Aug. 21, 1928. 1,681,491

J. E. LONG

ELECTRIC SIGN

Filed April 20, 1927

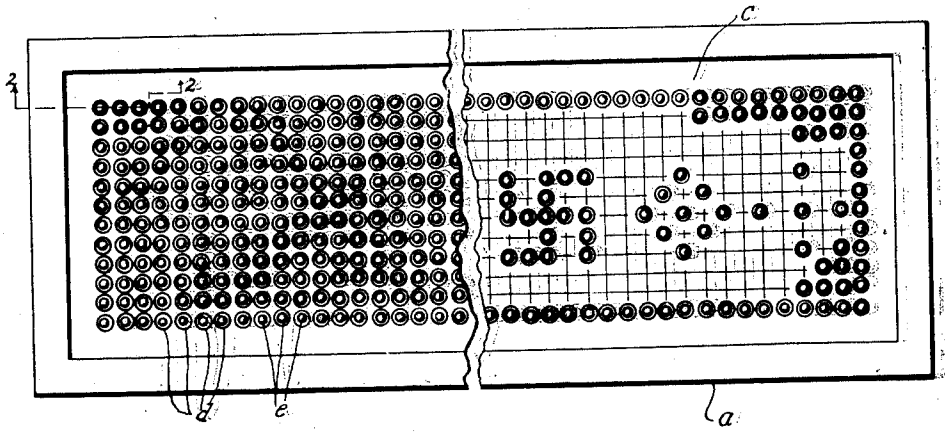


Fig. 1.

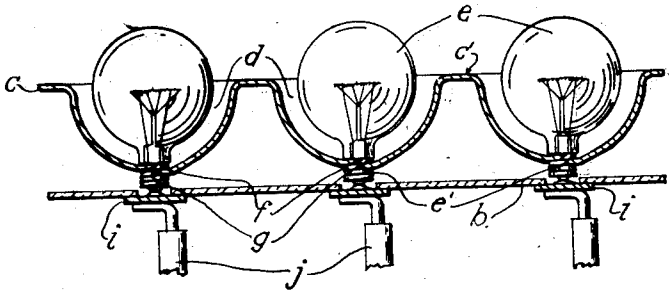


Fig. 2.

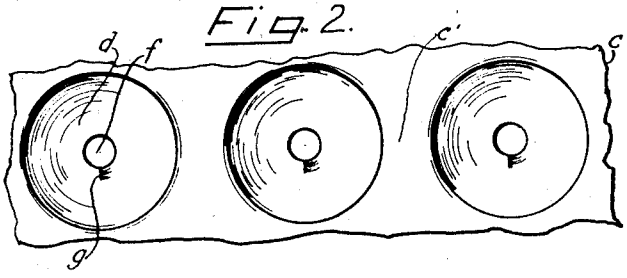


Fig. 3.

INVENTOR

John E. Long.

BY

ATTORNEY

Patented Aug. 21, 1928. 1,681,491

UNITED STATES PATENT OFFICE.

JOHN E. LONG, OF MULTNOMAH, OREGON.

ELECTRIC SIGN.

Application filed April 20, 1927. Serial No. 185,162.

My invention relates to electric display signs and especially to those in which the individual electric light bulbs can be separately energized, and for this purpose are connected by separate wires to a circuit controller.

The principal object of my invention is to provide an extremely simple and inexpensive electric display sign of this character, which can be assembled quickly, and one which is positive in action and able to withstand a great deal of hard usage.

Another object of my invention is to provide an electric display sign in which the separate light bulbs are recessed relatively to the surface of such sign, which surface extends substantially in a plane. Said recesses for such electric light globes are integral portions of the display surface of such sign, being "dished" inwardly so as to form semi-spherical recesses to partially encircle such globes.

A further object of my invention is to provide an electric sign of this character in which the lights are arranged to stand out prominently and to have their illuminative power concentrated.

A further and more specific object of my invention is to provide a sign comprising two relatively flat members one of which is relatively thin and which constitutes the display surface and the other which is substantially thicker constitutes the base, and to provide the member constituting such display surface with more rigidity I form therein a plurality of recesses to stiffen such member against twisting and warping.

This application is intended as a division and as a continuation in part, of that phase of my invention divided out of the application which matured into Patent No. 1,572,212, granted February 9, 1926, the division being made to comply with the examiner's requirement.

The details of my invention are hereinafter described in greater detail and with reference to the accompanying drawings, in which:

Fig. 1 is an elevation of an electric display sign embodying my invention;

Fig. 2 is a transverse section taken on the line 2—2 in Fig. 1 through such electric display sign and such figure illustrates the manner of forming recesses about the electric light globes; and

Fig. 3, is a fragmentary elevation of a portion of the common terminal plane plate showing the construction of the apertures for receiving and retaining the bases of such electric light globes.

My improved electric display sign comprises a frame a, of insulating material of convenient form and size, in which are arranged in spaced relation, an insulating base b, and a terminal plate c, both extending over the entire surface of such sign. Arranged in predetermined pattern are a plurality of "dished" recesses d formed in such common terminal plate and being substantially semi-spherical in cross-section, as is shown in Fig. 2, which not only form pockets for receiving and protecting the electric light globes e, but also serve to stiffen such terminal plate which otherwise would be quite flexible. Such recesses d, are preferably painted with a material which serves as a reflective medium, some material for example such as aluminum paint, and the portions c' of such terminal plate between such recesses are coated with a material having the property of absorbing light such, for example, as rough black paint.

In the bottom of each recess is a punched aperture f, substantially the diameter of the grooved portion of the electric light globe base e' and a radial slit g is formed alongside such aperture and the portions of the plate adjacent the latter and at opposite sides of the slit are bent angularly relatively to each other to form the perimeter of the aperture into an internally threaded socket for such threaded base of an electric light globe to be received and retained therein.

In alignment with such apertures are correspondingly spaced insulated terminals i, carried by the base b and each of such terminals is connected by a separate wire j to the control mechanism (not shown). The recesses formed are of such depth that the filaments of the globes carried therein will lie below the plane of the terminal plate between such recesses. Thus the light given off from such filaments will not strike such plane surfaces to illuminate the latter. This produces the effect of a void between the apertures when such electric light globes are energized and causes the design formed by the energizing of such lights and spaced portions to stand out more clearly.

I claim:

1. In an electric sign, an insulating base, a plurality of electric terminals arranged thereon, a terminal plate in spaced relation with such base having apertures in registry with such terminals, the portions of such

plate adjacent such apertures being slit radially to the latter, and bent angularly to form light receiving sockets.

2. In an electric sign, an insulating base, a plurality of electric terminals arranged thereon, a terminal plate in spaced relation with such base and having apertures in registry with such terminals, the portions of such plate adjacent such apertures being dished to a depth in excess of the length of the light element to be accommodated in such aperture and formed into a semi-spherical recess, adjacent such apertures such plate being slit radially to the latter, and bent angularly to form light receiving sockets in the bottom of such formed recesses.

3. In an electric sign, an insulating base carrying one electric terminal and a terminal plate spaced thereover and provided with an aperture in registry with such base terminal, the portion of the plate adjacent such aperture being slit radially to such aperture and bent angularly at opposite sides of such slit, to form a light receiving socket in such aperture.

JOHN E. LONG.