(No Model.)

J. KIRBY, Jr.

ELECTRIC HEADLIGHT.

No. 589,130. Patented Aug. 31, 1897.

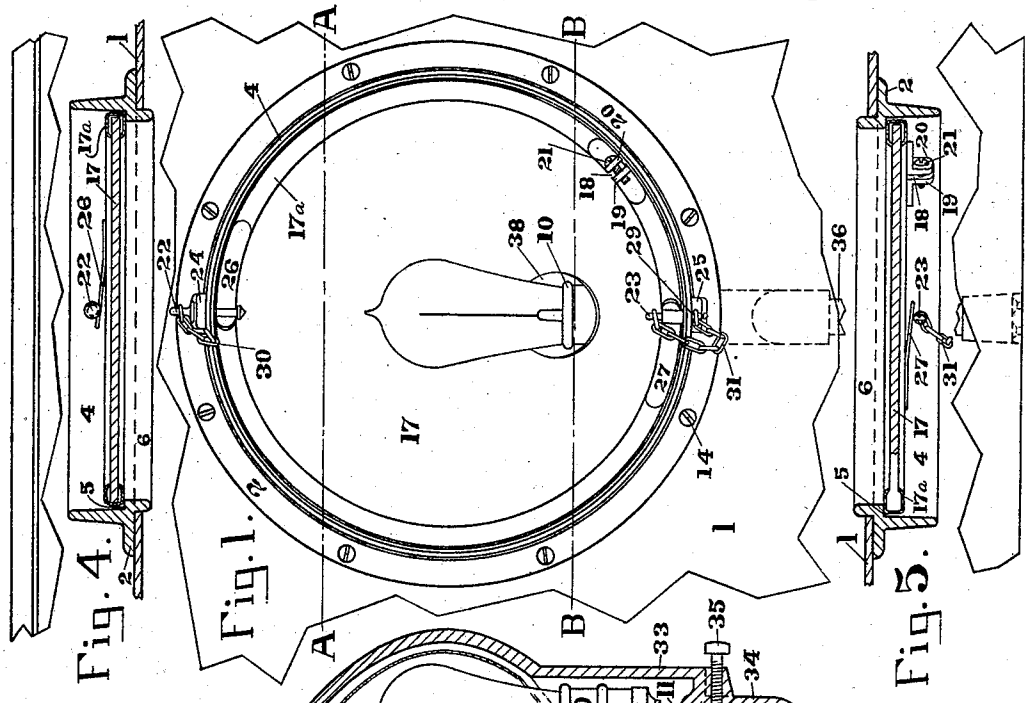


Fig. 4.

Fig. 1.

Fig. 5.

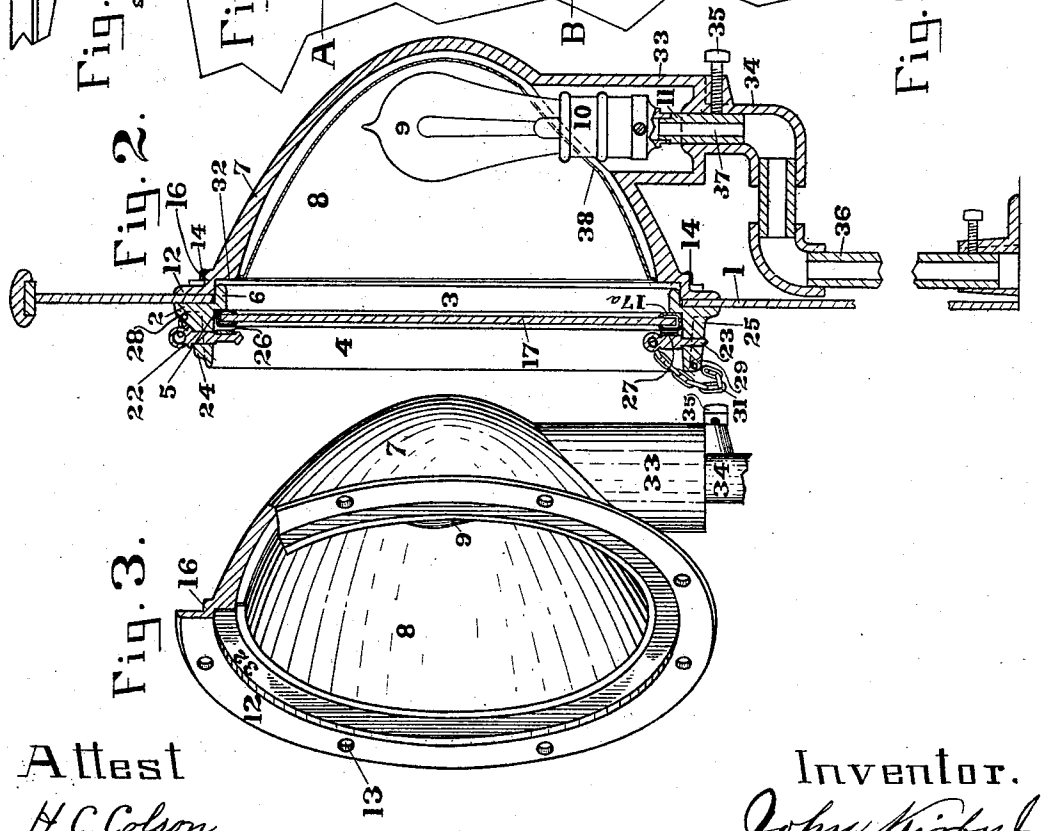


Fig. 2.

Fig. 3.

Attest

H. C. Colson.

E. B. Lehmann

Inventor.

John Kirby Jr.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN KIRBY, JR., OF DAYTON, OHIO, ASSIGNOR TO THE UNITED STATES HEADLIGHT COMPANY, OF UTICA, NEW YORK.

ELECTRIC HEADLIGHT.

SPECIFICATION forming part of Letters Patent No. 589,130, dated August 31, 1897.

Application filed February 15, 1897. Serial No. 623,522. (No model.)

To all whom it may concern:

Be it known that I, JOHN KIRBY, Jr., a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Electric Headlights; and I do hereby declare that the following is a full, clear, and exact description of the invention.

My invention relates to electric headlights such as are adapted to be attached to the dashboards of street-cars; and it consists in certain new and novel features, as hereinafter fully described, pointed out in the claims, and shown in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a front view of the headlight applied to the dashboard of a street-car and as seen from the front side thereof; Fig. 2, a vertical section through the center line of Fig. 1, the lamp and socket being shown in full; Fig. 3, a front perspective view of the headlight detached from the dashboard; Fig. 4, a section of the dash-ring, taken through line A A of Fig. 1, looking upward; Fig. 5, a similar section taken through line B B, looking downward.

Similar numerals indicate corresponding parts in the several figures of the drawings.

1 represents a dashboard of a street-car provided with an opening registering with a dash-collar 2, having a central opening 3, a front projecting rim 4, a shoulder 5, and a rear projecting rim 6.

The headlight consists, chiefly, of a case 7, provided with a parabolic reflector 8, lamp 9, lamp-socket 10, and lamp-socket holder 11. The case is closed at its rear end and open at its front end, where it is provided with an annular flange 12, having a number of bolt-holes 13, which register with corresponding holes in the dash-collar 2, and which holes receive bolts 14, that pass through the dash and by which the dash-collar is permanently secured to the outside of the dashboard and the headlight to the inside thereof, as shown in Fig. 2. I prefer that the flange 6 be somewhat wider than the thickness of the dashboard and that it extend a slight distance beyond the rear side thereof to receive an offset 16 at the front of the headlight-case, as a matter of convenience in mounting the latter. A glass 17, through which the light is transmitted, covers the open end of the reflector and is held in a channeled ring 17^a, separated at 18 and provided with projecting lugs 19 20, the lug 19 being tapped to register with a machine-screw 21 and the lug 20 being perforated to allow the said screw to pass freely therethrough. When the screw 21 is removed, ring 17^a can be sprung apart sufficient to insert the glass, after which its ends are drawn together by the screw 21, the head of which bears against the outer side of the lug 20, as clearly shown in Figs. 1 and 5 of the drawings. The channeled ring 17^a fits the inside of the projecting rim 4 and is held against the shoulder 5 by pins 22 23, which fit into perforations through the rim 4 and through bosses 24 25, formed on the said rim to provide suitable bearings for the pins. Springs 26 27 are attached to the front side of ring 17^a and their free ends arranged to press against the pins 22 23, thereby pressing the ring close against the shoulder 5. To provide against the pins becoming misplaced or lost, I attach them to ears 28 29 by chains 30 31.

The bottom of the case is provided with a housing 33 to accommodate the lamp-socket, and depending from the same is a hollow sleeve 34, within which the socket-holder is movable and within which it is held in place by a set-screw 35. The lower end of the hollow sleeve 34 terminates in a conduit 36, through which current-conveying wires (not shown) lead from the platform of the car to the lamp-socket through a central bore 37 of the socket-holder. The reflector is provided with an opening 38 for the passage of the lamp-socket, and it may be secured within the case by any suitable means.

In the foregoing I have described what I now consider to be the best manner of carrying out the details of my invention, but it is obvious that such details may be departed from without departing from the spirit thereof.

What I claim, and desire to secure by Letters Patent, is—

1. As an improvement in dash electric headlights, the combination with the dashboard of a railway-car having an opening cut through

the same, of a headlight-case provided at its front or open end with means by which it is secured to the rear side of said dashboard opposite the said opening therein; a reflector, a lamp-socket holder, a lamp-socket and an incandescent lamp mounted within the case and removable therewith, a dash-collar secured to said dashboard on the front side thereof, the open center of which registers with the opening in said dashboard and with the open end of the headlight, a rim projecting forward of said dash-collar and carrying a glass-holder provided with a glass for covering the said openings, a fastening for securing the glass within said holder and a device for coupling the said glass-holder within said rim, whereby access to the interior of the headlight through said openings and from the front side of said dashboard may be had, substantially as set forth.

2. As an improvement in dash electric headlights, the combination with the dashboard of a railway-car having an opening cut through the same, of a headlight-case provided at its front or open end with means by which it is secured to the rear side of said dashboard opposite the said opening therein; a reflector, a lamp-socket holder, a lamp-socket and an incandescent lamp mounted within the case and removable therewith, a dash-collar provided with a forwardly-projecting rim and secured to the front side of said dashboard; the open center of which dash-collar registers with the opening in said dashboard and with the front or open end of the headlight, a removable glass-holder carrying a glass for covering the open end of said reflector, a fastening for securing the glass within said glass-holder, and a device for retaining the said glass-holder within the said rim and against a shoulder adjacent thereto, whereby access to the interior of the headlight through said openings, and from the front side of the dashboard may be had, substantially as set forth.

3. In a headlight for street-cars, the combination with the dashboard of such car having an opening cut through the same, of a headlight with the front or open end of its casing secured to the rear side of said dashboard and registering with said opening therein, a removable glass-holder carrying a glass for covering the open end of the reflector of said headlight, a rim projecting forward of the open end of said reflector and of said dashboard, a shoulder formed adjacent to said rim, fastenings for retaining the said glass-holder within the said rim, springs operating in conjunction with the said fastenings and said glass-holder, whereby the latter is pressed closely against said shoulder and access to the interior of the headlight through said openings can be had, substantially as set forth.

JOHN KIRBY, JR.

Witnesses:
H. D. HENDRICK,
ED L. SPENCER.