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G. E. LOFGREN

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VACUUM CLEANER

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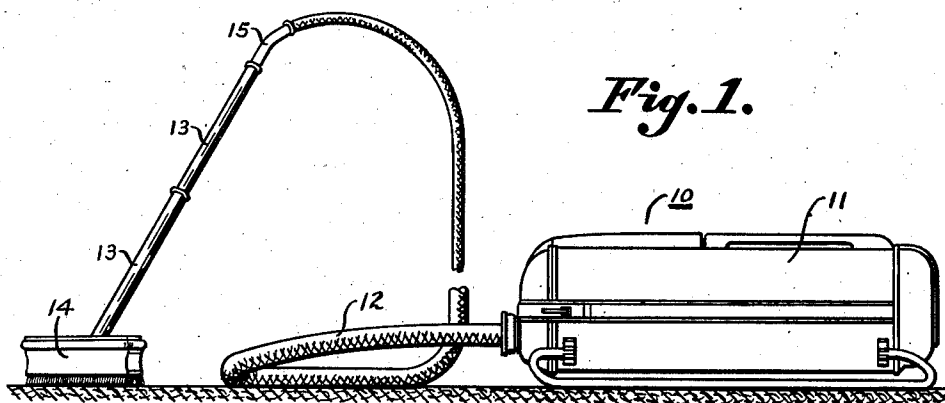


Fig. 1.

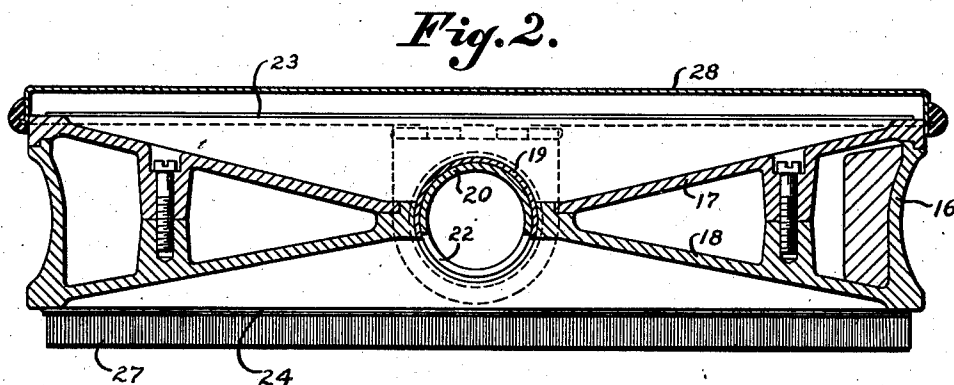


Fig. 2.

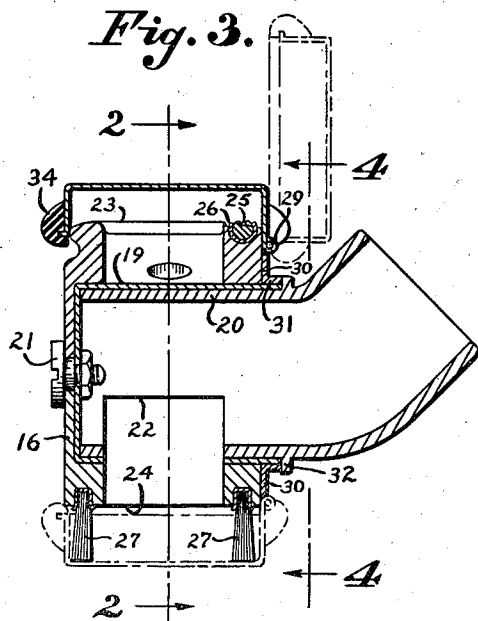


Fig. 3.

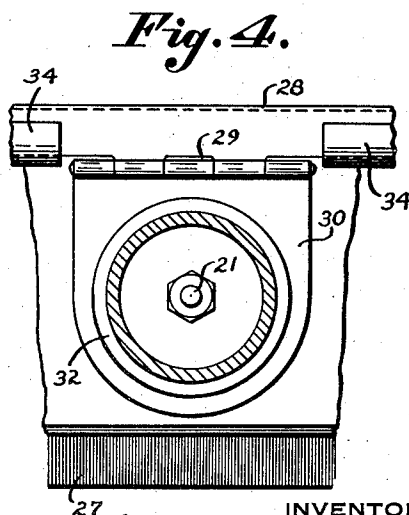


Fig. 4.

INVENTOR

Gustaf Einar Lofgren

BY

Murray Robinson
ATTORNEY

UNITED STATES PATENT OFFICE

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VACUUM CLEANER

Gustaf Einar Lofgren, Riverside, Conn., assignor
to Electrolux Corporation, Old Greenwich,
Conn., a corporation of Delaware

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4 Claims. (Cl. 15—155)

The object of this invention is to provide an improved combination rug and floor cleaning tool to be used in connection with a vacuum cleaner of the so-called tank type.

More specifically, it is an object of the invention to provide a cover for a duplex tool of the above type so that the nozzle not being used will not be exposed. This is desirable not only from an esthetic point of view but also because the nozzle not in use may not be clean and contact between it and other surfaces would be undesirable.

It is another object of the invention to provide a duplex tool in which the bumper is always at the top regardless of which nozzle is in use.

According to the described embodiment a cover is arranged so that when it is open the tool may be rotated relative thereto to expose the desired nozzle and permit the other nozzle to be covered. When in place over a nozzle the cover also serves as a bumper, being provided with a rubber strip around its outer edge.

For a detailed description of a preferred embodiment of my invention, reference will be made to the accompanying drawing in which:

Fig. 1 is a side elevation of a vacuum cleaner of the type with which my improved tool is to be used,

Fig. 2 is a sectional view taken on a vertical plane along the line 2—2 of Fig. 3,

Fig. 3 is a sectional view taken on a transverse vertical plane through the center of the tool, and

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3.

Referring now to Fig. 1 of the drawing, reference character 10 generally designates a vacuum cleaner of the tank type comprising a body 11 housing a dust bag, a filter pad and a motor-fan unit. To one end of the body is connected a hose 12 to the opposite end of which there is connected a hollow wand 13 made up of several sections telescoped together. A duplex tool 14 embodying the present invention is connected to the last section of the wand.

When using the cleaner a person starts up the motor-fan unit to create a flow of air in through the nozzle opening in the tool, along the wand and hose, and through the dust bag and filter pad to an exhaust. The user can then push the tool over the surface to be cleaned while holding on to the elbow 15 between the wand and hose. It is desirable to have different types of tools for cleaning bare floors and rugs. Considerable time and trouble can be saved by the use of a tool of the type herein shown in which the two

tools are combined in one. In order to change over from one nozzle opening to the other it is merely necessary to turn the tool over.

Referring now to Figs. 2 and 3, the duplex tool comprises a hollow body 16 divided by inner walls 17 and 18 into upper and lower chambers. The body 16 is rotatably mounted on cup 19 which is pressed over the horizontal end of elbow tube 20. A bolt 21 passes through the side of the body 16 into the end of the cup 19 to hold the body on the cup. There is provided sufficient play to prevent the body from binding against the cup. An opening 22 in the walls of the cup and elbow tube provides communication between the elbow tube 15 and the interior of the hollow body 16.

The top and bottom of the body of the tool are open forming nozzles 23 and 24. The nozzle 23 is used for cleaning rugs and may be provided along one edge with a comb 25 to aid in the removal of tenaciously adhering surface litter. A tubular member 26 may be rotated to cover the teeth of the comb when it is not needed as during normal cleaning operations. The nozzle 24 is used for cleaning bare floors and pavements. To facilitate the removal of dirt it is provided around all of its edges with a row of bristles 27.

As shown in Fig. 3 the tool is in such position that the floor brush nozzle is in communication with the elbow 21. By rotating the tool with respect to the elbow, the rug nozzle may be brought into communication with the elbow.

A cover 28 is hinged at 29 to a plate 30. Plate 30 has a flange 31 which provides a bearing surface so that the plate can rotate on the end of cup 19. A flange 32 near the bend of the elbow serves to prevent the flange 31 from slipping off the end of cup 19. A rubber bumper 34 is secured around the edge of the cover except adjacent the hinge 29.

As shown in dotted lines in Fig. 3, the cover may be raised from the rug nozzle and then the tool or cover revolved relative to each other until the cover can be closed over the floor brush nozzle. The now exposed rug nozzle may then be used for cleaning without fear that lint and other dirt accumulated on the bristles of the floor brush will mar any of the upholstery or walls with which the nozzle may come in contact.

It is to be noted that since the bumper is attached to the cover it is always near the top of the tool regardless of which nozzle is being used. This is desirable because the top edge is much more apt to come in contact with furniture or other objects when the tool is being used to clean a rug or a floor.

While a preferred embodiment of the invention has been described it is to be considered as illustrative only and it is intended to cover by Letters Patent all forms of the invention falling within the scope of the appended claims.

What I claim is:

1. A suction cleaning tool comprising a hollow tube, a hollow body member rotatably mounted on the tube, two nozzles formed in the top and bottom of the hollow body and alternately connected in communication with the tube depending on the position of the body with respect to the tube, a cover rotatably mounted on the tube arranged to cover either one of the nozzles as desired.

2. A suction cleaning tool comprising a hollow tube, a hollow body member rotatably mounted on the tube, two nozzles formed in the top and bottom of the hollow body and alternately connected in communication with the tube depending on the position of the body with respect to the tube, a supporting member rotatably mounted on said tube, a cover hinged to said member arranged to cover either one of the nozzles as desired, said cover being rotatable with respect to said body only when raised on its hinge away from said body.

3. A suction cleaning tool comprising a hollow tube, a hollow body member rotatably mounted on the tube, two nozzles formed in the top and

bottom of the hollow body and alternately connected in communication with the tube depending on the position of the body with respect to the tube, a cover rotatably mounted on the tube arranged to cover either one of the nozzles as desired, and a resilient bumper secured around the edge of the cover.

4. A suction cleaning tool comprising a hollow tube, a hollow body rotatably mounted on the tube, two nozzles formed in the top and bottom of the hollow body and alternately connected in communication with the tube depending on the position of the body with respect to the tube, a bumper member rotatably mounted on the tube, said bumper member including releasable means to engage the hollow body and means to protect at least the front wall of the body against contact with other objects, said bumper member and the hollow body being relatively rotatable when the releasable means is released, said protecting means being disposed along a horizontal plane near the lips of one of the nozzles when said releasable means is engaged, said one of the nozzles in normal use being the nozzle that is out of communication with the tube while the other nozzle is in communication with the tube and available for cleaning.

GUSTAF EINAR LOFGREN.