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FLOOR DRESSING APPARATUS.
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Witnesses:

Louis Henry Veronneau, dit Vernon,
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By

Attorneys

THE NERGIS PETERS CO., WASHINGTON, D.C.
To all whom it may concern:

Be it known that I, LOUIS HENRY VERRONEAU, DIT VERNON, a citizen of the United States of America, residing at Viauville, near the city and District of Montreal, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Floor-Dressing Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to floor dressing apparatus.

The object of my invention is to provide a construction which will not mar a floor or similar body when it is moved thereover in the dressing operation. A further object is to provide a rotatable dressing member with an adjustable support which is of simple construction, and which may be easily operated to vary the cut of the dressing member. A further object is to provide the dressing member with an extension projecting beyond the plane of the side of the supporting base, so that the apparatus may work into a corner. A further object is to provide a detachably supported reciprocable means for polishing the floor as it is dressed.

My invention consists of the construction, combination and arrangement of parts, as herein illustrated, described and claimed.

In the accompanying drawings, forming part of this application, I have illustrated one form of embodiment of my invention, in which drawings similar reference characters designate corresponding parts, and in which:

Figure 1 is a side elevation; Fig. 2 is a plan view of the handle of the apparatus; Fig. 3 is a plan view of the complete apparatus; Fig. 4 is an inverted plan view of the complete apparatus; Fig. 5 is a front elevation; Fig. 6 is a vertical transverse section through the supporting plate of the apparatus, taken approximately on line 6—6 of Fig. 1, looking in the direction indicated by the arrow; Fig. 7 is a vertical section through the supporting plate, taken approximately on line 7—7 of Fig. 6, looking in the direction indicated by the arrow, and partly broken away to show the construction of the runner attaching means; Fig. 8 is a transverse vertical section through the cutting blade shaft adjacent one end of the cutting blades; Fig. 9 is a perspective view of one of the cutting blades; Fig. 10 is a transverse section through the cutting blade shaft and the blades, showing the method of attachment; and, Fig. 11 is a vertical section through one end of the cutting blade shaft, showing the arrangement of loose and fast pulleys.

Referring to the drawings, 1 designates a base plate having side flanges 2, which flanges are provided with longitudinal slots 3. Disposed in the slots 3 are longitudinal skids or runners 4, maintained in position by means of set-screws 5, so that they may be easily removed. Rollers 6 are disposed in the rear ends of the slots 3, and rotatably supported by pintles 7 disposed transversely through the flanges 2. By means of the rollers 6, the front end of the apparatus may be tilted upward and the same easily transported from place to place on the rollers. A yoke 8 has its ends pivotally secured to the plate 1, in any suitable way, and terminates in an operating handle, which is preferably hollow to receive a conductor, the passage of a motive fluid through which is governed by a switch 9 on the handle. The conductor 9 being connected to a suitable source of power, extends to a motor 10 of any ordinary construction, which may be bolted to the supporting plate 1, and which is provided with a shaft 11.

Disposed on the extreme outer end of the shaft 11 of the motor is a fixed pulley 12, and adjacent thereto is a loose pulley 13. A driving belt 14 is adapted to run over either of said pulleys, and over a fixed pulley 15 or a loose pulley 16 disposed on a horizontal shaft 17. The shaft 17 is provided with a squared portion 18 intermediate of its ends, and is also provided with squared ends 19, one of which projects some distance beyond the plane of one side of the plate 1, so that the apparatus may be worked into a corner.

Cutting blades or other tools 20 are provided with slots 21 to receive the set-screws 22, by means of which the blades may be secured to said squared portions of the shaft 17.

By mounting the base plate carrying the floor dressing tool on short narrow runners as illustrated, the effective working of the tool is in no way dependent upon the surface over which the base plate travels. The cutter shaft is disposed across the front of the runners, and consequently meets all uneven por-
tions of the floor which would pass beneath the runners and beneath the base plate. By placing the runners directly in the rear of the dressing tool, the surface is evened off by the dressing tool ahead of the runners, and therefore the runners have a perfectly even surface over which to travel.

The shaft 17 is rotatably supported by the forward ends of a supporting yoke 23, which is disposed on the pivotal supports 24 carried by the inner faces of the flanges 2 of the plate 1. A lever 25 has one end secured to the rear end of the yoke 23, and has its opposite end connected to the lower end of a set-screw 26, which is screw-threaded through a lug 27 on the rear end of the plate 1. A suitable hand-wheel 28 is secured on the upper end of the set-screw 26, by means of which construction the lever 25 may be moved to rock the yoke 23, and thereby raise or lower the shaft 17 to vary the depth of the cut of the tools secured on said shaft. Suitable buffers of rubber or other resilient material 29 are secured to the forward ends 20 of the yoke 23, so that when the apparatus is worked into a corner it will not mar any vertical projection from the surface being dressed.

Removably secured to the forward end of the plate 1, is a supporting arm 30, provided with a vertical slot 31, and also provided with an intersecting horizontal slot 32. Slidably disposed in the horizontal slot 32, is a block 33, provided on its under surface with a bifurcated lug 34, which extends through the vertical slot 31 and below the plane of the under side of the supporting arm 30. Disposed in the bifurcated lug 34 is an ear 35, formed on the upper surface of a block 36, and pivotally maintained in engagement with the bifurcated lug 34 by means of the pin 35*. This pivotal connection permits the block 36 to have a slight play to compensate for any inequalities of the surface being dressed. The block 36 is provided with transverse channels 37 formed in its upper face, in which channels are disposed the removable holding strips 38, by means of which a sheet of abrading material 39 may be held on the block 36. The slots 31 and 32 are closed at the outer end of the arm 30 by means of the removable block 40, which is held in place by means of a set-screw 41. The slideable block 33 is provided with an upwardly projecting lug 42, which extends through the vertical slot 31 above the plane of the upper surface of the supporting arm 30, and by means of a pin 43 the lug 42 is pivotally connected to an offset eccentric rod 44, one end of which rod is connected to an eccentric strap 45 on an eccentric 46, which is secured on the motor shaft 11. The rotation of the motor shaft 11 causes reciprocation of the block 33, and the parts immediately connected thereto.

By means of the arrangement of fixed and loose pulleys, either the cutting or polishing construction described may be run independently, or both may be run simultaneously. The supporting arm 30 being easily removable, the eccentric rod 44 and the strap 45 may be removed and the apparatus used only for dressing a surface.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is——

1. A floor polishing apparatus comprising the combination of a base plate, skids on the base plate, a rotatable dressing tool adaptably supported from the base plate, and means for actuating the dressing tool.

2. A floor dressing apparatus comprising a base plate, supporting skids on said base plate, and mounted at the opposite sides thereof a dressing tool carried by said base plate, and means for operating said dressing tool.

3. A floor dressing apparatus comprising the combination of a base plate, skids removably secured on the base plate, a rotatable dressing tool adaptably supported from the base plate, and means on the base plate for rotating the tool.

4. A floor dressing apparatus comprising the combination of a base plate provided with vertical flanges having channels therein, skids secured in the channels, a rotatable dressing tool adaptably supported from the base plate, and means for rotating the tool.

5. A floor dressing apparatus comprising the combination of a base plate provided with flanges having channels disposed therein, skids secured in the channels, rollers disposed in the channels at one end of the base plate, a dressing tool adaptably supported from the base plate, and means for rotating the tool.

6. A floor dressing apparatus comprising a base plate, a motor on said base plate, a rotatable dressing tool adapted to be operated by said motor, and supporting skids mounted on said base plate directly in the rear of said dressing tool and at the opposite edges thereof.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

LOUIS HENRY VERONNEAU, DIT VERNON.

Witnesses:
C. C. COUSINS,
E. M. SLINEY.