Sept. 4, 1934. J. P. ROSENBERG 1,972,318

WAXING DEVICE

Filed July 30, 1932

FIG. 1

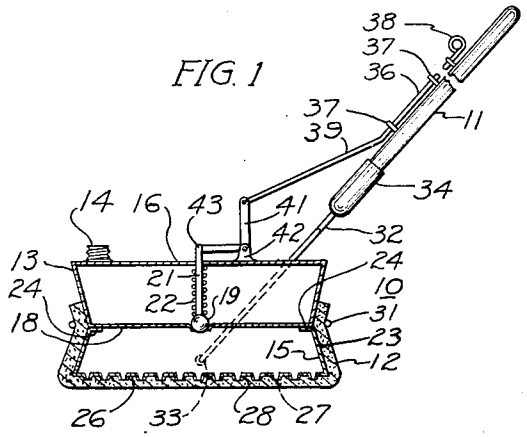


FIG. 2

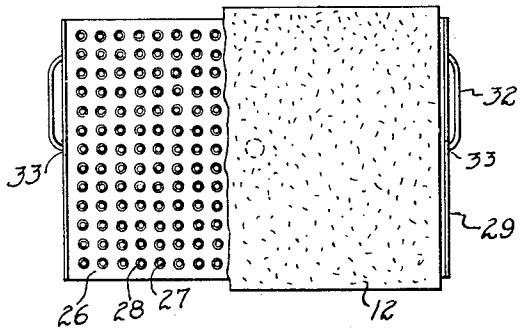


FIG. 3

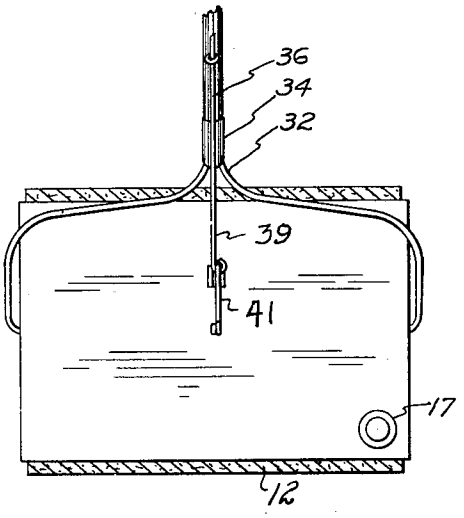


FIG. 4

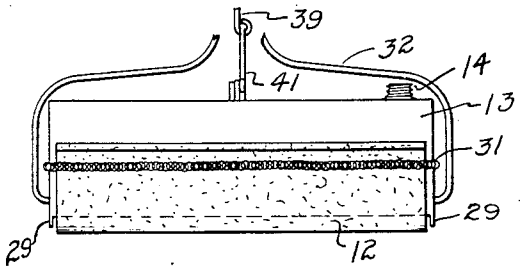


FIG. 5

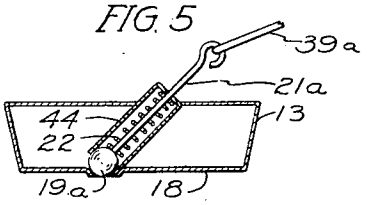


FIG. 6

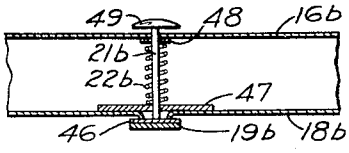
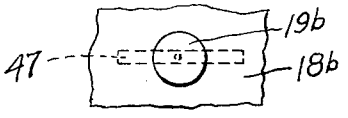


FIG. 7.



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UNITED STATES PATENT OFFICE

1,972,318

WAXING DEVICE

John P. Rosenberg, Chicago, Ill.

Application July 30, 1932, Serial No. 626,464

4 Claims. (Cl. 91—39)

My invention relates to waxing devices and has particular reference to devices of this description adapted for dispensing wax, oil or the like, distributing it upon a surface, and polishing the waxed surface.

Devices have been provided which are adapted to dispense and distribute oil or wax for the purpose of furnishing a highly polished surface-covering for floors and the like, but the devices of the prior art have not always been satisfactory because the mechanism utilized was involved and cumbersome and because the means employed for polishing the surface after the wax had been disposed thereon was not effective to distribute the wax in a thin film, and to give the film a high luster. The devices were relatively expensive and utilized a relatively complicated structure which necessitated expensive dies and a great amount of machine work in the manufacture thereof.

I have observed the difficulties of the devices of the prior art and have devised a relatively inexpensive and very effective mechanism for dispensing and distributing wax or oil and for polishing the wax or oil after it has been distributed.

An object of my invention is to provide a simple mechanism for dispensing and distributing wax and for polishing the wax after it has been distributed.

Another object of my invention is to provide an effective means for dispensing wax in fine streams over a large surface.

Another object of my invention is to provide a novel means of polishing the waxed surface.

Still another object of my invention is to provide a cover for the bottom of a wax dispensing device which will prevent the device from marring furniture or other objects with which it comes into contact.

A still further object of my invention is to provide a very simple means for securing a sheet of polishing material to the bottom of the container.

A still further object of my invention is to provide a simple means for holding all parts of the polishing material in place on the lower bottom of the dispenser.

An important feature of my invention is the use of a thick porous sheet of material such as sponge rubber for covering the bottom of the container.

Other and further features and objects of my invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawing and following specification, wherein is disclosed an exemplary embodiment of the invention, with the understanding, however, that such changes may be made therein as fall within the scope of the appended claims without departing from the spirit of the invention.

In the drawing:

Figure 1 is a view partly in side elevation and partly in section of a device for dispensing, distributing, and polishing oil or wax.

Figure 2 is a bottom plan view of the container of the device shown in Figure 1. A portion of the polishing sheet material has been removed to show the bottom of the container in greater detail.

Figure 3 is a top plan view of the container showing the means for operating the valve therein and the means employed for engaging the handle of the device with the container.

Figure 4 is a front elevational view of the device shown in Figure 1 with the handle portion broken away to show the remaining parts in greater detail.

Figure 5 is a sectional view of a modified form of valve suitable for controlling the flow of fluid from the upper portion of the container to the lower portion.

Figure 6 is a view in section of still another form of valve structure, and

Figure 7 is a bottom view of the valve shown in Figure 6.

The waxing device hereinafter described, although suitable for dispensing and polishing all kinds of oil and wax finishes, is particularly desirable for use with the so-called "water wax" which is a wax in freely flowing liquid form. Water wax may be poured into a can or a like container and its flow therefrom controlled by any suitable mechanical valve means. In distributing the wax, however, it is highly important that the wax be distributed in extremely fine streams and over a large surface. Success in obtaining a high polish depends to a great extent on how thinly the wax is distributed.

My preferred distributing device contemplates the use of a porous material, such as sponge rubber, whereby the wax passes through the pores of the rubber in a great number of small streams and is thereby thinly and evenly distributed. The sponge rubber constiutes an excellent polishing medium.

For a more complete explanation of the invention, reference may be had more particularly to Figure 1 in which a container, represented generally by the number 10, is provided with a handle 11 which is pivotally attached thereto. A sheet of polishing material 12 which

preferably is of sponge rubber is secured to the underside of the dispenser 10.

The dispenser 10 is comprised of a closed upper tank 13 which preferably is substantially rectangular in shape, and the end walls of which taper slightly inwardly for a purpose to be hereinafter explained. A large filler cap 14 is provided, preferably near center and close to the valve mechanism, so the valve may be assembled easily and to provide ready accessibility to the valve mechanism should there be necessity for renewal or adjustment of parts of the upper cover 16 of the tank 13, and this filler cap is provided with a screw thread so that a cover 17 may be threaded on over the filler cap. The lower wall 18 of the container 13 is preferably provided with an opening at substantially its mid-point and the edges of the opening drawn down to afford a valve seat. A ball valve 19, having as an integral part thereof a stem 21, is adapted to be seated in the valve seat and resiliently engaged therein by means of the spring 22 which bears against the upper wall 16 and against the valve. The valve may be raised from its seat to permit the oil or wax to flow from the upper container 13 into the lower container 23 by means of a mechanism hereinafter described.

The lower container is comprised of a substantially rectangular tank having a horizontally-extending flange 24 extending inwardly from the upper edge of the inside walls thereof. This flange 24 may be secured to the bottom wall 18 of the upper container in any suitable manner as by spot welding or soldering. The bottom 26 of the lower container 23 is preferably of sheet material or the like and has a large number of openings 27 therein. These openings are preferably made by punching the material downwardly with a sharp tool so that the side walls 28 of the openings 27 are bent or drawn downwardly below the lower surface of the plate 26, which forms the bottom of container 23, in order to keep the polishing material or sheet 12 from moving with reference to the bottom of the container. The side walls 15 of the container 23 are drawn down slightly as shown at 29 to prevent the polishing sheet from slipping or moving sidewise from off the container.

The sheet of sponge rubber polishing material 12 is preferably longer than the bottom of the container 23 in order that it may be drawn upwardly over the end walls 15 of the lower container and partially up over the end walls 13 of the upper container.

The end walls 13 of the upper container and the end walls 15 of the lower container preferably slope inwardly toward the junction of the two containers in order that when a coil spring 31 is stretched in place over the upwardly extended portions of the polishing sheet, the sheet will be held in place on the bottom container. The punched-down edges of the plate 26 also serve to hold the polishing sheet in place and when the sheet is attached to the container perform the function of holding the edges of the sheet, so that when the bottom of the sheet is rubbed upon the floor or other surface to be polished, the rubber is squeezed one way and then the other to work the oil or wax through the pores of the rubber.

The dispensing and polishing device is moved back and forth on the floor by means of the handle 11 and the handle 11 may be fastened to the polisher in any suitable manner as by means of a wire hook 32 which is pivotally secured in suitable openings 33 in opposite sides of the lower container and which is secured to the handle 11 as by means of a cap 34 which fits over the end of the handle.

It is necessary to control the amount of wax fed from the upper to the lower container in any given period of time and in conformance with, or proportion to, the area covered. This is accomplished by means of a pull-rod 36 which is mounted for reciprocation upon the handle 11 by means of guides 37. The rod is provided with a hook 38 at the upper end thereof in order that the operator may grasp the rod to pull it upwardly, and the lower part 39 of the rod is bent at an angle away from the handle 11 so that it may be pivotally engaged to a bell-crank 41 mounted upon the top of the upper container. The bell-crank 41 is mounted on the upper container by means of a bracket 42 and is pivotally engaged to the stem 21 of valve 22 as shown at 43. It may readily be understood that pulling upwardly on the hook 38 causes the bell-crank 41 to rotate to lift the valve 19 from its seat in the lower wall 18 of the upper container to permit liquid to flow from the upper container into the lower.

If desired the spring 22 may be housed in a small cylinder 44 which is disposed within the upper container 13 (see Figure 5) and the cylinder and spring set at an angle of about 45 degrees within the container 13 in order to eliminate the bell-crank 41. If this type of valve is used the pull rod 39*a* is hooked directly to the valve stem 21*a* and a pull on the rod 39*a* will raise the ball valve 19*a* from its seat in the lower wall 18 of the container.

In still another form of valve shown in Figures 6 and 7 the pull-rod 39 and bell-crank 41 are eliminated and flow of the fluid from the upper to the lower tank is controlled by means of a valve mechanism comprising a stem 21*b* mounted vertically within the container 13 and having a flat valve 19*b* secured to its lower extremity, with the valve head bearing against the downwardly turned edges at a centrally located opening in the lower wall 18*b* of the container. A pad 46 of leather or the like is preferably disposed between the valve head and the lower wall 18*b* in order that when the valve is seated an effective seal is formed. A guide 47 is preferably fastened to the inside of the lower wall 18*b* to guide the valve stem. A washer 48 is disposed on the stem 21*b* and spaced away from the upper wall 16*b* of the container, and the spring 22*b* pushes against this washer and against the guide 47 to hold the valve head 19*b* against the wall 18*b* to close the opening. A bell-shaped cap 49 is provided at the upper end of the stem 21*b* and this cap may be depressed by the operator to permit a supply of oil to pass into the lower container. If desired the cap 49 might be depressed by a bell-crank and push rod attached respectively to the upper container and the handle, but this latter construction is not necessary and the device is thereby considerably simplified.

In operation of the waxer a supply of oil is permitted to flow from the upper container to the lower container by opening the valve, as for instance by pulling the rod 39. The wax flows downwardly through the openings 27 and into the sponge rubber sheet 12. The waxer is pushed back and forth on the floor by means of the handle 11 and this action causes the rubber sheet

to be squeezed in one direction and then in the other to work the wax through the pores of the sheet and onto the surface to be waxed. The wax is disposed in a very thin and even sheet by reason of the porous structure of the sponge rubber and after it has been deposited very little rubbing is required to give the surface a high luster. The wax then dries and does not require any further rubbing. The polishing process not only cleans the floor but removes foreign material such as dust and dirt from the surface of the floor. The structure of my device is very simple and is consequently quite inexpensive to manufacture. The cost of a waxer made according to my invention is so low that the device may be given away with relatively small purchases of wax or other products.

Although I have described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claims.

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

1. In a waxing device including a wax container and a polishing sheet, the bottom of the container having openings therein, and means for holding the polishing sheet on the bottom of the container comprising projections depending from the lower wall of the container, the said projections being truncated hollow cones formed by material punched out from the walls of openings in the lower wall.

2. A floor waxer comprising a pair of superimposed, substantially rectangular receptacles, the lower wall of the lower receptacle being perforated to permit wax to issue therefrom, the dividing wall between the receptacles being provided with at least one perforation to permit wax placed in the upper receptacle to flow into the lower receptacle, a valve located in each perforation of the dividing wall to control the flow of wax from the upper to the lower receptacle, the end walls of the containers being sloped inwardly toward the junction of the two containers, a sponge rubber pad located on the outside of the lower wall of the lower container and extending up over the sloping ends of the containers, and a spring for encircling the ends of the pad and the containers at the junction thereof to hold the pad on the waxer.

3. A floor waxer comprising a pair of superimposed, substantially rectangular receptacles, the lower wall of the lower receptacle being perforated to permit wax to issue therefrom, the dividing wall between the receptacles being provided with at least one perforation to permit wax placed in the upper receptacle to flow into the lower receptacle, a valve located in each perforation of the dividing wall to control the flow of wax from the upper to the lower receptacle, the end walls of the containers being sloped inwardly toward the junction of the two containers, a sponge rubber pad located on the outside of the lower wall of the lower container and extending up over the sloping ends of the containers, a spring for encircling the ends of the pad and the containers at the junction thereof to hold the pad on the waxer, a handle having a bail portion adapted to be pivotally secured to the side walls of the lower container, a pull rod mounted on the handle, and means for connecting the valve with the pull rod.

4. In a waxing device, a pair of superimposed, substantially rectangular containers having their end walls beveled inwardly toward the junction of the containers, the side walls of the lower container having depending flanges on the lower edges thereof, the lower wall of the lower container having projections depending downwardly from the surface thereof and having openings in the projections, a pad adapted to extend over the bottom of the lower container and up over the ends of the containers, the pad being located on the projections of the bottom wall and between the flanges of the side walls, and a resilient member encircling the ends of the pad and the containers at the junction thereof for holding the pad in position on the containers, the flanges and the projections from the lower wall also serving to hold the pad in position.

JOHN P. ROSENBERG.