No. 853,188. PATENTED MAY 7, 1907.

C. McCOY & W. MORTON.

AUTOMATIC CURTAIN HOOK AND RELEASE FOR VESTIBULE CARS.

APPLICATION FILED APR. 4, 1906.

2 SHEETS—SHEET 1.

Fig. 1

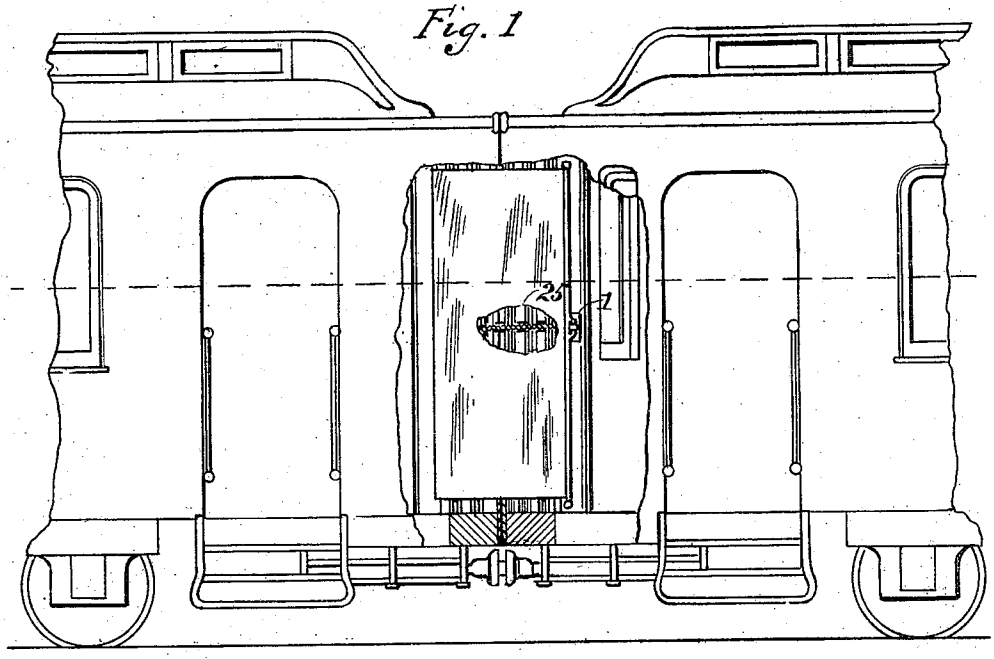

Fig. 2

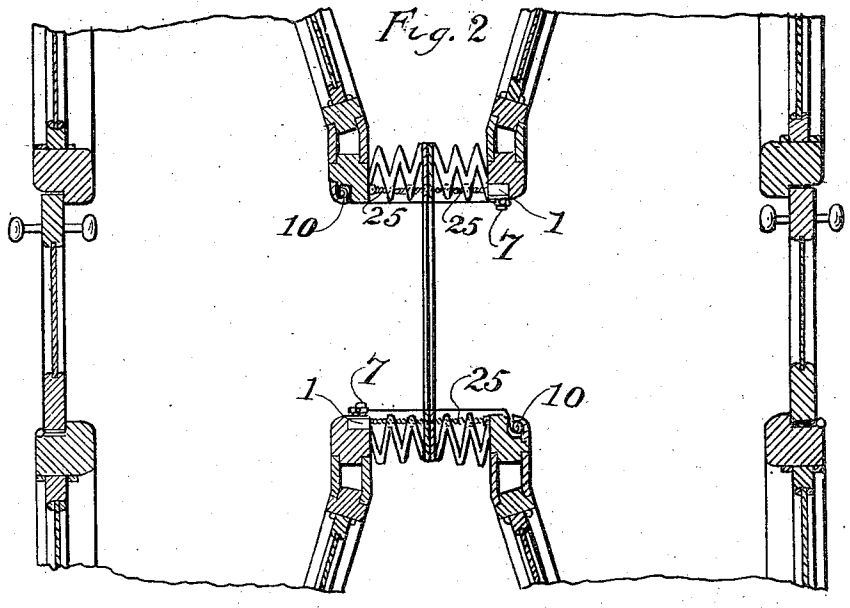

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Fig. 3

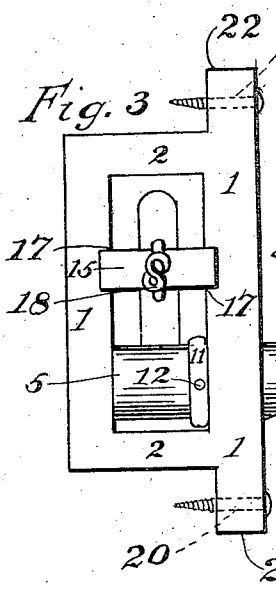
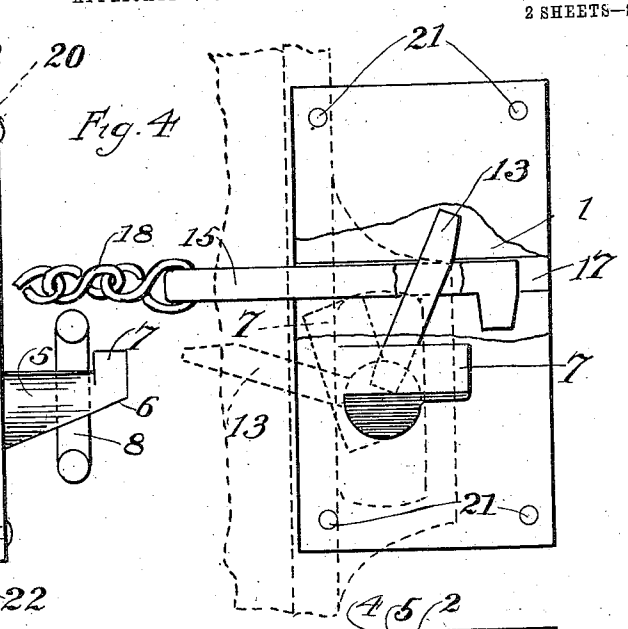


Fig. 4



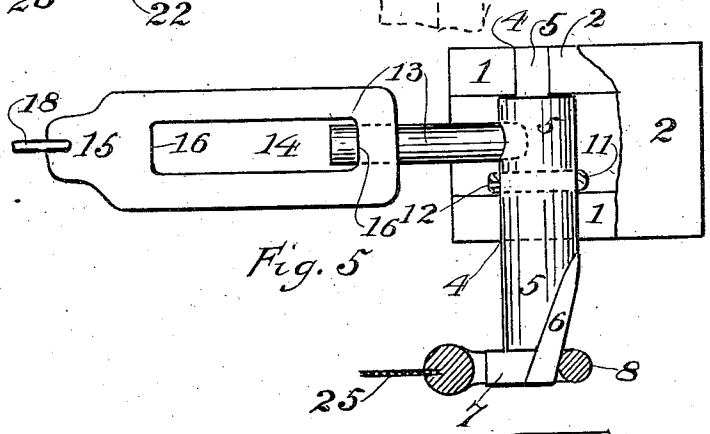
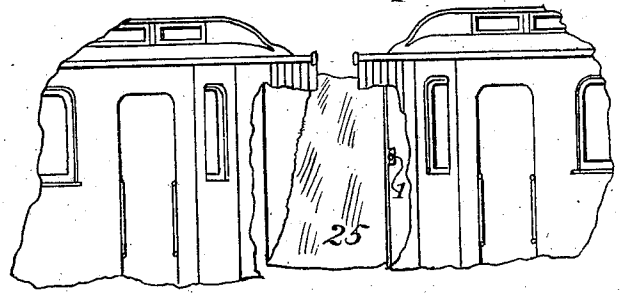


Fig. 5

Fig 6



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UNITED STATES PATENT OFFICE.

CLYDE McCOY AND WILLIAM MORTON, OF LOS ANGELES, CALIFORNIA.

AUTOMATIC CURTAIN HOOK AND RELEASE FOR VESTIBULE-CARS.

No. 853,188. Specification of Letters Patent. Patented May 7, 1907.

Application filed April 4, 1906. Serial No. 309,933.

To all whom it may concern:

Be it known that we, CLYDE McCOY and WILLIAM MORTON, citizens of the United States, and residents of Los Angeles, county of Los Angeles, State of California, have invented and discovered a new and useful Improvement in Automatic Curtain Hooks and Releases for Vestibule-Cars; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in automatic curtain hook and release for vestibule cars; and the objects of my improvement are; first, to provide a bracket carrying the operative parts of my improvement adapted to be fastened to abutting ends of cars for automatically releasing one of the ends of the vestibule curtains when cars are uncoupled or separated from each other; and, second, to construct and arrange parts of our improvement in such a manner that the parts thereof are not torn or damaged when the cars are suddenly disconnected and the parts can be quickly and readily replaced.

The invention consists essentially of the construction, combination and arrangement of the several parts, as will be hereinafter fully described in the specification, shown upon the drawings appended hereto and specifically pointed out in the claims made a part hereof.

We attain these objects by the construction and arrangement of the parts of my invention illustrated in the accompanying drawings, in which—

Figure 1 is a side view in elevation of portions of two cars coupled together, parts broken away and parts thereof shown in section; Fig. 2 is a partial plan view of two cars coupled together, parts thereof broken away; portions of the cars illustrated in section, showing our improvement secured to abutting and opposite ends of the cars upon opposite sides of the vestibule; Fig. 3 is an end view in elevation of the bracket, the slotted slide, the bevel-ended hook-shaft, and a portion of the ring or hook secured to the curtain shown in section upon the shaft; Fig. 4 is a side view in elevation of the bracket, parts thereof broken away, showing in full and dotted lines the slotted slide, the shaft and shaft-pin in the grooves of the vertical side walls of the bracket; Fig. 5 is a top plan view of the bracket, parts thereof broken away, showing the bevel-ended hook-shaft, the shaft-pin, the slotted slide, the curtain hook or ring upon the shaft secured to the curtain and the shaft ring within the bracket illustrated in section; and Fig. 6 is a view in elevation of portions of two cars coupled together, parts thereof broken away, showing the vestibule curtains separated, one of the curtains having slipped from the beveled hook-shaft adapted to turn in the sides of the bracket secured to abutting and opposite ends of the cars on opposite sides of the vestibule.

Similar reference numerals, letters and characters refer to like parts throughout the several views of the drawings.

The reference numerals 1, 1, denote the sides of the bracket shown upon Figs. 3, 4 and 5 of the drawings, the numerals 2, 2, the top and bottom of the bracket. In the sides 1, 1, of the bracket are formed bearings 4, 4, in which the shaft 5, beveled at 6 near the end thereof and provided with a hook 7 upon the end thereof retains the hook or ring 8 thereon when in the position shown in full lines upon Fig. 4 of the drawings, and when in position illustrated upon Fig. 5 of the drawings permits the said hook or ring 8 to slip over the bevel 6 and off from the end of the shaft. The chains 18, 18, are secured at one of their ends to the slides 15, 15, carried by one of the coupled cars and the opposite ends thereof are fastened to the other adjacent coupled car in order that when the cars are uncoupled and separated as shown upon Fig. 6 of the drawings, the shafts 5, 5, are tilted so as to free the beveled ends 6, 6, thereof from engagement with the links, 8, 8, when the vestibule curtains are pulled apart beyond a limit which would otherwise tear the curtains. To the said hook or ring 8, one end of the curtain is fastened and the opposite end of the curtain is secured at 10 to the side of the vestibule of the abutting end of the coupled car in any suitable manner, as illustrated upon Fig. 2 of the drawings.

The shaft 5 is held in place within the bracket by means of the removable shaft-ring 11, retained thereon by the screw 12, shown upon Figs. 3 and 5 of the drawings. The shaft-pin 13, is removably secured to the shaft 5, and is adapted to move within the slot 14 of the slide 15, and to contact with the ends 16, 16, of the slide, when the shaft 5 is turned in the bearings 4, 4, of the bracket. The slide 15, is held in a horizontal position,

the edges thereof being retained in the grooves 17, 17, in the sides 1, 1, of the bracket, as it reciprocates back and forth through the bracket. By means of the chain 18, the slide is secured to the car. One of the brackets is fastened by means of screws 20 20, passing through the holes 21, 21, in the projecting ends 22, 22, of one of the side pieces 1, to one side of the vestibule of one of the abutting cars and the other bracket is secured to the opposite side of the vestibule of the coupled, abutting, car, as illustrated upon Fig. 2 of the drawings, and the curtains 25, 25, extend directly in straight lines from each of the said brackets across the vestibule and are secured by hooks or rings to the cars and as illustrated at 10, 10 upon Fig. 2 of the drawings.

There are parts of the cars shown upon the drawings, not referred to by reference numeral, common to all cars, which are deemed unnecessary to be described herein, as the same form no feature of our invention.

From the foregoing description, taken in connection with the accompanying drawing, it is thought that the construction, mode of operation and advantages of our improvement will be readily apparent without requiring further explanation of the same.

Various changes in the form, proportion and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention, and we therefore reserve the right to make such changes as fairly fall within the scope thereof.

What we do claim as our invention and desire to secure by Letters Patent, is—

1. A vestibule curtain hook and release comprising a bevel-ended hook-shaft carrying a pin thereon, a slotted slide, means for supporting the same, in combination with a curtain fastened to one end of the coupled and abutting cars carrying means adapted to be removably engaged from the said hook-shaft and to be retained thereon.

2. A vestibule curtain hook and release comprising a bracket having bearings in the side thereof, a shaft mounted in said bearings and provided with a bevel near the end and carrying a hook or ring, the shaft pin removably secured to the shaft adapted to receive a hook or ring upon the end of the curtain attached to the abutting end of a coupled car to that on which the bracket is fastened.

3. An automatic curtain hook and release comprising a bracket having bearings in the sides thereof adapted to be secured to the abutting ends of coupled cars, a shaft carrying a removable pin adapted to engage a slotted slide reciprocating in grooves in the sides of the bracket, the said shaft having a beveled end-portion adapted to engage means fastened to a curtain attached to an abutting or coupled car.

4. A bracket for curtains of vestibule cars having grooves and bearings in the sides thereof, a bevel-ended hook-shaft journaled in said bearings carrying a pin, a slotted slide secured at one end to a curtain having one end thereof fixed to an abutting coupled car, said slide adapted to reciprocate in grooves in the side of the bracket and a bevel-ended hook-shaft adapted to engage a curtain securely fixed at the opposite end of an abutting car from that on which the bracket is fastened.

5. A vestibule car curtain hook and release comprising brackets secured to abutting ends of cars, said brackets carrying bevel-ended hook-shafts in combination with a curtain fixed to the abutting end of a coupled car to that on which the bracket is fastened, said curtain carrying means adapted to engage and disengage the said bevel-ended hook-shafts.

6. An automatic curtain hook and releasing device for coupled vestibule cars comprising a bracket carrying a slotted slide, a bevel-ended hook-shaft and a shaft-pin removably fastened to the shaft, the said slide adapted to reciprocate in grooves of the bracket, in combination with a curtain having a hook or ring secured to the ends thereof for engaging and disengaging the hook bev-eled end of the shaft.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

CLYDE McCOY.
WILLIAM MORTON.

Witnesses:
JAMES R. ROGERS,
M. E. SMITH.