597a

PATENT SPECIFICATION

Inventors: EDWARD FRANK MANN AND FREDERICK ROY SIBBALD

762,277

Date of filing Complete Specification: April 8, 1954. *No. 10209/53.*

Application Date: April 14, 1953.

Complete Specification Published: Nov. 28, 1956.

Index at acceptance:—**Classes 19,** J; **95,** B3; **and 138(1),** H2.

COMPLETE SPECIFICATION

Improvements relating to Polish Dispensers

We, HOOVER LIMITED, a Company registered under the Laws of Great Britain, of Perivale, Greenford, Middlesex, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to polish dispensers and particularly, though not exclusively, to polish dispensers intended for use with power driven floor polishing machines, for example of the type having two or more polishing brushes rotating about vertical axes.

An object of the invention is to provide an improved construction or arrangement of polish dispenser for attachment to such a polishing machine.

According to the present invention a polish dispenser includes a reservoir for polish, an elongated wiper blade, and means for supplying polish from the reservoir to the blade, in which the wiper blade is composed of rubber or like flexible impervious material and is of hollow form with a narrow wiping edge, and in the region of its wiping edge has at least one web distributed along its length and interconnecting its opposite walls, the hollow part of the blade above the web being so formed and mounted that the blade is free to flex to and fro as it is moved to and fro in a direction transverse to its length with the wiping edge in contact with the surface to be polished to smear polish on the latter.

In one arrangement the wiping edge has in it a longitudinal trough separated from the interior of the blade by a single intervening web that has in it a number of holes for the passage of polish. The holes in the web may be in the form of holes or slits formed, as by a sharp instrument, so that they normally tend to close up but will open to allow delivery of polish in response to pressure applied to the polish in the reservoir.

In an alternative arrangement the opposite walls of the blade at the wiping edge are bridged by a number of spaced webs leaving between them spaces for the delivery of polish. The spaces may extend laterally to open above the plane of the floor-contacting parts of the webs.

Means are preferably provided for applying pressure to the contents of the reservoir. As claimed in the present applicants' copending Patent Specification No. 10321/54 (Serial No. 762,306) such means may include means for generating an air pressure and employing it to apply pressure to the contents of the reservoir to deliver polish to the wiper, the reservoir having at least one flexible wall separating the polish in the reservoir from the air pressure acting on it. Thus in one arrangement the reservoir is in the form of a resilient bag and is mounted within an airtight outer casing, the air pressure being applied to the space between the casing and the bag.

The air pressure may be generated by a flexible hand bulb having inlet and outlet valves and preferably also a valve for releasing the pressure on the reservoir. Where the polish dispenser is attached to a floor polisher having a handle for propelling it about the floor, the air bulb is conveniently mounted on the handle and connected to the dispenser by a flexible pipe.

Means are preferably provided, interconnected with a closure for the reservoir, for releasing the pressure to ensure that the pressure is always released before the reservoir is opened. Such means may comprise at least one latch arranged to hold the closure in sealing engagement with the reservoir, a vent in the casing wall, a sealing member for the vent, and interconnecting means between the latch and the sealing member arranged automatically to disconnect the sealing member from the vent when the latch is released.

[*Price* 3/-]

The polish dispenser may be mounted on the polisher so as to be movable between an operative position in which the wiping edge is in contact with the floor, and an inoperative position in which it is raised from the floor.

In order to minimise drying of the polish in the wiper blade, due to access of air, releasable gripping means may be provided arranged to grip the wiper blade to press opposite walls of it together to prevent air contacting the polish within the lips and reservoir. When mounted on a polisher, as referred to above, the gripping means may be arranged automatically to grip the wiper blade when the dispenser is raised to its inoperative position.

Preferably as claimed in the present applicants' co-pending Patent Specification No. 10322/54, (Serial No. 762,307) spring means are provided to bias the polish dispenser towards the inoperative position, and latching means arranged to engage automatically when the dispenser is moved to its operative position to hold it in that position against the action of the spring means. Preferably the operative position of the polish dispenser is adjustable vertically with respect to the polisher body. Conveniently the latching means is arranged to be released by a foot pedal. In addition the polish dispenser may be provided with a footpad, preferably of resilient material, to facilitate pressing it down to the operative position.

In one arrangement in which the polisher has a pivoted handle movable to a vertical storage position, the latching means is arranged to be released automatically by movement of the handle to this vertical storage position.

The invention may be carried into practice in various ways but one specific embodiment will be described by way of example with reference to the accompanying drawings:—

Fig. 1 is a perspective view of an electric floor polisher provided with a polish dispenser embodying the invention;

Fig. 2 is a sectional side elevation of the dispenser on the line 2—2 of Fig. 4;

Fig. 3 is a partial under plan-view of the dispenser;

Fig. 4 is a plan-view of the dispenser partly in section;

Fig. 5 is a rear elevation of the dispenser partly in section;

Fig. 6 is a partial section on the line 6—6 of Fig. 5;

Fig. 7 is a partial section on the line 7—7 of Fig. 4;

Figs. 8, 9 and 10 are diagrammatic views of the clamping jaws for closing the wax dispenser, shown respectively in three different positions;

Fig. 11 is a section through the bulb for applying air pressure to the device;

Fig. 12 is an enlarged section corresponding to part of Fig. 2 showing one form of wiper blade for paste polish; and

Fig. 13 is a view similar to Fig. 12 showing a modified form of wiper blade for liquid polish.

The dispenser is shown in the drawings as carried by a floor polisher of the type having a main body 10 and a pair of brushes 11 rotated in opposite directions about vertical axes by means of an electric motor (not shown). The polisher is controlled by a rod-like handle 12 having a bail 13 pivotally connected to the body of the polisher.

Carried by the body of the polisher is a wax dispenser comprising an outer casing 20 of rigid material, within which is a reservoir in the form of a bag 21 formed of flexible resilient material. The outer casing is open at the bottom and the flexible bag 21 is formed at its lower end with an outwardly turned flange 22 and an upwardly turned flange 23 which fits snugly round the lower edge of the outer casing to form a furniture guard or bumper. The open bottom of the reservoir is closed by means of a bottom plate 24 held in place by a pair of toggle latches 25 one at each end of the casing. As shown in Fig. 7 each toggle latch comprises a short strut 26 connected at its lower end by a pivot 27 to a lug 28 projecting from the fixed outer casing, and at its upper end connected by a pivot 29 to a long tension link 30 which surrounds and encloses it and has a hooked lower end 31 which hooks under the end of the bottom plate 24 to hold it firmly in sealing engagement with the out-turned bottom flange 22 of the flexible bag. The bottom plate may have a rib 32 extending round it to press into the out-turned flange 22 to improve the seal.

The bottom plate 24 has in it a long narrow opening or slot 33 within which is fitted a hollow wiper blade 34 in the form of a moulding of rubber or like resilient material comprising a pair of parallel opposed lips 35 and a flange 36 which overlies the margins of the opening or slot 33, and is secured to them by means of a washer plate 37 and screws 38. The lips of the mouth may take various forms as referred to below.

As shown in Fig. 1 an air pipe 40 opens out of the top of the outer casing 20 and extends up the handle 12 of the polisher to a flexible bulb 41. As shown in detail in Fig. 11, the bulb is provided with a pair of valves 16 and 17, and a release button 42, so that by squeezing the bulb repeatedly a desired pressure can be built up in the air pipe 40 and communicated thence to the space between the outer casing 20 and the flexible bag 21 of the dispenser. This pressure tends to collapse the bag and force the polish out of it through the wiper blade 34. By pressing

the release button 42 pressure can be released to stop the delivery of polish.

The polish dispenser is mounted on the polisher in such a way that it can be moved up and down. Thus, as shown in Figs. 2, 3 and 5, a moulded insulating bracket 45 of generally T-shape has the stem 46 of the T curved upwardly and bolted to a web 47 that happens to be available on the underside of the main casting of the particular polisher to which the dispenser is applied. As shown in Fig. 5, the head 48 of the T-shaped bracket terminates in a pair of tubular guides 49. A pair of bosses 50 project from the rear face of the outer casing 20 of the dispenser and receive a pair of guide rods 51 which are screw-threaded into them, and slide in the tubular guides 49. Helical compression springs 52 surround the guide rods between the bosses 50 and the tubular guides 49 so as to support the weight of the dispenser.

The up and down movement of the dispenser is controlled by a latch shown in Fig. 5. Thus the casing of the dispenser carries a detent 53 whilst one of the tubular guides 49 is formed with a lug 54 carrying a pivot 55 for a latching bell crank 56. One arm 57 of this bell crank projects vertically upwards and carries a hooked latch member 58 having a hooked end 59 arranged to overlie the detent 53 in the latched position. The latch member 58 is secured to the arm 57 of the bell crank by rivets 60 received in a slot in the bell crank arm so that the latch member can be adjusted up and down relatively to it. At its lower end the latch member 58 has a horizontal tongue carrying a nut 61 cooperating with an adjusting screw 62 passing through the bell crank. The bell crank also has a horizontal arm 63 carrying a pedal 64 by which the bell crank can be swung in an anti-clockwise direction, as viewed in Fig. 5, against the action of a spring 65 surrounding the pivot 55, to clear the hooked end 59 of the latch member from the detent 53 and allow the complete dispenser to be raised by the springs 52.

Accordingly in use the dispenser can be lowered to its operative position by pressing down on the top of the casing 20, which may be provided with a rubber footpad 66 for the purpose. The hooked end 59 of the latch member 58 then snaps over the detent 53 and holds the polisher down in its operative position in which the lips 35 engage the floor. As the brushes of the polisher wear, the level of the dispenser can be suitably adjusted by means of the adjusting screw 62. To raise the polisher to its inoperative position, it is only necessary to press the pedal 64 to release the latch member 58 from the detent 53.

The form of the lips for applying the polish may vary, and will depend on the type of polish to be used. Alternative wiper blades may be available for use with different types of polish.

In one form of wiper blade, for use with paste polish, shown in Figs. 2, 3 and 12, the edges of the lips are bridged at intervals by short webs 67 so that the polish emerges through a number of separate slots spaced apart along the length of the wiper blade. The webs extend down beyond the intervening portions of the edges of the lips so that there will be lateral outlets for polish which will not be blocked by the floor.

In an alternative form of blade, shown in Fig. 13, intended for liquid polish, the lips are joined by a continuous web 68 extending the whole length of the blade just above the lower edges of the lips. A number of pin holes are pierced in this web with a needle, for example five holes with a needle .036" in diameter, so that they tend normally to close up but can open in response to pressure to allow polish to pass through them. Such polish emerges from the holes into a shallow trough 69 in which it can be distributed along the length of the wiper blade.

In either case there is a possibility that the polish remaining in the wiper at the end of a polishing operation may tend to dry up by access of air to it through the slots or pin holes, in the interval before the next polishing operation. To prevent this the dispenser is provided with a pair of gripping jaws 70 and 71 extending alongside the mouth, one in front of it, and one behind it. These jaws are pivoted at 72 and 73 respectively and the pivot 73 is provided with a spring tending to rotate the jaws in opposite directions so as to grip the lips 35 between them and squeeze them together. In order to open the jaws they are formed at their ends with bell crank arms 74 and 75 as shown diagrammatically in Figs. 8, 9 and 10. In addition, the forward jaw 70 is pivoted to one end of a link 76 whose other end is pivoted at 77 to the T-shaped supporting bracket 45.

Thus, as indicated in Figs. 2, 8, 9 and 10, when the dispenser is lowered to its operative position the link 76 will pull the jaw 70 away from the lips. The bell crank arm 74 of the jaw 70 rests on top of the corresponding arm 75 of the jaw 71, as shown in Figs. 8 to 10, and hence the movement of the jaw 70 produces corresponding movement of the jaw 71 away from the lips. Accordingly, when the dispenser is lowered to its operative position the jaws are automatically opened so as to allow wax to be delivered between the lips. Conversely, when the pedal 64 is pressed to allow the dispenser to be lifted by the springs 52 to its inoperative position, the jaws are allowed to close, to squeeze the lips between them and prevent delivery of polish or entry of air.

In order to refill the reservoir with polish,

it is only necessary to turn the polisher upside down, disengage the toggle latches 25, and turn the bottom plate 24 complete with the wiper blade 34 about the pivot 77. The reservoir can then be filled through its open bottom and the bottom plate replaced. To prevent any possibility of the bottom plate being removed whilst the reservoir is still subjected to air pressure, which might result in the polish being thrown or squirted out of the reservoir, an air vent 80 is provided at each end of the casing 20 as shown in Fig. 7. This air vent is normally closed by a sealing button 81 of rubber or other suitable material which is carried by the strut 26 of the toggle latch 25. Accordingly as soon as the toggle latch is moved to release the bottom plate, the sealing button 81 is removed from the vent 80 and the air pressure can escape.

The invention provides a dispenser which can be used with either liquid or semi-solid polishes, to apply the polish in an economical manner without causing excess polish to be splashed or thrown by the brushes. The construction is simple and does not involve any valves, and the resilient lips spread the polish in a thin film over the floor where it can be further distributed by the brushes. The hand control allows polish to be squeezed out at any desired rate to suit particular conditions.

It will be appreciated that the invention is not restricted to the embodiment described by way of example. Thus the arrangement of the squeeze bag for dispensing the polish may be altered. For instance, the air bulb and tube may be replaced by a hand grip and a Bowden cable arranged to operate a squash plate interposed between the casing and the flexible reservoir so that when the hand grip is squeezed the plate will be pressed towards the reservoir which will thereby be squeezed to dispense the polish. If desired a ratchet or equivalent device may be incorporated to apply pressure in small steps, so as to prevent accidental release of excessive quantities of polish.

If desired, the latch 58 may be arranged to be released automatically by movement of the handle of the polisher to a vertical storage position.

In a further alternative arrangement the lips of the blade may again be joined by a continuous web and a number of small elongated slits may be cut in the web instead of the pin holes shown in Fig. 13.

What we claim is:—

1. A polish dispenser including a reservoir for polish, an elongated wiper blade, and means for supplying polish from the reservoir to the blade, in which the wiper blade is composed of rubber or like flexible impervious material and is of hollow form with a narrow wiping edge, and in the region of its wiping edge has at least one web distributed along its length and interconnecting its opposite walls, the hollow part of the blade above the web being so formed and mounted that the blade is free to flex to and fro as it is moved to and fro in the direction transverse to its length with the wiping edge in contact with the surface to be polished to smear polish on the latter.

2. A polish dispenser as claimed in Claim 1 in which the wiping edge has in it a longitudinal trough separated from the interior of the blade by a single intervening web that has in it a number of holes for the passage of polish.

3. A polish dispenser as claimed in Claim 2 in which the holes in the web are in the form of holes or slits formed, as by a sharp instrument, so that they normally tend to close up but will open to allow delivery of polish in response to pressure applied to the polish in the reservoir.

4. A polish dispenser as claimed in Claim 1 in which the opposite walls of the blade at the wiping edge are bridged by a number of spaced webs leaving between them spaces for the delivery of polish.

5. A polish dispenser as claimed in Claim 4 in which the spaces extend laterally to open above the plane of the floor-contacting parts of the webs.

6. A polish dispenser as claimed in any one of the preceding claims including releasable gripping means arranged to grip the wiper blade to press opposite walls of it together to prevent air contacting the polish within it and the reservoir.

7. A polish dispenser as claimed in any one of the preceding claims including means for applying pressure to the contents of the reservoir to deliver polish to the wiper.

8. A polish dispenser as claimed in Claim 7 in which the pressure is applied to the contents of the reservoir by means of air under pressure, the reservoir having at least one flexible wall separating the polish in the reservoir from the air pressure acting on it.

9. A polish dispenser as claimed in Claim 8 in which the reservoir is in the form of a resilient bag and is mounted within an air-tight outer casing, the air pressure being applied to the space between the casing and the bag.

10. A polish dispenser as claimed in Claim 8 or Claim 9 in which the air pressure is generated by a flexible hand bulb having inlet and outlet valves.

11. A polish dispenser as claimed in Claim 10 including a valve on the bulb for releasing the pressure on the reservoir.

12. The combination with a power-driven floor-polisher having a handle for propelling it about the floor, of a dispenser as claimed in Claim 10 or Claim 11, the air bulb being mounted on the handle and connected to the

it is only necessary to turn the polisher upside down, disengage the toggle latches 25, and turn the bottom plate 24 complete with the wiper blade 34 about the pivot 77. The reservoir can then be filled through its open bottom and the bottom plate replaced. To prevent any possibility of the bottom plate being removed whilst the reservoir is still subjected to air pressure, which might result in the polish being thrown or squirted out of the reservoir, an air vent 80 is provided at each end of the casing 20 as shown in Fig. 7. This air vent is normally closed by a sealing button 81 of rubber or other suitable material which is carried by the strut 26 of the toggle latch 25. Accordingly as soon as the toggle latch is moved to release the bottom plate, the sealing button 81 is removed from the vent 80 and the air pressure can escape.

The invention provides a dispenser which can be used with either liquid or semi-solid polishes, to apply the polish in an economical manner without causing excess polish to be splashed or thrown by the brushes. The construction is simple and does not involve any valves, and the resilient lips spread the polish in a thin film over the floor where it can be further distributed by the brushes. The hand control allows polish to be squeezed out at any desired rate to suit particular conditions.

It will be appreciated that the invention is not restricted to the embodiment described by way of example. Thus the arrangement of the squeeze bag for dispensing the polish may be altered. For instance, the air bulb and tube may be replaced by a hand grip and a Bowden cable arranged to operate a squash plate interposed between the casing and the flexible reservoir so that when the hand grip is squeezed the plate will be pressed towards the reservoir which will thereby be squeezed to dispense the polish. If desired a ratchet or equivalent device may be incorporated to apply pressure in small steps, so as to prevent accidental release of excessive quantities of polish.

If desired, the latch 58 may be arranged to be released automatically by movement of the handle of the polisher to a vertical storage position.

In a further alternative arrangement the lips of the blade may again be joined by a continuous web and a number of small elongated slits may be cut in the web instead of the pin holes shown in Fig. 13.

What we claim is:—

1. A polish dispenser including a reservoir for polish, an elongated wiper blade, and means for supplying polish from the reservoir to the blade, in which the wiper blade is composed of rubber or like flexible impervious material and is of hollow form with a narrow wiping edge, and in the region of its wiping edge has at least one web distributed along its length and interconnecting its opposite walls, the hollow part of the blade above the web being so formed and mounted that the blade is free to flex to and fro as it is moved to and fro in the direction transverse to its length with the wiping edge in contact with the surface to be polished to smear polish on the latter.

2. A polish dispenser as claimed in Claim 1 in which the wiping edge has in it a longitudinal trough separated from the interior of the blade by a single intervening web that has in it a number of holes for the passage of polish.

3. A polish dispenser as claimed in Claim 2 in which the holes in the web are in the form of holes or slits formed, as by a sharp instrument, so that they normally tend to close up but will open to allow delivery of polish in response to pressure applied to the polish in the reservoir.

4. A polish dispenser as claimed in Claim 1 in which the opposite walls of the blade at the wiping edge are bridged by a number of spaced webs leaving between them spaces for the delivery of polish.

5. A polish dispenser as claimed in Claim 4 in which the spaces extend laterally to open above the plane of the floor-contacting parts of the webs.

6. A polish dispenser as claimed in any one of the preceding claims including releasable gripping means arranged to grip the wiper blade to press opposite walls of it together to prevent air contacting the polish within it and the reservoir.

7. A polish dispenser as claimed in any one of the preceding claims including means for applying pressure to the contents of the reservoir to deliver polish to the wiper.

8. A polish dispenser as claimed in Claim 7 in which the pressure is applied to the contents of the reservoir by means of air under pressure, the reservoir having at least one flexible wall separating the polish in the reservoir from the air pressure acting on it.

9. A polish dispenser as claimed in Claim 8 in which the reservoir is in the form of a resilient bag and is mounted within an air-tight outer casing, the air pressure being applied to the space between the casing and the bag.

10. A polish dispenser as claimed in Claim 8 or Claim 9 in which the air pressure is generated by a flexible hand bulb having inlet and outlet valves.

11. A polish dispenser as claimed in Claim 10 including a valve on the bulb for releasing the pressure on the reservoir.

12. The combination with a power-driven floor-polisher having a handle for propelling it about the floor, of a dispenser as claimed in Claim 10 or Claim 11, the air bulb being mounted on the handle and connected to the

* C L M S *

dispenser by a flexible pipe.

13. A polish dispenser as claimed in any one of Claims 8 to 11 including means interconnected with a closure for the reservoir for releasing the pressure, to ensure that the pressure is always released before the reservoir is opened.

14. A polish dispenser as claimed in Claim 13 including at least one latch arranged to hold the closure in sealing engagement with the reservoir, a vent in the casing wall, a sealing member for the vent and interconnecting means between the latch and sealing member arranged automatically to disconnect the sealing member from the vent when the latch is released.

15. A polish dispenser as claimed in Claim 9, and Claim 13 or Claim 14 in which the reservoir has, at its mouth, an outwardly directed flange forming a sealing gasket between the outer casing and the closure.

16. A polish dispenser as claimed in Claim 15 in which the reservoir also has an upturned flange, integral with the outwardly directed flange, and forming a furniture guard on the outside of the dispenser.

17. A polish dispenser as claimed in any one of Claims 1 to 11 or 13 to 16 having means for securing it to a polishing machine to dispense polish as the machine is operating.

18. The combination with a floor polisher of a polish dispenser as claimed in Claim 17 the dispenser being mounted on the polisher so as to be movable between an operative position in which the wiping edge is in contact with the floor, and an inoperative position in which it is raised from the floor.

19. The combination as claimed in Claim 18 including gripping means as claimed in Claim 6 arranged automatically to grip the wiper blade when the dispenser is raised to its inoperative position.

20. The combination as claimed in Claim 19 in which the gripping means comprise jaws extending along the length of the blade pivoted to the dispenser and interconnected to a fixed point on the polisher, so that as the dispenser is raised to the inoperative position the jaws are pivoted to their gripping position.

21. The combination claimed in Claim 18 including spring means biasing the polish dispenser towards the inoperative position, and latching means arranged to engage automatically when the dispenser is moved to its operative position to hold it in that position against the action of the spring means.

22. The combination as claimed in Claim 21 in which the operative position of the polish dispenser is adjustable vertically with respect to the polisher body.

23. The combination as claimed in Claim 21 or Claim 22 in which the latching means is arranged to be released by a foot pedal.

24. The combination as claimed in Claim 23 in which the latching means is in the form of a bell crank having a vertical arm carrying a hook for engaging a detent on the dispenser and a horizontal arm terminating in the foot pedal.

25. The combination as claimed in Claim 22 and Claim 24 in which the hook is adjustable relatively to the vertical arm of the bell crank.

26. The combination claimed in Claim 21 or Claim 22 in which the polisher has a pivoted handle movable to a vertical storage position, and the latching means is arranged to be released automatically by movement of the handle to the vertical storage position.

27. The combination as claimed in any one of Claims 18 to 26 in which the polish dispenser is provided with a footpad, preferably of resilient material, to facilitate pressing it down to the operative position.

28. A polish dispenser as specifically described herein with reference to the accompanying drawings.

29. The combination with a floor polisher of a polish dispenser as specifically described herein with reference to the accompanying drawings.

KILBURN & STRODE,
Agents for the Applicants,

PROVISIONAL SPECIFICATION

Improvements relating to Polish Dispensers

We, HOOVER LIMITED, a Company registered under the Laws of Great Britain, of Perivale, Greenford, Middlesex, do hereby declare this invention to be described in the following statement:—

This invention relates to polish dispensers and comprises the combination with a floor polisher of a polish dispenser carried by the floor polisher and including a reservoir for polish communicating with a mouth having a pair of lips of rubber or like resilient material which normally tend to spring into contact with one another but can be forced apart to allow polish to issue between them.

Preferably the dispenser includes means for applying pressure to the contents of the reservoir. In one arrangement the reservoir is of rubber or like resilient material and is provided with means for squeezing it to apply pressure to its contents. In another arrangement, in which the reservoir may be rigid, an inflatable bag is provided inside the reservoir and means is provided for inflating it.

Means are preferably also provided for releasing the pressure on the contents of the

reservoir. Such means may be interlocked with a closure for the reservoir, to ensure that the pressure is always released before the reservoir is opened.

In one form of the invention the dispenser, or at least its mouth, is movably mounted in relation to the polisher so that it can be raised to withdraw the mouth to a distance from the surface being polished, when the application of polish is discontinued.

The invention may be carried into practice in various ways, but two specific embodiments will be described by way of example. In each case the dispenser is carried by a floor polisher of the type having a main body and a pair of brushes rotated in opposite directions about vertical axes by means of an electric motor. The polisher is controlled by a rod-like handle pivotally connected to the body of the polisher.

Carried by the body of the polisher is a wax dispenser comprising an outer casing of rigid material within which is a reservoir in the form of a bag formed of flexible resilient material. The top of the flexible bag is secured to a rigid annular filling bush, the upper part of which is screw-threaded and is screwed into and projects through an opening in the top of the casing. The projecting screw-threaded portion receives a screw-threaded cap which can be removed to fill the reservoir through the filling bush. The lower end of the flexible bag is open to form a discharge mouth but the material is of such thickness and so moulded that opposite edges of the opening tend to remain sprung together to form lips between which the contents of the reservoir will be discharged only when pressure is applied to them.

In order to apply such pressure to the contents of the reservoir one wall of the casing is shaped to fit snugly against the reservoir. Between the opposite wall of the casing the adjacent wall of the reservoir a squash plate is interposed and this is provided with a Bowden cable connected to a hand grip on the handle so that when the hand grip is squeezed the plate will be pressed towards the reservoir which will thereby be squeezed between it and the opposite wall of the casing. If desired a ratchet or equivalent device may be incorporated to apply the pressure in small steps, so as to prevent accidental release of an excessive quantity of polish.

The casing is mounted on the body of the polisher in such a way that it can slide up and down to a limited extent between a lower operative position and an upper inoperative position. In the lower operative position the lips are substantially in the plane of the ends of the brush bristles, so that as polish is squeezed out between them by pressure on the hand grip, it will be applied to the floor. When the use of the dispenser is discontinued, it may be manually moved to its inoperative position where it may be retained by a suitable latch. Alternatively means may be provided for automatically moving the dispenser to its inoperative position, for example when the handle is moved to its vertical storage position.

In a further embodiment the body of the reservoir is of rigid material and no outer casing is required. At its lower end the reservoir has a neck terminating in an elongated flanged opening over which is sprung a cap of resilient material affording a mouth having a pair of lips as in the first embodiment. Alternative caps of different materials may be available for different polishes for example liquid polishes and paste polishes.

A suitable removable closure is provided at the top of the reservoir and within the reservoir is mounted an inflatable bag of suitable flexible resilient material. An air pipe connects this bag to a small hand operated pump, such as a rubber bulb provided with valves, mounted on the handle. A manually controlled vent is provided for releasing the pressure from the bladder and hence from the contents of the reservoir.

In other respects, and in operation, this embodiment is precisely analogous to that described previously.

In each arrangement various materials may be used for the lips and for the flexible bag provided they will not adversely affect or be affected by the polish. For certain polishes a suitable mix of natural rubber may be suitable but in general a synthetic material will be desirable for example neoprene or polyvinyl chloride.

Moreover in each arrangement the closure for the reservoir may be interconnected with the means for releasing the pressure from its contents so that there is no fear of polish being thrown out of the reservoir when its cap is removed.

The invention provides a dispenser which can be used with either liquid or semi solid polishes, to apply the polish in an economical manner without causing excess polish to be splashed or thrown by the brushes. The construction is simple and does not involve any valves, and the resilient lips spread the polish in a thin film over the floor where it can be further distributed by the brushes. The hand control allows polish to be squeezed out at any desired rate to suit particular conditions.

KILBURN & STRODE,
Agents for the Applicants.

Printed for Her Majesty's Stationery Office by Wickes & Andrews, Ltd., E.C.4. 684/2.—1956.
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which copies may be obtained.