

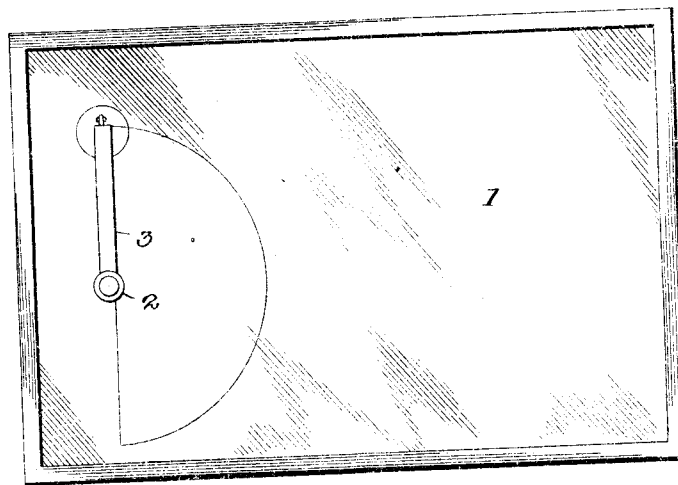
W. JONES.  
WINDOW CLEANER.

APPLICATION FILED APR. 4, 1912. RENEWED JAN. 7, 1913.

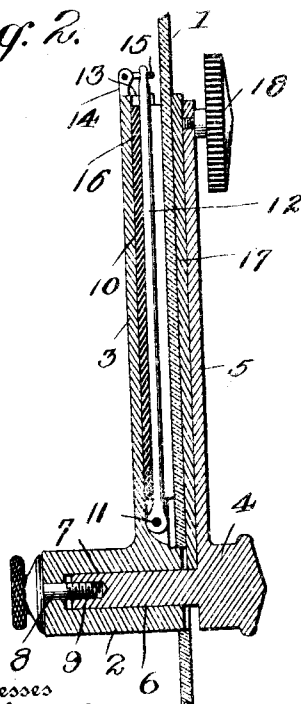
Patented Mar. 11, 1913.

1,055,918.

*Fig. 1.*

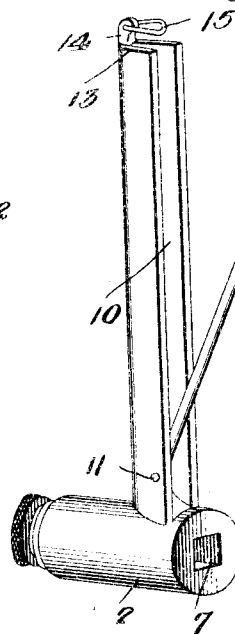


*Fig. 2.*



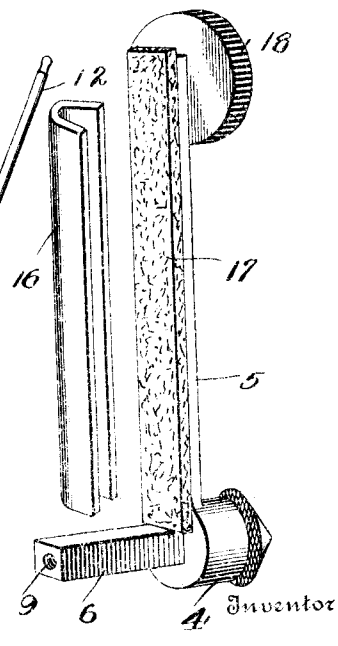
Witnesses  
*J. H. Collins*  
*Edwin F. Frey*

*Fig. 3.*



By

*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

WALTER JONES, OF NEW YORK, N. Y.

## WINDOW-CLEANER.

1,055,918.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed April 4, 1912, Serial No. 688,467. Renewed January 7, 1913. Serial No. 740,693.

*To all whom it may concern:*

Be it known that I, WALTER JONES, a citizen of the United States, residing at Bensonhurst, in the borough of Brooklyn, city of New York, State of New York, have invented new and useful Improvements in Window-Cleaners, of which the following is a specification.

My invention relates to devices for cleaning windows, and more particularly to devices adapted for use in connection with the outlook windows of electric cars, locomotive cabs, automobiles, and the like, and has for its object certain improvements in that class of such devices as are adapted to clean both sides of the glass, as will be hereinafter more particularly described and claimed, reference being had to the accompanying drawing, in which:

Figure 1 is a front elevation of a glass with my improved device attached thereto. Fig. 2 is a central vertical sectional view of my improved device shown applied to a pane of glass. Fig. 3 is a detail perspective view of the outer member, the parts thereof being shown separated. Fig. 4 is a similar view of the inner member.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawing the reference numeral 1 denotes the glass window pane to which the device is to be attached, and 2 the hub of the outer member, which has formed integrally therewith an arm 3 hereinafter specifically described. The inner member comprises a hub 4 to which is integrally attached an arm 5 and said hub has projecting therefrom a squared shaft 6 adapted to enter a similarly shaped aperture 7 in hub 2. Said hub 2 is apertured at its outer end to receive a screw 8 which is adapted to engage a threaded opening 9 in the outer end of shaft 6 to adjustably draw the hubs 2 and 4 together.

The arm 3 of hub 2 is formed with a deep longitudinal groove 10 on its inner face, and at the lower end of said groove is pivoted at 11 a rod 12. The sides of said groove at their upper ends are cut away at 13 to leave an outer tongue 14, to which is pivoted a loop or bail 15, which is adapted to engage the upper end of rod 12 to detachably lock the same in groove 10. To form the scraping surface of the arm 3 I provide a strip of material 16, preferably rubber, which is folded centrally and longitudinally and in-

serted in said groove 10 in arm 3, where it is removably retained by the rod 12 and loop or bail 15 with its longitudinal edges projecting.

The arm 5 of the inner member is provided on its face adjacent the glass to be cleaned with a sheet or covering 17 of suitable cleaning material; such as felt, and at its upper inner end has attached thereto a suitable knob 18, which may be grasped to operate the device.

It will be observed that the hub 2 of the outer member projects somewhat inside of the arm 3 thereof and is circular in cross section. To assemble the device said portion of the hub 2 is inserted from the outside into a circular aperture formed in the glass 1, the squared shaft 6 of the inner member is then inserted in the aperture 7 in the hub 2, and the screw 8 engaged with the threaded opening 9 therein to adjustably draw the outer and inner members together on opposite sides of the glass 1 until the sheet or covering 17 of arm 5 contacts with the inner face of the glass 1, and the folded and removably retained strip 16 of arm 3 similarly contacts with the outer face of said glass. By now manipulating said device, through knob 18, the device as a whole may be rotated on the hub 2 in the aperture in glass 1 to cleanse said glass on both sides throughout a complete circle, or through any arc of the same.

By reason of the ability to adjust the hubs 2 and 4 toward each other through the adjustment of screw 8 in the shaft 6, the device is adapted for use with window panes of varying thicknesses and without other retaining means, the folded strip 16 and the sheet 17 on the arms 3 and 5 affording a yielding contact with the opposite faces of the window pane which will also regulate the frictional contact therewith.

If desired, the hubs 2 and 4 may be reversed, so that the adjusting screw 8 may be disposed on the inside of the window pane.

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

1. A window cleaner, comprising a hub adapted to pass through a circular aperture in the window pane and rotatable therein in contact therewith, a second hub, an angular shaft on said latter hub adapted to enter a similarly shaped aperture in said first mentioned hub to connect said hubs, means en-

gaging said shaft through said first mentioned hub, to draw said hubs together, an arm on one of said hubs, and a scraping surface carried by said arm adapted to contact with one face of the window pane and to engage the same and to be regulated in its frictional contact therewith by the adjustment of said hubs.

2. A window cleaner, comprising arms adapted to be disposed on opposite sides of a window pane to be cleaned, a hub on one arm adapted to pass through a circular aperture in the window pane and rotatable therein in contact therewith, a hub on the other arm, an angular shaft on said hub adapted to enter a similarly shaped aperture

in said first mentioned hub to connect said hubs, a screw engaging said shaft through said first mentioned hub to draw said hubs together, and yielding scraping surfaces on said arms adapted to contact with the opposite faces of the window pane and to engage the same and to be regulated in their frictional contact therewith by the adjustment of said screw.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

WALTER JONES.

Witnesses:

JACOB WILK,  
S. E. STONE.