Jan. 6, 1953 T. R. McKENZIE 2,624,060

ROTARY ADHESIVE ROLL FABRIC CLEANING DEVICE

Filed May 17, 1946

FIG. 1

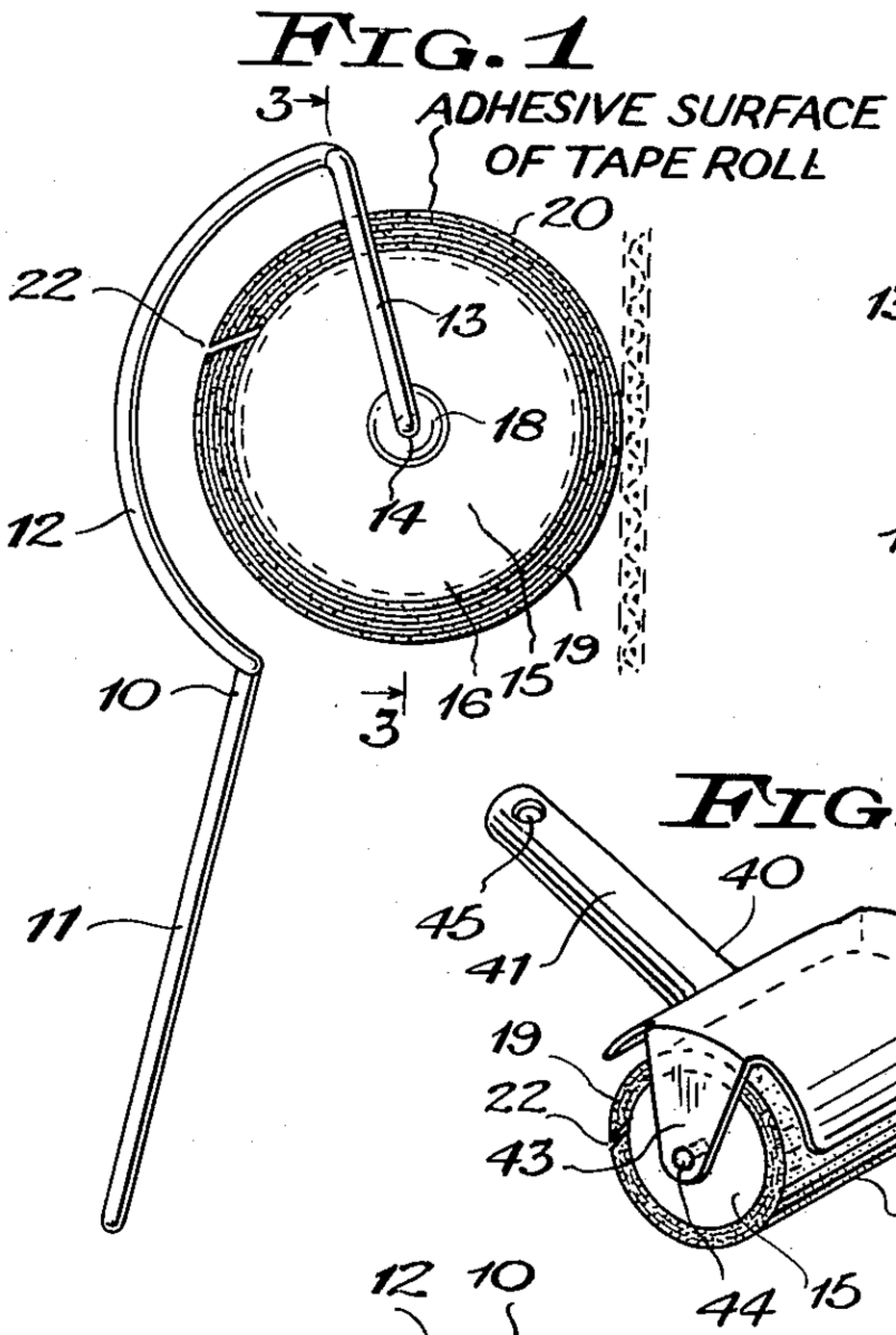


FIG. 2

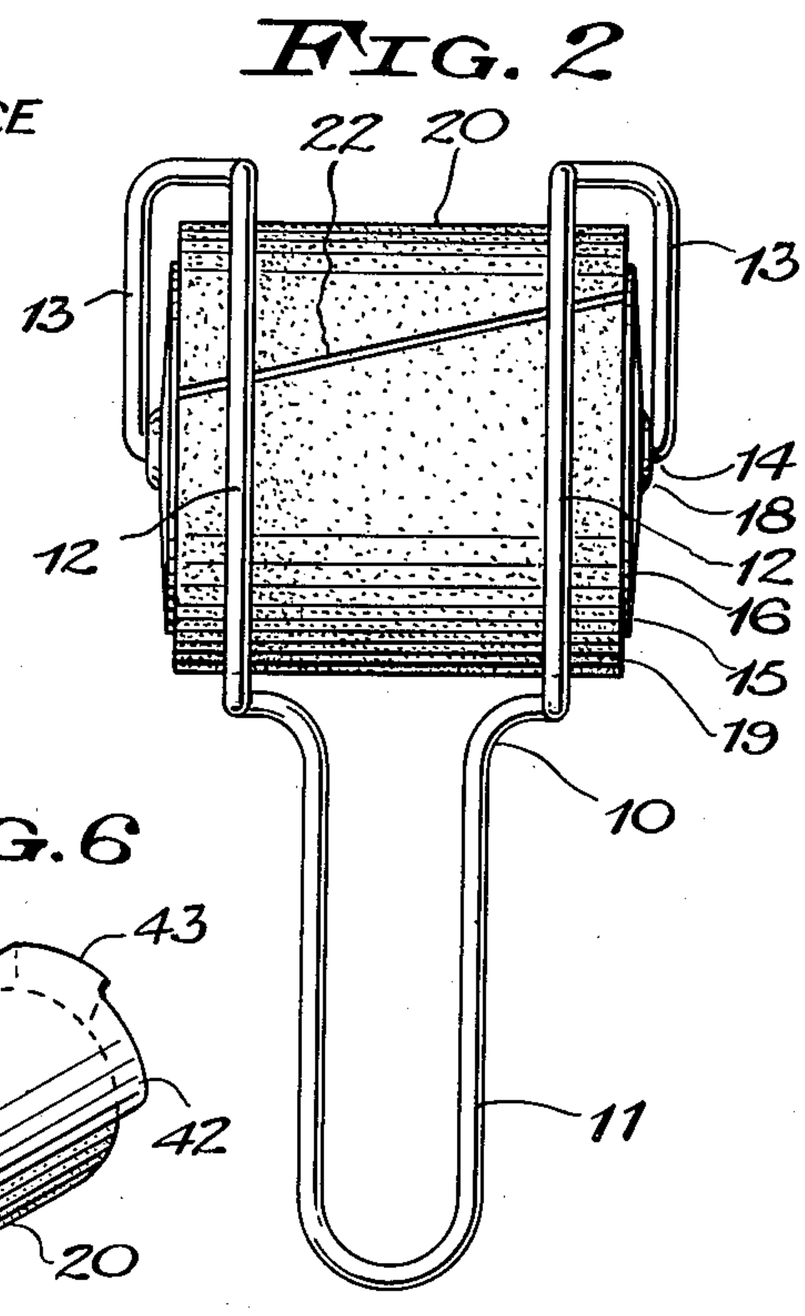


FIG. 6

FIG. 3

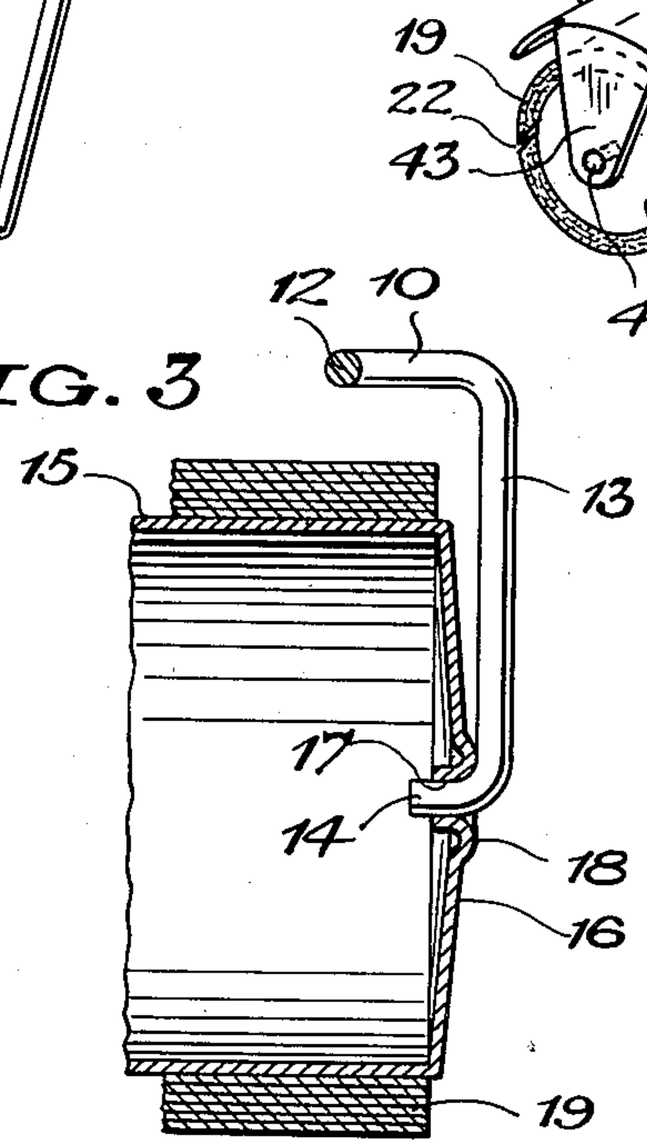


FIG. 5

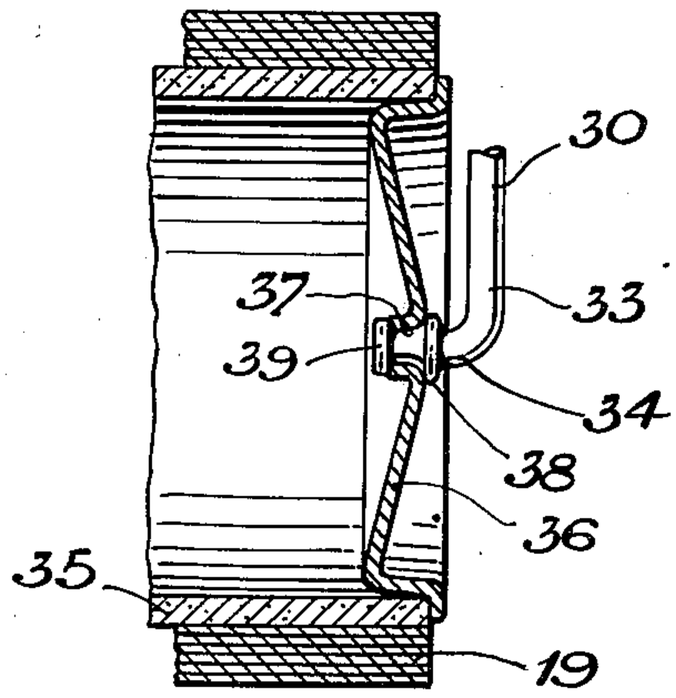
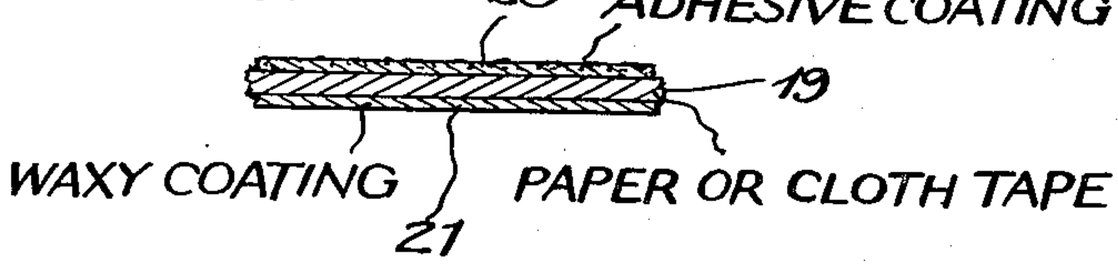


FIG. 4



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Patented Jan. 6, 1953 2,624,060

UNITED STATES PATENT OFFICE

2,624,060

ROTARY ADHESIVE ROLL FABRIC CLEANING DEVICE

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Application May 17, 1946, Serial No. 670,486

1 Claim. (Cl. 15—104)

1

The present invention relates to fabric cleaning devices, and has for an object to provide a simple but effective device with an adhesive surface for removing lint, threads, hair, dandruff, dust and other loose foreign matter from clothing and other fabrics.

Another object is to provide a cleaning device in which the adhesive surface can be readily renewed.

A further object is to provide a cleaning device which is convenient to use and which can be inexpensively manufactured.

The invention further consists in the several features hereinafter described and claimed.

In the accompanying drawing, illustrating certain embodiments of the invention,

Fig. 1 is a side view of one form of fabric cleaning device constructed in accordance with the invention;

Fig. 2 is a top view of the device;

Fig. 3 is a sectional view taken generally along the line 3—3 of Fig. 1;

Fig. 4 is a detail sectional view of an adhesive tape for the device;

Fig. 5 is a sectional view similar to Fig. 3, but showing a modified form of device, and

Fig. 6 is a perspective view of another modification.

Referring to the embodiment of the invention shown in Figs. 1 to 4, 10 designates a handle or support formed by a length of wire looped to form a hand-grip 11 and including a pair of laterally spaced arcuate shield or guard portions 12 and parallel terminal arms 13 with aligned inturned pivot-forming tips 14.

A rotatable cylindrical drum or roller 15, such as of sheet metal or hardened plastic material, has crowned end walls 16 with aligned central openings 17 detachably receiving the pivot tips 14 of the handle, the openings being surrounded by respective embossments 18. The handle 10, or at least the arms 13 thereof, are sufficiently resilient to permit the pivot tips 14 to be applied to or removed from the drum.

A length of adhesive tape 19, similar to drafting tape or masking tape, is wound on the drum with the tacky side 20 out to form a number of convolutions, the inner end of the tape being suitably anchored on the drum, as by cementing. The tape body is formed of paper, cloth, or other suitable sheeting, and the face thereof opposite the tacky face may have a waxy coating 21, Fig. 4, or be otherwise treated to facilitate unwinding. A slit 22 is cut through the roll of tape to facilitate removal of successive convolutions when

2

they become spent, and preferably extends at an angle to the drum radius and also on a bias across the drum so as to permit easy peeling of the tape. The arched or arcuate guard portions 12 of the handle extend circumferentially over the tape roll for a portion of the periphery of the roll and concentrically thereof so as to permit the device to be set down, or hung by its handle, without adhering to an adjacent surface, and also to minimize accidental contact with the tape.

In use, the device is held in the hand and is rolled lightly over clothing or other fabrics to be cleaned. In the passage of the roller the exposed tacky surface of the tape picks up any lint, threads, hair, dandruff, dust and other loose foreign matter from the fabric and leaves the fabric surface in a clean and presentable condition. Usually a single pass of the roller over a given area is sufficient, and the tacky tape will not injure the fabric surface. The detached foreign matter is held on the tape, thus avoiding settling of this foreign matter on floors or other surfaces, or dispersal in the surrounding air. After a considerable period of use, the outermost tape convolution may be peeled off and discarded, thus exposing a fresh tacky surface. The slit 22 facilitates the peeling operation and avoids removal of excess tape. If desired, when the device is not in use, a piece of waxed paper or cloth, not shown, may be wrapped about the roll of tape. When the tape-carrying roller is exhausted, it can be readily replaced by a fresh roller at low cost.

While the device is particularly useful in cleaning clothing while in place on a wearer, it may also be used for cleaning other fabrics, including rugs, carpets, and upholstery.

In the modified form of device shown in Fig. 5, the roller comprises a roll of tape 19 wound on a cardboard tube 35 the ends of which are detachably carried by flanged end caps 36 (one being shown) rotatably carried on aligned inturned pivot tips 34 of arms 33 of a wire handle 30. Each cap has a central pivot opening 37 receiving the associated tip 34 and is suitably secured to the tip as by axially spaced flanges or beads 38 and 39 on the tip. The device of Fig. 5 is otherwise the same as that of Fig. 1 and is used in the same manner.

In the modified form of device shown in Fig. 6, the roller 15 with its tape roll 19 is detachably secured to a handle 40 which may be formed of sheet metal or hardened plastic material. The handle comprises a tubular or trough-shaped hand-grip 41 and an arched or arcuate guard or shield 42 which extends partially about the roller

in a circumferential direction and has resilient parallel side arms **43** with short aligned pivot pins **44** which enter the roller end openings, like the pivot tips **14** of Fig. 3. The handle has an opening **45** by which the device may be hung. The device of Fig. 6 is otherwise similar in construction to the device of Fig. 1 and is used in the same manner.

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

A fabric cleaning device comprising a roller having an exposed tacky face, a length of wire looped on itself to form a hand-grip and a pair of arched guard portions extending circumferentially over the tacky face of said roller for a portion of the periphery of said roller, said wire further having a pair of terminal arms extending from said guard portions and provided with aligned pivot portions engaged with said roller.

THOMAS R. McKENZIE.

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