

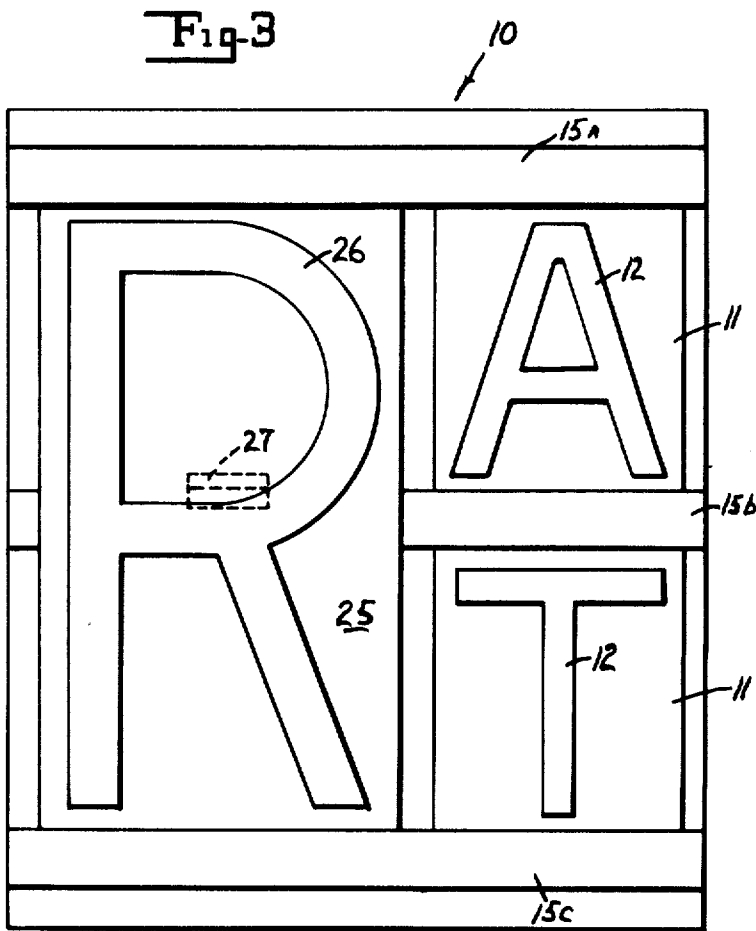
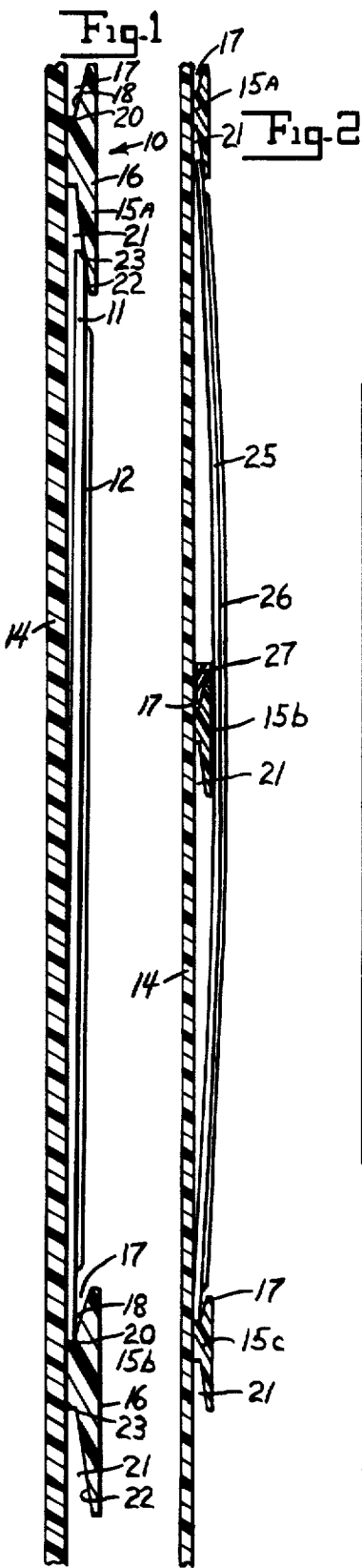
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DISPLAY SIGN

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DISPLAY SIGN

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4 Claims

ABSTRACT OF THE DISCLOSURE

A framed backing plate is provided with a plurality of parallel strips which mount lettered plates. In the case of a large plate spanning more than one strip, the plate is provided with a rear bracket which engages an intermediate strip to hold the plate more securely.

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation of application Ser. No. 645,051, filed June 9, 1967, and now abandoned.

BACKGROUND OF THE INVENTION

This invention relates to display frames and more particularly to display frames for securely supporting letter plates having indicia such as letters formed thereon. One of the principal objects of this invention is to provide a display frame for letter plates that is economical to manufacture, efficient in operation and easy to maintain.

An additional object of this invention is to provide a display frame that is very versatile and is capable of securely supporting different sized letter plates.

A further object of this invention is to provide a display frame that has features for securely holding the letter plates to the frame to prevent removal by environmental forces and yet enable the easy removal of the letter plates when change is desired.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of this invention is shown in the accompanying drawings, in which:

FIG. 1 is a fragmentary vertical cross sectional view of the display frame showing a letter plate mounted between two horizontal frame strips;

FIG. 2 is a fragmentary vertical cross sectional view of the display frame showing a larger letter plate mounted between two alternate vertical strips and spanning an intermediate horizontal strip; and

FIG. 3 is a front elevation view of a fragmentary section of the display frame showing both a large letter plate and two small letter plates mounted on the display frame.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now in detail to the drawings there is shown in FIG. 1 in cross section a display frame 10 for securely supporting a letter plate 11 in an upright position for physical display. Each of the letter plates 11 is made of rectangular sheets of plastic that are somewhat flexible. The letter plates 11 may be transparent or opaque depending upon the application. Indicia 12 such as letters is mounted on each letter plate 11. For example, in FIG. 3 the letters "A" and "T" are mounted on respective letter plates 11.

The display frame 10 includes a large backing plate 14 that may also be made of plastic. A plurality of vertically spaced horizontal securing strips 15 are mounted on the front of the backing plate 14 at evenly spaced in-

tervals for holding the letter plates 11 to the display frame 10. Two adjacent strips 15a and 15b hold a row of letter plates 11.

Each strip is relatively thin and has a flat front face 16 that is aesthetically pleasing and may have a color that adds emphasis to the lettering mounted on the letter plates. Each strip 15 has a first or upper groove 17 formed in the upper edge that faces upward for receiving the bottom ends of a row of letter plates 11. The groove 17 has an inclined side wall 18 facing the backing plate 14 to form a groove base 20 that has a width slightly smaller than the thickness of the letter plate so that when the letter plate is moved into the groove 17 a forced fit is provided for securing the letter plate to the backing plate. The forced fit prevents the letter plates from being blown from the display frame by the wind or effected by other environmental forces.

A second or lower groove 21 is formed in the lower edge of each strip 15 facing downward opposing the first groove of the lower adjacent strip. The groove 21 is provided for receiving the upper end of the lower adjacent row of letter plates. The lower groove 21 has an inclined side wall 22 for facilitating the mounting and removal of the letter plates from the frame. The inclined side wall 22 extends inwardly to the groove base 23. The base 23 is slightly wider than the thickness of the letter plate so that each plate may readily be moved upwardly during removal. The depth of the lower groove 21 is greater than the depth of the upper groove 17 to facilitate the removal of the letter plates.

The intervals between the strips 15 are preset so that the distance between one strip 15a and the base 20 of the lower adjacent strip groove 17 is less than the length of the letter plates 11. The distance between the lower adjacent strip 15b and the base 23 of the groove 21 (strip 15a) is greater than the length of the letter plates 11 so that the letter plates may be easily removed when desired.

To remove each letter plate 11 from the display frame, the letter plate is first moved upwardly so that the upper edge of the plate abuts the groove base 23 of strip 15a. The lower end of the plate 11 disengages the forced fit in the groove 17 and clears the groove 17 so that the lower end of the plate may be moved outwardly from the lower strips 15b.

After the lower end of the plate is moved outwardly from the strip, the plate 11 is moved downwardly to move the upper end of the plate 11 from the groove 21 of strip 15a. To mount a letter plate 11 on the frame one merely follows the reverse procedure.

Thus, it may be appreciated that when a letter plate 11 is mounted on the display frame, the lower end of the letter plate is rigidly secured in the groove 17 of strip 15b while the upper end of the plate is merely prevented from moving outwardly by the upper strip 15a.

The display frame 10 is particularly versatile because it is capable of supporting more than one size letter plate. As shown in FIGS. 2 and 3 a large letter plate 25 may be mounted between alternate horizontal strips 15a and 15c in somewhat the same manner as the smaller letter plates 11. The large letter plate 25 has indicia 26 formed thereon as shown in FIG. 3. The indicia 26 is in the form of a letter "R."

As may be particularly seen in FIG. 2 the large letter plate 25 is bowed to form a convex front face so that it will span the intermediate horizontal strip 15b.

A display frame 10 has an L-shaped bracket 27 mounted to the back of the large letter plate 25 for protruding into the groove 17 to hold the plate 25 securely to the strip 15b. The large letter plate 25 is removed from the display frame 10 in substantially the same manner as previously described for the smaller letter plates 11.

The simplicity of display frame 10 makes the display frame 10 quite attractive and extremely versatile for mounting different size letters.

It should be understood that the above described embodiment is simply illustrative of the principles of this invention. Therefore, the breadth and scope of this invention is defined by the following claims.

What I claim is:

1. An improvement in a letter plate for use in conjunction with a display having an upright backing plate with a plurality of vertically spaced horizontal strips directed across the front thereof, each strip having opposed upwardly and downwardly open grooves formed therein;
 - said letter plate comprising:
 - a sheet of material having a lower edge adapted to be received within the upwardly open groove of one of the strips and an upper edge adapted to be received within the downwardly open groove of the alternate strip above said one strip;
 - and a bracket at the back of the letter plate adapted to be engaged within the upwardly open groove of a strip intermediate the strips receiving the letter plate edges.
2. The apparatus as set out in claim 1 wherein each groove diminishes in thickness toward its base, and wherein the thickness of the bracket portion that engages the intermediate strip groove is complementary thereto.
3. A display sign, comprising:
 - an upright backing plate;
 - a plurality of horizontal strips directed across the front of the backing plate and protruding forwardly therefrom at vertically spaced intervals;
 - one or more letter plates having indicia thereon mounted forwardly adjacent to the backing plate between alternate strips spanning intermediate strips;
 - each of said horizontal strips having:
 - a first longitudinal groove formed therein having a lower base facing upwardly; and
 - a second longitudinal groove formed therein having an upper base facing downwardly;
 - the strips being spaced so that the distance between the base of the first groove of one strip and the lower edge of the alternate strip above it is less than the height of the letter plates, and the distance from the base of the second groove of said alternate strip and the upper edge of said one strip is greater than the height of the letter plates to permit removal of the letter plates; and
 - a bracket on the back of the letter plates for fitting

engagement with the first groove of the intermediate strips to hold the letter plates securely to the strips when the bottom and top ends of the letter plates are received within the first groove of said one strip and the second groove of said alternate strip respectively.

4. A display sign, comprising:
 - an upright framed backing plate;
 - a plurality of vertically spaced horizontal strips affixed on the front of the back plate at evenly spaced intervals;
 - one or more rows of small letter plates having indicia thereon mounted on the backing plate between adjacent strips;
 - one or more large letter plates having indicia thereon mounted on the backing plate between alternate strips spanning intermediate strips;
 - each of said horizontal strips having:
 - a first longitudinal groove formed therein facing upwardly for receiving the bottom ends of the small and large letter plates; and
 - a second longitudinal groove formed therein facing downwardly for receiving the top end of the small and large letter plates, wherein the strips are spaced so that the distance between the base of the first groove of one strip and the outer lower edges of the upper adjacent strip and alternate strip is less than the heights of the small letter plates and large letter plates respectively to retain the small and large letter plates, and the distance from the base of the second groove and the outer lower edges of the lower adjacent strip and lower alternate strip is greater than the heights of the small letter plates and large letter plates respectively to permit the removal of each of the small and large letter plates; and
 - a bracket secured on the back of each large letter plate for fitting engagement with the first groove of the intermediate strips to hold the large letter plates securely to the strips.

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