No. 809,580. PATENTED JAN. 9, 1906.

F. B. REICHENBACH.

FLOOR WAXING, POLISHING, AND CLEANING MACHINE.

APPLICATION FILED JAN. 26, 1905.

Fig. 5

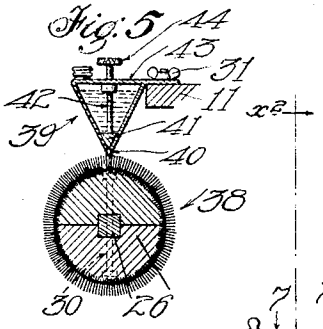


Fig. 1

Fig. 2

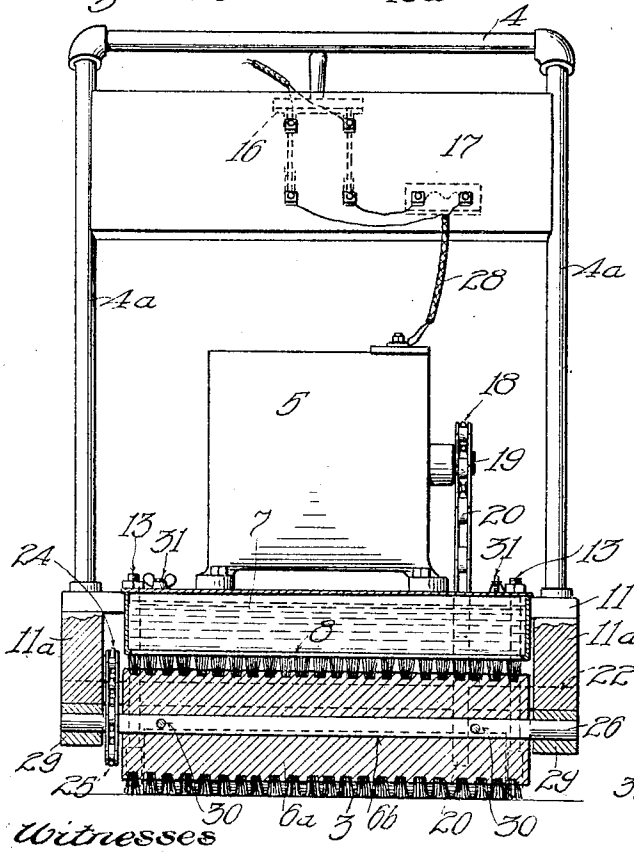


Fig. 3

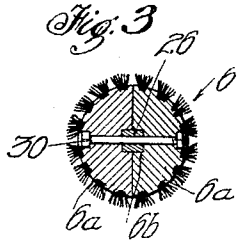
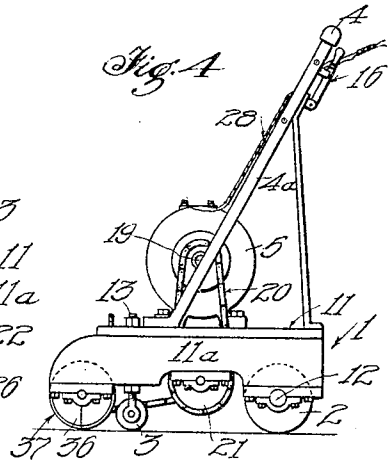


Fig. 4



Witnesses

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Inventor

Frank B. Reichenbach

by Townsend Bros

His Attys

UNITED STATES PATENT OFFICE.

FRANK B. REICHENBACH, OF LOS ANGELES, CALIFORNIA.

FLOOR WAXING, POLISHING, AND CLEANING MACHINE.

No. 809,580. Specification of Letters Patent. Patented Jan. 9, 1906.

Application filed January 26, 1905. Serial No. 242,718.

To all whom it may concern:

Be it known that I, FRANK B. REICHENBACH, a citizen of the United States, residing at Los Angeles, county of Los Angeles, and State of California, have invented a new and useful Floor Waxing, Polishing, and Cleaning Machine, of which the following is a specification.

The main object of this invention is to provide means whereby floors can be waxed and polished more quickly and economically than is possible with the present method of using hand brushes and rubbers.

A further object of the invention is to enable the same machine to be used for waxing and for polishing and also, if desired, for cleaning.

The accompanying drawings illustrate the invention.

Referring to the drawings, Figure 1 is a side elevation, partly in section, of the machine in condition for use in floor-waxing. Fig. 2 is a section on line x^2 x^2 in Fig. 1. Fig. 3 is a transverse section of a removable rotary brush for use in the machine. Fig. 4 is a side elevation of the machine in condition for use as a polisher. Fig. 5 is a sectional view of part of the machine, showing a different form of brush and means for supplying cleaning medium thereto.

The machine comprises a truck-frame 1, suitable supporting-wheels, and roller 2 3 therefor, a handle 4 for propelling the frame, a motor 5 on said frame, and a rotary device for operating on the floor and connected to be operated by the motor. Said rotary device may be a rotary waxing-brush, as shown at 6 in Fig. 1, a rotary polishing-drum, as shown at 36 in Fig. 4, or a rotary cleaning-brush, as shown at 38 in Fig. 5.

The machine also desirably comprises means for detachably supporting a receptacle for floor-treating material, such as wax, if the machine is being used for waxing, or benzin or other cleaning agent if it is being used for cleaning. Thus in Fig. 1, 7 designates a tank or trough adapted to contain wax and provided with a longitudinal slot or perforation 8 in its bottom extending over the brush 6, so that as the brush rotates its bristles will wipe against the surface of wax exposed at the slot or the perforated bottom of the receptacle and will take up a continual supply of wax. Brush 6 being placed at the open front end of truck-frame 1, said frame may have a closed top 11, on which the motor 5 rests, and depending side flanges or boards 11^a, on which are mounted the bearings 12 for the supporting-wheels 2. Roller 3 is mounted in bearings 13^a at the lower ends of screw-rods 13, that pass up through brackets 14 on the inside of side pieces 11^a and up through the top 11, being provided with nuts 15 15′ above the top 11 and below brackets 14 to adjust the vertical position of said rods and the roller carried thereby.

The motor may be any suitable form of electric motor, controlled by a switch and starting device 16, mounted on a cross-piece 17 on the side bars 4^a of handle 4. 28 designates flexible supply connections for the motor. A sprocket-wheel 18 on the shaft 19 of the motor is engaged by a sprocket-chain 20, that passes down through the top 11 and engages a sprocket-wheel 21 on a shaft 22, mounted in bearings 23 on bottom of side pieces 11^a. Another sprocket-wheel 24 or shaft 22 is engaged by a sprocket-chain which extends under the truck-body or frame 1 and engages a sprocket-wheel 25 on shaft 26 of roller 6. This construction brings the running parts substantially out of sight and out of the way. Shaft 26 is mounted in bearings 29 on bottom of side pieces 11^a.

It is preferable to make the roller or brush means 6 detachable from shaft 26, so as to enable renewal or substitution of other roller means. For this purpose the roller of the rotary brush may be split or made in two parts 6^a, embracing the shaft 26 between them, each part having a longitudinal groove 6^b to fit the shaft, a bolt 30 passing through perforation in parts 6^a and 26 to fasten said parts together. The trough or receptacle 7 for the wax is also desirably made detachable, so that it can be renewed when the machine is being used for polishing or cleaning. For this purpose said trough may have arms 7^a extending over the frame-top 11 and fastened thereto by clamp-screws 31, traversing slots 7^b in said arms.

In using the machine for floor-waxing receptacle 7 will be filled with wax or suitable preparation, roller 3 will be adjusted, by means of nuts 15 15′, to raise or lower the front end of the frame, so as to allow the brush 6 to bear on or engage the floor in the proper manner, and the electric motor is set in operation. On thus moving the machine over the floor the rotation of brush 6 will cause the wax to be taken from receptacle 7 and applied to the floor in an even uniform

coat. After this operation is finished the floor may be polished, using the same machine, the roller 6 being removed and a polishing-roller 36 (see Fig. 4) being substituted. This polishing-roller is split, as above described for roller 6, and is provided with a circumferential layer 37 of suitable polishing material, such as velvet carpet. The receptacle 7 may in that case be removed.

The same machine may also be used for cleaning or resurfacing the floor, a stiff steel-bristle brush 38, Fig. 5, being substituted for brush 6 and a receptacle 39 being substituted for receptacle 7, said receptacle 39 adapted to contain benzin or other cleaning fluid and having perforations 40 in its bottom through which the fluid will pass down onto the brush. A valve 41 is provided for stopping the flow of benzin or other fluid from the receptacle 39, said valve consisting, for example, of a triangular strip fitting in the lower end of the receptacle and closing the opening or perforation 40 at the bottom thereof and being operated by a screw-rod 42, extending through the cover 43 of the receptacle, and having a manual operating means, such as a round milled head 44, at its upper end.

What I claim is—

1. A floor-waxing machine comprising a truck-frame, a motor on said frame, a rotary brush mounted on said frame, and connected to be driven by the motor, and a receptacle on the frame for supplying wax to said brush, said receptacle having a perforate bottom against which the brush wipes in its rotation.

2. A floor-waxing machine comprising a truck-frame, a motor on said frame, a rotary brush detachably mounted on said frame and connected to be driven by the motor, and a receptacle detachably mounted on the frame for applying wax to said brush, said receptacle having a perforate bottom against which the brush wipes in its rotation.

3. A floor waxing and polishing machine comprising a truck-frame, a motor on said frame, a shaft on the frame connected to be driven by the motor and interchangeable rotary waxing and polishing devices detachably mounted on said shaft, and a wax-carrying receptacle detachably mounted on the frame and having an opening for exposing the wax to the rotary waxing device.

4. A floor-waxing machine comprising a truck-frame, a motor on said frame, a rotary brush mounted on said frame and connected to be driven by the motor and a receptacle on the frame for supplying wax to the brush and roller means for engaging the floor and adjustably connected to the frame to adjust the height of the part of the frame carrying the rotary brush.

5. A machine for operating upon floors comprising a truck-frame, a motor on said frame, a rotary brush mounted on said frame and connected to be driven by the motor, a receptacle on the frame for supplying fluid to said brush and roller means for engaging the floor and adjustably connected to the frame to adjust the height of the part of the frame that carries the brush.

In testimony whereof I have hereunto set my hand, at Los Angeles, California, this 19th day of January, 1905.

FRANK B. REICHENBACH.

In presence of—

A. P. KNIGHT,

JULIA TOWNSEND.