Nov. 19, 1935. A. W. BAILEY 2,021,347

SIGN CONSTRUCTION

Filed June 22, 1934 2 Sheets-Sheet 1

Fig. 1

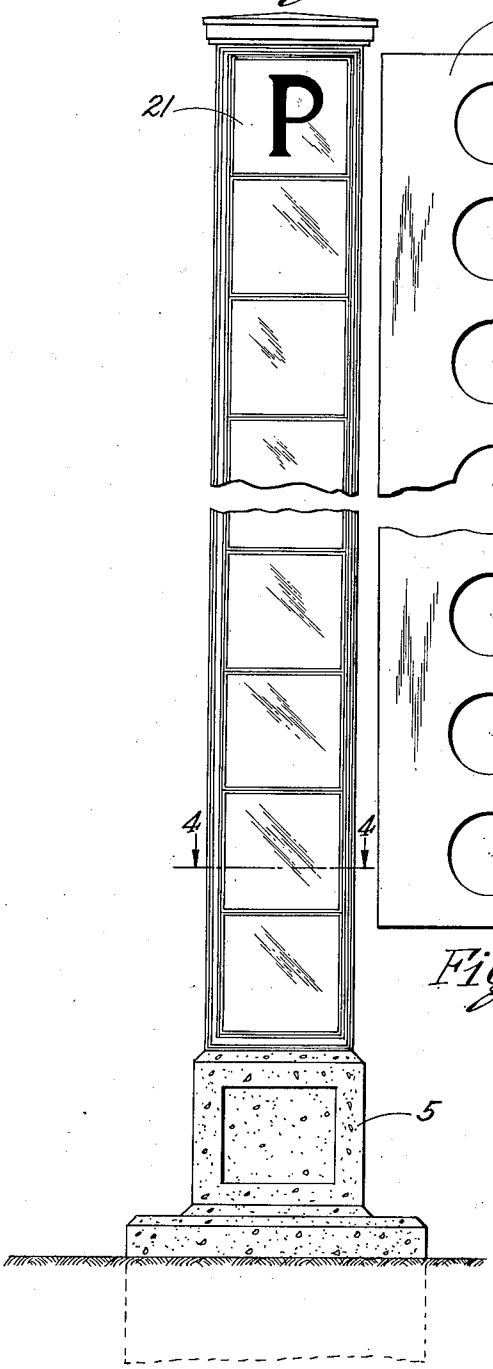
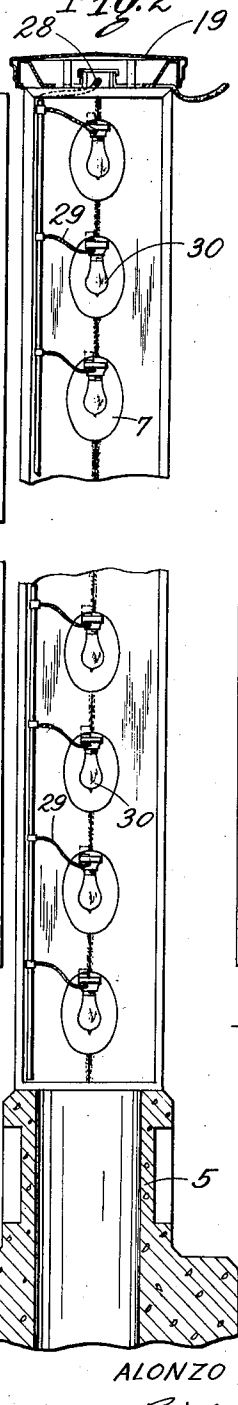



Fig. 2



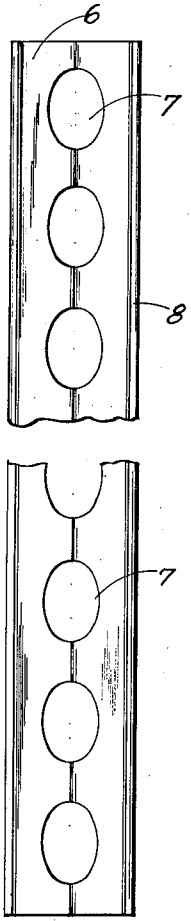







Fig. 3




Fig. 3a

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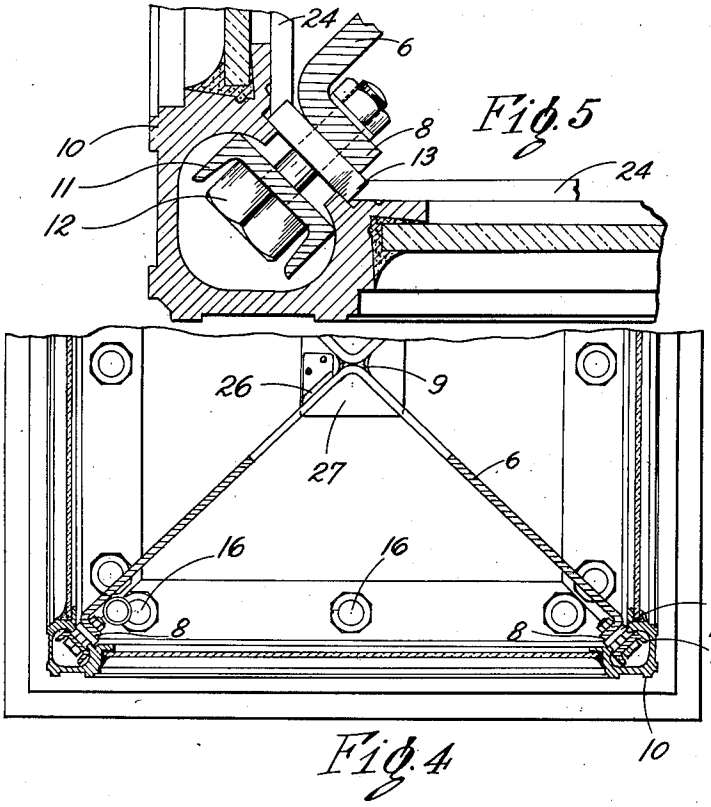



Fig. 5

Fig. 4

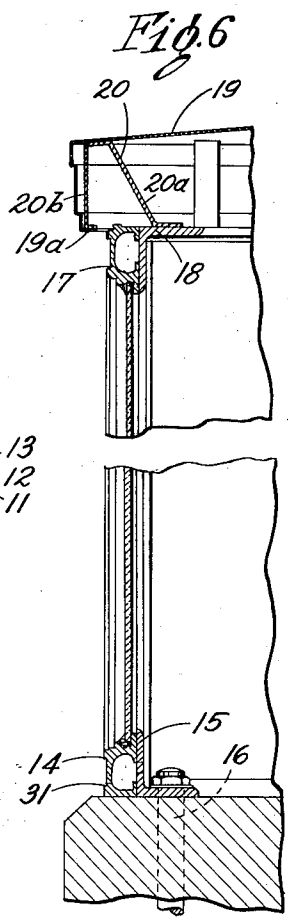



Fig. 6

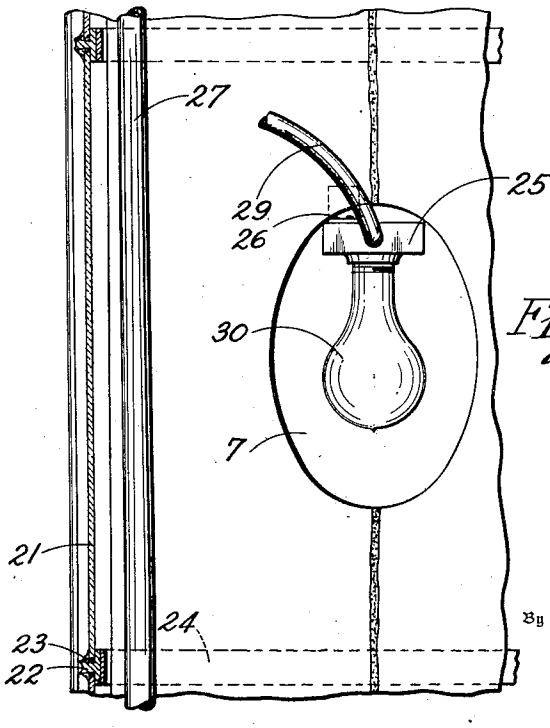



Fig. 7

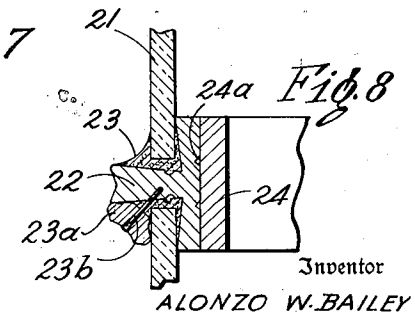



Fig. 8

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# UNITED STATES PATENT OFFICE

2,021,347

## SIGN CONSTRUCTION

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Application June 22, 1934, Serial No. 731,948

10 Claims. (Cl. 40—132)

This invention relates broadly to sign construction and more specifically to an advertising medium popularly known as the "pylon" or tower type of signs. Such structures comprise generally a monumental shaft or obelisk adapted to be illuminated from the interior and provided with transparent side walls exposed to view from all sides and bearing the decorative, ornamentative and advertising indicia.

One of the objects of this invention is to provide a sign of the above type which embodies certain improved features of construction, minimizes the cost of production and erection and in addition possesses an attractive and aesthetic appearance.

Another object of this invention is to provide a sign of the interiorly illuminated type which is capable of more effective and uniform light diffusion than known signs of this class.

Another object of this invention is to provide a sturdy and durable structure which will form an attractive pylon or analogous internally lighted display device and which is so constructed that it may be operated at a relatively low cost as compared with the construction and operating costs of comparable advertising structures.

A further object of this invention is to provide a sign of the above type in which the interior framework adequately strengthens and reinforces the sign and at the same time more effectively distributes the light within the structure.

The foregoing and other objects and advantages will become apparent in view of the following description taken in conjunction with the drawings, wherein—

Figure 1 is a view in elevation of a sign of the pylon type constructed in accordance with the present invention.

Figure 2 is a view in central vertical section of the sign shown in Figure 1.

Figure 3 is a plan view of one of the metal sheets or plates from which the central framework of the sign is constructed and Figure 3*a* shows the plates illustrated in Figure 3 configured into the desired form for installation with a companion sheet in the sign.

Figure 4 is an enlarged fragmentary sectional view taken on a plane indicated by the line 4—4 of Figure 1.

Figure 5 is an enlarged view of one of the corner portions of the structure illustrated in Figure 4.

Figure 6 is a fragmentary longitudinal section (with portions broken away) of the upper and lower extremities of the pylon sign.

Figure 7 is an enlarged fragmentary longitudinal sectional view of an intermediate portion of the sign.

Figure 8 is an enlarged detailed sectional view of one of the frame or muntin sections and adjacent panels showing the preferred method of mounting the glass.

The sign, as shown in Figure 1, is mounted upon a base or pedestal 5 which may be of concrete or suitable masonry, the type of sign shown in Figure 1 being what is known as the "pylon" sign. The body of the sign comprises a central frame structure supporting an outer framework which retains transparent or translucent panels. These panels are illuminated by incandescent lights or other means from within the sign. The panels may bear advertising indicia of any desired type, such indicia being applied on the inner or outer surface of the glass or material forming the panel.

Referring to Figure 3, a fabricated sheet or plate 6 is shown, which may be of such length and breadth as to accommodate the desired height and breadth of the pylon after the forming or bending operation thereon. In the present case a single sheet is shown although it will be obvious that a plurality of sheets may be employed and joined in any suitable manner, as by welding, to obtain a frame of required dimensions. The sheet 6 is fabricated in the central portion with a plurality of holes 7. The sheet is then bent longitudinally to form an angle iron, note particularly Figure 4, and also with the edge portions thereof bent to form attaching flanges 8. In constructing a complete unit, two blanks or sheets 6 are preferably employed, each blank being substantially identical and shaped in substantially the same manner. The formed sheets are then arranged with the apices of the angles contiguous and secured preferably by welding as at 9. The resultant structure forms an X in cross section having four projecting wings with flanged edges which support the outer sheathing materials.

The outer framework comprises a series of skeleton frame sections which are preferably, but not necessarily, of extruded aluminum bar stock. At each corner of the pylon an upright frame section or corner post is provided which is substantially C-shaped in cross-section and externally configured to present an attractive appearance. Within the corner post there is an anchor member for supporting the central X-frame. This member may be in the form of a channel 11 and is preferably disposed with the flanges thereof turned outwardly in order to

retain and prevent rotation of the bolts 12 mounted thereon. The flanges 8 of the wing portions of the outer frame plates 6 are secured to the channel 11 by the bolts 12. Washers or analogous thrust members or shims 13 may be inserted between the flanges 8 and corner pieces 10 to facilitate more expeditious assembly and to compensate for structural error or distortion.

At the base of the sign, the corner posts or plates 10 are secured to or interlocked with base plates 14, note Figure 6, which are also preferably of extruded material such as aluminum and are secured to a continuous angle iron frame 15, anchored to the foundation or base by lug screws or studs 16.

The top of the skeleton framework comprises a header plate or frame section 17 to which each of the corner members or posts 10 are secured, each of the plates 17 being secured to a continuous angle iron frame member 18. Above the angle 18, and supported by a series of brackets 20, there is a cap 19 which may be formed of sheet metal or other material susceptible of suitable configuration and decorated. Each of the brackets 20 is preferably formed of a bent bar stock having legs 20*a* and 20*b*, the leg 20*a* resting on the angle 18, and the leg 20*b* upon the lower flange 19*a* of the cap. The upper portion of the bracket bears against the top wall of the cap and serves to brace the cap as a whole and rigidly support the latter in its associated relation with the frame sections 17 and 10.

A series of panels 21, which are preferably transparent or translucent, are attached at their side edges to the corner sections 10 and at their upper and lower edges to muntins 22, note particularly Figure 8, by means of suitable caulking material 23. The muntins 22 are each supported by a continuous band 24 formed with a series of spaced anchor ribs 24*a* adapted to engage corresponding grooves formed in the inner face of each of the muntins. The bands 24 may be secured to the corner posts 10 or may be bolted to the channel iron 11. If it is desired the panels in one side of the pylon may be hinged to facilitate removal of light bulbs or repairs.

The lower portion of Fig. 8 shows a means for securing the panels 21 in readily removable position, said means consisting of a sash 23*a* which is secured to the muntin 22 by means such as screws 23*b*. The sash may obviously be replaced by a series of wedge blocks, if desired.

Adjacent the top of each of the apertures 7 of the plates 6 there is an electrical junction box and light socket 25 secured by a clip 26, which may be clamped or otherwise secured upon the wings of one of the plates 6. A conduit 27 is assembled in one of the corners of the pylon and may be secured to the framework thereof in any suitable manner. This conduit is provided to sheath a cable 28 from which a plurality of lines 29 are extended, each adapted to supply electric current to the light bulbs 30 within the sockets 25.

The interior of the sign may be ventilated by forming vents in the upper and lower frame plates or sections, as illustrated at 31, Figure 6.

The wings defined by the plates 6 may be surface-treated or coated to provide an effective reflecting surface, or may be formed from a material of inherent reflecting qualities so that the light rays will be directed in such a manner as to materially aid in illuminating the sign. The wings of the central frame member also serve to more evenly distribute the light rays with respect to the panels 21. The construction of the central framework embodied in this invention not only contributes to lighting efficiency of the pylon but also adds greatly to the general appearance of the sign when illuminated since the light bulbs are so mounted and shrouded as to cause a uniform illumination throughout the length of the tower.

Experience has shown that a sign of this type may be produced at a much lower cost than those now on the market, while at the same time the sign may be made attractive in appearance without adding to the cost thereof. Another advantage is that the construction is relatively light while at the same time it is strong and rigid and capable of withstanding the elements over a long period of time.

It will be understood that any desired number of angle-shaped members 6 may be employed to produce the desired polygonal configuration and that various other modifications and changes in structure may be adopted without departing from the scope of the invention as defined by the appended claims.

I claim:

1. A sign comprising an outer framework including a series of transparent or translucent panels, a central framework and reflecting structure formed of two or more elongated blanks of sheet or plate metal bent into angular formation and secured together at the central portion of the sign, the sheet or plate metal blanks thus attached being disposed axially of the sign with the free edges of the blanks extended radially and being attached to the outer framework, each of the blanks being formed with a plurality of openings in the central portion thereof, and a plurality of lighting devices mounted in said openings.

2. A sign comprising an outer skeleton framework, a plurality of transparent or translucent panels mounted in said framework, a central reinforcing framework comprised of two or more sheet metal blanks bent into angular formation and secured together at the apices of the angles and disposed axially of the sign, each of said blanks being formed centrally with a plurality of openings, and a series of lighting devices mounted in said openings.

3. A sign comprising an outer skeleton framework having a series of transparent or translucent panels mounted therein, an inner reinforcing framework comprised of two or more sheet metal plates formed with a plurality of openings in the central portion thereof and bent into angular formation, said plates being secured together at the apices of the angles and disposed axially of the sign thereby providing a plurality of outwardly projecting wings which are joined to the outer framework, and a series of lighting devices mounted in said openings.

4. A sign comprising an outer skeleton framework having a series of transparent or translucent panels mounted therein, an inner reinforcing framework comprised of two or more sheet metal plates formed with a plurality of openings in the central portions thereof and bent into angular formation, said plates being arranged axially of the sign with the apices of the angles contiguous and welded together into a unitary structure thereby providing a plurality of outwardly projecting wings which are secured to the outer framework, and a series of lighting devices mounted in the openings provided in the central portion of the plates.

5. A sign comprising an outer skeleton framework including corner posts and a series of trans-

parent or translucent panels mounted between said posts, an inner framework comprised of two or more sheet metal plates each being formed with a series of longitudinally arranged openings in the central portion thereof and securing flanges at its lateral edges, said plates being bent into angular formation and welded together at the apices of the angles thereby providing a series of outwardly projecting flanged wings, means for securing the respective wings to the corner posts, and a plurality of lighting devices mounted in the openings formed in the plates.

6. A sign consisting of an outer skeleton framework including corner posts of hollow, substantially C-shaped formation, a series of transparent or translucent panels mounted between said posts, an inner framework formed of a pair of sheet metal plates each of which is formed with a plurality of longitudinally arranged openings in the central portion thereof and attaching flanges at its lateral edges, each of the plates being bent into the form of an angle and the angles arranged with their apices contiguous and welded together, anchoring members inserted in the hollow corner posts, means for attaching the flanges of the plates to said anchor members thereby connecting the inner and outer framework, and a series of lighting devices mounted in the openings formed in the plates.

7. A sign comprising an outer skeleton framework including corner posts, continuous angles connecting the upper and lower ends of said corner posts, a series of transparent or translucent panels mounted between said posts, a central reinforcing framework comprised of a pair of sheet metal plates formed with a series of longitudinally arranged openings in the central portion thereof and securing flanges at their lateral edges, each of the plates being bent into the form of an angle and arranged with the apices of the angles contiguous and secured together by welding material, means for securing the flanged edges of the plates together with the corner posts, and a plurality of light bulbs mounted in said openings.

8. A sign of the "pylon" type comprising a base, an outer framework consisting of corner posts which are anchored to said base, continuous reinforcing members uniting said posts at spaced points along the length of the sign, a series of translucent or transparent panels mounted between said posts, and a central framework consisting of a pair of sheet metal plates formed centrally with a plurality of openings and securing flanges at their lateral edges, each of said plates being bent into the form of an angle and arranged with the apices of the angles contiguous and secured together by welding material, means for securing the flanged edges of the plates to said corner posts, and a series of light bulbs mounted in said openings.

9. A sign of the "pylon" type comprising a base, an outer skeleton framework consisting of a plurality of hollow corner posts of substantially C-shaped contour, a series of continuous reinforcing members connecting said corner posts at spaced points along the length of the sign, means for anchoring the posts to said base, a sheet metal cap mounted on the outer framework, a plurality of transparent or translucent panels mounted between said corner posts, an inner framework consisting of a pair of sheet metal plates each of which is formed with a series of openings in the central portion thereof and securing flanges at its side edges, said plates each being bent into the form of an angle and arranged with the apices of the angles contiguous and secured together by welding material thereby providing outwardly projecting flanged wings, each of the corner posts having inserted therein an anchor strip, means for securing the flanged edges of the wings to said anchor strip, and a plurality of light bulbs mounted in said openings.

10. A sign consisting of an outer framework which is substantially box-shaped in cross section, a series of transparent or translucent panels mounted in said frame, and an inner reinforcing framework consisting of a pair of plates of sheet metal formed with a series of longitudinally arranged openings in the central portion thereof and bent into the form of an angle and secured together with the apices of the angles contiguous, and a plurality of lighting devices mounted in said openings.

ALONZO W. BAILEY.