

April 25, 1933.

J. B. FARQUHAR

1,905,163

CLEANING DEVICE

Filed June 20, 1931

Fig. 1.

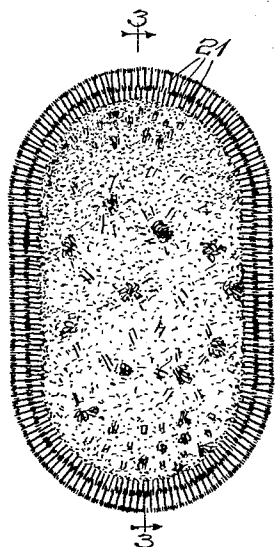


Fig. 2.

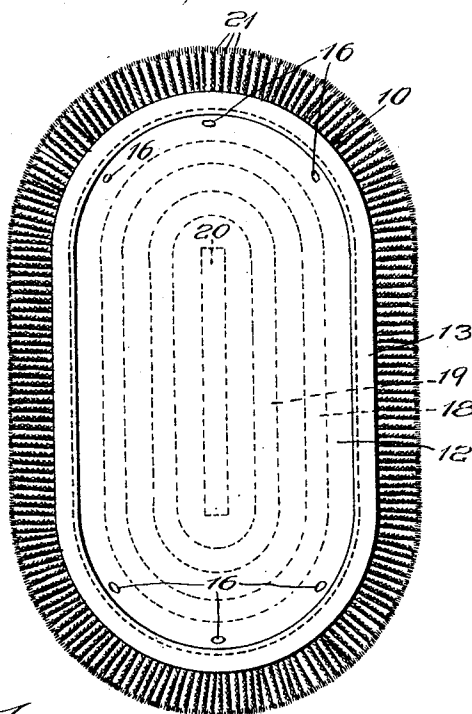


Fig. 3.

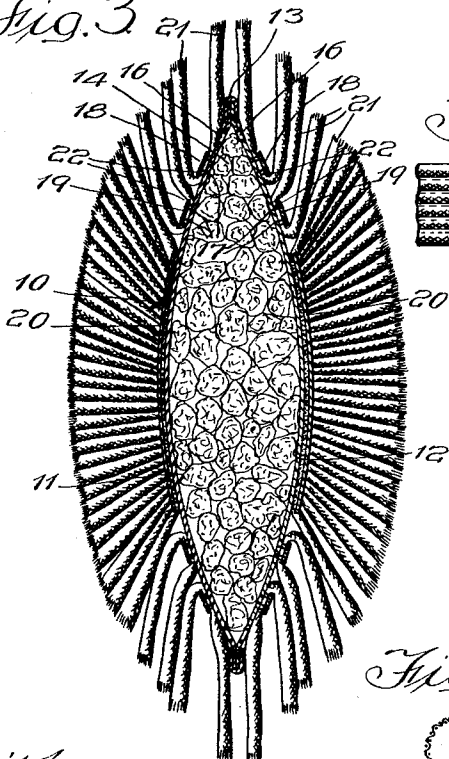


Fig. 5.

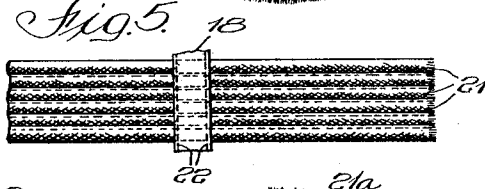


Fig. 4.

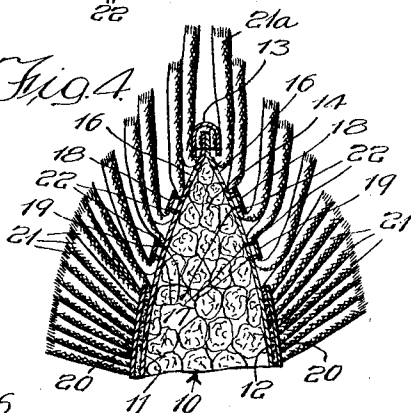


Fig. 6.



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CLEANING DEVICE

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This invention relates to cleaning devices and particularly to an article of the class described having fluid absorbing and retaining properties of a high character.

5 The present invention is particularly adapted for use in cleaning automobiles, or other devices having similar highly polished surfaces, and among other objects, the invention is intended to provide an article of the class described which is capable of absorbing and retaining a large quantity of fluid, preferably water, for cleaning purposes.

15 Another object of the invention is to provide an article of the class described from which the absorbed water or other fluid may be manually and readily expelled.

20 Another object of the invention is to provide an article which will not become matted when saturated or moistened with fluid, and which will not become knotted in a manner to produce hard portions which would tend to scratch or mar the surface being cleaned or otherwise treated.

25 A further object of the invention is to provide a cleaning device having a soft pliable surface of substantially uniform appearance and cleaning qualities.

30 A still further object of the invention is to improve an article of the class described in sundry details hereinafter referred to and particularly pointed out in the appended claims.

35 One embodiment of the present invention is shown for illustrative purposes in the accompanying drawing, in which

Fig. 1 is an elevational view of the cleaning device embodying features of the present invention;

40 Fig. 2 is an enlarged elevational view of the improved cleaning device, the braided or woven tubular strands of absorbent material having been removed from one side thereof to facilitate the illustrating of the preferred arrangement of the apertures formed in the envelope comprising the body portion of the device;

50 Fig. 3 is an enlarged sectional view taken substantially as indicated by the line 3—3 of Fig. 1;

Fig. 4 is an enlarged fragmentary sectional view of a portion of the device embodying the present invention, and illustrating the manner of securing a plurality of braided tubular strands adjacent the extreme edge of the envelope;

Fig. 5 is a fragmentary view of a carrier strip and strand assembly adapted to be secured to the body of the device forming a part of the present invention; and

Fig. 6 is an enlarged transverse sectional view through one of the strands embodied in the present invention and illustrating the hollow tubular form thereof.

The illustrative embodiment of the present invention comprises a body portion shown in the present instance as an envelope preferably of elongated, oval or elliptical form, indicated as a whole by the numeral 10 and comprising, in the present instance, a pair of suitably formed front and back portions or pieces 11 and 12, respectively, stitched together and covered throughout their edge portions with a binding strip 13, in a manner to form a closed envelope or container having a hollow central portion adapted to receive a suitable resilient pliable material 14 capable of absorbing and retaining a considerable quantity of water or other cleaning fluid, the material 14 being shown, in the present instance, as a plurality of pieces of sponge, a material which has been found most desirable for the purpose intended, namely, that of absorbing and retaining a considerable quantity of water or other cleaning fluid, it being understood that other materials may be employed if found desirable without departing from the spirit of the present invention.

The elongated, oval or elliptical form of envelope has been found desirable in that it enables the user to grasp the device in both hands, and facilitates the expelling of the fluid from the device when desired, it being understood that an envelope of other form than that mentioned may be employed if found desirable or convenient.

To resist the deteriorating effect of water and distillates of petroleum, or the like on the device, the body portion 10 thereof is

formed preferably of a chemically treated material such as drill or other closely woven fabric, and, preferably, both the front and back pieces 11 and 12 are provided with apertures 16 through which water entering the interior of the envelope may be drained off or expelled.

Secured to the front side of the envelope 10, and, if desired, to the rear side thereof also, preferably by means of stitching 17, are a plurality of carrier strips 18, 19 and 20 on which are mounted a plurality of braided, tubular, preferably overlapping strands 21 of absorbent material. These strands are secured preferably adjacent their central portions to the strips 18, 19 and 20 by means of stitching 22 along the edges of the strip in a manner to secure the central portion of the strands in fixed position with respect to the strip, and to permit the opposite ends of the strands to hang or move free and assume any natural position according to the cleaning operations of the device.

The braided tubular formation of the strands 21 provides a structure capable of absorbing and retaining a vast amount of fluid such as water, and from which the fluid may be readily expelled by squeezing in the manner employed in expelling water from a sponge, or the like. Furthermore, the structure of the strands serves to eliminate matting of the absorbent material and prevents the formation of knots or hard portions which would tend to scratch or mar the surface being cleaned or otherwise treated.

A device of the character described provides material advantages over cleaning devices at present in use, particularly sponges, or the like, in that the present invention provides a structure which is strong, durable and not easily torn or ruptured as frequently happens in the use of other devices, particularly sponges, or the like, which are of such delicate character that unless carefully used, are easily ruptured and soon become unfit for further use.

For providing substantially uniform distribution of the strands 21 throughout the working surfaces of the device, the carrier strips 18, in the present instance, are secured in substantially loop-shaped formation to the front and rear sides of the device, preferably adjacent the marginal edge thereof, while the strips 19 are secured in substantially loop-shaped formation to the front and rear portions 11 and 12 of the envelope 10, preferably within the strips 18, and substantially straight strips 20 are secured to the front and rear portions, preferably within the loop-shaped strip 19, thus insuring a substantial body of strands adjacent that portion of the device where the greatest pressure is applied in the cleaning operation, and protecting the surface to be cleaned from contact with the harder material of the body portion or envelope 10.

To further insure the protection of the surface being cleaned or otherwise treated from contact with the body portion of the device, a plurality of woven or braided tubular strands 21a (Fig. 4) may be secured to the extreme edge portions of the envelope between the binding strip 13 and the edges of the front and rear portions 11 and 12 of the device, the ends of the strands 21a extending a substantial distance beyond the edge of the envelope in a manner to protect the surface being cleaned or otherwise treated from contact therewith.

It will be apparent also that the improved cleaning device may be employed for polishing or dusting as well as for washing purposes and, as previously stated, the carrier strips and strands may be secured to either one or both sides of the body portion, as desired.

Obviously, the present invention is not limited to the precise construction and arrangement shown and described, as the same may be variously modified without departing from the spirit of my invention. Moreover, all the features of the present invention need not be used conjointly as the same may be used to advantage in variously different combinations and sub-combinations within the scope of the appended claims.

What I claim as new and desire to cover by Letters Patent is:

1. An article of the class described comprising a closed envelope, and a plurality of relatively long braided strands of absorbent material secured adjacent their central portions to opposite sides of said envelope.

2. An article of the class described comprising an envelope having apertures formed therein and containing a fluid absorbing and retaining material, and a plurality of relatively long closely positioned braided tubular strands of absorbent material secured to said envelope.

3. An article of the class described comprising an envelope of water proof material having apertures formed therein, a fluid absorbing and fluid retaining sponge material positioned in said envelope, carrier strips secured to the envelope, and a plurality of braided tubular strands of absorbent material secured adjacent their central portions to said strips.

4. An article of the class described comprising an elongated closed envelope, sponge material in said envelope, a plurality of carrier strips having a plurality of closely positioned tubular braided strands secured thereto and extending substantially transversely thereof, one of said strips being secured to the edge of said envelope and extending on opposite sides thereof another of said strips being secured in substantially loop-shaped form to said envelope within the edge there-

of, a second strip of substantially loop-shaped
form secured to the envelope within said last
mentioned loop-shaped strip, and a substan-
tially straight strip secured to said envelope
adjacent the central portion thereof and with-
in said second loop-shaped strip.

In witness whereof, I hereunto subscribe
my name this 17th day of June, A. D. 1931.

JOHN B. FARQUHAR.

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