

1

3,230,652
SIGNBOARD

Lyle W. McNair, Florissant, Mo., assignor, by mesne assignments, to Phelps-Dodge Aluminum Products Corporation, New York, N.Y., a corporation of Delaware

Filed May 1, 1963, Ser. No. 277,149
3 Claims. (Cl. 40—125)

This invention relates to signboards and more particularly to signboards of the type adapted to have signboard characters (letters, numerals etc.) clipped thereto.

Among the several objects of this invention may be noted the provision of an improved signboard of the class described which is adapted for economical fabrication in various sizes from metal extrusions, such as aluminum extrusions; the provision of a signboard such as described which comprises modular panels adapted to be cut from extruded stock to length corresponding to the desired width for the signboards, various numbers of such cut panels being used according to the desired height for the signboard, and which further comprises a rectangular frame in which the panels are held in assembly with components of the frame adapted to be cut from extruded frame member stock to lengths required for the top, bottom and end members of the frame; the provision of a signboard such as described adapted for clipping of signboard characters to the panels as mounted in the frame; the provision of a signboard such as described the components of which are adapted for easy assembly (and for easy disassembly, if desired); and the provision of a signboard such as described which is of pleasing appearance, the panels being inset in the frame. Other objects and features will be in part apparent and in part pointed out hereinafter.

The invention accordingly comprises the constructions hereinafter described, the scope of the invention being indicated in the following claims.

In the accompanying drawings, in which two of various possible embodiments of the invention are illustrated,

FIG. 1 is a plan of a signboard constructed in accordance with this invention, showing a numeral "2" clipped in place as exemplary of various characters that may be clipped in place;

FIG. 2 is a vertical section taken on line 2—2 of FIG. 1;

FIG. 3 is an enlarged perspective of a corner of the signboard of FIG. 1, showing the connection of the top frame member and one end frame member;

FIG. 4 is an enlarged section taken on line 4—4 of FIG. 1;

FIG. 5 is a plan of another embodiment of the invention;

FIG. 6 is a vertical section taken on line 6—6 of FIG. 5; and

FIG. 7 is an enlarged section taken on line 7—7 of FIG. 5.

Corresponding reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings, first more particularly to FIGS. 1-4, a signboard of this invention is shown to comprise a rectangular frame generally designated 1 and a back generally designated 3 in the frame. The frame comprises top and bottom members 5 and 7, and end members each designated 9. These frame members are all cut from the same extruded metal stock (preferably an aluminum extrusion), having their ends cut at a 45° angle for forming mitered corners. The extrusion from which the frame members are cut has a cross section such as appears in FIG. 2, being a generally triangular hollow extrusion, of right triangular configuration. Accordingly,

2

each frame member has walls 11 and 13 at right angles to one another (which constitute the legs of the right triangular cross section) and an angled wall 15 (which constitutes the hypotenuse of the right triangular cross section). As assembled to form the frame, wall 11 of each frame member constitutes what may be termed the back wall of the frame member, wall 13 is directed forward and constitutes the external or peripheral wall of the frame member, and wall 15 constitutes the front wall facing generally forward. The outside face of wall 15 may be fluted as shown for decorative purposes.

At the juncture of the back wall 11 and the angled front wall 15 of each frame member there are a pair of inwardly extending spaced flanges 17 which define a groove or channel 19 extending throughout the length of the frame member. This channel opens toward the interior of the frame. A flange 21 projects perpendicularly from the back wall 11 of the frame member adjacent wall 13, and an L-shaped flange 23 extends inwardly from the wall 13 spaced from flange 21 to provide a socket 25 for reception of one leg of a clip angle 27 used at each corner of the frame for jointing at the mitered corners. As shown in FIG. 3 for the upper left corner of the frame, for example, the clip angle 27 has one leg extending horizontally into the socket provided by the flanges 21 and 23 of the top frame member 5 and its other leg extending downward into the socket provided by the flanges 21 and 23 of the left end frame member 9, screws 29 passing through holes in the walls 13 of the frame members and being threaded in the legs of the clip angle to hold the parts in assembly. It will be understood that the same joint is used at each of the other three corners of the frame.

The back 3 of the signboard comprises a plurality of individual flat panels extending crosswise of the frame 1, each panel being designated 31. These are all cut from the same extruded metal stock (preferably an aluminum extrusion). The extrusion from which these panels are cut has a cross section such as illustrated in FIGS. 2 and 4, from which it will appear that each panel is essentially in the form of a relatively thin flat plate with stiffening ribs 33 extending lengthwise on the back thereof spaced from and adjacent the longitudinal margins 35 of the plate with flanges 37 extending laterally outward at right angles from the ribs and projecting somewhat beyond the longitudinal margins 35. Each flange 37 in conjunction with the respective margin 35 defines a groove 39 which extends all along the respective longitudinal edge of the panel, opening laterally outward.

In the completed assembly of the signboard, panels 31 extend one above another from one end member 9 of frame 1 to the other, the end edges of the panels being received in the channels 19 of the end members 9. The upper edge of the upper panel is received in the channel 19 of the top frame member 5, and the bottom edge of the lower panel is received in the channel 19 of the bottom frame member 7. As to each panel, margins 35 and flanges 37 are so spaced that they have a tight press fit in the channels 19 of the frame members. The panels are coplanar in a plane which is inset (i.e., toward the back) of the frame 1.

It will be observed that with flanges 37 projecting beyond margins 35 of the panels, the grooves 39 at the meeting edges of two adjacent panels form a T-shaped slot 41 extending throughout the length of the panels. Received in each such T-shaped slot is a clip-receiving rail generally designated 43. These rails are cut from extruded stock (preferably a plastic extrusion), which is of bulb-T cross section, having a flange 45 fitting in the portion of slot 41 constituted by the two mating grooves 39, and a web 47 projecting forward between the edges of marginal portions 35 of the two adjacent