

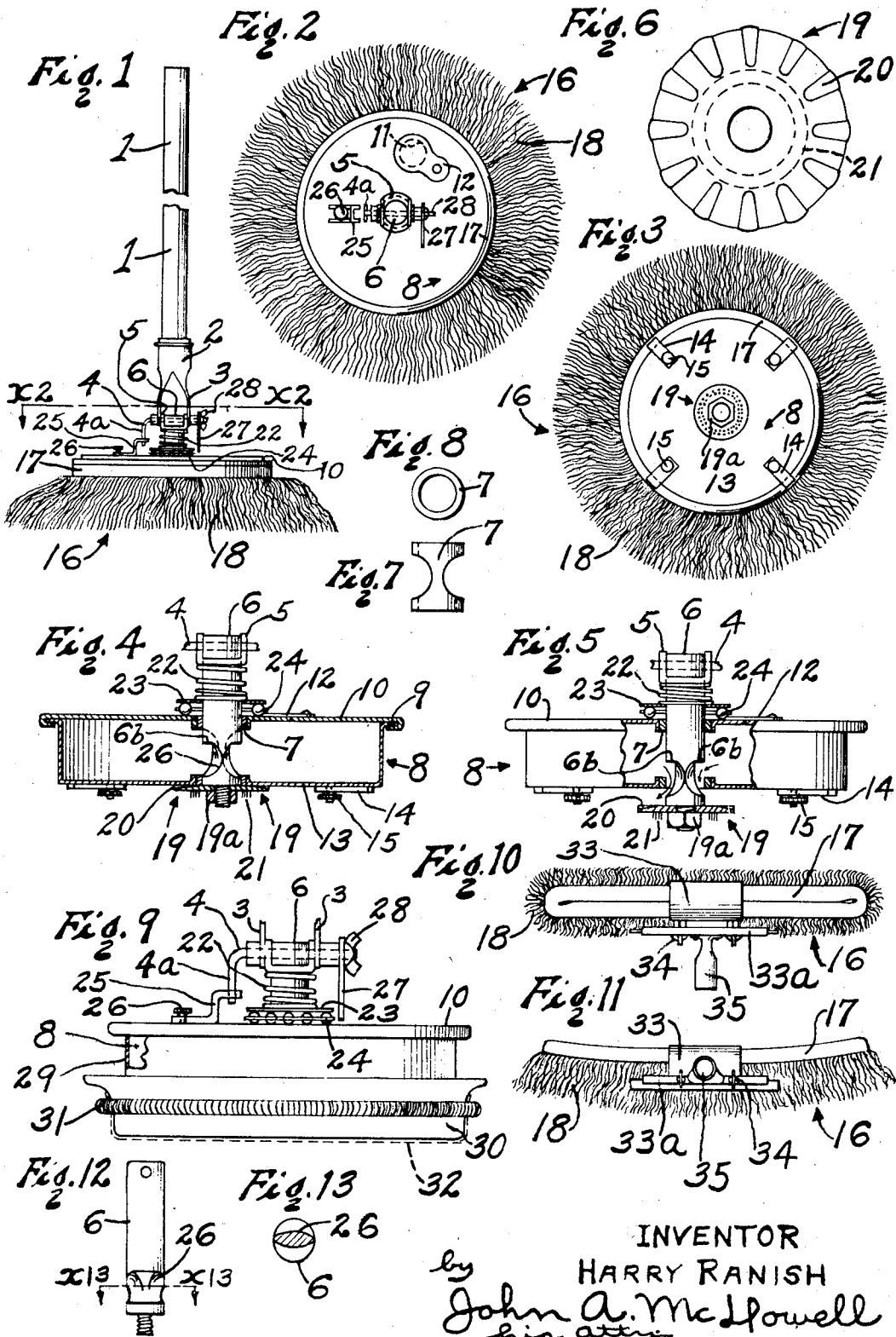
Aug. 8, 1933.

H. RANISH

1,921,637

COMBINATION HOUSE CLEANER

Filed Oct. 24, 1931



INVENTOR

HARRY RANISH

by John A. McIlwain
his atty

UNITED STATES PATENT OFFICE

1,921,637

COMBINATION HOUSE CLEANER

Harry Ranish, Los Angeles, Calif.

Application October 24, 1931. Serial No. 570,879

5 Claims. (Cl. 15—131)

This invention relates to the improvements in general house cleaning devices, where improved means of discharging various kinds of liquids from the same container to the spreading means as may be found applicable.

An object of the invention is to provide a device of the character set forth having interchangeable parts more particularly adapted for fitting the device to be used, for sanding a floor, in some instances for oiling and mopping a floor, in other instances for waxing the floor; and in other instances for polishing the floor and still further instances for scrubbing floors and washing and cleaning windows and other surfaces.

Simplicity and cheapness of construction; ease of assembling and taking apart and ease of supplying and controlling the supply of oil or liquid wax to and through the spreading means, are further objects.

A feature of the invention is the provision of a novel discharge propeller valve that is so constructed that when liquid wax is used it stirs and breaks up the wax in the container momentarily as it is rotated or depressed by the user, thus preventing the wax from becoming caked in the container and will allow a free flow at all times.

An advantage of the invention is the provision of means to create a friction between the brush and contacting objects which compels the appliance to revolve automatically by forward and backward movements and thus to lighten the process of cleaning, eliminate waste of time by crowding between obstructed objects, such as furniture etc.

Another feature of the invention is that the device can be put under any piece of furniture and will pick up dust quickly without scratching furniture or corners by the rotating of the brush.

The invention is not limited to the specific construction shown, and it is understood that forms of embodiment other than those shown may be employed without departing from the invention or from the principles therein disclosed and embodied in the mechanism herein set forth and claimed.

Other objects, advantages and features of the invention may appear from the accompanying drawing, the subjoined detailed description and the appended claims.

The accompanying drawing illustrates the invention.

Figure 1 is a front fragmental elevational view of the device as in use when not oiling a floor surface and is also shown in locked position to prevent rotation of the brush.

Fig. 2 is a plan view taken on line x2—x2 Fig. 1, showing the brush in unlocked position and also showing the stop in raised position so that when in use the operator may rotate the brush and feed oil or wax to the floor at the same time.

Fig. 3 is a bottom plan view of Fig. 1 showing the latches and distributor disc.

Fig. 4 is an enlarged fragmental sectional detail showing the container construction and valve in closed position.

Fig. 5 is a view analogous to Fig. 4 showing a fragment of the container broken away to disclose interior construction and shows the valve in open position.

Fig. 6 is an enlarged detail view of the distributor showing the spacing of the spray depressions.

Fig. 7 is an elevational detail view of the valve bushing.

Fig. 8 is a plan view of Fig. 7.

Fig. 9 is a fragmental elevational detail view on the same scale as Figs. 4 and 5 showing a device applied to the container for polishing a floor. Also shown in broken lines attached thereto is a piece of sandpaper for use when sanding a floor that may be attached as shown.

Fig. 10 is a plan view of a combination device to hold the brush for washing and drying windows. The handle being omitted therefrom.

Fig. 11 is a front elevation of Fig. 10.

Fig. 12 is a detail view of the valve showing the propeller blade construction.

Fig. 13 is a section on line x13—x13 Fig. 12.

The handle 1 is provided with a threaded socket and fork connection as at 2, 3 to a hinged stop 4 that extends through the U shaped shoulder 5 and propeller valve 6 that is slidably mounted in the bushing 7 which fits in the container 8 that holds the liquid or liquid wax for distribution.

The container 8 is provided with a flange 9 at its top edge and a top piece 10 having an inlet 11 that is covered by a sliding cover as at 12.

At its bottom 13 the container 8 is provided with latches 14 that are held by nuts 15 in their required position to hold a brush 16 securely as shown in Fig. 3.

The brush 16 may be of any practical construction and is shown comprising a belt formed of a strap 17 and a fringe 18; the strap being adapted to fit the outside of the container 8 and to be held thereon by the flange 9 and latches 14, so that the brush forms a spreader approaching a circular form, and the fringe constitutes a normally soft floor contacting extension of

the container through which the oil or liquid wax is to be applied, this brush can be removed, washed and be used for any purpose.

19 is a distributing disc having depressions 20 on the inside and a circular steel wire brush 21 on the outside which is made of very fine and short bristles that collects and holds dirt and lumpy wax. By shaking the mop a little the dirt and lumpy wax frees itself.

Resilient means as a recoil spring 22 mounted on the valve 6 and interposed between the U shaped shoulder 5 and plate 23 with a ball bearing race 24 arranged to rest on the container top 10, holds the valve in closed position except when pressed downward by the handle 1 and acts as a brake to prevent the brush from rotating too fast.

The hinged stop 4 is provided with an extension 4a that extends downwardly toward the container and permits of a forked latch 25 to fit over the extension and is held by a lock screw 26 to prevent the container and brush from rotating when required by the operator.

When using liquid wax in the container it may cake or stick to the bottom or valve and to stir this wax a blade 26 and shoulders 6b on the valve 6 is constructed as shown in Figs. 4, 5, 12 and 13.

To prevent feeding oil or liquid wax to the floor when downward pressure is brought upon the handle 1 if so desired a stop bar 27 mounted on the hinged stop 4 and held locked by a thumb screw 28 that can be operated by anyone to regulate the stop bar to locking or unlocking position as shown in Figs. 1, 2 and 9 of the drawing.

Referring to Fig. 9 is shown an attachment for sanding and polishing a floor comprising a metal cap 29 that fits over the container 8 and permits of a felt covering 30 to be held thereto by an elastic spring 31.

A piece of sand paper 32 is shown in broken lines placed over the felt covering 30 and held by the elastic spring 31 that is used for sanding a floor when desired by the operator.

In Figs. 10 and 11 is shown a device for washing and polishing windows comprising a clamp 33 that fits over the brush 16 as shown in Fig. 10 and a wiper 33a that is attached to the clamp by screws 34. The wiper being provided with a socket 35 for a handle not shown.

In practical use the operator having filled the container will use the appliance as common in using a mop, and when he desires to feed liquid to the distributing disc 19 he will press upon the handle to depress the spring and valve, thus to allow flow of the liquid to the distributor disc 19 and depressions 20 that permit of a whirling spray upon the mop or felt and this feed supply can be regulated by the pressure on the handle by the operator.

The device is so constructed that by providing the ball bearing race 24 between the plate 23 and container top 10 will permit the brush and container to rotate freely when being used by the operator, thus making it easier to apply polish quicker and gives better results.

The device may also be used with a backward and forward movement by applying the forked latch 25 to mesh into the extension 4a of the hinged stop 4, thus locking the container and brush to prevent it from rotating as shown in Fig. 1 of the drawing.

For sanding and polishing a floor the lock is applied to prevent rotating and to prevent any liquid from being fed to the distributor disc, the

stop bar 27 is adjusted as shown in Fig. 9 and prevents the valve 6 from being depressed regardless of any downward pressure that may be applied to the handle 1.

The device shown in Figs. 10 and 11 shows a combination window washer and wiper that by using the same brush 16 and folding it as shown in Fig. 10 the clamp 33 is applied thereto and by wetting the brush it is applied to the window by the operator, then by turning the screws 34 releases the wiper 33a from the clamp and brush, to dry the window with the wiper. After this operation it is then put back in place as shown in Fig. 10.

A nut 19a is shown in Figs. 3, 4 and 5 that holds the disk 19 in place on the valve 6 and the valve fits snugly in the bushing 7 thus preventing any leakage except when the valve is in open position.

A shoulder as at 6b on the valve 6 crushes the wax when the valve is depressed if it should become caked, and a blade 26 churns the liquid as the valve is rotated giving a complete spray upon the brush when the valve is depressed and rotating and the nut or valve end will not touch the floor at any time.

I claim:—

1. A device of the character set forth comprising a container having a bushing housed therein; a valve operable in said bushing; a brush fixed to said container and a handle to press downward to operate said valve to permit liquid to flow from the container and means to rotate the brush by its friction when contacting other objects and a hinged stop having a downward extension over which fits a forked latch which is held by a lock screw to prevent the brush and container from rotating when desired by the operator.

2. A device of the character set forth comprising a container having a flange at its top; a top to fit on the container and provided with a feed inlet and a cover for said inlet; a bushing mounted in the container; a propeller valve slidably mounted in said bushing and extending upwardly above the top when in closed position and its lower end extending downwardly below the container when in open position; a U shaped shoulder mounted on said valve; a plate mounted on said valve; a spring interposed between said plate and shoulder and a ball bearing race interposed between said plate and top of the container; a felt that fits over said container and held thereto by an elastic spring a distributor disc mounted on said lower end of the valve and means to feed liquid to said disc to be sprayed on the felt.

3. A device of the character set forth comprising a container having a flange at its top; a top to fit on the container and provided with a feed inlet and a cover for said inlet; a bushing mounted in the container; a propeller valve slidably mounted in said bushing and extending upward above the top when in closed position and its lower end extending downwardly below the container when in open position; a U shaped shoulder mounted on said valve; a plate mounted on said valve; a spring interposed between said plate and shoulder and a ball bearing race interposed between said plate and top of the container; said propeller valve having a blade to churn the liquid wax in said container; latches fixed to the bottom of said container; a brush mounted on said container and held in place by said container flange and said latches; a distributor disc mounted on said lower end of the valve and resting against the

bottom of the container provided with depressions and means to feed liquid to said disc to create a spray when the device is in operation.

4. A device of the character set forth comprising a handle; a container having a bushing housed therein; a propeller valve slidably mounted in said bushing provided with shoulders that churn and crush lumpy material; a brush fixed to said container and means to rotate said brush and container by friction when contacting other objects and a handle connected to said propeller valve that when pressed downward causes the valve to discharge the substance to be distributed and spread.

5. A device of the character set forth comprising

a handle; a container having a bushing housed therein; a propeller valve slidably mounted in said bushing; a brush fixed to said container; means to rotate said brush and container; a handle connected to said propeller valve that when pressed downward causes the valve to discharge the substance to be distributed and spread; a hinged stop having a downward extension over which fits a forked latch which is held by a lock screw to prevent the brush and container from rotating and a stop bar mounted on said hinged stop and locked by a thumb screw to prevent the propeller valve from opening when desired by the operator.

HARRY RANISH.

20	85
25	100
30	105
35	110
40	115
45	120
50	125
55	130
60	135
65	140
70	145
75	150