

Jan. 27, 1959

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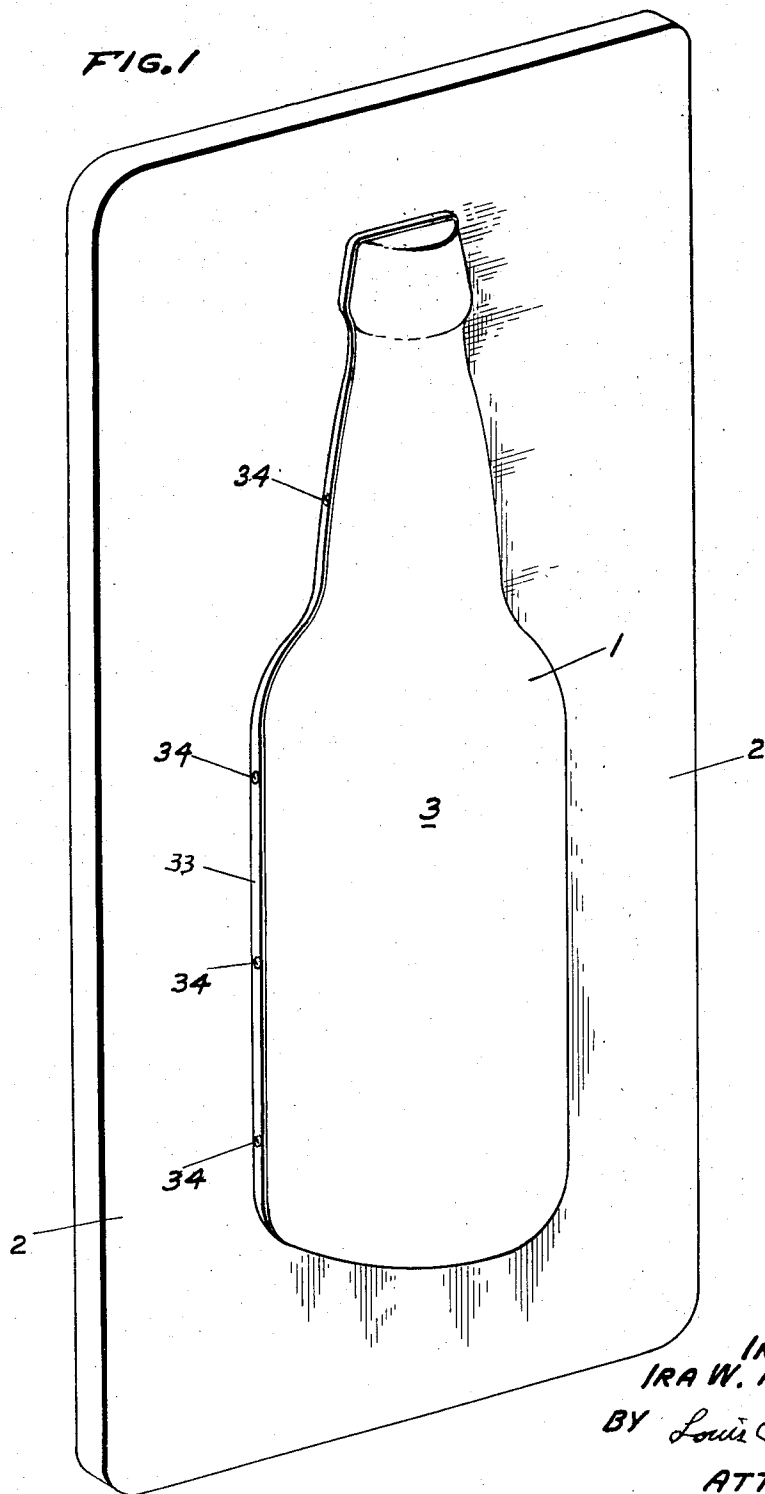
2,870,558

DISPLAY ELEMENT IN RELIEF FOR AN ADVERTISING SIGN

Filed Nov. 12, 1957

4 Sheets-Sheet 1

FIG. 1



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FIG. 2

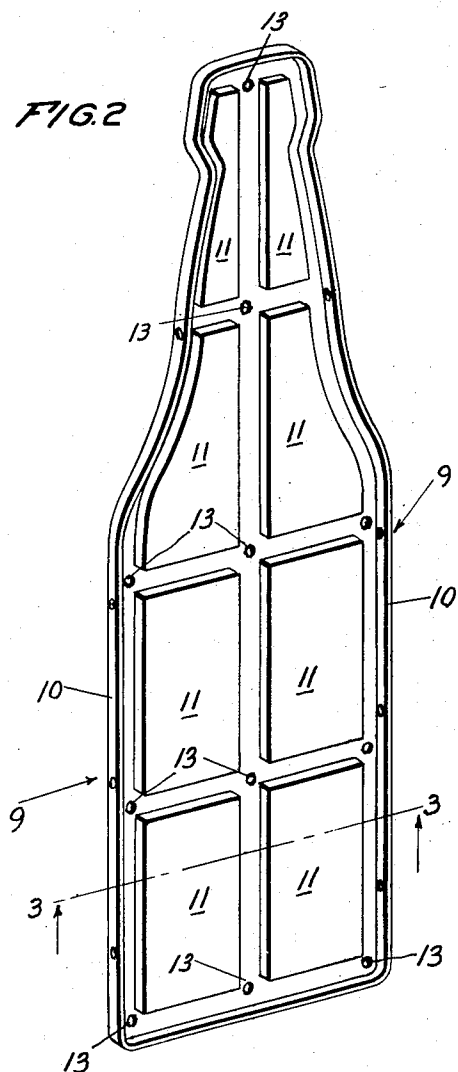


FIG. 3

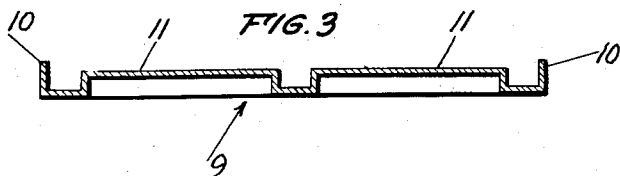
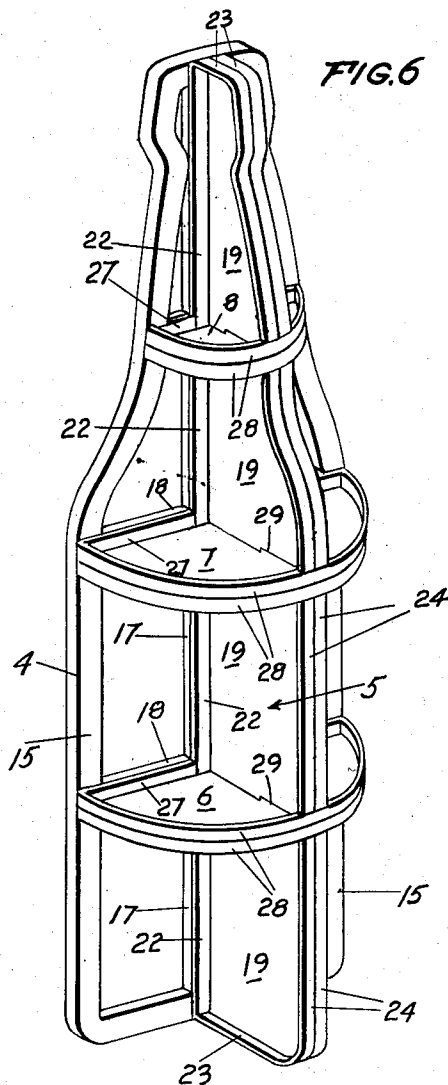


FIG. 6



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FIG. 4

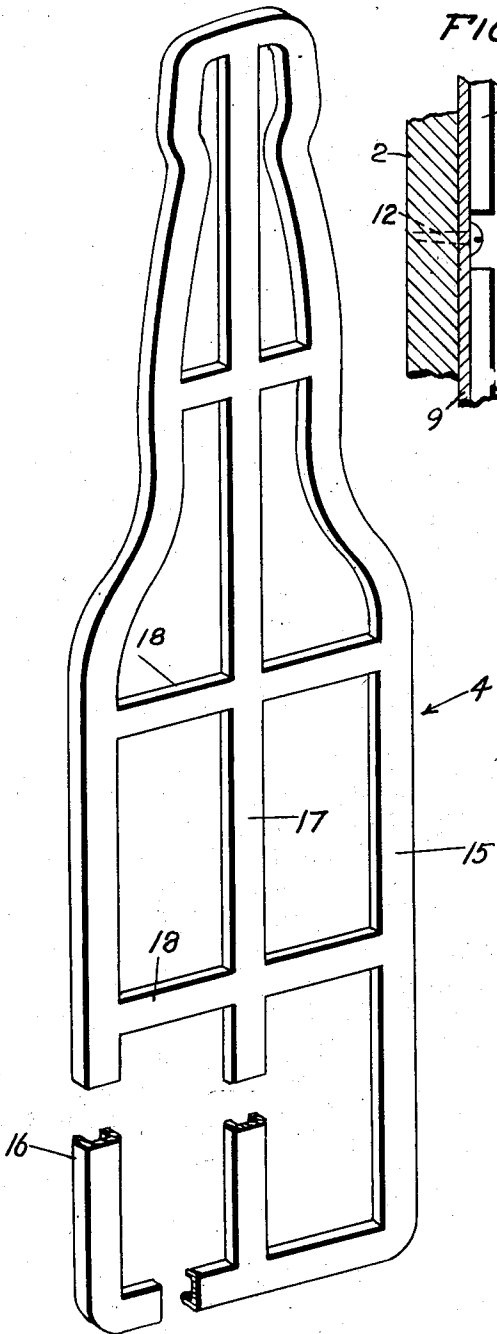


FIG. 12

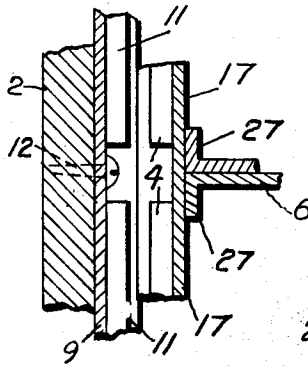
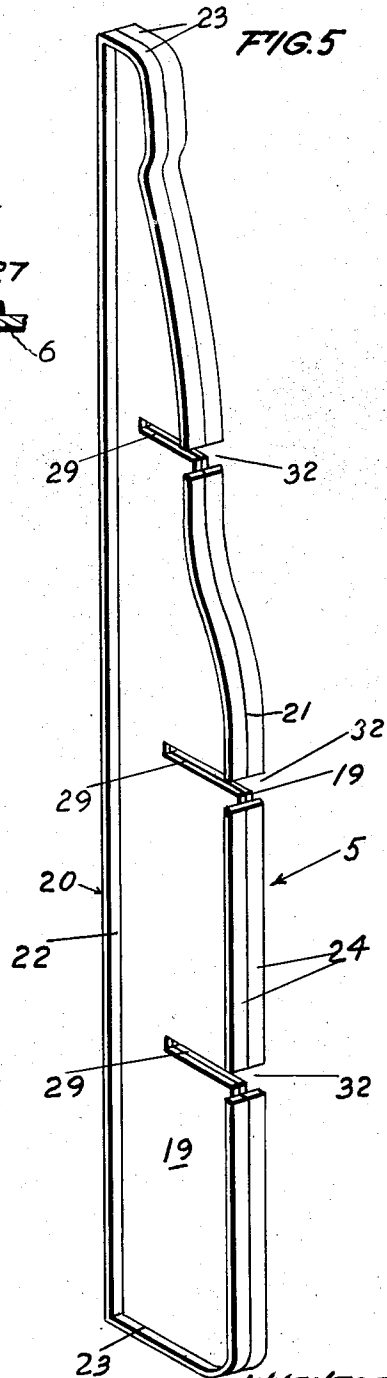


FIG. 5



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FIG. 7

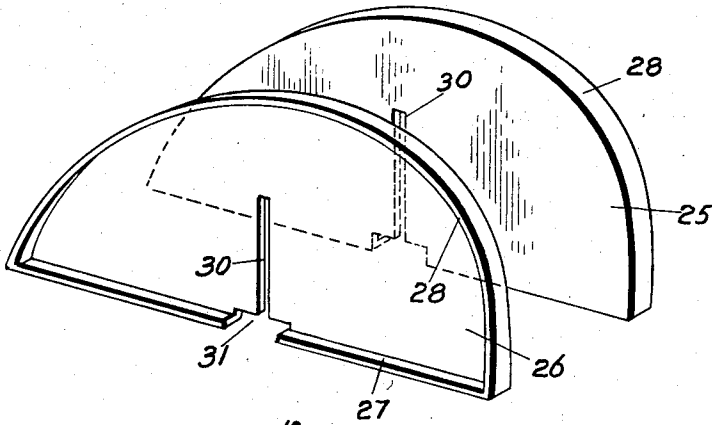


FIG. 8

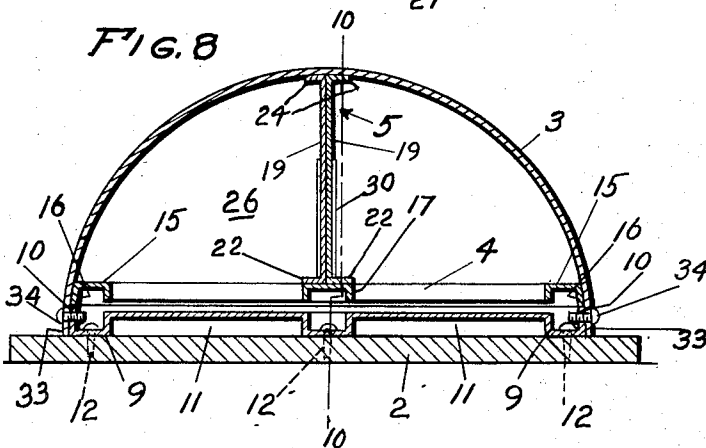


FIG. 9

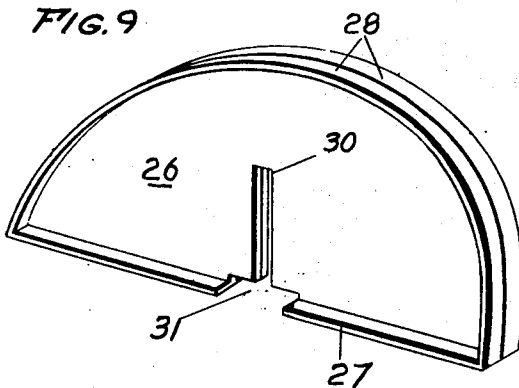


FIG. 11

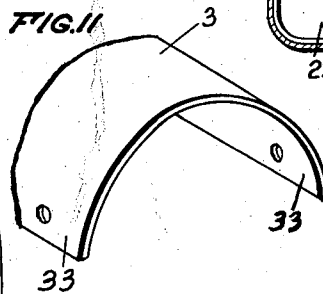
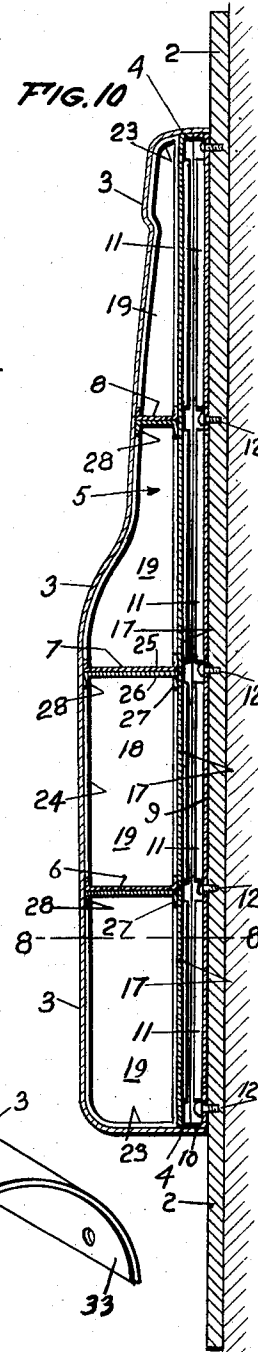


FIG. 10



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DISPLAY ELEMENT IN RELIEF FOR AN
ADVERTISING SIGN

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Application November 12, 1957, Serial No. 695,898

2 Claims. (Cl. 40—126)

In my Patents No. 2,457,883, January 4, 1949, and No. 2,480,408, August 3, 1949, there is shown and described a display element in relief for an advertising sign which is detachably mounted on the sign so that if the display element needs renovating or is to be replaced it can easily be removed for such purpose.

It is an object of the present invention to provide an improved detachable display member which is made of some suitable moldable plastic material that can be easily molded into a shape simulating the shape of any article which is desired to display in relief on the sign.

For the purpose of illustration I have shown a display element which simulates half of a bottle which has been bisected vertically, but I wish to state that the invention is adapted for use in connection with any other article.

In the drawings

Fig. 1 illustrates a display element which represents half of a bottle mounted on a billboard.

Fig. 2 shows the support member by which the demountable display element is supported.

Fig. 3 is a section on the line 3—3, Fig. 2.

Fig. 4 is a view of the base element of the display member.

Fig. 5 shows one of the brace members of the interior frame work.

Fig. 6 shows the interior frame work for the envelope member.

Fig. 7 shows the two sections of one of the brace members before they are assembled.

Fig. 8 is an enlarged section on the line 8—8, Fig. 10.

Fig. 9 shows the two brace member sections of Fig. 7 after they have been assembled and secured together.

Fig. 10 is a vertical sectional view of the display member.

Fig. 11 is a fragmentary perspective view of the envelope member.

Fig. 12 is an enlarged fragmentary section through the support member and base element on the line 10—10 Fig. 8.

Referring to Fig. 1, the display element is indicated at 1, and is shown as representing half of a bottle, although as stated above, the invention is applicable to the manufacture of any other article. This display element is illustrated as being demountably mounted on a sign board 2 which may carry any suitable advertising matter.

The display element comprises a support member 9 by which it is secured to the sign board 2, and a demountable body portion which includes a dome-shaped envelope or cover member and an interior frame work by which the envelope is maintained in its proper shape.

The support member 9, which is shown in Fig. 2, is made of plastic material and is molded to present a sheet having a peripheral contour which represents the shape of a bottle, and is provided with a peripheral flange 10 to which the demountable body of the display

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element is attached. Said support member is shown as having raised panels 11 formed therein and it is permanently secured to the sign board 2 by any suitable means, such as screws 12, the support member being provided with holes 13 for this purpose.

The envelope or cover member is indicated at 3 and is preferably made of some suitable plastic material which can be molded to the shape desired for the display element. In the illustrated embodiment of the invention, since the display element represents a half bottle only, the envelope having what may be described as a dome shape which is open at the back and presents a continuous peripheral edge portion 33 having a contour corresponding to that of a bottle.

The interior frame work comprises a base element 4 and brace members secured to the base element and extending to the envelope and serving to support the latter and maintain its shape.

The base element 4 is molded from plastic material to present a peripheral portion 15 having a channel shape in cross section and a peripheral contour corresponding to that of the peripheral edge 33 of the envelope member and which provides an outside peripheral flange 16. In the construction shown the base element also has interior tie members 17 and 18, each of which is shown as having a channel shape in cross section. The tie member 17 extends lengthwise of the base element from one end thereof to the other, and the tie members 18 extend transversely of said base element.

The base element 4 thus has a shape to fit the interior face of the envelope 3 and it is located within the latter in a position spaced slightly inwardly from the edge 33 thereof, so that said edge projects beyond the base element. The peripheral flange 16 of the base element lies against the interior face of the envelope and has a contour mating that of said envelope, said flange being securely attached to the envelope by any suitable means. If the material of the envelope and of the flange have the proper thermoplastic characteristics, the attaching of the flange 16 to the envelope may be accomplished by a heat sealing operation.

The brace members are secured to the base element 4 and extend from the latter to the envelope 3 and serve to support the latter and maintain it in its proper shape as stated above. The shape, number and arrangement of the brace members will depend on the shape and contour of the envelope. In the illustrated embodiment of the invention the brace members include the central member 5 which extends from one end to the other of the envelope, and the cross brace members 6, 7 and 8.

Each brace member is preferably made of molded plastic material and presents a flat body portion having a peripheral flange by which it is secured to both the base element 4 and the envelope 3. In the construction shown each brace member is made in two sections that are secured together in face to face relation, thus making a brace member of double thickness. Each section of the central brace member 5 has a body portion 19 which has a straight edge 20 that engages the central tie member 17 of the base element 4. The outer edge 21 of the body portion is shaped to fit the interior face of the envelope 3. Each section is also formed with a flange 22 along the straight edge 20, a flange 23 at each end and a flange 24 along its outer edge 21. When the two sections are secured together as shown in Fig. 5 the flanges on the sections extend in opposite directions, thus making a wide peripheral flange which encircles the body of the brace member.

The cross brace members 6, 7 and 8 are similarly made. In Fig. 7 the two sections of the brace element 6 are shown at 25 and 26, each section being in the

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form of a sheet of plastic material having a semi-circular shape and provided with a flange 27 along its straight edge and a curved flange 28 along its curved edge. The two sections are permanently secured together in face to face relation as shown in Fig. 9 thus providing brace element of double thickness and with an encircling flange of double width. The other cross brace members 7 and 8 are made in a similar manner.

The two sections of each brace member may be secured together by staples, or may be adhesively united, or if the material of the sections has the proper characteristics they may be heat sealed together, or they may be secured together in any other suitable way.

As stated above the brace members are secured to the tie members of the base element, the central brace member 5 being secured to the central tie member 17 and the cross brace members 6, 7 and 8 being secured to the tie members 18. This is accomplished by attaching the flanges along the straight edges of the brace members to the tie members 17 and 18 by stapling, heat sealing or by any other means.

Each brace member is continuous from one end to the other thereof, and in order to provide for assembling them with the cross members at right angles to the central member 17, said central member is provided with slots 29 which extend from the outer edge thereof part way to the straight edge, and the cross brace members are each made with a slot 30 which extends from its straight edge part way to the curved outer edge.

In assembling the brace members, the cross members are dropped into the slots 29 of the central member 5 to bring the flanges 27 on the cross members flush with the flanges 22 on the central member, the flanges 27 being cut away as shown at 31 to provide for this. The flanges 24 of the central brace member are also cut away as shown at 32 to receive the flanges 28 of the cross braces as shown in Fig. 6.

After the brace members have been thus assembled they are placed on the base element 4 with the flanges 22 of the center brace resting on the tie member 17 and with the flanges 27 of the cross braces resting on the tie members 18. The braces are then secured to the base element 4 as above described and the base element and brace member assembly is then placed within the envelope 3 in the position shown in Figs. 8 and 10, and the peripheral flange 16 of the base element is secured to the envelope. When the parts are in this position the edge 33 of the envelope overlaps the attaching flange 19 of the support member 9 and the envelope may be detachably secured to said flange 19 by screws 34. The body of the display element can thus be readily removed from the support member 9 by simply removing the screws 34.

While I have described the invention as it might be used in connection with a display element in the form

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of a half bottle, yet it is equally applicable for making other display elements of widely different shapes and contours.

I claim:

1. The combination with an advertising sign, of a display element in relief having a dome-shaped envelope member of sheet material molded to a desired shape and presenting a continuous peripheral edge portion having a contour determined by the shape of said display element, a base element located entirely within said envelope member adjacent to but spaced inwardly from the continuous edge thereof, whereby said continuous edge projects beyond the base element, said base element having a peripheral contour corresponding to that of the edge portion of the envelope member, means permanently securing the peripheral edge of the base element to the inner face of the peripheral edge portion of the envelope member, brace members of sheet material permanently secured to the inner face of the base element and extending therefrom to the envelope member, the outer edges of the brace members being permanently secured to the inner face of the envelope member, a support member having a peripheral contour corresponding to that of the peripheral edge portion of the envelope member, said support member having a size to fit into the part of said edge portion which projects beyond the base element, means to secure said support member to the advertising sign, and means to detachably secure the projecting edge of the envelope member to the edge of the support member, whereby the envelope member together with the base element and brace members enclosed therein may be readily removed from the support member or replaced thereon.

2. The combination set forth in claim 1 in which some of the brace members extend across the base element in one direction and at least one of the brace members extends across the base element in another direction, and those brace members which extend in the one direction being provided with slots extending from the bottom edge thereof part way to the top edge to receive the bottom portion of the brace member which extends in said other direction, and the latter brace member has slots extending from its top edge part way to its bottom edge to receive the top portions of the brace members extending in said one direction.

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