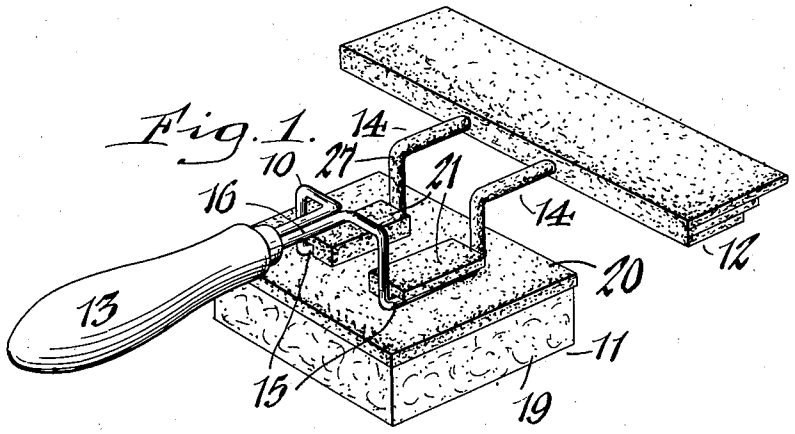
March 19, 1935. A. E. BOULTON 1,994,939

WINDOW CLEANING IMPLEMENT

Filed Aug. 29, 1933

Fig. 1.



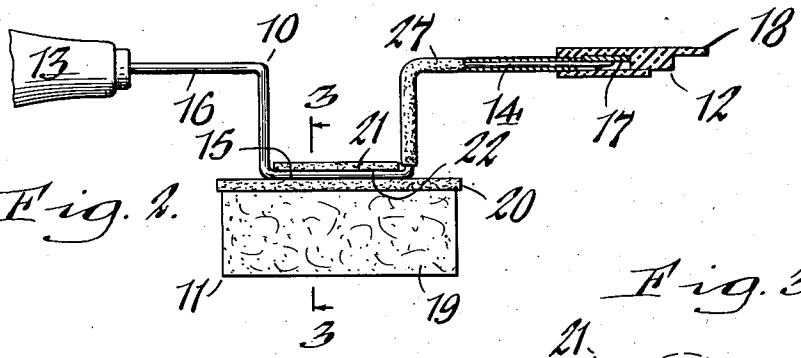


Fig. 2.

Fig. 3.

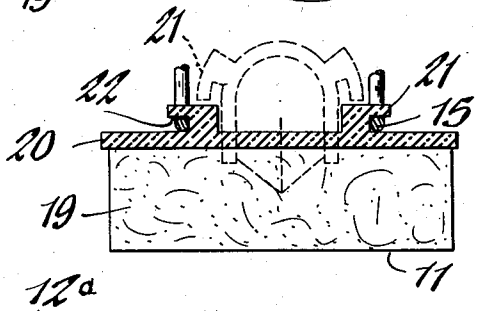


Fig. 4.

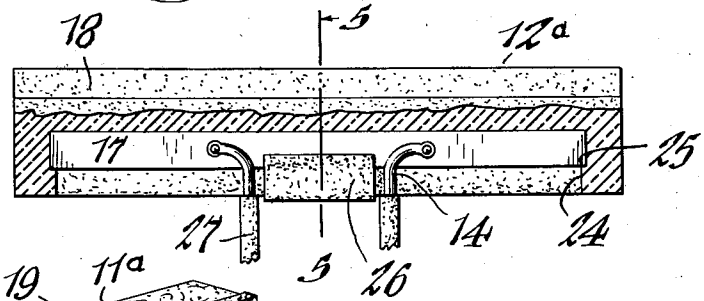
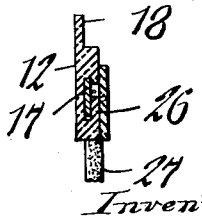


Fig. 5.



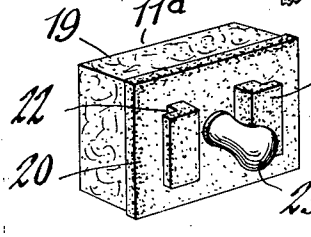


Fig. 6.

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1,994,939

WINDOW CLEANING IMPLEMENT

Albert E. Boulton, Buffalo, N. Y.

Application August 29, 1933, Serial No. 687,286

3 Claims. (Cl. 15—121)

This invention relates generally to cleaning implements but more particularly to a device for effecting the washing and drying of windows and like surfaces.

One of its objects is to provide an implement of this character having means thereon for supporting a washing or cleansing element and a squeegee or drying element, such means being so disposed as to effect the ready and convenient manipulation of the elements mounted thereon without relative interference from each other and without danger of marring or scratching the windows or their frames.

Another object of the invention is the provision of a cleaning implement which is simple, compact and inexpensive in construction, and wherein the cleaning and drying elements may be readily detached or renewed when desired.

In the accompanying drawing:—

Figure 1 is a perspective view of a cleaning implement embodying my invention. Figure 2 is a side elevation thereof, partly in section. Figure 3 is a cross section of the same taken on line 3—3, Figure 2. Figure 4 is a sectional elevation of a modified form of mounting of the wiper or drying element. Figure 5 is a cross section thereof, taken on line 5—5, Figure 4. Figure 6 is a perspective view of the washing or cleansing element detached from the implement and having a handle thereon.

Similar characters of reference indicate corresponding parts throughout the several views.

Referring to the embodiment of the invention shown in Figures 1, 2 and 3, the numeral 10 indicates a suitable frame or mounting for the washing or cleansing element and the wiping or drying element indicated generally by the numerals 11 and 12, respectively. This frame or mounting is preferably made from wire and is provided at one end with a suitable handle 13 for manipulating the tool during the washing and drying operations. This wire mounting is shaped or bent to provide longitudinal front and rear parallel portions including front or end-attaching arms 14, 14 upon which the wiping element 12 is mounted and intermediate portions 15, 15 which are offset laterally and rearwardly from said portions 14 and upon which the washing element 11 is mounted. The opposite or rear end-portions 16 of the wire frame adjoin each other and constitute a shank for receiving the handle 13, said shank-ends being substantially in line with or in the plane of the wiper attaching arms 14 while the portions 15 are offset inwardly somewhat in the shape of a U to bring the washing element 11 in a plane forwardly or in advance of that of the wiping element 12.

The terminal ends of the frame portions 15 are secured to the wiper element 12 in any suitable manner, as, for example, to a bar 17 embedded in or otherwise attached to such element. As seen in Figures 1 and 2, the wiping element or squeegee is provided at its front edge with a comparatively thin marginal flange-like portion 18 which constitutes a flexible wiping edge for windows and the like and which can be projected into comparatively small spaces where desired.

The washing element 11 is preferably in the form of a rubber brush or sponge and consists of a main body portion 19 of sponge rubber or the like and backing wall 20 of solid rubber or like flexible or elastic material. This washing element is preferably detachably mounted on the intermediate portions 15 of the implement frame and to this end is provided on the outer face of its backing wall 20 with oppositely-facing hook-like lugs 21 forming outwardly-facing parallel grooves 22 which engages the companion frame-portions 15, 15, in the manner shown in Figures 1, 2 and 3. The washing element may be detachably applied to and removed from the frame by merely bending the washing element upon itself in the manner shown by dotted lines in Figures 3, which permits the insertion of the washing element between the frame portions 15 to bring its lugs 21 into interlocking engagement with such portions when the washing element is allowed to assume its normal position, or upon bending the washing element to a contracted position, to release its lugs from interlocking engagement with the frame portions 15 and permit the removal of the washing element from the frame.

For the purpose of permitting the convenient use of the washing element 11^a when detached from the implement frame, it may be provided with a suitable handle 23, as seen in Figure 6, which handle may be disposed between the lugs 21.

If desired, the wiping element 12 may also be detachably applied to the implement frame 10. As depicted in Figures 4 and 5, such a construction is shown wherein the resilient wiper element 12^a is provided with a downwardly-opening socket or recess 24 for receiving the bar 17 attached to the free ends of the frame portions 14, such recess being somewhat narrower than the bar and shaped to provide shoulders 25 at its ends for preventing outward displacement of the wiping element from the bar 17. To hold the central portion of the wiper to the bar 17 and prevent its

flexing away therefrom, I provide the lower edge of the wiper with an upwardly-facing flange 26 which is adapted to engage the lower edge of the bar 17, in the manner shown in Figure 5. In applying the wiper element 12 to the bar 17, its recess 24 is brought into register with the bar and then stretched and pulled over the same in an obvious manner, after which the flange 26 thereof is flexed over the lower edge of said bar.

As shown in Figures 1, 2 and 4, the frame portions 14 of the implement frame are preferably covered by rubber tubing 27 or the like to thereby prevent any metallic parts of the implement from marring or scraping the window or its frame during the use of the device.

I claim as my invention:—

1. An implement holder of the character described, comprising a frame having a handle and including a pair of adjacently disposed members terminating at their front ends in longitudinal attaching arms for receiving a wiping element and rearwardly of said arms in laterally offset U-shaped portions disposed in planes companion to those of said arms and forming longitudinal attaching arms substantially parallel to the first-named arms and adapted to receive a washing element.

2. A cleaning implement of the character described, comprising a wire frame including adjacently disposed rigid members provided at one end with a handle and terminating at its opposite ends in laterally-spaced arms adapted to receive a wiping element, the intermediate portions of said members being jointly offset laterally in substantially parallel U-shape to provide longitudinally extending attaching arms disposed in a plane at a different elevation than said first named arms and adapted to receive a washing element.

3. An implement of the character described comprising a handle, a transverse bar connected thereto, an elongated resilient wiper element having a socket extending lengthwise thereof and removably engageable with said bar, the mouth of said socket being somewhat shorter than the length of the bar to provide shoulders to prevent outward displacement of the wiper element from said bar, and a flange projecting from said wiper element for engagement with the bar.

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