

No. 824,494.

PATENTED JUNE 26, 1906.

G. R. MACOMBER.

ELECTRIC SIGN.

APPLICATION FILED DEC. 22, 1906.

Fig. 1.

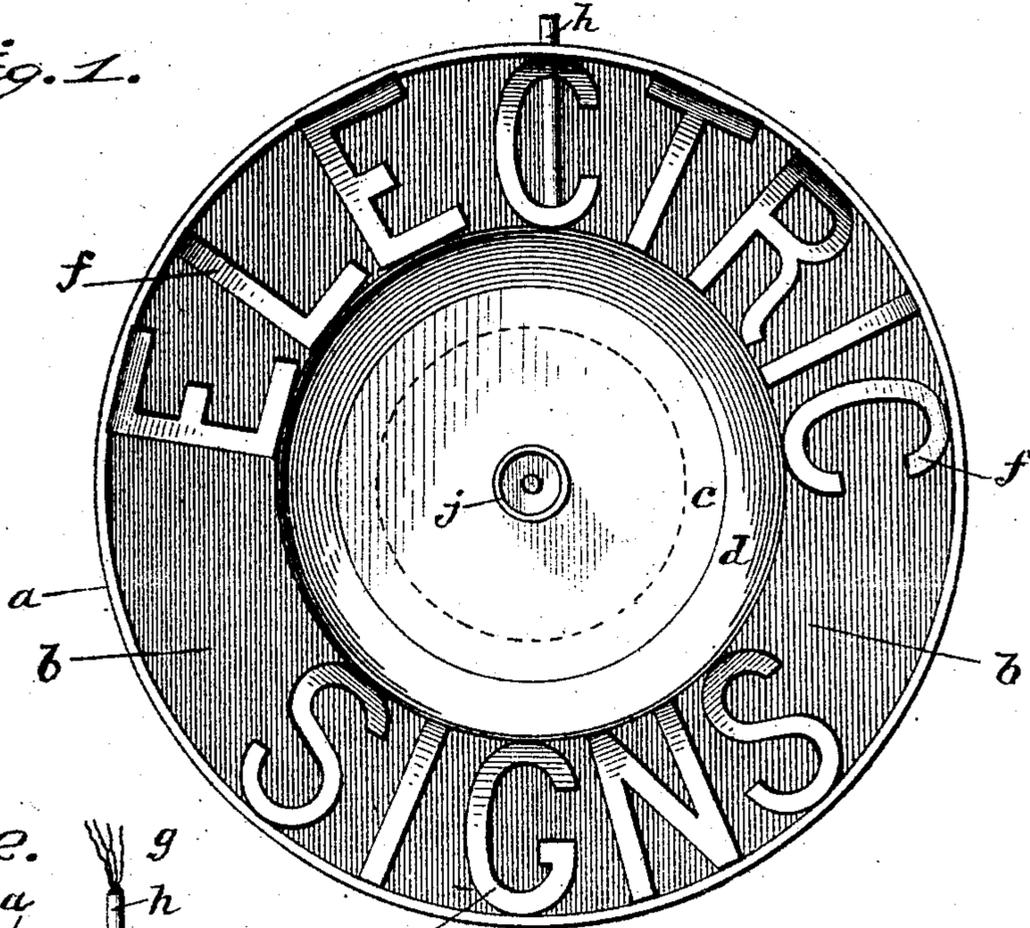


Fig. 2.

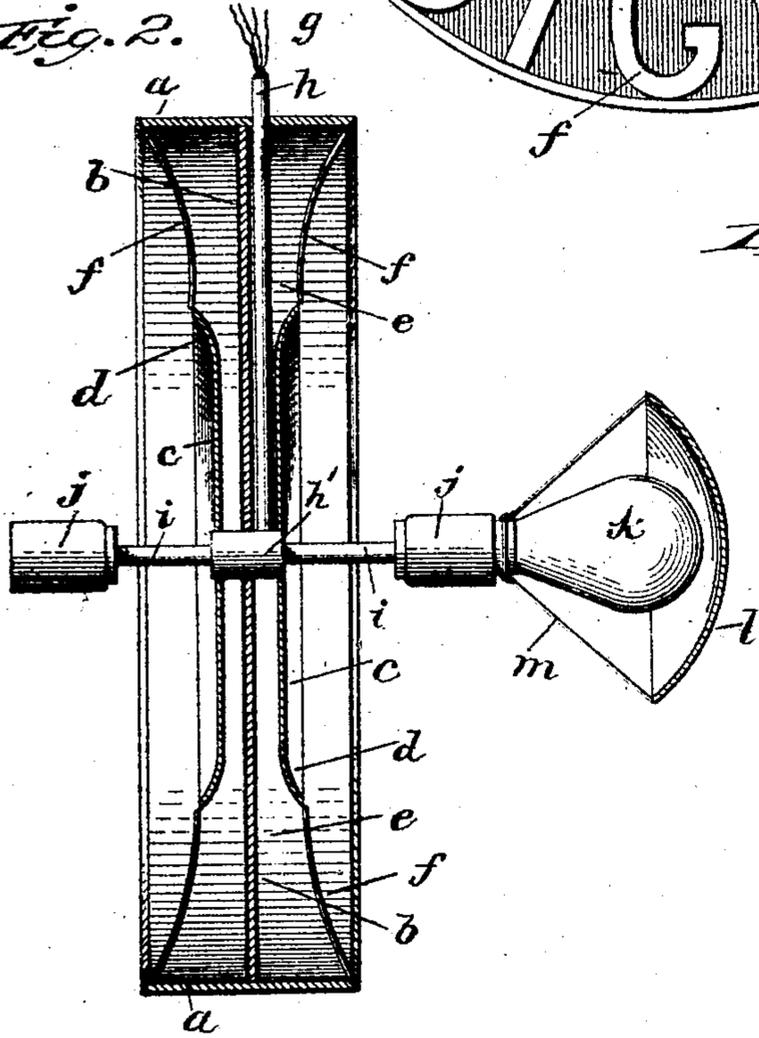


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE R. MACOMBER, OF BALTIMORE, MARYLAND.

ELECTRIC SIGN.

No. 824,494.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed December 22, 1905. Serial No. 292,884.

To all whom it may concern:

Be it known that I, GEORGE R. MACOMBER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Electric Signs, of which the following is a specification.

This invention relates to a street-sign lighted by electricity at a single central point whereby at night the characters of the sign will be visible, but the electric lamp itself invisible.

Referring to the accompanying drawings, Figure 1 is a front view of the circular sign. The inner broken circular line indicates the shape and relative size of the reflector. Fig. 2 is a vertical diametrical section of the circular sign. Fig. 3 is a diagram of all the letters of one-half the circular sign and including also those on a vertical diametrical line and showing adjacent each letter a line whose length equals the height of the letter, said lines illustrating curves whose radii gradually increase from the uppermost to the lowermost.

The sign is circular in shape. It may be made double—that is, two sided—as shown in the section view Fig. 2, a sign of this character being adapted for a position cross-wise of a street-pavement, where one of its sides would show to persons at one end of the street and the other side of the sign would show to persons at the other end of the street. The sign may also have but one side, which form would be suitable for placing at the front of a building.

The letter *a* designates the outer circular wall, made of any suitable material that will be tight and exclude rain. A wall *b* fills the entire area within the circular wall and serves as a background. In the case of the double or two-sided sign this wall *b* forms a central division and serves as a background for the two opposite sides. Concentric with the center is a circular plate *c*, whose rim *d* is dished or concave. The rim or edge of the outer circular wall *a* projects forward of the dished rim *d* of the center plate. In other words, the outer circular wall *a* and flat back wall *b* form a recess or cavity, and the said concentric center plate *c* has vertical position back within said recess. An annular cavity or space *e* is formed between the center dished rim *d* and the outer circular wall *a*, and

letters, figures, or characters *f*, preferably of sheet metal, bridge across the said annular space, each letter in the present instance having a radial position. It will be seen that the circular wall-rim *a* and the concentric smaller circular dished rim *d* serve as abutments on which the top edge and bottom edge of the letters or other characters of the sign are supported and secured. It will be seen the letters are both radial and also inclined or curved. As all the letters are arranged in a circle, they form as a whole a concaved sign, each letter slightly curving from top to bottom.

I have found that in order to render each and all of the letters equally conspicuous in the reflected electric light it is necessary to have the curve of those letters which are uppermost of a shorter radius and those which are lowermost of a longer radius. I have therefore provided that the letters or characters be curved by using radii of gradually-increasing length proceeding from the uppermost to the lowermost letter or character. As the sign is usually elevated at a height above a person's head, this insures that the lowermost letters of the circle will be seen better.

Fig. 3 illustrates this difference in the curvature of the letters. The letters shown in Fig. 3 are those to be seen when looking at the right-hand half of the sign, commencing at the top. Adjacent each letter is a line whose length equals the height of the letter. These lines are curved. The uppermost line illustrates a curvature whose radius is shorter than that of the next line. Each succeeding line downward has less curvature, or, in other words, a greater radius, until the lowermost line, which has the greatest radius. The conductor-wires *g* extend through a pipe *h* to the center, where it connects with a larger short section of pipe *h'*, which at the center extends like a hub between the two concentric plates *c*. A branch pipe *i* runs out at each side of the sign and has a screw-socket *j* of usual construction, into which the screw-neck of an ordinary incandescent bulb-lamp *k* is fitted. A circular concave reflector *l* of suitable construction covers the bulb-lamp and is suitably supported by wires *m*, attached to the reflector and also attached to either the glass bulb-lamp or the screw-neck thereof, so that the bulb-lamp and reflector

2

go together. When unscrewing the lamp to remove it from the socket *j*, the reflector will also be removed.

In Fig. 2 a lamp and reflector is shown attached at one side of the sign, but none at the other. The size and position of the circular reflector *l* are indicated on Fig. 1 by the broken circular line. It will be understood the light of the central lamp *k* will be thrown by the reflector *l* equally on all the letters or characters *f*, which are equidistant from the lamp, and that as the uppermost radial letters or characters have the greatest curvature from top to bottom and those on either side proceeding downward have a gradually-decreasing curvature and the lowermost have the least curvature all the letters or characters will be equally conspicuous when viewed at a slight elevation above the street. As the face of the letters or characters *f* are designed to be brilliant and shiny, either silver or gold color, and the background *b* to be preferably black color, the letters will stand out boldly in contrast.

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

A sign having a circular wall; a flat wall back within said circular wall; letters or other characters placed radially within said circular wall and also inclined—the inner ends being depressed, and each letter or character curved from top to bottom, the uppermost letters or characters having the greatest curvature and those on either side proceeding downward having a gradually-decreasing curvature and the lowermost having the least curvature; a lamp supported at the center but in front of the sign, and a reflector covering the lamp to throw the light equally on all the letters or characters.

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

GEORGE R. MACOMBER.

Witnesses:

JOHN W. HEWES,
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