Aug. 19, 1952 E. WAGNER 2,607,146

CHANGEABLE DISPLAY SIGN AND SILHOUETTE LETTER THEREFOR

Filed Oct. 21, 1950

Fig. 1.

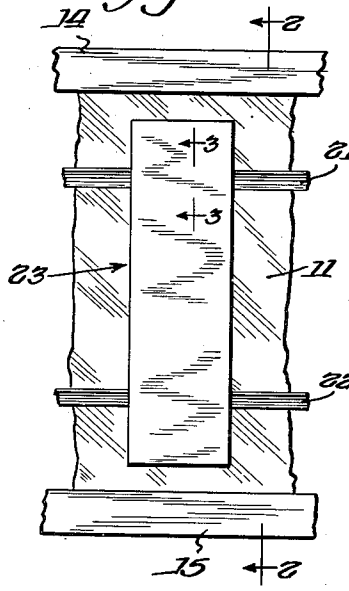


Fig. 2.

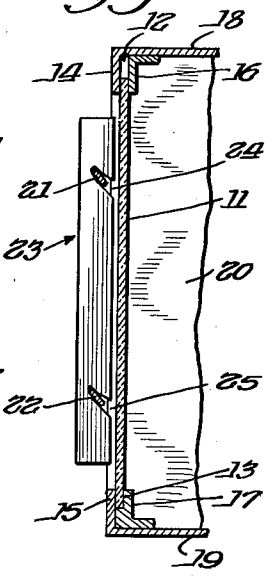


Fig. 3.

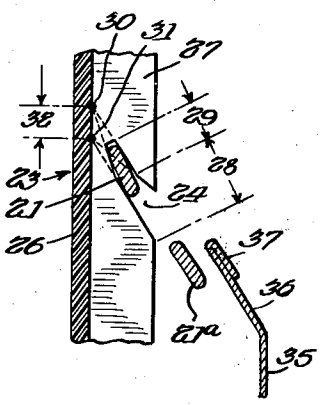


Fig. 4.

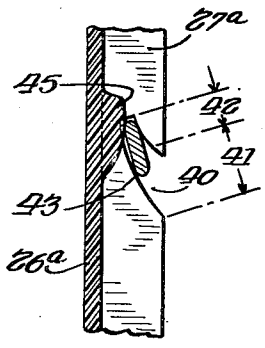


Fig. 5.

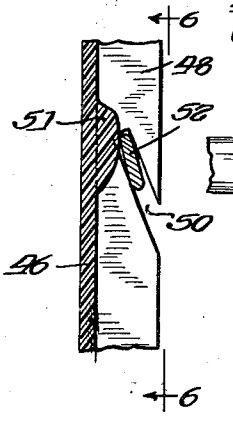
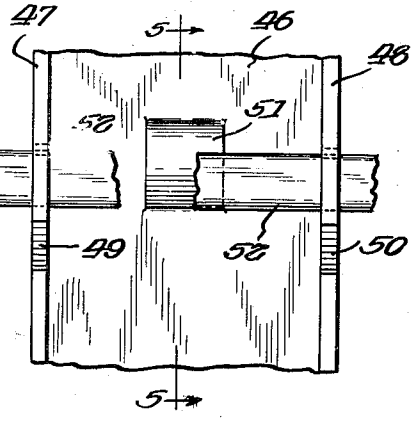


Fig. 6.



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CHANGEABLE DISPLAY SIGN AND SILHOUETTE LETTER THEREFOR

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Application October 21, 1950, Serial No. 191,390

4 Claims. (Cl. 40—143)

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This invention relates to changeable display signs of the slotted-letter type such as are disclosed, for example, in U. S. Patents Nos. 2,158,343, 2,224,069 and 2,270,711, and is particularly concerned with a sign of this character and with slotted so-called "silhouette" letters therefor comprising means integral therewith for camming coaction with associated supporting members so as to hold each letter in mounted position against inadvertent and undesired displacement or shifting.

The term "slotted letter" refers to a peripherally rearwardly flanged symbol, letter, figure, numeral and the like having slots in its flanges which are inclined rearwardly and downwardly at an angle to the plane of its frontal surface. Such letters may be assembled in front of a suitable background, e. g., a translucent and, if desired, suitably illuminated display panel, on horizontally extending supporting members to form a desired message, the letters appearing in bold silhouette outline against the background panel. Signs of this type are well known, being widely used as marquee signs for theaters and other establishments frequented by the public.

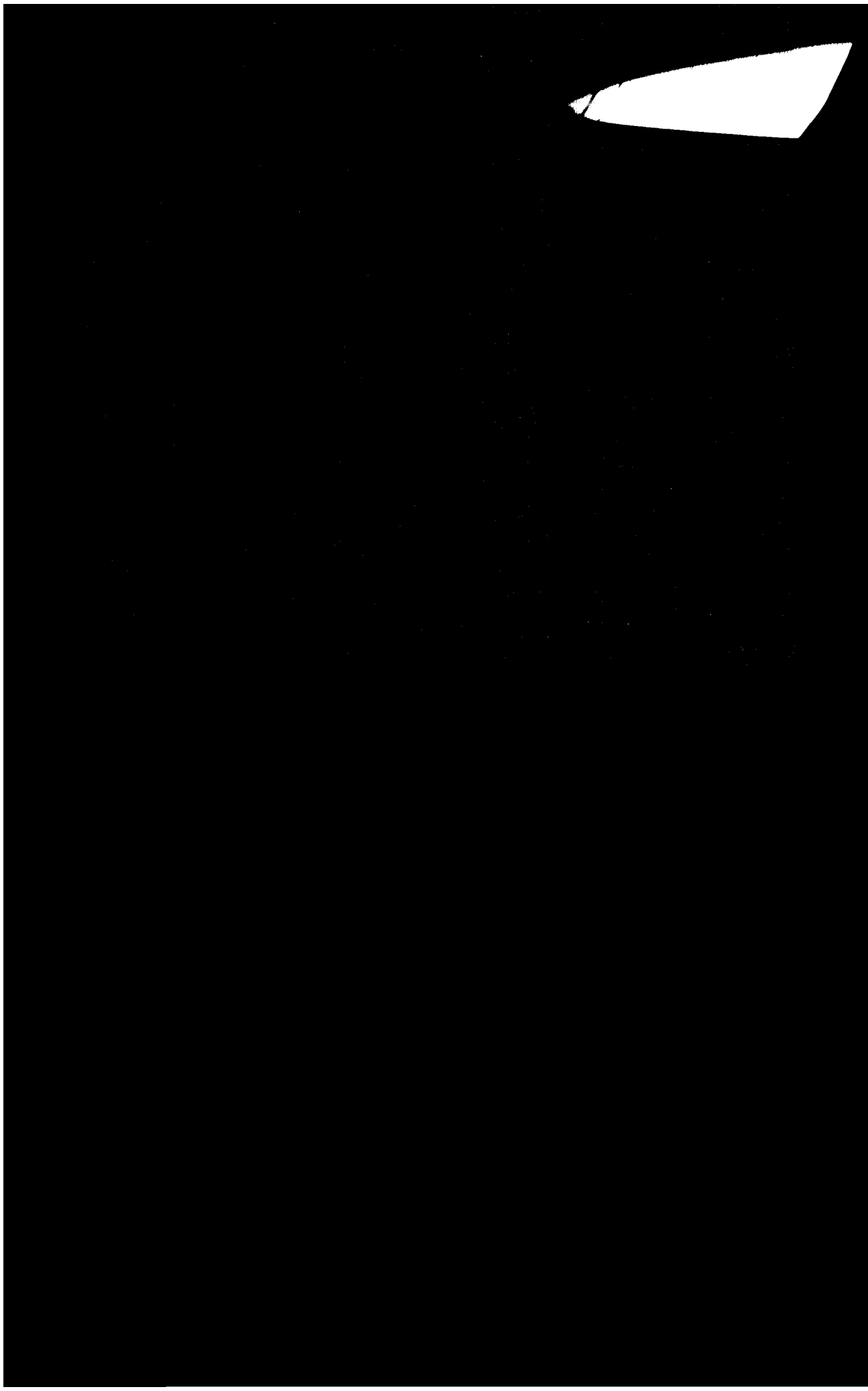
Structural features of these signs may vary according to the use for which they are designed, but they all have one feature in common, namely, the "slotted letters" which are removably assembled on horizontally extending supporting members with the slots in their peripheral flanges hooked over such members. The rearmost edges of these flanges are in mounted position of the letters disposed closely adjacent to the surface of the background panel of a sign, thus eliminating shadows, assuring the bold and prominent silhouette effect and minimizing the danger of inadvertent displacement due to eddies resulting from wind pressure on the sign. The individual letters are relatively light weight, being made of a light metal, e. g., aluminum, or in most modern installations molded or pressed from a light-weight synthetic material, permitting the use of colors or textural features which cannot be easily and inexpensively furnished in the case of metallic structures.

The slots in the peripheral flanges of the letters (the term being used in a generic sense and including any type of symbol that may be desired and suitable for display) were heretofore made in the form of channel-like cutouts having substantially parallel sides. The supporting members over which the slotted flanges of a letter are hooked to dispose it in mounted display position may be in the shape of flat strip- or bar-like members or, as in the case of structures such as shown in the previously mentioned Patent 2,224,069, they may be formed by forwardly inclined ledges of panels made from relatively thin sheet stock (e. g., enameled or glazed panels), such stock being bent upon itself to form a supporting ledge for disposal in engagement with and within the slots in the peripheral flanges of the letters.

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It is desirable of course to make the slots in the flanges of the letters standardized and uniform, of identical width and depth, regardless of the size of the letters, and it is likewise desirable to make all letters adapted for selective and exchangeable use, either with signs having flat bar- or strip-like supporting members or with signs having supporting members formed by panel ledges made of thin doubled sheet stock. The coaction between the letters and the particular supporting members of a sign should always be such as to facilitate the mounting and removal thereof without putting any undesired stresses on the structures and preventing inadvertent displacement or shifting of a letter from its intended display position.

Simple as these structures are and simple as the problem of meeting these requirements may seem to be, it is a fact that difficulties have been experienced in finding a simple and practical solution. The thickness of the supporting members may vary, variations to about 1/64" being rather frequent. If the slots in the flanges of the letters are made uniform, of a maximum width adapted to receive supporting members or ledges of maximum thickness, there will be instances in which the supporting members happen to be of minimum thickness, and the result will be that the letters are loosely resting on their supports. Wind pressures against a sign may produce eddies in back of the letters or pressure against one side or the other, and such letters, being extremely light weight (particularly the modern type letters made of synthetic materials which brought the problem into prominence), may shift from their intended positions and destroy the desired pleasing display effect of the message to be conveyed by the sign. Contrariwise, if the slots in the flanges of the letters are made uniform, of a minimum width for coaction with supporting members of minimum thickness, instances will inevitably occur in which the thickness of the supporting members exceeds the width of the slots, resulting in difficulties in assembly and removal for exchange of the letters. Maintenance men—oftentimes inexperienced and frequently working on such signs under hazardous conditions—may be tempted to use force to remove a "sticking" letter or to place it forcefully in its position on supports which are thicker than the clearance between the walls of its slots, and the result might be either breakage (the material of modern type letters of synthetic substances being relatively fragile) or placement in irregular spacing relative to adjacent letters induced by understandable impatience which arises when it is attempted to cope with structural inadequacies.



ing member 43 in camming engagement therewith in a similar manner as the striplike supporting member 21 is received in camming engagement with its angularly formed channel 24 in Fig. 3. A supporting member made in the form of a ledge (37 in Fig. 3) may be accommodated in the curved slot 40 in place of the bar-like supporting member 43 in similar wedging and camming engagement to hold the corresponding letter against displacement from its assigned and intended display position.

A curved slot such as 40 in Fig. 4 may thus be employed in place of the angular slot 24, Fig. 3, to produce a similar wedging or camming effect with respect to the supporting member and to facilitate in similar manner the insertion of such supporting member during the mounting of the letter. The letter in either case may also be provided with a separate camming member or projection 45 which is integral with its front wall 26a and extends rearwardly therefrom into camming engagement with a point on the inner edge of the supporting member 43.

The curved slot 40 has been shown proportionally larger, i. e., wider than required for actual use, in order to facilitate illustration of the camming member 45 and its camming and locking coaction with the supporting member. It is understood that its width may be as desired throughout its extent and that it may be employed alone, in the manner of the slot 24 of Fig. 3, i. e., without the camming member 45.

The embodiment shown in Figs. 5 and 6 contemplates the use of letters having the front wall 46 and the rearwardly extending flanges 47 and 48. The slots 49 and 50 formed in the flanges 47 and 48 are in this case of usual configuration having substantially parallel sides, as particularly shown in Fig. 5. The letter, however, is provided with a camming member 51, or with several such camming members integral with the front wall 46 and rearwardly extending therefrom. The letter is put in display position by hooking the slots 49, 50 over the supporting member 52 (corresponding to a member such as shown at 21, 22 in Figs. 1–3), the supporting member slipping into the slots and encountering the cam 51 as the letter moves downwardly and rearwardly with respect to the supporting member 52 during the placement thereof, and the cam 51 wedges against the supporting member 52, locking the letter in engagement with the supporting member in display position against inadvertent and undesired displacement. It is understood that the supporting members may be in the form of ledges such as shown in Fig. 3 at 37. The slots 49, 50 are wide enough to accommodate supporting members of varying thickness. The action of the cam 51 will compensate for variations and will always lock the correspondnng letter in its assigned display position.

Parts of the flanges forming the slots 49, 50 may be cut away, e. g., parts of the flange forming the upper wall of the slots 49, 50 in Figs. 5 and 6, so as to provide relatively large openings at the bases of the slots to facilitate the insertion of the supporting member and removal therefrom.

The locking or camming members such as 45 and 51 in Figs. 4, 5 and 6, respectively, have been shown on a proportionately larger scale, particularly with respect to their thickness, to bring out their function more distinctly. They are in actual structures relatively small bosslike protuberances extending rearwardly from the front walls of the corresponding letters. One or more such camming members may be provided in a letter, as desired.

I claim:

1. In an exchangeable display sign of the class described having a horizontally extending supporting member disposed in front of a suitable display background and letters for exchangeable display against such background each having rearwardly extending peripheral flanges provided with downwardly and rearwardly inclined slots forming channels for removable engagement with said supporting member, said channels being wide enough to accommodate supporting members of different thickness, the improvement which consists in the provision of cam means disposed in back of the front wall of each letter integral therewith, said cam means being effective in mounted position of its associated letter on said supporting member for wedging said supporting member within the slots in the flanges of the corresponding letter to hold such letter in its assigned display position.

2. The structure defined in claim 1, wherein said cam means is a rigid protuberance carried by the corresponding letter and extending rearwardly from the inside of the front wall thereof and integral therewith for camming engagement with said supporting member intermediate of the slots in the flanges of the letter.

3. For use in an exchangeable display sign having a horizontally extending supporting member, a silhouette letter comprising a front wall forming a desired symbol and rearwardly directed peripheral flanges extending therefrom, downwardly and rearwardly extending slots formed in said flanges for receiving said supporting member to mount said letter exchangeably thereon, and a rigid protuberance carried by said front wall integral therewith and rearwardly extending therefrom to form a cam for wedging coaction with said supporting member.

4. For use in an exchangeable display sign having a horizontally extending forwardly inclined barlike supporting member, a silhouette letter having a front wall forming the outline of a desired symbol for removable display on said sign and having flanges rearwardly extending from said front wall peripherally thereof and horizontally aligned downwardly and rearwardly extending slots in said flanges for receiving said forwardly inclined barlike supporting member to mount said letter removably thereon, and a rigid protuberance carried by said front wall integral therewith and rearwardly projecting therefrom for camming coaction with the upper edge of said forwardly inclined barlike supporting member to wedge said supporting member within the slots in said flanges so as to hold the associated letter against inadvertent displacement from its assigned display position.

ERWIN WAGNER.

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The following references are of record in the file of this patent:

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2,193,502	Wagner	Mar. 12, 1940
2,224,069	Wagner	Dec. 3, 1940