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F. COOLEY

2,262,166

CLEANING DEVICE

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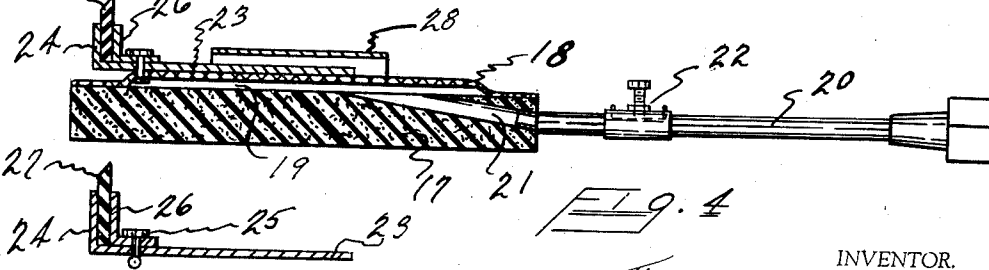
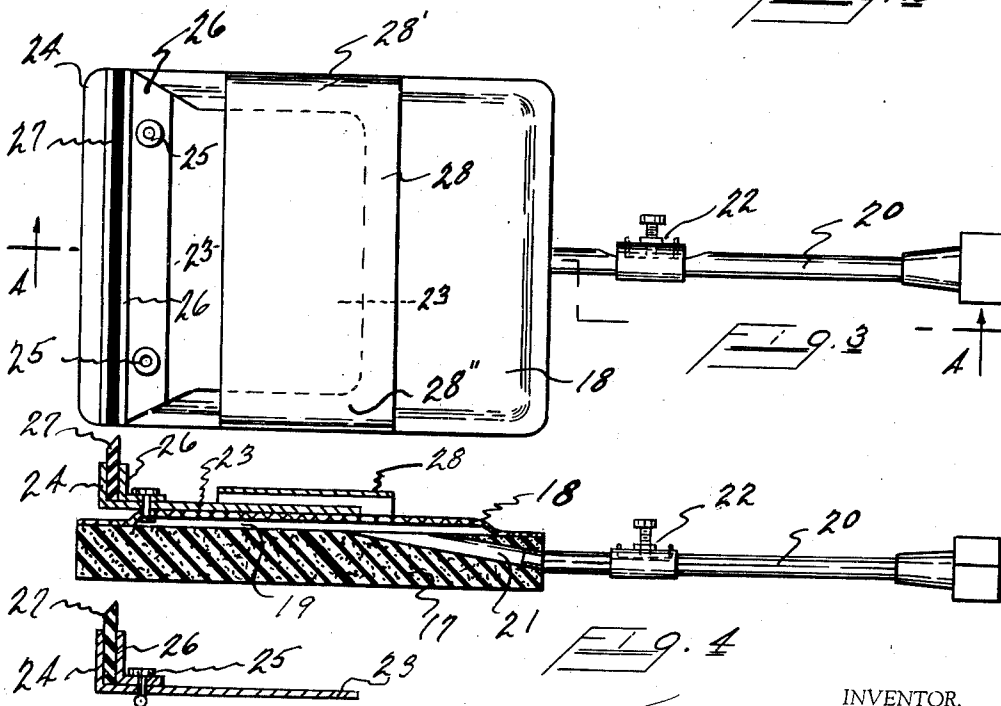
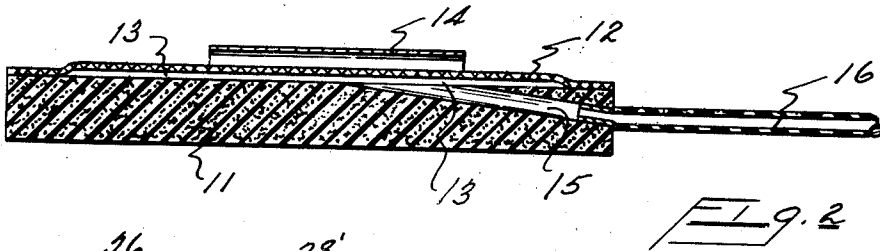
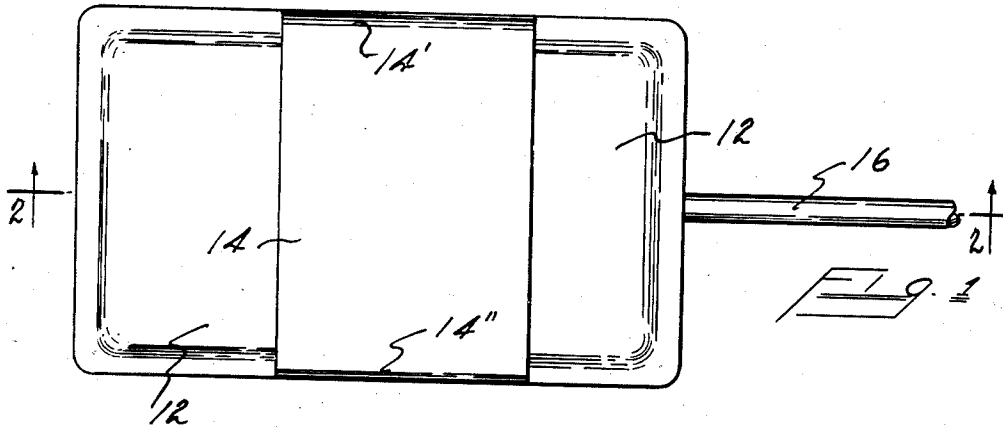


FIG. 5

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CLEANING DEVICE

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3 Claims. (Cl. 15—130)

The present invention relates to improvements in cleaning devices and more particularly to water-supplied cleaning devices. Heretofore, devices of this type have not proved satisfactory, due to unequal distribution of water supply over the entire area of the cleaning surface thereof. This is due to the fact that no provision has been made for the equal distribution of water or cleaning fluid, prior to its entrance into and through the cleaning surface. Consequently, the cleaning was not thorough, leaving streaks or water-marks.

The primary object hereof is the provision of a cleaning device of this class of means providing for equal distribution of cleaning fluid throughout substantially the entire area of the cleaning surface.

It is the further object hereof to provide in a cleaning device of this class, a resilient waterproof member secured adjacent the sponge or other porous cleaning material, forming a fluid compartment, and at the same time providing a waterproof cover therefor, protecting the operator's hand.

It is the further object hereof to provide a flexible cleaning device incorporating therein a drying device.

It is the still further object of this invention to provide a separate cleaning device independent of the fluid supply conduit, whereby said device is adaptable for the cleaning of walls, wallpaper, floors, and so forth.

The invention herein described in detail in connection with the appended drawing relates to the various arrangements of parts shown therein; however, it is expressly understood that the same are not by way of limitation, but are merely descriptive of the inventor's preferable embodiment of the invention.

Figure 1 is a plan-view of the cleaning device.

Figure 2 is a side-elevational section thereof, on line 2—2 of Figure 1.

Figure 3 is a plan-view of a slightly different adaptation of the invention.

Figure 4 is a side-elevational section thereof on line 4—4 of Figure 3.

Figure 5 is a sectional side-elevational view of the wiper and support therefor.

In the drawing referring to Figures 1 and 2, the cleaning device consists of a substantially rectangular, or any other shaped, material forming a body portion 11 composed of sponge rubber or other porous substance, which has been previously perforated throughout to provide fluid communication therethrough, at a plurality of points.

A flexible waterproof chamber defining cover member 12 is adhesively or otherwise secured peripherally to the body portion 11, whereby an opening or fluid chamber 13 is provided adjacent body member 11.

An elastic strap or other hand retaining means 14 secured at its ends along lines 14' and 14'' to the cover member 12 provides for manipulation of the cleaning device with fluid flowing there-through, in the manner hereinafter described.

An opening 15 in the body portion 11 communicates with the chamber 13 and is joined on its other end with a flexible fluid supply conduit 16, which is attachable to any desired source.

It will be seen that the purpose of the cover member 12 is three-fold. In the first place, it provides a waterproof cover for the body portion 11, flexibly providing a fluid compartment 13, adjacent substantially the entire upper surface of the porous cleaning body portion 11. In addition, it provides a base for attachment of a strap 14 or other means of a similar nature by which cleaning manipulation of the device is facilitated.

By the provision of the elastic cover member 12, peripherally secured to the body portion 11, cleaning fluid is uniformly applied to the cells or pores thereof. Consequently, the entire outer surface of the cleaning device has a uniform water-supply.

Heretofore, without this chamber, the water supply has not been uniform, due to the inherent non-conductivity, or lack of interrelation between the pores or openings in cleaning substances commonly used. Consequently, the water supply was concentrated at one or two points, which is unsatisfactory, in view of the poor cleaning results usually obtained.

It is for this reason that applicant provides a body portion which is substantially cellular, such as, for instance sponge or sponge rubber, which is further perforated at a plurality of points throughout, thus insuring uniform distribution of the water supply throughout the entire cleaning surface thereof.

Referring to Figures 3, 4, and 5, the porous body portion 17, otherwise suitably perforated throughout, has peripherally secured to its upper surface a waterproof cover member 18, defining a fluid chamber 19. Cleaning fluid, such as water, is conducted to said chamber through a flexible conduit 20, which communicates with an opening 21 in the body portion 17.

A suitable manually regulatable control mechanism 22 is provided upon the flexible conduit 20

at any convenient point, preferably adjacent the cleaning device.

The top edge of the waterproof chamber confining member is provided preferably with snap buttons in spaced relation, or any other convenient fastening device.

A wiper support 23 upwardly flanged at 24 has removably secured thereto with snaps 25 co-operating with the aforementioned snap buttons, a flanged angle piece 26 between which and said first-mentioned flange 24 a wiper blade 27 is inserted and secured.

It will be noted, however, that the wiper supporting member 23, as preferably shown, is snapped to the cover member 18 with angle member 26 superimposed thereon; however, any other method of attachment, permanent or removable, would be satisfactory.

The elastic hand strap 23 suitably attached to the cover member 18, is provisioned so as to receive the end of the wiper support 23, the ends of said strap being secured along lines 28' and 28'', as shown by the dotted lines in Figure 3, whereby the operator's hand within strap 28, in manipulating the cleaning device, can control the movement of the wiper blade upon the resilient bendable support 17.

The blade supporting members 23 and 26 are provisioned opposite the cleaning body member 17, whereby a turn of the wrist is all that is necessary to put said wiper into play upon a wet surface, drying the same, or removing excess moisture therefrom.

Having described preferable embodiments of my invention in detail, reference should now be had to the claims which follow for determining the scope of said invention.

I claim:

1. A cleaning device comprised of a flexible porous body portion, perforated at a plurality of points throughout, an elastic, waterproof cover member therefor peripherally secured to the top surface thereof and otherwise in spaced relation thereto, defining a sealed chamber, a hand receiving strap secured at its ends to said cover member, said body portion having an opening communicating with said chamber, and a flexible fluid supply conduit secured to and communicating with said opening, whereby a cleaning fluid may be uniformly supplied to approximately the entire upper surface of the body portion.

2. A cleaning device comprised of a flexible porous body portion suitably perforated throughout, an elastic cover member therefor, peripherally secured to the top thereof, and otherwise in spaced relation thereto, defining a sealed fluid chamber adjacent substantially the entire upper surface of said body portion, said body portion having an opening communicating with said chamber, and a flexible fluid supply conduit secured to and communicating with said opening, whereby a cleaning fluid may be uniformly supplied to the entire cleaning surface of said body portion.

3. A cleaning device comprised of a flexible porous and perforated body member, a cover member peripherally secured thereto defining a fluid chamber extending over substantially the entire upper surface of said body member, the latter having an opening communicating with said chamber, and a flexible fluid supply conduit communicating with said opening.

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