

C. W. DAKE.
 INCANDESCENT ELECTRIC HEADLIGHT.
 APPLICATION FILED JUNE 12, 1912.

1,101,686.

Patented June 30, 1914.

Fig. 2.

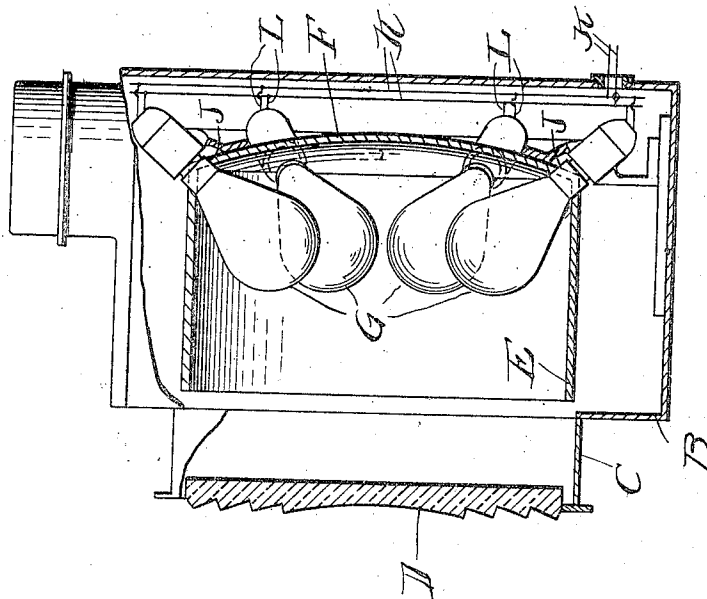
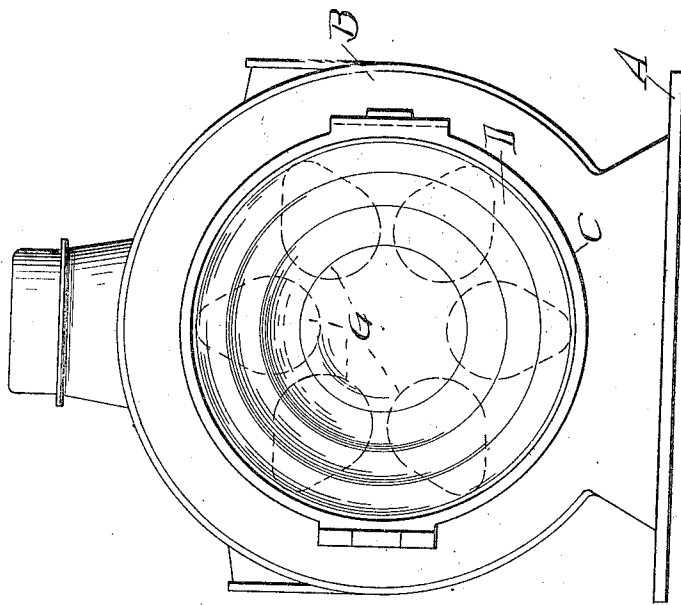


Fig. 1



Witnesses:
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 Samuel W. Doremus

Inventor:
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 by *John R. Kato*
 atty.

UNITED STATES PATENT OFFICE.

CHARLES W. DAKE, OF CHICAGO, ILLINOIS, ASSIGNOR TO PYLE-NATIONAL ELECTRIC HEADLIGHT COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

INCANDESCENT ELECTRIC HEADLIGHT.

1,101,686.

Specification of Letters Patent.

Patented June 30, 1914.

Application filed June 12, 1912. Serial No. 703,122.

To all whom it may concern:

Be it known that I, CHARLES W. DAKE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Incandescent Electric Headlights, of which the following is a specification.

My invention relates to headlights particularly intended for locomotive purposes and has for its object to provide convenient means whereby such headlights may be properly equipped with incandescent lamps. It has hitherto been the practice to provide locomotive headlights with arc lamps. It is desirable to substitute incandescent lamps if that can be done. To do this there must, of course, be a considerable number of units so that a fairly effective light will remain after some of the units have burned out or been destroyed. On the other hand, the area of the headlight is relatively small and incandescent lamps, if used, must be grouped so that a sufficient number of them may be mounted in the relatively small field with proper relation to the lens, reflector or both.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a front view of a headlight, and Fig. 2 is a side view with parts shown in section.

Like parts are indicated by the same letters in all the figures.

A is the base and B the casing. Forwardly projecting from the casing and secured thereto in any desired manner is the thimble C which contains at its outer end the lens D. Within the casing is the cylindrical sleeve E at the inner end of which is the reflector F. These parts are properly secured within the casing and the casing is adapted to be mounted in proper position at the front and end and upper side of the boiler.

G, G are incandescent lamps inserted through the openings J, J at the intersection of the cylindrical sleeve E with the reflector F, and these lamps are placed diagonally as shown.

K, K are the main conductors to which the lamps are coupled in multiple by the conductors L, L.

My drawings are somewhat diagrammatic, but sufficient to indicate the invention and the manner of its use.

The incandescent lamps may be secured in any desired manner, but they should be so secured that they can be put into place or removed through the cylindrical sleeve E by moving the lens D or thimble C without disturbing the other parts. Placing the lamps in this inclined way their bulbs are brought together over the reflector leaving a considerable part of the reflector surface at the middle thereof exposed. I am enabled to get a much larger number of lamps into position than if they were placed horizontally or substantially parallel to the lens and I get a much more effective light than would be possible if they were placed parallel with the sides of the cylindrical sleeve E. By arranging the lamps as indicated a large central area of the reflector is entirely free from obstruction and nothing but the transparent lamp and its filaments and wires is placed in front of the reflector.

The use and operation of my invention will be clear from what has preceded.

The parts are all secured together so as to be easily removable from place or from one another if desired. The short thimble C and lens D may be hinged or otherwise connected so that, being swung to one side, free access is had to the incandescent lamps and the interior of the device. The loss of one or two lamps in the series will not very perceptibly effect the practical illuminating power of the lamp. The arrangement of the lamps is effective with a lens only or with a reflector only. I prefer to use lens, reflector and incandescent lamps together. The casing is preferably tubular to aid in projecting the rays of light forwardly. The lens is adapted for the same purpose and the reflector in the rear of the tubular casing is intended for the same purpose. The incandescent lamps are coupled in multiple so

that when one lamp is burned out, the others are not interfered with.

I claim:

3 A headlight comprising a slightly curved reflector, a cylindrical sleeve projecting forwardly from the periphery of the reflector, and a plurality of electric lights grouped about the reflector and projecting inwardly from near the line of connection between the

reflector and the sleeve toward the center of 10 the reflector.

Signed at Chicago, Illinois, this 10th day of June, 1912.

CHARLES W. DAKE

Witnesses:

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