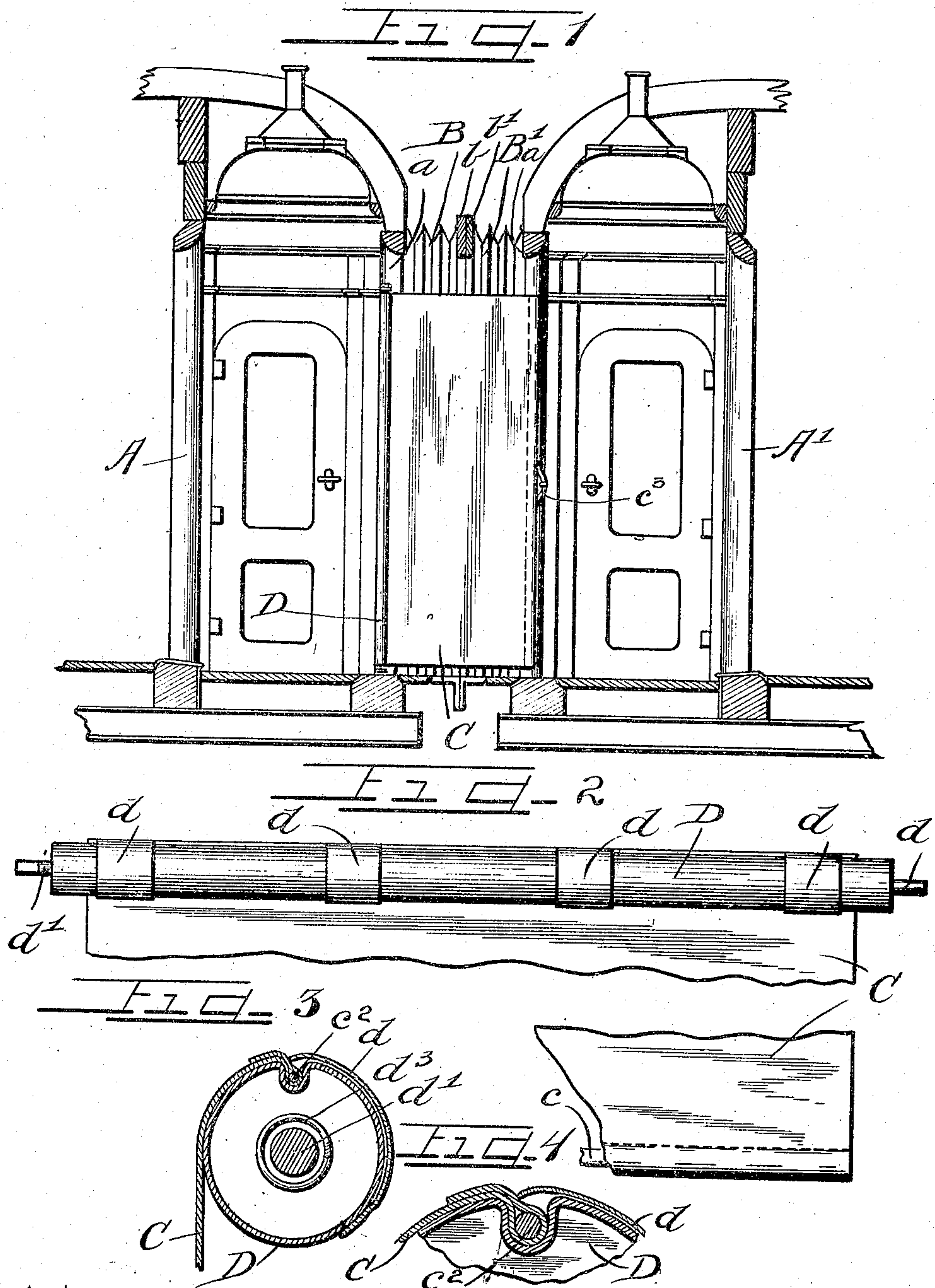


H. H. SCHROYER.
CURTAIN FOR CAR VESTIBULE DIAPHRAGMS.
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924,004.

Patented June 8, 1909.



WITNESSES
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UNITED STATES PATENT OFFICE.

HARRY H. SCHROYER, OF CHICAGO, ILLINOIS.

CURTAIN FOR CAR-VESTIBULE DIAPHRAGMS.

No. 924,004.

Specification of Letters Patent.

Patented June 8, 1909.

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To all whom it may concern:

Be it known that I, HARRY H. SCHROYER, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Curtains for Car-Vestibule Diaphragms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to curtains for car vestibule diaphragms.

Heretofore the curtains whereby the inner edges of the diaphragm in railway vestibules are concealed from the view of the passengers have been rigidly attached upon a spring roller of any desired kind on one vestibule face plate and are hooked at the center at the vestibule face plate of the adjacent car. In consequence should the train be uncoupled or break in two as frequently happens the curtain is torn from its roller and usually ruined. A considerable expense is thus occasioned for renewal of this important equipment.

The object of this invention is to provide a curtain roller and fastening means for the curtain whereby should the train break in two or the cars be uncoupled with first releasing the curtains the curtains will be merely detached from the roller and without injury, permitting the same to be immediately secured in place without expense or trouble.

The invention consists in the matters hereinafter described and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a fragmentary longitudinal section of the vestibule and diaphragms of two coupled cars. Fig. 2 is an enlarged side elevation of the automatic roller. Fig. 3 is an enlarged transverse section of the roller. Fig. 4 is an enlarged fragmentary detail of the same.

As shown in the drawings: A and A' indicate the car ends or vestibules provided with the usual vestibule face plates a — a' to which respectively are secured the diaphragms B and B', the diaphragm face plates b — b' of which mutually engage as is usual.

Journaled vertically on the vestibule face plate of one car is the automatic curtain roller D, to which is detachably secured the

curtain C the opposite end of which is provided with a rod c engaged in the hem thereof and which extends vertically along the opposite vestibule face plate a' and is provided with a central loop c^3 adapted to engage on a suitable hook on said vestibule face plate a' . Said curtain may be of any suitable material and is provided in its edge which engages the roller with a rod c^2 engaged in the hem thereof as shown in Figs. 3 and 4. The roller is constructed of metal or other suitable material as is usual for automatic curtain rollers of large size and is provided in one side with a longitudinal groove or recess of a size and depth adapted to receive the rod and a part of the hem at the rear edge of the curtain. Rigidly secured on the roller at intervals in its length are spring clips d , one end of each of which is rigidly secured on the periphery of the roller and the other end of which curves upwardly around the roller and extends across the groove in the side thereof and into positive bearing on the curtain firmly engaging the curtain between the extremity thereof and the rounded side wall of the groove as shown in Figs. 3 and 4. The free ends of said springs as shown are bent slightly inward the better to engage and hold the edge of the curtain in place. Said curtain roller of course is journaled at one end upon a suitable gudgeon a^2 , engaging in a suitable bearing on the vestibule face plate and on the opposite end is provided the protruding angular end of the non-rotative shaft d' on which is secured the spring d^3 for rotating the roller as is usual and which serves to hold said roller in position.

The operation is as follows: When equipped with curtain rollers and curtains as described should the cars separate without detaching the edge of the curtain from the opposite vestibule face plate, the roller revolves until the straight pull on the rear edge of the curtain springs the spring plates or clips d sufficiently to permit the edge of the curtain to be drawn from beneath the same thus freeing it entirely from the roller and without injury. Of course if it is desired to replace the curtain it is only necessary to spring the clip d open sufficiently to insert the edge of the curtain into said groove beneath the springs as before described. The rod c^2 in the seam of the curtain nearly fills the groove and is loosely engaged therein. Said curtain adjacent the rod is firmly engaged by the extremities of said spring clips and is retained in place until

excessive strain may again release the curtain from the roller. The curtain is capable of detachment at any possible angle of pulling to the fact that the end thereof and the rod are loosely engaged in the slot beneath the ends of the clips which leaves the same free for removal at a pressure less than that possible to tear or injure the curtain.

While I have described my invention as relating to automatic rollers and curtains for car vestibules obviously curtains and rollers such as described may be applied for any purpose for which curtains may be required and I do not desire to limit my invention to a curtain for a specific purpose. Obviously also the curtains and rollers may be made of any desired size and material and many details of construction may be modified without departing from the principles of my invention.

I claim as my invention:

1. In a device of the class described a pressed metal curtain roller having a longitudinal groove pressed therein providing comparatively deep side walls, a curtain, a rod secured thereto adapted to loosely fit in the groove and spring clips, each rigidly secured to the roller at one end and at the opposite ends coacting with the wall of the groove to grip the curtain and retain the rod in the groove, said clips adapted to yield to permit the rod to be automatically withdrawn from the groove.

2. A device of the class described embracing an automatic curtain roller provided with a longitudinal groove, a curtain having a rod in each end, one of which engages loosely in the groove, clips rigidly engaged at one end to the roller and at their opposite

ends projecting over the groove firmly engaging and jamming the curtain against the roller and adapted to permit automatic release of the curtain rod from the groove.

3. A device of the class described embracing a roller provided with a longitudinal groove, a curtain, a rod secured in each end thereof, and clips loosely engaging one of the rods in the groove by engaging the curtain adjacent the rod and yieldable to automatically release the curtain rod from the roller.

4. A device of the class described comprising a curtain roller having a longitudinal groove, a curtain, a rod firmly secured at each end of the curtain, one of which is adapted to loosely fit in the groove and means for retaining the rod in the groove and adapted to yield to permit automatic withdrawal of the rod.

5. In a device of the class described a curtain roller provided with a longitudinal groove, a curtain, a rod secured to each end of the curtain, one of said rods fitting in the groove in the roller, means secured to the rod at the outer end of the curtain adapted for engagement with a hook and means for normally holding the rod in the groove in the roller adapted to release the rod from the groove when the curtain is fully extended and tension exerted on the means secured to the outer rod.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

HARRY H. SCHROYER.

Witnesses:

R. E. SLAGLE,
C. W. HILLS.