No. 612,896. Patented Oct. 25, 1898.

R. H. DUNN.

WINDOW CLEANER.

(Application filed Nov. 26, 1897.)

(No Model.)

Fig. 1.

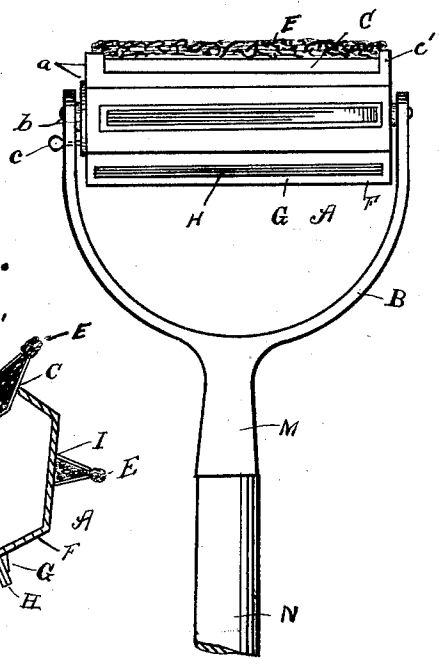


Fig. 2.

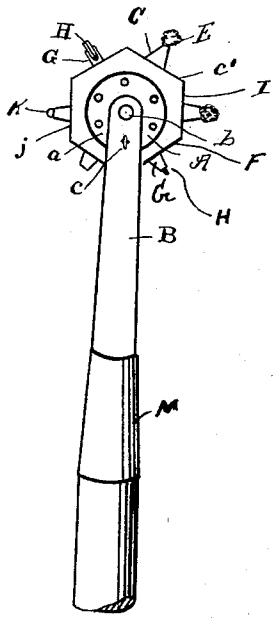
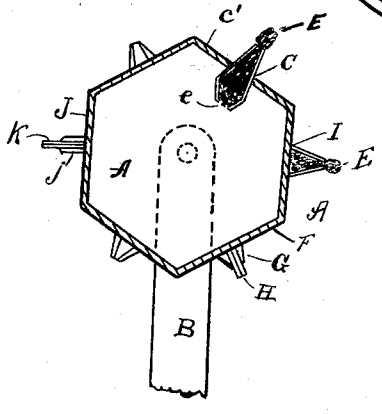


Fig. 3.



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UNITED STATES PATENT OFFICE.

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WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 612,896, dated October 25, 1898.

Application filed November 26, 1897. Serial No. 659,807. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HARTY DUNN, a citizen of Canada, residing at Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Window Washing and Cleaning Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in window washing and cleaning devices, and has for its object to provide a cheap, simple, and efficient means adapted to carry a quantity of water and to be operated by means of a long or short handle, whereby the entire window may be cleaned and dried without the necessity of lowering and dipping the apparatus.

A further object is to provide a simple construction that will furnish suitable supports for washing, cleaning, and polishing devices.

The invention consists in the construction and arrangement of the various parts to be hereinafter described, and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a side elevation of my improved window washer and cleaner. Fig. 2 is an end elevation. Fig. 3 is a transverse section taken through the cylinder and its various attachments.

Like letters of reference refer to corresponding parts throughout the figures.

A indicates the cylinder or reservoir within which the water is carried and to which the various cleaning and polishing attachments are secured. I prefer in the construction to form this cylinder with six sides, or with a hexagonal cross-section, so as to furnish a plane surface within which to engage the cleaners and polishers. The cylinder is journaled at its two ends between the extreme outer ends of the fork B and is adapted to rotate freely therein, so as to present any one of the surfaces toward the working side of the device, as may be desired. To secure it in the adjusted position, I provide the perforated plate *a* upon one end thereof around its journal-pin *b* and arrange the bolt *c* through a suitable opening in one arm of the fork, so that its inner end will register with the perforations in said plate. Thus it will be seen that when the cylinder has been adjusted to the required position the bolt may be inserted within the recess which registers therewith to hold it firmly fixed with relation to the fork.

C represents the sponge-holding receptacle, having its side walls extending through the face *c'* of the hexagonal cylinder and arranged to extend within the cylinder, where it terminates with a series of perforations, through which the water is supplied to the sponge. This receptacle is somewhat diamond-shaped in cross-section, having the upper edges of the two sides slightly separated, so as to permit the sponge E to protrude therethrough, and as the interior gradually increases in dimensions from the top toward the center or below the sponge is firmly held in position. Upon the side F of the cylinder I provide the rubber-holder G, within which the rubber cleaner H is clamped. This clamp does not communicate with the interior of the cylinder, but is formed upon the outer surface either integral with the cylinder or independent thereof and the rubber secured therein by any suitable means. The side I carries a similar holder or receptacle to the outer portion of the sponge-receptacle C, within which a dry sponge is carried, and the side J has suitably mounted thereon a holder *j*, within which there is secured the polisher K. It will thus be observed that a great variety of useful attachments may be easily mounted upon the various convenient surfaces offered in this construction, whereby the window may be washed, cleaned, and polished by the use of a single implement.

The yoke or fork B terminates at its central lower point with the ferrule M, within which the handle N is arranged to engage, and, as will be evident, any style or size of handle to suit the purpose to which the cleaner is to be applied may be inserted within the ferrule.

I have found in the use of a sponge in connection with this class of window cleaners and

washers that the capillary attraction is so great that the water within the receptacle is wasted, a greater quantity of it being absorbed by the sponge, and hence squeezed out by the operator in the process of washing the window, than is necessary. To obviate this objectionable feature, I first insert within the sponge-receptacle C a suitable quantity of absorbent cotton, arranging it immediately over the openings *e* within the lower surface of the receptacle, so that the capillary attraction of the absorbent cotton will govern the supply of water to the sponge. By this means a sufficient quantity is absorbed to accomplish perfect results without the wasting effect produced in connection with the use of a sponge as employed in other similar devices.

From the foregoing the operation of my invention will be readily understood. The water having been inserted within the cylinder either through the sponge-receptacle or by any other suitable inlet, the absorbent cotton is then forced in upon the openings *e* in the bottom of the receptacle and the sponge pressed into position, whereupon the implement is ready for use. The various attachments, as they are required, may be turned to any side desired by the operator by merely disengaging the bolt *c*, revolving the cylinder, and again securing the bolt in the perforated plate *a*.

It will be obvious that a variety of modifications may be made in the general construction and arrangement of the various parts as I have herein shown and described them, and I desire to have it understood that although I prefer the form and arrangement herein shown the essential novelty of my invention lies in the use of a cylinder or water-receptacle offering a plurality of surfaces upon which a variety of washing, cleaning, and polishing attachments may be secured, means for shifting any one of said attachments to a working position, and the use of absorbent cotton as a regulator for the capillary attraction of the sponge, and any construction by which substantially the same results may be accomplished may be employed without materially departing from the spirit and scope of my invention.

Having thus described my invention, what I claim is—

1. In a window washing and cleaning device, the combination with a cylindrical reservoir, having a plurality of surfaces, of a sponge-receptacle extending through one of said surfaces into the interior of said cylinder provided with a series of openings in the bottom thereof, absorbent cotton within said receptacle adjacent to said openings, a sponge above said absorbent cotton and adapted to protrude beyond the opening at the outer end of said receptacle, a yoke or fork, between the ends of which said cylinder is journaled, and means for securing said cylinder in its adjusted position, substantially as described.

2. In a window washer and cleaner, the combination of a reservoir, means for supporting said receptacle, whereby a long or short handle may be secured thereto, a sponge-receptacle arranged to extend through the wall of said reservoir therein, provided with perforations at the bottom thereof, absorbent cotton within said receptacle adjacent to the openings, and a sponge above said cotton and arranged to protrude beyond said receptacle, substantially as described.

3. In a window cleaner and washer, the combination of a reservoir having a plurality of sides, a fork or yoke between the ends of which said reservoir is journaled, a perforated plate upon one end of said reservoir, a bolt adapted to pass through one arm of said fork and to engage with the perforations in said plate, whereby the cylinder is secured in its adjusted position, a sponge-receptacle arranged to pass through one of the sides of said cylinder and to extend within the reservoir, where it terminates with a series of openings, absorbent cotton within said receptacle adjacent to said openings, a sponge above said absorbent cotton adapted to extend beyond said receptacle, a series of holders upon the remaining sides of said cylinder adapted to support driers, cleaners and polishers, and means whereby a long or short handle may be secured to said fork, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT HARTY DUNN.

Witnesses:
F. CURRAN,
A. LAMB.