G. H. SCHAFFNER.

ILLUMINATED SIGN.

APPLICATION FILED DEC. 8, 1916.

1,352,031.

Patented Sept. 7, 1920.

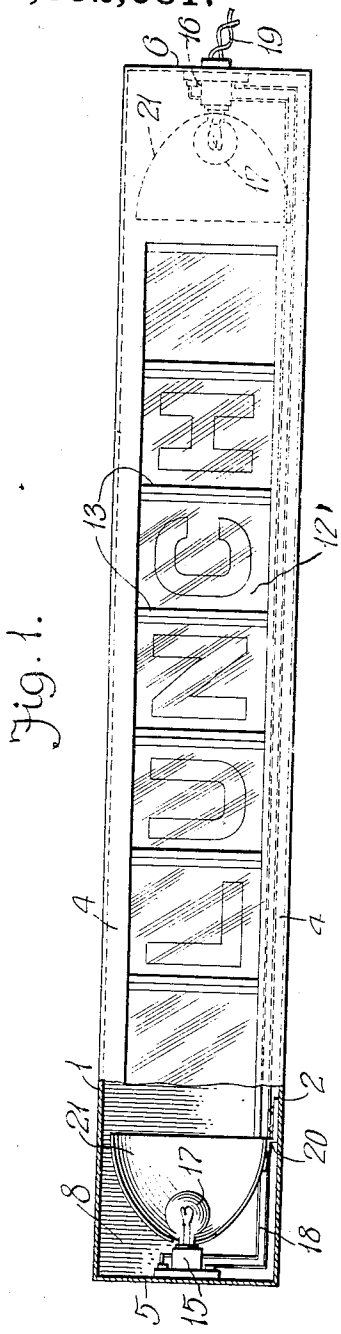


Fig. 1.

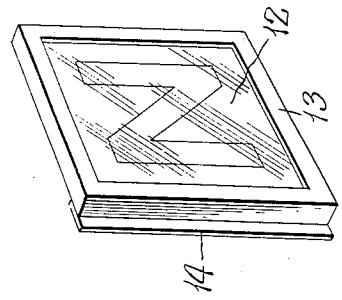


Fig. 3.

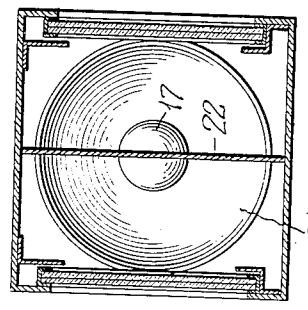


Fig. 5.

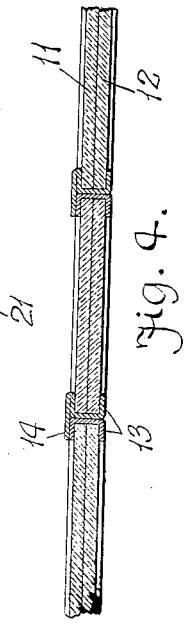


Fig. 4.

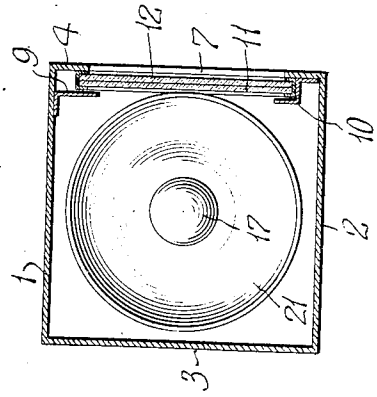


Fig. 2.

Witness

Chas. W. Stauffiger

Karle A. Butler

Inventor

George H. Schaffner,

By Dorsett & Dorsett

Attorneys

UNITED STATES PATENT OFFICE.

GEORGE H. SCHAFFNER, OF DETROIT, MICHIGAN.

ILLUMINATED SIGN.

1,352,031. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed December 8, 1916. Serial No. 135,770.

To all whom it may concern:

Be it known that I, GEORGE H. SCHAFFNER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Illuminated Signs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to illuminated signs, and the primary object of my invention is to reduce the cost of using electrical signs by obtaining the same lighting effect or degree of brilliancy by reducing the number of electrical lamps heretofore necessary to obtain a desired display.

Another object of my invention is to provide illuminating means for sign boards which insures thorough illumination and obviates the necessity of using a large number of lamps or an expensive installation to accomplish a desired display of sign boards.

A further object of my invention is to provide an illuminated display sign including a casing having the entire interior thereof serving functionally as a reflector and within the casing are placed electric lamps which fully illuminate the interior thereof and at the same time cause beams or rays of light to be cast through interchangeable sign elements or exhibitors carried by the casing.

I attain the above objects by a sign adapted for interior or exterior display purposes and the structure is made to withstand the forces of nature, insure proper electrical connections, and at the same time be susceptible to any desired finish so as to present a neat and attractive appearance.

My invention will be hereinafter fully described and then claimed, and reference will now be had to the drawing.

Figure 1 is a front elevation of the sign partly broken away and partly in section;

Fig. 2 is an enlarged cross sectional view of the same;

Fig. 3 is an enlarged perspective view of an interchangeable sign element;

Fig. 4 is a horizontal sectional view of assembled sign elements; and

Fig. 5 is a cross sectional view of a modified form of sign.

The sign comprises a long casing, rectangular in cross section, and having top and bottom walls 1 and 2, rear and front walls 3 and 4, and end walls 5 and 6.

The front wall 4 has a sight opening 7 of less length and height than the casing in order to provide pockets 8 in the ends of the casing. The top wall 1, adjacent the opening 7, has an angle retaining member 9 and connected to the inner side of the front wall 4, at the lower edge of the opening 7, is an angle support 10. The member 9 and the support 10 coöperate with the front wall 4 in holding sign elements or exhibitors in position to close the opening 7 and be illuminated from the interior of the casing.

Each sign element or exhibitor comprises transparent plates 11 and 12 having the edges thereof bound together, with plates in parallelism, by a metallic binder 13. The innermost plate can be finished to provide a black or dark background for a remaining clear or transparent portion representing a character, numeral, insignia or other configuration, so that only the transparent portions of the sign elements or exhibitors will be displayed by the sign.

The clear or transparent portions of sign elements may be frosted or stippled, especially when a sign has two display faces and it is not desirable to use a partition, as will hereinafter appear.

The sign elements just described are an example of various forms of exhibitors that may be easily mounted in the casing, to close the opening 7, by first placing the upper edges of the elements between the member 9 and the front wall 4 of the casing, and then by pushing inwardly upon the lower edges of the elements, said elements may be seated on the support 10 to close the opening 7. Of course blank elements may be used for spacing purposes or to close those portions of the opening 7 not in use and to prevent emission of light between the elements, each element has a projecting vertically disposed flange or overlapping member 14 adapted to extend onto an adjacent member and thereby close the crack or space between assembled sign elements.

The inner sides of the end walls 5 and 6 are provided with lamp sockets 15 and 16 for lamps 17 and the socket 15 is connected by wires 18 to the socket 16 with the wires extending along the bottom of the casing. The socket 16 extends through the end of the wall 6 and has suitable lead-in wires 19 from a suitable source of electrical energy, as an ordinary electric light circuit.

Brackets 20 on the bottom wall 2 support parabolic reflectors 21 in the pockets 9 to

reflect light rays from the lamps 17 longitudinally of the casing, and with the interior of the casing finished in white or provided with reflecting surfaces, the entire interior of the casing will be illuminated and the light rays intensified to that extent as to fully illuminate the sign elements or exhibitors and cause the same to be prominently and clearly displayed at the front side of the casing.

In order that the sign may have two reading or display sides, a partition 22 may be arranged longitudinally of the casing, between the reflectors 21, as shown in Fig. 5.

It is a well-known fact that electric signs now in use having sign elements or exhibitors utilize a lamp for each element or exhibitor, consequently considerable electric current is consumed in the operation of such a sign. By using end lamps and reflectors as the illuminating means of the interior of my signs, there is a confusion of light or commingling of longitudinal light rays sufficient to thoroughly illuminate the sign elements, consequently, I can eliminate a great many lamps heretofore used and cut down the current consumption, thus permitting of a large display being obtained for advertisement or other purposes at a minimum expense.

What I claim is:—

An illuminated sign comprising a casing having a wall provided with a sight opening approximately the length of said casing, an angle support carried by the casing wall at the lower edge of the sight opening and extending throughout the length of said opening, an angle retaining member depending from the top of said casing adjacent the sight opening, said angle support and said retaining member having vertical flanges cooperating with the casing wall adjacent said angle support and said retaining member in providing an exhibitor holder, interexchangeable exhibitors detachably held in the exhibitor holder of the casing at the sight opening thereof, lamp holders on the inner sides of the end walls of said casing, reflectors in the ends of said casing supported from the bottom thereof and said lamp holders, said reflectors confronting each other, and lamps in said holders and reflectors with electrical connections in the bottom of said casing connecting said lamps.

In testimony whereof I affix my signature in the presence of two witnesses.

GEORGE H. SCHAFFNER.

Witnesses:

KARL H. BUTLER,

ANNA M. DORR.