Oct. 27, 1931. D. M. LOVETT 1,829,287

CLEANING DEVICE

Filed May 22, 1930

Fig. 1.

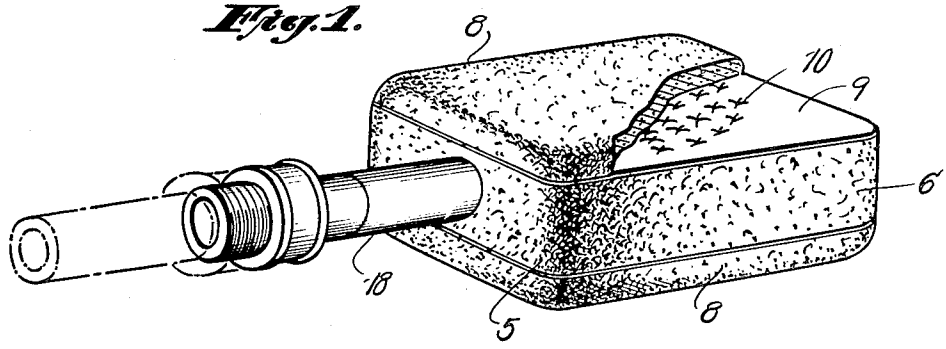


Fig. 2.

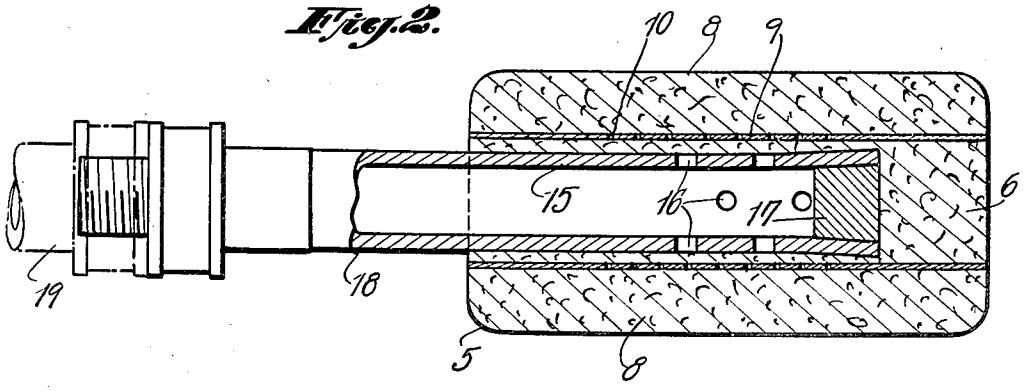
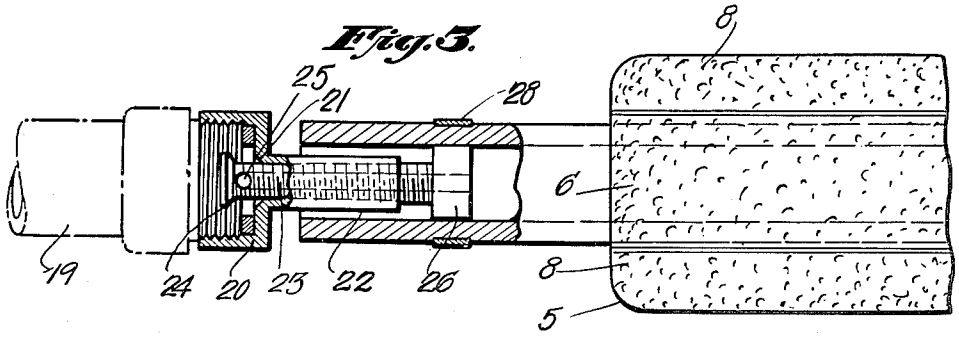


Fig. 3.



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CLEANING DEVICE

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The present invention relates to cleaning devices, and more particularly it pertains to a fountain sponge especially adapted for cleaning windows, and vehicles such for example as automobiles.

It is one of the objects of the invention to provide a device of the aforementioned character which will be effective, both for cleaning plane surfaces, and for cleaning the spaces between the spokes of wheels and such irregular surfaces.

It is a further object of the invention to provide a novel form of sponge which will be possessed of high wearing qualities, and at the same time, will be highly flexible and well adapted for the service required of it.

It is a still further object of the invention, to provide a sponge of the fountain type which will permit of a free flow of water therethrough, and at the same time, will prevent the entrance or ingress of grit or other foreign matter to the main body of the sponge.

It is a still further object of the invention to provide a fountain sponge which is so constructed, that there are no metal parts exposed to scratch or mar the article being cleaned during the washing operation.

It is a still further object of the invention, so to construct a sponge having an internal nozzle, that the nozzle cannot wear or rupture the sponge body to the extent that the nozzle will protrude therefrom.

Other objects of the invention relate to certain novel and improved constructions, arrangement and combinations of parts hereinafter described and particularly pointed out in the claim, the advantages of which will be readily understood and appreciated by those skilled in the art.

The invention will be clearly understood from the accompanying drawings illustrating the invention in its preferred form, and the following detailed description of the construction therein shown.

In the drawings,

Figure 1 is a perspective view partly broken away, illustrating a fountain sponge constructed in accordance with the present invention,

Figure 2 is a sectional view of the sponge body and nozzle, and,

Figure 3 is a sectional view of the rear end of the nozzle and its connection with a suitable source of water supply.

In the drawings, 5 designates the sponge which is preferably formed of close grained "sponge rubber". The sponge comprises a main body portion 6 upon the opposite sides of which there is a supplementary layer 8 of "sponge" rubber, and these supplementary layers 8 form the working side faces of the sponge. The supplementary layers 8 are each attached to the main body portion 6 by means of a sheet 9 of tough material preferably rubber, to which each respective supplemental layer 8 may be vulcanized, and which in turn may be vulcanized to the main body portion 6 of the sponge. To permit of the free flow of water or other cleaning fluids from the main body of the sponge, to the supplementary layers 8, the sheets 9 are preferably perforated as at 10, although they may if desired be provided with slits or other types of openings.

By this construction, it will be apparent that the sponge presents a soft cleaning element which is tough enough to withstand all of the abuses to which it may be put in ordinary use. Furthermore it will be obvious that the sheets 9 which separate the supplementary layers 8 from the main body portion 6 of the sponge, will permit of a free flow of water or cleaning fluid to the exterior of the sponge, and at the same time prevent the ingress of grit or other foreign matter to the body of the sponge.

Water or other cleaning fluid is supplied to the main body portion 6 of the sponge by means of a nozzle 15. This nozzle preferably comprises a relatively short length of hose formed adjacent its inner end with a plurality of perforations 16. The inner end of the nozzle is closed by a plug 17 cemented therein. The nozzle 15 is preferably inserted into the main body portion 6 through one end thereof, it being understood that a suitable recess is provided for the reception of the nozzle, and the nozzle attached to the

main body portion 6 of the spring by a suitable rubber cement.

The rear end of the nozzle 15 projects beyond the sponge as at 18, and is provided with one member preferably the female member, of a coupling by means by which it may be attached to a suitable water supply such as a hose illustrated in broken lines as at 19.

Thus it will be seen that water or other cleaning fluids may be supplied to the nozzle 15 by a hose such as 19 and will pass through the sponge and be discharged from the exterior thereof in a manner which insures a constant flow of water during use of the device.

In the modified form of nozzle illustrated in Figure 3, means is provided whereby the flow of water or cleaning fluid may be controlled at the sponge, and to this end, the female member 20 is formed or otherwise provided with a valve seat 21. Projecting from the female member 20 there is an internally threaded tubular extension 22, and threaded therein, there is a hollow stem member 23, having a valve 24 adapted to engage the seat 21 to completely cut off the supply of water simply by rotating the female member 20 of the coupling in the proper direction. Partial reduction of flow is obtained by rotating the female member 20 so that openings 25 in the hollow stem member 23 lie partially within the tubular portion 22. To prevent turning movement of the stem member 23, its inner end may be provided with a head member 26 which engages the inner surface of the extended portion 18 of the nozzle, and a suitable hose clamp may be employed at this point if desired.

Having thus described the invention, what is claimed, is:

A cleaning device of the character described comprising a main body portion of sponge rubber, supplemental layers of sponge rubber secured to opposite sides of said main body portion, a perforated sheet of rubber between and securing said supplemental layers to the main body portion, and means for supplying cleaning fluid to said main body portion, said last mentioned means comprising a nozzle mounted in said main body portion, and means comprising a valve associated with said nozzle for controlling the supply of cleaning fluid to said nozzle.

In testimony whereof I affix my signature.

DANIEL M. LOVETT.