April 5, 1938. F. L. KEHL 2,113,026

ILLUMINATED SIGN

Filed April 27, 1935

FIG. 1.

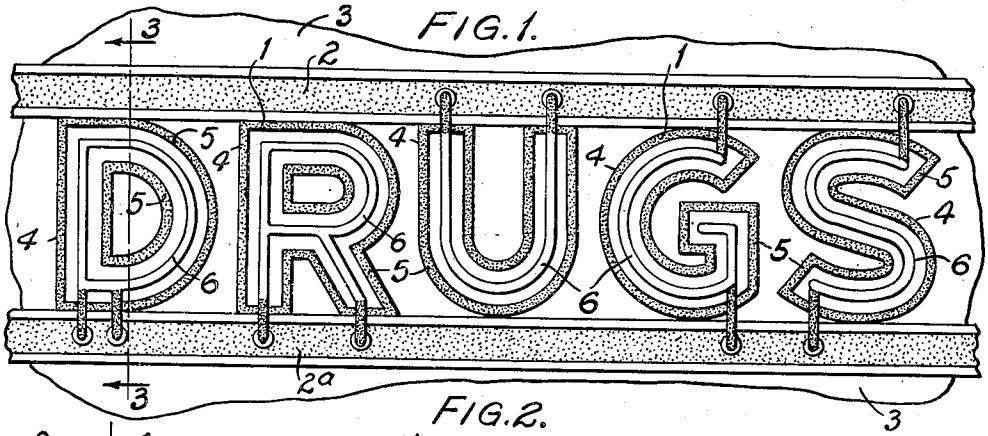


FIG. 2.

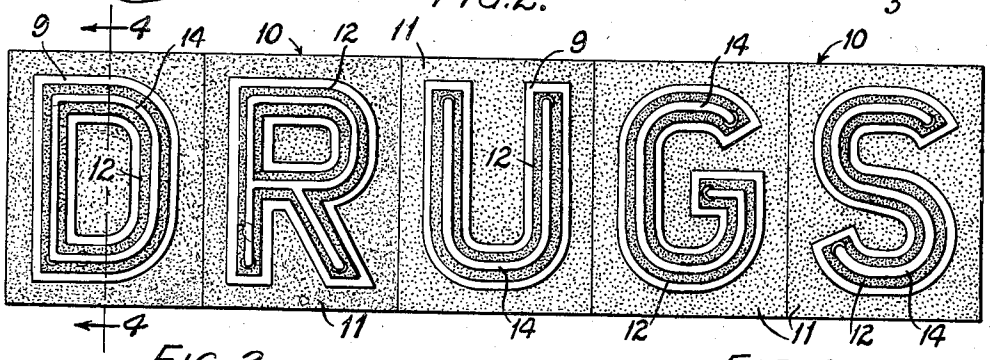


FIG. 3.

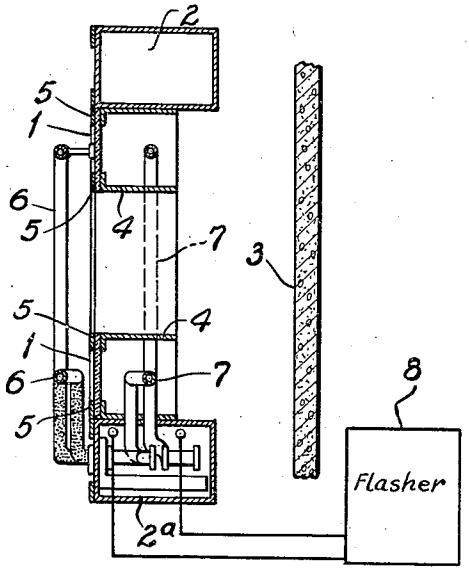
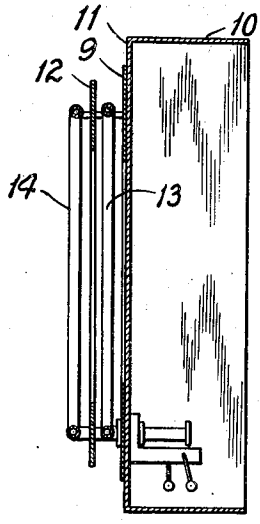


FIG. 4.



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ILLUMINATED SIGN

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Application April 27, 1935, Serial No. 18,618

2 Claims. (Cl. 40—130)

My invention relates to illuminated signs and more particularly to such signs as used for display and advertising purposes wherein it is desirable to have a high degree of character visibility and decorative effectiveness.

An object of my invention is to provide a new and improved illuminated sign which will be efficient and attractive; another object is to provide an advertising sign having cut out characters which are illuminated in silhouette; and a third object is to provide a sign which will be of cheap and economical construction, but which may be assembled readily and easily to produce an improved and superior product.

Several embodiments of my invention in advertising signs are shown in the accompanying drawing wherein similar characters are used to designate similar parts: Fig. 1 is a face view of one form of sign embodying my new and improved construction; Fig. 2 is a face view of another form of sign; Fig. 3 is a section through one of the letter characters of the sign in Fig. 1; and Fig. 4 is a section along the lines 4—4 in Fig. 2.

Referring to the figures, the essential difference between the two forms of sign shown is that in the form of Figs. 1 and 3, the characters are arranged independently of the background and are not supported thereon but in the form of Figs. 2 and 4 the characters are mounted directly on the background, as will be more fully explained below. However, both embodiments include cut out characters, in the forms shown these characters being letters to form the word "drugs", both include means for illuminating the characters in silhouette and both include a luminous tube outline of a character carried on the face thereof.

In the sign shown in Figs. 1 and 3, the characters 1 are carried by upper and lower rails 2 and 2^a, respectively, and are positioned forwardly of a background 3, which may be of any suitable color, but which, preferably is treated to reflect light. Each of the characters 1, as shown in Fig. 3, includes an opaque, trough shaped casing 4 arranged to outline the desired letter, figure, or other character in cut out form. These trough shaped casings are positioned so that the closed side thereof forms the face of the character and the open side is towards the back of the sign for the purposes more fully outlined below. The face of the character may be of any material and may have a strip of aluminum or other bright metal or material outlining the marginal surfaces thereof as indicated at 5.

Carried on the face of each character is a luminous tube outline thereof, indicated at 6. While in the embodiment shown here, this luminous tube outline is that of the character on which it is carried, in some signs it may be desirable to have one series of characters formed in cut out shape but to have a different series of characters formed in luminous outline on the faces thereof.

Arranged rearwardly of the cut out characters are means for illuminating each character in silhouette and in this embodiment such means include a luminous tube 7 arranged behind the face of the character and in the trough shaped casing 4. It will be seen that when the luminous tube 7 of each character is energized light therefrom will be projected rearwardly through the open side of the casing and against the background 3 and also the tube will project an aura of light outwardly from the edges of the character. Similarly, when the tube 6 is illuminated the character will be outlined luminously on the face thereof. Of course, the luminous tubes 6 and 7 may comprise a plurality of separate tube portions and by the term "luminous tube" as used herein, I mean, the aggregate length of tube portions necessary to form the desired outline.

A distinctive result in appearance may be obtained by alternately energizing the luminous tubes 6 and 7 and this may be accomplished by a flasher diagrammatically shown at 8. By adjustment and operation of this flasher, the tube 7 may be energized to illuminate a character in silhouette, as described above, and then while the tube 7 is dark the tube 6 may be energized to illuminate a character in outline on the face of the character previously illuminated in silhouette. Also, both of the tubes 6 and 7 may be flashed simultaneously or the flasher may be dispensed with and the tubes may be energized continuously. By combining different colored characters, backgrounds and luminous tubes highly pleasing effects may be obtained.

In the form shown in Figs. 2 and 4, one or more characters 9 are painted or otherwise formed on the face 11 of a suitable background casing 10. The face of the casing 10, preferably, is of a dark color which will not effectively reflect light and the characters 9 formed on the face thereof are preferably of a light color so as to have a high reflecting quality. Positioned forwardly from the face 11, in the embodiment shown, are a plurality of opaque cut out characters 12. Preferably, the cut out characters 12 are slightly smaller than the similar characters formed on the face 11 of the casing 10 and are

positioned to register therewith, as shown in Fig. 2. If the cut out characters 12 are smaller than the similar characters 9 a portion of the latter characters will be visible from the front of the sign.

Mounted on the rear face of each cut out character 12 is a luminous tube 13, preferably following the contour of said character and positioned and arranged so that when the tube is illuminated, it will, in turn, illuminate the character 12 in silhouette. Also, light from the tube 13 will be reflected by the character formed on the face 11 of the casing 10. Preferably, as explained above, the tube 13 and the characters 12 are proportioned so that when the tube is illuminated it will project an aura of light outwardly beyond the edges of the character 12. To aid in this result, preferably, the characters are formed flat, as shown in the figures, that is, the different parts are not bent or bowed, but are arranged in a single plane. If the characters are so formed direct rays of light from the tube 13 will be allowed to extend directly outwardly beyond each character 12. Similarly mounted on the face of each character 12 is a luminous tube 14 arranged to outline the character.

As in the case of the other embodiment the tubes 13 and 14 may be alternately energized or may be simultaneously energized, as desired.

While I have shown luminous tubes as the means for illuminating the characters in silhouette, it is to be understood that other means may be used and such illuminating means may be positioned variously without deviating from the spirit of my invention. However, in any embodiment of my invention, means must be provided to illuminate the characters in silhouette and also to illuminate characters in outline upon the face thereof. Other changes in the size, shape and arrangements of the various parts included in a sign may be made within wide limits without deviating from the spirit of my invention as set forth above and as included in the appended claims.

What I claim as new and desire to secure by Letters Patent, is:—

1. An illuminated sign including a background having a character formed thereon so as to reflect light, a flat cut out character arranged forwardly of the character formed on said background and registering therewith, the boundaries of said cut out character lying within the boundaries of the character formed on said background whereby the boundaries of the character formed on said background are visible when said sign is viewed from the front thereof, means for illuminating said cut out character in silhouette, a luminous tube outline of said cut out character carried on the face thereof, and means for alternately energizing said illuminating means and said luminous tube.

2. An illuminated sign including a back ground having a light reflective character formed thereon, a flat cut out character of less size than the character formed on said background arranged forwardly of said background and registering with said light reflective character formed thereon, a luminous tube arranged at the back of said cut out character and to follow the contour thereof, and a luminous tube outline of said cut out character carried on the face thereof.

FRANK L. KEHL.