

(No Model.)

W. E. ALLEN.
WINDOW CLEANER.

No. 553,327.

Patented Jan. 21, 1896.

Fig. 1.

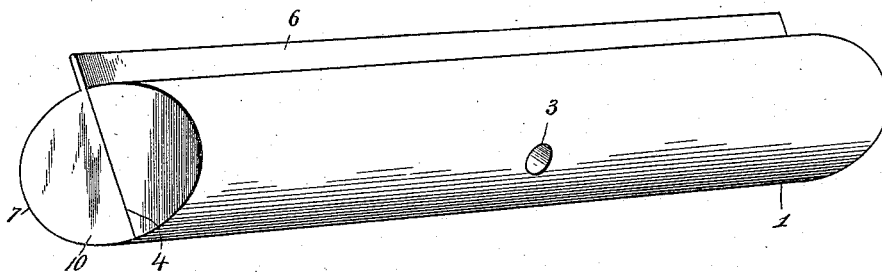
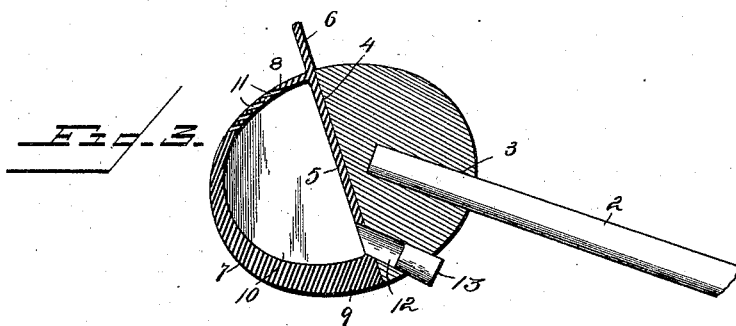
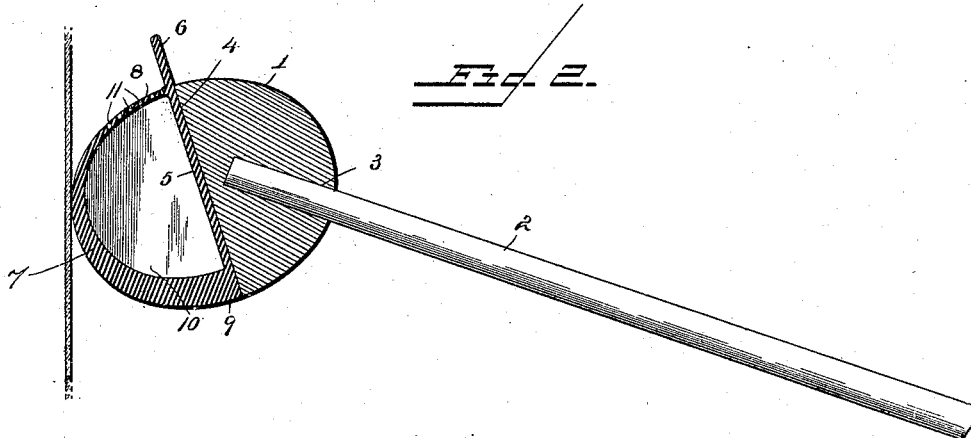


Fig. 2.



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UNITED STATES PATENT OFFICE.

WALTER ERNEST ALLEN, OF McCracken, KANSAS.

WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 553,327, dated January 21, 1896.

Application filed May 23, 1895. Serial No. 550,413. (No model.)

To all whom it may concern:

Be it known that I, WALTER ERNEST ALLEN, a citizen of the United States, residing at McCracken, in the county of Rush and State of Kansas, have invented a new and useful Window-Cleaner, of which the following is a specification.

This invention relates to an improvement in window-cleaners, and has for its object to provide a simple, inexpensive and efficient device for cleaning windows, which shall at the same time comprise a reservoir adapted to hold a quantity of water, the device being so constructed that the water may be forced from the reservoir against the glass being cleaned in any desired quantity or at any time.

A further object of the invention is to construct such cleaner and reservoir in a manner that will permit the surplus water to run from the window pane or glass back into the reservoir, whereby less water is required in the operation of cleaning windows.

A further object of the invention is to construct the cleaner in such manner that the sediment which collects therein may be drawn off, and whereby also the device may be used as a sprinkler.

In order to accomplish the objects above enumerated, the invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally embodied in the claim.

In the accompanying drawings, Figure 1 is a perspective view of an improved window-cleaner constructed in accordance with this invention. Fig. 2 is a transverse section taken through the same, said cleaner being shown in operative contact with a window-pane. Fig. 3 is a similar view showing the irrigating perforations extending tangentially from the reservoir and showing also a plugged orifice for drawing off sediment and adapting the device to be used as a sprinkler.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates the main or supporting body of the cleaning device, which is preferably made of

wood and in substantially semielliptical form in cross-section.

2 designates a handle of any suitable or desired length, the end of which is received in a socket 3 in the back or body 1.

The back or body 1 may be made of any desired length, according to the use to which the device is intended to be put or the size of the windows to be cleaned.

Secured to the forward flat face 4 of the back or body 1 is a water reservoir or receptacle, which is made from rubber and comprises a base 5 corresponding approximately in length to the back 1 and made of a width somewhat greater than the width of the flat side 4 of said back, thus forming a projecting portion or strip 6, which is intended for use as a window-drier.

The base 5 may be secured to the wooden back by means of cement or in any usual or preferred manner. The reservoir or receptacle also comprises a curved wall 7, which is also formed of rubber and made integral with the base 5 and projected portion or strip 6. The curved wall 7 is substantially semielliptical in its outer contour and is made of gradually-increasing thickness from its upper end 8, contiguous to the portion or strip 6, to its lower end, where it joins with the base 5, as indicated at 9. The object in increasing the thickness of the elliptical wall of the water reservoir or receptacle at the base thereof and gradually diminishing the thickness thereof toward its top is to provide said wall with sufficient body or stiffness to resist the compression thereof near the base and adapt the same to be used as a scraper or drier after the window has been washed.

The elliptical wall 7 corresponds in length to the base 5 and is provided with closed ends 10, and is also formed with a number of perforations 11, extending through the upper thin portion thereof, adjacent to the strip 6, communicating with the interior of the receptacle. These perforations 11 may extend in a radial direction through the wall 7, or they may be extended tangentially therethrough, as shown in Fig. 3.

12 designates an orifice leading through the wooden back 1 and communicating with the interior of the reservoir or receptacle, provid-

ing for the escape of sediment which may collect within the receptacle. A plug or stopper 13 serves to close said orifice while the device is in operation.

- 5 In the use of the window-cleaning device hereinabove described the same is, with the aid of the handle 2, submerged in a vessel of water and the rubber receptacle or reservoir compressed for expelling the air therefrom.
- 10 Upon removing the pressure from the device the reservoir, by reason of its resiliency, expands to its normal shape, thereby filling said receptacle with water. The cleaning device is now applied to a window-pane, as illustrated in Fig. 2, and sufficient pressure applied thereto to force a sufficient amount of water through the perforations 11 against the glass. The device is moved over the glass in the usual manner, and the surplus water as it flows downward upon the surface of said glass will fall upon the upper portion of the elliptical wall of the device and will flow back through the perforations 11 into the receptacle. The presence of the strip 6 prevents the surplus water from flowing over the wooden back or body 1, and directs it into the reservoir. In this manner a small quantity of water will serve to wash and clean a large area of glass. The amount of water forced against the glass may be regulated by the pressure applied to the device and the compression given to the elliptical wall 7. After sufficient water has been flowed over the glass by inverting the cleaning device or removing the plug 13, the reservoir may be entirely emptied, after which the curved wall 7, by reason of its stiffness caused by thickening the same,

as hereinbefore described, may be used as a squeegee for removing the surplus water from the glass and drying the same in a manner that will be readily understood. Where it is desired to get up into angles or corners, the strip 6 may be utilized as the squeegee. By extending the perforations 11 tangentially, as in Fig. 3, and providing the removable plug 13 and orifice 12, the device may be used as a sprinkler by simply inverting the same and removing said plug. The device described will be found very convenient and efficient in practice and will avoid much of the muss which usually attends the operation of cleaning windows, &c.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

A window cleaning device consisting of a suitable back or support, a hollow rubber receptacle or reservoir for water secured thereto and comprising a substantially semi-elliptical curved wall and a diametrically disposed flat connecting wall, a squeegee formed integrally with said receptacle and constituting an extension of the diametric wall of the receptacle, and a series of perforations providing for the admission and escape of water, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WALTER ERNEST ALLEN.

Witnesses:

T. P. STARRETT,
G. L. STOCK.