

J. BUTENSCHON.

ILLUMINATED SIGN.

APPLICATION FILED SEPT. 30, 1914.

1,157,504.

Patented Oct. 19, 1915.

2 SHEETS—SHEET 1.

Fig. 1.

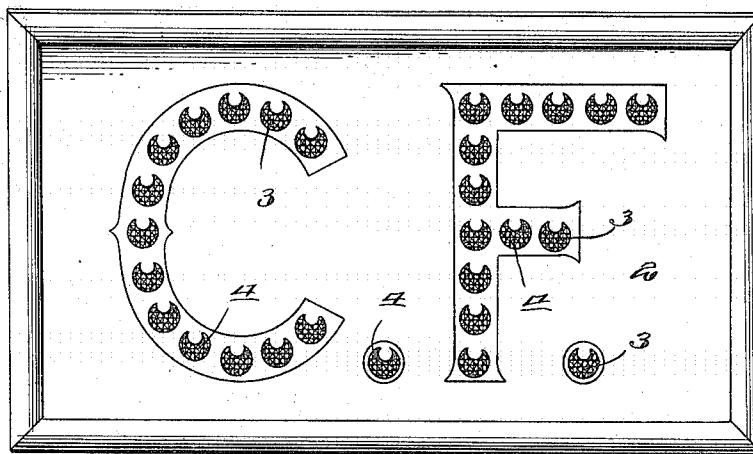
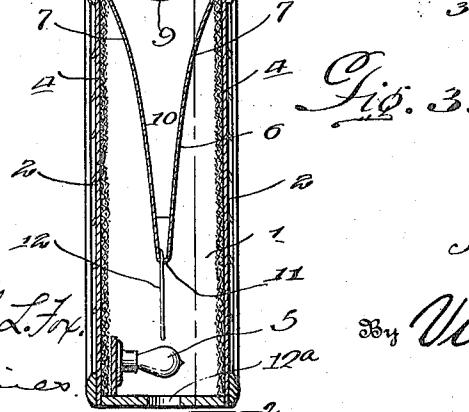
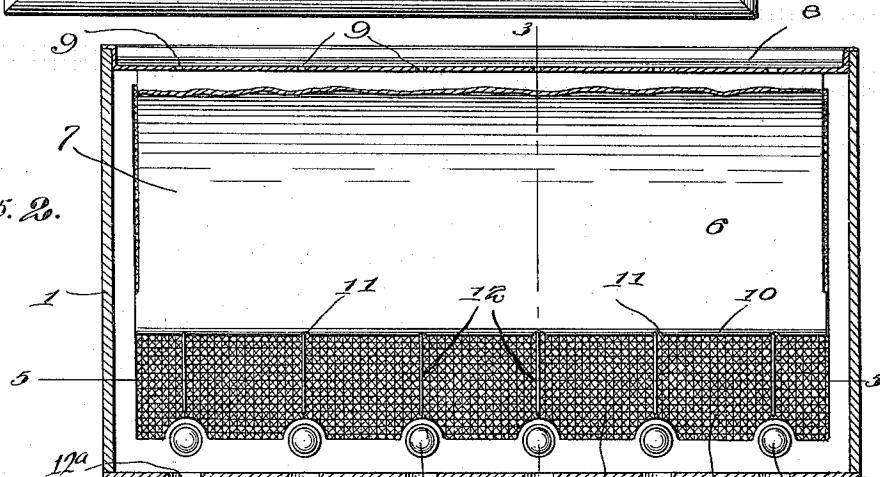


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

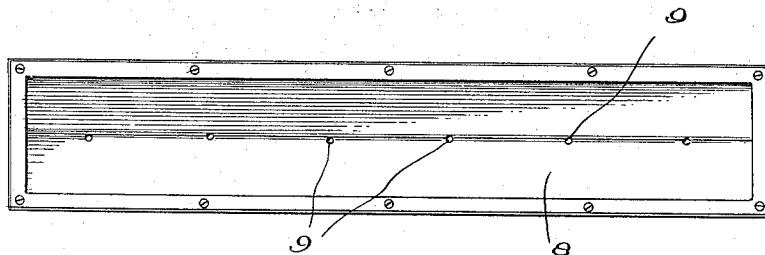


Fig. 5.

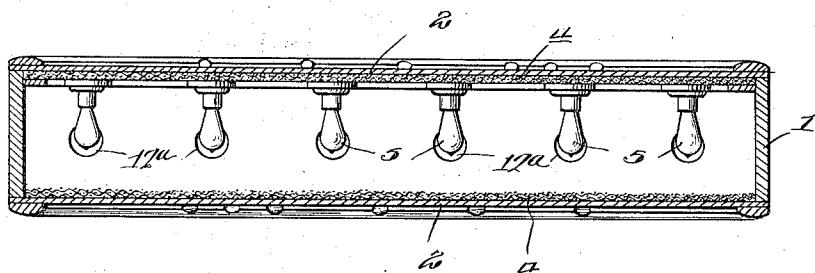
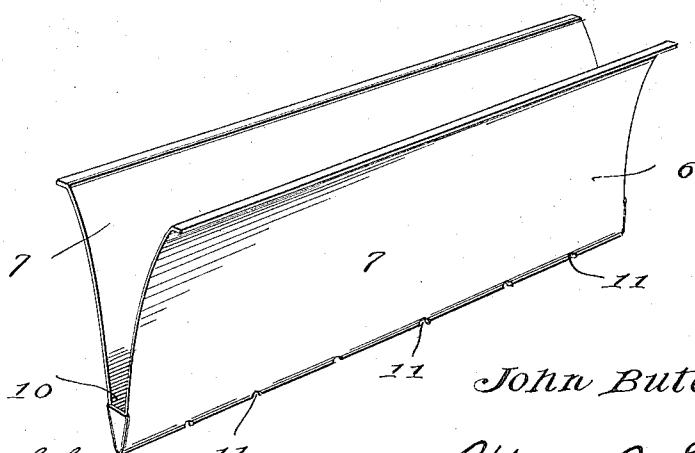


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN BUTENSCHON, OF ANNISTON, ALABAMA.

ILLUMINATED SIGN.

1,157,504.

Specification of Letters Patent.

Patented Oct. 19, 1915.

Application filed September 30, 1914. Serial No. 864,333.

To all whom it may concern:

Be it known that I, JOHN BUTENSCHON, a citizen of the United States, residing at Anniston, in the County of Calhoun and State of Alabama, have invented new and useful Improvements in Illuminated Signs, of which the following is a specification.

This invention relates to improvements in illuminated signs, and has particular application to double faced signs of the general character disclosed in my prior application filed May 19, 1914, Sr. No. 839,624.

In my aforesaid application I disclose an illuminated sign embodying, among other features, a face plate cut out to form the letters or characters, a reflector disposed behind the face plate, and a source of light, such as one or more electric lamps, interposed between the face plate and reflector and projecting its rays upon the reflector so that the light will be projected through the letters or characters of the sign to illuminate the same.

The purpose of my present invention is to provide means whereby water, preferably rain water, may be supplied to the interior of the sign to wash off the lamps and keep the same clear and thus prevent the lamps from being coated and clouded with dust and dirt and impairing the illuminating efficiency of the sign.

A further object of the invention is to provide a novel construction and arrangement of double reflector, for projecting the light rays through spaced parallel face plates, together with means coöperating with the reflector by which the reflector serves as a medium for conducting the water or cleansing fluid to the lamps.

With the foregoing and other objects in view, the invention consists of the features of construction, combination and arrangement of parts herein fully described and claimed, reference being had to the accompanying drawings in which:-

Figure 1 is a face view of a sign constructed in accordance with the present invention. Fig. 2 is a vertical longitudinal section on line 2—2 of Fig. 3. Fig. 3 is a vertical transverse section on line 3—3 of Fig. 2. Fig. 4 is a top plan view of the sign. Fig. 5 is a horizontal transverse section on line 5—5 of Fig. 2. Fig. 6 is a perspective view of the reflector.

Referring now more particularly to the drawings, 1 designates a substantially rec-

tangular frame constructed of any suitable material, while 2, 2 indicate face plates closing the opposite sides of the frame and suitably fastened thereto. In the present instance, each face plate 2 is cut out to form a series of openings 3, arranged to simulate letters or characters. Disposed immediately behind each face plate 2 and in face to face contact therewith is a screen 4, having the edges thereof suitably secured to the inner walls of the frame. This screen is preferably coated with some suitable sort of reflecting material, such as white enamel, and suitably arranged within the bottom of the frame are incandescent lamps 5, whereby the interior of the frame, sign or casing is illuminated and light projected against a centrally disposed and double reflector 6, whereby rays are projected outwardly through the screens 4 and openings 3 in the face plates, thereby illuminating the characters or letters of the sign.

In practice, the reflector 6 consists of a pair of concavo convex plates 7 of aluminium or other suitable material, which plates are secured at their upper side edges to the side walls of the frame near the top thereof and thence depend in converging relation to a point about midway of the height of the casing, the lower or proximate edges of said reflector plates being suitably united and the concaved faces of said plates being arranged opposite the respective face plates so that the light rays from the lamps will be reflected both outwardly and downwardly through the openings 3, thereby illuminating both the characters or letters as well as the vicinity of the sign. In practice, the faces of the double concaved screen are so arranged that one of the surfaces of said reflector and the foraminous material or screen of one face plate or sign form a back ground for the other face plate or sign, and vice versa, the screens of the particular signs acting to break up the light rays and render the reflector and lamps within the casing invisible.

The sides of the frame or casing extend upward at the top to form a catch basin 8 for rain or wash water, which basin is in communication with the interior of the sign through a desired number of openings 9 in the top of the casing. The water from the basin flows through these openings into the space, chamber or V-shaped trough 10 formed by the reflector 6, and at the point of emergence of the plates of said reflector the

latter is formed with openings 11 which may be equal in number and coincide in arrangement with the openings 9 for the discharge of the water into the casing. The openings 5 11 are of a size to permit the water to drip outwardly therethrough and to flow along depending conducting wires or filaments 12, the lower ends of which terminate above or are disposed in proximity to the bulbs of 10 the incandescent lamps so that the water dripping from the filaments will flow upon said bulbs. By this means the bulbs will be washed clear of all dirt and dust whenever water is supplied to the sign during a rain 15 fall or when a suitable amount of water is placed within the basin 8 for distribution. The bulbs may thus be kept clean so that the amount of light projected by the lamps will not be impaired or diminished.

20 It will of course be understood that the water and dust or dirt dislodged thereby from the lamp bulbs may be allowed to discharge through suitable openings 12^a, in the bottom of the sign casing, all the moisture allowed 25 to evaporate and the dust and dirt to settle for removal at stated intervals, the main purpose of the invention being to insure the keeping of the lamp bulbs washed and free 30 from dust or other clouding agents, so that a full volume of light will at all times be supplied. While reliance may be placed upon rain water for the washing action, it will be evident that the water or other 35 cleansing fluid may be supplied in any suitable manner to the gutter or basin 8, the invention not being limited in this particular.

I claim:—

1. An illuminated sign including a casing having a face plate, a source of light composed of one or more electric lamps, a receptacle for a cleansing liquid in said casing, and means for conducting the same to the lamps to keep the lamp globes clear.
2. An illuminated sign including a casing 45 having a face plate, illuminating means within the casing consisting of one or more electric lamps, a reflector forming a conductor, and means for conducting a cleansing fluid from said reflector to the lamp 50 globes to keep the same clear.
3. An illuminated sign including a casing provided with a catch basin, a face plate, a reflector forming a conductor adapted to

receive a cleansing fluid from said catch basin, a source of light within the casing 55 consisting of one or more electric lamps, and means for conducting a cleansing fluid from said reflector to the lamp bulbs to keep the same clear.

4. An illuminated sign including a casing 60 having its top formed to provide a catch basin having openings, a face plate, a reflector forming a channel communicating with said openings, a source of light consisting of one or more electric lamps, and 65 conductors for conveying a cleansing fluid from the channel to the lamps.

5. An illuminated sign including a casing having a catch basin and a face plate, a reflector providing a conductor communicating 70 with the catch basin, electric lamps within the casing, and filaments leading from the channel for conducting a cleansing fluid to the lamps.

6. An illuminated sign including a frame 75 having a catch basin at the top thereof, and a face plate, a reflector providing a trough communicating with said basin, one or more electric lamps, and drip wires for conducting a cleansing agent from said trough to 80 the lamps.

7. An illuminated sign including a casing having a catch basin at the top thereof provided with openings, a V-shaped reflector forming a trough communicating with said 85 catch basin through said openings and having discharge openings at the point of convergence of its side portions, lamps within the casing, and filaments for conducting a cleansing fluid from the discharge openings 90 to the lamps.

8. An illuminated sign including a casing having a face plate, a source of light composed of one or more electric lamps, a water receptacle in said casing, a catch basin for 95 rain water communicating with said receptacle, and means for conducting the water from said receptacle to the lamps to cleanse the globes thereof.

In testimony whereof I affix my signature 100 in presence of two witnesses.

JOHN BUTENSCHION.

Witnesses:

LOUISA NONNENMACHER,
W. P. ACKER.

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