A. L. M. THOMPSON.

SCREEN.

APPLICATION FILED MAY 10, 1911.

1,040,813.

Patented Oct. 8, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

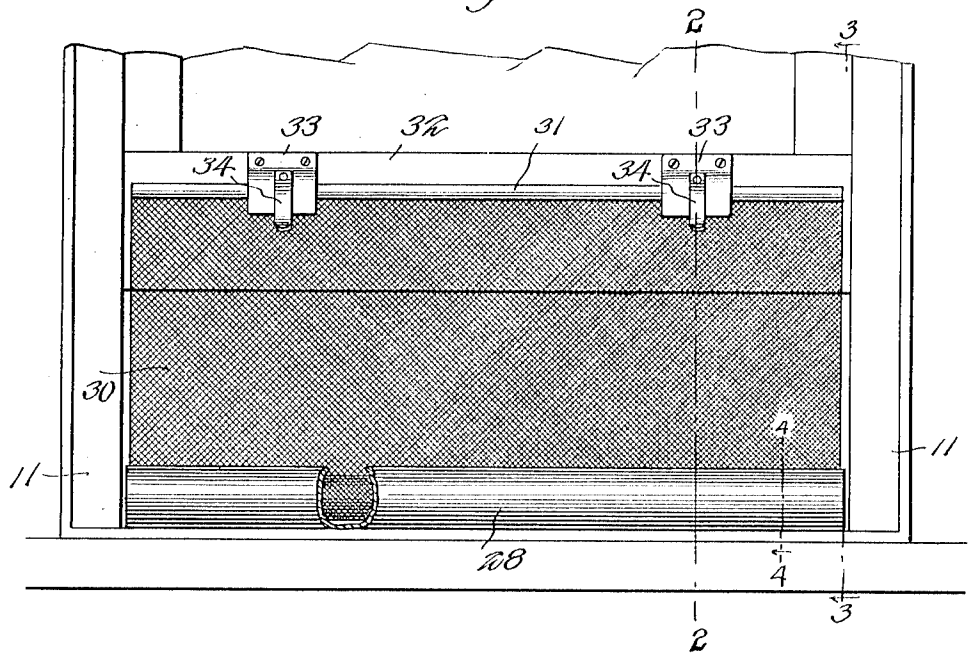


Fig. 4.

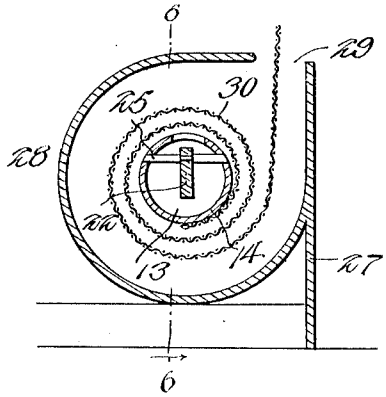
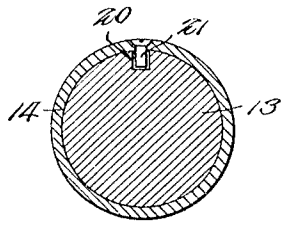


Fig. 5.



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2 SHEETS—SHEET 2.

Fig. 2.

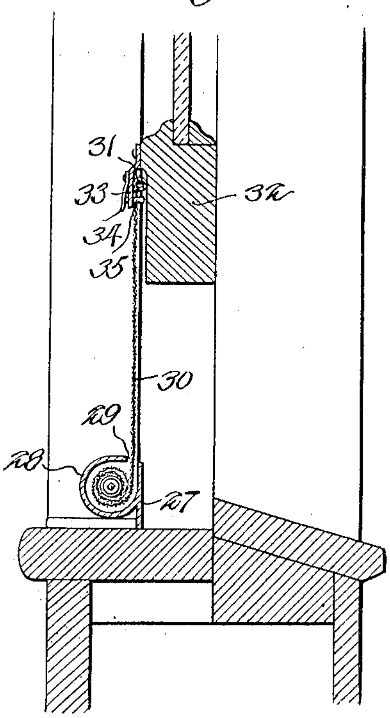


Fig. 3.

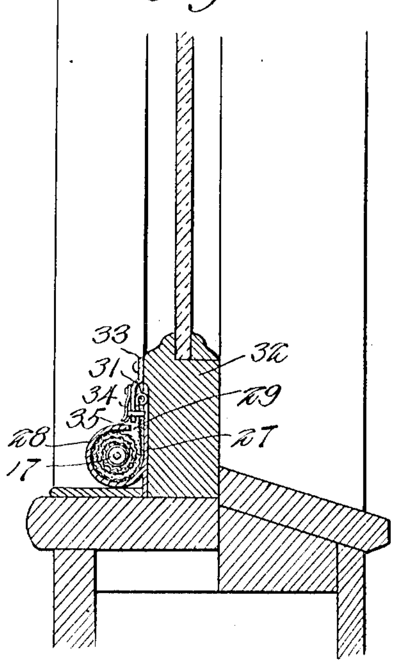
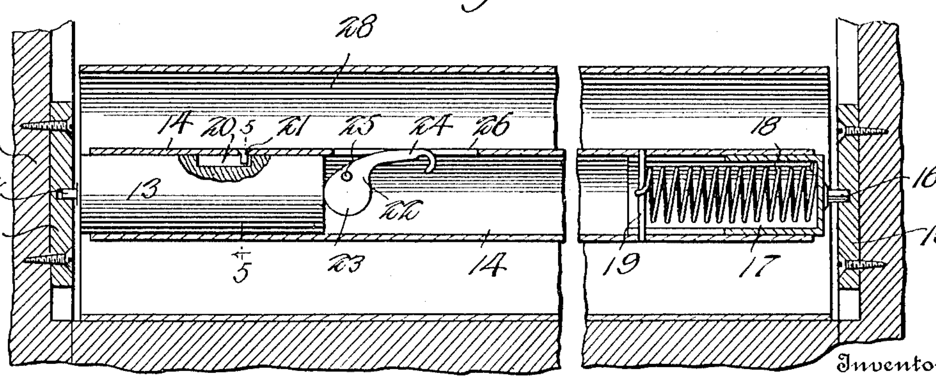


Fig. 6.



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UNITED STATES PATENT OFFICE.

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SCREEN.

1,040,813. Specification of Letters Patent. Patented Oct. 8, 1912.

Application filed May 10, 1911. Serial No. 626,381.

To all whom it may concern:

Be it known that I, ANNA L. M. THOMPSON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Screens, of which the following is a specification.

An object of the invention is to provide a device for attachment to car windows to act as a screen to prevent cinders from entering the car when the window is open.

For the purpose mentioned, use is made of a mandrel journaled in a bearing secured to the window casing near the base thereof, the said mandrel extending into a sleeve provided with a pin operable in a slot in the said mandrel so that the mandrel will turn with the sleeve, a casing having a squared shaft in engagement with a second bearing secured to the other side of the window casing, the said casing extending into the said sleeve and having a spring mounted therein with one end of the spring connected to the said sleeve and a curtain secured to the sleeve and encircling the same, the outer end of the said curtain being removably attached to the base of a window and operable therewith.

Reference is to be had to the accompanying drawings constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a front elevation showing my device attached to a window casing, the window being in open position and parts being broken away to disclose the underlying structure. Fig. 2 is a vertical sectional view taken on the line 2—2 in Fig. 1. Fig. 3 is a vertical sectional view taken on the line 3—3 in Fig. 1, looking in the direction of the arrow, the window being in closed position. Fig. 4 is a vertical section taken on the line 4—4 in Fig. 1, looking in the direction of the arrow. Fig. 5 is a vertical section taken on the line 5—5 in Fig. 6, looking in the direction of the arrow. Fig. 6 is a vertical section on the line 6—6 in Fig. 4, the screen being removed from the roller.

Referring more particularly to the views, I provide a bearing 10 for attachment to one side of a window 11 and having an aperture in which is revolubly received a pin 12 of a mandrel 13, the said mandrel being in slidable engagement with a sleeve 14. A bearing 15 is secured in the other side of the casing 11 and the said bearing is provided with a squared aperture through which is extended a squared shaft 16 of a casing 17, slidably extended into the sleeve 14 and having one end of a spring 18 secured thereto. A diametrically extending bar 19 is secured within the sleeve 14 and has the other end of the spring 18 secured thereto. The mandrel 13 is provided with a longitudinal slot 20 into which is extended a pin 21 secured to the inner periphery of the sleeve 14, the said pin being provided to permit the mandrel to turn relatively to the sleeve 14, and at the same time permit a longitudinal movement of the mandrel relatively to the sleeve for a purpose that will be hereinafter more fully disclosed. A cam 22 having a head 23 and a handle 24 is mounted on a pin 25 in the sleeve 14 with the head 23 of the cam abutting against the inner end of the mandrel 13, the handle 24 of the cam being adapted to repose in a slot 26 in the sleeve 14, the said handle 24 being preferably hook shaped at its outer end. A guard 27 is secured to the base of the window casing 11 as shown in Fig. 2, the said guard extending entirely across the base of the window casing and secured to the guard is a casing 28 having a slot 29 extended the entire length thereof, the casing 28 being also adapted to extend across the base of the window casing. Secured to the sleeve 14 in any convenient manner is a screen curtain 30 and the said curtain is repeatedly wound around the sleeve 14 after which a strip 31 is secured to the outer end of the curtain. Secured to the base of a car window 32 are plates 33 having locking lugs 34 secured thereon, the said locking lugs being in the form of springs with pins 35 at their free ends, the said pins extending through apertures in the plates 33 and adapted for engagement with the strip 31 to releasably retain the strip in engagement with the window 32.

In the use of my device when it is desired to open the window and at the same time prevent cinders from entering the car, the window is raised upwardly and the screen curtain 30 being connected thereto by means of the locking lugs 34, will unwind from the sleeve 14 so that a portion of the curtain will move upwardly with the window and extend across the opening

formed by the window when the same is raised upwardly. As the curtain unwinds from the sleeve 14 a tension will be produced in the spring 18 so that if the locking lugs 34 are disengaged from the strip 31 the tension of the spring 18 will rewind the curtain on the sleeve 14 so that the strip 31 will engage the outer side of the casing 28 and tend to close the slot 29. The curtain 30 is preferably made of a material having a large mesh so that air can pass into the car through the opening made when the window is raised upwardly, while at the same time the curtain being in operative position any cinders or dust will be prevented from entering the car. Should it be desired at any time to remove my device from connection with the window casing 11, a hook or the like is passed through the slot 29 in the casing 28 and engaged with the hooked end of the cam 24, thus pulling upwardly on the cam and disengaging the head thereof from the mandrel 13. The mandrel 13 can then be slid inwardly in the sleeve 14 and the pin 12 can then be disengaged from the bearing 10 as will be readily understood, thus also permitting the pin 16 to be disengaged from the bearing 15 and making it possible to remove my entire device from engagement with the window casing. The spring 18 having the inner end secured to the casing 17 and the outer end thereof secured to the bar 19 connected with the sleeve 14, tends to retain the casing 17 in operative position, while at the same time the said spring is so arranged that it will cause the sleeve 14 to revolve relatively to the casing 17, thus winding the screen curtain 30 on the sleeve 14. I preferably secure one end of the curtain 30 to the sleeve 14 in such a manner that when the curtain is in open position, the slot 26 will be in alinement with the sleeve 29 of the casing 28 so that any convenient hooked member can be inserted through the slot 29 and slot 26 to grasp the hooked end of the cam 22.

It will be understood, that although my device is preferably adapted to prevent cinders from entering the windows of trains, the same can be used in the usual manner as a curtain, suitable cloth or leather being provided in place of the screen curtain 30.

Having thus fully described the invention, what I claim as new, is:—

1. In a device of the class described, the combination with a revoluble sleeve, of a slotted mandrel telescopically mounted therein, a pin secured to the inner side of the sleeve and extending into the slot of the said mandrel to rotate the said mandrel with the said sleeve, a casing mounted to slide in the said sleeve, said sleeve being revoluble relatively to said casing, a spring mounted in the said casing with an end thereof secured to the casing and the other end thereof secured to the said sleeve, means for limiting the telescopical action of the said mandrel and a curtain mounted to encircle the said sleeve and having an end thereof secured to the sleeve, the other end of the said curtain being adapted for connection with a closure.

2. In a device of the class described, the combination with a revoluble sleeve, of a slotted mandrel telescopically mounted therein, a pin secured to the inner side of the sleeve and extending into the slot of the said mandrel to rotate the said mandrel with the said sleeve, a casing mounted to slide in the said sleeve, said sleeve being revoluble relatively to said casing, a spring mounted in the said casing with an end thereof secured to the casing and the other end thereof secured to the said sleeve, means for limiting the telescopical action of the said mandrel, a curtain mounted to encircle the said sleeve and having an end thereof secured to the sleeve, the other end of the said curtain being adapted for connection with a closure, a guard secured to the window casing and a longitudinally slotted casing secured to the said guard and mounted to loosely encircle the said sleeve, the said curtain being adapted to slidably extend through the slot in the said casing.

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

ANNA L. M. THOMPSON.

Witnesses:

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