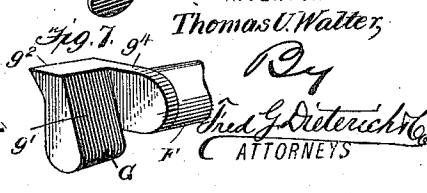
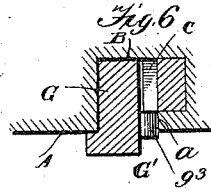
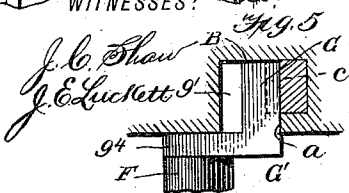
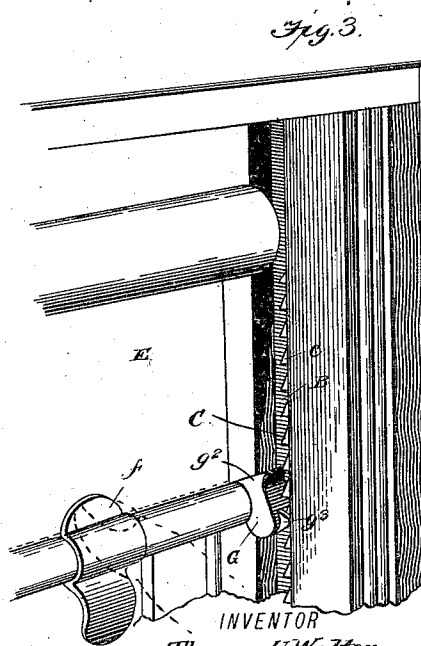
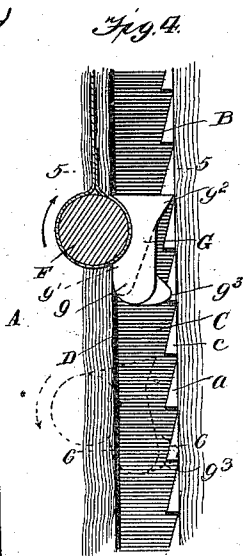
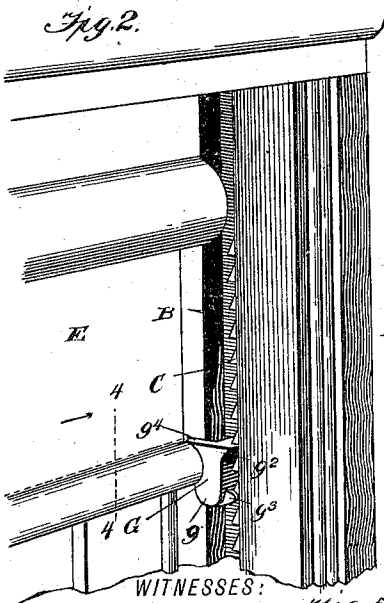
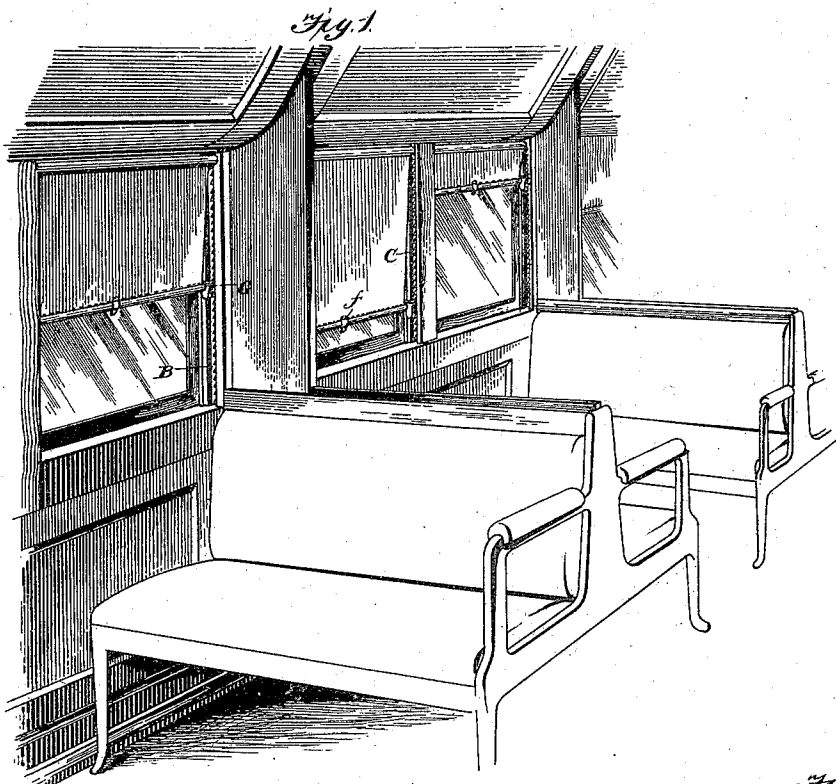


(No Model.)

T. U. WALTER.
CURTAIN FIXTURE.

No. 579,504.

Patented Mar. 23, 1897.



UNITED STATES PATENT OFFICE.

THOMAS U. WALTER, OF HUNTINGTON, WEST VIRGINIA, ASSIGNOR OF ONE-HALF TO F. M. FRAZIER AND C. D. EBERSOLE, OF BIRMINGHAM, ALABAMA.

CURTAIN-FIXTURE.

SPECIFICATION forming part of Letters Patent No. 579,504, dated March 23, 1897.

Application filed March 14, 1896. Serial No. 583,191. (No model.)

To all whom it may concern:

Be it known that I, THOMAS U. WALTER, residing at Huntington, in the county of Cabell and State of West Virginia, have invented a new and Improved Curtain-Fixture, of which the following is a specification.

My invention, which relates to improvements in that class of curtain-fixtures and inside blinds more especially adapted for use on railway-cars, particularly refers to improvements on the devices disclosed in my Patent No. 548,485.

My present invention seeks to provide a more simplified construction and arrangement of parts, which can be more economically manufactured, and which are so arranged that it will be almost impossible for the several parts comprising my invention becoming separated or broken.

In my patent above referred to the detent mechanism comprises a dog or pawl adapted to engage a rack-face and normally held in an operative or locked position by a suitable spring device held to slide within the guideway and which also forms a runner member to steady the pawl in its ascent or descent within the guideway.

In the practical application of the form of curtain-fixture shown and described in my patent above referred to I have found that the arrangement of detent mechanism, while effective in its operation, is open to objection in that the spring member and pawl being of necessity two separate parts joined together they are liable to become detached and broken by the ordinary manipulation of the curtain and the detent mechanism thereby rendered inoperative. To overcome this objectionable feature and to provide a detent mechanism which cannot be rendered inoperative by the ordinary or rough manipulation of the curtain is the main object of this invention.

A further object of this invention is to utilize the tension of the spring which rolls up the curtain as the power for holding the detent mechanism to its locked position.

With other minor objects in view, which hereinafter will be referred to, the invention consists in a curtain-fixture comprising the peculiar combination and novel arrangement

of parts, such as will be first described, and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a view illustrating my invention as applied for use in railway-cars. Fig. 2 is a detail perspective illustrating the detent devices in their locked position. Fig. 3 is a similar view illustrating the detent devices in an unlocked position. Fig. 4 is a sectional view taken on line 4 4 of Fig. 2, the pawl or dog being shown locked in full lines and unlocked in dotted lines. Fig. 5 is a section on line 5 5 of Fig. 4. Fig. 6 is a similar view taken on the line 6 6 of Fig. 4, and Fig. 7 is a detail view of the lock dog or pawl.

Referring to the accompanying drawings, A indicates the window frame or sash, which has the usual curtain or blind grooves B, which in the preferred form have at one side a rack-bar C, the teeth of which incline downward, the opposite side D being smooth.

By referring more particularly to Figs. 5 and 6 it will be observed that the rack-bar C is held in a groove or rabbet in such a manner that its tooth portion *c* only projects beyond the edge *a* of the frame, such edge forming a guideway for a purpose presently explained.

While in practice I have found that a rack member having regular teeth forms the most positive lock member for the detent devices, I desire it understood that the lock edge of the groove B may be serrated or roughened, or, in some instances, in the nature of yielding body, such as rubber, into which the pawls will impinge when forced to a locking position by the tension of the curtain.

E indicates the curtain, which is of the spring-roller kind, it having, however, in the present case a solid pull-rod F in the lower end, which has centrally a suitable finger-press member *f*, as shown, such rod carrying at the ends the lock-pawls, the construction and arrangement of which are best illustrated in Figs. 4 and 7.

The dog or pawls G, one of which is secured to each end of the rod F or formed integral therewith, each consist of a cast member having a pendent portion *g*, rounded at the lower

end at g' , which normally forms a fulcrum or rest portion to bear against the smooth edge of the groove B.

The upper end of the member G on the face opposite the bearing portion g' has a tooth-engaging lip g^2 , it also having on such face near the lower end a projecting lug g^3 .

By reference to Figs. 5 and 6 it will be observed the pawls G are of a width greater than the groove B to provide an exterior portion G' , to which the lug g^3 is joined, such portion G' also having a rearwardly-extending ear g^4 , which connects with or is integrally formed with the end of the pull-rod F.

By providing a detent mechanism, as described, it will be readily seen that the pawl has an eccentric connection with the curtain, that is, the curtain is connected thereto at a point out of line with the groove B, and as the tension of the spring serves to draw the curtain up it follows that as the lower end g' of the pawl engages the smooth edge of the groove B the said pawl will be rocked into the direction indicated by the arrow in Fig. 4 and the lip g^2 in consequence forced into engagement with the rack-bar.

From the foregoing description, taken in connection with the accompanying drawings, it will be readily seen that by pressing against the rod F at any point the pawl G will be rocked in a reverse direction, (see dotted arrow, Fig. 4,) the rod F being slightly rocked by such pressure, such movement causing the lip g^2 to move out of engagement with the rack-bar, and thereby allowing the curtain to move up so long as pressure on the bar F is maintained.

To prevent the lower end of the detent rubbing against the rack-teeth as the pawl G moves up in the groove B, I provide the projection g^3 , before referred to, which engages the edge a of the frame and forms a guide for the lower end of the pawl, as clearly shown in Figs. 5 and 6.

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

1. In a curtain-fixture the combination with the spring-rolled curtain and the casing having guideways in front of the pull-line of the curtain, said guideways having the edge adjacent the curtain made straight and the opposite edge provided with rack-teeth, of the rock-bar F having lock-dogs G secured thereto, said dogs having each a tooth portion g^2 and a fulcrum or bearing portion g' all arranged substantially in the manner shown and for the purposes described.

2. In a curtain or blind fixture, the combi-

nation with the window-casing having guideways and a spring-rolled curtain, of a rocking bar attached to the lower end of said curtain, the ends of said bar, traveling in the guideways and carrying dogs adapted to engage the side of the casing and a guide carried also at each end of the bar to engage the casing and hold the dogs free of engagement of the sides of the guideways when the bar and curtain are being moved up and down substantially as shown and described.

3. In a curtain or blind fixture, the combination with the casing having guideways provided with rack-faces, of a spring-rolled curtain, the bar at the end of said curtain, the dogs rigidly connected to the said bar at one side of the center of said bar, whereby the tension of the curtain will throw said dogs into engagement with the rack-faces, said dogs being disengaged by rocking the bar, said dogs carrying guide-shoulders at their opposite ends to hold the dogs out of engagement while the bar is held in its rocked position and moved up or down substantially as shown and described.

4. In a curtain or blind fixture, the combination with the casing having guideways provided with rack-faces, of the curtain and bar, the dogs mounted upon the ends of the bar, and provided with a guide-shoulder adapted to bear against the guideway to hold the nose of the dog out of engagement with the rack-face substantially as shown and described.

5. In a curtain or blind fixture, the combination with the casing having guideways at each side each guideway having a rack-faced member arranged therein, the spring-rolled curtain, carrying a rigid member at the bottom, the ends of said member traveling in the guideways and carrying locking-dogs, therein, said dogs being rigidly connected with the rigid member and arranged eccentrically or to one side of the center of said member, whereby the tension of the curtain will rock the member and project the dog into engagement with the rack-faced member, said dog carrying a guide-shoulder at the opposite end adapted to bear upon the casing when the member is rocked to disengage the dog from the rack member whereby the curtain can be moved up or down without the dogs contacting with the rack-faced member substantially as shown and described.

THOMAS U. WALTER.

Witnesses:

CHARLES E. RIORDON,
J. EDW. LUCKETT.