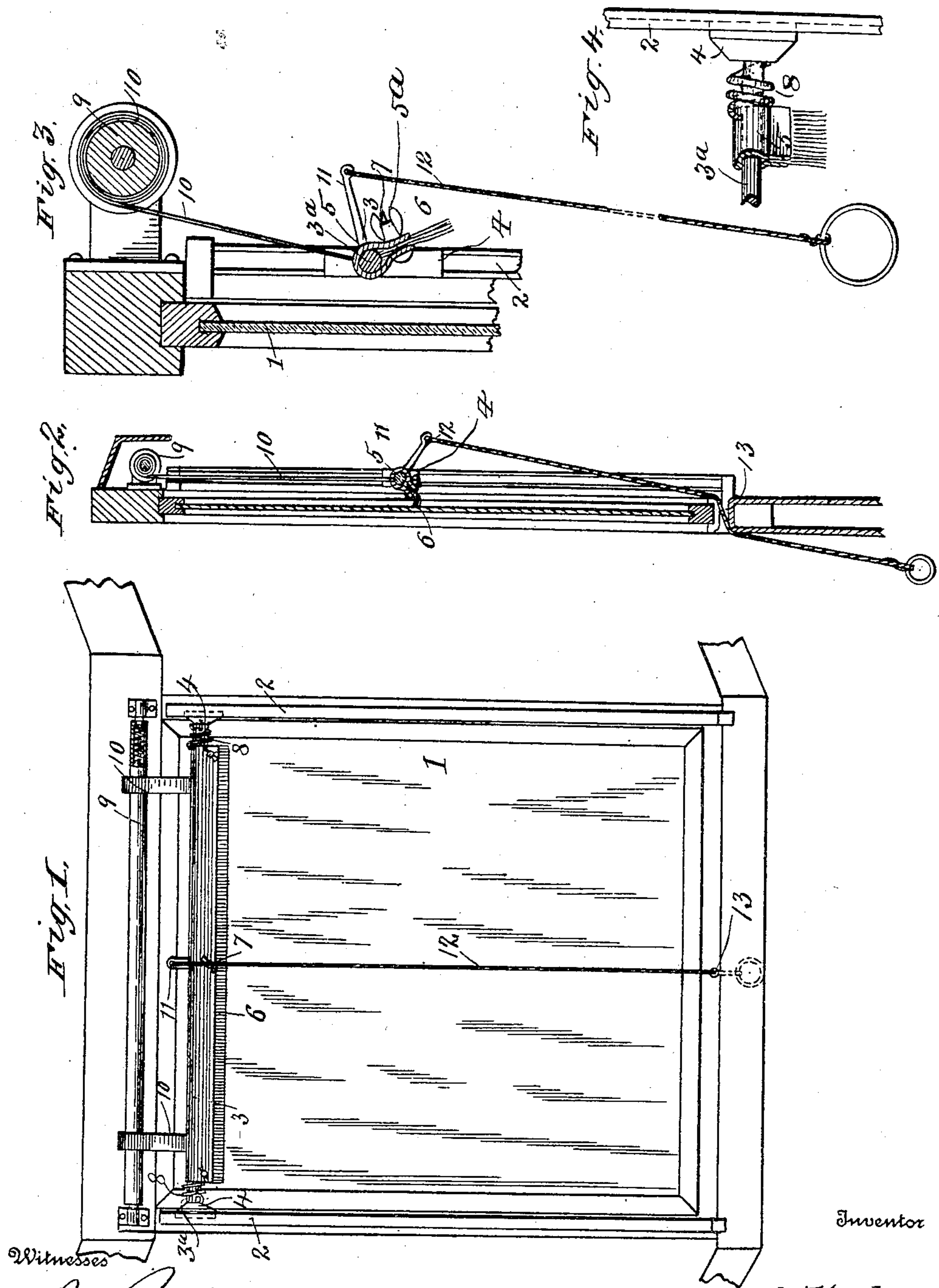


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STORM FRONT CLEANER.  
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910,624.

Patented Jan. 26, 1909



Witnesses  
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# UNITED STATES PATENT OFFICE.

LYMAN A. WILSON, OF NEW YORK, N. Y.

## STORM-FRONT CLEANER.

No. 910,624.

Specification of Letters Patent.

Patented Jan. 26, 1909.

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*To all whom it may concern:*

Be it known that I, LYMAN A. WILSON, citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Storm-Front Cleaners, of which the following is a specification.

The present invention relates to an improved attachment for cleaning the storm fronts of street cars, motor vehicles and the like, and has for its object to provide an improved means whereby the dirt, snow, or rain drops which accumulate upon the glass and tend to obscure the view of the motor-man or chauffeur may be easily and quickly removed.

The invention further contemplates a storm front cleaner which is of simple and inexpensive construction and will operate in a quick and effective manner to accomplish the desired result.

For a full description of the invention and the merits thereof, and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a front elevation of a storm front having the cleaning attachment applied thereto, portions being broken away. Fig. 2 is a vertical sectional view through the same. Fig. 3 is an enlarged vertical sectional view through the upper portion of the device. Fig. 4 is a detail view of one end of the sliding frame.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

For the purpose of illustration, the invention is shown as applied to a storm front of the conventional construction, the numeral 1 designating a sash which is mounted so as to slide to either side. Located on the window frame at each side of the sash is a vertical guide 2 between which a sliding frame 3 is mounted. These guides 2 may be of any suitable construction although in the present instance they are shown as having a channeled formation and as receiving blocks 4 connected by a cross bar 3<sup>a</sup>. Loosely mounted upon this cross bar is a sleeve 5 carrying a cleaning strip 6 of felt, rubber or other suitable material, the said cleaning strip being adapted to be swung

into and out of operative position. In the preferred construction the sleeve 5 is formed from a single strip of sheet material, the edges of the strip being extended to form the complementary jaws 5<sup>a</sup> between which the cleaning strip 6 is clamped by means of the clamping bolts 7. Located at each end of the sleeve 5 is a coil spring 8 surrounding the cross bar 3<sup>a</sup> and having one end thereof connected to the block 4 while the opposite end is connected to the sleeve 5, the said springs normally serving to rotate the sleeve upon the cross bar and swing the cleaning strip away from the glass of the storm front.

A self-acting spring roller 9 is mounted above the sliding frame 3 and flexible strips 10 which may be either of fabric or thin metal as desired are connected to the spring roller so as to be wound thereon and also have an operative connection with the sliding frame 3 to admit of the latter being moved up and down in front of the glass. In the present instance the flexible strips are shown as secured to the sleeve 5. Projecting from the sleeve 5 is an arm 11 and connected to the extremity of this arm is an operating cord 12 which passes through a guide opening 13 located below the sliding frame. This arm 11 is so arranged that when tension is produced in the cord for the purpose of moving the sliding frame 3 the sleeve 5 is rotated upon the cross bar and the cleaning strip 6 swung into contact with the glass. It will thus be apparent that the sliding frame 3 can be reciprocated up and down across the face of the storm front by suitably manipulating the cord 12 and that the cleaning strip 6 will be swung inwardly into contact with the glass so as to remove all dirt, snow, rain drops or the like from the surface thereof. When the device is not in operation, however the coil springs 8 move the strip away from the glass so that the sash 1 can be readily moved to either side in the usual manner.

Having thus described the invention, what is claimed as new is:

1. A cleaning device for storm fronts, comprising a pair of guides, a block slidably mounted upon each of the guides, a cross bar connecting the blocks, a sleeve rotatably mounted upon the cross bar, a cleaning member carried by the sleeve, springs surrounding the cross bar and connected to the sleeve and blocks, the said springs normally rotating the sleeve to hold the cleaning member



in an inoperative position, a spring actuated roller, flexible strips adapted to be wound upon the spring actuated roller and having an operative connection with the cross bar, an arm projecting laterally from the sleeve, and an operating cord cooperating with the arm to move the cross bar against the action of the spring roller and at the same time rotate the sleeve to throw the cleaning member into an operative position.

2. A cleaning device for storm fronts, comprising a pair of guides, a block slidably mounted upon each of the guides, a cross bar connecting the blocks, a sleeve rotatably mounted upon the cross bar and formed of a single strip of material having the edges thereof extended outwardly to form jaws, a cleaning member secured between the said

jaws, a spring actuated roller having an operative connection with the cross bar, an arm projecting laterally from the sleeve, an operating cord cooperating with the arm to move the cross bar against the action of the spring roller and at the same time throw the cleaning member into an operative position, and springs surrounding the cross bar and connected to the sleeve and blocks, the said springs normally tending to rotate the sleeve to throw the cleaning member into an operative position.

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

LYMAN A. WILSON. [L. s.]

Witnesses:

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