May 3, 1927.

M. NORDEN

1,626,958

ILLUMINATED SIGN

Filed Feb. 14, 1924

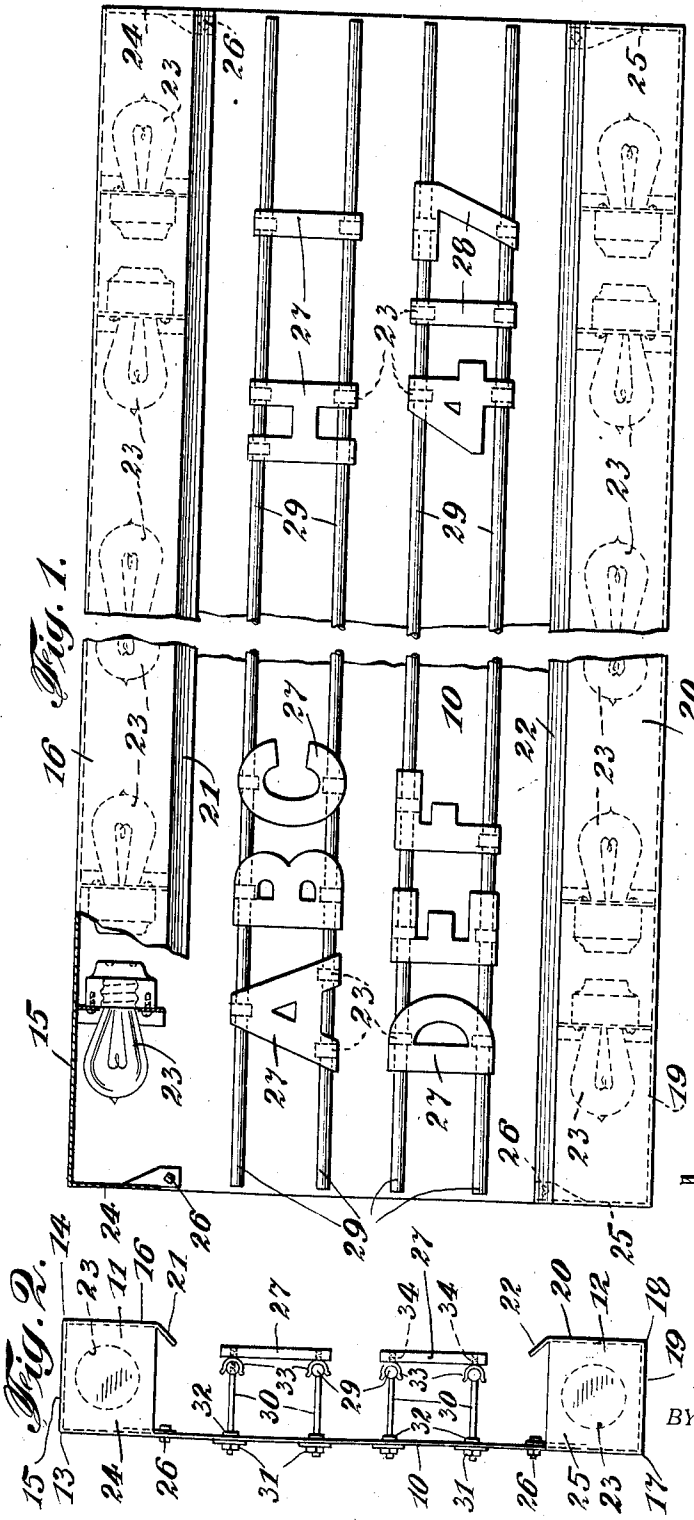


Fig. 1.

Fig. 2.

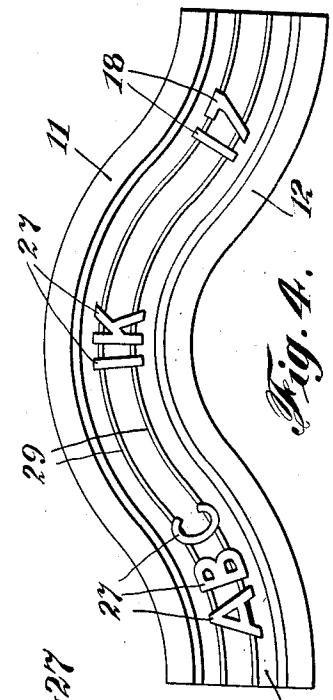


Fig. 4.

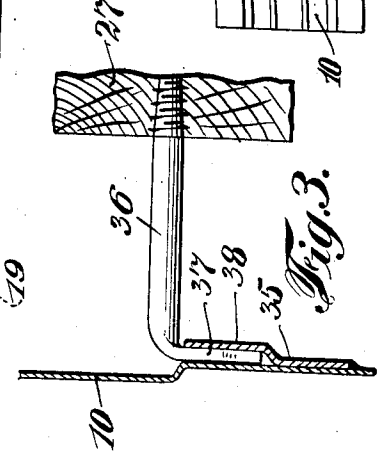


Fig. 3.

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Patented May 3, 1927. 1,626,958

UNITED STATES PATENT OFFICE.

MORTIMER NORDEN, OF NEW YORK, N. Y.

ILLUMINATED SIGN.

Application filed February 14, 1924. Serial No. 692,677.

My invention relates to illuminated signs displaying names, numbers or other characters or devices. In signs of this character it is customary to employ electric lamps arranged to form the letters, numerals or characters. The main object of my present invention is to greatly lessen the cost of construction and maintenance of illuminated signs by the employment of solid letters, numerals or other characters in place of the electric lamps, which letters, numerals or other characters are adjustably and interchangeably supported in front of an illuminated background.

Other objects will appear from the following description, in which the details of the invention are particularly described.

In the accompanying drawing:

Figure 1 is a front elevation of a sign embodying my invention.

Fig. 2 is an end view of the same.

Fig. 3 is a fragmental end view illustrating a modification, and

Fig. 4 is another fragmental view illustrating another slight modification.

Similar reference characters indicate like parts throughout the several views.

The sign is preferably of rectangular shape as shown in the drawing.

10 denotes the back of the sign which is preferably of sheet metal, and 11 and 12 denote two housings extending longitudinally the full length of the back plate one at its top and the other at the bottom. These housings are also preferably made of sheet metal and may be attached to the back plate in any desired manner, but I prefer to make them integral therewith by bending the plate 10, on the lines 13 and 14 to form the top 15 and front 16 of the upper housing, and on the lines 17 and 18, to form the bottom 19, and front 20, of the lower housing. I also prefer to bend the edges of the front plates 16 and 20 inwards at an inclination to form the elongated reflectors 21 and 22. The inner surfaces of the back 10 and housings 11 and 12 are preferably polished or enameled.

Within either or both of the housings 11 and 12 there are a plurality of electric lamps 23, supported in any suitable manner.

The ends of the housings may be open, but I prefer that they be closed by end plates 24 and 25, which may be secured in place in any suitable way, such as by rivets 26.

It will be readily seen that the rays of light from the lamps 23 will be reflected against the back plate 10, brightly illuminating the same, so that a solid object supported in front of the back plate will be very conspicuous, and in carrying out my invention, I provide means for supporting solid letters 27, numerals 28 or other characters at a predetermined distance in front of the illuminated back plate 10.

In the preferred form, I provide a plurality of bars 29 extending longitudinally of the sign its entire length, and arranged in parallel pairs. These bars are supported at a predetermined distance in front of the back plate 10, by rods 30 which may be threaded at both ends, one end of each being screwed into threaded recesses in the bars while their other ends pass through holes in the back plate 10, the projecting ends receiving the nuts 31, there being a flange 32 on each of the rods which bears against the inner surface of the back plate 10. Of course, the ends of the rods connected to the bars may be secured thereto in any other suitable manner. These rods 30, are employed at each end of the sign, and also preferably in the center which ordinarily is sufficient, but they may be provided at other points if necessary. In this manner the bars 29 are rigidly held in position.

The letters 27, numerals 28, or other characters, are made of any suitable material, preferably wood, and spring clips 33 are secured to the back of each in any suitable way, such as by screws 34. These clips are of a size to snap closely over the bars 29, and are spaced to correspond with the distance between the bars in each pair, the ends of the clips being bent outwardly so that they do not interfere with the easy attachment of the letters or numerals to the bars. The letters or symbols are solid with a dull surface which increases their visibility by contrast of color with the illuminated back plate, and furthermore they are supported at such a distance in front of the plate that the inwardly inclined reflectors 21 and 22 prevent the rays of light from the lamps striking their front surface.

The bars 29, in most cases are arranged in straight horizontal lines, but it will be readily understood that they may be arched or curved if desired, as illustrated in Fig. 4.

While I prefer to support the letters, numerals or other characters in front of the back plate by the employment of the bars

and rods as above described, the bars may be dispensed with, and the rods alone employed in the manner shown in Fig. 3 of the drawing.

In such cases flat strips of metal 35, are attached to the back plate 10, by solder, rivets, or other suitable means, and extend longitudinally of the back plate in predetermined position, taking the place of the bars 29. These strips 35, are secured to the back 10, along their lower portions, above which they are bent outwardly and vertically leaving a predetermined space between the back plate and their vertical portions. Rods 36 having a flattened right angle bend or projection 37 at one end and carrying at their other end one of the letters, numerals, or other characters, are employed, such rods being of predetermined length to support the letters, numerals or other characters at the desired distance in front of the illuminated background. The flattened right angle ends of these rods are pushed down into the space between the back plate 10 and the vertical portions 38 of the strips 35, which portions possess sufficient resiliency to permit this to be done without undue effort, while at the same time holding such ends of the rods firmly by friction after they have been so placed, although it will be readily understood that the rods may be moved laterally in such space or spaces by exerting sufficient pressure in view of the resiliency of the vertical portions of the strips. In this form of my invention it is preferable that the letters, numerals or other characters be permanently fixed to the ends of the rods 36 although they may be detachably connected thereto in any suitable manner.

My invention provides an illuminated sign of simple and inexpensive construction and maintenance, and dispenses with all the sockets and lamps usually employed to form the letters, numerals or monograms in electrically illuminated signs.

Each letter being separately detachable, the same may be placed in position side by side to form any desired word or words.

In practice complete alphabets with duplicate letters and numerals will be provided.

I claim as my invention:

An illuminated sign comprising a back plate, a housing extending longitudinally along the top of said plate, another like housing at its bottom, solid letters having a dull surface, supports for the same to which they are detachably connected at a predetermined distance in front of the back plate, electric lamps supported within said housings, the edge of each housing being inclined inwardly to prevent the rays of light from the lamps striking the front surface of the letters.

Signed by me this 7th day of February, 1924.

MORTIMER NORDEN.