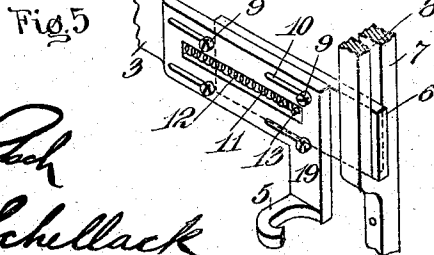
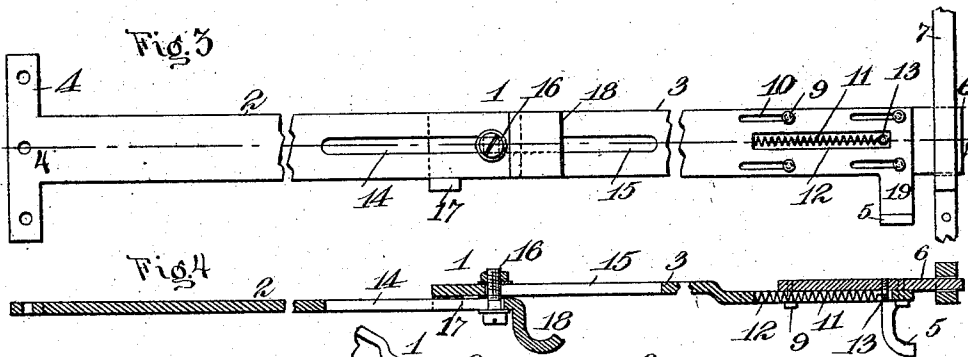
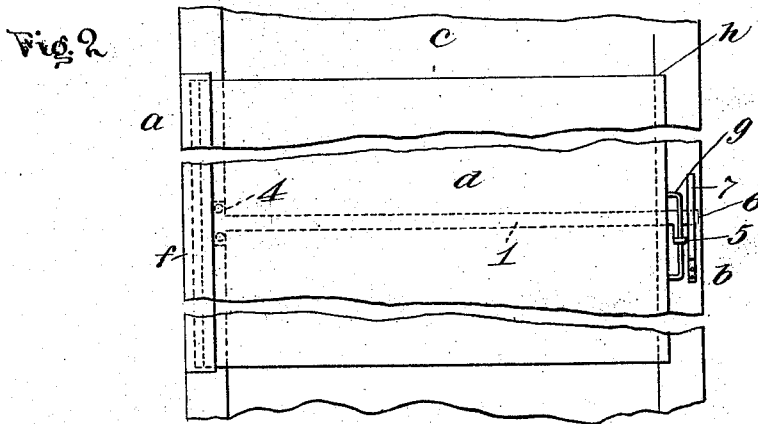
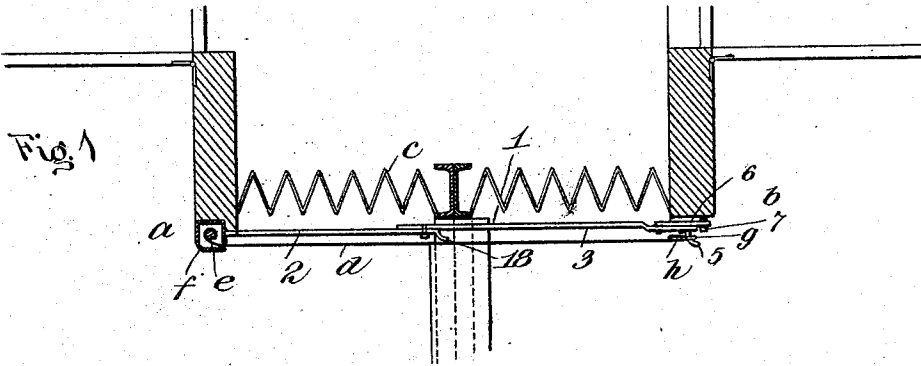


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ATTACHMENT FOR TRAIN VESTIBULE CURTAINS.  
APPLICATION FILED JUNE 25, 1910.

996,332.

Patented June 27, 1911.



Witnesses:

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# UNITED STATES PATENT OFFICE.

EDMUND F. HARTSHORN, OF NEWARK, NEW JERSEY.

ATTACHMENT FOR TRAIN-VESTIBULE CURTAINS.

996,332.

Specification of Letters Patent. Patented June 27, 1911.

Application filed June 25, 1910. Serial No. 568,765.

*To all whom it may concern:*

Be it known that I, EDMUND F. HARTSHORN, a citizen of the United States of America, residing in Newark, county of Essex, State of New Jersey, have invented a certain new and useful Improvement in Attachments for Train-Vestibule Curtains, of which the following is a specification.

The object I have in view is the production of a device for extending the curtain on the side of the bellows or accordion of the vestibule of railway or other cars, and in which no injury will result if the car be uncoupled without first collapsing the curtain.

A further object is to produce a device for holding the curtain partly distended, when the car is uncoupled or is the last on the train, so that only the bellows on that car will be covered.

These and further objects will more fully appear from the following specification and accompanying drawings.

In the drawings: Figure 1 is a plan view, partly in section, of the bellows of two abutting vestibules of a pair of coupled cars, showing an embodiment of my invention in place. Fig. 2 is an elevation of the same. Fig. 3 is an elevation on an enlarged scale, of the device embodying my invention. Fig. 4 is a section on the line 4—4 of Fig. 3, and Fig. 5 is a perspective view of a detail.

In all the several views, like parts are designated by the same reference characters. In the drawings, *a* is the vestibule of one car, and *b* the vestibule of another car coupled to the first car, *c* is the bellows, or accordion, of the usual form, *d* is the curtain which is secured to the jamb of the vestibule *a* and is mounted on a spring roller *e*, carried within a box *f*. On the outer edge of the curtain, which is stiffened by a rod *h* in the usual manner, is a bail or handle *g*. These parts are of the ordinary and well known construction. The curtain is wound up upon the roller *e* within the box *f*, and passes through a slot in the box, which slot will not permit the entrance of the rod *h*, on the free edge of the curtain. Ordinarily, it has been the custom heretofore to attach the handle to a hook on the jamb of the vestibule *b*. It is apparent that, should it be forgotten to unhook this handle when the cars are uncoupled, the curtain will be forcibly pulled off the roller. The usual practice is to attach the curtain to the

roller by fastenings analogous to a glove fastener, to permit the curtain to come off the roller without injury, but this practice is objectionable, in that the curtain is carried off by the other car, and that it or a new one cannot be attached to the roller without removing the same from the box *f*,—an operation which requires sending the car back to the shops. Various devices have been planned to automatically release the handle from the hook on the other car when the cars are uncoupled, but such devices do not work well in practice. According to my invention, I avoid these objections and, at the same time, produce an effective device, by holding the curtain in the distended position by means of a device which is carried upon the car upon which the curtain is mounted. This device is in the form of an arm, which, in the embodiment illustrated, is attached to the car *a* and extends in a horizontal direction outside of the curtain, between it and the bellows, and has a hook on the outer extremity for engagement with the handle *g*. The free end of the arm is adapted to be supported or guided in a device carried by the vestibule *b* in situations in which it is desirable to have such support. The arm, if desired, is also adapted to be folded, in order to get it out of the way, and it is also provided with a supplemental hook or support for the handle when the curtain is half unrolled and when the car is uncoupled or forms the end of the train. The arm, in the embodiment of my invention which is chosen for illustration, is preferably made of metal, and is indicated by the reference character 1. It is made of two sections,—an inner section 2, and an outer section 3. The inner section 2 has a T-head 4, with openings therein, as shown in Fig. 3, for the reception of screws or bolts for securing the section to the car vestibule *a*. The outer section 3 is provided with a hook 5, near its outer extremity, which engages with the handle *g* of the curtain. This outer section is also provided with a finger 6, for engaging with the fork 7, (see Fig. 5) which is carried by the vestibule *b*. This fork provides a vertical slot 8, within which the finger 6 will rest. The slot 8 may be open at the top, or closed, as desired. The purpose of this finger and slot is to give support to the outer end of the arm; but they may be omitted, if desired. In the embodiment of my invention chosen for illustration

tion, the finger is movably mounted on the section 3 and is held in distended position by means of a spring. This is for the purpose of preventing injury to the parts when the cars are coupled, the spring compressing and allowing the finger to adjust itself to the proper position. In the drawings the finger is provided with headed bolts 9, which pass through slots 10, formed near the outer end of the outer section 3. A spring 11, lying within a slot 12 in the outer section, engages with a pin 13, on the finger, and by its expansion moves the latter to the outermost position.

By making the arm in two sections, the latter may be made adjustable for various depths of vestibule. The means of connection of the two sections comprises a slot 14 on the inner section, and a slot 15 on the outer section. A bolt 16 passes through the two slots. This bolt may be tightened up or loosened in order to adjust the positions of the sections to vary the length of the arm, and also to pivot the outer section upon the inner section to permit the outer section to be folded over back or outside of the inner section when the arm is reduced to one-half its length. In order to sustain the weight of the outer section when distended, the latter is provided beyond the point of pivot, with a finger 17, which engages with the lower edge of the inner section. By providing the bolt 16 with a left-handed thread and a nut, as shown, the latter may be tightened so as to prevent the outer section of the arm from moving horizontally inward; at the same time, this outer section may be lifted up and swung around the pivot and thereby loosening its engagement, owing to the direction of the threads. The outer extremity of the inner section is provided with a hook 18, which is adapted to engage in the handle *g* when the curtain is extended to one-half its width. In order to allow the hook 5 to clear the inner section 2 when the outer section is folded inward, the said hook is mounted upon a column or extension 19.

In accordance with the provisions of the patent statutes, I have described the principle of my invention, together with the apparatus which I now consider to represent the best embodiment thereof; but I desire to have it understood that the apparatus shown is merely illustrative and that the invention can be carried out in other ways.

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

1. The combination with a car vestibule and a spring roller supported curtain carried thereby, of means carried by the car for holding the curtain distended.

2. A car vestibule and a spring roller supported curtain carried thereby, in combination with an arm carried by the car and

engaging with the curtain to hold the same in distended position.

3. A device for holding a vestibule curtain in distended position, which comprises an arm secured to the vestibule carrying the curtain and means on said arm engaging with the curtain handle.

4. A device for holding a vestibule curtain in distended position, which comprises an arm adjustable in length carried by the vestibule which carries the curtain, and means on said arm engaging with the curtain handle.

5. A device for holding a vestibule curtain in distended position, which comprises an arm made in adjustable sections and mounted on the vestibule carrying the curtain, and means on said arm engaging with the curtain handle.

6. A device for holding a vestibule curtain in distended position, which comprises an arm made in sections adjustable one with reference to another and foldable upon one another, and means on said arm engaging with the curtain handle.

7. A device for holding a vestibule curtain in distended position, which comprises an arm formed of sections and hooks on the sections to engage with the handle of the curtain.

8. A device for holding a vestibule curtain in distended position, which comprises an arm formed of sections, one section being carried by the car, and the other section being pivoted to the first section.

9. A device for holding a vestibule curtain in distended position, which comprises an arm formed of sections, one section being carried by the car, and the other by the first section, the connection between the two being by means of a slot and pivot.

10. In combination with two abutting car vestibules and a curtain on one, of an arm on the same vestibule, and a guide on the other vestibule engaging with the arm, said arm holding the curtain in distended position.

11. A device for holding a vestibule curtain in distended position, which comprises an arm on one vestibule with a hook on the free end which engages with the curtain to hold it in distended position, and a member having a slot on the other vestibule, with which the arm engages.

12. A device for holding a vestibule curtain in distended position, which comprises an arm on one vestibule with a hook on the free end, a spring pressed finger on the free end and a hook for engaging with the curtain to hold the latter in distended position, and a member having a slot on the other vestibule, with which the finger engages.

13. A device for holding a vestibule curtain distended, which comprises an arm

made of two sections, a hook on each for engagement with the handle of the curtain to hold the latter in distended position.

14. A device for holding a vestibule curtain distended, which comprises an arm made of two sections, a hook on each for engagement with the handle of the curtain to hold the latter in distended position, and a member with a slot, on the other vestibule

for engagement with the free end of the 10 arm.

This specification signed and witnessed this 24th day of June, 1910.

EDMUND F. HARTSHORN.

Witnesses:

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ALEX. C. ADAMS.