No. 719,180. PATENTED JAN. 27, 1903.

I. B. BROWER.

ELECTRIC CAR SIGN.

APPLICATION FILED APR. 4, 1902.

NO MODEL.

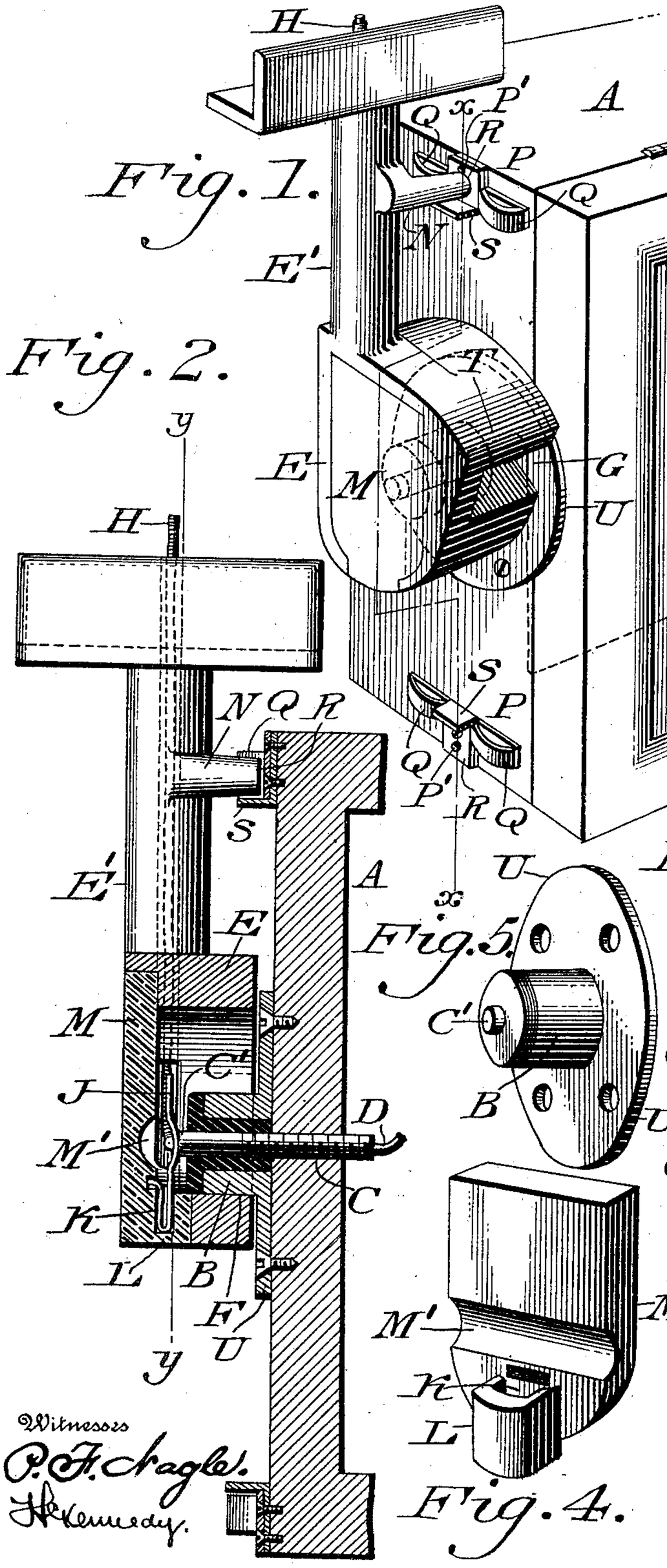

Fig. 1.

Fig. 2.

Fig. 5.

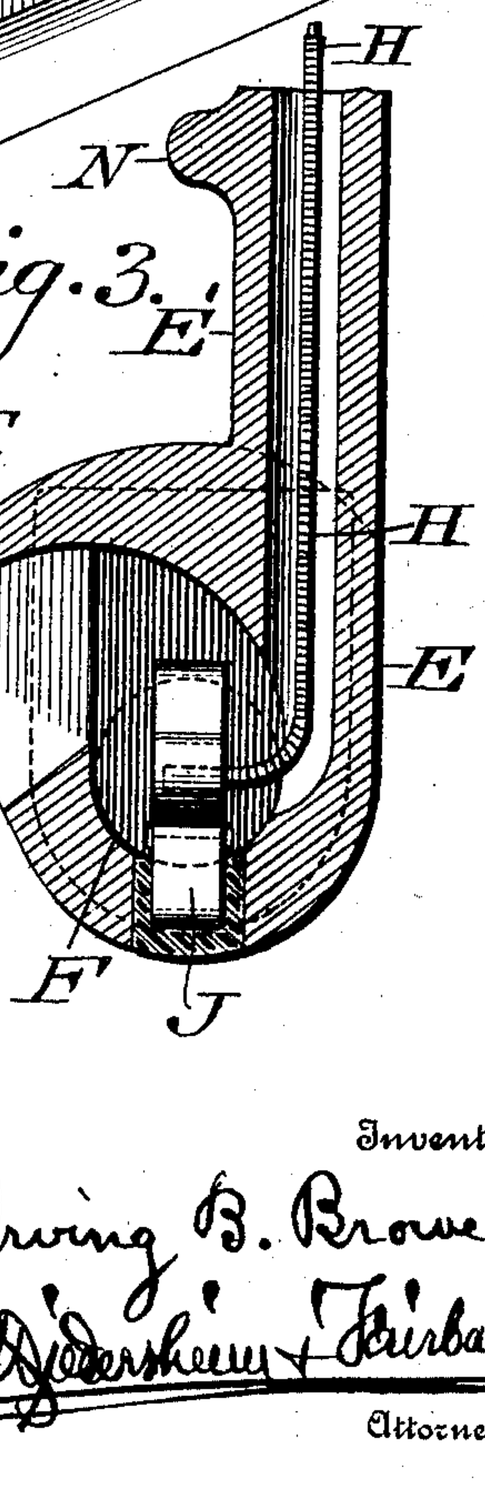

Fig. 3.

Fig. 4.

Witnesses
P. F. Eagle.
H. Kennedy.

Inventor
Irving B. Brower.
By Dodersheim & Fairbanks
Attorneys

UNITED STATES PATENT OFFICE.

IRVING B. BROWER, OF PHILADELPHIA, PENNSYLVANIA.

ELECTRIC CAR-SIGN.

SPECIFICATION forming part of Letters Patent No. 719,180, dated January 27, 1903.

Application filed April 4, 1902. Serial No. 101,330. (No model.)

To all whom it may concern:

Be it known that I, IRVING B. BROWER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Electric Car-Signs, of which the following is a specification.

My invention consists of a car-sign which is provided with means for electrically illuminating the same, the current therefor being established by the support of the frame of the sign, the removal of the sign from said support breaking the circuit and leaving the support dead, provision being made for reversing the sign and firmly retaining the same in position, and other features are provided, as will be hereinafter described, and pointed out in the claims.

Figure 1 represents a perspective view of an electric car-sign embodying my invention. Fig. 2 represents a vertical section of a portion on line $x\,x$, Fig. 1. Fig. 3 represents a section on line $y\,y$, Fig. 2. Figs. 4 and 5 represent perspective views of detached members of the device.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a frame having on the end thereof the stub B, the latter having therein the insulated plug, pin, or screw C, to which is attached the conductor D, which leads to the electric lamps in said frame, one of said lamps being shown dotted in Fig. 1, the frame thus being illuminated.

E designates a bracket which is adapted to be secured to a proper part of a car-body. On the interior of the lower portion of the body of said bracket are the recess F and the passage or channel G, which latter opens from the side of said body to said recess, whereby the stub B may be passed through said channel and enter said recess and be seated on the latter, as most plainly shown in Figs. 2 and 3.

The neck or hanger E′ of the bracket E is tubular and receives the conductor H, whose lower end is connected with the contact-piece J, which consists of a piece of resilient metal or material having its lower portion bent up on itself, forming the foot K, which is seated in the eye L of the porcelain plate M, which occupies the outside side of the body of the bracket E and is sustained thereon in any suitable manner.

Projecting inwardly from the neck E′ is the finger N, which is adapted to engage with either of the retaining devices P on the adjacent end of the frame A, said devices consisting of the convex portions Q, forming bent-out shoes which project in opposite directions, and having the intermediate flat portion R and the outwardly-projecting lip S, whereby when the frame is turned the respective portions Q yield and permit the finger N to reach the portion R and lip S, (see Fig. 1,) by which provision the frame is prevented from improper turning, but the portion Q yields under superior force, and so permits the disengagement of the finger N from the retaining device P.

In practice the retainers or retaining devices P are each formed of two pieces connected at their central portions by the screws P′.

The upper wall of the channel or passage G is projected forwardly beyond the lower wall thereof, forming the canopy T, which acts as a shed or guard for preventing rain or water that may fall on said upper wall from entering the recess F.

It is of course evident that the frame or casing A is provided at its other end (not shown) with a stub, such as B, and the car-body has a bracket, such as E, to receive and support said end, together with appurtenances of said parts similar to that shown in the drawings for one end.

The operation is as follows: The stubs B are passed through the channels G and seated in the recesses F. As the stubs descend to their seats the projecting ends C′ of the pins C as electrodes press against the upper limbs of the pieces J. The pieces J are resilient, so as to yield. The wires or conducters are attached to said pieces opposite to the grooves U′, which provide space for the adjacent portions of said conductors when the pieces are sprung back to receive contact of C′; but they nevertheless press firmly against said ends C′ of the pins C and form a close contact therewith, thus establishing an electrical communication with the lamps in the frame or casing A, and thereby illuminating the latter as a sign, as a positive wire is run in

the hanger on one end of the frame A and negative wire in hanger on the other end of the frame A, thus forming a circuit, as described in original patent. The frame may be rotated by superior force, the stubs B now constituting journals or the axis of the frame, the same rotating on the brackets, whereby the name of the street or route for the return trip or change in the route may be presented to the front. In this case the upper device P, moving with the frame, clears itself of the adjacent finger N. Then when the lower device P reaches said fingers, the members of the former yield until said device is in operative position, when the finger N is again controlled by the spring members of said device, and thus prevented from rotating.

When illumination of the sign is not required, the frame A is raised and the stubs B directed from the recesses or seats F through the channel G, whereby the ends C′ of the pins C are withdrawn from the pieces J, thus immediately breaking the circuit, the brackets E for the time being dead and always dead, as the electric-light wire H is thoroughly insulated and running through the hollow tube in the bracket only connects with the spring, which, being incased in porcelain plate, makes the entire hanger always insulated. It will also be noticed that the contact-piece J occupies a chamber in the bracket E and the conductor H reaches said contact-piece through the neck E′, so that both said members are inclosed and guarded from the weather and against contact.

The conductor H receives its current from any suitable source on the car or elsewhere.

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

1. In an electric sign of the character described, a frame adapted to be illuminated, a bracket adapted to support said frame, and having a chamber therein and a resilient piece occupying said chamber and adapted to contact with a conductor on said frame, said piece and the illuminator of said frame being in an electric circuit.

2. In an electric sign, a frame provided with means for electrically illuminating the same, a stub on an end thereof, forming a journal by which said frame may be rotated, a bracket adapted to form the bearing for said stub, a contact-piece in said bracket, and a conductor in connection with said piece, said stub carrying a conductor, which leads to the illuminator of said frame and is adapted to engage said contact-piece, said bracket having a chamber within which said contact-piece is seated and inclosed and the neck of said bracket inclosing the conductor of said contact-piece.

3. In an electric sign, a bracket, a frame adapted to be supported on a seat therein, an electric illuminator in said frame, and means for forming the circuit for said illuminator and breaking the same by the removal of said frame from said bracket, said bracket having a water-guard for said seat and being made thoroughly waterproof on the side toward the sign A by means of the plate U on which is the stub B covering the entire inside opening and the bracket is made thoroughly waterproof outside opposite the frame A by means of porcelain plate M fitted in the bracket.

4. In an electric sign, a bracket, a frame, an electric illuminator in the latter, a journal on said frame adapted to have its bearings on said bracket, a conductor in said journal leading to said illuminator, a plate of porcelain or equivalent on said bracket and a contact-piece carried by said plate, and a conductor connected with said piece, the conductor of the illuminator being adapted to engage with said contact-piece.

5. In an electric sign, a rotatable frame, an electric illuminator therein, a bracket on which said frame is mounted, a finger projecting from said bracket, and bent-out shoes projecting from said frame in opposite directions, the portion intervening between said shoes being adapted to have said finger seated therein.

6. A chambered bracket, a rotatable frame having a journal seated in said bracket, a contact-piece within said bracket, and an eye in said bracket, said eye receiving the foot of said contact-piece.

IRVING B. BROWER.

Witnesses:
WM. C. WIEDERSHEIM,
JOHN A. WIEDERSHEIM.