

[54] **BILLBOARD**

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[22] Filed: **Aug. 9, 1971**

[21] Appl. No.: **169,943**

[52] U.S. Cl. **40/125 K, 40/156**

[51] Int. Cl. **G09f 01/12**

[58] Field of Search **40/125 K, 156, 155; 160/380, 374.1; 16/164**

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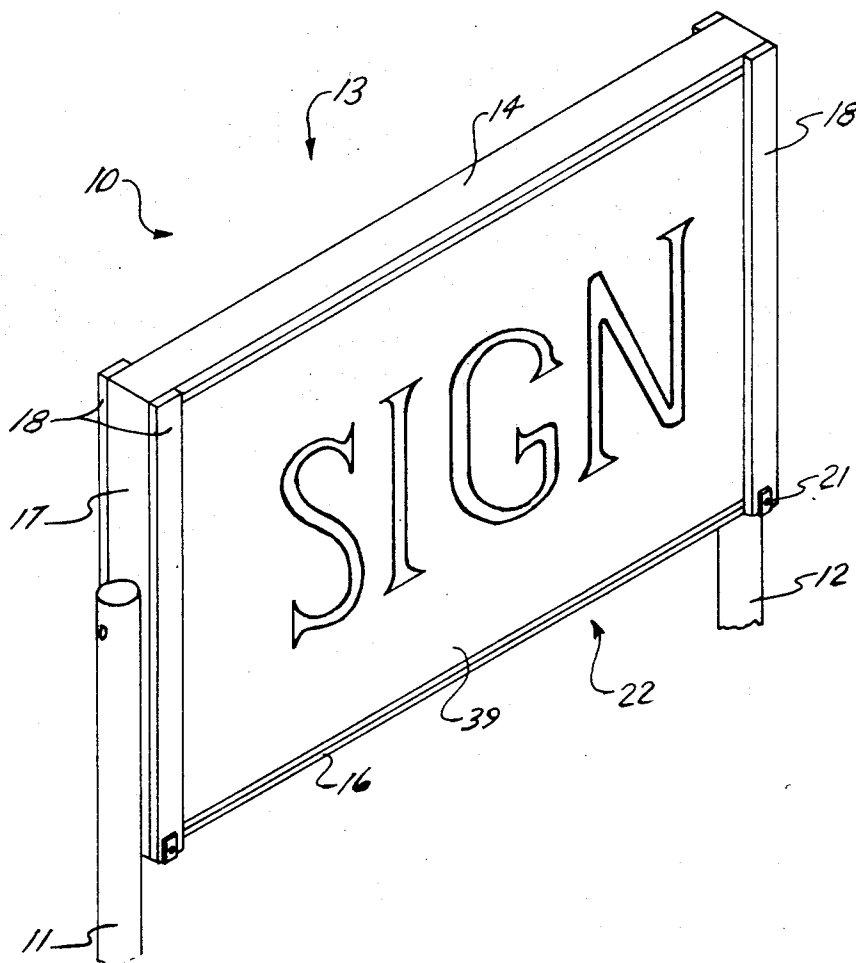
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[57]

ABSTRACT

A billboard having a housing secured to a supporting structure, the housing removably receiving a sign panel comprising at least two nesting members which securely hold a sign therebetween. The sign is stretched across one of the members and its edges are tightly disposed between the members. Each member includes a plurality of struts each detachably connected in abutting relationship to its adjacent struts thus permitting the member to be readily disassembled for storage and transport. One of the members has a plurality of electrically connected outlets mounted thereon which are adapted to be connected to a power source thus providing lighting for the sign.

2 Claims, 8 Drawing Figures



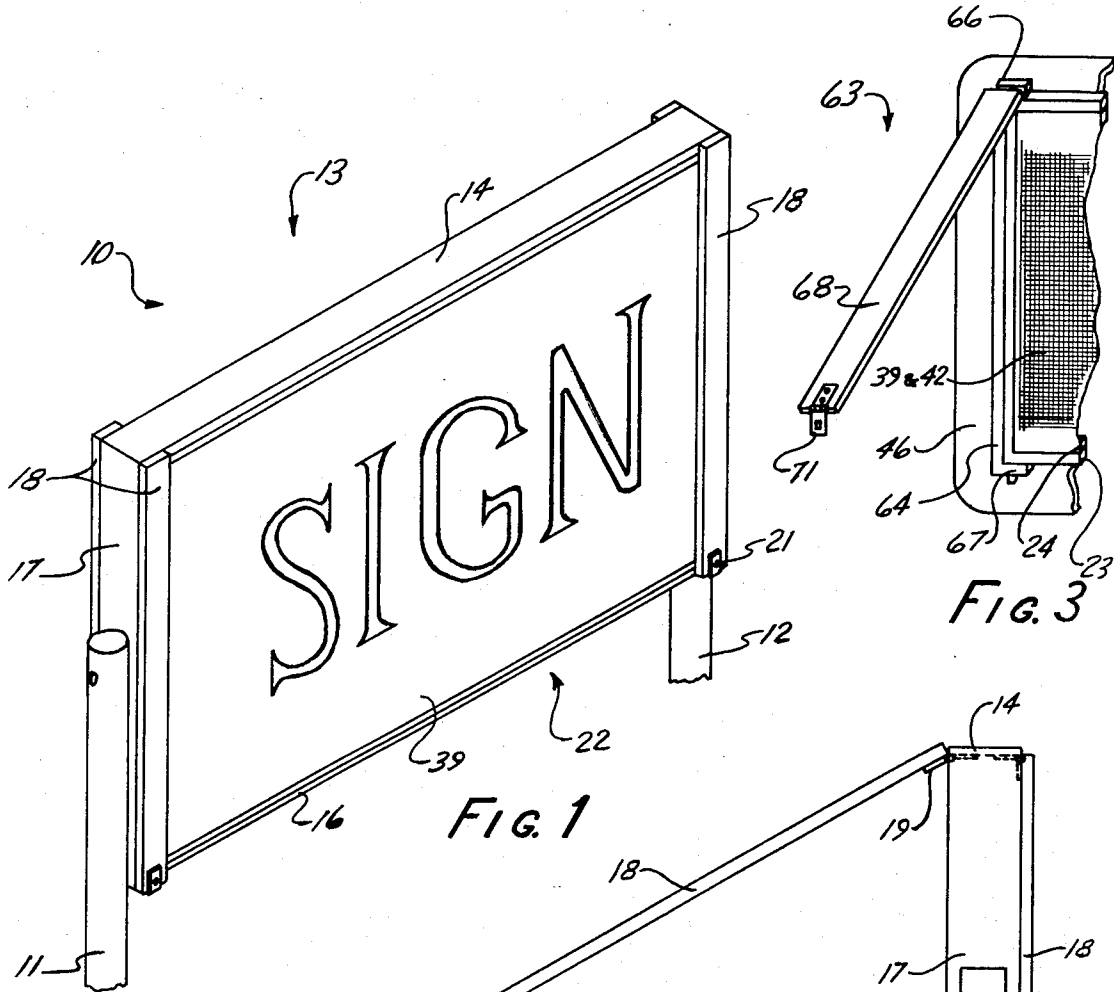


FIG. 1

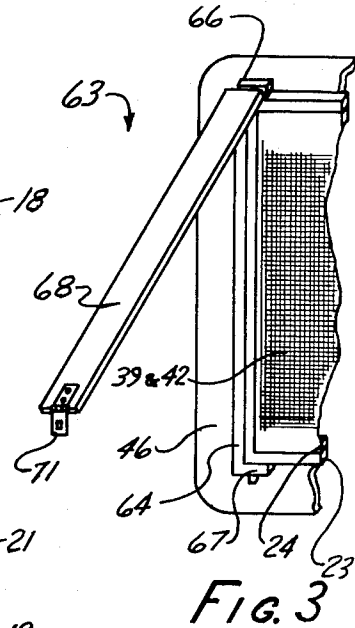


FIG. 3

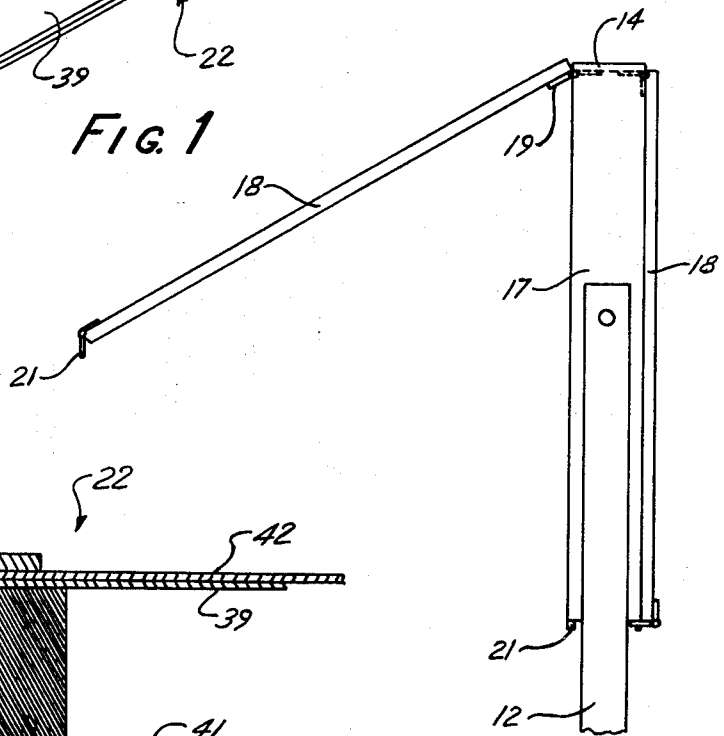


FIG. 2

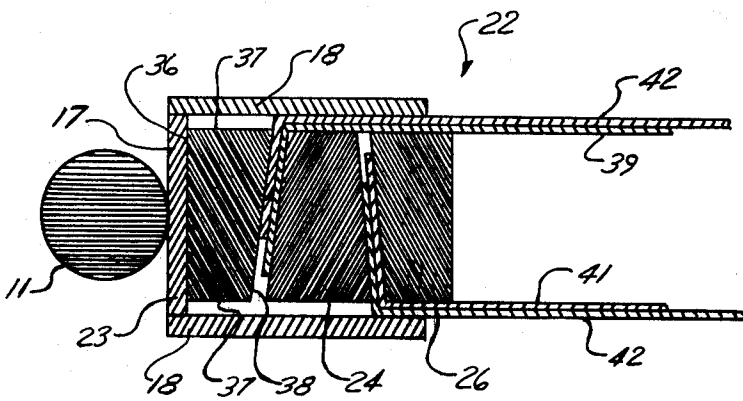


FIG. 4

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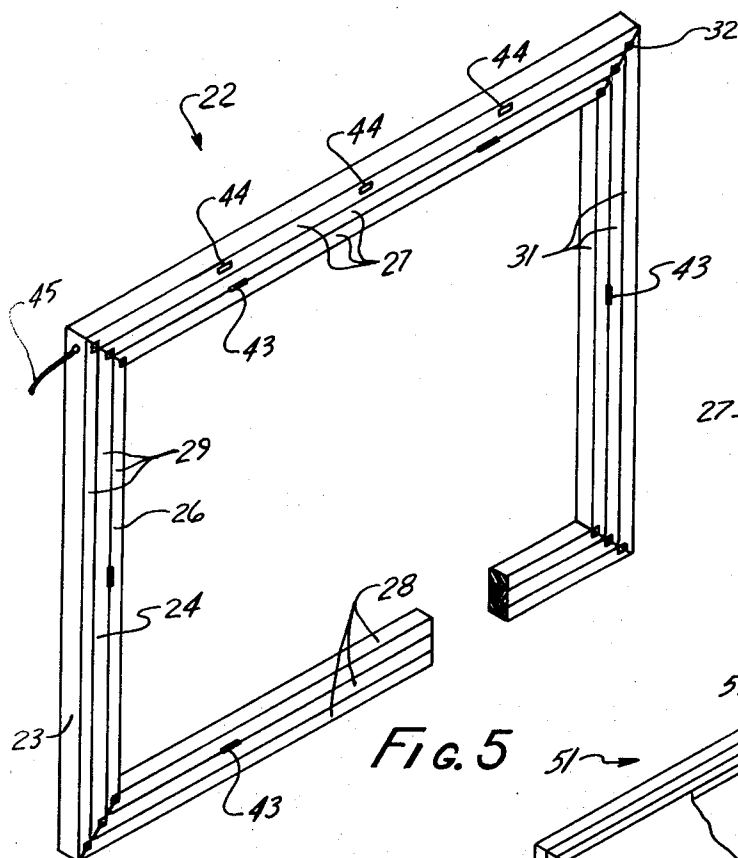


Fig. 5

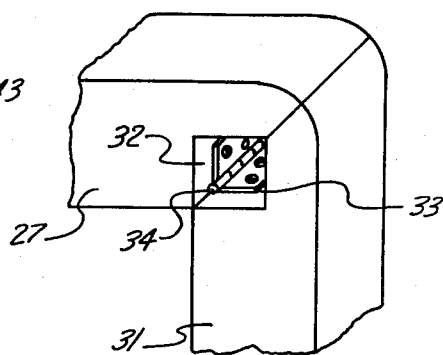


Fig. 6

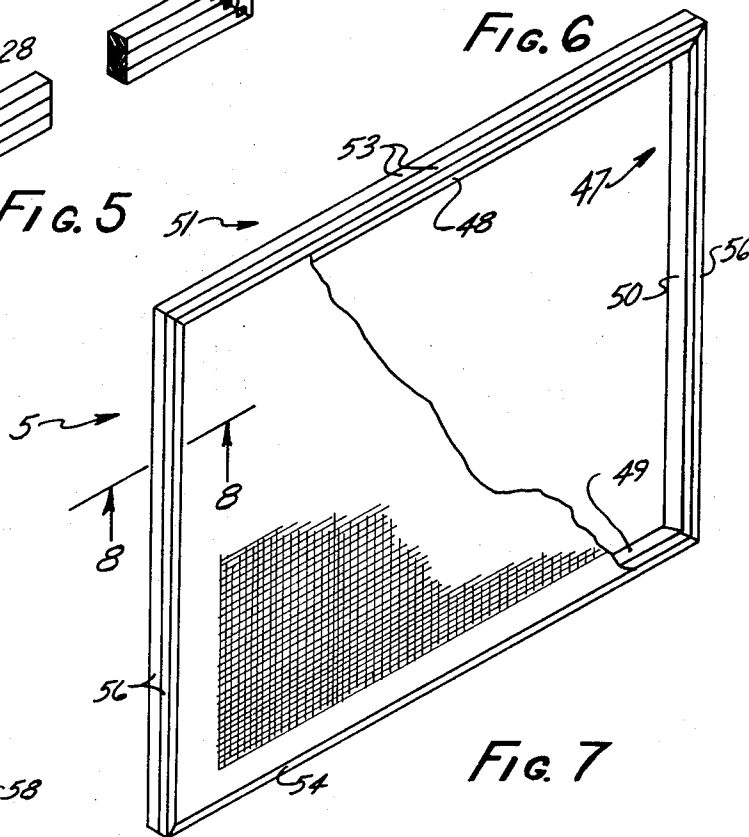


Fig. 7

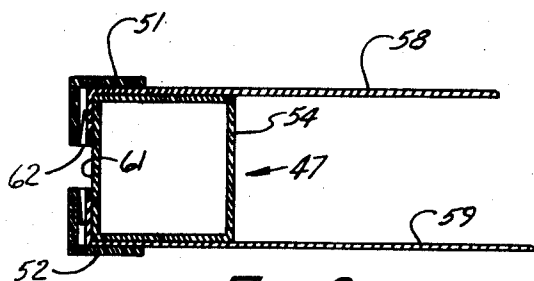


Fig. 8

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BILLBOARD**BACKGROUND OF THE INVENTION**

When billboards first became prevalent they were prepared with painted advertising and an artist painted the image on the panels. The next step was to paste pre-printed paper signs over the panels on the billboard thus eliminating the need for the artist. To change the sign, the old sign must be covered by paint, or a new sign, or scraped off and then the new sign affixed to the panel. Even in pleasant weather the changing of the sign is difficult in that the painter or sign poster works for long periods of time on precarious perches or walkways, sometimes many feet above the ground. In inclement weather, i.e. wind, cold, precipitation, or dust, the painter cannot paint nor can the sign poster apply paste and paper to the panel.

The artisan applying or changing the sign must be an expert or the results may not be satisfactory. Particularly in the area of paper, the worker must not leave loose ends unpasted which can ultimately cause the sign to deteriorate, the paper must not be applied in an irregular fashion, and furthermore warm water and paste must be available at the billboard.

The tremendous expense of removal, scraping, cleaning, and replacing of copy means that the message has to be more institutional than currently dated and thus, this method can not compete with radio, television, magazines, or newspapers. For example, the election campaign normally does not exceed three months. The cost of painting or papering a panel is expensive and only a limited number of candidates can afford the use of this media. Furthermore, we often observe after the election is over that the platform or picture of the candidate is still disposed on billboards for a long period of time. It is therefore obvious that some method must be devised to reduce the cost of this media if it is to remain viable.

Loss of rental income to the outdoor advertising company that posts the billboard is high where there is a long period of time between an old and new posting of the sign. No charge can be made until the sign has been actually posted. It is the consensus, among outdoor advertising executives, that their signs are out of production about 25 percent of the time, even though they are sold, because they are not speedily posted.

SUMMARY OF THE INVENTION

This invention relates generally to a billboard and more particularly to a sign housing having a removably mounted sign panel disposed therein. The sign panels include at least two rectangular shaped nesting members which receive the edges of a sheet of paper therebetween with the paper stretched across one of the members. Each member is formed from four struts connected at their ends to each other to form a rectangular panel frame which is open in the center. The connection between the strut ends includes a hinge or a releasable holding device thus permitting the panel to be dismantled for storage and/or transport.

The paper, or sign, having advertising imprinted thereon can be mounted on the members in a shop and carried to the site for immediate assembly in the housing thus negating the need for highly trained artisans to spend many hours at the site while painting or pasting a sign on a billboard panel. In the event it is desired to move a panel from one site to another site it can readily

be removed and transported. Thus the life and value of one sign can be substantially increased. The sign is also more adaptable to seasonable displays or limited showings, i.e. department store sales, sporting events, theatricals, etc.

Due to the simplicity of the no paste posting method, it is not unreasonable to assume that one laborer can post as many as 100 boards in a single 8 hour period. A substantial savings will be realized by the outdoor advertising company because the exchange of signs at the point of location can be accomplished during the most favorable conditions, non-business hours when the traffic is light and parking is convenient.

It is therefore an object of this invention to provide a billboard having a housing mounted on a supporting structure, for releasably receiving a sign panel.

Another object of this invention is to provide a billboard which permits quick and easy changes of the sign panel.

A further object of this invention is the provision of a sign panel which is light in weight and thus easily transported.

Yet another object of this invention is the provision of a sign panel which releasably receives a sign without requiring the use of highly trained and costly sign painters or paperers.

A still further object of this invention is to provide a billboard which can be constructed without costly tools, assembled with a minimum of labor, erected without the use of large equipment, is light in weight and not costly.

Still another object of this invention is the provision of a sign panel which is not painted or papered at the site of the billboard but which can be easily affixed with a sign by unskilled labor in the plant under controlled conditions.

A further object of this invention is to provide a billboard wherein the sign thereon can readily be changed or removed in inclement weather.

Another object of this invention is the provision of a billboard with a removable sign panel which is economical to manufacture, and extremely simple, economical and functional in use.

Yet another object of this invention is the provision of a sign panel having outlets mounted thereon which can be electrically connected to an electrical power source to provide lighting for the sign.

These objects and other features and advantages of this invention will become readily apparent upon reference to the following description when taken in conjunction with the accompanying drawings.

In the drawings as hereinafter described, a preferred embodiment and modifications and alternate construction can be made thereto without departing from the true spirit and scope of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the billboard of this invention;

FIG. 2 is an end elevational view thereof;

FIG. 3 is a fragmentary perspective view of one end of an adaptor, housing, for an existing billboard;

FIG. 4 is a fragmentary sectional view taken along the lines 4—4 in FIG. 1;

FIG. 5 is a perspective view of the sign panel;

FIG. 6 is an enlarged fragmentary view of a corner joint of one section of the sign panel;

FIG. 7 is a perspective view of a modified embodiment of the sign panel; and

FIG. 8 is a sectional view taken along the lines 8—8 in FIG. 7.

DESCRIPTION OF THE EMBODIMENTS

Referring now to the drawings, the billboard of this invention is indicated generally at 10 in FIG. 1.

The billboard 10 (FIGS. 1 and 2) includes a pair of spaced vertically disposed posts 11 and 12 (shown broken off) and a rectangular housing 13 mounted between and supported by the posts 11 and 12. The housing 13 is formed of top, bottom and end strips 14, 16 and 17. Vertically disposed hinged strips 18 are connected to the top strip 14 by a hinge 19 and releasably secured to the bottom strip 16 by a clasp device 21. If desired a lock (not shown) may be secured to the clasp device to prevent entry into the housing.

Removably mounted in the housing 13 is a sign panel 22 (FIGS. 4 and 5) comprising three rectangular nested members 23, 24 and 26 and a sign. As each member is substantially identical, except for size, like parts will be identified by like numbers wherever possible. The first member 23 comprises top and bottom struts 27 and 28 hingedly connected at their ends to end struts 29 and 31. The ends of the struts are mitered (FIG. 6) and a 45° cutout 32 is removed from each end to form a hollow transverse passage when the ends are disposed normally and in abutting relationship to each other. A hinge 33 is mounted in the passage and hingedly interconnects the two abutting struts. The corners of the mitered ends of the second and third members may be rounded slightly as shown in FIG. 6, particularly on the inner members to facilitate nesting and the gathering of the edges of the sign.

The pin 34 (FIG. 6) is removably disposed in the slots of the plates of the hinge 33 to permit disassembly at two diagonally opposite corners of the member to permit the top and one end strut, and the bottom and other end strut to be pivoted to a side by side relationship adjacent each other for storage and easy transport. The outer dimension of the second member 24 are slightly smaller than inner dimensions of the first member 23 while a like relationship exists between the second member 24 and the third member 26, thus permitting easy assembly for nesting. It has also been found that hinge connections may be mounted in only two corners, diagonally opposed, while releasable holding devices (not shown) such as hinges with removable pins are installed in the other two corners of each member. Upon releasing the holding device adjacent struts can be pivoted into juxtaposition about the hinge.

The cross-sectional view of the three members is best noted in FIG. 4. The first member struts outer surface 36 is adapted to be in disposed juxtaposition with the inner surface of the end, bottom and top strips. The side surfaces 37 are parallel and disposed normally to the outer surface 36 and the inner surface 38 is slanted. The second member struts are frustro-pyramidal in shape with one of the slanted surfaces disposed parallel to the inner surface 38. The third member struts are substantially identical in shape to the first member struts but are disposed in an inverted position.

A sign 39 (FIGS. 1 and 4) comprising a sheet of paper or the like having advertising imprinted thereon is mounted over the second member 24 with the edges of the paper disposed between the first and second

members 23 and 24. If the sign is to be viewed on both sides of the billboard then a second sign 41 is mounted over the third member 26 on the side opposite the first sign 39 with the ends disposed between the second and third members 24 and 26. In the event the signs are subjected to inclement weather or possible vandalism then a fine mesh screen or transparent cover 42 of substantially the same size as the sign is disposed over the signs 39 and 41. Where the thickness of the paper or the paper and cover is inadequate to provide a tight fit between adjacent members, wedges 43 (FIG. 5) are inserted between the members.

In use the billboard 10 is mounted with the posts 11 and 12 engaging or disposed in a surface and the housing 13 mounted therebetween. The members are assembled as described hereinabove and the first sign 39 and cover 42 are disposed over the second member 24. The first member 23 is then positioned over the second member 24 thus tightly wedging the paper and cover therebetween. Paper 41 and cover 42 are then disposed over the opposite side of the third member 26 and the second member 24 is then positioned over the third member 26 to wedge the paper and cover therebetween. The sign panel is then slid into the housing and the hinged strips 18 are secured to the bottom strip 16 at the clasp 21, thus locking the panel in the housing.

The assembly of the members and mounting of the sign can thus be accomplished in a shop and carried to the site of the housing. The ease of mounting the panel in the housing therefore substantially eliminates the time spent by the installer at the billboard site and reduces the risk by substantially reducing the time spent on precarious perches.

Under certain circumstances it is desirable to provide lighting for the sign, which can readily be accomplished by mounting electrical outlets 44 (FIG. 5) in the top strut 27 of the first member 23. The outlets are electrically connected to a wire 45 disposed in the strut are along the strut which is adapted to be connected to an electrical power source (not shown).

In the event a standard billboard 46 exists at a particular location, it can readily be converted to a structure of this invention by mounting a housing 13 or an adapter to either or both sides of the billboard panel. As the panel of the standard billboard is disposed between the frames only the first 23 and second 24 members are required, and only the sign 39 and cover 42 are used.

A modified embodiment of the sign panel is depicted in FIGS. 7 and 8. A first member 47 is rectangular in shape and includes top, bottom and end struts 48, 49 and 50 connected together at their ends. Each of the struts is rectangular in cross section. Rectangular shaped second and third members 51 and 52 are formed from angle iron or the like and have top, bottom and end strips 53, 54 and 56. The members 51 and 52 are oppositely disposed to nest over the first member 47 as depicted in FIG. 8. Signs 58 and 59 are disposed over the member 47 and between the member outer surface 61 and the members 51 and 52 inner surfaces. In the event a tight fit is not available between the member 47 and members 51 and 52 a plurality of wedges 62 or the like are secured to the outer surface 61 intermediate the edges thereof to coact with the inner surface of the members 51 and 52.

In FIG. 3 an adapter 63 is depicted which may be substituted for the housing 13 to modify an existing bill-

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board. The adapter includes two end frames each comprising end strips 64 having top and bottom flanges 66 and 67 which extend horizontally and inwardly toward the other end frame. A hinged strip 68 is hingedly connected by a hinge 69 to the top flange 66 and releasably secured by a clasp device 71 to the bottom flange 67.

Although a front opening frame 13 has been disclosed in FIGS. 1, 2 and 3 there are many instances where an end opening frame can be utilized. For example, if the frame is to be mounted on an existing structure the posts 11 and 12 are not required. In that event, the end strip 17 is hingedly mounted to the top strip 14 and the hinged strips 18 are secured to the top and bottom strips and serve as braces and provide a slideway through which the panel is slid.

Billboards are also constructed in a variety of sizes, therefore, the panel can be fabricated in various sizes thus permitting a plurality of frames to be mounted on one billboard in an end to end or side by side relationship.

I claim:

1. A billboard comprising:

a housing adapted to be supported in a vertically disposed position;

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sign panel means including an inside member and an outside member, removably disposed in nested relationship one inside the other, said panel means removably mounted in said housing;

wherein each said member includes a plurality of struts releasably interconnected by a holding device in end to end relationship with adjacent struts, thus forming a framework which is open in the center;

a first sign stretched over the inside member with the edges thereof secured between said members when they are in said nested position;

a third member removably disposed in nested relationship inside said inside member; and

a second sign disposed over said third member on the opposite side of said first sign with the edges of said second sign secured between said inside member and said third member when disposed in a nested position.

2. A billboard as defined in claim 1 including a cover disposed over each said sign with the outside edges thereof disposed in juxtaposition with the edges of said sign.

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