Jan. 3, 1928. 1,655,085

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CLEANING TOOL

Filed Feb. 6, 1923

Fig. 1.

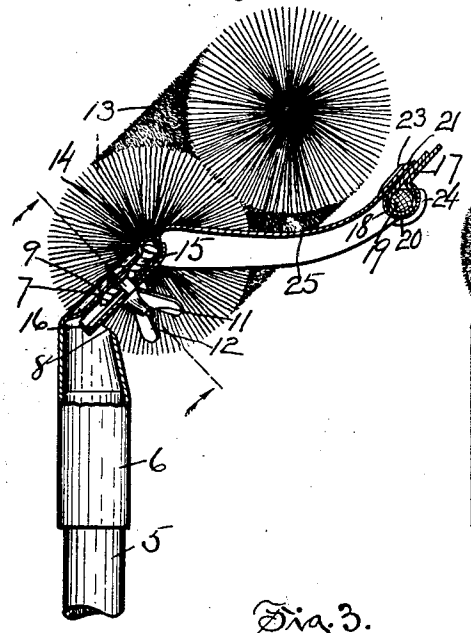


Fig. 2.

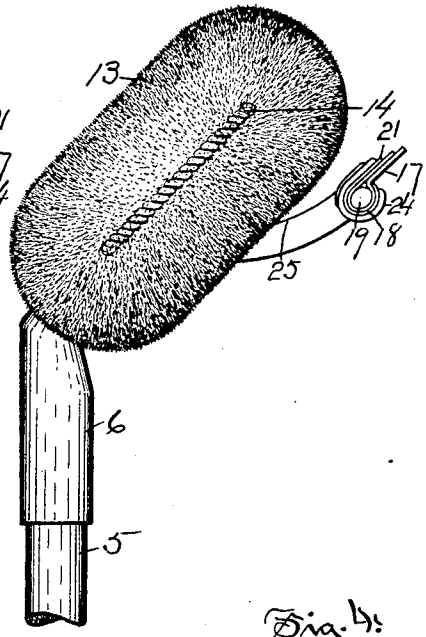


Fig. 3.

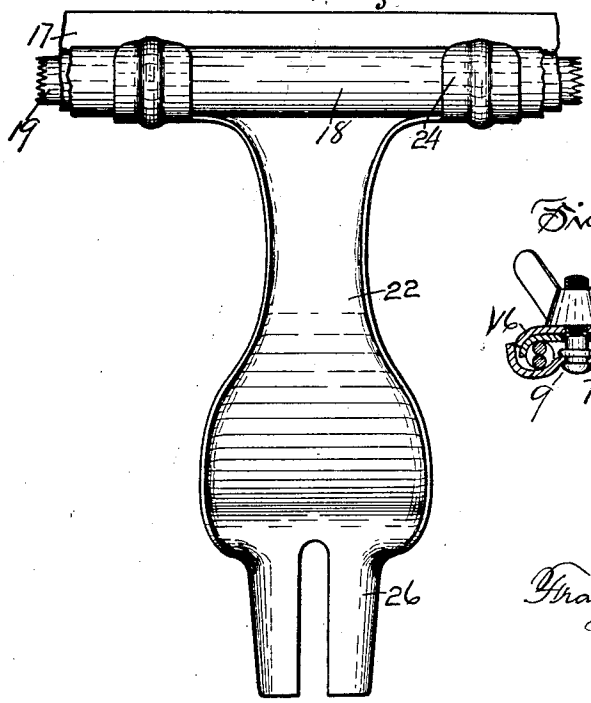


Fig. 4.

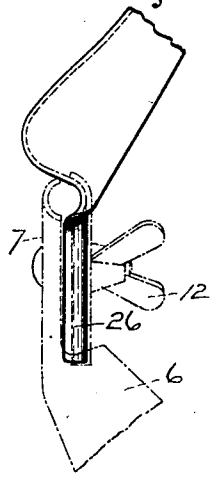


Fig. 5.

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UNITED STATES PATENT OFFICE.

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CLEANING TOOL.

Application filed February 6, 1923. Serial No. 617,220.

This invention relates to the class of tools more especially designed for cleaning windows and similar surfaces, and an object of the invention, among others, is to provide a tool by means of which the entire operation of washing and drying such surface may be efficiently and quickly performed.

One form of tool embodying the invention and in the construction and use of which the objects herein set out, as well as others, may be attained, is illustrated in the accompanying drawings, in which—

Figure 1 is a view in cross section through this improved cleaning tool.

Figure 2 is an end view of the tool.

Figure 3 is a top view, scale enlarged, showing a portion of the drying member of the tool.

Figure 4 is a detail view illustrating the manner of securing the drying member of the tool separately to a handle.

Figure 5 is a detail view in cross section through the clamping members.

This improved cleaning tool embodies in a single structure two members commonly employed for washing windows and similar surfaces, the members being so arranged that either may be used independently of the other for accomplishing its purpose. Such a tool is illustrated in the accompanying drawings in which the numeral 5 denotes the lower end of a handle of the kind commonly employed to support tools of this character and 6 denotes a socket secured to the handle in an ordinary manner, this socket being formed as from sheet metal and having at its outer end a clamp member 7 preferably formed integral with the handle. This clamp member is located at an angle to the socket 6, one side of the socket being cut away to provide an opening 8 in the end of said socket, one side of such opening being partially bounded by said clamp member.

The clamp member is formed with a groove 9 extending centrally lengthwise thereof on one face and also with side grooves 10 on its opposite face, these side grooves being located on opposite sides of the central groove and as shown in Figure 5 of the drawings. A clamp screw 11 is secured to the clamp member with its head located within the groove 9, the sides of which project beyond the head, and this clamp screw may be secured in any suitable manner. The outer end of the clamp screw receives a thumb nut 12.

A brush 13 of common construction and comprising a body composed of bristles and and a core 14 with angularly extending ends 15 may be secured to this structure, said ends 15 being located within the side grooves 10, and a clamp plate 16 having downturned lips is fitted upon the clamp screw 11 and serves to clamp the ends 15 of the brush structure securely in place when the thumb nut 12 is screwed down.

A drying tool is formed to be secured by means of the clamping device hereinbefore described, this drying tool comprising a wiper 17 of rubber or other suitable material secured within a holder 18. The wiper is preferably formed of a strip of rubber folded upon itself and extending around a core 19, and the holder 18 is formed from a thin piece of metal bent to form a socket 20 at one edge and with a supporting lip 21 extending from the socket along the side of the wiper 17 to support the latter. A shank 22, preferably of metal, is bent into curved form in cross section and is provided at one end with holding lips 23—24, there preferably being a single lip 23 and a plurality of oppositely disposed lips 24, as shown in Figures 1 and 3, said lips embracing and securing the socket 20 by being bent into close contact therewith and fastened as by means of a rivet or rivets. This shank is comparatively narrow forming a neck adjacent to the holding lips 23—24, said shank broadening out from said neck and toward the outer end of the shank. This shank is arched, as at 25, and terminates at the end opposite the wiper with ears 26 located at an angle to the arched portion, said ears being formed by a slot extending inwardly from the end of the shank and within which slot the clamp screw 11 is received.

In assembling the structure the ends 15 of the brush are placed in the grooves 10, and the clamp plate 16 and the thumb nut 12 being loosely engaged with the clamp screw, the ears 26 of the shank 22 are projected between the ends of the brush body and are inserted under the clamp plate to

lie on opposite sides of the screw 11 that is received in the slot between said ears. The thumb nut now being screwed down the parts are securely clamped together, as shown in Figure 1 of the drawings.

With the tool thus arranged it will be perceived that the brush may be used in the ordinary manner to wash a window or similar surface, and when this has been accomplished the structure being turned over the wiper will be in position for effecting a drying operation of said surface, and such wiper by reason of the peculiar manner in which the shank is formed, will be in convenient position with respect to the handle 5 to readily accomplish its purpose.

There is thus combined in a single structure a tool required to perform two operations, and the members of the tool are so arranged that they are in a most convenient position to perform either of the operations for which they are intended.

If it be desired to have only one of the members secured to the handle, this is readily accomplished by simply removing the brush, if the wiper only is wanted, and reclamping the parts. On the contrary, if the brush only is desired, the thumb nut is loosened, the wiper removed and the thumb nut retightened.

In accordance with the provisions of the patent statutes I have described the principles of operation of my invention, together with the device which I now consider to represent the best embodiment thereof; but I desire to have it understood that the device shown is only illustrative and that the invention may be carried out by such means and applied to such uses other than those above set out as fall within the scope of the claims.

We claim—

1. A wiper attachment for brushes of the type including a looped bristle carrying core having its ends removably secured between clamp plates by means of a clamping stud and nut, said attachment including ears separated to form a slot to receive said stud, a neck projecting from and at an angle to said ears and from within said brush and overarching the same, and a wiper secured to the end of said neck opposite said ears.

2. A wiper attachment for brushes of the type including a looped bristle carrying core having its ends removably secured between clamp plates by means of a clamping stud and nut, said attachment including ears separated to form a slot to receive said stud, a trough shaped neck projecting from and at an angle to said ears and from within said brush and overarching the same, with the closed side of said neck toward said brush, and a wiper secured to the end of said neck opposite said ears.

3. A wiper attachment for brushes of the type including a looped bristle carrying core having its ends removably secured between clamp plates by means of a clamping stud and nut, said attachment including ears formed to receive said stud, a neck projecting from and at an angle to said ears and within said brush and overarching the same, said neck widening at its end, lips spaced apart at said widened portions, and a wiper secured between said lips.

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