J. HADKA.

CLEANER.

APPLICATION FILED MAY 2, 1908.

939,248. Patented Nov. 9, 1909.

Fig. 1.

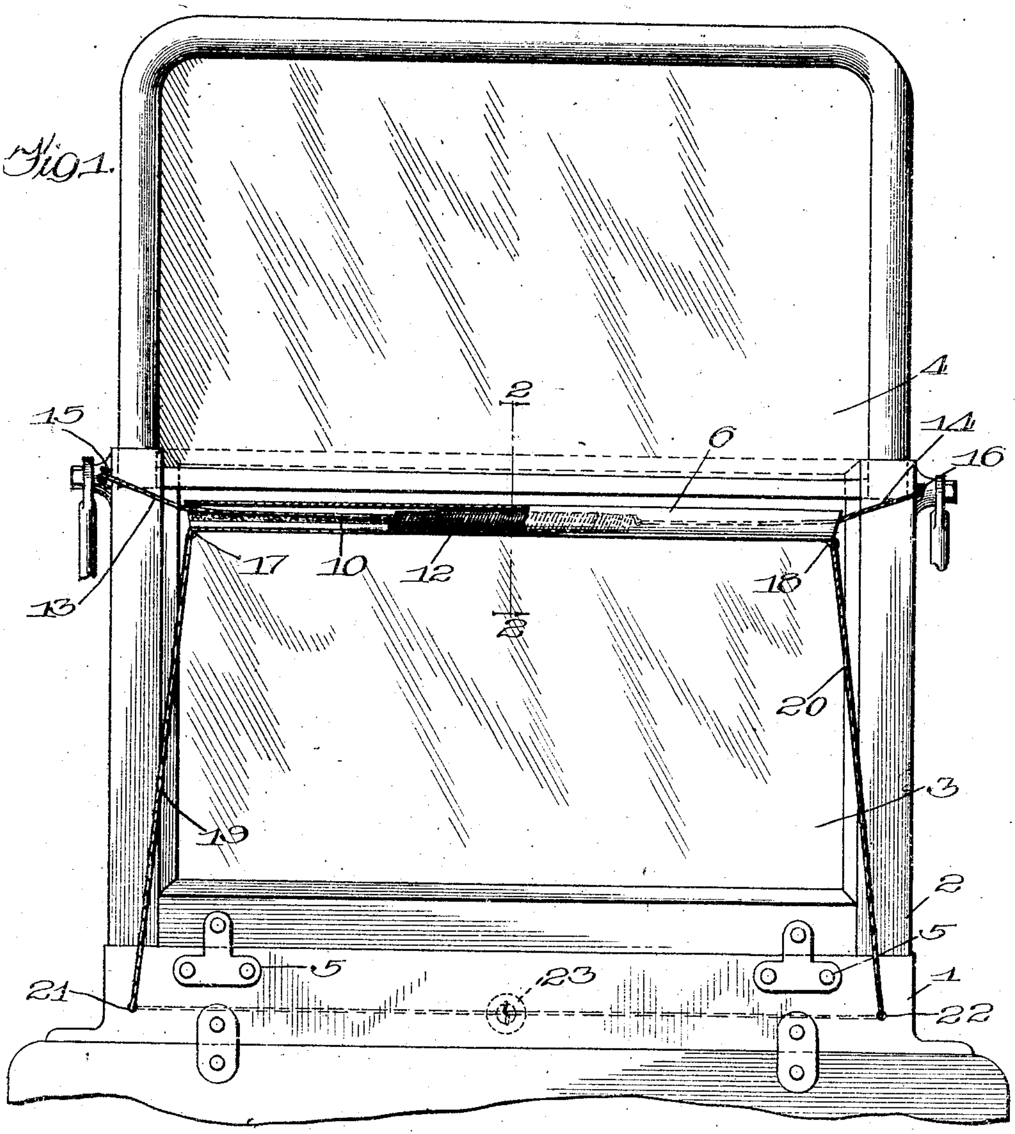


Fig. 2.

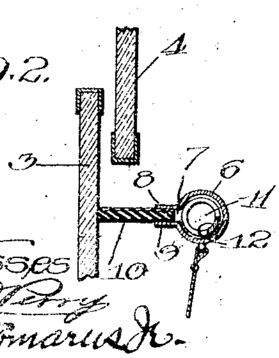
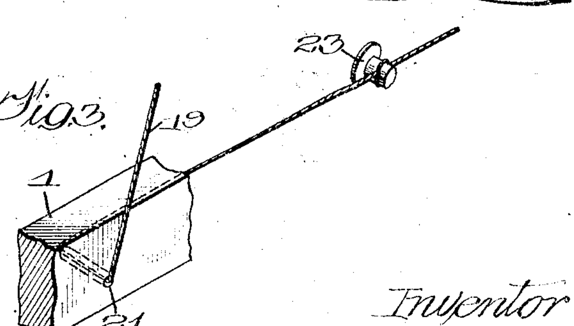


Fig. 3.



Witnesses
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CLEANER.

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To all whom it may concern:

Be it known that I, JOSEPH HADKA, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cleaners, of which the following is a specification.

This invention relates to a cleaning device for removing extraneous matter from surfaces.

One of the objects of the invention is to provide means whereby moisture, etc., may be conveniently removed from a surface, for example, a motor vehicle wind shield.

Another object of the invention is to provide means for moving the cleaner across the surface to be cleaned in one direction and for causing it to automatically move in the opposite direction to its initial or normal position.

Another object of the invention is to insure a counter movement being imparted to the cleaner every time it is moved from its initial position.

Other objects and advantages will appear by reference to the following description.

In the drawings, Figure 1 is a front view of a wind shield showing the cleaner partly in elevation and partly in section, with all of the appurtenances assembled and set up for use. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a fragmentary perspective view of a part of the base rail and a portion of the actuating cord.

One embodiment of the device forming the subject matter of my invention is herein shown as being applied to a wind shield of an automobile, and is applied for the purpose of removing or scraping off moisture and other foreign matter so that the chauffeur may have an unobstructed view through the wind shield even in inclement weather.

1 designates a base rail carried by the forward portion of the machine, and this base rail supports a wind shield 2 of any preferred construction having the usual glass panels 3 and 4. The wind shield 2 may be secured to the base rail 1 by cleats 5.

The cleaner or scraper is herein shown as comprising a split tube 6, the split portion forming a slot 7 having flanges 8 and 9 to receive and clamp the scraping strip 10 which may consist of rubber or other suitable material. The hollow portion 11 of the tubular body portion 6 contains a tension spring 12 from the respective ends of which run flexible connections, as cords or tapes 13 and 14. These tapes 13 and 14 may be secured to the upper portion of the lower section of the wind shield at suitable points, as for example, 15 and 16.

Secured to the respective ends 17 and 18 of the tube 6 are cords 19 and 20 which extend down to and pass through openings 21 and 22 in the base rail 1, whereby said cords 18 and 19 extend to the inner side of the rail 1. These cords are connected to a handle or button 23 preferably located between the ends of the rail 1 and within convenient reach of the chauffeur.

In actual practice, the chauffeur may grasp the handle or button 23 and by giving it a pull, the strip 10 of the cleaner will be caused to pass over the glass panels 3 and 4 so as to remove moisture or other foreign matter which may have adhered to the panels. The descent of the cleaner will cause expansion of the spring 12, so as soon as the handle or button 23 is released the contraction of the spring 12 will elevate the cleaner to its initial position where it will remain supported until a pull is again exerted upon the cords 19 and 20 through the button 23 or some other suitable means.

It will be apparent that the tube 6 is provided with self contained means for automatically causing a counter-movement of the cleaner every time it is caused to descend over the surface of the panel 3, and that the cleaner will always be in position to be instantly used.

In a device intended to be used upon automobiles, it is especially desirable that the apparatus be compact, simple and neat. For this reason, the cleaner-returning spring 12 has been placed within the body of the cleaner proper, where it also is protected from the weather.

I claim as my invention:

1. A surface cleaner comprising a hollow body, a spring therein, flexible cleaner-supporting members connected to said spring and projecting from said hollow body, and manually operable means for moving said body.

2. A cleaner having a scraping edge and a hollow body, oppositely disposed flexible devices projecting from said hollow body,

and a normally contracted extensible member interposed between adjacent portions of the devices within the hollow body.

3. The combination of a cleaning device having a hollow body, a spring in said body, cords attached to said spring and extending from the ends of said cleaning device to the upper corners of a shield to be cleaned, cords attached to the ends of said cleaning device and extending to the lower corners of said shield, and means to permit of pulling the last mentioned cords.

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