

F. S. STAFFORD.
 INTERCHANGEABLE ILLUMINATED SIGN.
 APPLICATION FILED FEB. 21, 1910.

983,945.

Patented Feb. 14, 1911.

2 SHEETS—SHEET 1.

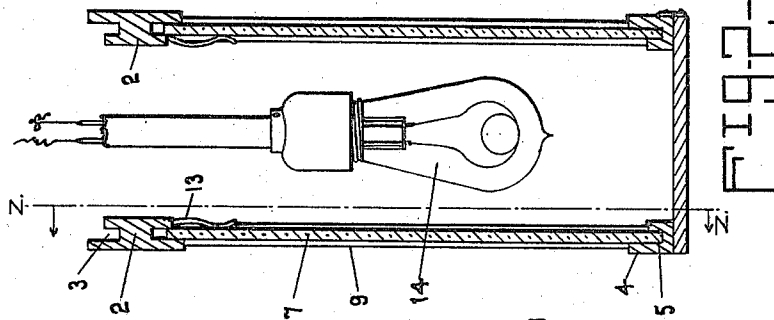


FIG. 2

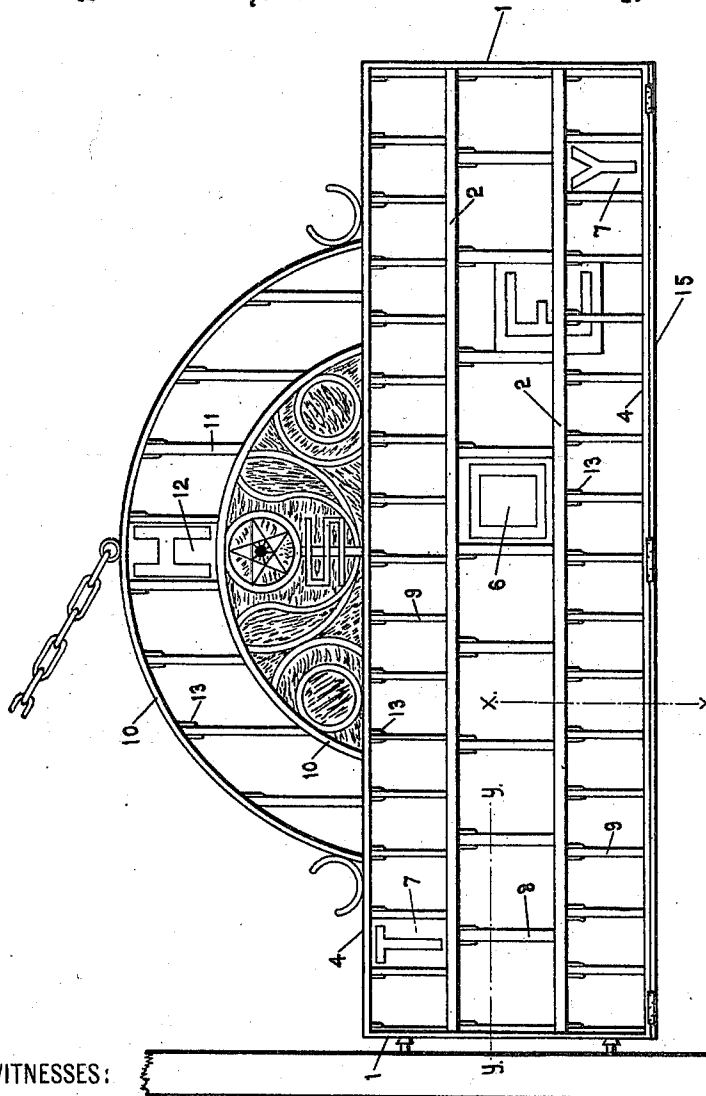


FIG. 1

WITNESSES:

A. S. Knight.
J. S. Murray

INVENTOR

Frederick S. Stafford.

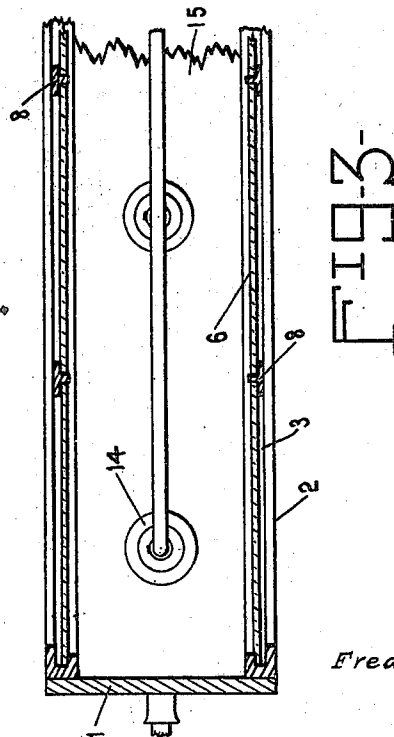
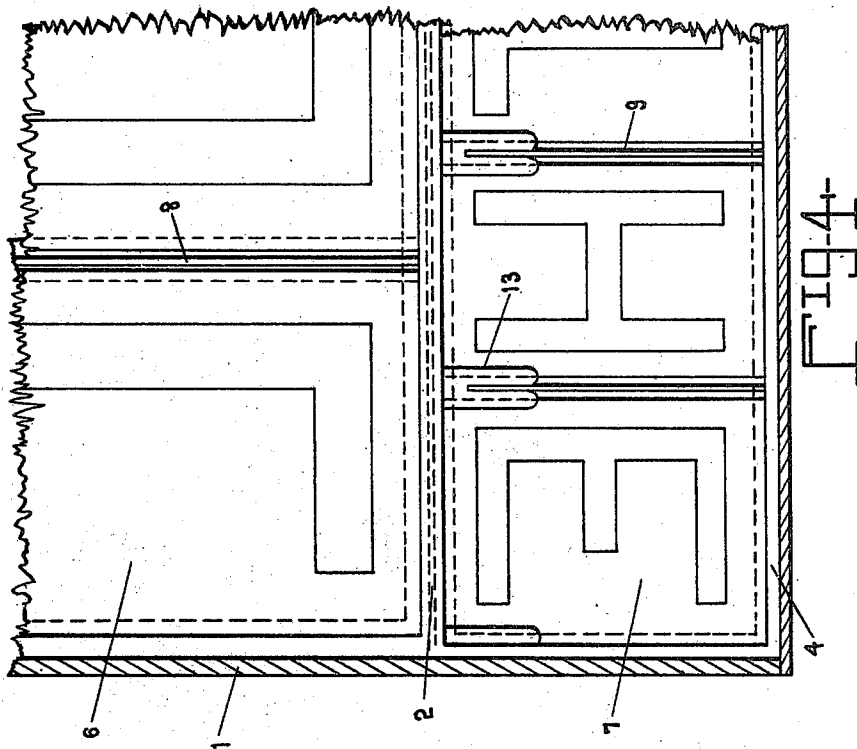
BY *John M. Bellman*
 ATTORNEY

F. S. STAFFORD.
 INTERCHANGEABLE ILLUMINATED SIGN.
 APPLICATION FILED FEB. 21, 1910.

983,945.

Patented Feb. 14, 1911.

2 SHEETS—SHEET 2.



WITNESSES:

A. S. Knight
J. S. Murray

INVENTOR

Frederick S. Stafford

BY

John M. Spellman
 ATTORNEY

UNITED STATES PATENT OFFICE.

FREDERICK S. STAFFORD, OF DALLAS, TEXAS.

INTERCHANGEABLE ILLUMINATED SIGN.

983,945.

Specification of Letters Patent.

Patented Feb. 14, 1911.

Application filed February 21, 1910. Serial No. 544,980.

To all whom it may concern:

Be it known that I, FREDERICK S. STAFFORD, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Interchangeable Illuminated Signs, of which the following is a specification.

My invention relates to new and useful improvements in illuminated signs, and relates more particularly to an improved means by which the illuminated letters are made interchangeable. Its object is to provide a casing adapted to receive a source of light in its interior and having a specially constructed frame at each side thereof to receive glass plates, each of which carries a letter.

A further object of the invention is to subdivide each of these frames into a number of smaller frames or compartments, in each of which one of said glass plates may be placed, the plates being easily removed in order that the words of the sign may be readily changed.

Finally, the object of the invention is to provide a device of the character described, that will be strong, durable, simple and efficient, and comparatively easy to construct, and also one in which the various parts will not be likely to get out of working order.

With these and various other objects in view, my invention has relation to certain novel features of the construction and operation, an example of which is described in the following specification and illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevation of the sign, which is shown as having the form of a rectangular base, surmounted by an upper casing of approximately semi-circular shape. Fig. 2 is a transverse vertical sectional view taken on the line $x-x$ of Fig. 1, showing the lower portions of the side walls of the sign casing, and an electric bulb therewithin. Fig. 3 is a transverse, horizontal sectional view taken on the line $y-y$ of Fig. 1, showing the aforesaid glass plates positioned in the compartments into which the frame which forms the side walls of the casing is divided. Fig. 4 is a longitudinal vertical sectional view taken on the line $z-z$ of Fig. 2, showing a portion of the side frames of the casing with the glass plates mounted therein.

Referring now more particularly to the

drawings wherein like numerals of reference designate similar parts in all the figures, the numeral 1 denotes the end-boards of the sign casing and 2 a pair of horizontal bars which extend longitudinally of the sign at each side thereof. These bars are provided with grooves 3 upon their upper and lower sides, the purpose of which grooves is made clear hereinafter. Along the upper and lower longitudinal edges of the casing, there extend bars 4, each of which is provided with a groove 5, these grooves being upon the under side of the upper bars, and upon the upper side of the lower bars. Between the bars 2 at each side of the casing are mounted a number of glass plates 6, the upper and lower edges of which are received by the grooves 3 in said bars. Between each of the bars 2 and the bar 4 which is adjacent thereto, are mounted glass plates 7, of a smaller size than the plates 6, the upper and lower edges of the plates being received by the grooves 3 and 5 of the bars. Each of the plates 6 and 7 carries a letter, the plates being so positioned that these letters form the words of the sign. Between the bars 2 extend vertical ribs 8 of T-shaped cross-section, which divide the space between said bars into compartments each of which receives one of the plates 6. The space between each of the bars 2 and the bar 4 adjacent thereto is similarly divided by ribs 9, forming compartments to receive the glass plates 7. The curved bars 10 which form the upper and lower edges of the superimposed casing are of similar construction to the bars 4. The vertical ribs 11, which together with said bars form compartments to receive the glass plates 12, are of similar shape to the ribs 8 and 9.

In order to hold the glass plates 6, 7 and 12 firmly in their respective compartments, double springs 13 are secured to the upper extremities of each of the ribs 8, 9 and 11, and the bifurcated extremities of these springs press upon the glass plates at either side of the ribs, preventing any rattling or displacement of said plates. The springs 13 will preferably be soldered upon the ribs, but any other suitable means of attachment may be employed.

The glass plates will be introduced into their respective compartments from the interior of the casing, their upper edges being pushed upwardly beneath the springs 13 into the grooves upon the underside of the

- bars 2 and 4, the lower edges of the plates being then permitted to drop into the grooves provided in the upper sides of said bars. In order that the upper edges of the
- 5 plates may not escape from the grooves receiving them, when thus allowed to drop down, said grooves are made somewhat deeper than those which receive the lower edges of the plates.
- 10 A plurality of incandescent bulbs 14, positioned within the casing will serve to illuminate the sign at night, the letters being made clearly visible by the light passing through the glass plates which carry them.
- 15 The casing is provided with a hinged door 15 upon its under side, to give access to the electric bulbs and to facilitate the mounting of the plates in their compartments and their removal therefrom.
- 20 It is obvious that other means of illumination than that shown may equally well be used and that various changes may be made in the form and proportion of parts and details without sacrificing the advantages or
- 25 departing from the spirit of the invention.

I therefore reserve the right to make such changes and alterations in said device as fairly come within the scope of the following claim.

What I claim is:

In a device of the character described, the combination with a casing, of longitudinally grooved horizontal bars and T-shaped vertical ribs extending across the sides of said casing forming rectangular compartments, 35 transparent plates mounted in said compartments each of which carries a letter, the upper and lower edges of said plates entering the grooves of the horizontal bars, bifurcated springs bearing upon said plates 40 adapted to hold them firmly in position, and a hinged door giving access thereto.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK S. STAFFORD.

Witnesses:

J. S. MURRAY,

EUGENIA HENSLEY.