

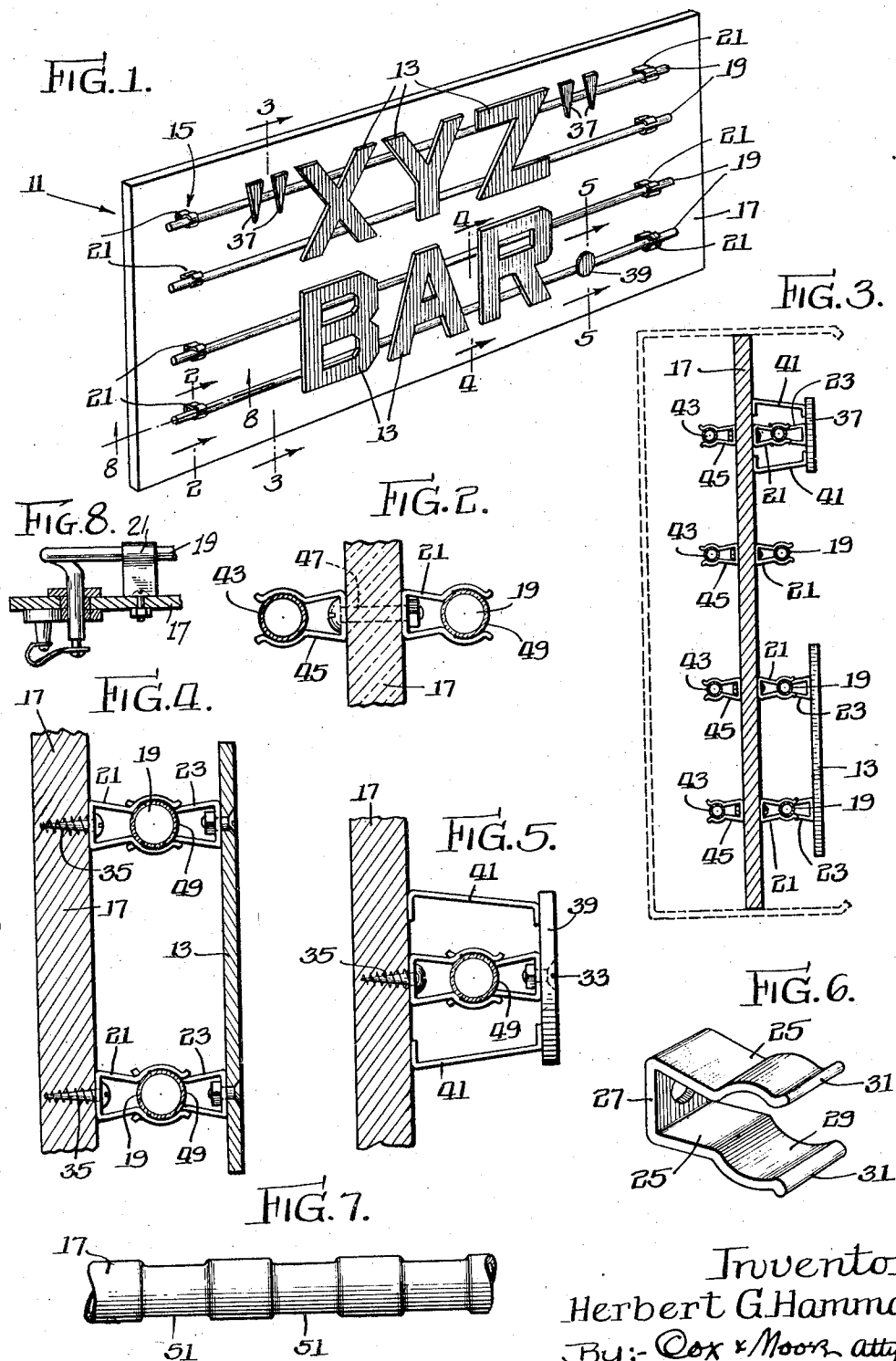
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SIGN

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SIGN

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My invention relates in general to signs and has more particular reference to illuminated signs, although many of its features apply equally well to signs in which no provision is made for illumination.

An important object is to provide a changeable letter sign; a further object being to provide for the use of so-called "silhouette" letters or characters in a changeable letter sign.

Another important object is to provide a sign, in which silhouette characters are removably supported on substantially invisible rails so that the characters supported thereon may appear as if floating in space; a further object being to make the rails invisible by forming them of transparent material or by making them the same color as a sign background against which the characters are displayed.

Another object is to provide a sign in which sign characters are supported on rails of glass or similar transparent or translucent material; a further object being to form the rails as tubular envelopes comprising lamps.

Another important object is to provide a sign in which sign characters are supported on rails in front of a backing member, the rails being attached on the backing member by means of clips and the characters being attached on the rails by similar clips; a further object being to mount the rails removably in clips carried by the backing member and to removably mount the characters on the rails by means of similar clips carried by the characters.

Another object is to provide a sign having characters mounted in front of a backing member on supports comprising lamps adapted to illuminate the backing behind the characters, whereby the latter may be displayed in silhouette fashion in front of the illuminated backing.

Numerous other objects, advantages, and inherent functions will be apparent from the following description, which taken in connection with the accompanying drawing discloses a preferred embodiment of the invention.

Referring to the drawing:

Figure 1 is a perspective drawing of a sign comprising rail-mounted indicia embodying my present invention;

Figures 2, 3, 4, and 5 are sectional views taken substantially and respectfully along the lines 2—2, 3—3, 4—4, and 5—5 in Figure 1;

Figure 6 is a perspective view of a mounting clip forming a part of my present invention;

Figure 7 is a fragmentary view of a selected form of sign character support rail forming a part of my present invention; and

Figure 8 is a sectional view taken along the line 8—8 in Figure 1 to illustrate a preferred manner of end connection for the rails if and when the same comprise gaseous conduction lamps.

To illustrate the invention, I have shown on the drawing a sign 11 comprising characters 13 and means 15 for detachably supporting the same preferably in front of a backing member 17.

The backing means preferably comprises a panel of any suitable material and may be transparent, translucent, or opaque, as desired, although I ordinarily prefer to employ an opaque or translucent panel.

The support means 15 comprises rails 19 preferably arranged in pairs and supported in any suitable or convenient manner in position extending in front of the panel forming the backing 17. I prefer to mount the rails in a removable manner in spaced support clips 21, which may be formed as shown in Figure 6 of the drawing, although other means for supporting the rails in position may, of course, be used. The support clips 21 are secured preferably directly on the backing 17 as shown and as many clips may be used in supporting each rail as are necessary with due regard to the length and cross sectional configuration of the rail and the strength of its constituent material.

The rails preferably comprise rods of circular cross-sectional configuration and of any suitable material, such as glass, metal, wood, synthetic resin, or other material capable of being formed into rods of requisite size and strength. The rods may be solid, although hollow rods may be used if desired. The rods also are preferably colored to match the color of the backing 17 in order that they may be substantially invisible when viewed in front of the panel. Rods of glass or other transparent material, of course, will be substantially invisible without being colored to match the backing.

The characters 13 are preferably what are known as silhouette characters, that is to say, characters adapted for display against a backing of a contrasting color, as, for instance, letter blocks or cut-out character plates, and I prefer to employ dark colored characters against a light field, although I may provide for the display of light colored letters against a darker field. The characters are provided with clips 23, which are preferably identical to the clips 21. The clips 23 are fastened to the characters in position to receive the rails 17 and support the characters in place thereon, each character being supported preferably on at least two rails and having two clips 23, one for each rail.

The characters may be made of any suitable sheet material, though I prefer to use sheet metal for the purpose. The characters may be formed by cutting from the sheet stock, or a sheet having a cutout portion corresponding to the desired character may be used.

The clips 21 and 23 likewise may be formed of metal and each preferably comprises a single

strip bent to provide spaced arms 25 and an interconnecting base portion 27. The arms 25, at their extremities, are curved to form oppositely facing seats 29 adapted to receive the rails 19 therebetween, the terminal ends 31 of the arms being inclined outwardly to permit the rails to be readily inserted between the arms and spread the same slightly to permit the rails to enter the curved seats 29.

The arms are normally positioned so that the seats 29 are resiliently held in position such that the vertical distance between the sheets is somewhat less than the width of the rails whereby when the rails are inserted in position between the seats 29, the rails are snugly held resiliently by and between the arms.

The characters 13 may be fastened on the base portion 27 of the clips 23 in any suitable fashion as by means of the fastening screws 33 and the clips 21 may likewise be secured on the panel 17 as by the fastening devices 35. Since the sign characters 13 may be formed of sheet metal, it is, of course, possible and within the contemplation of my present invention to form the arms 25 of the clips 23 by striking the same from the material of the characters. In such a case, the clip 25 will be integral with the sign character on which mounted.

The characters 13 are supported firmly in position since each is preferably attached on a plurality of the rails 19. There are, however, additional sign characters, such as quotation marks 37 and punctuation marks, such as the period 39, the nature of which prevents mounting of the same upon a plurality of rails. Such characters have to be supported on one rail and, in the event that the rail has the preferred circular, cross-sectional configuration, the clips, by means of which the sign characters 37 and 39 are secured on the support rail, will not prevent the character from tilting on the rail. Tilting of the character may be prevented by providing legs 41 extending rearwardly of the character in position to bear upon the surface of the panel 17 in the rear of the character. Such legs may be and preferably are of sheet metal, either welded or otherwise secured to the back of the character or formed as an integral offset portion of the character itself.

Signs, embodying my invention as heretofore described, may be utilized without illumination for the purpose of displaying the sign characters against the backing panel 17. The characters and backing panel may be of contrasting color and the rails may be either transparent and, for this reason, substantially invisible against the background, or the rails and clips may be painted in conformity with the color of the backing panel for the same purpose, that is to say, to render the same substantially invisible against the backing panel. The support legs 41 for the characters 37 and 39 may also be painted to conform with the backing in order to reduce the visibility of the support legs although these legs are relatively small and are substantially concealed behind the characters which they support and it is, therefore, not essential to conceal the same by making them invisible against the backing panel.

Neither is it an essential feature of the invention to make the rails invisible and I may, in fact, color the rails in such a way as to make them contrast vividly with the backing in order to provide a so-called modernizing effect in the

sign, in which the characters will appear to be superimposed upon horizontal bars.

The rail-supporting clips 21 also need not necessarily be arranged in the ends of the rails as shown in Figure 1, but may be applied directly behind the sign characters in position concealed thereby so that no particular means need be employed in concealing the support clips 21 and the rails, where rendered visible as aforesaid, may, with the supported characters, be made to appear as floating in space in front of the backing 17.

I may use the sign without illuminating it, however, I may provide means for illuminating the panel behind the characters in order to make the same highly visible by night. In an illuminated sign, it is desirable to form the letters of some dark color for display against a background of lighter color. The backing may be illuminated in any suitable or convenient fashion and, as indicated in Figure 2, lamps 43 are supported in rear of the panel for the purpose of illuminating the same, the panel, in such case, being of translucent material so that the light from the lamps 43 will penetrate the panel and render the same luminous behind the sign characters 13.

The lamps 43 preferably comprise elongated tubular elements and preferably are of the so-called discharge type popularly known as neon lights. The tubular lamps 43 may be supported behind the panel 17 in clips 45 similar to the clips 21 and 23. The clips 45 are secured to the back of the panel in any suitable fashion as by means of the fastening devices 47, which may serve also to hold the rail supporting clips 21 on the front of the panel so that a single fastening element is used to clamp a clip 21 and a clip 45 on opposite sides of the panel.

I may also illuminate the panel by forming the rails 19 themselves as discharge lamps, since lamps of this character comprise elongated tubular elements of sufficient strength to support the sign characters directly on the lamps. In such a case, the lamps forming the rails 19 may be coated on their forwardly facing surfaces with a layer 49 of opaque paint in order to prevent the direct light rays from projecting forwardly of the panel. The light rays, however, will be directed rearwardly toward the panel for the purpose of illuminating the same behind the sign characters. The paint layer 49 may, of course, comprise mirror means facing toward the panel in order to reflect the light produced in the lamps toward the panel. The paint film 49, of course, may be omitted if desired, in which event the rails will be made visible as light streaks, upon which the sign characters appear to be supported. Ordinarily, however, since discharge lamps produce a somewhat intense light, it is undesirable to expose the lamps forwardly of the sign since this will tend to reduce the visibility of the characters by attracting attention to the illuminated rails.

Where the rails 19 comprise gaseous conduction lamps, the ends of the rails may be offset rearwardly to engage terminal receptacles carried on the backing panel 17 as shown in Figure 8. If desired, the ends of the lamps may extend through openings in the backing panel, as shown in Figure 8, to facilitate electrical connections made behind the panel in order thus to improve the appearance of the exposed forward space of the panel concealing the connections.

Similar arrangement may be made for the end connections for the lamps 43, although it is ordi-

narily desirable to make the end connections for the lamps 43 entirely rearwardly of the backing panel. The construction shown in Figure 2 permits the provision of a double faced sign utilizing the single backing panel by constituting the rails 19 as gaseous conduction lamps and by mounting display characters on the rails 19 as well as on the lamps 43 so that characters are supported for display on opposite sides of the backing panel 17, the panel being illuminated or trans-illuminated by the lamps on either or both sides of the panel. Naturally where the panel 17 is of translucent material, it need be illuminated by lamps on one side only, the rail-like elements on the opposite side of the panel functioning merely as character supporting means.

The rails 19, on which the characters are mounted, are preferably smooth although, in certain instances, as, for example, as where the rails are curved, it may be necessary to provide means for preventing the characters from moving longitudinally on the rails. This may be accomplished by forming the rails at intervals with depressions 51, forming seats adapted to receive the character-mounting clips 23 in a manner to prevent longitudinal movement of the characters on the rails. This expedient, however, is a refinement which ordinarily is unnecessary and, of course, any other suitable or convenient means may be adopted for anchoring the characters in place against longitudinal movement wherever such movement is likely to occur.

It is thought that the invention and numerous of its attendant advantages will be understood from the foregoing description and it is obvious that numerous changes may be made in the form, construction, and arrangement of the several parts of the illustrated apparatus without departing from the spirit or scope of my invention or sacrificing any of its attendant advantages, the preferred modes and forms herein described being merely for the purpose of illustrating the invention.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

1. A sign comprising silhouette means forming a character, a backing panel, support means for said character comprising a lamp providing a light source in front of the panel to illuminate the same, means to mount the character on the lamp in position extending in front of said panel, and means on said lamp for preventing the light thereof from traveling forwardly of said character.

2. A sign comprising silhouette means forming a character, a backing panel, support means for said character comprising a lamp providing a light source in front of the panel, means to mount the character on the lamp in position extending in front of the panel, and means operatively associated with said lamp for projecting all of the light, developed at said source, rearwardly of said character and onto the panel.

3. A sign comprising silhouette means forming a character, a backing, and a character support comprising an elongated rail mounted in front of said backing, means to secure the character on said rail in position to be displayed against said backing, the rail comprising a lamp positioned to illuminate the backing and including means to prevent the projection of light from said lamp in a direction forwardly of said character.

4. A sign comprising silhouette means forming

a character, a translucent backing, and means to support the character in front of said backing, comprising an elongated rail mounted in front of said backing, means to secure the character on said rail in position displayed against said backing, a lamp, means to mount the same on said backing in position to illuminate the same behind said character, a clip on said backing and extending rearwardly thereof in position to detachably receive and support said lamp behind the backing in position to illuminate the same, another clip on said backing and extending forwardly thereof to detachably receive and support the rail in front of the backing, and an additional clip carried by the character and extending rearwardly thereof in position to receive the rail and secure the character removably thereon.

5. A sign comprising silhouette means forming a character, a backing, a character support comprising an elongated rail, means to mount the rail on and in front of said backing comprising a clip secured to said backing and extending forwardly thereof and in which said rail is removably mounted, a clip carried by said character and extending rearwardly thereof in position to receive the rail and secure the character removably thereon in position to be displayed against said backing, said rail being hollow and containing a light source adapted to be electrically energized to illuminate the backing behind said character.

6. A sign comprising silhouette means forming a character, a backing, a character support comprising an elongated rail, means to mount the rail on and in front of said backing comprising a clip secured to said backing and extending forwardly thereof and in which said rail is removably mounted, and a clip carried by said character and extending rearwardly thereof in position to receive the rail and secure the character removably thereon in position to be displayed against said backing, a lamp, and means comprising clips carried by said backing to removably secure the lamp on said backing in position to illuminate the same behind said character.

7. A sign as set forth in claim 6, wherein all of the clips are of identical form.

8. A sign comprising silhouette means forming a character, a backing, a character support comprising an elongated rail mounted in front of said backing, said rail comprising a hollow envelope containing a light source adapted to be energized electrically to illuminate the backing, means to secure the character on said rail in position to be displayed against said backing, said means comprising a clip carried by the character for receiving the rail whereby to secure the character removably thereon.

9. A sign comprising silhouette means forming a character, a backing, a character support comprising an elongated rail mounted in front of said backing, means to secure the character on said rail in position to be displayed against said backing and for preventing rotation of the character on said rail.

10. A sign comprising silhouette means forming a character, a backing, a character support comprising an elongated rail mounted in front of said backing, means to secure the character on said rail in position to be displayed against said backing, and means carried by the character and extending to and engaging the backing for preventing rotation of the character on said rail.

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