

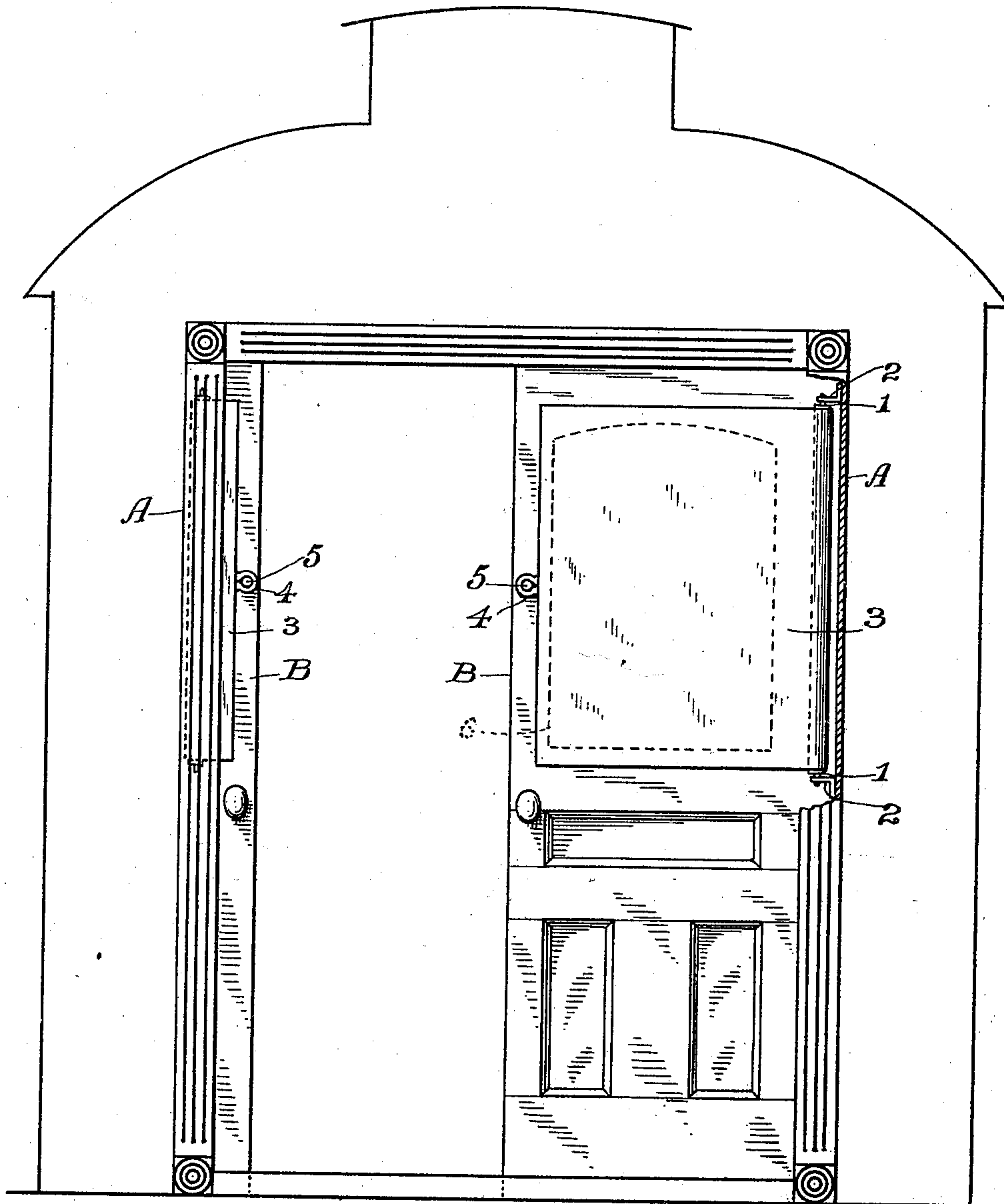
No. 671,414.

Patented Apr. 2, 1901.

E. I. PYLE.
WINDOW SHADE FOR SLIDING DOORS.

(Application filed Nov. 7, 1900.)

(No Model.)



WITNESSES:

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EDWIN I. PYLE, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO M. R. BENNETT, OF SAME PLACE.

WINDOW-SHADE FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 671,414, dated April 2, 1901.

Application filed November 7, 1900. Serial No. 35,761. (No model.)

To all whom it may concern:

Be it known that I, EDWIN I. PYLE, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Window-Shades for Sliding Doors; and I 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.

My invention relates to certain improvements in window-shades, but more particularly has reference to a certain combination between a window-shade and a sliding door, such as will effect the automatic winding of the shade when the door is open and the automatic drawing of the shade when the door is closed without the manipulation of such shade by the hand.

The accompanying drawing illustrates an interior end view of an ordinary street-car having its sliding doors equipped with my improvement.

Heretofore windows and doors have been equipped with shades, the latter being in both a horizontal and a vertical position; but in all instances manipulation by the hand has been necessary either for the purpose of drawing the shade or as a preliminary to the winding thereof.

It is the object of my improvement to so equip a sliding door with a shade that the opening of the door will automatically effect the winding up of the shade, while the closing of the door will automatically draw the shade, and at the same time my improvement is so constructed and applied that the shade may be released from the door and wound, so that such shade will not perform its functions except in the ordinary manner by hand manipulation.

1 is an ordinary "Hartshorn" roller from which the end detent-pawls have been removed, said roller being journaled in a vertical position within fixtures 2, which are secured at the side of the upper door-casing A in proximity to the door B itself. 3 is the shade, which is secured to said roller and is capable of being wound thereon, the outer edge of said shade being provided at its mid-

dle portion with any suitable eye or loop 4, which is adapted to be engaged with a stud or hook 5, secured to the outer edge of the door. The upper portion of the door has a large pane of glass 6 (shown in dotted lines) set therein, and in applying my improvement the shade is drawn and the eye or loop fastened over the stud.

I have shown in the drawing two sliding doors, such as are commonly found in street-cars, and in the instance of one of these doors the shade is shown fully drawn across the glass 6 and the door is closed, while the other door is open and the shade is wound on the roller. It being borne in mind that the end detent-pawls are removed from the roller it will be clear that the shade is always under tension, and therefore when the door is open the shade will be automatically wound on the roller and when the door is closed the shade will be drawn from the roller. Should the occasion arise, as it generally does in the day-time, when the shade is not necessary, the loop is simply detached from the stud and the shade allowed to wind up on the roller, the loop acting as a stop to prevent the shade-roller spring from unwinding beyond a certain limit.

My invention is particularly intended for use in connection with vestibuled street-railway cars, for it is a well-known fact that in the night-time the glare of the light from the interior of the car will reflect upon the glassed portion of the vestibule in front of the motor-man and blind the latter, so that he cannot properly see ahead of the car.

It has been a common practice to hang a screen or shade from the top of the door-casing so as to cover up the glass portion of the doors, but such a screen is constantly becoming jammed in the doors, is in the way of persons passing through said doors, and must constantly be removed and transferred to the other end of the car. By the use of my improvement all these disadvantages are obviated and the operation of the shade is entirely automatic in every respect, being effected solely by the opening and closing of the doors.

I do not wish to be understood as laying any claim whatever to a shade, it being the sole

object of my improvement to so utilize an ordinary shade in connection with a sliding door that a new result will be accomplished—namely, the automatic operation of the shade
5 by the opening and closing of the door itself.

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

1. In combination with a horizontally-sliding door, which is partly of glass, and the fixed parts of the structure in which it moves, a spring-operated roller-shade extending across the transparent part of the said door and provided with means for detachably connecting its outer end to the said door, the
15 roller of the said shade being attached to the fixed parts of the structure and the aforesaid devices being arranged to allow the winding of the shade when the door is opened and its

extension when the door is closed substantially as set forth. 20

2. The combination of a sliding door, the resilient free-acting shade having its roller journaled within suitable fixtures extending from the side of the door-casing in close proximity to the door, and a loop and stud for detachably connecting said shade to the outer edge of the door, whereby the opening and closing of said door will automatically effect the winding and drawing of said shade, substantially as set forth. 25 30

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN I. PYLE.

Witnesses:

F. W. SMITH, Jr.,
M. I. LONGDEN.