J. C. EUBANK.

LETTER PLATE.

APPLICATION FILED AUG. 8, 1914.

1,157,856. Patented Oct. 26, 1915.

Fig. 1.

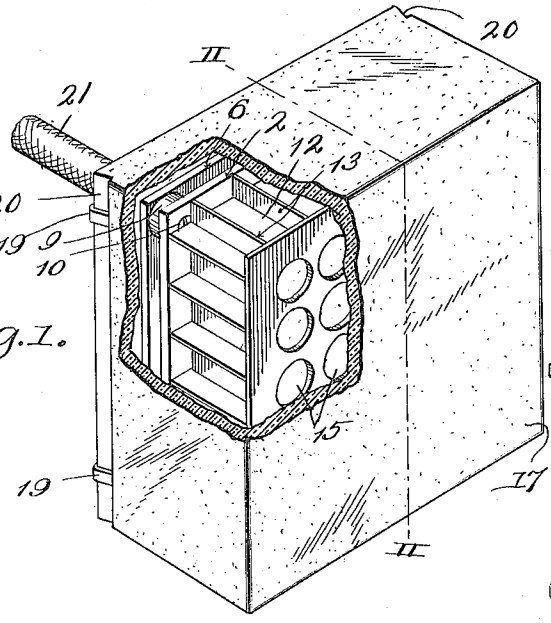


Fig. 4.

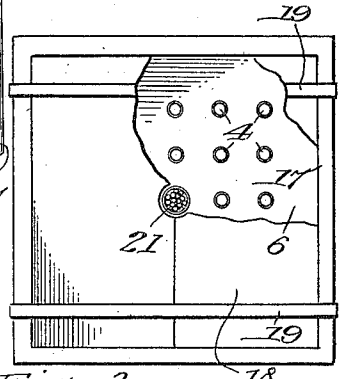


Fig. 2.

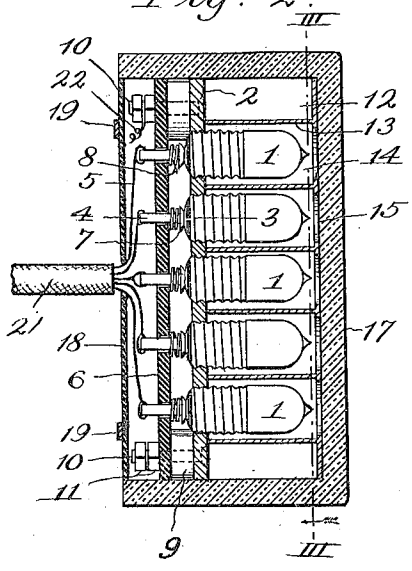
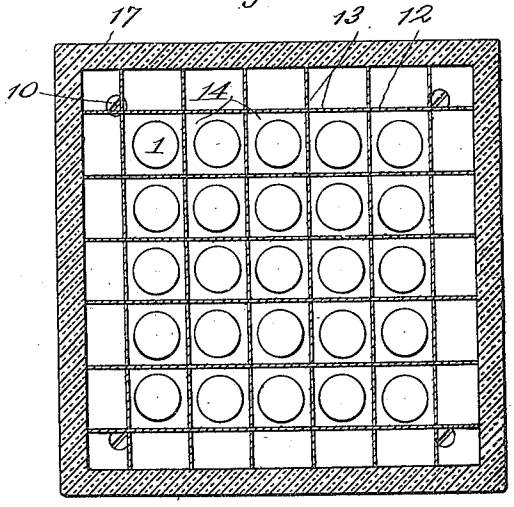


Fig. 3.



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LETTER-PLATE.

1,157,856. Specification of Letters Patent. Patented Oct. 26, 1915.

Application filed August 8, 1914. Serial No. 855,863.

To all whom it may concern:

Be it known that I, JUDSON C. EUBANK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Letter-Plates, of which the following is a specification.

My invention relates to a letter plate, which while susceptible of other uses, is particularly adapted for use in connection with automatic electric display signs, such for instance as those disclosed by U. S. Letters Patent No. 1,065,513, issued to me on the 24th day of June, 1913.

The present invention embodies a group of plain or colored lamps, which may be so connected that any desired number thereof may be illuminated to display any symbol, letter, number, or word, and when a number of the letter plates are employed, as will be the custom in the ordinary practice of the invention, entire sentences may be displayed when desired.

In order that the invention may be fully understood, reference will now be made to the accompanying drawings, in which:

Figure 1 is a perspective view of my letter plate with the cover thereof partly broken away. Fig. 2 is a vertical cross section on line II—II of Fig. 1. Fig. 3 is a vertical sectional view on the plane of line III—III of Fig. 2. Fig. 4 is a rear elevation of the letter plate with a portion thereof broken away.

In carrying out the invention, I employ a group of incandescent lamps 1, which are screwed into a socket plate 2 that constitutes a common return conductor for all of said lamps. When the lamps 1 are screwed into the socket-plate 2, the lead terminals 3 of said lamps engage contacts 4, each of which communicates with a lead wire 5. The contacts 4 extend through an insulating plate 6, and their heads 7 are yieldingly-held in engagement with the terminals 3 through the intermediacy of coil springs 8, interposed between the heads 7 and the plate 6. By thus yieldingly pressing the contacts 4 against the terminals 3, perfect contacts are not only insured between the heads 7 and said terminals 3, but the lamps 1 are reliably held in the socket plate 2 and prevented from accidentally unscrewing therefrom, even though subjected to considerable vibration. The plate 6 is spaced rearwardly from the socket plate 2 by sleeves 9, against which said plates are reliably held by screws 10 and nuts 11.

12 designates a partition comprising a plurality of intersecting strips 13 arranged to form a cell 14 for each lamp 1. Strips 13 are constructed, preferably, of opaque material, so that the light from one lamp will not shine into the cell of the adjacent lamps, but on the contrary will be projected forwardly through its respective opening 15, in the front wall of the partition 12.

When the several parts are assembled, the rear of the partition 12 is held against the socket plate 2 by a box-like transparent or translucent cover 17, which engages the margins of said socket plate 2 and the plate 6, and extends rearwardly beyond the rear ends of the contacts 4 and the screws 10. Cover 17 is, preferably, made of glass having a ground or otherwise roughened surface to render the dark lamps invisible and cause the symbols displayed by the glowing lamps to show more distinctly.

The contacts 4 are protected from dust and other foreign matter by an insulating sheet 18, held in the rear end of the cover 17 by a pair of spring clips 19, the ends of which are bent to enter the dove-tail grooves 20 in the vertical rear ends of said cover 17.

For convenience in getting the sheet 18 over the cable 21 formed by the lead wires 5, I form said sheet 18 in two parts, as disclosed by Fig. 4.

Should it become necessary to gain access to any of the lamps 1, or to the contacts 4, it is only necessary to slip the clips 19 out of the grooves 20, after which the cover 17, the partition 12, the plate 6, and the sheet 18 can be readily removed.

As the socket plate 2 acts as a common return conductor for all of the lamps 1, the wiring for said lamps is correspondingly simplified, as but one return wire 22, connected to one of the screws 10, is required for the purpose of conducting the current back to the source of electrical energy.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

A device of the class described consisting of a plate having a plurality of threaded sockets formed therein, a plurality of intersecting strips abutting the plate to provide cells, lamps threaded in said sockets and ex-

tending into the cells, a front wall abutting the outer ends of the strips and having a plurality of openings therein which register with the cells, and a one-piece glass cover having a front wall and side walls inclosing the cells with the first mentioned front wall flush against the inner face of the front wall of the cover, while the side walls thereof engage the margins of the plate and of the first mentioned front wall.

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

JUDSON C. EUBANK.

Witnesses:
F. G. FISCHER,
L. J. FISCHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."