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F. BODENHOFER

1,662,038

WINDOW CLEANER

Filed June 24, 1927

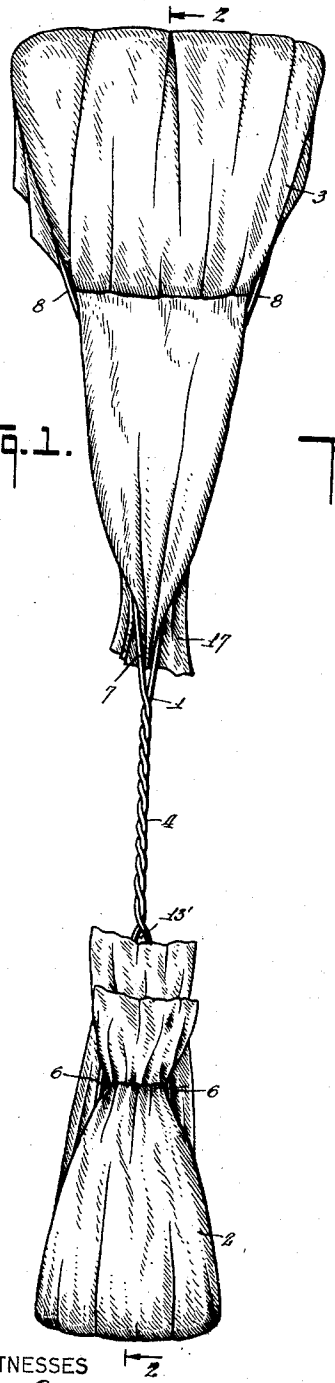


Fig. 1.

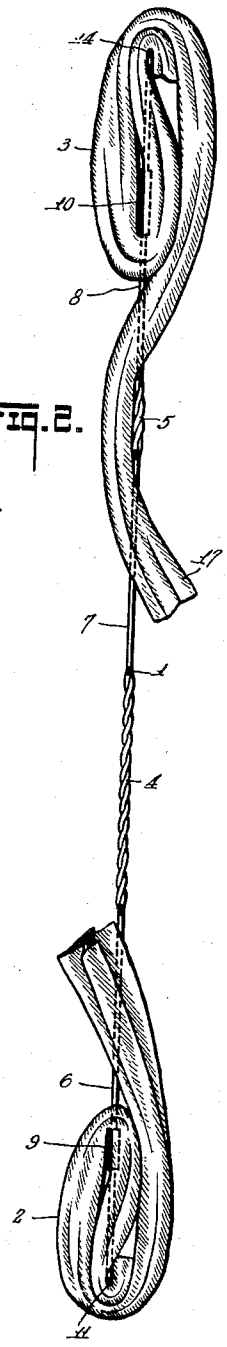


Fig. 2.

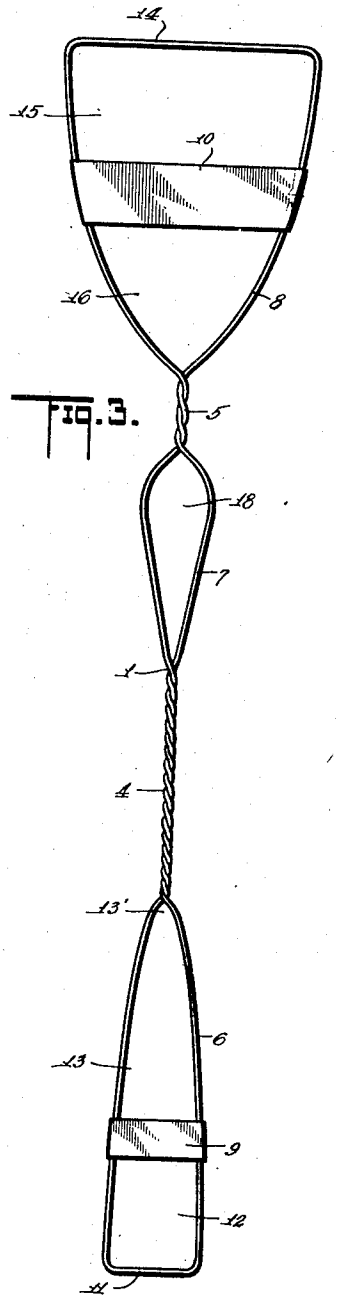


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

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WINDOW CLEANER.

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This invention relates to window cleaners, and has for an object to provide an improved simplified structure which may be easily operated by the hand for cleaning a window inside or outside, wherein means are presented for both cleaning and drying the window.

A further object of the invention is to provide a cleaning structure wherein means are provided whereby a person may clean the outside of a window without leaning out of the window.

A further object, more specifically, is to provide a window cleaner which may be used for cleaning windows or other objects, the arrangement being such that removable cleaning cloths or other members may be arranged at each end and readily tightened by a simple pull.

In the accompanying drawing—

Figure 1 is a plan view of a window cleaner, disclosing an embodiment of the invention, the same being in condition for use.

Figure 2 is a side view of the structure shown in Figure 1.

Figure 3 is a plan view of the holding frame disclosed in Figure 1.

Referring to the accompanying drawing by numerals, 1 indicates the holding frame preferably made of metal, and particularly of strong heavy wire bent into the desired shape. Arranged on the frame 1 are the cleaning and drying members 2 and 3. In forming the frame 1, the same is provided with twisted sections 4 and 5 and looped sections 6, 7 and 8. The looped section 6 is provided with a sheet metal strip 9 secured thereto near the center, while section 8 is provided with a sheet metal strip 10 secured thereto near the center. The strips 9 and 10 extend across the sections to which they are secured, and remain in one place as they are soldered or otherwise rigidly secured in position. The section 4 and parts of the adjacent sections, present a handle whereby the cleaning member 2 may be manipulated or the drying member 3. The cleaning member 2 may be any desired material, as for instance, a piece of cloth. When cloth is used, the same is bent over the end bar 11 as shown in Figure 2 with a portion extending through the space 12 beneath the plate 9 and upwardly through the space 13, around plate 9 and from thence over and around bar 11 so that the free end may be forced through the opening 13 and pulled down into the restricted section 13′, which in a certain sense pinches the cloth for holding the same pulled or wound in the position shown in Figures 1 and 2. When the cloth is in this position, it may be dipped in water and provided with soap if desired or other cleaning means, and then rubbed over either the inside or the outside of the window pane for cleaning the same. Clean water may be also applied in the same way and then the device is reversed and the drying member 3 used. This drying member is shown as a piece of cloth folded in substantially the same manner as the cleaning member 2.

As indicated in Figure 2, the cloth of cleaning member 3 is pulled over the end bar 14, passed through the opening 15 beneath plate 10 and over the plate 10 and bar 14 and back through the opening 16. By pulling the end, the parts will be pinched in position and the extreme end 17 of the cloth is forced through the opening 18 of section 7 where it is in a certain sense, pinched by the side bars of section 7 so that the cloth will not unwind. Both sides of the wound cloth may be used for drying. It is also evident that both sides of the wound cloth of the cleaner 2 may be used. The frame 1 is made of any desired length, but preferably of appreciable length so that a person may merely pass an arm out of the window when cleaning the outside of the window whereby leaning out of the window is eliminated.

What I claim is:

1. In a window cleaner, a wire frame formed with a handle, looped portions at each end, said looped portions tapering toward the handle, and a substantially V-shaped opening adjacent one end of the handle and spaced from said looped portions, said looped portions being adapted to receive cleaning and drying cloths positioned so that part of the cloths will be pinched by the small ends of the looped portions, said V-shaped opening being adapted to receive one end of the drying cloth carried by one of said looped portions when the cloth is appreciably larger than the last mentioned looped portion.

2. In a window cleaner, a frame formed of wire, said frame being provided with a large substantially V-shaped loop at one end

and a small substantially rectangular looped portion at the opposite end with the intermediate part of the frame consisting of twisted portions, said intermediate part having a V-shaped opening near the large V-shaped loop, one of said twisted portions acting as a handle, and a flat plate rigidly secured to each loop extending across the same near the center whereby cleaning and drying cloths may be readily entwined in the loops and pinched by the small ends thereof and by said V-shaped opening to prevent accidental disengagement.

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