S. RADIMAK.

BRUSHING AND POLISHING MACHINE.

APPLICATION FILED JULY 20, 1921.

1,417,768

Patented May 30, 1922.

2 SHEETS—SHEET 1.

FIG-1

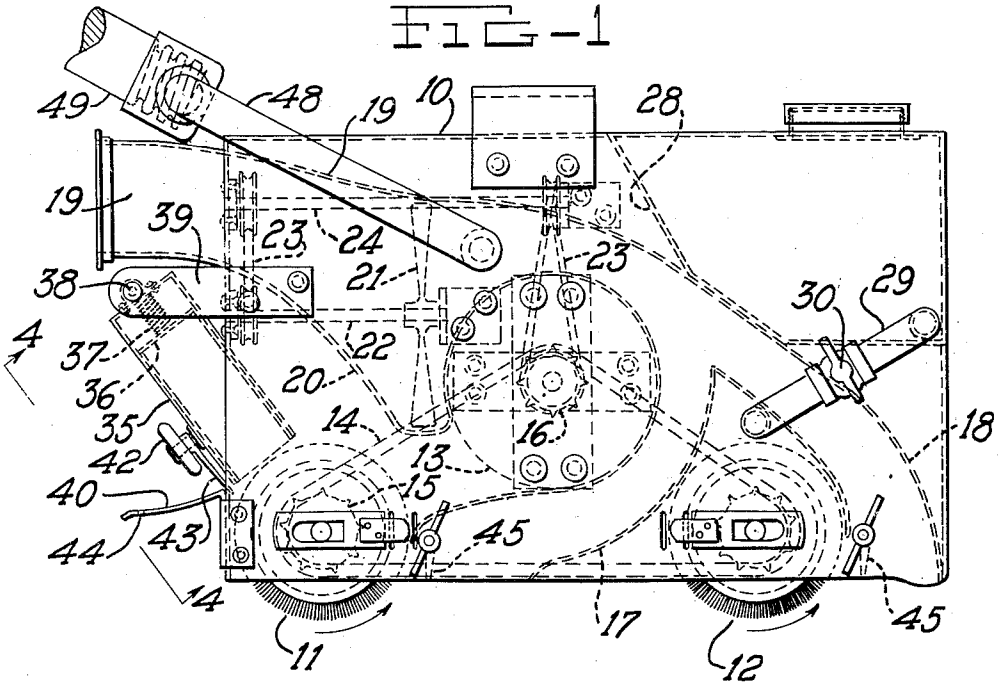
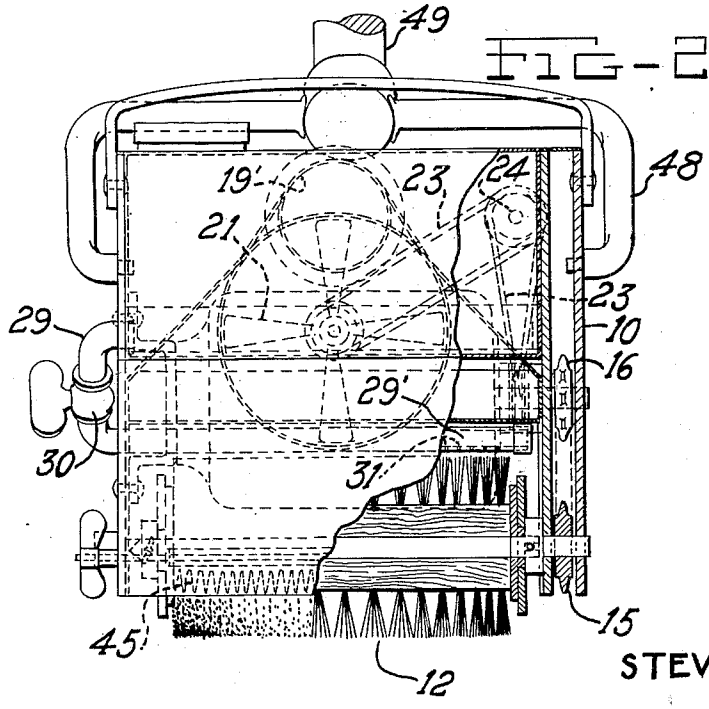



FIG-2




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2 SHEETS—SHEET 2.

FIG-3

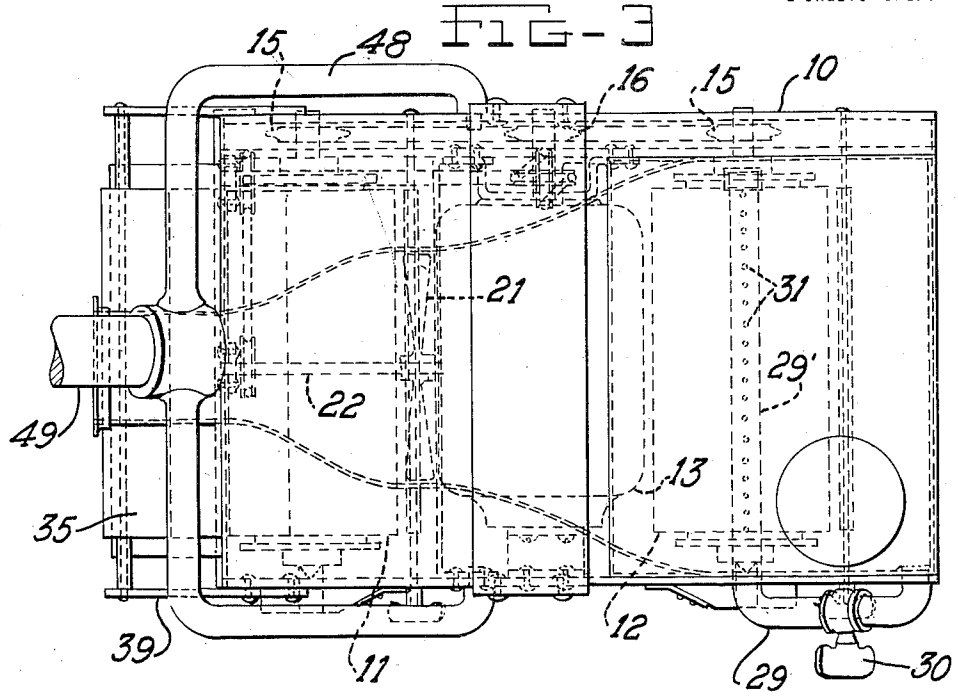



FIG-4

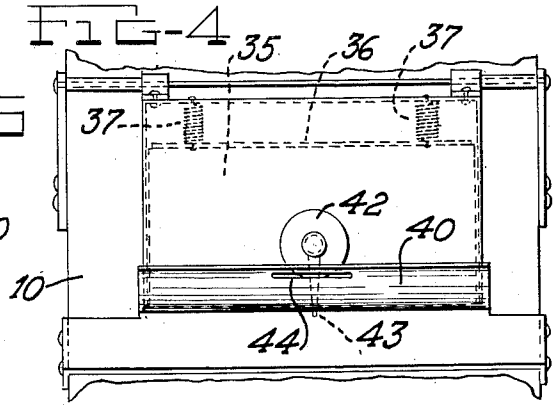



FIG-5

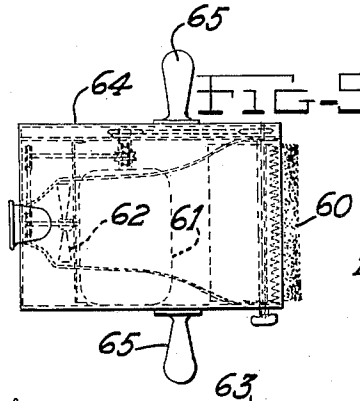
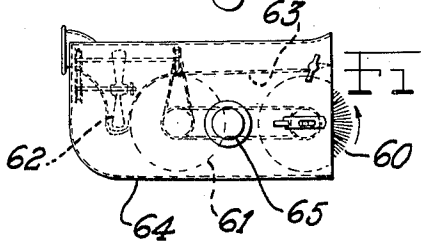



FIG-6




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# UNITED STATES PATENT OFFICE.

STEVEN RADIMAK, OF NEW YORK, N. Y.

## BRUSHING AND POLISHING MACHINE.

1,417,768. Specification of Letters Patent. Patented May 30, 1922.

Application filed July 20, 1921. Serial No. 486,119.

*To all whom it may concern:*

Be it known that I, STEVEN RADIMAK, citizen of Hungary, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Brushing and Polishing Machines, of which the following is a specification.

This invention relates to a brushing and polishing machine which may be used for polishing and sweeping floors, or for brushing and cleaning other objects.

The invention has for a general object to provide a novel and simple machine of this type.

More specific objects of the invention are to provide for the waxing of one or more of the brushes when the machine is used to polish floors, and to provide a special arrangement of the bristles which improves the efficiency of the brushes.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

Fig. 1 of the drawings is a side elevation of a brushing and polishing machine constructed according to the invention.

Fig. 2 is a front end view with parts broken into section.

Fig. 3 is a plan view.

Fig. 4 is a partial elevational view of the rear portion of the machine and looking in the direction indicated by the arrows 4—4 in Fig. 2.

Fig. 5 is a plan view of a modified form.

Fig. 6 is a side view of the modified form shown in Fig. 5.

Referring now to the drawing, my improved brushing and polishing machine here comprises a rectangular box 10 having an open bottom through which a pair of rotary cylindrical brushes 11 and 12 project, the box being supported on these brushes. These brushes are rotated by an electric motor 13 suitably mounted in a box 10, a sprocket chain 14 being looped over suitable sprocket wheels 15 and 16 on the brush shafts and the rotor of the motor 13.

The material dislodged by the brushes 11, 12 is sucked up through a pair of conduits 17 and 18 which have their intake ends located in front of the respective brushes and facing downwardly these conduits uniting in a single rearwardly extending conduit 19 which is projected rearwardly through the rear wall of the box and is adapted to have a bag or the like secured to its projecting neck portion 19′. This conduit 19 has a depending pocket 20 formed therein within the box to accommodate a suction fan 21. This fan 21 is here shown as mounted on a shaft 22 driven by the motor 13 by means of belts 23 looped over suitable pulleys on a countershaft 24 and on the shaft 22 and the rotor of the motor 13.

Located in the front of the box 10 is a tank 28 adapted to contain a polishing liquid, such as oil, which is fed to the front brush 12. Leading from this tank is a pipe 29 controlled by a valve 30 and extending along the top of the brush 12 as at 29′ this pipe having a series of small holes 31 spaced therealong for discharge of the liquid on the brush.

Located in suitable proximity to the rear brush 11 is a wax feeding device which comprises a guide-box 35 having its lower side open and located in close adjacence to the periphery of brush 11. This box 35 is adapted to contain and act as a guide for a cake of wax which is inserted in the open side thereof. This cake of wax is pressed against the brush 12 by a follower 36 urged forwardly by the coiled expansion springs 37. The box 35 is adapted to be swung out of registry with the brush 12 when desired, and to this end it is hinged at its upper side as at 38 to arms 39 fixed to box 10.

To prevent the cake of wax from being discharged by springs 37 from the box 35 when the latter is swung away from brush 12 a plate 40 is fixed to the rear end of the main box 10, this plate being arranged with a curvature concentric to the pivot point 38 of the box 35 and being suitably positioned with respect to brush 11. To hold the box 35 in the desired position a latch is provided in the form of a handwheel 42 to which is fixed a finger 43. This finger 43 may be engaged either over the front edge of the plate 40, as shown in Fig. 1, or in a slot 44 adjacent the outer edge of the plate.

As shown in Fig. 2 the brushes 11, 12 preferably have the bristles spaced more closely together at the ends than at the centre, this arrangement acting to prevent tendency of the device to tilt sideways when being moved along the floor or other surface.

The brushes also preferably have rubber washers at the ends thereof partially overlapping the bristles. Hinged adjacent each brush 11, 12 is a comb 45 which may be swung into engagement with the brush to dislodge material therefrom and cause it to be directed into the adjacent chute.

For running the device along the floor it may have a bail 48 hinged thereto and provided with an elongated push handle 49.

In the modification shown in Figs. 5 and 6 a single brush 60 is provided, being driven by a motor 61, which also drives a suction fan 62 in a conduit 63. In this modified form the box 64 is provided with a pair of fixed handles 65 which may be grasped by the user.

Having thus described my invention what I claim as new and desire to protect by Letters Patent of the United States is as follows:

1. In a device of the class described, a pair of roatry brushes, means for supporting a cake of wax adjacent one of the brushes, and means for delivering a polishing liquid on the other brush.

2. In a device of the class described, a pair of rotary brushes arranged one before the other, means for delivering a polishing liquid on the front brush and means for supporting a cake of wax in contact with the rear brush.

3. In a device of the class described, a pair of rotary brushes located one in advance of the other, and means for applying oil to the front brush and wax to the rear brush.

4. A device of the class described comprising a box, a pair of rotary cylindrical brushes mounted in said box, a tank for a polishing liquid in said box, a perforated pipe leading from said tank above and parallel to one of said brushes, and a guide box for a cake of wax located adjacent to the other brush.

5. A device of the class described comprising a box, a pair of rotary cylindrical brushes mounted in said box, a tank for polishing liquid in said box, a perforated pipe leading from said tank above and parallel to one of said brushes, and a guide box for a cake of wax located adjacent the other brush, and a spring pressed follower in said guide box.

6. A device of the class described comprising a box, a pair of rotary cylindrical brushes mounted in said box, a tank for a polishing liquid in said box, a perforated pipe leading from said tank above and parallel to one of said brushes, and a guide box for a cake of wax located adjacent the other brush, and a spring pressed follower in said guide box, said guide box having one side open and being hinged at its opposite side, and a retainer plate adapted to register with the open end of the guide box when the latter is swung out of registry with the said brush.

7. In a device of the class described, a rotary cylindrical brush, a guide box for a cake of wax hinged at one side and having its opposite side open and adapted to be swung into or out of registry with the said brush, and a retainer plate curved concentric to the pivot point of the guide box.

8. In a device of the class described, a rotary cylindrical brush, a guide box for a cake of wax hinged at one side and having its opposite side open and adapted to be swung into or out of registry with the said brush, and a retainer plate curved concentric to the pivot point of the guide box, said retainer plate having a slot therein, a hand wheel pivoted on said box, and a finger fixed to said hand wheel and adapted to engage in said slot.

In testimony whereof I have affixed my signature.

STEVEN RADIMAK.