Feb. 21, 1967 J. BENKIN 3,304,679

CONSTRUCTION ELEMENT

Filed July 14, 1964

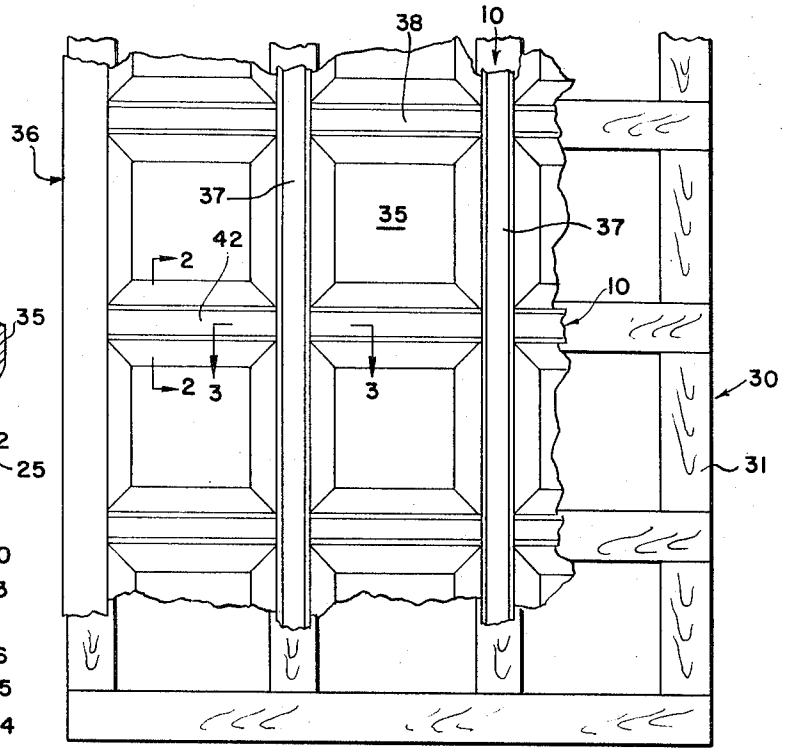
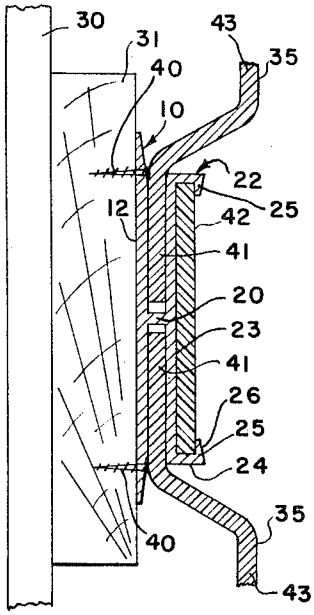


FIG. 1

FIG. 2



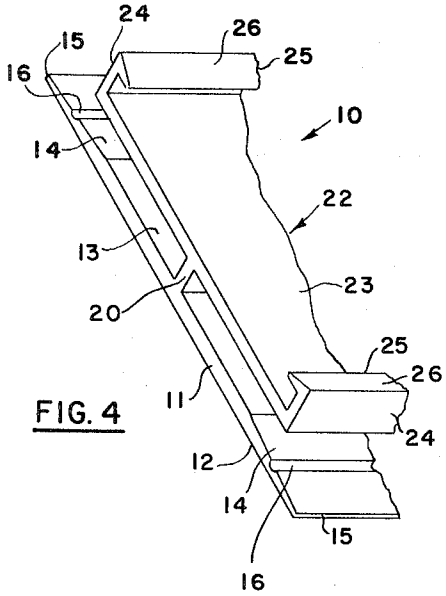


FIG. 4

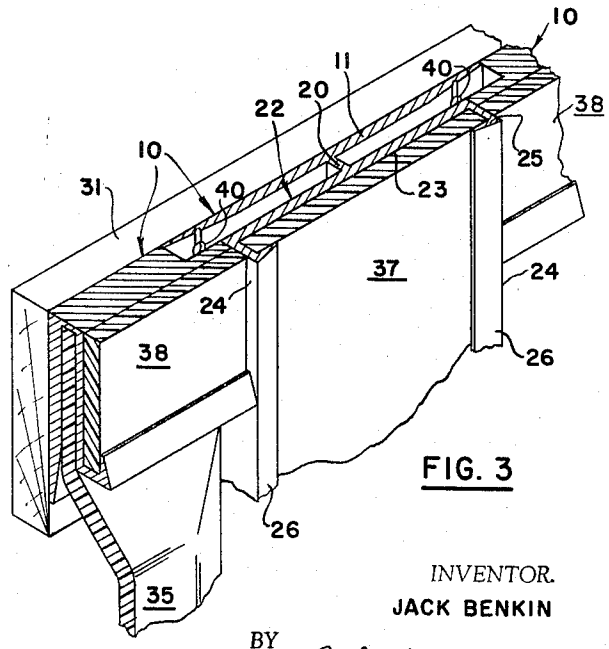


FIG. 3

INVENTOR.
JACK BENKIN

BY Robertson and Voutie

ATTORNEYS

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CONSTRUCTION ELEMENT

Jack Benkin, Margate, N.J., assignor to Amplex Manufacturing Company, Philadelphia, Pa., a corporation of Pennsylvania

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This invention relates generally to building construction, and is especially concerned with unique structural improvements in signs, wall faces, and the like.

It is an important object of the present invention to provide a highly improved structural arrangement for use in the installation of panels for facing walls, signs and the like, and the instant invention embraces the combination of a panel holder in association with panels and support means.

It is a more particular object of the present invention to provide a panel-holder construction which is extremely simple to manufacture, greatly facilitates assembly of paneled wall faces and signs, and effectively enhances the esthetic appearance thereof.

It is still another object of the present invention to provide a panel holder for architectural and sign panels which effects rapid and easy installation, is durable and reliable throughout a long useful life, and which is highly attractive and lends itself to a variety of decorative effects, including that of virtual concealment, when desired.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claims.

In the drawings:

FIGURE 1 is a front elevational view showing a wall face or sign constructed in accordance with the teachings of the present invention, and partly broken away for clarity of understanding;

FIGURE 2 is a partial sectional view taken generally along the line 2—2 of FIGURE 1, greatly enlarged;

FIGURE 3 is a partial sectional view taken generally along the line 3—3 of FIGURE 1, greatly enlarged; and

FIGURE 4 is an end perspective view showing a construction element according to the teachings of the instant invention.

Referring now more particularly to the drawings, and specifically to FIGURE 4 thereof, a construction element is there generally designated 10, and may advantageously be integrally fabricated by extrusion, say of aluminum or other satisfactory material. The element 10 is of indeterminate length and of substantially constant cross section throughout its length, being broken away in the drawing to conserve space.

The element 10 may include an elongate generally flat base 11 having a substantially flat inner or undersurface 12. The upper or outer face 13 of the base 11 may also be substantially flat, and has its longitudinal margins 14 beveled or declining laterally outwardly to the side edges 15. Thus, the outer face 13 of base 11 is substantially parallel to the inner face 12, except for the laterally outwardly declining outer marginal portions 14, and the side edges 15 may extend in substantial parallelism with each other normal to the inner surface 12.

The beveled or outwardly declining marginal surface portions 14 may be provided with longitudinally extending grooved formations 16 facing upwardly or outwardly and located adjacent to and spaced laterally inward from respective side edges 15.

Formed integrally with the base 11, upstanding from the upper base face 13 is a longitudinally extending rib or web 20. That is, the rib 20 extends longitudinally along the outer surface of base 11, outstanding therefrom and approximately normal thereto, being located substantially medially between opposite side edges 15 of the base.

A fascia member is generally designated 22 and extends longitudinally along the outer edge or extremity of rib 20, being formed integrally therewith. The fascia member 22 is of a width greater than the thickness of rib 20, extending laterally in opposite directions beyond the rib, but is of a width less than that of the base 11 so as to terminate laterally short of the base edges 15. The fascia member 22 is disposed generally parallel to and spaced from the base 11 by the height or outward extent of rib 20.

More particularly, the fascia member 22 is of a channellike configuration, including a generally flat bottom wall 23 disposed in parallel spaced facing relation with respect to the outer face 13 of base 11, and a pair of longitudinally extending, outstanding side walls 24. The bottom wall 23 and side walls 24 of channellike fascia member 22 are disposed symmetrically about the center line of rib 20, so that the fascia member is symmetrical with respect to the base 11. The cross section of construction element 10 is therefore symmetrical about a longitudinal center line; and as the fascia member or channel 22 is of less lateral extent than the base 11, the side walls 24 are equally spaced laterally inward from their respective adjacent longitudinal base edges 15. Further, the channel side walls 24 are spaced laterally inward sufficiently to expose the base grooves 16 for insertion therein of fasteners, as will appear presently.

The channel side walls 24 are of substantially equal height or projection away from the bottom wall 23, and provided on their outer longitudinal edges with inturned lips or flanges 25. The lips or flanges 25 are thus substantially coplanar and project generally normally inward from respective side walls 24 toward each other. However, the upper or outer surface 26 of each lip or flange 25 is advantageously beveled to decline laterally inward, for a purpose appearing presently.

In assembly, see FIGURE 1, a support is generally designated 30 and may consist of a gridlike arrangement of furring strips 31 configured to define a plurality of adjacent rectangles and fixed in any suitable manner, say to a supporting wall 32, see FIGURE 2.

A plurality of lengths of construction elements 10 are similarly arranged to define adjacent rectangular configurations and suitably secured to the support 30. As will appear hereinafter in greater detail, the rectangularly configured construction elements 10, as seen in FIG. 1, serve to receive and retain a plurality of generally rectangular panels 35; and a peripheral frame or casing 36 may extend circumferentially about the support 30 and its associated panels 35 and panel-holder elements 10.

More specifically, in the illustrtaed embodiment a pluraliy of relatively long panel holders or elements 37 are fixed vertically on the support 30, while a plurality of relatively short panel holders or elements 38 are disposed horizontally and fixed on the support 30 extending between adjacent holders 37. The holders 37 and 38 are arranged to define the adjacent rectangular configurations seen in FIGURE 1.

As best seen in FIGURE 2, each construction element or panel holder 10 is disposed with the undersurface 12 of its base 11 in facing engagement with a furring strip 31 and extending longitudinally therealong. Suitable fastener elements 40, such as nails or screws are engaged through the marginal base portions 14 and firmly into the underlying furring strip 31 to secure the holder

10 fast to the furring strip. Advantageously, the fasteners 40 are engaged at spaced locations in the grooves 16 of base 11 and thence through the base for impaling into the nether support strip 31. As best seen in FIGURE 2, the grooves 16 are located laterally, outward beyond the fascia 22 for ready access in fastening the holder 10 to a support strip 31.

The assembly may proceed by securement of holders 10 to support 30, insertion of panels 35 into the secured holders, and reepated securement of holders and insertion of panels, until the assembly is complete. For example, in the construction shown in FIGURE 1 the vertical holders 37 may be secured, and a panel slid therebetween, after which successive holders 38 and panels 35 may be applied.

In FIGURE 2 it is seen that a pair of panels 35 have respective edge portions or margins 41 engaged on opposite sides of rib 20 between the base 11 and bottom wall 23 of fascia 22. The edge margins 41 of panels 35 thus overlie the fasteners 40 to prevent withdrawal of the latter.

Advantageously, the panels 35 may be of plastic, such as thermoplastic and formed with an outwardly dished central portion, or otherwise contoured, as desired.

In addition, engaged in each channel or fascia 22 may be an insert strip 42, say also of suitable plastic material. The insert strips 42 are slidably engaged in each fascia or channel 22 and positively retained therein by the inwardly extending lips or flanges 25. The flanges 25 may be relatively narrow or slender so as to be effectively nonapparent except upon close examination. In this way, only the decorative plastic or other material of panels 35 and inserts 42 are effectively presented to view. Further, as the panels 35 have their major central portions 43 dished outward appreciably beyond the flanges 25, the latter are effectively obscured from view even at close angles, both by limitations of line of sight and shadows. Also, the holders 10 being advantageously fabricated of aluminum and having shiny surfaces, with the flange surfaces 26 inclining obliquely toward the adjacent plastic insert 42, produce colored reflections upon the oblique flange surfaces to render the latter more obscure to an observer. Of course, the inserts 42 may be of different design or color from that of the panels 35 for more striking appearance, if desired.

While plastic and aluminum are highly weather-resistant materials, it will be observed that the edgewise marginal engagement of panels 35 between base 11 and fascia 22 of holders 10 provides a labyrinth-type, reverse-direction path serving to effectively exclude the elements from through passage.

From the foregoing it is seen that the instant invention provides a construction element for holding panels of walls, signs and the like, which fully accomplishes its intended objects and is well adapted to meet practical conditions of manufacture, erection and use.

Although the present invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be made within the spirit of the invention and scope of the appended claims.

What is claimed is:

1. A construction element for holding panels, said element being integrally fabricated of extrudable material and comprising an elongate relatively flat base adapted to be secured with one face engaging a support, a rib extending longitudinally along and outstanding from the other face of said base spaced medially between the longitudinal edges thereof, a channel disposed longitudinally along the outer edge of said rib spaced from said base and facing outwardly therefrom, said channel extending laterally beyond said rib on opposite sides thereof terminating short of the side edges of said base, and inturned longitudinal flanges on opposite sides of said channel, whereby a pair of panels are engageable edgewise between said base and channel on opposite sides of said rib and an insert is engageable in said channel beneath said flanges, the outer surface of said flanges being beveled toward the interior of said channel to reflect light from an insert in said channel.

2. A construction element according to claim 1, the side margins of said base being provided with recessed fastener-receiving formations laterally outward beyond said channel.

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FRANK L. ABBOTT, *Primary Examiner.*

RICHARD W. COOKE, JR., *Examiner.*

A. B. WILLIAMS, C. G. MUELLER,

Assistant Examiners.