Oct. 18, 1960 B. H. ADLER 2,956,360

CHANGEABLE LETTER CONSTRUCTION

Filed March 6, 1958

FIG. 1.

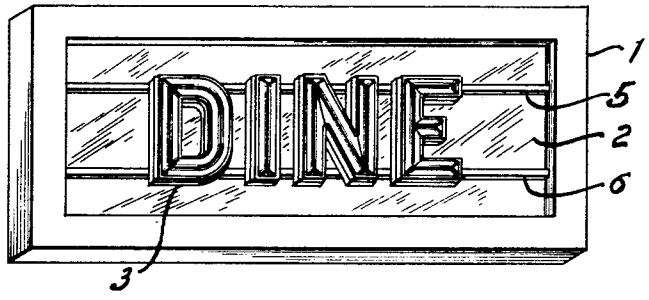


FIG. 3.

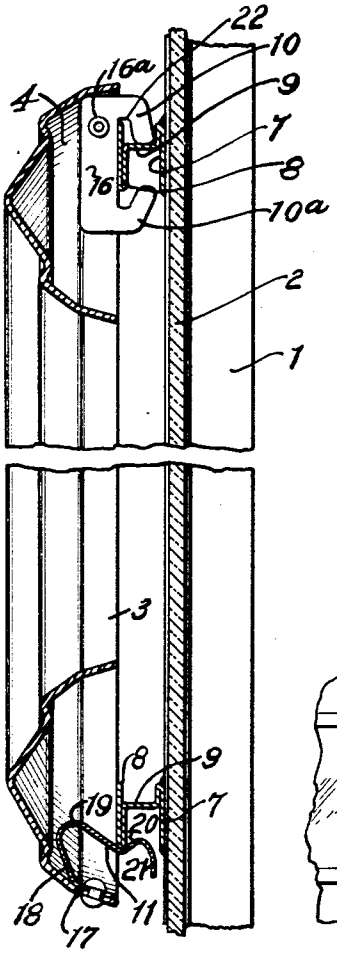
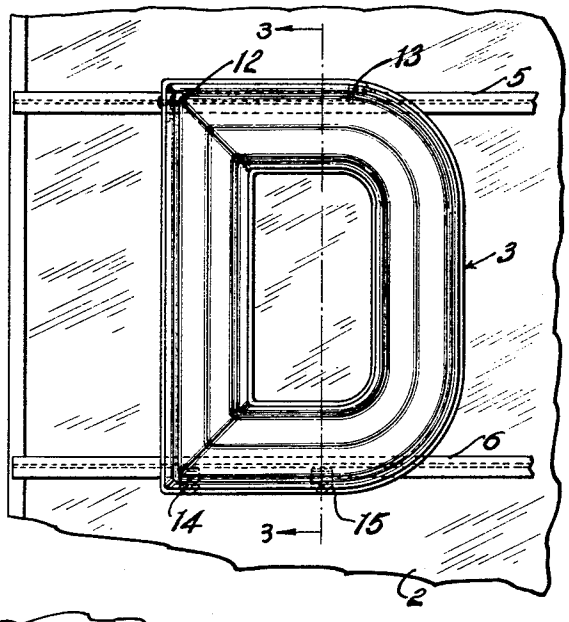


FIG. 2.



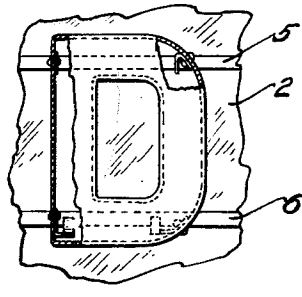


FIG. 4.

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CHANGEABLE LETTER CONSTRUCTION

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1 Claim. (Cl. 40—140)

The present invention relates to changeable sign construction of the type wherein letters, symbols, and numerals, as well as other display material, may be rapidly attached to and detached from a support.

Specifically, the invention contemplates the use of suitable framing adapted to confine a translucent member of glass, plastic, or other material, and behind which there is placed suitable illuminating means. On the forward side of the frame, and the said translucent member are arranged suitable rails or supports to which the letters, symbols and numerals are attached. The letters, numerals and symbols may be formed of any material desired, such as a plastic or in metal, and of different colors, the letters preferably being of the three-dimensional type so that when the background member, which constitutes the translucent glass or plastic or other material, the letters stand out and appear illuminated.

It is within the invention to provide a background member formed of translucid material, in which case, illuminating means is not placed to the rear thereof.

An object of the invention is to provide a quick means of attaching the letters, symbols, numerals, and other media, quickly and easily, and to likewise effect ready detachment of said members as the sign is changed.

A further object is the provision of a sign having quickly attachable or detachable letters, symbols, numerals, or other elements which will maintain the selected position upon the sign during inclement weather, whether it be a heavy rain, a high wind, or an earthquake, by way of example.

A further object of the invention is the provision of a detachable letter, symbol, and numeral construction which is inexpensive in cost of manufacture, foolproof in operation, easily applied within a minimum of time, does not require a skilled workman in the use of the invention, and is generally superior to constructions now known to the inventor.

With the above mentioned and other objects in view, the invention consists in the novel and useful provision, formation, construction, association, and interrelation of parts, members and features, all as shown in one embodiment in the accompanying drawing, described generally, and more particularly pointed out in the claim.

In the drawings:

Figure 1 is a perspective view of a sign incorporating the invention,

Figure 2 is a fragmentary, enlarged detail of one letter and its supporting rails, shown in Figure 1,

Figure 3 is a fragmentary sectional view on an enlarged scale, taken on the line 3—3 of Figure 2, and,

Figure 4 is a fragmentary sectional view, on a reduced scale, showing an adaptation of the invention to large scale letters.

Referring now with particularly to the drawing, I have shown by way of example in Figure 1, a use of the invention which, in this case, includes a framing 1 and a background member or panel 2 within the framing, which member 2 may be glass, plastic or other material,

in front of which member 2 are placed letters, such as the letter "D," shown at 3 by way of example, and which letters may be illuminated when some form of illumination, not shown is placed rearward of the member or panel 2, assuming that the member 2 is translucent or light transmitting. Preferably, the letters are of the three-dimensional type, which is to say that the letters are generally recessed as shown in Figure 3, at 4, thus giving the letter depth and thereby illuminating the letter on the sides as well as the front thereof. In the illustration shown in Figure 1, parallel rails 5 and 6 of identical construction extend between sides of the frame 1, and overlie the face of the member 2. The spacing between the said rails is governed by the height of the letter, symbol or numeral, or other display element. Therefore, no particular height of letter or other symbol is intended, as it will depend upon the character and use of said symbols and the sign, considered as an entirety. The particular rails 5 and 6 are, as stated, of identical construction and are substantially H-shape in cross section, each rail having a pair of spaced apart flanges, as shown at 7 and 8, with an interconnecting transverse webbing 9. Preferably, the webbing is spaced at one side of the center of the said flanges, as shown in Figure 3, and the portion of least depth of flange, for convenience of description, will be termed the top of the rail, and the remaining portion below the webbing will be termed the bottom or base of the rail. As stated, the flange 7 is adjacent the outer surface of the member 2. The letter 3 is adapted to be detachably secured between the pair of rails 5 and 6, and to accomplish this, and depending upon the width of the letter, I provide for the upper end of the letter, one or more hooks 10 and 10^a, and for the base of the letter I provide a spring clip, designated generally as 11. The arrangement is such for the clip and the hooks that the same are not visible when viewing the sign, such as, for instance, illustrated in Figures 1 and 2. In the case of the letter "D," two pairs of hooks 10 and 10^a are provided for the top of the letter, as shown in Figure 2, at 12 and 13, and two spring clips 11 for the bottom of the letter, as shown at 14 and 15. Preferably, the hooks are formed of flat stock, the shanks 16 being riveted, as shown at 16^a, or otherwise held to the letter so that the hooks 10 and 10^a project beyond the inner edge of the letter. The hook at 13 is similarly placed, although along the curved edge of the "D," and the hook 10 is bent or canted, if necessary, so as to engage the upper rail. The spring clips 11 include a flat base portion 17, which is riveted or otherwise secured to the bounding side of the letter, and with interconnected upwardly and downwardly extending portions 18 and 19, the portion 19 merging with a part 20 which is bent at an obtuse angle to portion 19, terminating in a curved end 21. The hook 10^a is formed in the same manner as hook 10, the spacing between the tips of said hooks being such as to permit engagement of hook 10 with web 9.

The operation, uses and advantages of the invention just described are as follows:

When it is desired to place a letter or letters in position, the operator will, of course, estimate the number of words and letters that may be placed within a frame, depending, of course, upon the size of the frame, the height of the letters, and the spacing of the rails, it being realized that in large display signs, many lines may be employed. Taking the simplest embodiment, being that of Figure 1, which shows the word "Dine" within a frame, the letters are properly spaced from ends of the frame and are attached by the operator between the pair of rails. The operator accomplishes this by placing each hook 10 over the uppermost end of the flange 8 so that the end or tip of the hook rests on the web, in the in-

stance shown, while in other cases, such as where the hook is fastened to the letters on a curved edge portion thereof, such as shown in Figure 2, the hook portion **22** may rest on the upper edge of the flange without the hook actually engaging the web. In either instance, the hooks will securely hold the letter to the rail. The hook **10a** when used, has its tip spaced beneath the web **9** and acts to prevent displacement of the letter from the upper rail **5**, resultant upon upward movement thereof. Such letter displacement might occur during heavy wind storms if the clip or clips became disengaged from the lower rail **6**. Hence, the hook **10a** is a safety device for preventing accidental displacement of the letter from the rails. The spring clips **11** engage the flange **8** at the bottom thereof, as shown in Figure 3, by merely pushing inwardly on the letter, using the hook engagement with the top rail as a fulcrum. Obviously, the portions at **18** and **19** will flex and then recover their normal position, being that shown in Figure 3, the flange engaging the bight between portions **19** and **20**. This releasably locks the letter between the two rails. In certain installations, the curved end **21** may engage the outer face of the member **2** and act to limit inward movement of the clip relative to the lower rail **6**.

Other letters are similarly attached between the two rails. The letter "I," for instance, may have a single hook and a single clip, as it is obvious that there would be very little side movement due to the edge of the letter engaging the upper and lower outer flanges of the rails. Letter "N" employs two hooks, one for each vertical portion of the letter, and two clips for the base portions. The letter "E" is similarly attached between the rails.

It is obvious that the letters will remain in position despite wind, intense vibration, and the like, for the reason that the hooks, in one instance, have slight play between the flanges, while the clips have positive engagement with the outermost flanges of the lower rail. It requires a straight pull outwardly from the base of each letter in order to release the clips from rail engagement and because of this fact, the letters are stable when placed between the rails.

As stated, the letters, which term includes symbols,

numbers, etc., may be non-light reflecting, i.e., translucid, and the background member or panel **2** may be likewise translucid. Furthermore, the rails may be of different cross-sections, such as channel form, V-section, angle-section, as is obvious. In certain installations, the rails for the letters may be attached directly to a wall.

If a uniform spacing between the upper and lower rails is a factor, then different sized letters may be applied between the rails in the manner illustrated in Figure 4. In Figure 4, the letter has the hooks applied to sides of the letter, while the clips are secured to the letter by brackets. The spacing between the hooks and the clips is the same as shown for the letter in Figure 2.

I claim:

In a changeable symbol construction for signs, a pair of substantially parallel, spaced apart rails of substantially H-shaped cross section to provide two parallel flanges and an intermediate web, said symbol being internally recessed, a substantially C-shaped hook secured to said symbol within the recess and in part extending outwardly from said recess, said hook adapted to overlie the outermost flange of the upper rail and having a part resting on said web, a second part of said C-shaped hook lying freely between the flanges beneath the web to prevent dislodgement of the hook from the rail, and a spring clip secured to the symbol within the recess thereof and extending outwardly from said recess for locking engagement with the outermost flange of said lower rail.

References Cited in the file of this patent

UNITED STATES PATENTS

654,936	Bigsby	July 31, 1900
1,740,736	Hatchner	Dec. 24, 1929
2,155,904	Lowinger	Apr. 25, 1939
2,213,393	Hinr	Sept. 3, 1940
2,272,733	Wamser	Feb. 10, 1942
2,313,723	Adler	Mar. 16, 1943
2,639,529	Fox	May 26, 1953

FOREIGN PATENTS

519,379	Belgium	May 15, 1953