

(No Model.)

A. D. COCHRAN.
STREET CAR CURTAIN.

No. 486,433.

Patented Nov. 22, 1892.

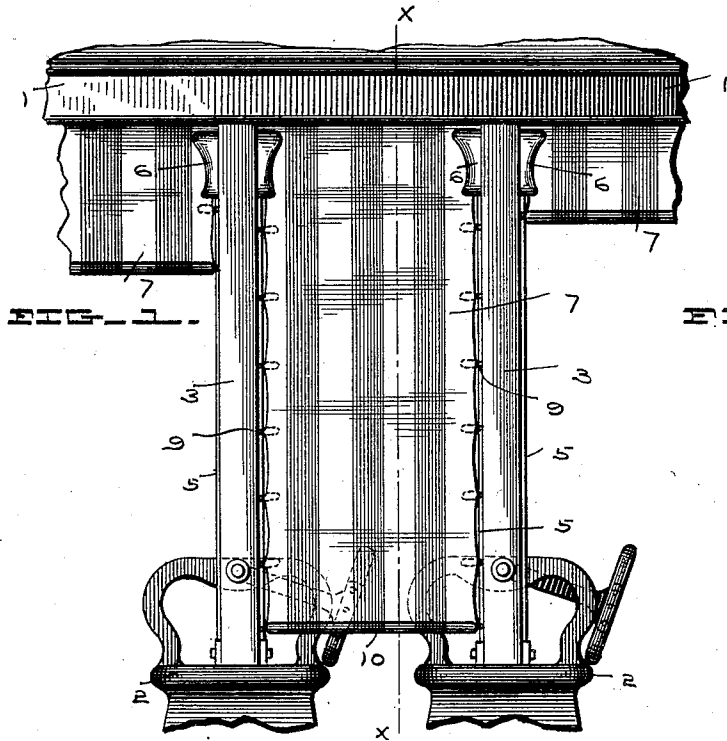


FIG. 1.

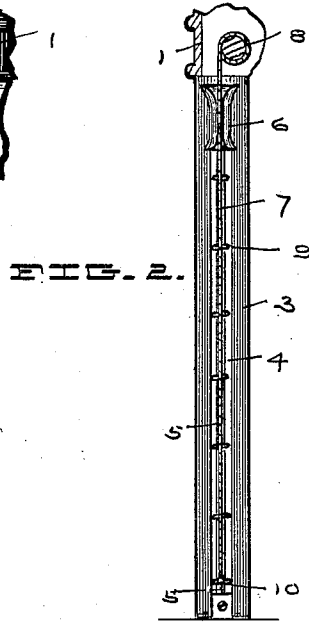


FIG. 2.

FIG. 3.

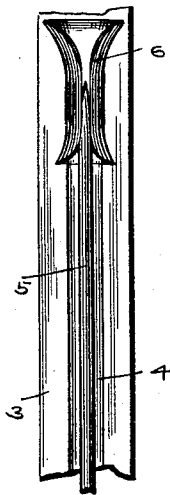


FIG. 4.

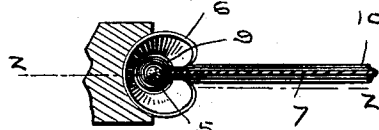
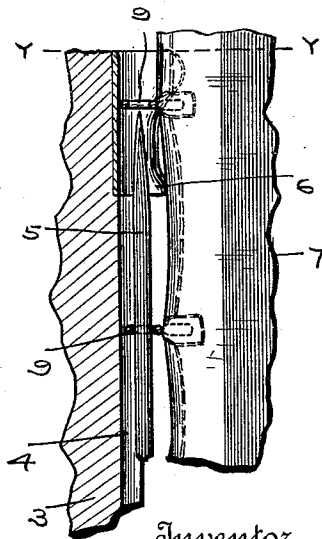


FIG. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR D. COCHRAN, OF INDIANAPOLIS, INDIANA.

STREET-CAR CURTAIN.

SPECIFICATION forming part of Letters Patent No. 486,433, dated November 22, 1892.

Application filed June 6, 1892. Serial No. 435,614. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR D. COCHRAN, of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Street-Car Curtains; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

My invention relates to new and useful improvements in the construction of street-car curtains and to one that is adapted for use on open or summer cars and will be understood from the following description.

In the drawings, Figure 1 represents a side view of a part of a car, showing one of the curtains drawn down and parts of two others. Fig. 2 is a vertical section of the same on the line *x x*, Fig. 1. Fig. 3 is an enlarged view showing a part of one of the guide-rods of the curtain and the bracket at its upper end. Fig. 4 is a cross-sectional view on the line *y y*, Fig. 5. Fig. 5 is a longitudinal section on the line *z z*, Fig. 4.

In detail, 1 is the framework of a street-car, 2 the seats, and 3 the connecting uprights, these having, as shown in Fig. 5, semicircular grooves 4 on opposite sides, and at the bottom of each the lower end of the vertical guide-rod 5 is supported and retained in position in any suitable manner. The rods 5 have pivoted ends and extend upward and nearly to the top of the uprights and about half-way through the slotted brackets 6. These brackets are rigidly secured to the uprights 3 and their upper and lower ends are flared, as shown in Fig. 3, the central part of the brackets being slightly larger in diameter than the rods 5.

7 represents the curtain, which is attached to an ordinary spring-roller 8 within the car and is in line with the vertical rods 5.

9 are rings with flat shanks thereon secured in the outer edges of the curtain, so that they will always remain in a horizontal position, a stiffening rod or wire 10 being secured in the lower end of the curtain and having a ring on either end, which fits around the guide-rods 5 below the brackets 6. The lower end of the curtain when drawn up, as shown in the left in Fig. 1, is prevented from passing through

the brackets 6 by the stiffening-rod at its base, and at this point none of the rings which are secured to the sides are around the guide-rods. If the curtain be drawn down, the edges of the curtain being in or about in line with the slotted brackets on each side, the rings secured in the sides of the curtain will always slip into the flared top of the brackets, as shown in Fig. 5, their shanks working in the slots, and the bracket being at its smallest diameter a little larger than the ring the latter will always slip over the pointed head of the vertical guide-rod 5. The rings 9 always remain in a horizontal position around the rods and have but a slight bearing upon them. Through the construction and operation of the curtain there is very little friction, and if at any time the spring-roller refuses to work, as is often the case with the ordinary curtains in wet and windy weather, and also without operating the roller at all, the entire curtain can be readily raised up by lifting the stiffening-rod at the lower end.

An important feature of my invention is to provide a roller-curtain for street-cars which passengers can readily raise when entering or leaving the car, and after being so raised the curtain will at once by its own weight drop down in its former position. No curtain, so far as I am aware, is adapted for the successful accomplishment of this object. Owing to their construction the curtains can be made very loose, so that in wet weather, when they will naturally shrink, it can never interfere with their proper working, for the rings will always be drawn down into the slotted bracket, and thereby be slipped over the ends of the guide-rods.

What I have herein shown and described is a simple, cheap, and effective curtain for street-cars for all purposes and one that is not liable to wear out readily or get out of order from any cause.

What I claim as my invention, and desire to secure by Letters Patent, is the following:

1. The combination, with a street-car curtain having rings in its sides, of vertical guide-rods secured at their lower ends within the grooved faces of the car-framework and circular vertical guide-brackets surrounding the upper end of such rods, such brackets flaring

at the top and bottom and having a narrow vertical slot in their opposing faces, substantially as shown and described.

2. A street-car curtain consisting of a curtain suspended from a suitable spring-roller and provided with a stiffening-rod at its lower end, rings having flat shanks so secured to the sides of such curtain that such rings will be retained in a horizontal position when the curtain is vertical, a vertical rod on each side of such curtain, such rod supported only at its base and standing loosely in a groove in the upright at the side of such curtain, a circular vertical guide-bracket attached to the upright and surrounding the upper end of such rod,

such bracket flaring at the top and bottom and having a narrow vertical slot through which the curtain can move, whereby the rings of such curtain will be forced in their descent through such brackets over the upper ends of such guide-rods and such curtain can be readily lifted, if desired, without operating the roller, substantially as shown and described.

In witness whereof I have hereunto set my hand this 3d day of June, 1892.

ARTHUR D. COCHRAN.

Witnesses:

H. D. NEALY,
E. B. GRIFFITH.