

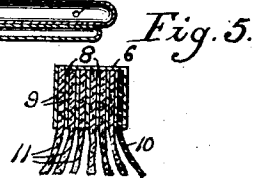
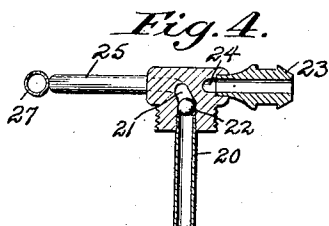
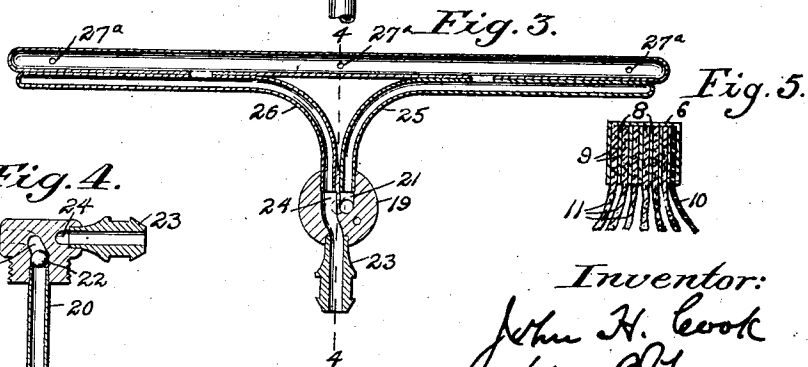
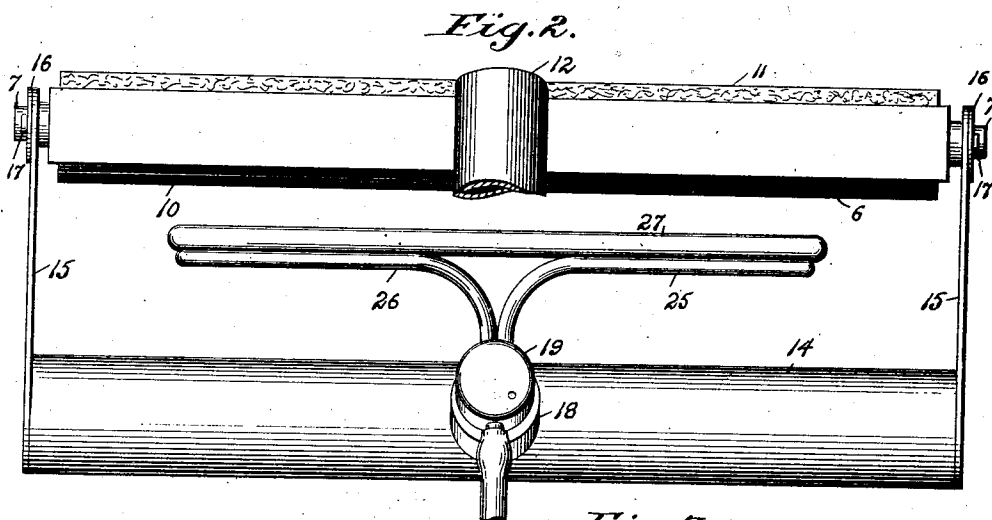
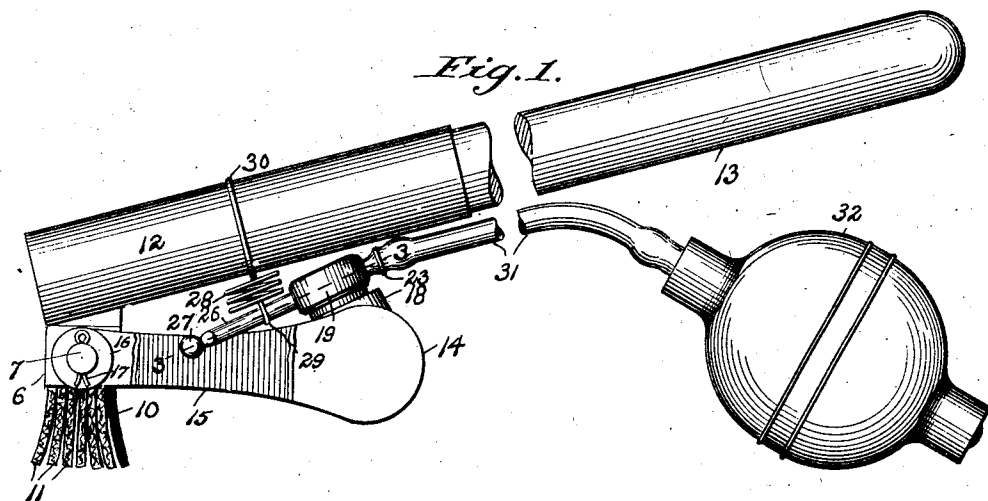
Aug. 30, 1927

1,640,924

J. H. COOK

WINDOW CLEANER

Filed April 11, 1923



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Att'y.

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UNITED STATES PATENT OFFICE.

JOHN H. COOK, OF SALT LAKE CITY, UTAH.

WINDOW CLEANER.

Application filed April 11, 1923. Serial No. 631,449.

The present invention relates to window cleaners of the fountain type, and the object is to provide a simple structure by which a fine spray may be delivered against the glass directly adjacent to a cleaning element, the element being moved over the glass and effectively cleansing the same without the liquid running down over the sash and frame.

10 The embodiment of the invention that is at present considered the preferable one, is illustrated in the accompanying drawings, wherein:—

Figure 1 is a side elevation of the cleaner,

15 Figure 2 is a plan view of the same,

Figure 3 is a detail sectional view on the line 3—3 of Figure 1,

Figure 4 is a sectional view on the line 4—4 of Figure 3,

20 Figure 5 is a detail cross sectional view through the cleaning member.

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

25 In the embodiment illustrated, a cleaning member is employed, comprising an elongated head box 6 preferably of metal, and having outstanding gudgeons 7 at its ends. The interior of the box is subdivided by longitudinal partitions 8 into chambers or grooves 9. In the rearmost of these grooves is fitted a rubbing element 10 preferably formed of rubber or flexible material impervious to water. In the other grooves are detachably placed absorbent strips 11 of wicking or the like.

Thus a scrubbing and drying member is provided that projects from the head box 6, as clearly shown in Figures 1 and 5. On 40 the upper side of the head box is secured a socket piece 12 adapted to receive one end of a handle 13, said handle being of any length desired.

45 Located in rear of the cleaning member is an elongated reservoir 14 preferably of cylindrical form, and having at its ends laterally disposed ears 15 that are journaled on the gudgeons 7 and are held in place by washers 16 and pins 17, or other suitable devices. This reservoir has a central upstanding nipple 18 in which is detachably mounted a sprayer head 19. The said head, as shown, is provided with a depending liquid intake pipe 20 communicating with a port 21. Said 50 port 21 contains a check valve 22 that seats upon the upper end of the intake pipe 20.

An air inlet nipple 23, connected to the rear side of the head 19, has communication with another port 24 in said head. The ports 21 and 24 communicate with supply pipes 25 60 and 26 that are in the form of elbows having their outer ends extending in opposite directions and connected to a discharge pipe 27 having spray orifices 27^a. The pipe 27 is located in rear of the cleaning member and the orifices discharge downwardly in rear 65 of the same. The reservoir and spray element are yieldingly supported by a coiled spring 28 having a terminal loop 29 surrounding one of the pipes as 26, and having another terminal loop 30 surrounding the socket piece 12. A rubber tube 31, connected at one end to the nipple 23, has connection at its other end with a compressible 75 bulb 32.

It will be understood that as this device is passed over the surface of the glass the bulb is occasionally compressed. The air expelled therefrom thus passes through the tube 31 and tube 26, discharging into the 80 pipe 27 and expelling the liquid contained therein. As the bulb again expands, creating a partial vacuum, a portion of the liquid contained in the reservoir 14 will rise through the pipe 20 past the valve 22 and enter the pipe 26, thereby providing a new 85 supply to be discharged, when the bulb is again compressed. The liquid, which is preferably a combination of alcohol and water, is delivered against the glass in a fine 90 spray, and the scrubbing member passed over the same, will cause the window to be effectively cleaned and quickly dried.

From the foregoing, it is thought that the construction, operation and many advantages 95 of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction, may be resorted to without departing 100 from the spirit or sacrificing any of the advantages of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by 105 Letters Patent, is:—

1. A window cleaner comprising a handle and a cleaning member rigidly mounted on one end of the same and disposed transversely thereto, a pivotally mounted reservoir for a cleansing agent located behind the 110 cleaning member and beneath the handle,

means interposed between the reservoir and handle and detachably connected to the reservoir for ejecting the cleansing agent from the reservoir and delivering it to a position
5 to be acted on by the cleaning member, and means for supporting the reservoir from the over-extending handle, and permitting its movement away from the same.

10 2. A window cleaner comprising a handle and a cleaning member mounted on one end of the same and disposed transversely thereto, an elongated reservoir extending parallel to the cleaning member and transversely beneath the handle in rear of the cleaning
15 member, pivotal connections between the ends of the reservoir and the cleaning mem-

ber, said reservoir having a filling opening on its upper side beneath the handle, a cap detachably closing the opening, mechanism for ejecting the material from the reservoir, 20 said mechanism being mounted on the cap beneath the handle and delivering the material behind the cleaning member, and a hanger for the reservoir engaged with the over-extending handle and permitting the 25 reservoir to be moved away from the handle sufficiently to give access to the filling opening.

In testimony whereof, I affix my signature.

JOHN H. COOK.