

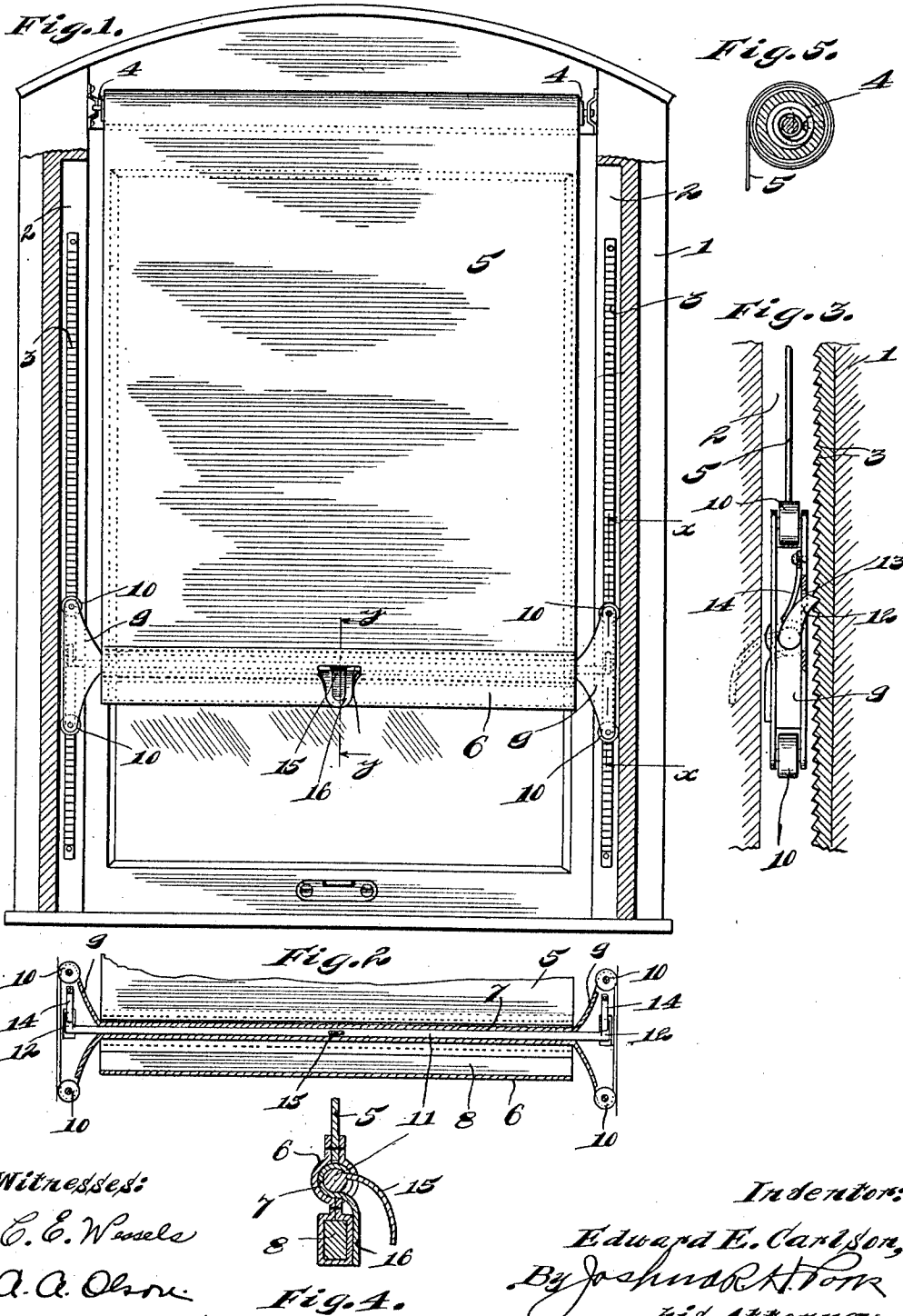
E. E. CARLSON.

WINDOW SHADE.

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1,061,728.

Patented May 13, 1913.



Witnesses:

C. E. Wassels

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Fig. 4.

Inventor:

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UNITED STATES PATENT OFFICE.

EDWARD EMMANUEL CARLSON, OF GENEVA, ILLINOIS.

WINDOW-SHADE.

1,061,728.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed March 11, 1912. Serial No. 683,052.

To all whom it may concern:

Be it known that I, EDWARD E. CARLSON, a citizen of the United States, and a resident of the city of Geneva, county of Kane, and State of Illinois, have invented certain new and useful Improvements in Window-Shades, of which the following is a specification.

My invention relates to window shades and more specifically to that class thereof designed especially for use in street and railway cars.

The object of my invention is the production of a shade of the character mentioned, which will be of improved construction and efficient in operation.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which,

Figure 1 is a sectional front elevation of a car window to which is applied a shade embodying my invention, Fig. 2 is a vertical longitudinal section of the lower end portion of the shade, Figs. 3 and 4 are enlarged sections taken on lines $x-x$ and $y-y$ respectively of Fig. 1, and Fig. 5 is an enlarged transverse section of the shade roller, showing a portion of the shade wound thereon.

The preferred form of construction as illustrated in the drawing comprises the window frame 1 which is of ordinary construction, except that in the inner sides of the vertical bars thereof are provided vertically extending grooves 2, said grooves being arranged parallel with and spaced slightly from the sash grooves of the frame. Provided in the grooves 2 are ratchet bars 3 secured upon the outer sides of said grooves, as shown, said bars being substantially co-extensive with said grooves.

Mounted in the upper end of the window frame is a spring roller 4, there being no pawls provided for coöperation with said roller and so that when the shade 5, which is secured to said roller, is released, said roller will immediately operate to wind the same thereon. At the lower edge of the shade 5 is provided an edging 6, preferably of leather, in which is mounted a tube 7 and

a reinforcing strip 8. The respective extremities of the tube 6 are T-formed in order to constitute guides 9 which slidably engage the grooves 2, there being rollers 10 provided at the respective extremities of said guides which are adapted to contact with the bottoms of said grooves in order to alleviate friction.

Rockingly mounted in the tube 7 is a rod 11 at the respective extremities of which are carried pawls 12, said pawls being adapted to project through slots 13 provided in the adjacent sides of the guides 9 into engagement with the teeth of ratchet bars 3 in order to lock the lower end of the shade against upward movement. Leaf springs 14 coöperate with the pawls 12 to normally hold the latter in operative position, and so that, in order to raise the shade, it will be required to first rock said pawls to inoperative position against the influence of said springs. Formed medially of the extremities of the rod 11 is an exteriorly projecting finger piece 15 through the medium of which said rod may be rocked in order to move the pawls to inoperative position. The tube 7 is provided with an extension 16 which serves as a protection for the edging 6, and as a stop for the finger piece 15 in rocking the same to release the pawls.

With a construction as set forth, it will be seen that the lower end of the shade will be normally locked against upward movement, said end being free to be moved downwardly if desired. When it is desired to raise the shade it is only necessary to depress the finger piece 15, such depression moving the pawls 12 to inoperative position, whereupon the shade will be free and the roller 4 will operate to move the same upwardly.

The construction is simple and economical to manufacture, and is of high efficiency in use.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claim.

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

5 The combination with a frame having grooves therein; rack bars mounted in said grooves; a tube interposed between said grooves, having ends thereof flared vertically to rest in said grooves; rollers mounted in said flared portion; a finger piece
10 formed on said tube; a shaft mounted for rotation in said tube and of a diameter substantially equal to that of the bore thereof; pawls mounted at the ends of said shaft for coöperation with the rack bars aforesaid; a

lever formed on said shaft and projecting 15 through said tube for coöperation with the finger piece aforesaid; and springs in said flared ends bearing against said pawls for normally holding the same in engagement with the rack bars. 20

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

EDWARD EMMANUEL CARLSON.

Witnesses:

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JOHN T. PETERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."