

(No Model)

W. W. WHITCOMB.
DASHER HEADLIGHT.

No. 582,800.

Patented May 18, 1897.

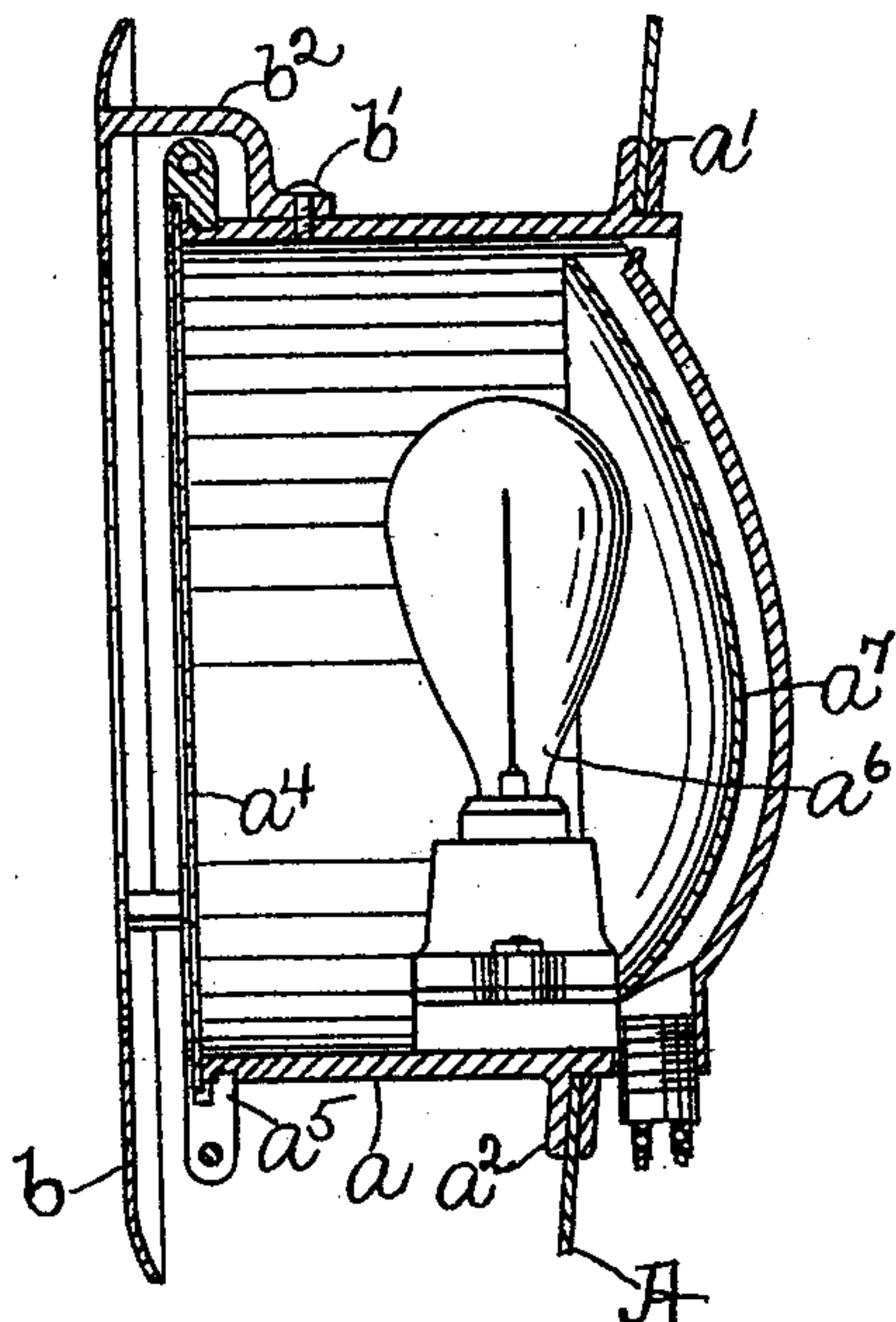


FIG. 1.

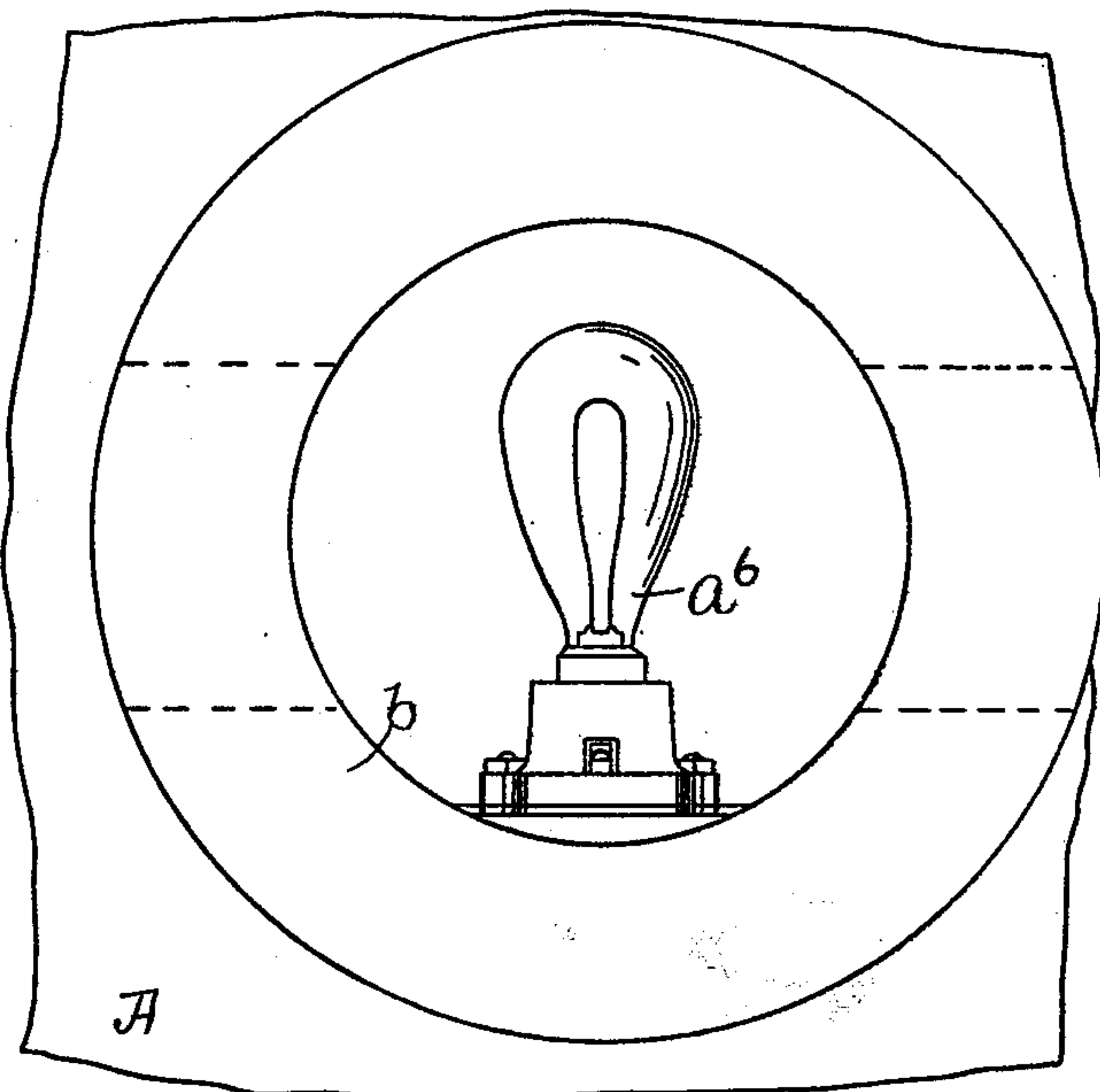


FIG. 2.

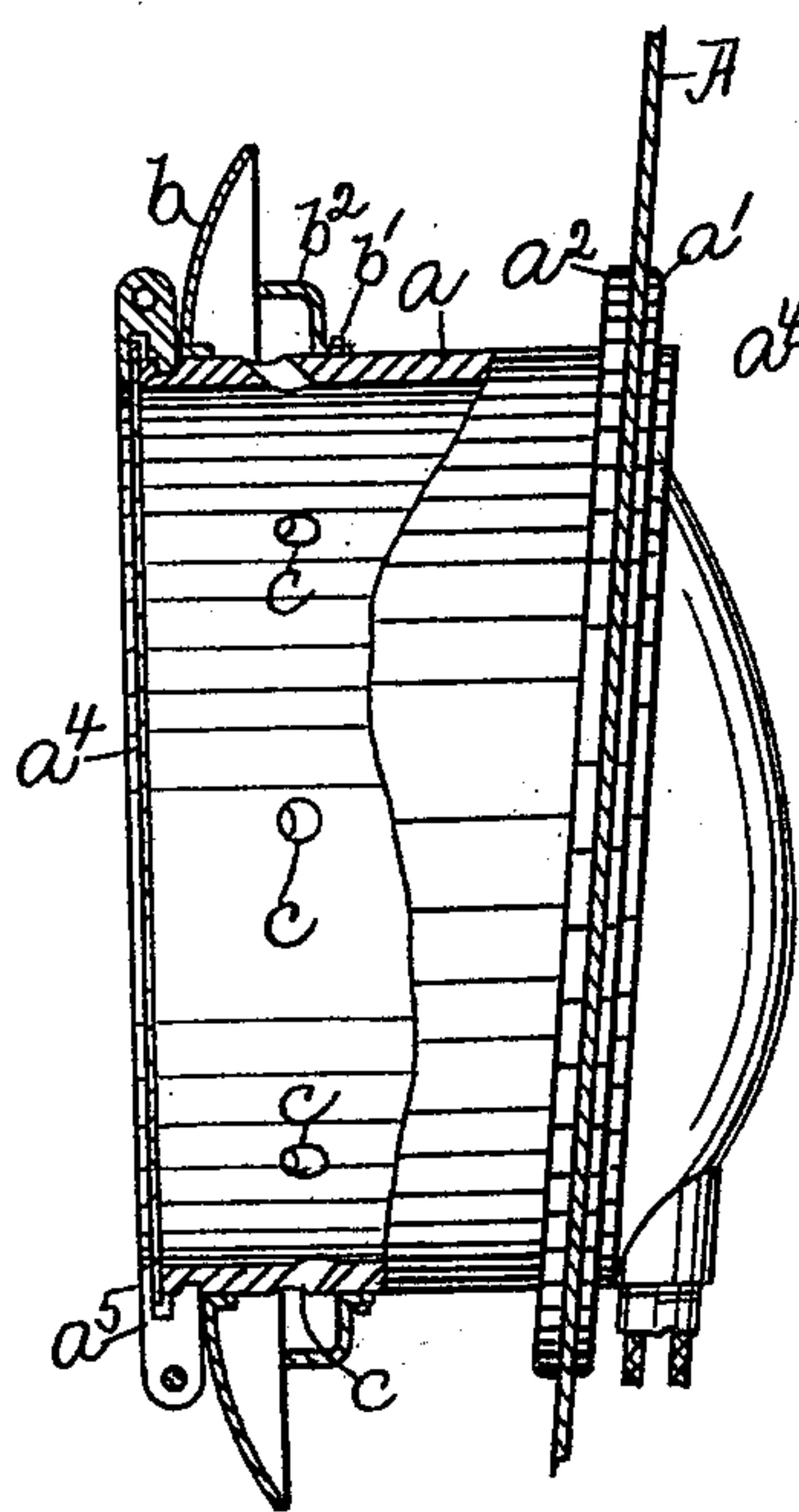


FIG. 3.

WITNESSES.

Matthew M. Blunt.
J. Murphy.

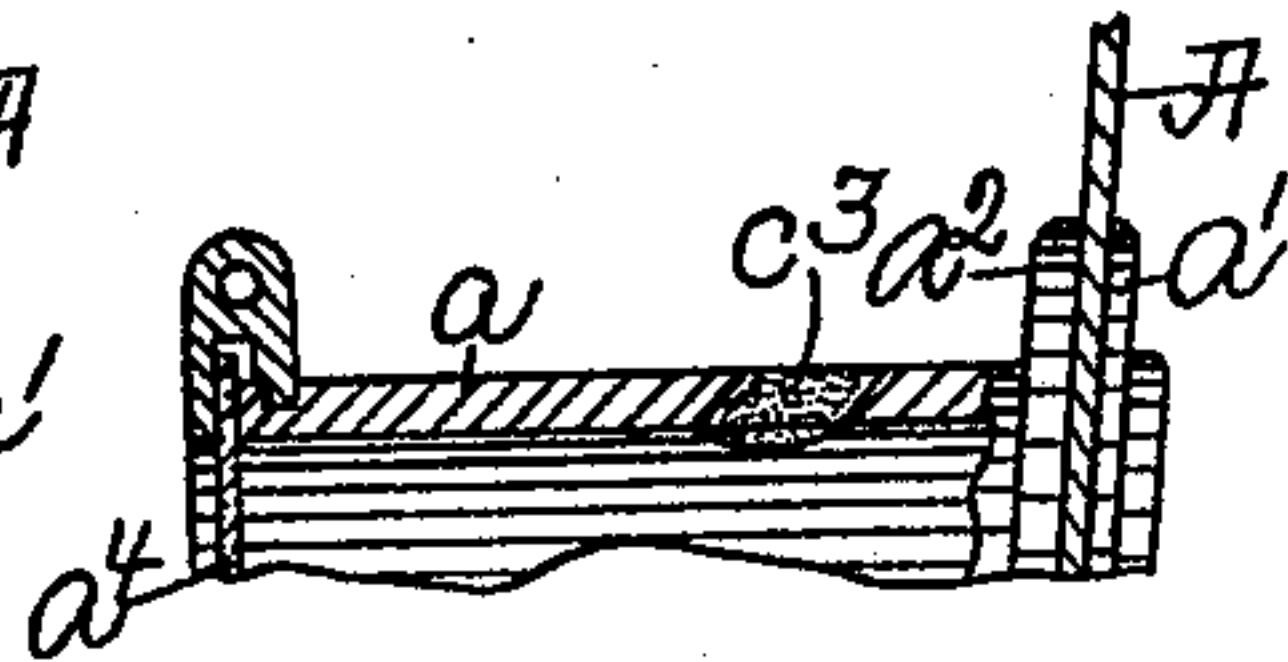


FIG. 5.

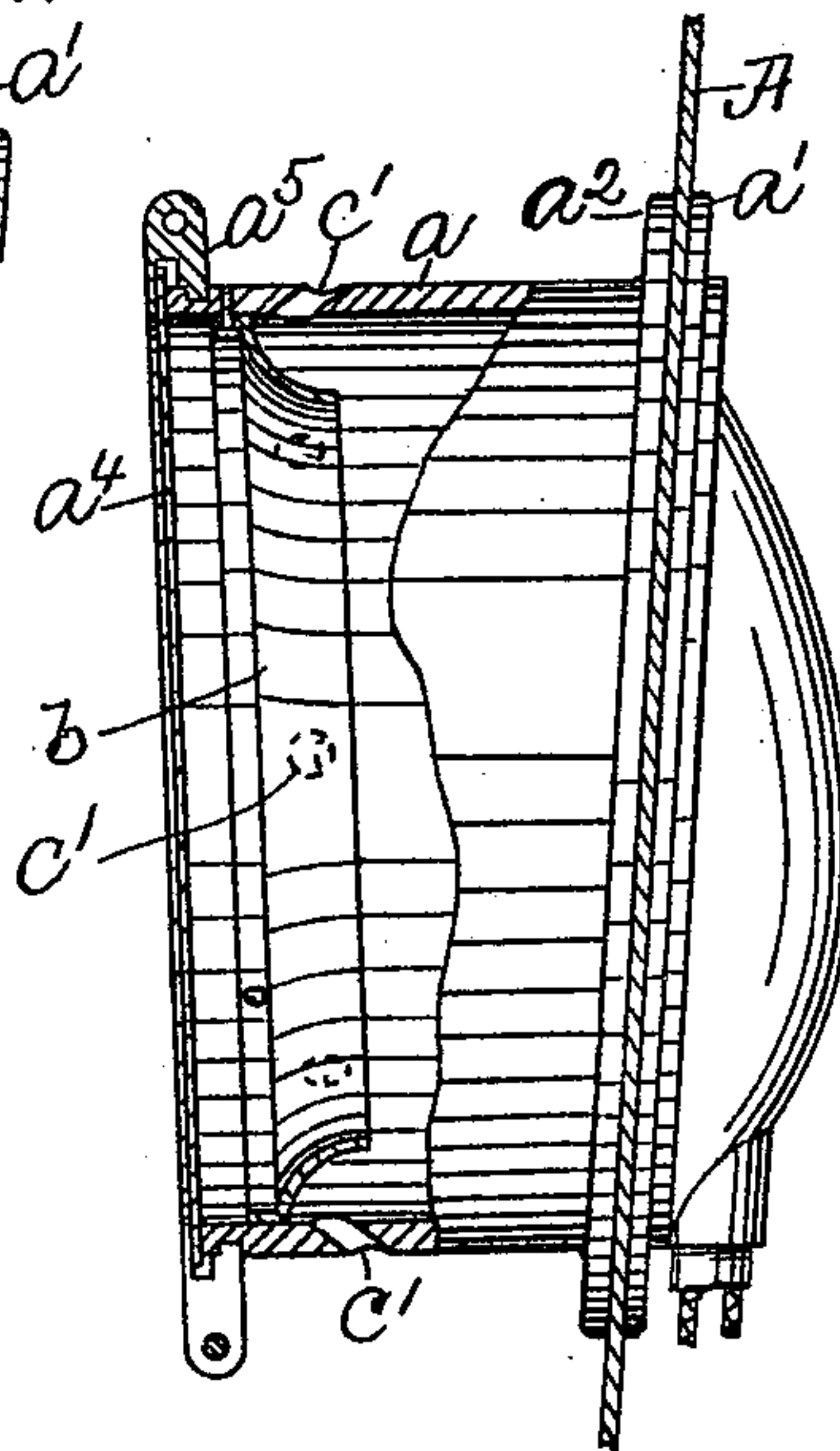


FIG. 4.

INVENTOR.
William W. Whitcomb

by Jas. H. Churchill

ATT'Y.

UNITED STATES PATENT OFFICE.

WILLIAM W. WHITCOMB, OF BROOKLINE, MASSACHUSETTS.

DASHER-HEADLIGHT.

SPECIFICATION forming part of Letters Patent No. 582,800, dated May 18, 1897.

Application filed November 9, 1896. Serial No. 611,444. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. WHITCOMB, residing in Brookline, in the county of Norfolk and State of Massachusetts, have invented an Improvement in Dasher-Headlights, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to headlights of that class known as "dasher-lights," which are now commonly attached to the dasher of electric street-railway cars. Electric street-railway cars are now commonly provided with a dasher-light which projects in front of the dasher substantially at its center and is used to illuminate the track and road-bed in front of the car. Electric-railway cars have usually placed upon their dashers above and below the headlight the names of the route or destination of the car, which with the dasher-lights as now constructed cannot be discerned at all as the car is approaching. Prior to this invention I am aware that numerous attempts have been made to provide electrically-propelled cars with some arrangement whereby the destination or route of the car may be made known to persons on the sidewalk or in the street as the car approaches, and I am aware that it has been proposed to utilize for this purpose illuminated signs on top of the car, which take the place of the ordinary signs; but so far as I am aware this method of illuminating the car has not gone into practice, no doubt owing to the increased cost of lighting, and also on account of electric difficulties which would naturally present themselves.

This invention has for its object to illuminate the dasher itself, preferably both above and below the dasher-light, so that the name or route on the dasher may be read by a person on the street or sidewalk as the car is approaching.

In accordance with this invention the dasher-light is provided with what I prefer to term a "reverse reflector"—that is, a reflector which intercepts the rays from the light within the casing containing the electric or other lamp, and which is attached to the said casing so as to turn or direct the said rays backward against the dasher, preferably above

and below the light-containing casing. The reflector referred to may be made in various ways, and may be located both without and within the casing containing the electric lamp, and it is so constructed that it will not interfere with the lighting of the track or road-bed in front of the car. These and other features of this invention will be pointed out in the claims at the end of this specification.

Figure 1 represents in vertical section with the lamp in elevation a sufficient portion of one form of a dasher-headlight embodying this invention to enable it to be understood. Fig. 2 is a front elevation of the dasher-headlight shown in Fig. 1, and Figs. 3, 4, and 5 partial elevations and sections of modified forms of headlights embodying this invention.

Referring to Figs. 1 and 2, A represents the dasher of an electric street-railway car, which is usually made of a single piece of sheet metal erected upon the platforms of the car.

The dasher A has attached to it a casing *a*, of metal, having its rear portion extended through a substantially central opening in the dasher A and provided with a clamping-ring *a'*, which is bolted or otherwise firmly secured to a flange *a²* on the casing, located on the outer side of the dasher A. The casing *a* is provided with a glass front *a⁴*, which is carried by a ring *a⁵*, of metal, detachably clamped onto the front end of the casing *a*. The casing *a* contains within it an electric lamp *a⁶* and a reflector *a⁷*, which projects the rays through the glass front *a⁴* onto the track and road-bed.

The dasher-headlight as thus far described does not form any part of my invention and is herein disclaimed. In order that the rays of light from the lamp *a⁶* projected by the reflector *a⁷* may be utilized to illuminate the dasher A, preferably both above and below the casing *a*, I have provided the headlight with what I prefer to designate as a "reverse reflector," which, as shown in Figs. 1 and 2, consists of an annular ring *b*, curved or otherwise suitably shaped, so as to reflect the rays of light back against the dasher A. The reflector *b*, as represented in Figs. 1 and 2 by full lines, is made as an annular band or ring, which is secured to the outside of the casing *a* by means of suitable bolts or screws *b'*, ex-

tended through arms b^2 , attached to the rear side of the band or ring and extended over the front end of the casing a . The band or ring b , when made as shown in Fig. 1, is provided with an opening of sufficiently less diameter than the diameter of the casing a to insure the reflector intercepting some of the rays of the light projected through the glass front a^4 , but which diameter is not sufficiently small to interfere with the main body of the light projected through the glass front a^4 onto the track. The rays of light intercepted by the reflector b are directed back against the outside of the dasher A , so as to illuminate the same and render plain the name of the route or destination of the car on the dasher. The name of the route or destination as now commonly practiced extends across the dasher near its top and bottom, while the sides are usually left free from lettering, and in some instances it may be found sufficient to divide the reflector b into two parts—namely, an upper and a lower part—as indicated by the dotted lines in Fig. 2, that portion on the sides of the reflector between the dotted lines being omitted.

I have shown the reverse reflector in Fig. 1 as projecting in front of the casing a , but I do not desire to limit my invention to any particular location of the reflector b , as it may be placed in other relations to the light-containing casing.

In Fig. 3 I have represented the reflector b as fitted onto or over the casing a , and in this instance the casing a is provided with suitable openings c , inclining outwardly toward the front of the casing, so that the rays of light passing through these openings may strike the reflector b and be carried back onto the dasher.

In Fig. 4 I have represented the reflector b as located within the casing near its front end, and I have provided the casing with suitable holes or openings c' , which extend rearwardly toward the dasher, so that the rays of light intercepted by the reflector b may be directed through the openings c' onto the dasher. I have herein shown my invention as applied to a dasher-headlight extended into an opening in the dasher, as this form of headlight is now in general use; but I do not desire to limit my invention in this respect, as the reflector b may be used with headlights which are attached to the outside of the dasher. Furthermore, I do not desire to limit my invention to the particular form of reverse reflector herein shown, but prefer to make the reverse reflector of such shape that it will not direct the rays of light above the dasher, so as to interfere with the vision of the motorman.

I prefer to use the reverse reflector, but it

may be found sufficient to provide the body of the light-containing casing with one or more openings inclined backward toward the dasher, as shown in Fig. 4, and to close said openings with ground glass or other translucent material c^3 , such as mica, as shown in Fig. 5.

I claim—

1. The combination with a headlight carried by the dasher of a railway-car, of a reverse reflector attached to and cooperating with said headlight to intercept a portion of the rays of light from said headlight and reflect them back above the said headlight onto the dasher but below the top of the dasher, substantially as described.

2. The combination with a headlight carried by the dasher of a railway-car, of a reflector carried by the headlight and intercepting a portion of the rays of light and reflecting them below the headlight back onto the dasher, substantially as described.

3. The combination with a headlight attached to the dasher of a railway-car, of a reverse reflector consisting of a ring or band attached to the headlight and cooperating therewith to reflect the light back over the headlight upon the dasher but below the vision of the motorman, substantially as described.

4. A dasher-headlight for railway-cars consisting of a casing containing a light and provided with an opening in its front to illuminate the track and with one or more openings in its body portion rearwardly inclined to enable a portion of the rays of light from the lamp to illuminate the dasher, substantially as described.

5. The combination with a casing containing a light and provided with an opening in its front to illuminate the roadway, of a reflector attached to and cooperating with said casing to intercept a portion of the rays of light and reflect the light back over and outside of the top of said casing, substantially as described.

6. The combination with a casing containing a light and provided with an opening in its front to illuminate the roadway, of a reflector attached to and cooperating with said casing to intercept a portion of the rays of light and reflect the light back outside of and around the said casing, substantially as described.

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

WILLIAM W. WHITCOMB.

Witnesses:

JAS. H. CHURCHILL,
J. MURPHY.