardly directed and hingedly engaged by the angle iron collar members on the top edges of the spaced dished sheets, whereby the dished sheets are normally depended from the top element of the frame.

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