

(No Model.)

3 Sheets—Sheet 1.

E. J. WESSELS.

ELECTRIC RAILWAY CAR ILLUMINATION.

No. 348,603.

Patented Sept. 7, 1886.

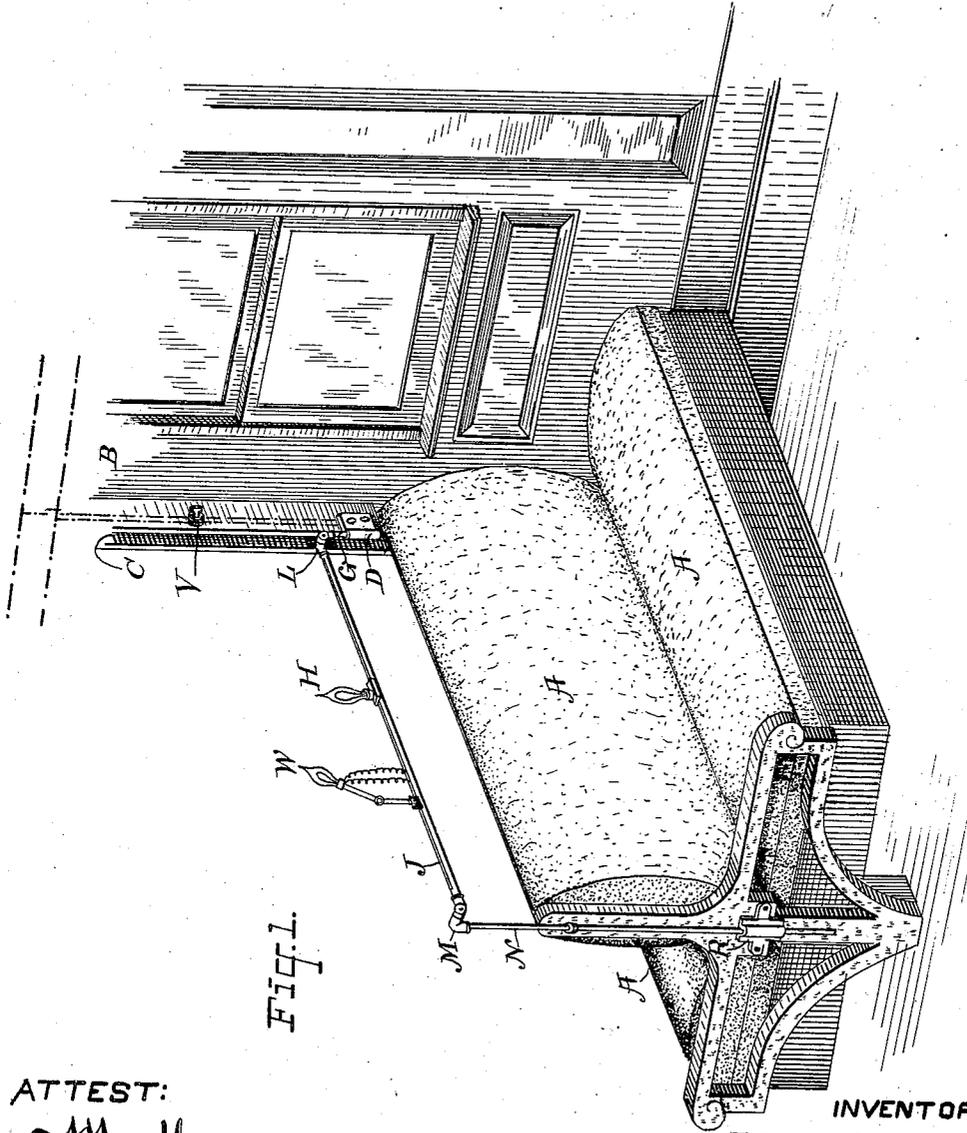


FIG. 1.

ATTEST:

*J. H. Mudd*

*Edward P. Thompson*

INVENTOR:

*Edward J. Wessels*

By

*W. J. Johnston*

*Attorney*

(No Model.)

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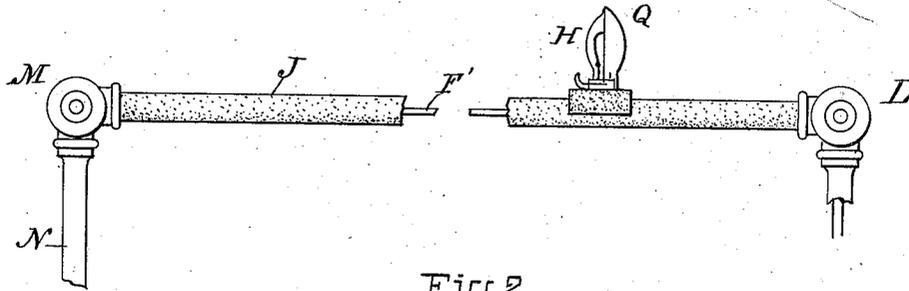


Fig. 2.

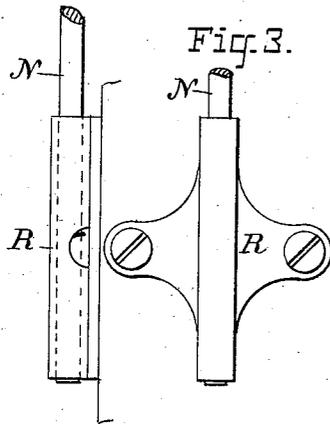


Fig. 3.

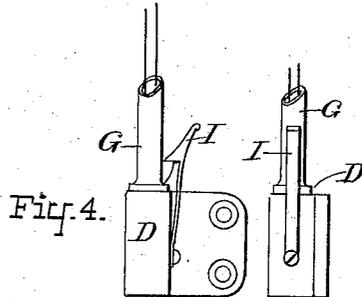


Fig. 4.

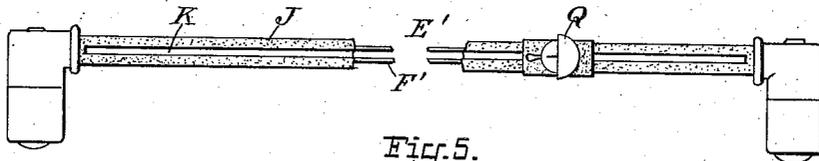


Fig. 5.

ATTEST:

*J. A. Murdley*  
Edward P. Thompson

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By

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(No Model.)

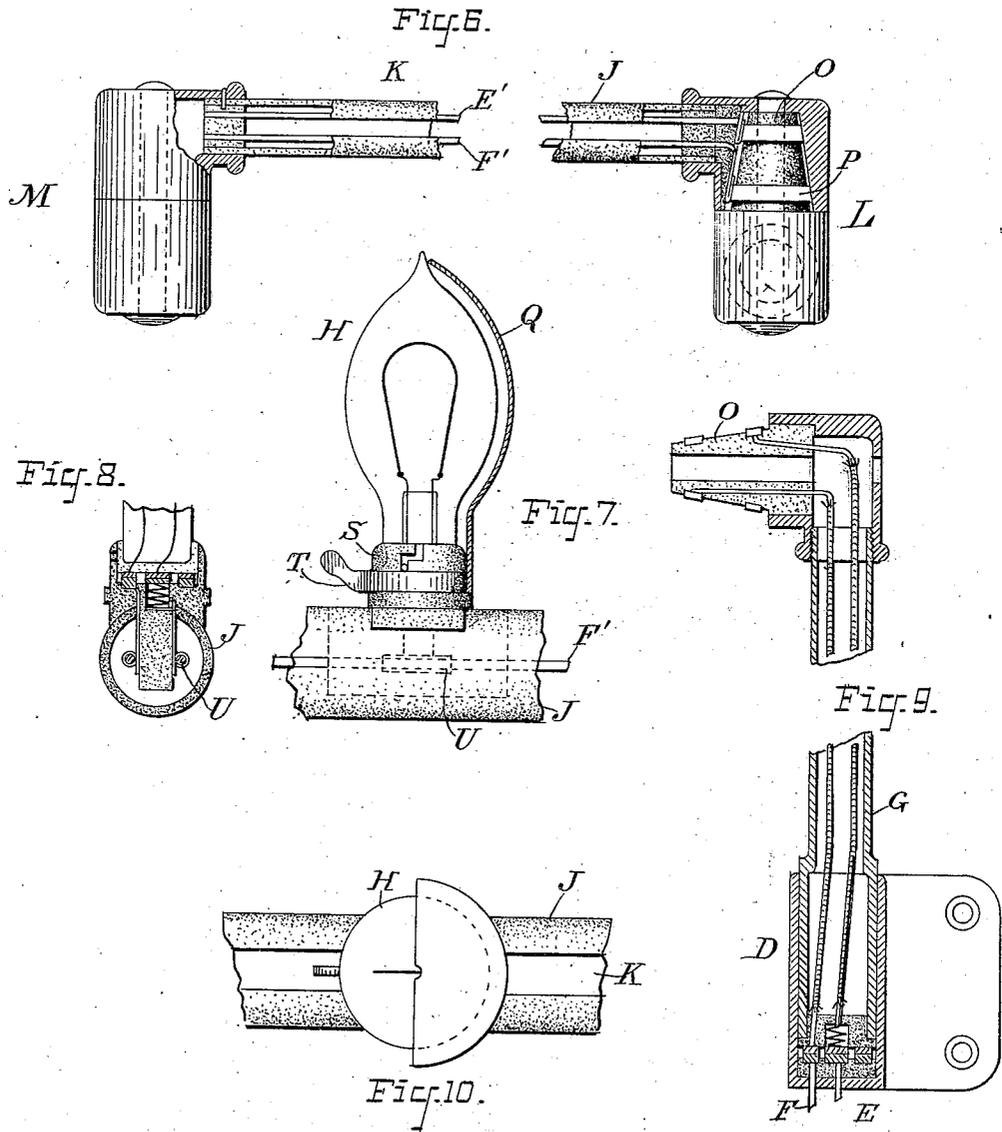
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# UNITED STATES PATENT OFFICE.

EDWARD J. WESSELS, OF ROSELLE, NEW JERSEY.

## ELECTRIC RAILWAY-CAR ILLUMINATION.

SPECIFICATION forming part of Letters Patent No. 348,603, dated September 7, 1886.

Application filed March 26, 1886. Serial No. 196,623. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD J. WESSELS, a citizen of the United States, and a resident of Roselle, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Railway-Car Illumination, of which the following is a specification.

My invention relates to an attachment for the seats of railway-cars, so that passengers may be able to read at any time they may desire, it being very inconvenient for them to do so in cars as at present equipped on account of the comparatively great distance between themselves and the light, which is suspended in the roof of the car.

The object of the invention is to provide a simple device whereby the lamp may be supported near the head of any person or persons sitting in the seats, and may in the day-time be removed to a receiving-closet on the side of the car with very little trouble either by the porter, conductor, or passenger.

It has been my object to make the mechanical construction so easy and simple as to the means for adjusting the lamp that the device may not become a hinderance and a nuisance to passengers rather than an advantage.

My invention consists in the combination, with the seats of a railway-car, of incandescent electric lamps containing boxes upon the side panels and devices for adjusting the lamps to any position desirable.

In order to illustrate the practical manner of carrying out the invention, drawings are hereunto annexed and described, in which similar letters of reference represent corresponding elements, and in which each part referred to is designated by a single letter.

Figure 1 shows a general view of the lamp and fixtures when ready for use. Fig. 2 is an enlarged view of the lamp, the slotted tube J, which is of insulating substance, and the reflector Q. Fig. 3 shows two views of the socket R, shown in position in Fig. 1. Fig. 4 shows a spring-catch, (not shown in other figures) and is for the purpose of holding the tube G in the socket D. Fig. 5 shows a top view of that shown in Fig. 2. Fig. 6 is the same as Fig. 2, except that portions are in cross-section. Fig. 7 shows the lamp and its socket. The socket S has a loose ring, T, secured to

the reflector, so that the same may be rotated. Fig. 8 is a cross-sectional view of the socket shown in Fig. 7, U being tubes which slide upon the wires E' and F', and which are the terminals of the lamp and rigidly attached thereto. Fig. 9 is a cross-sectional view of the plug O. Fig. 10 is a sectional view of the tube G and socket D, and Fig. 11 is a top view of the lamp H and socket-tube J.

The device conforming to my claim consists of the combination of one or more car-seats, A, a side panel, B, a receiving-box, C, upon said side panel, a socket, D, upon said box, containing terminals E and F of an electric circuit, a tube, G, also containing terminals of a circuit which includes one or more incandescent lamps, H, a spring-catch, I, for pressing the said terminals together and located upon said socket D, a tube, J, supporting said lamps and provided with a slot, K, running practically throughout its entire length, and with wires E' and F', the lamps being in circuit and being adapted to move in said slot, and two hinged joints, L and M, at each end of said tube, one joint, L, being fixed to the said first-mentioned tube and the other, M, to a rod, N, detachably fixed to that end of the seat opposite said panel, each joint having insulating rotatable plugs O, and having metallic rings P, which are continually in circuit with said lamps. By moving the lamp-socket along the tube J the lamp may be put into any position likely to be desired by the passenger. By raising the tube N the parts N, J, and H may be stored in the inclosure C. The switch V serves to turn the lamp in and out of a closed circuit.

The principles of construction and operations involved in the above are evidently attained in many variations in the specific character of the devices employed without departing from the spirit of the invention.

The lamp may be supported upon a rod projecting from a universal joint, as shown at W in Fig. 1.

In order that the application of my invention may not be considered extravagant, it should be stated that the ordinary roof-lights may be entirely omitted, as several of these little incandescent lamps distributed above the seats throughout the cars will be amply sufficient.

Having now stated the title, object, and relation of the said invention, having described its practical realization by reference to the accompanying drawings, having particularly ascertained the manner in which the same operates to accomplish the said object, what I consider to be novel and original, and therefore claim as my invention, secured to me by the hereinbefore in part recited application for Letters Patent of the United States, is—

1. In a railway-car, the combination, with the seats therein, of adjustable incandescent electric lamps located above said seats and in equitable electric circuits, the said lamp being supported upon a frame which has a detachable connection with said seats and a permanent and hinged connection with the side panels of said car.

2. In a railway-car, the combination, with the seats and side panels therein, of an incandescent electric lamp adjustable in one or more directions above said seats, a hinged support to said lamp, and a box or other suitable receiver for said support and lamp, located upon the said side panels, electric-circuit wires passing from the side panels of said car through said hinged support and to the leading-in-wires of said lamp, as and for the purpose described.

3. In a railway-car, in combination with a seat therein, of an incandescent electric lamp adjustably supported upon an adjustable and detachable frame, one end of which is supported upon one end of the seat and the other hinged upon a receiving-box secured to the side

panels of said car, electric-circuit wires passing from the side panels of said car through said frame and to the leading-in-wires of said lamp, as and for the purpose described.

4. In a railway-car, the combination of a seat, a side panel, a receiving-box upon said panel, a socket upon said box, containing the terminals of an electric circuit, a tube, also containing terminals of a circuit which includes one or more incandescent electric lamps, a spring-catch for pressing the said terminals together and located upon said socket, a tube supporting said lamps and provided with a slot and wires, the lamp being in circuit with said wires and adapted to move in said slot, and two hinged joints at each end of said rod, one joint being fixed to said first-mentioned tube and the other to a rod detachably fixed to that end of the seat opposite said panel, each joint being of insulating substance provided with metallic portions, which are continually in circuit with said lamps.

5. In combination with the seats of a railway-train, incandescent electric lamps adjustably supported upon a frame secured to said seats and included in an electric circuit which passes through said frame.

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, this 19th day of March, 1886.

EDWARD J. WESSELS. [L. s.]

Witnesses:

EDWARD P. THOMPSON,  
J. BAPTISTE MARSHALL.