

J. T. CRAW.
Street-Car Awnings.

No. 151,855.

Patented June 9, 1874.

Fig. 1.

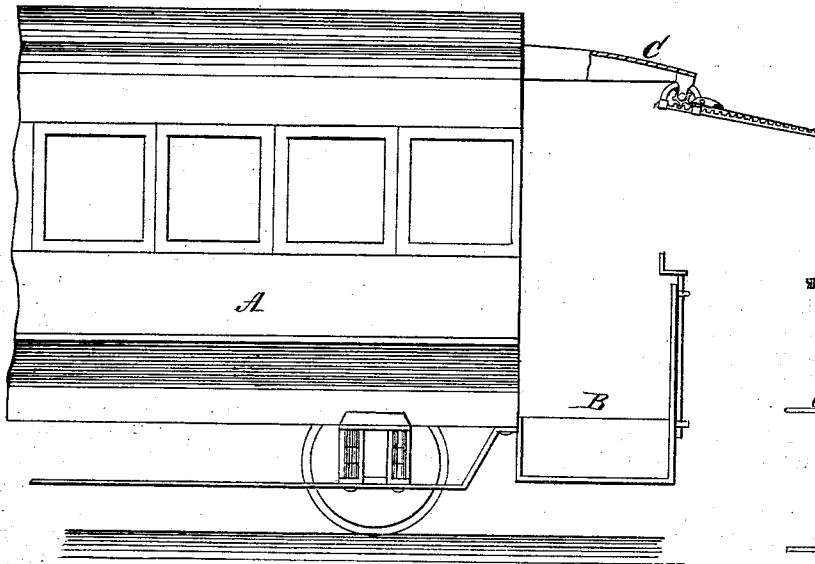


Fig. 4.

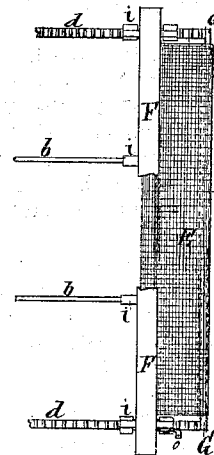


Fig. 2.

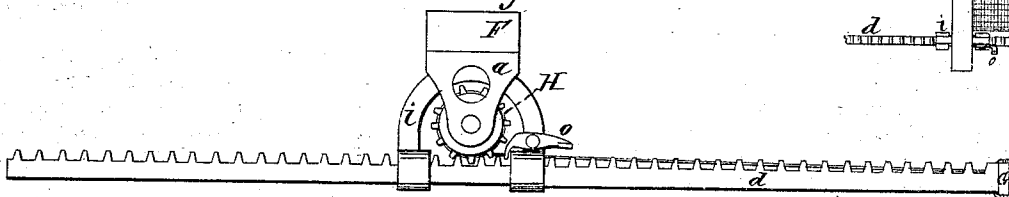
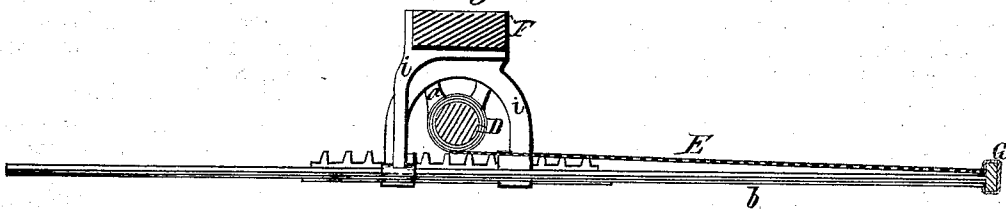


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH T. CRAW, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN STREET-CAR AWNINGS.

Specification forming part of Letters Patent No. 151,855, dated June 9, 1874; application filed April 2, 1874.

To all whom it may concern:

Be it known that I, JOSEPH T. CRAW, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Street-Car Awning; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 shows the awning applied to a car. Figs. 2 and 3 are respectively end and sectional elevations. Fig. 4 is a plan view.

The invention has for its object to provide an improved awning for the end platforms of street-cars, which may be readily adjusted to suit the varying conditions of sun or shade and dry or damp weather.

In carrying out my invention I attach one end of a curtain to a roller mounted in fixed bearings, and the other to a movable or extensible rack-frame operated by pinions, which are applied to the ends of the roller-shaft, the arrangement being such that the movement of the frame, in or out, turns the shaft in one direction or the other, and thus winds or unwinds the curtain, as hereinafter described.

In the drawing, the car A is represented as provided with the ordinary platform B and projecting roof C. The roller D, upon which the curtain E is wound, is hung in brackets *a*, which depend from a bar, F, that is attached to the under side of the roof C, as shown. The other end of the curtain is attached to the bar G, which joins the ends of parallel rods *b* and rack-bars *d*, composing the adjustable frame. These rods and rack-

bars are supported horizontally, or nearly so, in brackets *i*, which, like the roller-brackets, are attached to the bar G. A gear or pinion, H, is applied to each end of the roller D, and meshes with one of the rack-bars *d*.

It is evident from this arrangement that when the awning-frame is pushed or drawn forward the pinion H will be rotated, and thereby the roller also, thus unwinding the curtain correspondingly; and contrariwise, when the frame is pushed or drawn back, the roller will rotate in the reverse direction and take up the slack of the curtain. The frame may be locked in any adjustment by means of the thumb-pawl *o*, which is pivoted to one of the brackets *i*, and engages the teeth of a rack-bar, *d*.

The awning may be applied to cars in use, as well as others of new manufacture. Any suitable mechanical appliance may be employed to adjust the frame in or out, but it can ordinarily be conveniently and easily effected by hand.

Having thus described my invention, what I claim is—

In an awning for street-cars, the combination of the fixed roller, provided with pinions, the sliding rack-bar frame, and the curtain attached at its respective ends to the roller and cross-bar G, all as herein shown and described, whereby the movement of the frame, in or out, winds or unwinds the curtain, as specified.

JOSEPH T. CRAW.

Witnesses:

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