March 29, 1927. R. GREENBERG 1,623,004

WINDOW CLEANER

Filed June 12, 1926

Fig. 1.

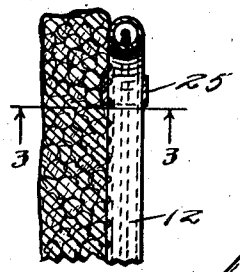


Fig. 5.

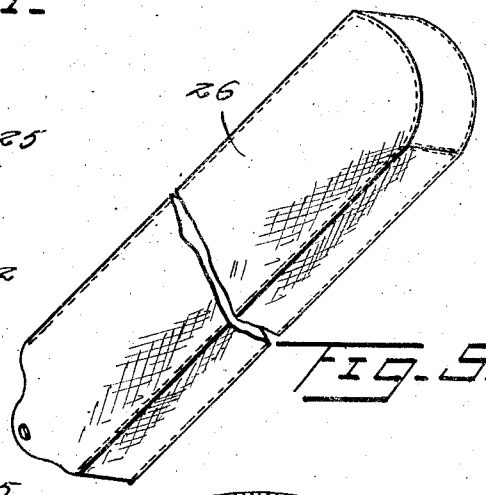
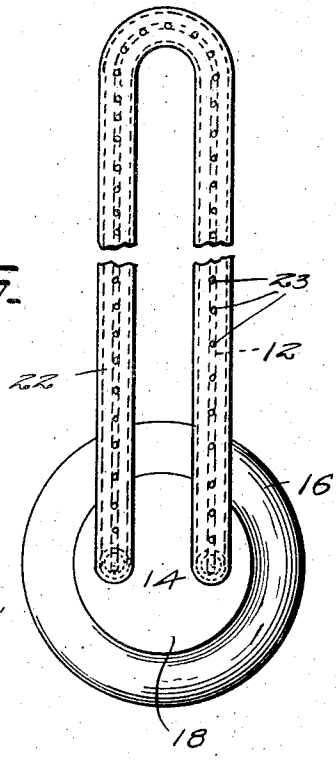


Fig. 2.



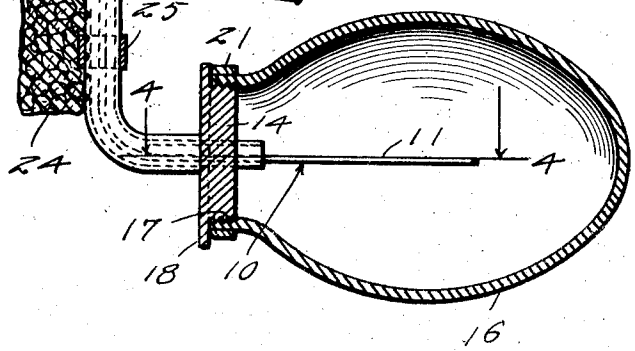


Fig. 3.

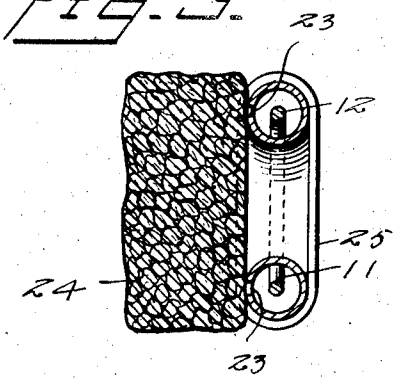
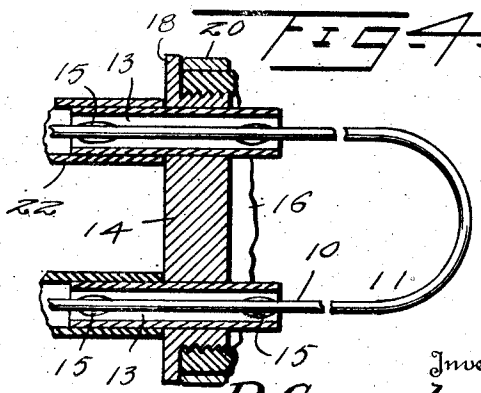


Fig. 4.



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UNITED STATES PATENT OFFICE.

RAUL GREENBERG, OF BROOKLYN, NEW YORK.

WINDOW CLEANER.

Application filed June 12, 1926. Serial No. 115,530.

This invention relates to a window washer or cleaner and is primarily adapted for use in connection with apartment windows, to enable the cleaning of the outside thereof by an operator standing within the room, so as to overcome the danger incidental to reaching out of a window or mounting a seat disposed therein.

Another object is to provide a novel construction wherein metallic parts cannot touch the glass or window and hence cannot mar the same in operation.

Another object is to provide a novel construction wherein a bulb or reservoir is used to contain and expunge the water or cleansing medium.

Additional objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating an operative embodiment.

In said drawings:

Figure 1 is a view of the device in substantially vertical section;

Figure 2 is a rear end elevation;

Figure 3 is a sectional view taken on the line 3—3 of Figure 1;

Figure 4 is a sectional view taken on the line 4—4 of Figure 1, and

Figure 5 is a detail perspective view illustrating a cover which may be used in connection with the applicator portion of the device, which may be used in the drying or wiping of the window.

In carrying out the invention, an endless wire or metallic frame is provided at 10, which in side elevation is L-shape, and each of the arms 11 and 12 thereof, respectively horizontal and vertical, are U-shape as shown in Figures 4 and 2, respectively.

Strands of arm 11 pass through nipples as at 13 which are rigidly or removably carried by a plug as at 14, and which may be of rubber or any other material desired. Said strands of arm 11 are preferably soldered as at 15 to the interior of the nipples to firmly anchor the parts in place.

A rubber or other elastic bulb or reservoir, adapted for compression, is shown at 16, having its open end fitted as at 17 to the plug 14, the end being overlapped by an annular flange 18 on said plug. Removable clamp bands 20 may engage the flanges 18, surrounding the adjacent portion or neck of the bulb, thus clamping it in a water-tight manner to the plug. To make the joint more secure, the portion of the plug engaged by the neck of the reservoir 16, may be threaded as at 21.

The arm 12 is surrounded by a tube 22, preferably of rubber, and the free end of which extends horizontally for a short distance along the strands of arm 11, abutting the plug 14 and being frictionally gripped or otherwise secured to the adjacent projecting ends of the nipples 13. Said tube 22 has discharge orifices as at 23 and coacting therewith and carried by the arm 12 is a suitable applicator which may be a sponge, a brush, cloth, or any similar means, the applicator 24 preferably having two elastic bands as at 25 which surround the tube 22 and arm 12, thus tightly and frictionally holding the applicator in place.

In use, the operator engages the device at the bulb 16, first charging the same with water or cleaning means, usually a mixture of water and ammonia, by dipping the sponge into the latter and compressing the bulb, so that the suction will draw the material into the bulb through the orifices 23, tube 12, nipples 13 and thence to the interior of the bulb. The device in use, is held in one hand which engages the bulb 16 and is then arranged with the applicator 24 against the glass or surface to be cleaned, being readily manipulated in view of the provision of the frame 11 which prevents complete collapse of the parts. The water or detergent is expelled through the compression of the bulb 16, the same feeding through nipples 13, tube 12 and orifices 23.

When it is a matter of drying a window after the device has been used to clean the same, as aforesaid, a casing as disclosed in Figure 5 and specifically designated 26 may be removably applied over the applicator 24 and tube 22. This cover 26 is, for instance, of chamois, and when in place as aforesaid may be manipulated over the window in order to dry the same.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

What is claimed is:—

1. An implement of the class described comprising a substantially L-shaped frame, a compressible reservoir into which one end of the frame extends, a flexible tube threaded on said frame and in communication with the interior of the reservoir, and applicator means associated with said tube.

2. An implement of the class described, comprising an open elongated frame, a perforated tubular member threaded on said frame, an applicator secured to the tubular member overlying the perforations therein, and a reservoir carried by the frame and communicating with the tubular member.

3. An implement of the class described comprising a frame, a plug, nipples passing through said plug and through which a portion of the frame passes, a compressible reservoir secured to said plug and surrounding the adjacent portion of the frame, a tube surrounding the frame exteriorly of the reservoir and provided with outlets, said tube being in communication with the reservoir through said nipples, and applicator means carried by the tube.

4. An implement of the class described, comprising an endless elongated open frame of rigid material, a plug, nipples passing through said plug and through which a portion of said frame is threaded and secured thereto, a reservoir carried by said plug, a tubular member threaded on the frame exteriorly of the reservoir and engaging said nipples for communication therethrough with the reservoir, and an applicator carried by said tubular member, the tubular member being perforated to discharge liquid from the reservoir into the applicator.

5. An implement of the class described, comprising an endless elongated open frame of rigid material bent into L-shape, a plug, nipples passing through said plug and through which a portion of said frame is threaded and secured thereto, a compressible reservoir carried by said plug and into which the adjacent end of the frame extends, a flexible tubular member threaded on the other portion of said frame and engaging said nipples for communication therethrough with said reservoir, and an applicator carried by said tubular member, the tubular member being perforated where engaged by said applicator to discharge liquid from the reservoir thereinto.

In testimony whereof I affix my signature.

RAUL GREENBERG.