Aug. 8, 1944. F. L. MICHAELS 2,355,546

COMPOSITE SIGN STRUCTURE

Filed April 28, 1941 3 Sheets-Sheet 1

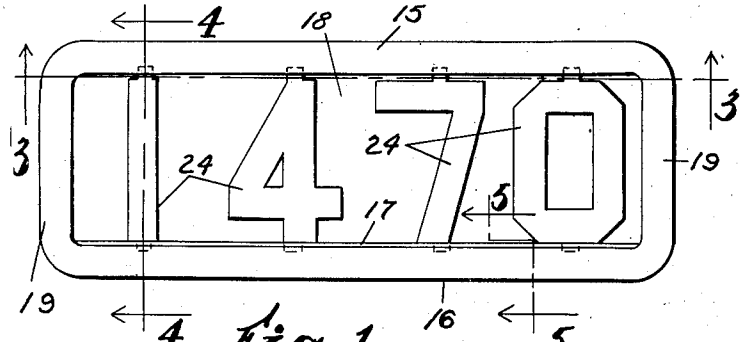

Fig 1

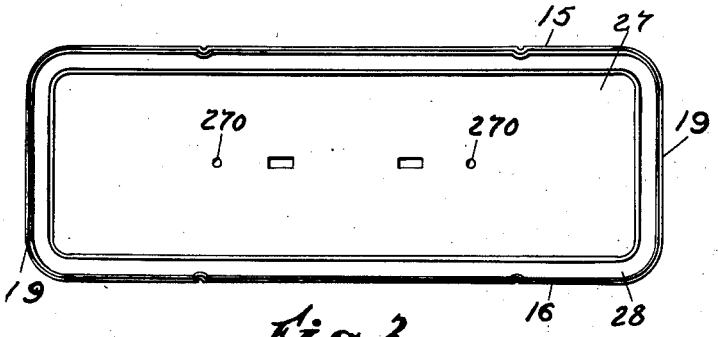

Fig 2

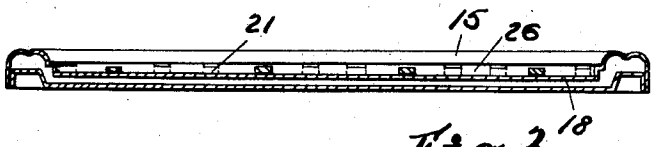

Fig 3

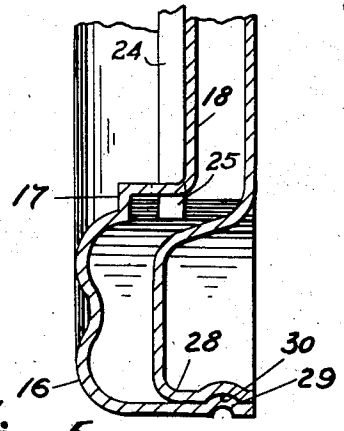

Fig 5

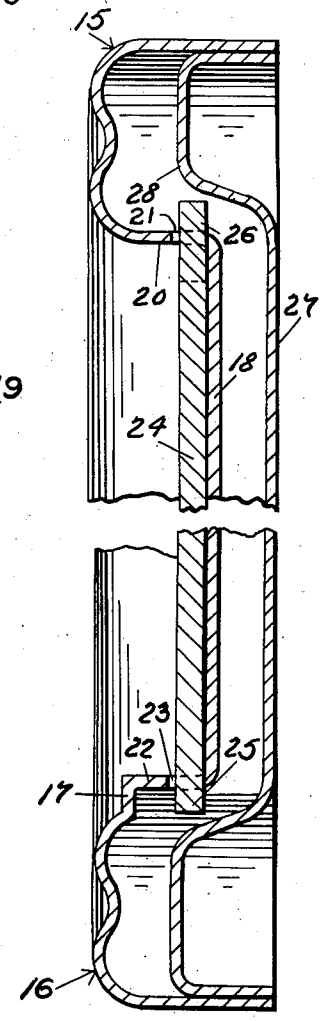

Fig 4

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COMPOSITE SIGN STRUCTURE

Filed April 28, 1941 3 Sheets-Sheet 2

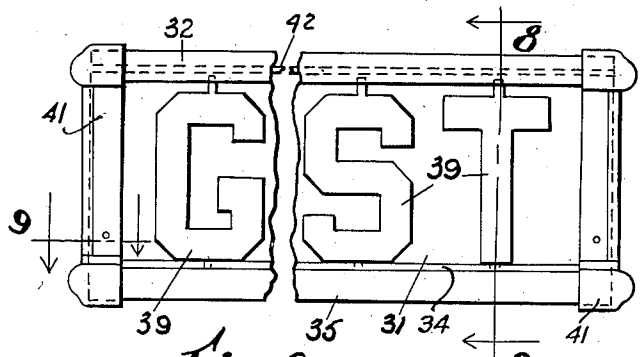
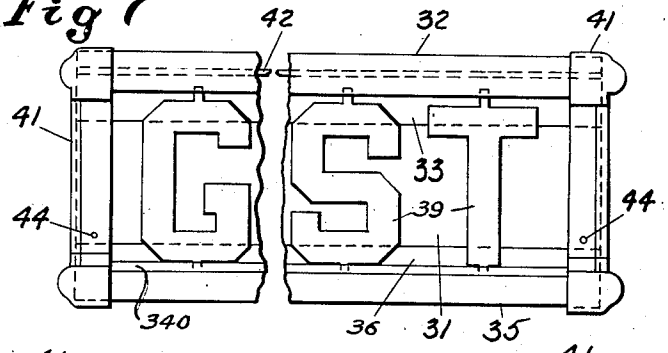


Fig 6

Fig 7



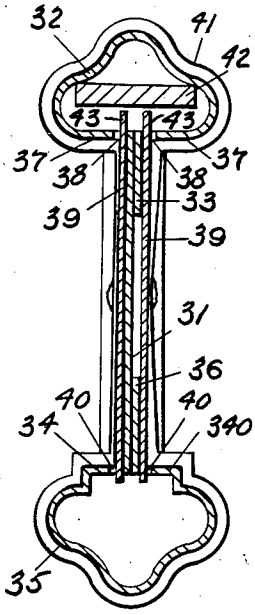


Fig 8

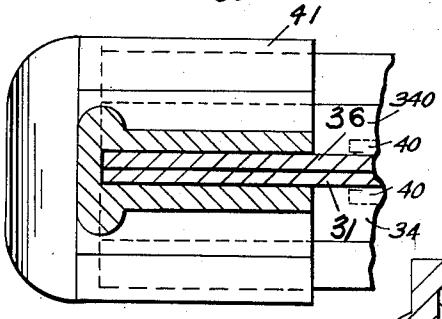


Fig 9

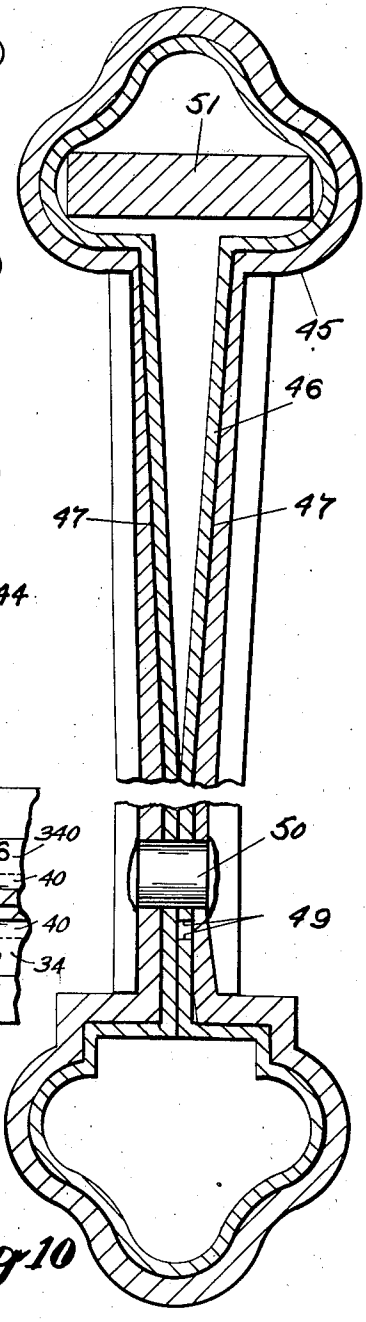


Fig 10

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COMPOSITE SIGN STRUCTURE

Filed April 28, 1941 3 Sheets-Sheet 3

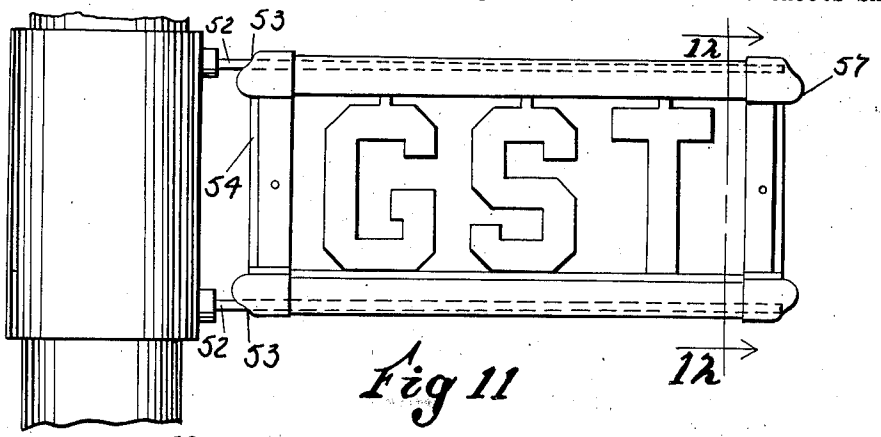

Fig 11

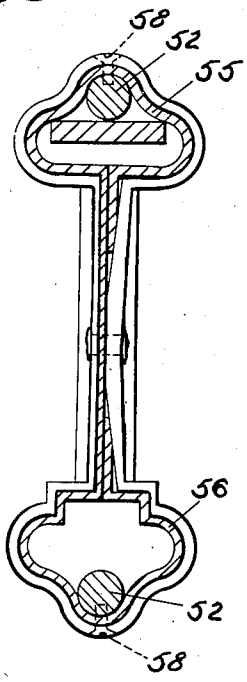

Fig 12

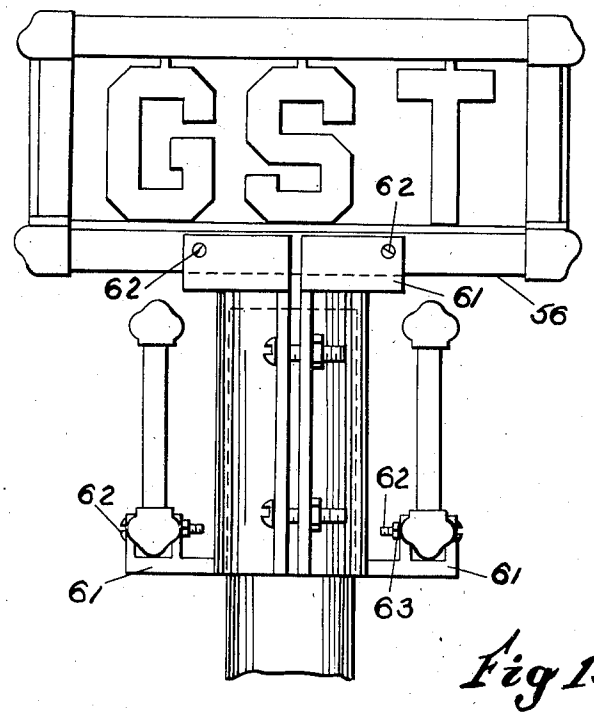

Fig 13

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UNITED STATES PATENT OFFICE

2,355,546

COMPOSITE SIGN STRUCTURE

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Application April 28, 1941, Serial No. 390,707

3 Claims. (Cl. 40—142)

The present invention relates to signs and has for an object the provision of a composite sign including indicia or sign elements and mounting means which are easily fabricated into strong and enduring signs of excellent appearance.

Another object of the invention is to provide a composite sign of this character which is readily adaptable to a variety of purposes including house number signs and street name signs.

A further object of the invention is to provide devices of this character wherein selected indicia or sign elements are easily inserted in making up the sign but cannot be readily removed or displaced after the completed sign is mounted in its position of use.

Still another object of the invention is to provide signs of this character which are of excellent visibility and which can be provided in great variety at a relatively low cost.

These and other objects are attained by the means herein described and disclosed in the accompanying drawings, in which:

Fig. 1 is a front elevational view of a wall type sign embodying the invention.

Fig. 2 is a rear elevational view of the device of Fig. 1.

Fig. 3 is a cross-sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 1.

Fig. 5 is a cross-sectional view taken on line 5—5 of Fig. 1.

Fig. 6 is a front elevational view of a double faced sign embodying the invention, part being broken away.

Fig. 7 is an elevational view of the reverse side of the sign shown in Fig. 6.

Fig. 8 is a cross-sectional view taken on line 8—8 of Fig. 6.

Fig. 9 is a cross-sectional view taken on line 9—9 of Fig. 6.

Fig. 10 is a vertical section through a modified form of double faced sign.

Fig. 11 is a front elevational view of a single faced sign adapted for bracket mounting.

Fig. 12 is a cross-sectional view taken on line 12—12 of Fig. 11.

Fig. 13 is an elevational view of a post type mounting embodying signs of the invention as used at street intersections.

The problems arising in connection with the provision of a variety of signs in relatively small numbers and at a relatively small cost have led to various disadvantages in municipal communities in the system of street posting. Amongst these disadvantages are the resort to signs of relatively inexpensive character having fair visibility in the daytime and poor visibility at night resulting from the uniform shiny surface of the sign in the presence of adjacent street lights where the almost complete lack of visibility is due to the absence of a properly located permanent source of illumination. Many municipalities adopt a system of elaborate cast metal signs for boulevards and the like, which are highly ornamental in the daytime but which are not uniformly effective after dark. By the means of the present invention the high costs incident to the use of a more elegant type of street sign as well as the objections regarding visibility and legibility at a reasonable distance, are elminated. The signs of the invention are adapted to a variety of styles and forms of mounting.

In the accompanying drawings and the following specification signs of the invention are exemplified embodying wall mounting signs, bracket mounting signs, post mounted signs, and single and double faced signs.

Referring now to the drawings: Figs. 1 to 5 are illustrative of one form of wall mounting sign and the details thereof. This wall mounting sign is adapted as a house number sign which can be inexpensively made up. The sign comprises essentially a top hollow frame or flange 15 of suitable ornamental shape and a bottom hollow frame or flange 16 parallel to flange 15 and presenting desirably the same ornamental contour with the addition of an integral offset shoulder 17. A flat background element or sheet 18 is integral with and in recessed relation to the frame and flange members. In this embodiment the form of the top flange 15 is carried out in the end flanges 19 so that the simple formed stamping comprising the aforementioned elements presents the appearance of a heavy cast metal panel. The wall 20 of top flange 15 is provided with a series of aligned apertures or slots 21 which may be initially completely punched out or, alternately, may be scored and weakened knock-outs to be removed as required. (See Fig. 3.) The top wall 22 of shoulder 17 is substantially parallel with the wall 20 of the top flange 15 and is similarly provided with apertures 23 in opposed relation with the apertures 21 in the wall 20. A selected group of sign elements 24 are adapted to be easily mounted in recessed portion of the sign between the top and bottom flanges. In this instance, the sign elements 24 are cut out numerals formed desirably of light-reflecting metal and each is provided at its bottom with a

relatively short lug 25 and at its top with a longer lug 26. The lugs 25 and 26 extend through apertures 23 and 21 to position the sign elements against shifting in the direction of the length of the sign. The bottoms of the elements 24 seat on the top face of the shoulder wall 22 and thus raise the sign elements sufficiently above the apparent top face of the lower flange 16 to prevent the bottom of the sign element from being obscured by the depth of the flange when the sign is in an elevated position. The length of the top lug 26 permits an inconspicuous portion thereof to be exposed below the wall 20 of top flange 15 while the remainder thereof projects well into the hollow interior of the flange.

The free edges of all the bordering flanges are extended rearwardly beyond the plane of the rear face of background member 18. The sign elements 24 are entered and removed from the sign panel by lifting the elements so that the entire lug 26 is disposed within the hollow interior of the top flange 15, at which time the bottom lug 25 is above the top of shoulder 17 and is free to be entered into or removed from the aperture 23. When the elements 24 are entered in place, they are automatically spaced between the top and bottom flanges so as to present an artistically balanced appearance. The sign of Fig. 1 is adapted for wall mounting by means of a back plate 27 having holes 270 for the reception of securing means such as nails, lag screws, etc. The back plate has a formed rim 28 which slidably enters the rim of the hollow flanges 15, 16 and 19, the members 15 and 16 being provided with suitable means to preclude separation of the sign panel and its back plate. Such means may be of any desired character, for example, as shown in Figs. 2 and 5, an occasional boss 29 may be provided on the inside of the members 15 and 16 while the rim 28 of the back plate is provided with complementary recesses 30 for receiving said bosses. Reference is now made to Fig. 4 wherein it will be noted that the top portion of rim 28 of the back plate projects into the hollow interior of top flange 15 and overhangs the top ends of the lugs 26 on the sign elements. Thus when the device is fastened upon a wall it is impossible to raise the sign elements sufficiently to unseat the bottom lugs 25. The signs are thus relatively tamper-proof and they present no visible fastening means.

It is to be understood that the sign elements may be in the form of any desired indicia including numerals, letters, symbols, or combinations thereof, to meet any desired requirements. It will be also understood that the sign elements used in making up the composite signs may, if desired, be embossed to present the appearance of burnished letters cast integrally on a panel. The face of background panel 18 and the entire shoulder 17 are suitably finished in a desirably dark lusterless color while the exterior face of the framing flange may be bronzed or otherwise finished. The faces of the sign elements are desirably, but not necessarily, of light-reflecting metal in order to afford excellent visibility under varying light conditions. Various kinds of polished light-reflecting metals are available on the open markets and the details of surface formation form no part of the present invention.

Reference is made now to Figs. 6 through 9, inclusive, wherein a double faced composite sign structure is shown. This type of composite sign is adapted to have the sign elements constructed as described in connection with the device of Fig. 1 while the panel or framing and background members are adapted to be sold as lengths of fabricated metal which may be cut into sections of required length and assembled by relatively unskilled labor. One feature of the present invention is the ability to provide municipalities with large quantities of sign components from which signs of different lengths may be readily made up into elegant and massive appearing individual signs. The panel strip is a unitary sheet metal form which may be rapidly produced on cornice machinery. It comprises a face member 31, the one edge of which is turned to form an ornamental hollow top flange 32 which extends uniformly along both faces thereof and is then brought around to the rear face, terminating in a flap 33. The bottom flange is formed by turning the metal at the bottom of 31 to form a shoulder 34, a hollow flange 35 presenting apparent uniformity to the hollow flange 32 and extending around to the rear of 31 to provide another shoulder 340 and an upstanding flap 36. The bottom wall portions 37 of the top flange 32 have slots or knock-outs 38 to receive the lugs of the inserted sign elements 39. The shoulders 34 and 340 have slots or knock-outs 40 for receiving the bottom lugs of the sign elements 39. The opposite faces of the panel strip just described are superficially identical because the edges of flaps 33 and 36 are not easily discernible, particularly when both background faces are of dark color and relatively lusterless finish. Sign elements 39, which correspond to sign elements 24 of Fig. 1, are inserted in a manner which will be well understood from the preceding description of Figs. 1 to 5 inclusive. End members 41 are one piece elements which are slipped over opposite ends of a section of panel strip to close the hollow ends of the top and bottom flanges and to cover the raw edges of the opposite ends of the sheet metal member. Caps 41 may be of formed sheet metal or cast metal. Each of the members 41 has a hollow recess therein complementary to the cross-sectional outline of top and bottom flanges 32 and 35 and the thickness of background panel 31 and its flaps. In order to avoid accidental or deliberate displacement of the sign elements 39, a flat strip 42 is slidably entered into the open end of hollow top flange 32 so as to rest on or overhang the tops of lugs 43 of the sign elements. The end caps 41 are then slidably mounted on the opposite ends of the composite sign and secured against removal by rivets or screws 44.

Reference is now made to Fig. 10 which shows a vertical section of a slightly modified form of the sign of Figs. 6 to 9 inclusive, the modification consisting in providing a panel strip 46 in which the opposed background portions are spaced apart at the top and in providing the end cap 45 (shown in cross-section) with a recess correspondingly shaped to slidably receive the end of the modified cross-section of the panel strip. The sign elements (not shown), which may be identical with elements 24 of Fig. 1, or elements 39 of Figs. 6, 7 and 8, are adapted for mounting in the panel strip 46 in the manner explained hereinbefore and illustrated in Figs. 6 and 8. The sign elements thus mounted are inclined with the background panel faces 47 of the panel strip 46 and thus provide better legibility of the composite sign embodying the same when viewed at an angle from below. Furthermore, the sign element, such as 39, of light-reflecting metal will reflect some of the light from street sources and approaching motor vehicles. In this construction,

it is desirable to have the edges **49**, which represent the opposite edges of the integral sheet, appear in close proximity near the base of one of the panels. The rivet **50** which passes through the narrow part of the end cap **45** serves to control the sheet and hold it in desired form. An inserted strip **51** serves to hold the sign elements against removal. The slots or knockouts **48** are provided at intervals throughout the length of the panel strip to enable the selective positioning of the sign elements.

Figs. 11 and 12 are illustrative of a single faced bracket mounted sign. Suitable rods **52**, projecting from any desired upright member, are passed through openings **53** formed in the top and bottom portions of the adjacent end cap **54**, and extend through the hollow top flange **55** and bottom flange **56** into the outer end cap **57**. One or more screws **58** or the like may pass through the end cap **57** and into the supporting rods **52** to mount the sign against removal.

For the purpose of mounting a plurality of signs of the invention on a post, as at street intersections, any suitable post clamp, such as a split clamp **59**, may be secured on a post **60** with one or more slotted brackets **61** affixed to or formed integrally therewith. The bottom flanges **56** of the several signs are seated in the grooves or slots of the respective brackets **61** and secured therein by bolts **62** which pass through both sides of the bracket and the interposed flange and are drawn up tightly by nuts **63**.

What is claimed is:

1. In a composite sign the combination of a formed sheet metal body comprising spaced hollow flanges and a recessed background panel connecting them, an offset shoulder formed integrally with and connecting the lower flange with the adjacent side of the panel, a sign element seated on its bottom edge on said shoulder and extending upwardly across the background panel toward the top flange, a lug on the bottom of the sign element passing through the shoulder for positioning the bottom of said sign element on the shoulder, a relatively longer lug on the top of the sign element extending in partially exposed relation to the top flange and then into the hollow interior of the top flange, and a rigid bar-like element retained in non-shiftable relation in said interior of said top flange precluding movement of the lug further into the flange whereby the sign element is retained against removal from the face of the sign.

2. In a composite sign the combination of a formed sheet metal body comprising spaced hollow flanges and a recessed background panel connecting them, an offset shoulder formed integrally with and connecting the lower flange with the adjacent side of the panel, a sign element having its bottom edge seated on said shoulder and extending upwardly across the background panel toward the top flange, a bottom lug on the sign element passing through the shoulder, a relatively longer top lug on the sign element extending in exposed relation across the background panel and then into the hollow interior of the top flange, a rigid bar inserted inside the top flange precluding further upward movement of said top lug, and end caps embracing the opposite ends of the first mentioned body and closing the ends of the hollow flanges and rendering said bar inaccessible and non-shiftable in the hollow flange.

3. In a composite sign the combination of a formed sheet metal body comprising spaced hollow flanges and a pair of oppositely facing background panel portions in recessed relation to the flanges, the panel portions spaced apart at the top and substantially in back-to-back abutment at the bottom, sign elements disposed against the background panel portions and each comprising top and bottom lugs extending into the hollow flanges, an inserted member in one of the flanges abutting the lugs to preclude movement of the sign elements, end caps recessed to receive the ends of said sheet metal body, and means extending transversely through the end caps and the substantially abutting panel portions disposed therein.

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