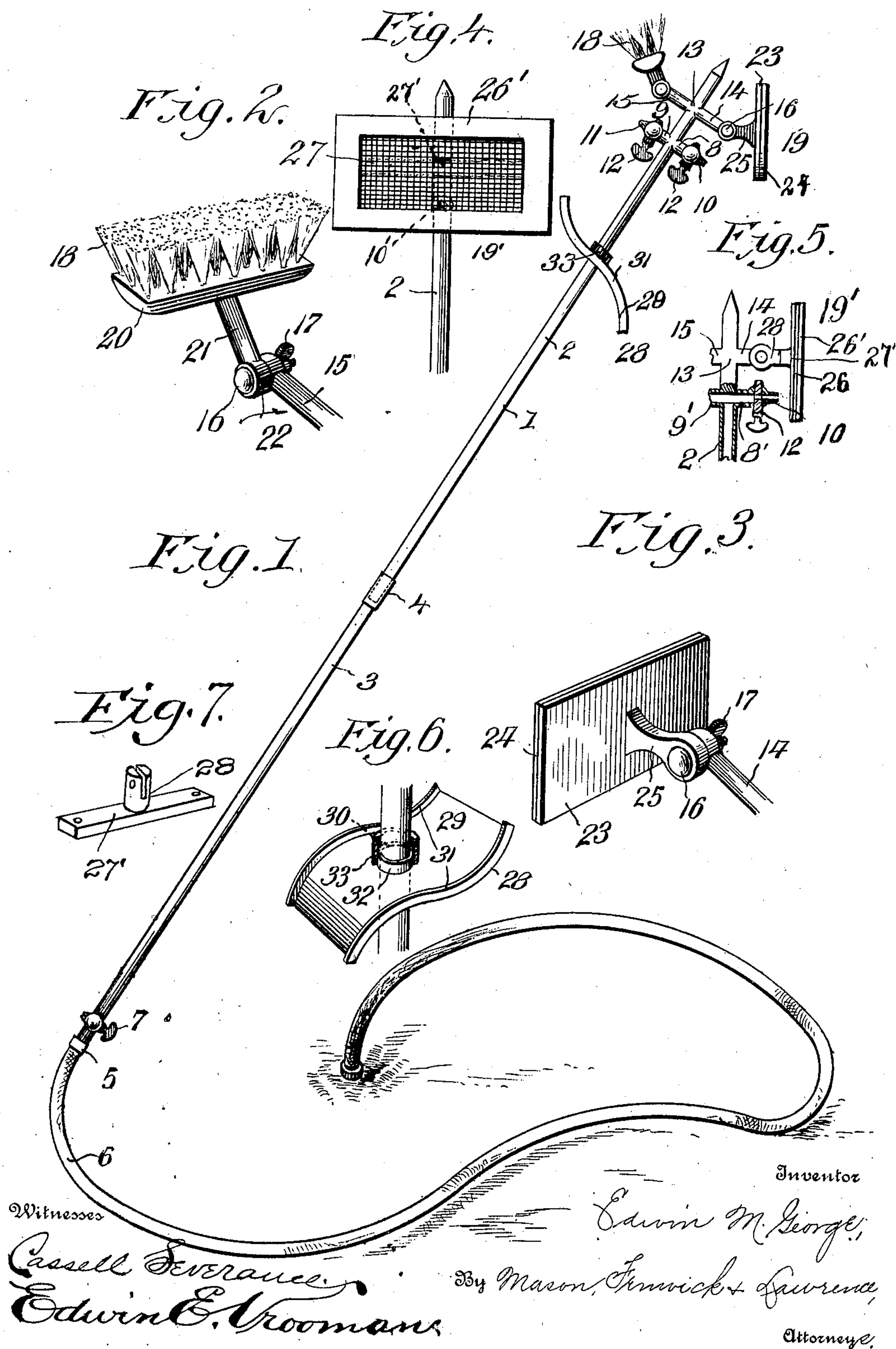


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PATENTED OCT. 2, 1906.

E. M. GEORGE.
WINDOW CLEANER.
APPLICATION FILED APR. 21, 1905.



UNITED STATES PATENT OFFICE.

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WINDOW-CLEANER.

No. 832,475.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWIN M. GEORGE, a citizen of the United States, residing at Grand Forks, in the Province of British Columbia, Canada, have invented certain new and useful Improvements in Window-Cleaners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in window-cleaners.

One of the objects of the invention is the improvement of the construction of a cleaner which is provided with a sectional handle, a brush, and a drying member.

Another object of the invention is the construction of a window-cleaner which is provided with a sectional handle, said handle affording means for conveying liquids from one end to the opposite end thereof, valves in each of opposite ends of said handle, and brush and drying-member supporting means carried by said handle.

A further object of the invention is the improvement of the construction of a drying member adapted to be supported upon the handle of a window-cleaner.

A still further object of the invention is the construction of a window-cleaner which is composed of a minimum number of parts and which is simple in operation as well as comparatively inexpensive in construction.

With these and other objects in view the invention consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the claims hereto appended.

In the drawings, Figure 1 is a view in side elevation of a window-cleaner constructed in accordance with the present invention. Fig. 2 is a perspective view of the brush employed in constructing the present invention. Fig. 3 is a perspective view of the drying member. Fig. 4 is a front view of another embodiment of the drying member. Fig. 5 is a fragmentary view of the cleaning device shown partly in section and showing the manner in which the drying member, Fig. 4, is secured

thereto. Fig. 6 is a perspective view of the deflector. Fig. 7 is a perspective view of the substantially T-shaped member which is employed in the construction of the drying member or wiper depicted in Figs. 4 and 5.

Referring to the drawings by reference-numerals, 1 designates a hollow sectional handle, which is shown in the drawings as being composed of detachable sections 2 and 3. It will be obvious that if it is desired to increase the length of the handle this may be done by employing another member constructed similarly to section 3. Upon the lower end of the section 3 is removably secured the end 5 of the flexible tubing 6. The tubing 6 is connected to a suitable member containing liquid under pressure, so that when the manually-operated valve 7 is actuated to open its port liquids may pass from the flexible tubing 6 into the hollow handle 1.

Formed upon the upper end of the handle 1, preferably upon the upper or outer end of the upper section 2, are right-angled hollow extensions 8 and 9. The hollow extensions 8 and 9 are preferably short tubings of the same construction as the sections of the handle. Positioned upon the tubings 8 and 9 are similarly-constructed nozzles 10 and 11. Similarly-constructed valves 12 are carried by the nozzles 10 and 11.

The outer end of section 2 beyond the tubings 8 and 9 is solid. Extending from the solid portion 13 of the section 2 and parallel to the tubings 8 and 9 are integral extensions 14 and 15. The extensions 14 and 15, as well as tubings 8 and 9, extend from diametrically opposite parts of the section 2. The tubings 8 and 9 are formed beneath the extensions 14 and 15 and are of less length than the same. Each of the extensions 14 and 15 is provided with an aperture near the outer end for receiving bolts 16, upon one end of which are thumb-nuts 17. The bolts 16 afford means whereby a brush 18, constituting an adjustable cleaning member, may be secured upon extension 15 and the wiper 19 secured upon extension 14.

The brush 18 comprises a body portion which is secured to an extension 21, having an apertured head 22. It will be obvious that the brush 18 may be adjusted to different positions upon the bolt 16, carried by the

extension 15. Furthermore, the brush may be removed when desired from upon the extension 15. The drying member 19 comprises a flat body portion 23, to which is secured upon its front surface a flexible pad 24. The body 24 extends the full width of the body portion 23. An extension 25 is secured to the back of the body portion 23 for affording means whereby said drying member may be positioned upon the bolt 16, carried by the solid extension 14 of the handle.

Referring to Figs. 4 and 5, the drying member 19' comprises a frame 26, constituting the body. Said frame 26 is provided with a metallic netting or apertured sheet of metal 27'. It will be obvious that the stream engaging the metallic surface will be sprayed upon the surface operated upon. When water is applied to member 19', it is used as a washing or rinsing device. Secured to the frame 26, which is shown in the drawings as rectangular in shape, is a covering 26' of rubber or analogous material. The rubber covering 26' for the front face of the frame 26 performs the same function as the rubber pad 24. The frame 26 of the drying member 19' is secured to the extension 14 by means of a substantially T-shaped member. The T-shaped member comprises a flat body 27' and a right-angled apertured extension 28. The flat body 27' is secured to the parallel sides of the frame 26. The extension 28 is secured to the extension 14 by means of a bolt 16 and a nut 17. The drying member 19' is capable of being adjusted or removed in the same manner as the brush 18 already described.

In the embodiment shown in Figs. 4 and 5 it will be seen that the short tubings 8' and 9' are formed nearer the extensions 14 and 15 than tubings 8 and 9. Owing to the structure, the liquid is discharged from the handle through nozzle 10' and through the frame 26 directly upon the object.

An adjustable deflector 28 is mounted upon the handle 1 intermediate its ends and preferably below the nozzles for the purpose of preventing liquids from running down the handle upon the hand of the operator. The deflector comprises a substantially S-shaped flat body 29. The body 29 is provided with a central aperture 30, which permits said deflector to be positioned upon the handle. The longitudinal edges of the body are bent at right angles for producing parallel flanges 31. The flanges 31 prevent of any lateral discharge of the liquid which may be thereon, thereby compelling said liquid to be discharged at one of the ends of the deflector. I provide an integral annular extension 32 upon the body contiguous to the aperture 30. The annular extension 32, which constitutes a sleeve, fits snugly against the section upon which it is mounted. After the deflector has

been positioned upon the section I place a flexible band 33, Fig. 6, around the section and the annular extension or sleeve 32, which not only secures the deflector in an adjusted position, but also prevents any liquid from running down the section below the deflector.

What I claim is—

1. A device of the character described, comprising a hollow handle, a valved nozzle formed upon the side of said handle, an integral extension formed upon the side of said handle above said nozzle, a drying member carried by said extension, said member comprising a substantially rectangular frame provided with a central, rearward extension, and a yielding covering carried by the outer part of the face of said frame.

2. In a device of the character described, the combination with a hollow handle, of an extension and a valved nozzle extending in parallel position from one side of said handle, said extension and nozzle formed at right angles to said handle, and cleaning means pivotally mounted upon said extension.

3. In a device of the character described, the combination with a hollow handle, of an extension formed upon the side of said handle, a drying member or wiper carried by said extension, said member comprising a flat frame provided with a central, rearward extension, said last-mentioned extension pivotally connected to the extension on said handle, and a flexible pad or covering secured upon the front of said frame.

4. In a device of the character described, the combination with a hollow handle, of a drying member supported upon said handle, said drying member comprising a frame provided with an elongated central opening, a covering positioned upon the front of said frame, and a nozzle formed upon said handle and being capable of discharging liquid through the opening of said drying member.

5. In a device of the character described, the combination with a hollow handle, of a movable drying member carried by said handle, said drying member comprising a rectangular frame provided with a central opening, a screen over said opening, a yielding covering positioned upon the front of said frame, and a nozzle formed upon said handle and being capable of discharging liquid through the screen.

6. In a device of the character described, the combination with a handle, of an adjustable deflector carried by said handle, said deflector provided with a central collar or extension, and a flexible band positioned around said collar and handle and being capable of securing said deflector in an adjusted position.

7. In a device of the character described, the combination with a handle, of an adjust-

able deflector carried by said handle, and flexible means engaging said handle and deflector and securing said deflector in a fixed position.

5 8. In a device of the character described, the combination with a handle, of an adjustable deflector carried by said support, and removable means, constituting a clamp, en-

gaging said deflector and said handle and securing said deflector in an adjusted position. 10

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

EDWIN M. GEORGE.

Witnesses:

CHARLES BROWN,
ROBERT PRIBILSKY.