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ILLUMINABLE SIGN HAVING REMOVABLE LAMP AND SOCKET UNIT

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2 SHEETS—SHEET 1

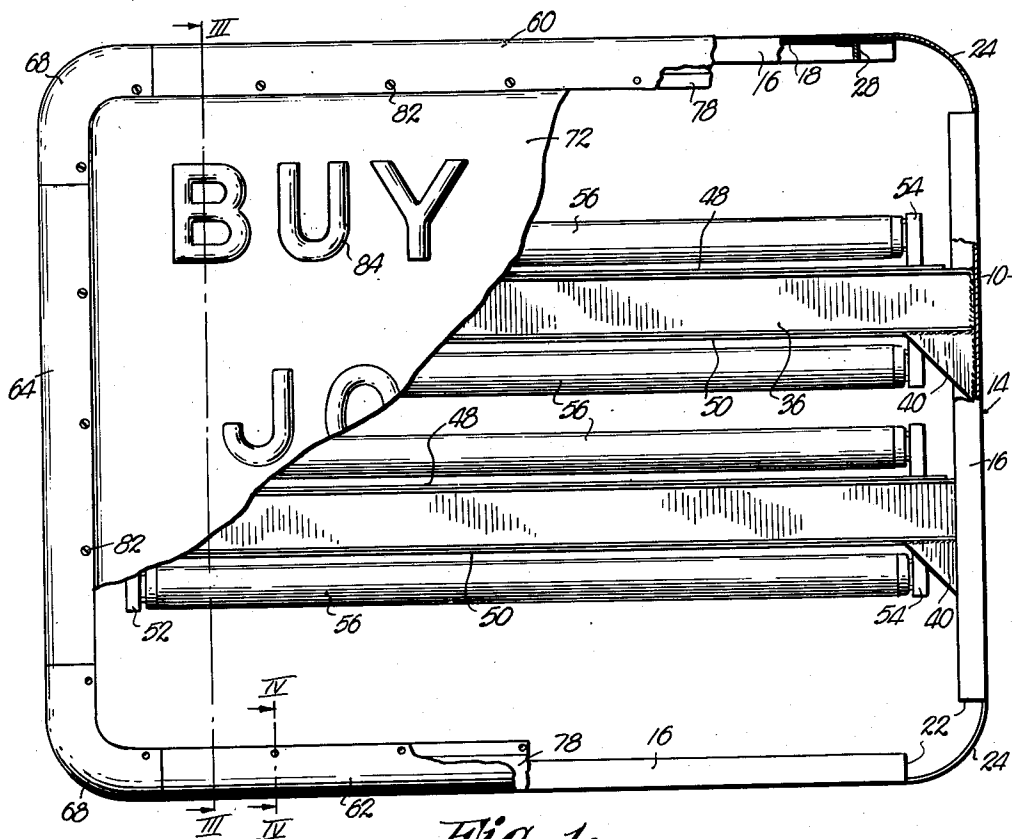


Fig. 1.

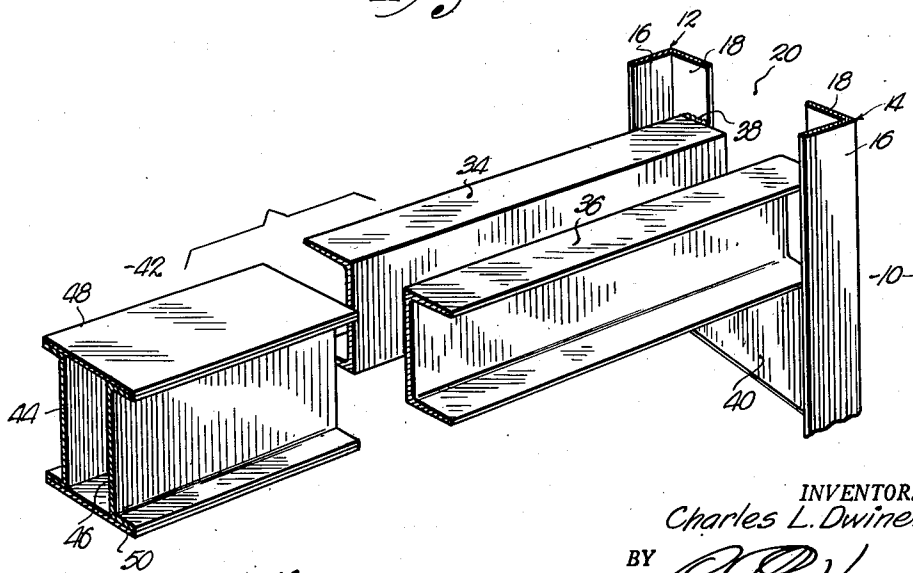


Fig. 5.

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2 SHEETS—SHEET 2

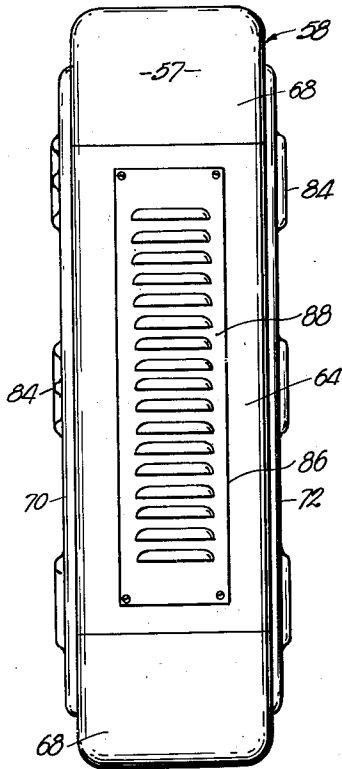


Fig. 2.

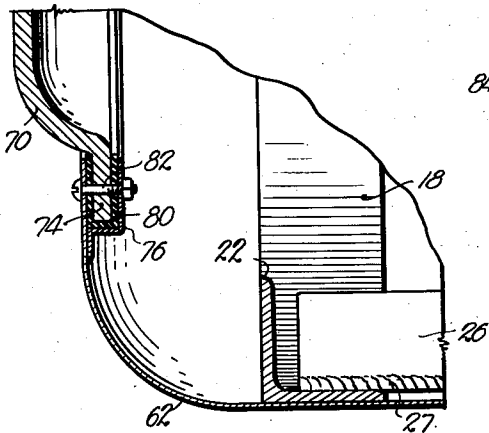


Fig. 4.

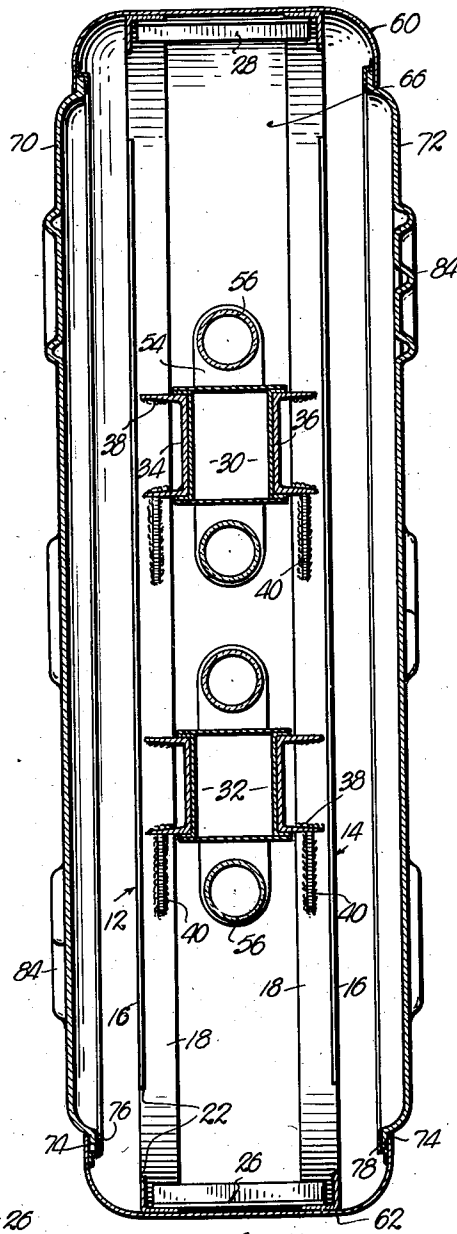


Fig. 3.

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ILLUMINABLE SIGN HAVING REMOVABLE LAMP AND SOCKET UNITS

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2 Claims. (Cl. 40-132)

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This invention relates to sign structure having for its primary object the provision of a hollow body provided with illuminable areas and adapted to support therewithin a plurality of elongated, cold light lamps of conventional character and slidably mounted within the body for removal therefrom as a unit for repair and replacement of the lamps themselves as the same becomes necessary.

It is the most important object of the present invention to provide sign structure having a continuous frame formed from a pair of spaced apart loops that support an elongated sectional track spanning the distance between a pair of spaced ends of the frame, all to the end that a fluorescent tube carrier unit may be slidably moved to and from a position on the track by passage thereof between the aforesaid spaced-apart loops.

Another important object of the present invention is to provide sign structure having a frame and track assembly as above set forth and provided with a housing that includes a rim-like shell that circumscribes the frame and is held thereon through releasable connection with a pair of spaced-apart, at least partially illuminable panels.

Other important objects of the present invention relate to the way in which an elongated carrier is formed for slidably mounting within the aforementioned track; the manner in which the sectional continuous frame supports the track and is reinforced by such track; the manner in which the sections of the frame are formed and disposed to present an opening through which the lamp carrier may be passed; and many other more minor details of construction, all of which render the entire sign structure durable, easily manufactured and eye appealing.

In the drawing:

Figure 1 is a side elevational view of an illuminable sign having removable lamp and socket units made in accordance with my present invention, parts being broken away and in section to reveal details of construction.

Fig. 2 is an end elevational view thereof.

Fig. 3 is an enlarged vertical transverse cross-sectional view taken on line III—III of Fig. 1.

Fig. 4 is an enlarged fragmentary detailed cross-sectional view taken on line IV—IV of Fig. 1, looking in the direction of the arrows; and

Fig. 5 is an enlarged fragmentary, stretched-out perspective view showing the frame-carrier-track assembly entirely removed from the remaining parts of the sign structure.

The sign about to be described includes a continuous polygonal frame, broadly designated by the numeral 10 and including a pair of spaced-apart continuous loops 12 and 14. As clearly indicated in Fig. 5 of the drawing, these two loops 12 and 14 are L-shaped in cross-section, each

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thereby presenting a pair of relatively perpendicular legs 16 and 18 respectively.

The legs 18 of the two loops 12 and 14 are continuous throughout the entire lengths thereof and spaced-apart to present a continuous opening 20 entirely around the frame 10. At each of the four corners of the two loops 12 and 14, the legs 16 thereof are cut away as at 22 in the manner clearly illustrated in Figs. 1 and 3. Furthermore, at the four corners of the frame 10, the legs 18 of each of the loops 12 and 14 are bent into an arc 24. A plurality of cross-bars 26 interconnect the legs 18.

A plurality of spaced-apart cross-bars 26, also preferably L-shaped in cross-section, interconnect the legs 18 along the lowermost stretch of the frame 10 in any suitable manner such as by welding 27. Likewise, a number of similarly formed cross-bars 28 interconnect the legs 18 along the uppermost stretch of the frame 10.

A pair of spaced-apart brackets or tracks, broadly designated by the numerals 30 and 32, interconnect the side stretches of the frame 10; each of the tracks 30 and 32 includes a pair of spaced apart sections 34 and 36 that are preferably U-shaped in cross-section as indicated in Figs. 3 and 5 and are disposed with the outermost faces of the bights thereof in facing substantially parallel relationship.

The two sections 34 and 36 of each of the tracks 30 and 32 have their ends abutting proximal stretches of the legs 18 and the legs of the two sections 34 and 36 are welded or otherwise affixed as at 38 directly to the legs 18 of frame 10.

The distance between the outermost faces of the bights of sections 34 and 36 is less than the distance across opening 20 within frame 10 as shown in Figs. 3 and 5, and while two tracks 30 and 32 are illustrated, it is apparent that one or more of such tracks may be provided, depending upon the size of the sign and the degree of illumination that is deemed necessary.

The tracks or brackets 30 and 32 are supported between the side stretches of frame 10 through the medium of a plurality of triangularly-shaped gussets 40, there being a gusset 40 underlying each section 34 and 36 at each end thereof and welded directly thereto and also welded to the proximal leg 18 of the loop 12 or 14 as the case may be.

It is thus far clear that the tracks 30 and 32 not only serve to support the side stretches of the frame 10 and to hold the same in spaced-apart relationship, but serve in maintaining the loops 12 and 14 at the side stretches of frame 10 spaced-apart when the carrier about to be described, is in place within the respective track 30 or 32.

The carrier just mentioned, is broadly designated by the numeral 42 and has a length that

is but slightly less than the over-all length of the tracks 30 and 32. Carrier 42 is H-shaped in cross-section and includes a pair of spaced-apart U-shaped members 44 and 46 that are formed and disposed relatively in the same manner as the sections 34 and 36 of tracks 30 and 32.

The members 44 and 46 are held in spaced apart relationship through the medium of a pair of spaced plates 48 and 50. The plates 48 and 50 are secured directly to the outermost faces of the members 44 and 46 in the manner shown in Figs. 3 and 5. Carrier 42 is designed to be slidably positioned within the corresponding tracks 30 and 32. To this end, the distance between the inner faces of the legs of each of the members 44 and 46, is slightly greater than the distance between the outer faces of the legs of the two sections 34 and 36. By the same token, the distance between the inner faces of the bights of members 44 and 46 is less than the distance between the outer faces of the bights of sections 34 and 36. Consequently, the carrier 42 is complementary with the track 30 or 32, as the case may be, in the manner shown in Fig. 3 and is freely slidable to and from a position between the sections 34 and 36.

Each of the plates 48 and 50 carries a pair of spaced-apart fixtures 52 and 54 of conventional character for supporting and establishing electrical connection with an elongated fluorescent tube or like cold light lamp 56.

The ballast, starter and other fixtures necessary or desired to be used with the lamps 56 have not been illustrated in the drawing, but the same may well be positioned within the carriers 42 between the bights of members 44 and 46 if desired. Furthermore, the electrical connections for all of the lamps 56 have not been illustrated and since the same may be of conventional character, the particular disposition and manner of connection with lamps 56 is of no importance to this invention. Inasmuch as the diameters of the lamps 56, the width of the fixtures 52 and 54 and the widths of the plates 48 and 50 are all less than the width of opening 20 within the frame 10, the entire carrier unit 42 may be easily moved to and from a position supported by the tracks 30 and 32.

All of the component parts of the sign structure thus far described and including frame 10, tracks 30 and 32 and the carriers 42, are mounted within a hollow body broadly designated by the numeral 57. Body 57 includes a rim-like shell 58 that completely circumscribes the frame 10 and consequently, the tracks 30 and 32 because of the fact that frame 10 is disposed in circumscribing relationship to tracks 30 and 32. The shell 58 is arcuate in cross-section as most clearly illustrated in Fig. 3 of the drawing and includes a number of sections. A pair of sections 60 and 62 extend along the upper and lowermost stretches respectively of the frame 10; a pair of sections 64 and 66 extend along the side stretches of frame 10 and four corner sections 68 of the shell 58 are formed arcuately to conform with the arcuate corners 24 of frame 10.

All of the sections 60, 62, 64, 66 and 68 are in abutting relationship to present the continuous shell 58.

All of the aforesaid sections of the shell 58 are held in position circumscribing the frame 10 through the medium of a pair of panels 70 and 72, which, with shell 58, completes body 57. The two panels 70 and 72 are cup-shaped and are

provided with an out-turned peripheral flange 74. The shell 58 is provided with continuous channels 76 and 78 for receiving the flanges 74 of the panels 70 and 72 in the manner illustrated in Fig. 4.

A U-shaped, resilient sealing member 80 is fitted around the flanges 74 and a plurality of bolts or the like 82 passing through the shell 58 and the channel 76 or 78, as the case may be, serve to releasably interconnect shell 58 with the panels 70 and 72.

Suitable indicia 84 is embossed within each of the panels 70 and 72 and it is contemplated that such indicia 84 may be of a color differing from the remaining areas of the panels 70 and 72 whereby to distinctively set out the message to be conveyed when lamps 56 are lighted. To this end, panels 70 and 72 may be made of a suitable transparent or translucent plastic and coatings of opaque and semi-opaque materials might well be applied thereto in any of the usual manners. At least one end of the shell 58, and in the instance illustrated, the section 64 thereof has an access opening 86 that registers with opening 20 and is covered by a louvered gate 88.

Screws or the like 90 removably hold the gate 88 in place and upon removal of the latter, the carriers 42 and the lamps 56 carried thereby, may be easily removed and replaced with respect to body 57 as desired.

Any suitable structure not shown, may be utilized to mount the entire sign depending upon the type of mounting that is to be used.

While only one form of my present invention has been illustrated and described, it is apparent that the same is capable of many changes and modifications and those that fairly come within the scope of the appended claims, are contemplated hereby.

Having thus described my invention, what is claimed as new and desired to be secured by Letters Patent is:

1. An illuminable sign comprising a polygonal frame including a pair of spaced-apart, parallel, continuous loops; a pair of spaced, elongated, parallel tracks mounted in the frame, there being a track secured to each loop respectively; a lamp carrier including an elongated member insertable between the loops and slidably disposed between the tracks, said carrier having parts in overlying and underlying, sliding engagement with the tracks; a lamp mounted on the carrier; and a hollow body mounted on the frame and enclosing the frame, the carrier, the lamp and the tracks.

2. The invention as set forth in claim 1 wherein said body includes a continuous shell circumscribing the loops and having opposed, continuous, intumed flanges; and a dish-shaped, translucent panel secured to each flange respectively.

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