

A. B. WETHERELL.
WINDOW CLEANER.
APPLICATION FILED FEB. 23, 1910.

1,045,345.

Patented Nov. 26, 1912.

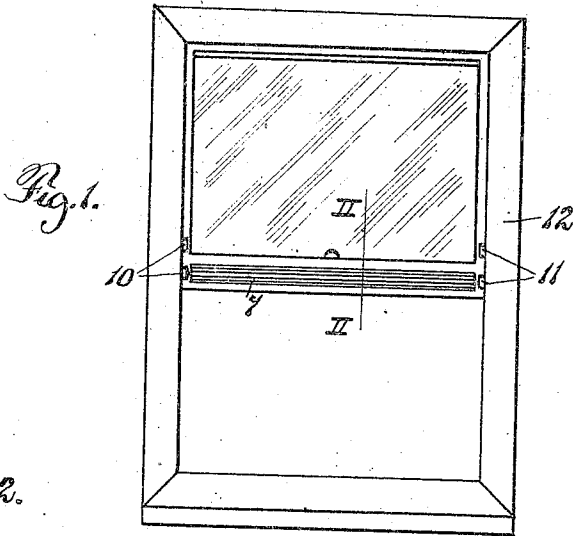


Fig. 2.

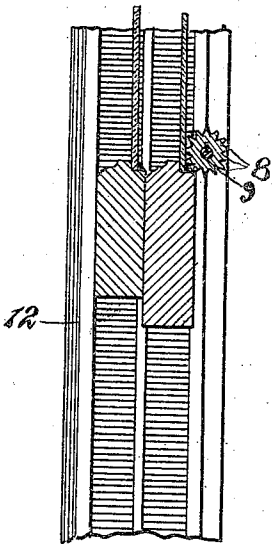


Fig. 3.

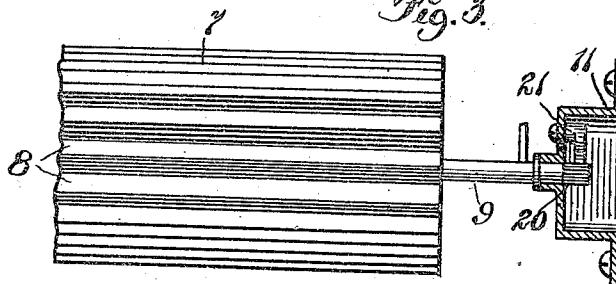


Fig. 4.

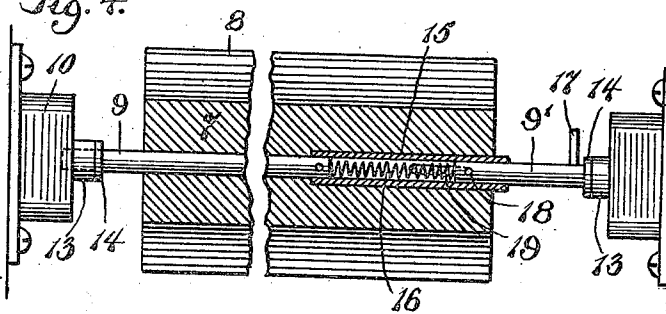
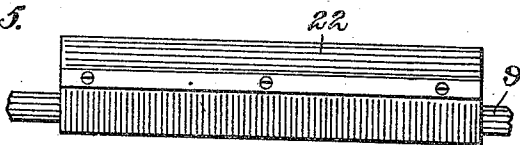


Fig. 5.



WITNESSES

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WINDOW-CLEANER.

1,045,345.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ANSON B. WETHERELL, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Window-Cleaners, of which the following is a specification:

My invention has reference to window cleaning apparatus, and it has for its primary object the provision of improved window cleaning attachment, which is simple and inexpensive, which will secure effective results with a minimum amount of labor, and which eliminates all danger of injury to the operator. These and such other objects as may hereinafter appear, or are incidental to my invention, I obtain by means of a construction illustrated in preferred form in the accompanying drawings wherein,

Figure 1 is a view of my improved window cleaning apparatus or attachment as it is applied in operation,

Figure 2 is an enlarged section taken on the line 11—11 of Fig. 1,

Figure 3 is a partial side elevation and section of my improved attachment,

Figure 4 is a transverse section through the body of my window cleaner, and,

Figure 5 is a view of a modified form of my invention.

My invention aims in general to provide a simple window cleaning attachment which is very effective in operation, and which is capable of being manipulated with a very small amount of labor and time. The danger of accident is always imminent in the methods at present current, and this is particularly the case in large office buildings, where the operator stands on the window ledges. My invention is designed to overcome this difficulty and to reduce the expense incurred in the methods at present used.

In carrying out my invention, I provide a roller 7 preferably composed of porous rubber, felt or a similar substance or composition which will retain a certain amount of moisture. This roll is provided with corrugations or ridges 8 and is mounted on the rods 9 and 9' adapted to engage caps or sockets 10 and 11 secured to the window frame 12 in a manner now to be described. The sockets 10 and 11 are each provided with a sleeve or flange portion 13 serving as

a bearing for the ends of the rods 9 and 9', and against which the collars 14 of the rod 9 are adapted to bear. These sockets are secured to the window frame 12 in the manner indicated in Fig. 1, and there is a set for each pane or two sets to the frame. The support for the roller is preferably composed of the two parts, 9 and 9', the former being secured to a sleeve 15 embedded in the roller 7, and the latter being slidably mounted in the sleeve, and being normally held in extended position by an interposed spring 16. A pin 17 is provided adjacent one end of the rod 9, for use in compressing the rod against the spring 16 in order to permit of ready insertion into the cap 11. In order to hold the portion 9' of the rod in position when the attachment is withdrawn from the socket, and is being carried about, I provide a pin 18 working in the slot 19 in the sleeve 15 and limited in its movement thereby. It is obvious that this particular construction need not be employed, it being necessary only to provide a construction providing a secure mounting for the roll 7. On the end of the rod 9' I cut a number of teeth 20 which in connection with the pawl 21 pivoted to the cap 11 forms a ratchet mechanism the purpose of which will hereinafter appear.

The operation of my invention is as follows; assuming that the lower pane is to be cleaned, the sash is first raised and the roller 7 inserted in the sockets 10 and 11 in the manner heretofore described, said roll having first been suitably moistened with water or other cleaning fluid. The parts are then in the position shown in Fig. 2, the position of the sockets being such that the ridges or corrugations 8 are compressed against the surface of the glass. The sash is then lowered, the roller 7 turning or rolling over the surface of the glass because of the friction between the roll and the glass. This action of the roll is permitted because the teeth 20 slip past the pawl 21. On the upward or reverse movement of the sash the pawl 21 catches in the teeth 20 and the roller is held against turning, and the surface of the glass is scraped or brushed by the ridges 8 in contact therewith, the dust and soot on the window and the moisture deposited by the roll being carried thereby to the bottom of the glass when they can be readily removed by a cloth. The upper pane is cleaned in a similar manner, the roll 7 however turning in

the reverse direction. The inside surfaces of the glass are similarly cleaned. It will be readily seen that, this construction is simple, inexpensive, and effective in its action.

5 The device is readily attached, and is readily removed, and manipulated without incurring any danger to the operator. The device may be used on any number of windows and it is obvious that by slight modifications in the configuration of the roll it
10 may be adapted for use on various kinds of window sashes or ornamental glass.

It is to be observed that the roll 7 is provided with the ridges or corrugations 8 in
15 order to secure a large area of surface in order to retain the proper amount of moisture. The particular form may be changed to suit the character of the work to be done.

In Figure 5 I have shown a slightly modified form of my invention wherein the roll
20 is dispensed with, and in place thereof a single flat piece 22 of rubber or felt is provided. In this case the rod 9 is non-rotative, and the device operates by the raising and
25 lowering of the sash.

Having thus described my invention and illustrated its use what I claim as new and desire to secure by Letters Patent is the following:—

30 1. A device for washing sliding windows,

comprising a cleaning roller extending transversely to the line of movement of the window, and sockets in the side frames in which the roller is rotatably and detachably
35 mounted.

2. A device for washing sliding windows, comprising a cleaning roller extending transversely to the line of movement of the window, means on the side frames in which
40 the window is slidably mounted for holding the roller against vertical movement, and means permitting a rotative movement of the roller in one direction but not in the other.

3. A window cleaner comprising a pair of
45 sockets adapted to be secured to opposite sides of a window frame, a roller provided with a resilient cleaning surface and adapted to be removably mounted in the sockets, and a ratchet mounted in one of the sockets for
50 permitting the roller to rotate in one direction, and restraining it against movement in the other direction.

In testimony whereof I have hereunto signed my name in the presence of the two
55 subscribed witnesses.

ANSON B. WETHERELL.

Witnesses:

HARVEY L. LECHNER,
IDA MAY BLAINE.