

UNITED STATES PATENT OFFICE.

ALBERT L. MELVIN, OF DETROIT, MICHIGAN.

SIGN.

SPECIFICATION forming part of Letters Patent No. 673,562, dated May 7, 1901.

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To all whom it may concern:

Be it known that I, ALBERT L. MELVIN, a citizen of the United States, residing at Detroit, in the county of Wayne, State of Michigan, have invented certain new and useful Improvements in Signs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to illuminated signs and characters for advertising and other purposes; and it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out especially in the claims.

The objects of the invention are to provide a sign of the character described in which the arrangement is such as to produce a brilliant effect when the sign is lighted at night and at the same time render the sign prominently visible in the day-time or when the illuminated lamps are not lighted.

A further object is to provide for protecting the lamps and lamp-sockets from water and to afford a reflecting-surface, which renders the sign additionally luminous when the lamps are lighted.

The above objects are attained by the combination and association of elements illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of my improved sign, illustrating the application of the invention to a single letter. Fig. 2 is an enlarged vertical section through said letter and a portion of the housing or casing containing the lamp-sockets as on line 22 of Fig. 1. Fig. 3 is an enlarged plan view of one of the concavities or apertures in the letter of the sign, in which the incandescent electric lamps are located.

Referring to the characters of reference, 1 designates a suitable case or housing, in which the lamp-sockets 2 of the incandescent lamps 3 are located, said sockets having connected thereto two circuit-wires 4 and 5 in the ordinary manner. The outer face 6 of the case or housing has a flat surface and is pro-

vided with apertures 7 therethrough, which register with the lamp-sockets 2. Said lamp-sockets 2 within the case are so arranged as to describe the outline of the letters of the sign, and the apertures 7 through the outer face of the case are made to correspond therewith.

The letters which spell the words of the sign are mounted upon the outer face of the case and are raised in relief therefrom, as shown at 8 in Figs. 1 and 2, a letter "S" being employed to illustrate the application of this invention. As will be seen, the whole surface of the letter is raised above the plane of the face of the case or surface upon which the letter is mounted and that said letter is provided with apertures 9 therethrough, which correspond with the apertures 7 in the face of the case and register with lamp-sockets 2. The apertures 9 are placed such a distance apart as to cause the lamps 3 when located therein to form the outline of the letter, as clearly shown in Fig. 1. The arrangement is such that when the lamps are seated in the sockets 2 the bulbs thereof will project well beyond the face of the letter, so that said letter affords no obstruction to the rays of light. To add to the brilliancy of the sign, the outer portion of the opening 9 through the letters which receive the lamps is countersunk or concaved, as shown at 10. The surface of the said concave portion of the opening through the letters being in the rear and partially behind the principal portion of the light from the lamps serves as a strong reflector, which gives the lamps additional force and brilliancy and adds greatly to the attractiveness of the sign. By thus hollowing out or concaving the outer portion of the openings through the letter water running down the surface of the letter is prevented from passing into the case or housing or running onto the lamp, for the reason that the water which flows into the said concavity on the upper side instead of passing through the opening into the case will follow the course of said concavity and be discharged therefrom on the lower side. The raising of the letter above the surface of the case or housing forms of said letter a watershed to direct the water striking the face of housing from the lamp-openings in the letter.

It is the purpose to cover the letters with bronze or other brilliant paint or enamel to render the sign more luminous at night and more distinctly visible in the day-time. The
5 fact that the letters are raised above the surface of the case adds greatly to the prominence of the sign in daylight or when the lamps are not lighted.

Having thus fully set forth this invention,
10 what is claimed is—

1. In an electric sign, the combination of a suitable casing, or housing, having lamp-sockets therein arranged to describe the outline of a letter or character, the outer face of said
15 housing being a plane flat surface, a letter mounted upon the outer face of said housing and projecting beyond the plane thereof, the margins of said letter curving inwardly to meet the surface of said housing, a series of
20 registering apertures formed through the letter and through the outer face of said housing adapted to register with said lamp-sock-

ets and a series of lamps mounted in said sockets and projecting beyond the surface of said letter.

2. The combination of a suitable support
25 having openings therethrough describing a letter or character, a raised letter or character mounted on the face of said support over said openings, said letter having circular
30 openings therethrough, which register with the openings in said support, a series of electric-lamp bulbs seated in and projecting from said openings, the outer wall of the circular
35 said concaved opening being of greater diameter than the diameter of the lamp-bulb seated therein.

In testimony whereof I sign this specification in the presence of two witnesses.

ALBERT L. MELVIN.

Witnesses:

E. S. WHEELER,
F. P. RADIN.