

- [54] **ILLUMINATED OUTDOOR SIGN**
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- [51] Int. Cl. **G09f 13/04**
- [58] Field of Search..... **40/132 R, 130 R; 220/31 R, 220/31 S; 16/171, 191; 52/501**

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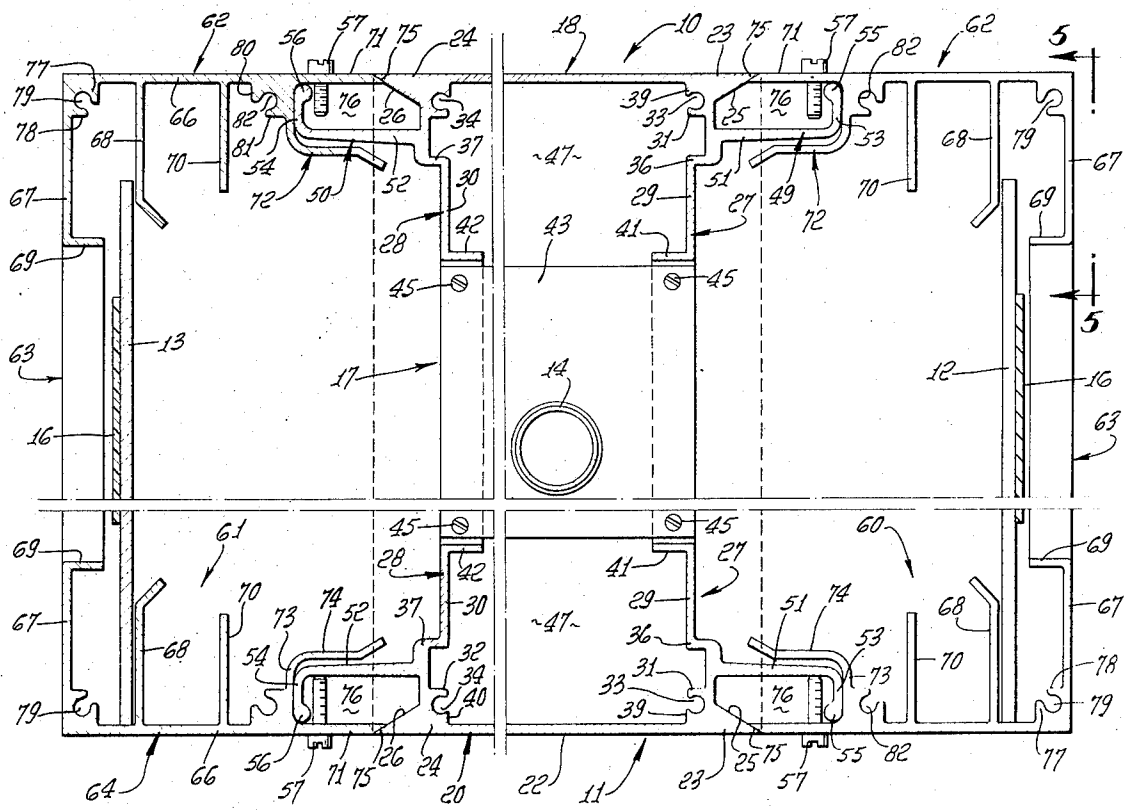
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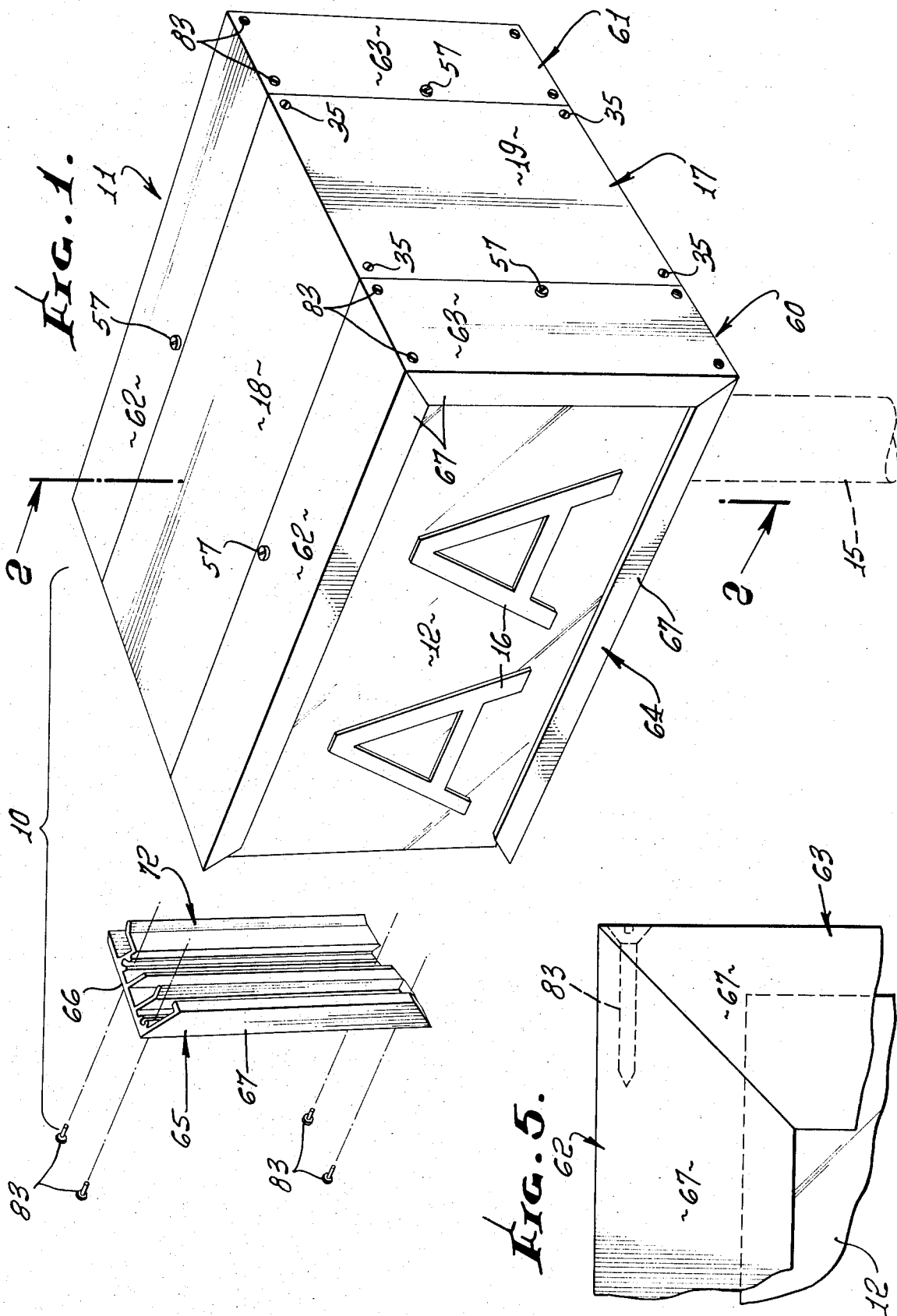
Primary Examiner—Wm. H. Grieb
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display panel, illumination means within the cabinet for illuminating the panel, and electrical means for supplying power to said illumination means, the cabinet including a central frame member and front and back frame members, there is disclosed the improvement wherein the central frame member and each of the front and rear frame members are formed, respectively, from four identical elongate frame sections mitered at a 45° angle at the ends thereof and joined at right angles whereby said sign is formed entirely from two extruded parts. The central frame member includes an elongate outer plate having opposite side edges and a first pair of elongate L-shaped flanges supported so as to project beyond the side edges. Each of the front and back frame members includes an elongate side wall positionable coplanar with the outer plate of the central frame member and having a side edge adapted to engage one of the side edges of the central frame, a second elongate L-shaped flange supported so as to define, together with the side wall, a U-shaped channel for receipt of one of the first pair of flanges, and a screw extending through the side wall into the U-shaped channel for preventing removal of the first flange from the channel but permitting pivotal movement of the front frame member relative to the

[57] **ABSTRACT**
 In a sign having a cabinet which frames at least one

10 Claims, 8 Drawing Figures





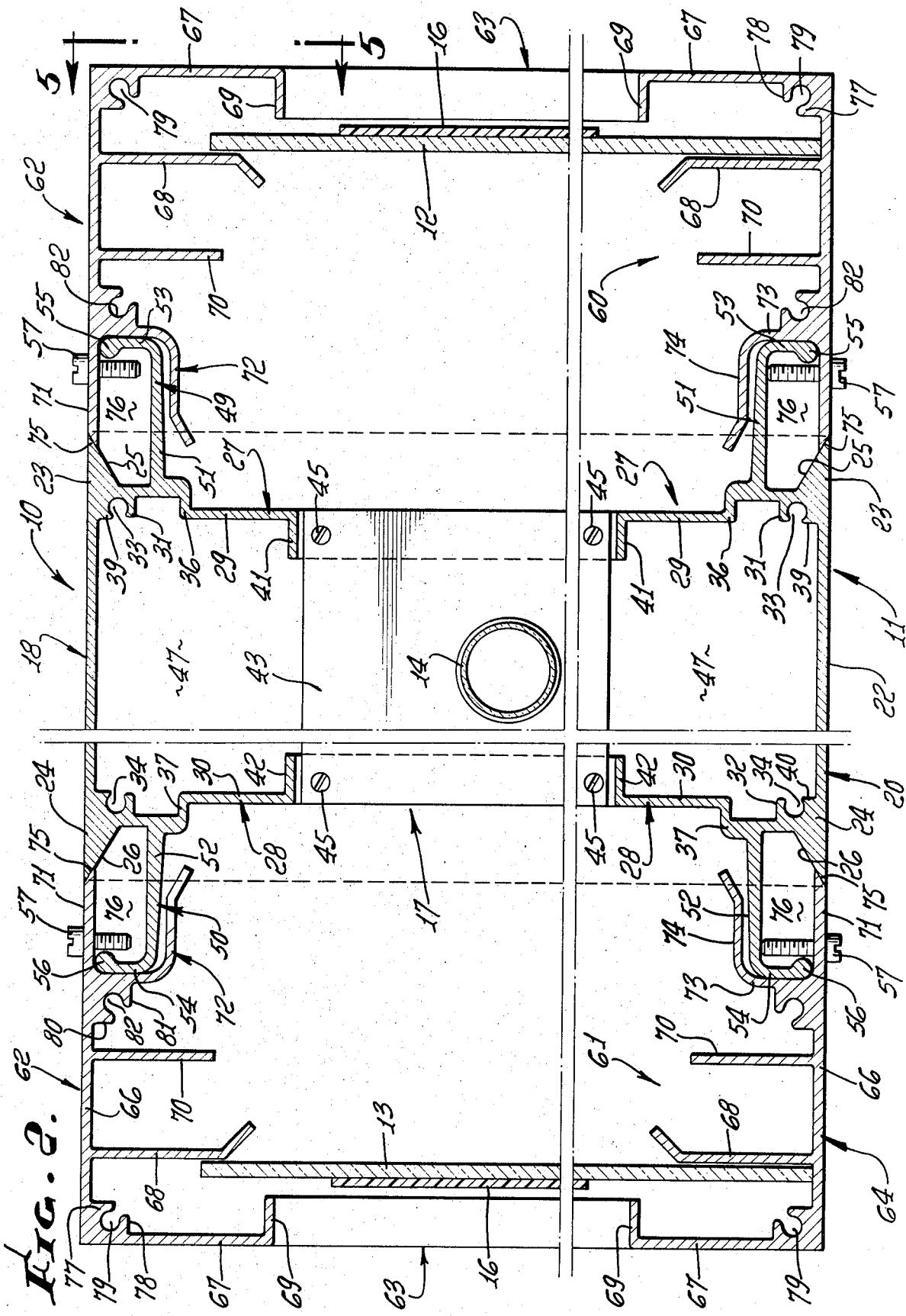


FIG. 2.

FIG. 3.

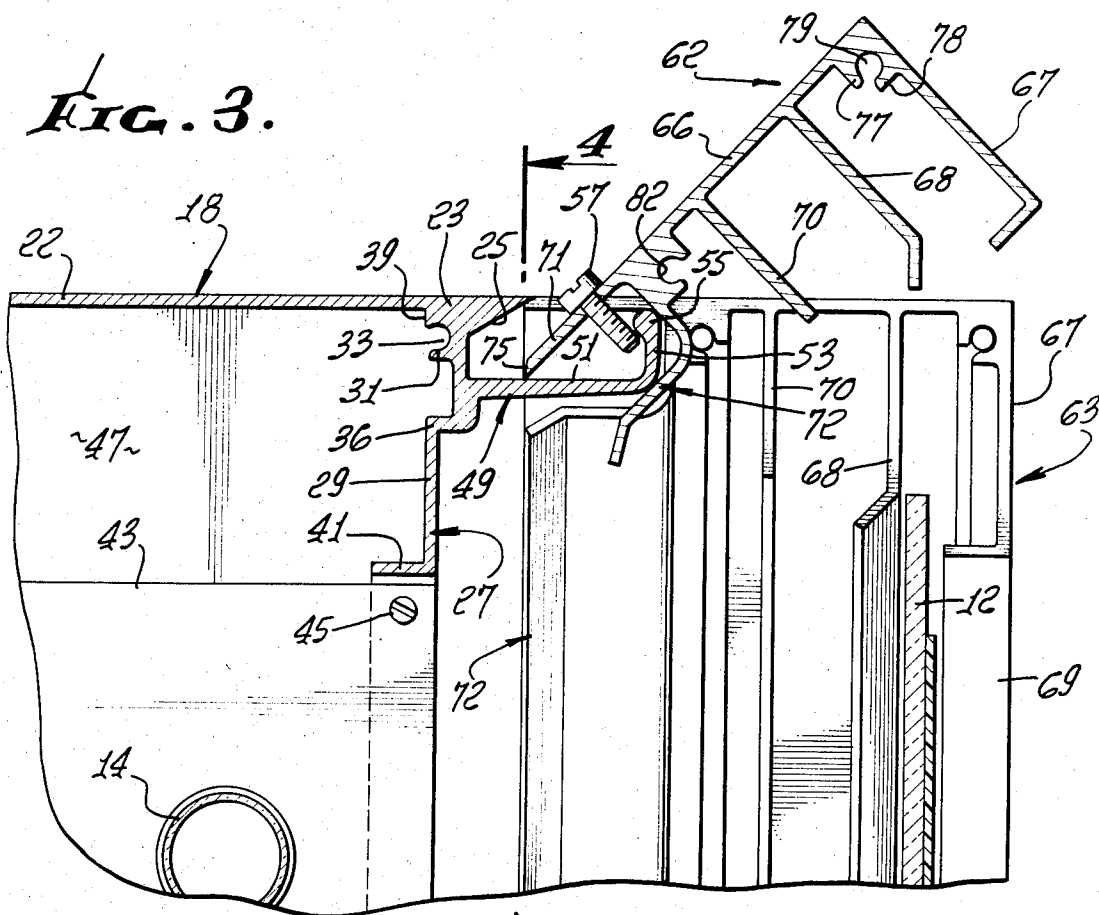
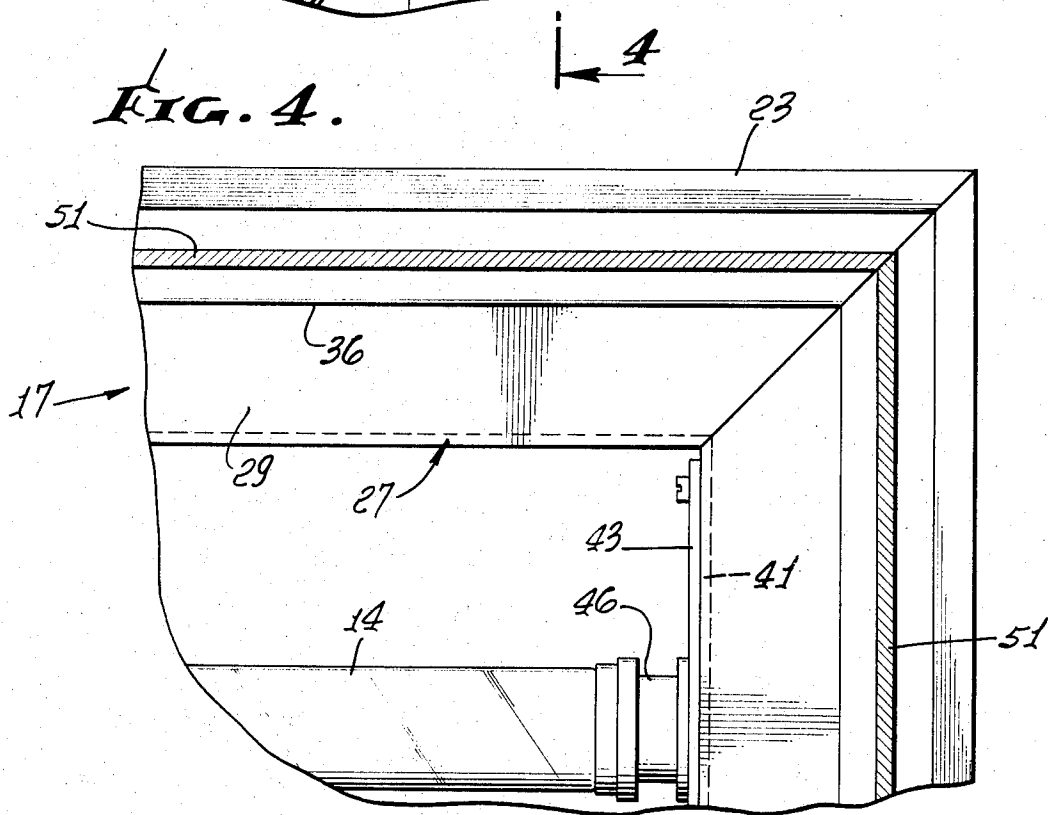
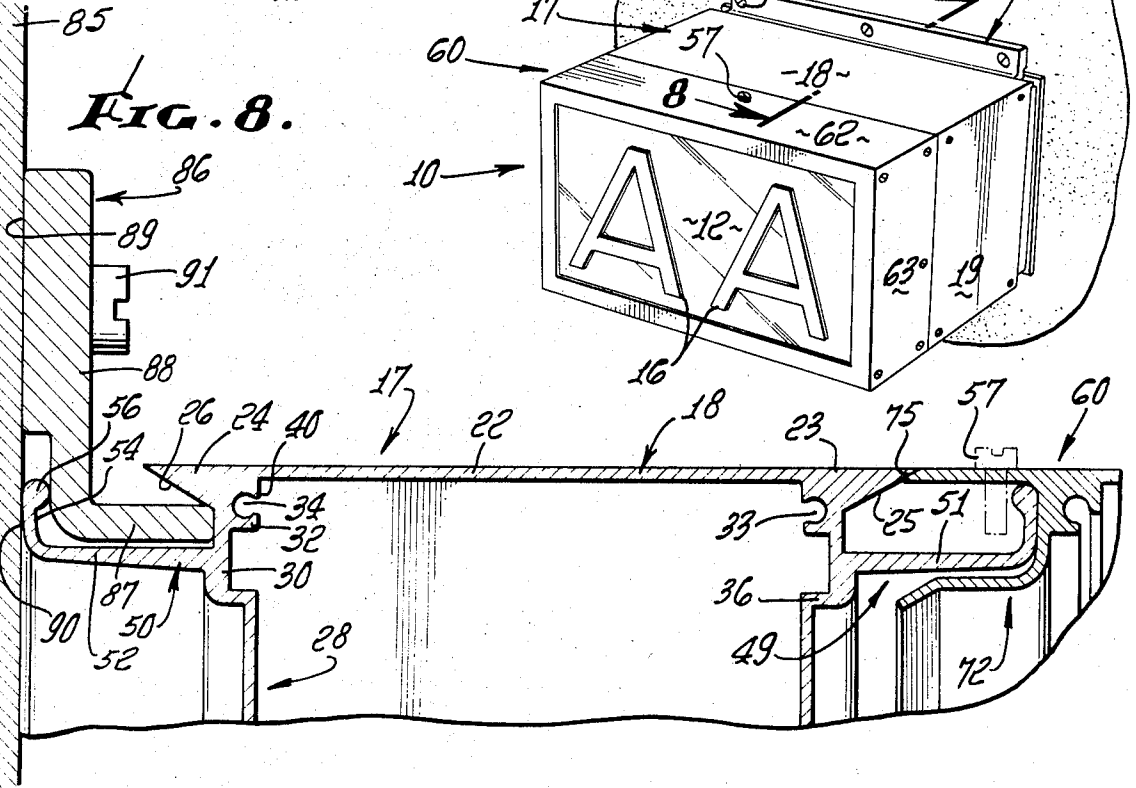
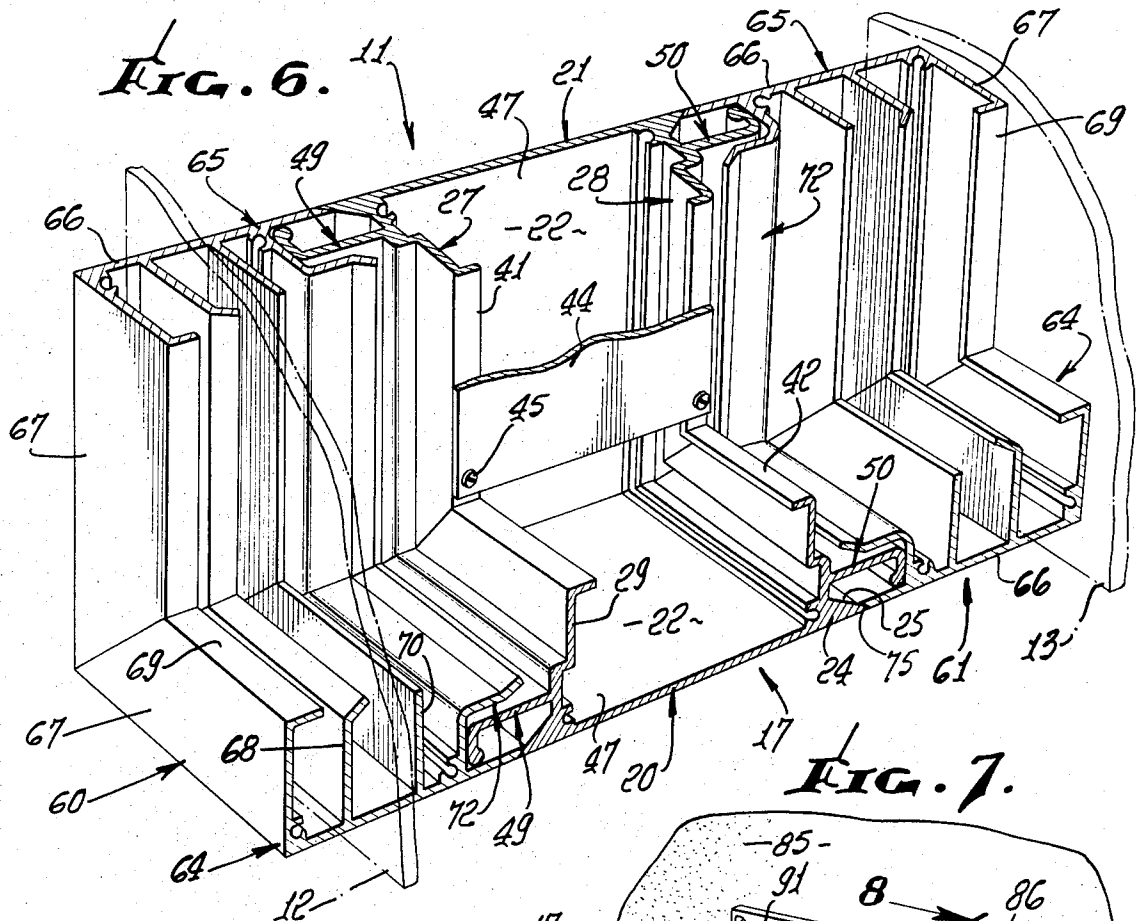


FIG. 4.





ILLUMINATED OUTDOOR SIGN

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to illuminated outdoor signs and, more particularly, to an illuminated outdoor sign which is formed entirely from two extruded parts forming hinged panels permitting opening of the sign without requiring hinges or cutting away of parts of the extrusions.

2. Description of the Prior Art

Illuminated outdoor signs are commonly used for advertising, for traffic control, and for other similar purposes. Such signs include a cabinet which may be supported above the ground on a vertical pole or which may be connected by a bracket to the wall of a building. Such cabinets typically include a central frame member in which fluorescent lamps and the associated electrical wiring is contained and front and back frame members which provide access to the interior of the cabinet and support a display panel having the advertising or other information thereon. The light from the fluorescent lamps within the central frame member of the cabinet shines through the display panels to illuminate the information thereon.

While such signs are widely used, there are usually a sufficient number of manufacturing and/or assembly problems associated therewith that the resulting structure is expensive to manufacture and/or difficult or time consuming to assemble. Existing signs are typically manufactured from many different shapes, requiring complex tooling for the manufacture thereof. In order to render the lights and electrical wiring accessible, the frame members must be hinged, usually requiring hinges or cutting away of parts of an extrusion. This also contributes to the overall expense of the completed sign.

SUMMARY OF THE INVENTION

The present invention relates to an improved illuminated outdoor sign which solves these problems in a simple and efficient manner. The present sign is made entirely from two, simple, extruded, frame sections, which frame sections completely form the cabinet body and are adaptable to constructing signs of any size. The frame sections are easy to manufacture so that the resultant structure is less expensive than previous designs. The individual frame sections may be shipped in a compact, disassembled form, and yet may be easily and quickly assembled on a job site. Portions of the frame sections are designed to form an interfitting or nesting arrangement permitting hinge movement without requiring separate hinges or cutting away of parts of the extrusions. Yet, when the sign is assembled, it achieves a weather tight arrangement that is easily opened for replacement of lamps, electrical wiring, sign elements, etc. The assembled sign is attractive and may be mounted on a pole or connected by a bracket to the wall of a building.

Briefly, the present illuminated outdoor sign includes a central frame member and at least a front frame member, the central frame member comprising four identical elongate frame sections mitered at a 45° angle at the ends thereof and joined at right angles. Each of the frame sections includes an elongate outer plate having at least one side edge and a first elongate L-shaped

flange supported with one of the legs thereof parallel to and spaced inwardly from the outer plate and projecting beyond the one side edge thereof, the other leg of the first flange extending toward but being spaced from the plane of the outer plate and terminating in an enlarged lip. The front frame member comprises four identical elongate frame sections mitered at a 45° angle at the ends thereof and joined at right angles. Each of the frame sections includes an elongate side wall positionable coplanar with the outer plate of the central frame member and having a side edge adapted to engage the one side edge of the central frame member, a second elongate L-shaped flange, one edge of the second flange being connected to the side wall, the side wall and the second flange defining a U-shaped channel for receipt of the first flange, the legs of the first flange being positionable parallel and adjacent to respective legs of the second flange, and a screw extending through the side wall, between the side edge thereof and the one edge of the second flange, for preventing removal of the first flange from the U-shaped channel but permitting pivotal movement of the front frame member relative to the central frame member. According to one embodiment of the invention, the central frame member has an identical other side edge and an identical third flange supported adjacent the other side edge and a rear frame member, identical to the front frame member, is connected to the other side edge of the central frame member.

OBJECTS

It is therefore an object of the present invention to provide an improved illuminated outdoor sign.

It is a further object of the present invention to provide a cabinet design for an illuminated outdoor sign which is formed entirely from two single extruded parts.

It is a still further object of the present invention to provide a cabinet design for an illuminated outdoor sign in which the separate parts thereof form an interfitting or nesting arrangement permitting hinged movement without requiring separate hinges or cutting away of parts of the frame elements.

It is another object of the present invention to provide an illuminated outdoor sign which may be shipped in a compact, disassembled form and may be easily and quickly assembled on a job site.

Still other objects, features, and attendant advantages of the present invention will become apparent to those skilled in the art from a reading of the following detailed description of the preferred embodiment constructed in accordance therewith, taken in conjunction with the accompanying drawings wherein like numeral designate like parts in the several figures and wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of an illuminated outdoor sign constructed in accordance with the teachings of the present invention, mounted on a pole, with one of the frame sections exploded away from the remaining sections of the cabinet;

FIG. 2 is an enlarged cross-sectional view taken along the line 2-2 in FIG. 1, showing the cross-sectional shape of the frame sections;

FIG. 3 is a partial cross-sectional view, similar to FIG. 2, showing the hinged frame section in its open position;

FIG. 4 is a partial cross-sectional view, on the same scale as FIGS. 2 and 3, taken along the line 4—4 in FIG. 3;

FIG. 5 is a front elevation view of one corner of the cabinet, taken along the line 5—5 in FIG. 2;

FIG. 6 is a partial perspective view of the lower left-hand corner of the sign of FIGS. 1—5;

FIG. 7 is a perspective view of an outdoor sign constructed in accordance with the teachings of the present invention, connected by brackets to a wall; and

FIG. 8 is an enlarged, partial, cross-sectional view taken along the line 8—8 in FIG. 7.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings and, more particularly, to FIGS. 1 and 2 thereof, there is shown an illuminated outdoor sign, generally designated 10, constructed in accordance with the teachings of the present invention. Sign 10 includes a generally rectangular cabinet 11 which supports front and rear display panels 12 and 13, respectively, in spaced apart, parallel relationship. Positioned within cabinet 11 is illumination means, such as a fluorescent lamp 14, mounted between display panels 12 and 13 for illuminating the information 16 thereon. Also positioned within cabinet 11 is electrical means (not shown) for supplying power to fluorescent lamp 14. Cabinet 11 may be supported above the ground by a vertical support pole 15, although in many instances it will be preferable to mount cabinet 11 on the wall of a building, as will be discussed more fully hereinafter with respect to FIGS. 7 and 8.

In accordance with the present invention, cabinet 11 may be made entirely from two extrusions which completely form the body of cabinet 11 and are adaptable to constructing signs of any size. More specifically, cabinet 11 includes a central frame member, generally designated 17, which is formed from four identical, elongate, extruded frame sections 18, 19, 20, and 21. The ends of frame sections 18—21 are mitered at a 45° angle and joined at right angles. Frame sections 18 and 20 form the top and bottom, respectively, of frame member 17 whereas sections 19 and 21 form the sides thereof. Thus, by simply selecting the lengths of sections 18—21, central frame member 17 may be made in any desired size.

Referring now primarily to FIGS. 2 and 6, each of frame sections 18—21 includes an elongate outer plate 22 having a generally thin cross-sectional shape but which has enlarged side edges 23 and 24. Edges 23 and 24 are enlarged for two reasons. In the first instance, edges 23 and 24 are enlarged to form inner surfaces 25 and 26 which are positioned at an acute angle, such as 30°, relative to the outer surface of plate 22. Edges 23 and 24 are also enlarged to support the side edges of first legs 29 and 30, respectively, of elongate, generally L-shaped flanges 27 and 28, respectively. Legs 29 and 30 of flanges 27 and 28, respectively, support elongate protrusions 31 and 32, respectively, which, together with elongate protrusions 39 and 40 supported by side edges 23 and 24, respectively, of plate 22 define longitudinal screw bores 33 and 34, respectively, which permit the interconnection of frame sections 18—21. This may be achieved by extending self-tapping screws 35

through side frame sections 19 and 21 so that the threaded portions thereof extend into and engage screw bores 33 and 34. Thus, four screws 35 extended through each of frame sections 19 and 21 into screw bores 33 and 34 in frame sections 18 and 20 is all that is required to interconnect frame sections 18—21.

Legs 29 and 30 of flanges 27 and 28, respectively, which are the longer legs thereof, are offset near the centers thereof, at 36 and 37, respectively, and the shorter legs 41 and 42, respectively, extend inwardly, as shown. Legs 41 and 42 of flanges 27 and 28, respectively, of frame sections 19 and 21 form surfaces for the mounting of fluorescent lamp 14. More specifically, sign 10 includes first and second rectangular plates 43 and 44 which are connected via screws 45 to legs 41 and 42 of frame sections 19 and 21. Each of plates 43 and 44 supports a socket 46 which is fastened thereto in any suitable manner. Furthermore, one or more standard fluorescent light ballasts (not shown) may be connected to the interior side of one or the other of plates 43 or 44. Furthermore, plates 43 and 44, flanges 27 and 28, and outer plates 22 define channels 47 within which the electrical wiring may conveniently be located.

Each of frame sections 18—21 also includes elongate L-shaped flanges 49 and 50, the side edges of the longer legs 51 and 52, respectively, of which are connected to legs 29 and 30, respectively, of flanges 27 and 28, respectively. Legs 51 and 52 of flanges 49 and 50, respectively, extend parallel to outer plate 22 and project beyond side edges 23 and 24 thereof. The shorter legs 53 and 54 of flanges 49 and 50, respectively, extend outwardly, toward the plane of plate 22, but terminate just prior to reaching such plane. The side edges 55 and 56 of legs 53 and 54, respectively, of flanges 49 and 50, respectively, are enlarged to catch the ends of screws 57, as will be explained more fully hereinafter.

Cabinet 11 includes identical, front and back frame members, generally designated 60 and 61, respectively, each of which is formed from four identical, elongate, extruded frame sections 62, 63, 64, and 65. As shown most clearly in FIGS. 1, 3, 4, 5, and 6, the ends of frame sections 62—65 are mitered at a 45° angle and joined at right angles. Frame sections 62 and 64 form the top and bottom, respectively, of frame members 60 and 61 whereas sections 63 and 65 form the sides thereof.

Referring now primarily to FIGS. 2 and 6, frame sections 62—65 include elongate side walls 66 which extend parallel to and coplanar with outer plates 22 of frame sections 18—21, respectively, and elongate face plates 67 which extend at right angles from the outer edges of side walls 66. An elongate spacer plate 68 depends from the interior side of each of side walls 66, spacer plates 68 extending parallel to face plates 67. The spacer plates 68 of frame sections 62—65 of frame members 60 and 61 cooperate to support the back surfaces of display panels 12 and 13, respectively. The sides of face plates 67 extend inwardly to form lips 69, the lips 69 of frame sections 62—65 of frame members 60 and 61 cooperating to support the front surfaces of display panels 12 and 13, respectively.

The edge 75 of the side 71 of wall 66 is positioned at an obtuse angle, such as 150°, relative to the outer surface of wall 66 so that edge 75 is parallel to inner surfaces 25 and 26 of frame sections 18—21. These surfaces are adapted to contact each other so that the

outer surfaces of each outer plate 22 and the adjacent side wall 66 are coplanar.

Depending from the interior side of each of side walls 66, parallel to spacer plate 68 but spaced therefrom, is a flange 70, included in frame sections 62-65 for strengthening purposes. Also depending from the interior side of each of side walls 66, adjacent the side 71 thereof, is a generally L-shaped flange 72. One leg 73 of flange 72 is perpendicular to side wall 66 whereas the other leg 74 of flange 72 is parallel to side wall 66.

With each side wall 66 positioned coplanar with the adjacent outer plate 22 and with edge 75 in contact with one of surfaces 25 or 26, the spacing between edge 75 and leg 73 of flange 72 is such that one of legs 53 or 54 of flanges 49 or 50 contacts leg 73. Furthermore, the spacing between side 71 of wall 66 and leg 74 of flange 72 is slightly greater than the corresponding distance between legs 51 and 52 of flanges 49 and 50 and outer plates 22. In other words, side 71 of wall 66 in combination with legs 73 and 74 of flange 72 define a generally U-shaped channel 76 for receipt of flanges 49 and 50. Legs 51 and 52 of flanges 49 and 50 extend into channels 76, spaced slightly from legs 74 of flanges 72. On the other hand, legs 53 and 54 of flanges 49 and 50, respectively, contact legs 73 of flanges 72. In order to retain flanges 49 and 50 in channels 76, each of frame sections 62-65 includes a single screw 57 which extends through a central portion of sides 71 of walls 66, between edges 75 and leg 73 of flange 72, the spacing between screw 57 and leg 73 being slightly greater than the diameter of enlarged edges 55 and 56 of legs 53 and 54, respectively, of flanges 49 and 50, respectively. The reason for this will appear more fully hereinafter.

Side walls 66 and face plates 67 support, adjacent the intersections thereof, elongate protrusions 77 and 78, respectively, which define longitudinal screw bores 79. Furthermore, side walls 66 and legs 73 of flanges 72 support, adjacent the intersections thereof, elongate protrusions 80 and 81, respectively, which define longitudinal screw bores 82. Screw bores 79 and 82 permit the interconnection of frame sections 62-65. This may be achieved by extending self-tapping screws 83 through side frame sections 63 and 65 so that the threaded portions thereof extend into and engage screw bores 79 and 82. Thus, four screws 83 extended through each of frame sections 63 and 65 is all that is required to interconnect frame sections 62-65.

In operation, cabinet 11 is readily assembled into the configuration shown in FIGS. 1, 2, and 4-6. Side frame sections 19 and 21 may first be connected to bottom frame section 20 of central frame member 17 using four screws 35. Thereafter, plates 43 and 44 may be connected to legs 41 and 42 of frame sections 19 and 21 by screws 45. Fluorescent lamp 14 may then be positioned within sockets 46 and the electrical wiring (not shown), run through channels 47 in side sections 19 and 21 into channel 47 in bottom section 21. From here, the electrical wiring may be run through an opening (not shown) in outer plate 22 into support pole 15. Thereafter, top frame section 18 may be positioned between frame sections 19 and 21 and connected thereto by means of four screws 35.

The assembly of each of frame members 60 and 61 is similar. Side frame sections 63 and 65 may be first connected to bottom frame sections 64 by means of four screws 83. Thereafter, display panels 12 and 13

may be dropped into place, between spacer plates 68 and lips 69. Then, top frame sections 62 may be positioned between frame sections 63 and 65 and connected thereto via four more screws 83.

After central frame member 17 and front and back frame members 60 and 61, respectively, are assembled, they may be readily interconnected by positioning all three members on a common flat surface and bringing them together so that flanges 49 and 50 extend into channels 76 in frame members 60 and 61, respectively. At this point, all of screws 57 would have been removed from side walls 66 to permit legs 53 and 54 of frame member 17 to contact legs 73 of frame members 60 and 61, respectively. After flanges 49 and 50 are so positioned and side edges 75 are in contact with surfaces 25 and 26, all of screws 57 may be inserted. It should be particularly noted that the screws 57 which extend through side walls 66 of frame sections 63, 64, and 65 have a length sufficient to contact legs 51 and 52 of flanges 49 and 50, respectively. Thus, tightening of these screws 57 applies pressure between side edges 75 and surfaces 25 and 26 forming a rigid connection between central frame member 17 and front and back frame members 60 and 61, respectively. This rigid connection between central frame member 17 and frame sections 63, 64, and 65 is sufficient to securely lock the members 17, 60, and 61. On the other hand, the screw 57 which extends through side wall 66 in frame section 62 is shorter and, even when fully extended, does not contact either of legs 51 or 52 of flanges 49 and 50. The reason for this will appear more fully hereinafter.

Assume now it is desired to open cabinet 11 to replace fluorescent lamp 14. This may be achieved by simply removing the four screws 83 which extend from side frame sections 63 and 65 into top frame section 62. While frame sections 63, 64, and 65 remain rigidly interconnected by means of the remaining four screws 83 and remain rigidly connected to central frame member 17 by means of the three screws 57 therein, frame section 62 is now released from sections 63 and 65. On the other hand, and as seen in FIG. 2, frame section 62 remains connected to frame section 18 of central frame member 17 because of the interfitting or nesting arrangement between flanges 49 and 72 and the screw 57 in side wall 66 of frame section 62. However, and as shown most clearly in FIG. 3, the arrangement of parts just described permits frame section 62 to pivot relative to frame section 18 of central frame member 17. In other words, there is no rigid connection between frame sections 18 and 62 and the arrangement of parts previously described permits a hinge action, allowing face plate 67 to be elevated. Rotation is permitted until edge 75 of side wall 66 of frame section 62 contacts leg 51 of flange 49 of frame section 18. This is illustrated in FIG. 3 and it is seen that access is now provided between lip 69 of frame section 62 and the top of front display panel 12 so that fluorescent lamp 14 may be reached and changed. After lamp 14 is changed, frame section 62 is returned to the position shown in FIG. 2 and the four previously removed screws 83 are replaced, thereby again forming a rigid connection between all frame sections.

Referring now to FIGS. 7 and 8, sign 10 is readily adaptable to be mounted on a wall 85 by means of a pair of elongate, generally L-shaped brackets 86 (only one being shown in FIGS. 7 and 8). Each of brackets 86 includes a shorter leg 87, the length of which is

equal to the distance between leg 30 of flange 28 and edge 56 of side 54 of flange 50, and a longer leg 88 which has a thickness adjacent the center and ends thereof so as to provide a surface 89 which is coplanar with the outer surface 90 of leg 54 of flange 50. Leg 86 also has a plurality of spaced holes therein (not shown) for receiving screws 91 which are connectable to wall 85.

In operation, bracket 86 is usable when it is desired to mount sign 10 on a wall 85. In this case, only central frame member 17 and front frame member 60 are used, back frame member 61 being unnecessary since it would be facing wall 85. Central frame member 17 and front frame member 60 would be assembled and interconnected as described previously with respect to the embodiment of FIGS. 1-6. Cabinet 11 would then be positioned against wall 85 with the outer surfaces 90 of the four legs 54 of the flanges 50 of frame sections 18-21 in contact with wall 85. A first bracket 86 would then be inserted into frame section 18 by inserting leg 87 between surface 26 and edge 56 and rotating until leg 87 is parallel to leg 52 of flange 50. At this point, surface 89 of leg 88 is in contact with wall 85 and screws 91 may be used to form a rigid connection therebetween.

Next, a second bracket 86 (not shown) would be connected to bottom frame section 20 of central frame member 17 and connected to wall 85 by a similar plurality of screws 91. Just these two brackets 86 are all that is required to support sign 10 on wall 85. Legs 54 of flanges 50 are trapped behind legs 88 of brackets 86, preventing movement of cabinet 11 away from wall 85. The two legs 87 of brackets 86 are on opposite sides of flanges 50 of frame sections 18 and 20, preventing vertical movement of cabinet 11. Finally, legs 87 of brackets 86 are positioned between side edges 24 of outer plates 22 of side frame sections 19 and 21, preventing lateral movement of cabinet 11.

It can therefore be seen that in accordance with the present invention, there is provided an improved illuminated outdoor sign which solves the previously discussed problems of the prior art in a simple and efficient manner. Sign 10 is made entirely from two simple extrusions, one extrusion forming frame sections 18-21 and the other extrusion forming frame sections 62-65 of front and back frame members 60 and 61, respectively. By adjusting the lengths of these sections, the present design is adaptable to constructing signs of any size. Furthermore, frame sections 18-21 and 62-65 are easy to manufacture so that the resultant structure is less expensive than previous designs.

The individual sections of frame members 17, 60, and 61 may be shipped in a compact, disassembled form, and yet may be easily and quickly assembled on a job site. Portions of the frame sections are designed to form an interfitting or nesting arrangement permitting hinge action or a firmly locked structure without requiring separate hinges or cutting away of parts of the extrusions. Yet, when sign 10 is assembled, it achieves a weather tight arrangement that is easily opened for replacement of lamps, electrical wiring, sign elements, etc. Sign 10 is attractive and may be mounted on a pole 15 or may be connected by brackets 86 to a wall 85.

While the invention has been described with respect to the preferred physical embodiment constructed in accordance therewith, it will be apparent to those skilled in the art that various modifications and im-

provements may be made without departing from the scope and spirit of the invention. Accordingly, it is to be understood that the invention is not to be limited by the specific illustrative embodiment, but only by the scope of the appended claims.

I claim:

1. In a sign having a cabinet which frames at least one display panel, illumination means within the cabinet for illuminating the panel, and electrical means for supplying power to said illumination means, said cabinet including a central frame member and at least a front frame member, the improvement wherein said central frame member comprises:

four identical elongate frame sections mitered at a 45° angle at the ends thereof and joined at right angles, each of said frame sections including:

an elongate outer plate having at least one side edge; and

a first elongate L-shaped flange supported with one of the legs thereof parallel to and spaced inwardly from said outer plate and projecting beyond said one side edge thereof, the other leg of said first flange extending toward but being spaced from the plane of said outer plate and terminating in an enlarged lip; and wherein said front frame member comprises:

four identical elongate frame sections mitered at a 45° angle at the ends thereof and joinable at right angles, each of said frame sections including:

an elongate side wall positionable coplanar with said outer plate of said central frame member and having a side edge adapted to engage said one side edge of said central frame member;

a second elongate L-shaped flange, one edge of said second flange being connected to said side wall, said side wall and said second flange defining a U-shaped channel for receipt of said first flange, the legs of said first flange being positionable parallel and adjacent to respective legs of said second flange; and

means extending through said side wall, between said side edge thereof and said one edge of said second flange, for preventing removal of said first flange from said U-shaped channel but permitting selective pivotal movement of said frame sections of said front frame member relative to said central frame member, rotation of said first flange within said U-shaped channel of the frame section forming the top of said front frame member being permitted in a first direction until said side edge of said side wall contacts said one leg of said first flange, said one side edge of said outer plate of said frame sections of said central frame member overlapping said side edge of said side wall of said frame sections of said front frame member thereby permitting pivotal movement of said top of said front frame member in said first direction only relative to the top of said central frame member.

2. In a sign according to claim 1, the improvement wherein the frame sections forming the sides and bottom of said front frame are connected together and wherein the frame section forming the top of said front frame member is releasably connected to the sides of said front frame member, and wherein pivotal movement of said top of said front frame member is permitted when said releasable connection is opened.

3. In a sign according to claim 2, the improvement wherein said first flange of each of said frame sections is nested within said U-shaped channels in the respective frame sections of said front frame member, said side walls resting on said enlarged lips at the end of said other legs of said first flanges.

4. In a sign according to claim 1, the improvement wherein said one side edge of said outer plate is positioned at an acute angle relative to the outer surface thereof and wherein said side edge of said side wall is positioned at an obtuse angle relative to the outer surface thereof so as to be parallel to said one side edge of said outer plate thereby forming an overlapping relationship between the frame sections of said central and front frame members.

5. In a sign according to claim 1, the improvement wherein said means extending through said side wall in said front frame member comprises a screw, the first screw which extends through the side wall of the frame section forming the top of said front frame member being of a length so that it does not contact said one leg of said first flange of the frame section forming the top of said central frame member whereby said first screw prevents lateral movement of said top of said front frame member relative to said top of said central frame member and engages said enlarged lip at the end of said other leg of said first flange when in said pivoted position to prevent disconnection of said tops of said front and central frame members.

6. In a sign according to claim 5, the improvement wherein the second, third, and fourth screws which extend through the side walls of the frame sections forming the sides and bottom of said front frame member have lengths sufficient to contact said one legs of said first flanges of the frame sections forming the sides and bottom of said central frame member, said second, third, and fourth screws applying pressure between said overlapped edges of said side and bottom outer plates of said central frame member and the respective side and bottom side walls of said front frame member thereby forming a rigid connection therebetween.

7. In a sign according to claim 1, the improvement wherein each of said frame sections of said central frame member further comprises:

- a pair of elongate L-shaped flanges, one edge of one of the legs thereof being connected to said outer plate and being perpendicular thereto, the other legs thereof being coplanar; and
- first and second rectangular plates connected to said other legs of the pair of flanges of the frame sections forming the sides of said central frame member, each of said plates supporting a socket for re-

ceipt of the opposite ends of said illumination means.

8. In a sign according to claim 1, the improvement wherein each of said frame sections of said front frame member comprises:

- an elongate face plate connected to and extending perpendicular to said side wall, the edge of said face plate extending inwardly toward said central frame member; and
- an elongate spacer plate depending from the interior side of said side wall, parallel to and spaced from said face plate, said edges of said face plates and said spacer plates supporting the front and back surfaces, respectively, of said one display panel.

9. In a sign according to claim 1, the improvement wherein said elongate outer plate of each of said frame sections of said central frame member has an opposite side edge and wherein each of said frame sections of said central frame member includes a third elongate L-shaped flange identical to said first flange and supported so as to project beyond said opposite side edge of said outer plate; and further comprising:

- a rear frame member identical to said front frame member and including:
 - an elongate side wall;
 - a fourth elongate L-shaped flange defining a U-shaped channel for receipt of said third flange; and

means extending through said side wall of said rear frame member for preventing removal of said third flange from said U-shaped channel in said rear frame member.

10. In a sign according to claim 1, the improvement wherein said elongate outer plate of each of said frame sections of said central frame member has an opposite side edge and wherein each of said frame sections of said central frame member includes a third elongate L-shaped flange identical to said first flange and supported so as to project beyond said opposite edge of said outer plate; and further comprising:

- a pair of elongate, generally L-shaped brackets, said brackets including first legs hookable under said opposite side edges of the frame sections forming the top and bottom of said central frame member, parallel to and in contact with the one legs of said third flanges, said brackets further including second legs overlapping the other legs of said third flanges of the frame sections forming the top and bottom of said central frame member and being adapted to be connected to a wall or other surface to connect said sign thereto.

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