ABSTRACT: A receptacle having a removable foraminous plate through which water exits to a surface to be cleaned. The receptacle includes a flange portion for mounting a mitt into which a user's hand is placed and a grip maintained on the receptacle thereby enabling locomotion thereof. A ringlike flexible brush is removably mounted to the underside of the receptacle to permit the spreading of cleaning water deposited on the surface to be cleaned. The foraminous base portion of the receptacle is removable thereby allowing the insertion of soap into the receptacle during the washing of the surface. The soap may then be removed for purposes of rinsing. A clip-bar section is easily attached to an input pipe section which supplies the receptacle with water. The clip-on feature creates a stiffened handle which is useful during the use of the device.
CAR-WASHING AID

The present invention relates to manual car washing devices. In the past, it has been the general practice to manually wash the body of an automobile by applying a water stream from a hose directly onto the vehicle body. This proves to be less than satisfactory in many instances due to the lack of dirt removal which the water stream is capable of performing. In situations where a wet sponge or the like is used for the purposes of removing dirt, the time required for completing the washing of an entire vehicle is quite lengthy and imposes a manual inconvenience.

Certain mitt-type devices have been designed which include an attached water supply hose. The purpose of such devices is to provide the surface of an automobile vehicle with a steady stream of water while scrubbing action of the mitt is simultaneously supplied. Generally, the latter type devices previously conceived have been complicated in construction and therefore expensive to manufacture. Further, if it is desirable to apply soapy water during the initial stage of the washing operation, such must be separately applied.

The present invention is basically a mitt having a water supply hose attached thereto. However, unlike the prior art, the present invention includes a central receptacle into which the water is supplied. A foraminous base plate causes exit of this water therethrough to be spread evenly by the mitt. The base portion is removable which allows the loading of a soap bar or pellet into the receptacle wherein water supplied to the vehicle body will be soapy. When rinsing is desired, the baseplate is once more removed thereby permitting the removal of the soap. Upon reinsertion of the foraminous base the mitt is then again supplied. As will be appreciated, application of soapy water to the vehicle body is rapid and efficient without the necessity of applying soapy water from a separate source. Further, the body of the receptacle allows the user to grip the receptacle and cause easy motion of the mitt device across the vehicle surface.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a perspective view illustrating the disposition of a user's hand in the present device.

FIG. 2 is a view taken substantially along the plane indicated by the section line 2-2 of FIG. 3 and illustrating the component portions of the present device.

FIG. 3 is a sectional view taken along a plane passing through section line 3-3 of FIG. 2.

FIG. 4 is a view of the underside of the receptacle employed as a central portion of the present invention.

FIG. 5 is a clip-on attachment to the pipe portion adjacent the mitt which creates a stiffening of the pipe portion to serve as a handle.

Referring to the drawings, and more particularly FIG. 1 thereof, reference numeral 10 generally indicates the mitt car washer of the present invention to which is attached a water supply pipe 12. As will be noted, the user's arm 14 is easily positioned into the mitt device and upon application of manual force the mitt device may be easily moved across the vehicle surface.

Considering the structure in particular, FIG. 2 shows the central part of the mitt device having a central body or portion generally indicated by reference numeral 16 to which is integrally attached an input pipe section 18 for supplying water to a hollowed receptacle 20.

The interior wall of the receptacle 20 includes an annular groove 22 which is also shown in FIG. 3. A circular foraminous plate 24 is adapted to be selectively positioned within the groove 22 as presently explained. Referring to FIGS. 2 and 3, the underside of receptacle 20 will be seen to include square shaped entrance slots 23 communicating perpendicularly with the annular groove 22. The entrance slots are formed at circumferentially equidistant points around the arcuate length of the groove. The base plate 24 includes radially extending lugs 26 which are mated with the entrance slots 23 then twisted so that the base plate 24 becomes keyed in the groove 22. When removal of the foraminous plate 24 is desired, the base plate is turned until the lugs 26 are aligned with the entrance slots 23 thereby permitting sliding removal of the base plate. An elongated handle 28 is formed on the central underside portion of the base plate thereby permitting insertion and removal of the base plate when desired. Apertures 30 are formed in the baseplate so that a sufficient flow of exiting water passes therethrough with a sprinkling effect.

As will be noted in FIG. 2, a bar of soap or pellet 32 may be positioned in receptacle 20 during a vehicle washing process. When a clear rinse water is desired, the foraminous plate 24 is removed from the receptacle 20 thereby removing the soap 32 which rests upon the base plate.

As will be seen in FIG. 2, a ledge 34 extends downwardly from the main body of the receptacle 20 and continues to a perpendicularly oriented square flange 42 which is disposed in parallel spaced relation with the inlet pipe section 18.

A radially inward groove 38 is formed in the ledge extension 34 which serves to receive the radially inward edge of the grommet 36. The brush material may be fabricated from lamb's wool or other materials conventionally used in buffing pads. The spring clip 40 is used to retain the radially inward edge in the groove 38 by folding the edge around the spring clip. The deposition of the spring clip is clearly shown in FIG. 2.

Referring to FIGS. 2 and 4, the square flange 42 mounts the outward edge of a flexible mitt or top cover 44 by means of suitable fasteners, preferably snaps 46. Use of such fasteners permits the removal of the mitt 44 and the ringlike brush 36 for cleaning or replacement thereof.

As will be seen in FIG. 1, the present invention is designed to operate with a flexible supply hose 12. However, by employing the modification generally denoted by 48 in FIG. 5, this portion of the hose may be stiffened to serve as a handle for the carwashing device. The modification includes an adapter having a bar section 50 with a first C-clamp 52 hingedly mounted thereto. A bolt passes through the outward arms of the clamp and is generally indicated by reference numeral 53. The bolts cause the inward clamping of the clamp arms thereby securing an engaged portion of the section to a first end of bar section 50. The opposite end of the bar section includes a flexibly resilient C-clamp 54 into which a second portion of the pipe section is snapped. It will be noted that the C-clamp 54 is suitably attached to the bar 50. Once the bar 50 is connected to the pipe section 18 a handle is formed.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What I claim as new is as follows

1. A manual surface-washing device comprising a hollow receptacle having a water inlet port, and an opened base, a foraminous plate through which water is forced to exit, the plate being positioned over the opening in the base, a mounting flange attached to the receptacle, a flexible mitt attached to the flange to form a pocket for receiving a user's hand, the receptacle body further serving as a grip for the hand, a brush member disposed around the underside of the receptacle and attached to the mounting flange, the brush serving to spread exiting water over a body while simultaneously cleaning the surface, the means for securing the plate over the opening in
the base comprising an annular recess formed in the interior surface of the receptacle, entrance slots perpendicularly communicating with the groove, and mating lugs formed on the edge of the plate for allowing keying of the lugs in the groove.

2. A manual surface-washing device comprising a hollow receptacle having a water inlet port, and an opened base, a foraminous plate through which water is forced to exit, the plate being positioned over the opening in the base, a mounting flange attached to the receptacle, a flexible mitt attached to the flange to form a pocket for receiving a user's hand, the receptacle body further serving as a grip for the hand, a brush member disposed around the underside of the receptacle and attached to the mounting flange, the brush serving to spread exiting water over a body while simultaneously cleaning the surface, said brush member being characterized by a flexible ringlike sheet having a radially outward edge removably attached to the mounting flange, the radially inward edge of the flange including an annular groove therein to accommodate the radially inward edge of the brush member, and an arcuate spring clip for engaging the accommodated edge of the brush member to retain its edge in the annular groove.

3. A manual surface-washing device comprising a hollow receptacle having a water inlet port, and an opened base, a foraminous plate through which water is forced to exit, the plate being positioned over the opening in the base, a mounting flange attached to the receptacle, a flexible mitt attached to the flange to form a pocket for receiving a user's hand, the receptacle body further serving as a grip for the hand, a brush member disposed around the underside of the receptacle and attached to the mounting flange, the brush serving to spread exiting water over a body while simultaneously cleaning the surface, a hose section integrally connected to the water inlet port, and an attachment for rigidifying the hose section thereby permitting the same to be employed as a handle, the attachment comprising a bar section having clamp members disposed at opposite ends thereof for clamping the hose section thereto, the bar being manually manipulatable as a handle.

4. A manual surface-washing device comprising a hollow receptacle having a water inlet port, and an opened base, a removable foraminous plate to permit introduction of a soap mass in the receptacle, water being forced to exit through the plate, means for securing the plate over the opening in the base, a mounting flange attached to the receptacle, a flexible mitt attached to the flange to form a pocket for receiving a user's hand, the receptacle body further serving as a grip for the hand, and a brush member disposed around the underside of the receptacle and attached to the mounting flange, the brush serving to spread exiting water over a surface while simultaneously cleaning the surface, the means for securing the plate over the opening in the base comprising an annular recess formed in the interior surface of the receptacle, entrance slots perpendicularly communicating with the groove, and mating lugs formed on the edge of the plate for allowing keying of the lugs in the groove, the brush member being characterized by a flexible ringlike sheet having a radially outward edge removably attached to the mounting flange, the radially inward edge of the flange including an annular groove therein to accommodate the radially inward edge of the brush member, and an arcuate spring clip for engaging the accommodated edge of the brush member to retain its edge in the annular groove.