No. 730,443. PATENTED JUNE 9, 1903.

E. H. DUCHEMIN.

CURTAIN.

APPLICATION FILED OCT. 30, 1902.

NO MODEL.

Fig. 1.

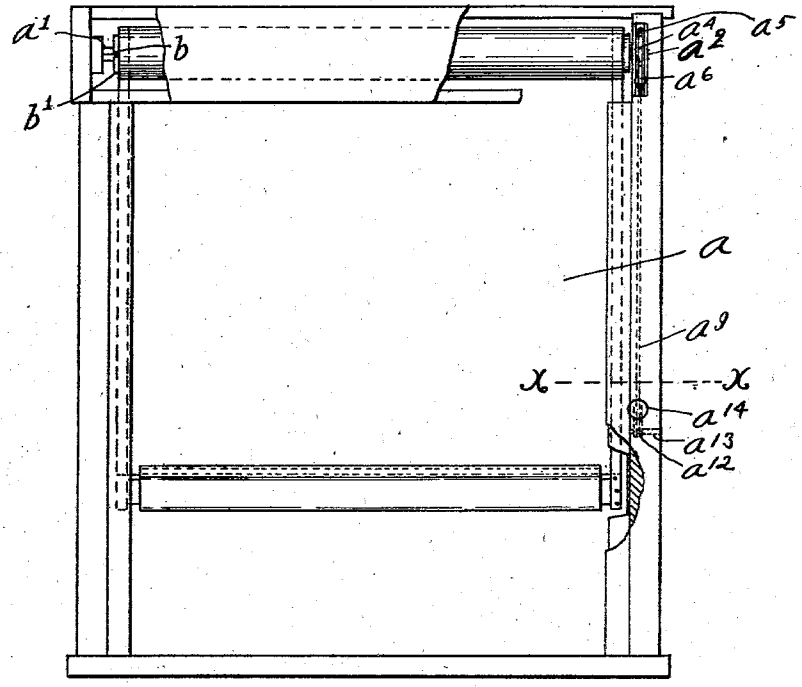
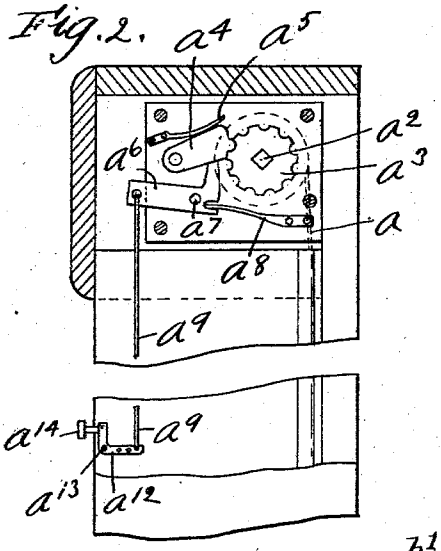


Fig. 2.



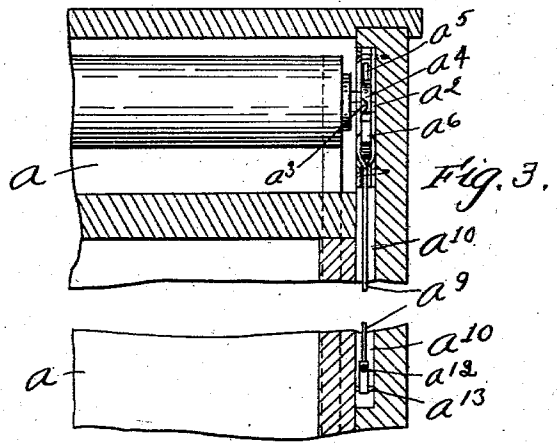


Fig. 3.

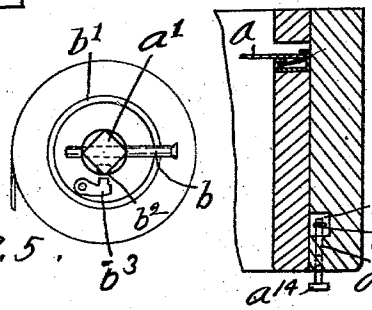


Fig. 5.

Fig. 4.

Witnesses:

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 730,443. Patented June 9, 1903.

UNITED STATES PATENT OFFICE.

EDMUND H. DUCHEMIN, OF NEWARK, NEW JERSEY.

CURTAIN.

SPECIFICATION forming part of Letters Patent No. 730,443, dated June 9, 1903.

Application filed October 30, 1902. Serial No. 129,340. (No model.)

To all whom it may concern:

Be it known that I, EDMUND H. DUCHEMIN, of Newark, county of Essex, State of New Jersey, have invented an Improvement in Curtains, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention relates to curtains especially adapted for use on cars, and has for its object to construct an improved form of locking device adapted to hold the curtain in any position that it may be set and when operated to release the curtain to enable it to be drawn up by the action of the spring, yet the curtain is at all times free to be drawn down, and my improved locking device has an operating device which projects from the casing at any desirable elevation adapted to be operated by pressure, like the pressure upon a button, and when operated to release the curtain.

Figure 1 shows in front elevation a curtain embodying this invention. Fig. 2 is an enlarged detail showing my improved locking device in side elevation. Fig. 3 is an enlarged detail showing the locking device in front elevation. Fig. 4 is a section taken on the dotted line 4 4, Fig. 1. Fig. 5 is an end view of the spring-roller, showing the means for holding the spring wound up.

a represents a curtain which is supported upon a spring-roller of the Hartshorn or other type, and a' a^2 are the end journals of said roller. A toothed wheel a^3 is secured to one of the end journals, as a^2, for instance, and said wheel is normally engaged by a pawl a^4, which may be held pressed into engagement with said wheel by a spring a^5 or by gravity. A pawl-lifting lever a^6 is provided, pivoted at a^7, which is adapted to engage the pawl a^4 and when operated to lift said pawl out of engagement with the toothed wheel. The pawl-lifting lever is made as a bell-crank lever. The pawl-lifting lever is acted upon by a spring a^8, which engages one arm of said lever. A link a^9 is connected to the other arm of said lever, which extends down along the casing within a recess a^{10}, formed or provided therein, and the lower end of said link a^9 is connected to one arm of a bell-crank lever a^{12}, pivoted at a^{13}, the other arm of said lever having a button or headed stud a^{14} attached to it, which projects through an opening in the casing. By pressing upon the button a^{14} the pawl-lifting lever will be operated and the pawl disengaged from the toothed wheel, and at such time the spring-roller will be released and caused to roll up the curtain by the action of the spring. In order to hold the spring of the roller wound up while the curtain is removed from its bearings, I have provided one of the end journals, as a', with a hole through it, through which a pin b may be driven, which engages a flange b' on the end of the roller, and when the journals of the roller are placed in their bearings, and thereby prevented from operating, the pin b will be removed. In order to hold the spring while it is being wound up, the end journal a' will be provided with a single notch b^2. A pawl b^3, which is connected to the roller, is adapted to enter said notch, and thereby lock the journal. When, however, the curtain is placed in its bearings, the journal a' will be placed with the notch in its under side, and the pawl will at such time fall by gravity out of engagement with the journal.

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

A curtain having a spring-roller, a case having a vertical recess in one of its side portions, provided with an opening at its lower end, a toothed wheel secured to one of the end journals of said roller, a pawl engaging said toothed wheel, a pivoted spring-controlled pawl-lifting lever, and means for operating said lever consisting of a link connected to said lever which passes down through said vertical recess, a pivoted bell-crank lever connected to the lower end of said link having a button attached to one of its arms which projects through the opening at the lower end of the casing, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDMUND H. DUCHEMIN.

Witnesses:

B. J. NOYES,

H. B. DAVIS.