July 1, 1924.

1,500,006

G. C. SHERMAN

WINDOW CLEANER

Filed July 12, 1922

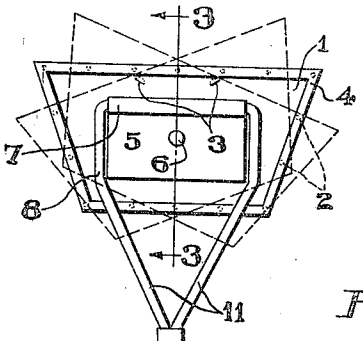



Fig. 1.

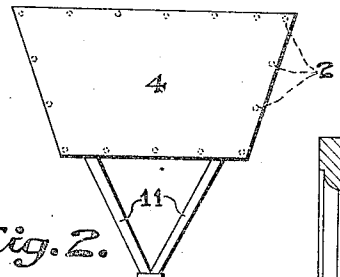
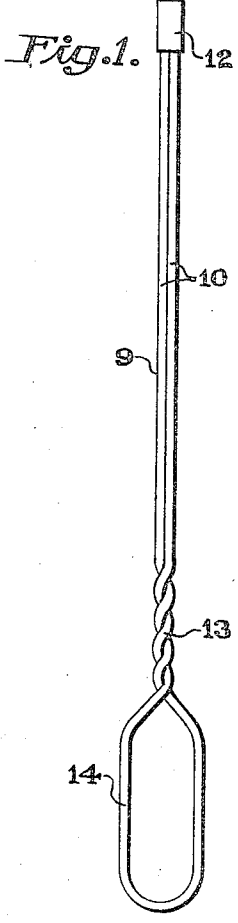



Fig. 2.



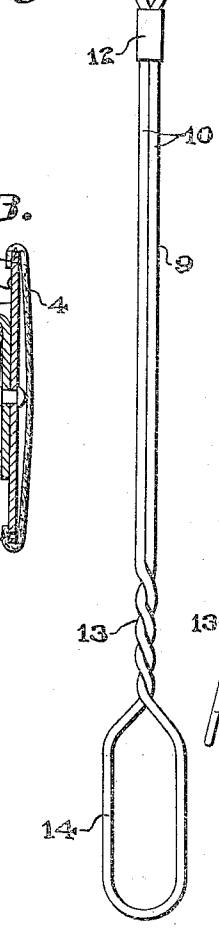
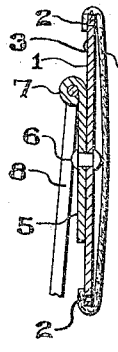




Fig. 3.



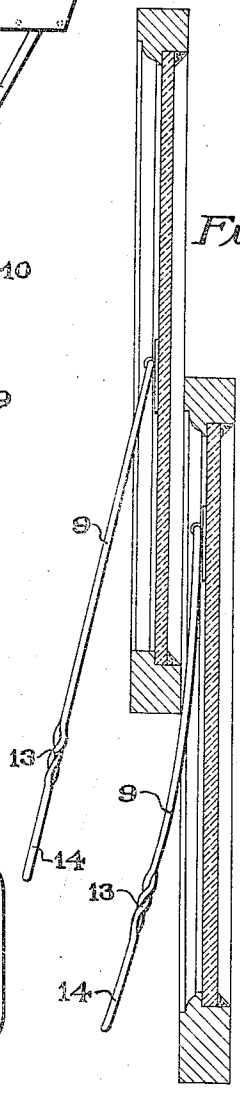




Fig. 4.

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Thomas E. Turk
WITNESSES

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Patented July 1, 1924. 1,500,006

# UNITED STATES PATENT OFFICE.

GEORGE C. SHERMAN, OF GENEVA, NEW YORK.

## WINDOW CLEANER.

Application filed July 12, 1922. Serial No. 574,576.

*To all whom it may concern:*

Be it known that I, GEORGE C. SHERMAN, a citizen of the United States, residing at Geneva, in the county of Ontario and State of New York, have invented new and useful Improvements in Window Cleaners, of which the following is a specification.

The object of my said invention is the provision of a window cleaner which while simple and inexpensive in construction is possessed of a wide range of usefulness particularly in cleaning windows of the sliding sash type in which use the working end of the device is adapted to be interposed and operated between the spaced glasses of partially opened sashes.

To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

Figure 1 is a back view of the device constituting the best practical embodiment of my invention of which I am cognizant and showing the head of the device in adjusted positions by dotted lines.

Figure 2 is a face view of the device.

Figure 3 is a cross-section taken in the plane indicated by the line 3—3 of Figure 1.

Figure 4 is a view diagrammatic in character and illustrating the manner in which the head of the device is operated between the spaced glasses of partially opened sliding sashes as hereinbefore indicated.

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

Among other elements my novel device comprises a head 1, preferably of tin or other appropriate sheet metal and shaped as illustrated. The said head 1 is provided adjacent to its edges with apertures 2, and on its back it is equipped with stops 3 which may be and preferably are struck up from the head 1. The head 1 is adapted to serve as a pad or cloth holder in the respect that a pad or cloth is arranged over the face of the head and is lapped around the edges thereof and is fastened to the head through the medium of stitches passed through the said apertures 2. The pad or cloth alluded to is designated by 4 and is adapted to be removed when soiled or worn and replaced with a fresh pad or cloth.

In addition to the head 1 and pad or cloth 4 the device comprises a swinging plate 5, pivotally connected at 6 to the head 1 at the back thereof and having at its upper edge a pivot bearing 7. The said pivot bearing 7 of the plate 5 serves to receive the upper terminal portions 8 of a resilient handle 9, and it will be readily manifest that through the medium of the handle 9, the plate 5 may be swung against one of the stops 3 to arrange the head relative to the handle as shown by dotted lines in Figure 1 so that the pad or cloth 4 may be more readily manipulated against the glasses in the corner portions of sashes.

As before indicated the handle 9 of the device is resilient, and in virtue of the handle being made of side by side portions 10 of light wire, and being of a considerable length the handle is capable of freely bending for the purpose brought out in Figure 4. The terminal portions 8 of the handle are extended inwardly from the upper ends of upwardly divergent portions 11, and the said divergent portions are merged into the side by side portions 10, which portions 10 at their upper ends are appropriately connected together in fixed manner as indicated by 12. The lower portions of the handle are twisted about themselves as indicated by 13 and the twisted portions are arranged immediately above a loop 14 which may be used in practice as a hanger up.

It will be manifest from the foregoing that in virtue of my novel construction the pad or cloth 4 may be yieldingly held under pressure against a pane of glass so as to promote the cleaning of the glass, and may be freely worked over the surface of the glass and into the corners of sashes so as to assure the cleaning of a glass throughout the area thereof. It will also be appreciated from Figure 4 that the cleaner head may be expeditiously and easily interposed between the glasses of two partially opened sliding sashes, and may be freely manipulated in said location so as to render it feasible to clean the entire outer surface of the lower glass and also the outer side of the glass of the upper sash. In this connection it will be understood that the pad or cloth will rest flat against the glass irrespective of the angle of the handle or the bending of the handle.

In addition to the practical advantages ascribed to my novel device it will be noted that the device is simple and inexpensive in

construction and because of its lightness is adapted to be manipulated with the expenditure of but very little effort.

I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope of my invention as defined in my appended claims.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

1. A window cleaner comprising a flat head having apertures adjacent to its edges and also having stops at the upper portion of its back, a pad arranged against a face of said head and lapped over the edges thereof and attached to the head by means passing through said apertures, a swinging plate pivotally connected to the head at the back thereof and arranged to cooperate with said stops and having a pivot bearing at its upper edges, and a handle journaled in the said pivot bearing and thereby pivotally connected to the said swinging plate; the said handle being resilient.

2. A window cleaner comprising a flat head having apertures adjacent to its edges and also having stops at the upper portion of its back, a pad arranged against a face of said head and lapped over the edges thereof and attached to the head by means passing through said apertures, a swinging plate pivotally connected to the head at the back thereof and arranged to cooperate with said stops and having a pivot bearing along its upper edge, and a resilient handle, formed of side by side lengths of wire with divergent portions at their upper ends terminating in inwardly directed portions journaled in the ends of the pivot bearing, and joined by a loop at their lower ends and twisted throughout a portion of their length immediately above the said loop.

3. A window cleaner comprising a head, a pad carried by the head, a plate pivoted to the head at the back thereof to swing in a plane parallel with said head, and a handle pivotally connected with said plate; the head having stops at its back at opposite sides of the plane of the pivotal connection of the plate to the head to cooperate with said swinging plate.

In testimony whereof I affix my signature.

GEORGE C. SHERMAN.