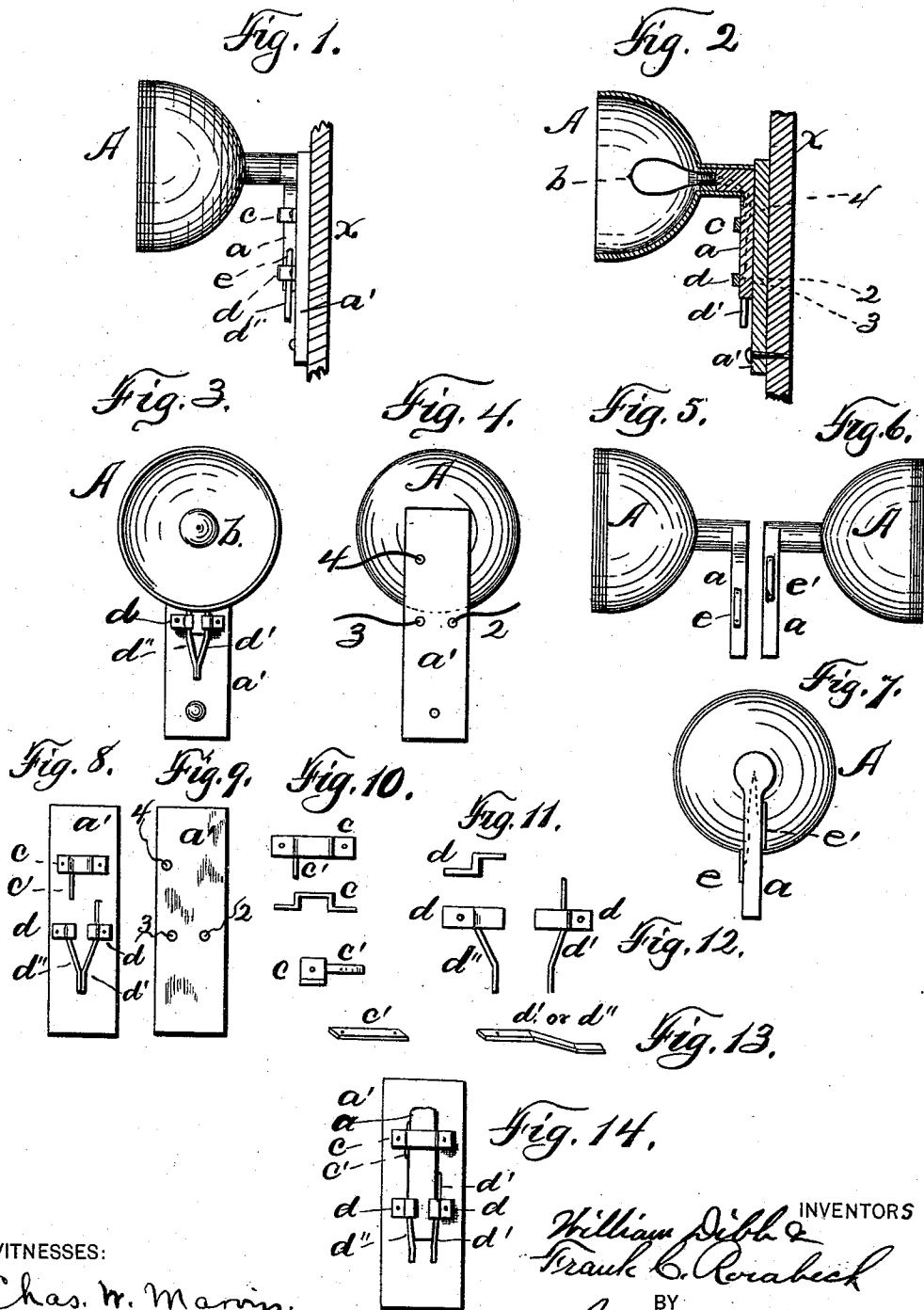


(No Model.)

W. DIBB & F. C. RORABECK.
CHANGEABLE ELECTRIC HEADLIGHT.

No. 538,243.

Patented Apr. 30, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM DIBB AND FRANK C. RORABECK, OF SYRACUSE, NEW YORK.

CHANGEABLE ELECTRIC HEADLIGHT.

SPECIFICATION forming part of Letters Patent No. 538,243, dated April 30, 1895.

Application filed March 19, 1894. Serial No. 504,125. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM DIBB and FRANK C. RORABECK, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Changeable Electric Headlights, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

Our invention relates to head lights, and particularly those which are portable or movable, and are lighted by electricity.

Our object is to produce a novel electric head-light, adapted to many purposes and especially to be used upon electric cars, whether lighted by electricity or not, in which a circuit making board is mounted upon the dashboard or end of a car (for illustration) to which the head-light can be detachably connected, having a shank or stem provided with contact plates adapted to make circuit with the stem holders upon said board to which the wires are connected, and to break such circuit by the removal of said stem; and when the car is lighted by electricity the lighting wires are led to said contact board and the circuit for the lamps is made through the head light.

Our invention consists in the several novel features of construction and operation hereinafter described and which are specifically set forth in the claim hereunto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1, is a side elevation of the head-light, mounted. Fig. 2, is a vertical section thereof, showing the different wires by the dotted lines. Fig. 3, is a front elevation including the contact board. Fig. 4, is a rear elevation of same. Fig. 5, is an elevation of one side of the head-light, separately. Fig. 6, is a like view of the opposite side. Fig. 7, is a rear elevation of the lamp. Fig. 8, is a front elevation of the contact and light supporting board. Fig. 9, is a rear elevation of same. Fig. 10, shows a front elevation, a top plan and an end elevation of the socket which receives the stem of the light. Fig. 11, is a top plan of one of the brackets receiving the lower end of the stem. Fig. 12, is a front elevation of the lower brackets and fingers. Fig. 13, shows a plan perspective of the upper and lower contact fingers respectively, detached

from the brackets and socket. Fig. 14, is a front elevation of the contact board and part of the light stem inserted, breaking the normal car lighting circuit so that the lighting circuit is made through the head light.

—A— is the reflector, of any ordinary construction, adapted to be mounted upon a suitable stem —a—, and also adapted to receive and hold any ordinary incandescent light —b—.

—a'— is the contact-board, adapted to be secured upon any suitable support, as the front of a car, upon which the bracket or socket —c— is secured, provided with a contact bar —c'—, which is negative in polarity; and also the angle brackets —d— are secured thereon provided with fingers —d'—d''— of spring metal, —d'— being a positive pole and —d''— a negative one, these fingers being normally in contact and in circuit, when this negative pole is used.

The positive wire —2— is connected to the finger —d'—, and the negative wire —3— to —d''—, and the negative wire —4— is connected to the bar —c'—; also a positive wire leads from the finger —d'— to the incandescent in the reflector, and a negative wire leads therefrom to the bar —c— as shown by the dotted lines, the positive wire being connected to a contact plate —e— secured upon the stem, and the negative wire to another contact plate —e'— upon the opposite side of said stem; said positive plate making circuit with the finger —d'—, and the negative plate with the bar —c'— when said stem is inserted into said brackets.

When the wires —2— and —3— are normally used for lighting a car, or are normally in circuit through the fingers —d'—d''— being in contact, and the head-light is upon the same wiring system, then the insertion of said stem will break the circuit through said fingers by springing them apart (Fig. 14) and the circuit is made through the wires —2— and —4— until said stem is removed, whereupon said fingers again make contact and circuit through the wires —2— and —3—. When the head-light is not upon the car lighting circuit, then the finger —d''— is omitted, the wires —2— and —4— then only being used.

It will be seen that by mounting a contact board upon each end of a car, the head-light

can be shifted from one end of the car to the other, at one end if desired, being upon the car-lighting circuit so that the current passes through said head-light to the car lights, and
5 at the other end of the car receiving the current from the car-light wiring system.

It will also be seen that by making the contact plates upon the stem long, the stem need only be inserted far enough to make contact
10 with the finger —*d'*—, without separating the fingers —*d'*—, —*d''*— in which case the car-lighting circuit is maintained through these fingers, part of the current being deflected to and through the head-light.

15 What we claim as our invention, and desire to secure by Letters Patent, is—

A head-light comprising a contact board, spring fingers normally in circuit with wires connected to them, a second negative pole upon said board and a reflector stem adapted 20 to break the circuit through said fingers, and make it through the positive pole of said circuit and the second negative pole aforesaid, and a lamp connected to said poles.

In witness whereof we have hereunto set 25 our hands this 3d day of March, 1894.

WILLIAM DIBB.

FRANK C. RORABECK.

In presence of—

C. W. SMITH,

HOWARD P. DENISON.