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FOUNTAIN APPLICATOR FOR FLOOR WAX

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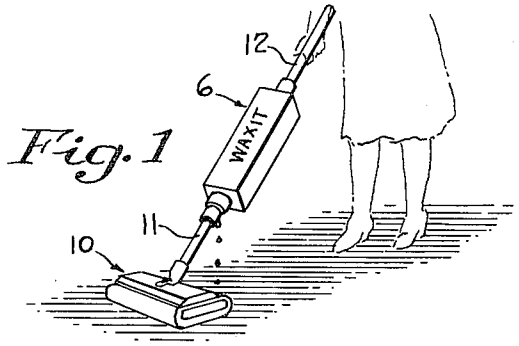


Fig. 1

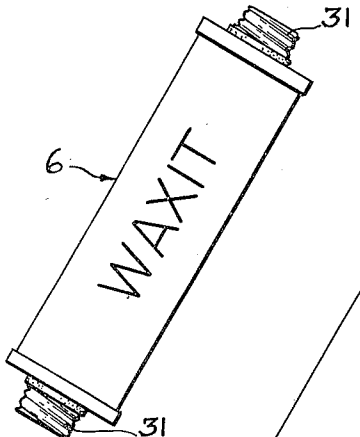


Fig. 2

Fig. 3

Fig. 4

Fig. 5

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FOUNTAIN APPLICATOR FOR FLOOR WAX

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1 Claim. (Cl. 15—124)

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This invention relates to containers and applicators for applying fluid wax and other preparations to floors and other surfaces for the purpose of cleaning and polishing. My invention is applicable wherever cleaning and polishing materials are applied in conjunction with an applicator such as a mop or polishing member which is manipulated by the operator through the medium of a handle.

One of the objects of the present invention is to provide a container in which floor wax or liquid preparation is sold and merchandised and which is designed to be incorporated in an applicator as a component thereof for immediate use.

Another object is to provide an improved device of this kind characterized by a handle structure including as a component thereof a replaceable container for the floor wax or other fluid preparation, the construction and arrangement being such that the fluid preparation is sold and merchandised in the container and the container when applied to the applicator and handle members becomes an integral part of the handle, giving length and body thereto and the proper rigidity for operating the applicator.

Another object is to provide a device of the character described in which the fluid preparation is discharged through a controllable outlet from the lower end of the container and wherein the discharge outlet is arranged to drop or feed the fluid in controllable amounts preferably to the floor surface close to the applicator and in sight of the user so as to facilitate the cleaning or polishing operation.

Another object is to provide a construction of this kind which is economical to manufacture and which will serve in a practical way the purposes intended.

Other objects and attendant advantages will be appreciated by those skilled in this art as the invention becomes better understood by reference to the following description when considered in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of a container and applicator embodying my invention, illustrating its use;

Figure 2 is an enlarged view of the container removed from the handle members of the applicator;

Figure 3 is a further enlarged view of the container and connected handle members, partly in longitudinal section;

Figure 4 is a cross-section taken on the section line 4—4 of Figure 3; and

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Figure 5 is a side view of the applicator end of the device, showing a conventional floor polishing head or applicator.

As stated above, a characteristic feature of my invention is the provision of an applicator head having a handle for its manipulation so constructed as to embody as one of its component parts a container in which the floor wax or other cleaning or polishing preparation is sold and merchandised. Thus a material saving is effected by the fact that the container in which the fluid preparation is transported, displayed, and merchandised, serves also as the fluid container when applied to the applicator head and, preferably, this container constitutes a part of the applicator handle. The container may be of metal, glass, or other suitable material and of suitable size and shape. For average home use I prefer to make the container elongated and of a cross-section suitable for stacking for shipping, storage, and display. These containers may be of suitable capacity such as a gallon, and in other capacities if desired. This is by way of illustration and it will be evident that the size as well as the shape of the container may be varied.

In the embodiment shown the container designated generally by 6 is rectangular in cross-section and elongated so that it will serve the purposes described. The container is provided at opposite ends with externally threaded coupling members 7 and 8, in this instance each such member being integral with the adjoining end 9 which is fixed to the side wall of the container. These coupling members are hollow and open at the end so that they may be used for filling and discharge purposes. They also provide means for connection to complemental coupling members associated with handle members 11 and 12 for the purpose of establishing a rigid connection therewith so that the container together with the handle members constitute a handle structure for the applicator head which is designated generally by 10. In this instance the upper handle member 12 fits into the tubular end of a coupling member 13 which is internally threaded to fit the threaded coupling member 8. Further means such as a screw 14 may be employed to fixedly secure the parts 12 and 13 against relative displacement. In this embodiment the part 12 is provided with a vent opening 15 which communicates with the interior of the container. The lower handle member 11 is similarly connected to the lower end of the container except that an intermediate coupling part designated generally by 16 is provided. This part is in the form of an elongated cap threaded onto the cou-

pling member 7 and having a cylindrical end portion 17 which fits into a corresponding similar end portion 17 of a coupling part 19. This part 19 is fixed to the handle member 11 as by means of a socket like connection together with suitable fastening screws 21. In this embodiment the cylindrical portion 18 is provided with a depending discharge spout 22 which is adapted to register with any one of a plurality of discharge ports 23—24 in the cylindrical part 17 which ports communicate with the contents of the container. These ports are graduated in area to provide relatively and fast feeds, respectively, according to which of the ports is in register with the discharge spout 22. In this instance these ports are formed in small bosses on the part 17 and adapted to have yielding engagement in quarterly spaced sockets 25 formed in the part 18. Additional bosses 26 are adapted to engage in the sockets 25 intermediate those engaged by the port bosses 23—24, to more securely locate and hold the ports 17—18 in the relation to which they are adjusted. Thus, by means of the interfitting bosses and socket portions the parts 17—18 are yieldingly but securely held in coacting relation in any selected position. In this embodiment either boss 26 serves as a closure for the discharge spout 22 when moved into registration therewith. Additional means is provided for maintaining the parts 17—18 against displacement one with respect to the other comprising an annular projecting bead 28 on the part 17 yieldingly fitting in an internal recess 29 on the part 18, these interfitting parts serving to maintain the parts 17—18 against axial displacement at all rotative positions of one with respect to the other.

As described, the container 6 constitutes a merchandising unit for the floor wax or other fluid preparation and as such its end openings are sealed by closure caps 31, as shown in dotted lines in Figure 2. In practice, any equivalent form of closure may be used, the purpose being to seal the container while it is being handled for sale, distribution, and storage. In the present embodiment the caps 31 are removed one at a time for connecting each threaded end of the container to the corresponding end of the handle structure in a manner obvious from the foregoing description.

In use, the container will be turned to either open position, such as the one shown in Figure 3 in which the port 23 registers with the spout 22. In this position the fluid discharges in drops as indicated in Figure 1. A slower feed is obtained by turning the container to register the port 24 with the spout. The fluid discharge is shut off when the container is turned to locate the port bosses 23—24 in the intermediate sockets 25. By rotative adjustment of the handle member 11 in the applicator head as by means of the clamp screw 32 shown in Figure 5, the location of the discharge spout 22 may be changed. By means of the controlled discharge of the fluid the user may regulate the dropping to suit the needs.

It will be evident from the foregoing that the container serves (1) as a merchandising unit for the floor wax or other fluid preparation, (2) as a component of the applicator structure, and (3) as a container for feeding the fluid preparation in actual use of the applicator. This simplifies the handling and use of such fluid and it also makes for economy in the applicator structure.

While I have shown a particular embodiment of my invention, it will be understood that I do not wish to be limited thereto since many modifications may be made, and I therefore contemplate by the appended claim to cover any such modifications as fall within the true spirit and scope of my invention.

I claim:

In combination, an applicator head for use in cleaning and polishing floors and the like, and a handle structure for manipulating the applicator head including a socket part fixed to the applicator head with the socket at its upper end, a hollow plug part fitting at its lower end in said socket part and having an internally threaded upper end, a container for holding fluid for cleaning and polishing, said container having an open externally threaded coupling member at each opposite end, one of said container coupling members adapted to be threaded into the upper end of said socket part, an upper handle member having an internally threaded coupling member adapted to be threaded to the opposite container coupling member, whereby said coupling member connections seal the opposite ends of the container except for communication of the fluid from the bottom of the container into said plug part, and means for discharging fluid from said plug part for use with the applicator head, the socket part being provided with a discharge spout and the plug part being provided with an opening adapted to be brought into and out of registration with said discharge spout by rotative movement of the plug part in the socket part.

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