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WINDOW CLEANING IMPLEMENT

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7 Claims. (Cl. 15-126)

This invention relates to improvements in window cleaning implements.

One of the features of the invention resides in a hand operated window cleaner by which the

5 surface of a glass pane may be successively moistened and wiped dry by a single manipulation of the hand of an operator.

Another feature of the invention is the provision of a window cleaning implement in which 10 moisture is automatically fed to the applicator element during use of the device to avoid fre-

quent wetting of the same. A further object of the invention is the pro-

vision of a window cleaning device having the 15 above features which is simple of construction, inexpensive of manufacture, and easy of operation.

With these and other objects in view, the invention resides in the certain novel construction,

20 combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:

25 Figure 1 is a perspective view of the invention showing the manner of holding the same for use. Figure 2 is a vertical transverse sectional view. Figure 3 is a perspective view of the invention with the parts in separated condition, and certain 30 of the parts shown in section.

Referring to the drawing by reference characters, the numerals 10 and 11 designate a pair of elongated plates which constitute the holding means for the moistening and wiper elements 5 presently to be described. The lower plate 11

35 presently to be described. The lower plate 11 adjacent one of its longitudinal edges is provided with a groove 12 extending substantially the length thereof and which is formed by stamping the same in said plate.

40 Interposed between the plates 10 and 11 is a wiping element 13 and an absorbent moistening element 14. The wiping element 13 is constructed of flexible rubber or other like flexible material. The flexible absorbent element 14 is pref-

- 45 erably constructed of felt or other similar soft absorbent material and is of a length equalling the length of the wiper element 13. The wiper element and absorbent element are disposed in spaced relation by the insertion of a spacer plate
- 50 17 therebetween which is of a less width than the width of the elements 13 and 14 so that one of the longitudinal edges of each of the elements overlies one longitudinal edge of the spacing plate 17. It is the working edge of the wiping

55 strip 13 which overhangs the adjacent edge of

the spacer plate and which working edge is disposed in free spaced relation with respect to the adjacent longitudinal edge of the absorbent element 14. The working edges of the elements 13 and 14 are in substantial parallel relation.

The parts above described are secured together by screws or like fastening elements 18 which pass through the plate 10, wiping element 13, spacer plate 17, and moistening element 14, and which screws thread into threaded openings ⁶⁵ 19 provided in the lower plate 11.

Secured to the upper plate 10 by screws or like fastening elements 20 is the flange 21 of a handle member 22. The handle member 22 extends at an angle from the flange 21 to enable grasping of the same in the manner shown in Figure 1 in order to permit the manipulation of the implement in the manner presently to be described.

Detachably associated with the parts hereinbefore mentioned is a tank 23 adapted to contain 75water and which is provided with a spout or discharge tube 24. When the tank is in position, the tube 24 extends through registering openings in the plate 10, wiping element 13, spacer plate 17, moistening element 14 and opens into the groove 80 or trough 12 provided in the lower plate 11. Extending from the tube or spout 24 is a segmental shaped flange 25 which fits into a segmental shaped recess 26 in the under side of the flange 21 of the handle member. In applying the tank into 85 position, the spout or tube 24 is first inserted through the alined openings with the flange 25 clear of the edge of the flange 21. After so positioning the tank, the same may be given a turn which causes the flange 25 to move into the seg- 90 mental shaped recess 26 where it is frictionally held against accidental movement. By this construction, the tank may be filled by separating the same from the holder as water may be poured into the tank through the tube or spout 24. Thus 95 it is unnecessary to provide a separate filling opening for the tank as the discharge tube serves both as a filling opening and as a discharge outlet for the water contained within the tank.

In the operation of the implement, assume that 100 the tank 23 is filled with water and it is desired to clean the surface of a pane of glass. The operator grasps the handle 22 in the manner shown in Figure 1, and places the working edge of the wiping strip 13 and the adjacent edge of 105 the moistening element 14 against the surface of the glass. It is assumed that the moistening strip 14 has been saturated with water from the trough 12 caused by the gravitational flow of the water from the tank 23. As the device is drawn across 110

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the glass, the surface is moistened by the working edge of the moistening strip 14 and which tends to loosen any dirt which may be present thereon. After the moistening of the surface by ${f 5}$ the moistening strip 14, the wiping strip 13 wipes

the surface dry of any moisture in the same manner as an ordinary squeegee.

Although the implement is especially adapted for use in the cleaning of windows, the same may 10 also be employed for the cleaning of windshields, show windows, show cases, and wherever a flat surface is adapted to be cleaned by first moistening and then scraping the same dry.

- While I have shown and described what I deem 15 to be the most desirable embodiment of my invention, I wish it to be understood that certain changes as come within the scope of the appended claims may be resorted to if desired.
- Having thus described the invention, what I 20 claim as new and desire to secure by Letters Patent of the United States, is:-

1. A window cleaning implement comprising a pair of spaced elongated plates, an absorbent strip secured between the plates, one of said 25plates having a groove therein extending lengthwise thereof, a tank supported upon the upper plate, a discharge spout leading from said tank to said groove through openings provided in said upper plate and said absorbent strip, and a han-30 dle joined to one of said plates.

2. A window cleaning implement comprising a pair of spaced elongated plates, a groove provided on the inside of one of said plates, and extending lengthwise thereof, an absorbent strip

- 35 secured between said plates and extending beyond one of the longitudinal edges thereof, a water tank removably supported above said absorbent strip, a vertical discharge spout leading from said tank to said groove through apertures
- 40 in one of said plates and said absorbent strip, and a handle member associated with one of said plates.

3. A window cleaning implement comprising a pair of elongated plates, an absorbent strip secured between said plates, one of said plates having a groove therein extending lengthwise thereof and terminating short of the ends of said plate, a tank supported upon the other plate, a discharge spout leading from said tank through 50

apertures in said other plate and said absorbent strip, to said groove, and a handle member joined to one of said plates.

4. A window cleaning implement comprising 90 a pair of spaced elongated plates, a groove provided on the inside of one of said plates and terminating short of the ends thereof, an absorbent strip between said plates and extending beyond one of the longitudinal edges thereof, a water tank supported above said absorbent strip, 85 a discharge spout leading from said tank through apertures in said plate and said absorbent strip, to said groove, and a handle member associated with one of said plates.

5. A window cleaning implement comprising a 90 holder including upper and lower plates, a groove in said lower plate terminating short of the ends thereof, an absorbent strip secured between said plates and overlying said groove, a water tank removably supported by said upper plate above 95 said absorbent strip, a discharge spout leading from said tank through apertures in said upper plate and said absorbent strip, to said groove, and a handle member extending from said upper plate. 100

6. A window cleaning implement including a holder having a handle member attached thereto. said holder comprising a pair of elongated plates, one of said plates having a groove therein extending lengthwise thereof, an absorbent strip 105 overlying said groove, a flexible wiping strip held in spaced relation to said absorbent strip, a tank removably supported by said holder, and a spout depending from said tank to said groove through apertures provided in said other mentioned plate 110 and said absorbent strip.

7. A window cleaning implement comprising a holder including a pair of spaced elongated plates, one of said plates being provided with an elongated groove pressed therefrom, an ab- 115 sorbent strip overlying said groove, a wiping strip held in spaced relation to said absorbent strip between said plates, a tank supported by said holder, a spout leading from said tank to said groove through apertures provided in said other 120 plate, said absorbent strip and said wiping strip, and a locking means for holding said tank on said holder.

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