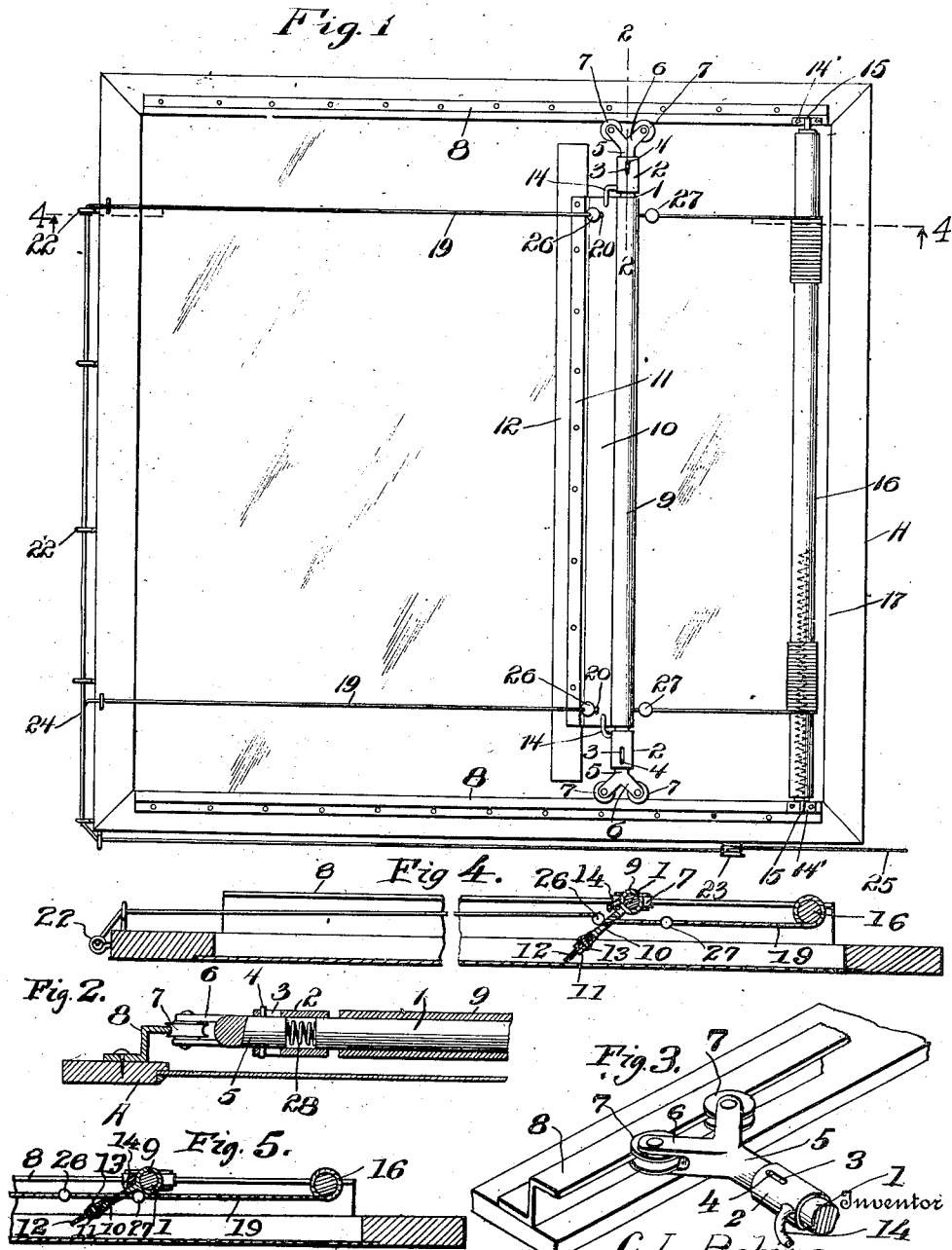


C. L. ROBINSON.
WINDOW CLEANING DEVICE.
APPLICATION FILED MAY 4, 1912.

1,054,621.

Patented Feb. 25, 1913.



Witnesses

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UNITED STATES PATENT OFFICE.

CLAUDE L. ROBINSON, OF PRINCETON, FLORIDA.

WINDOW-CLEANING DEVICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLAUDE L. ROBINSON, a citizen of the United States, residing at Princeton, in the county of Dade and State of Florida, have invented new and useful Improvements in Window-Cleaning Devices, of which the following is a specification.

This invention relates to window cleaning devices and particularly to devices designed for use upon street cars, automobiles or like windows where it is desirable to maintain a perfect transparent condition of the window in immediate line with the face of the driver or operator.

An object of the invention is to provide a window cleaning device which may be slidably mounted upon a window frame and which will be automatically held in an operative position at one end of the frame so as to permit of its being readily drawn across the window as the occasion may demand.

A still further object of the invention is to provide a window cleaning device which will include an elastic gripping element and means whereby the element can be rocked with relation to the window and automatically brought into operative contact with the window or movement of the device in one direction and then automatically moved to a disengaged position on movement of the device in another direction.

In the drawing forming a portion of this application and in which like letters of reference indicate similar parts in the several views:—Figure 1 is a front view of a window showing the application of the cleaning device thereto. Fig. 2 is a section on line 2—2 of Fig. 1. Fig. 3 is a perspective view of a portion of the carriage. Fig. 4 is a section taken on line 4—4 of Fig. 1 showing the cleaning strip in contact with the transparent panel of the window. Fig. 5 is a similar view showing the cleaning strip disengaged from the transparent panel of the window.

The cleaning device preferably comprises a carrier which includes a rod 1 which is disposed vertically upon the window frame. A conventionally shown herein. This rod has socket members 2 secured thereto at its ends and as illustrated the socket members are provided with slots 3 through which combined guide and stop pins 4 of slidable stub shafts 5 extend. These shafts have portions extended into the sockets 2 and outwardly

of the sockets they are provided with outwardly diverging arms 6 upon which rollers 7 are journaled, being adapted to travel upon the tracks 8 for a purpose to be hereinafter described.

A sleeve 9 is mounted for rocking movements upon the rod 1, being preferably provided with extension 10 to which is secured an elastic cleaning strip 12. Fastening screws or the like 13 are extended through the strip 12 and extension 10 so as to hold the former properly associated with the latter. The socket portions 2 are provided with stops 14 with which the sleeve 9 is adapted to contact whereby the movement of the latter is limited in one direction.

Brackets 14' are secured to the rails 8 and journaled therein are pintles 15 of a roller 16. This roller has one end of a helical spring 17 secured therein while the opposite end of the spring is secured to one of the pintles so that under the action of the spring the roller will tend to revolve in one direction. Cords 19 are secured to and wound around the opposite ends of the roller and extended through passages 20 in the extension 10 of the sleeve 9. One cord is preferably extended through one of the side bars of the window frame and operatively passed through guide eyes 22 which extend from the frame while the free terminal of this cord is detachably connected with a suitable cleat or retaining device 23 near the lower edge of the frame. The other cord 19 is secured to the just described cord as at 24 whereby when the cleat engaging terminal 25 is pulled both the cords may be unwound from the roller and drawn across the transparent panel of the window. Each cord is provided with a pair of spherical objects or stops 26 and 27 which are spaced relatively and disposed upon the opposite sides of the extension 10 of said sleeve 9. From this construction it is now evident that when pull is applied to the terminal 25 both cords will be simultaneously drawn from the roller and the body 27 thereof brought into contact with the extension 10 so as to rock the sleeve 9 in a direction to cause the strip 12 to move in spaced relation to the said transparent panel of the window. When the terminal 25 is released the cords will be drawn back upon the roller under the tension of the spring 16. The bodies 26 will be made to engage with the extension 10 of the sleeve 9 so as to rock the same in one direc-

tion on the rod 9 with a resultant engagement of the strip 12 with the transparent panel of the window. Relatively strong springs 28 are mounted in the socket portions 2 of the rod 1. These springs are made to engage against the inner ends of the stub shafts 5 in a manner which will cause them to be forced outwardly. This causes the rollers 7 to effectually engage against the rails 8 hereinbefore described.

I claim:—

A window cleaner comprising parallel tracks, a rod extending at right angles to the tracks and provided at its ends with

socket portions, traveling supports movably engaging the tracks, and having portions yieldingly fitted in said socket portions, means for moving the rod in two directions, and a rocking strip carried by the rod and adapted to engage against the window pane on movement of the rod in one direction.

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

CLAUDE L. ROBINSON.

Witnesses:

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