June 24, 1930. W. H. HUGHES 1,767,983

FLOOR POLISHER

Original Filed Jan. 8, 1927 2 Sheets-Sheet 1

Fig. 1.

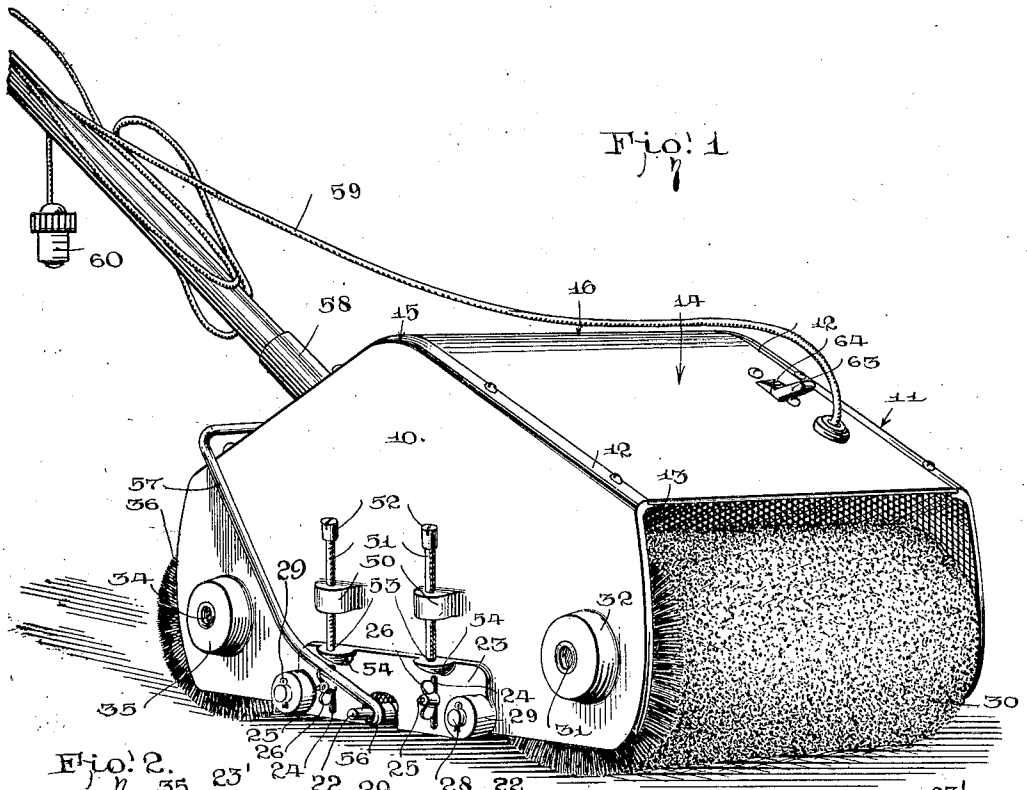
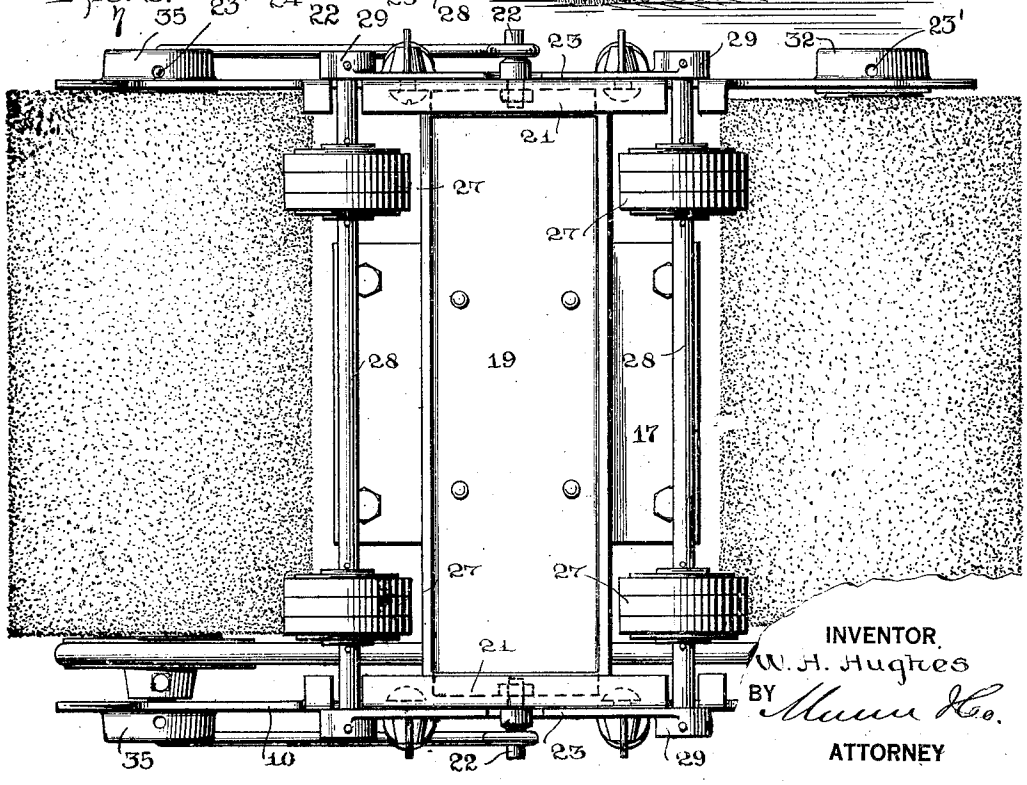


Fig. 2.



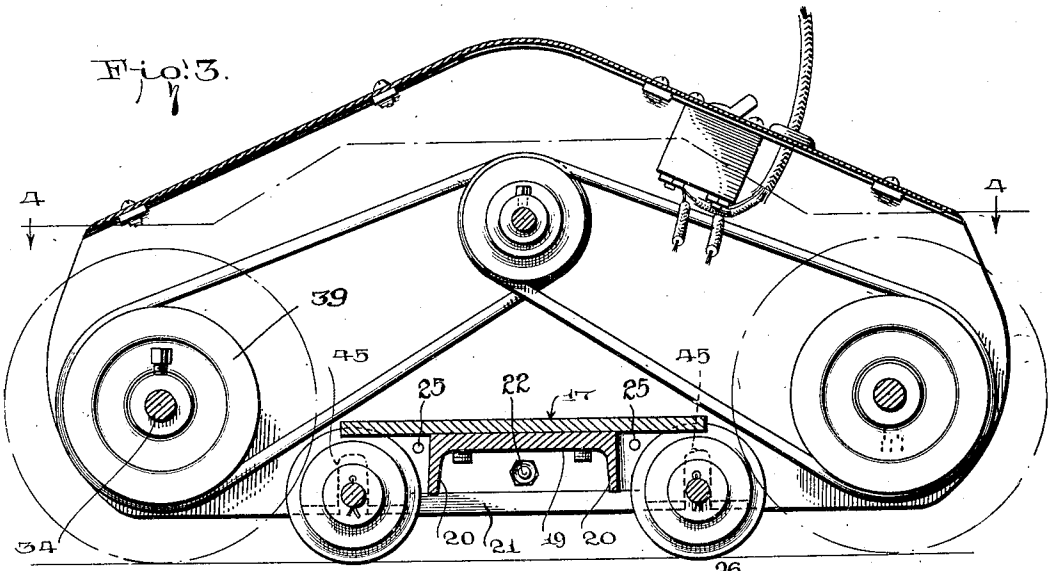
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Original Filed Jan. 8, 1927 2 Sheets-Sheet 2

Fig. 3.



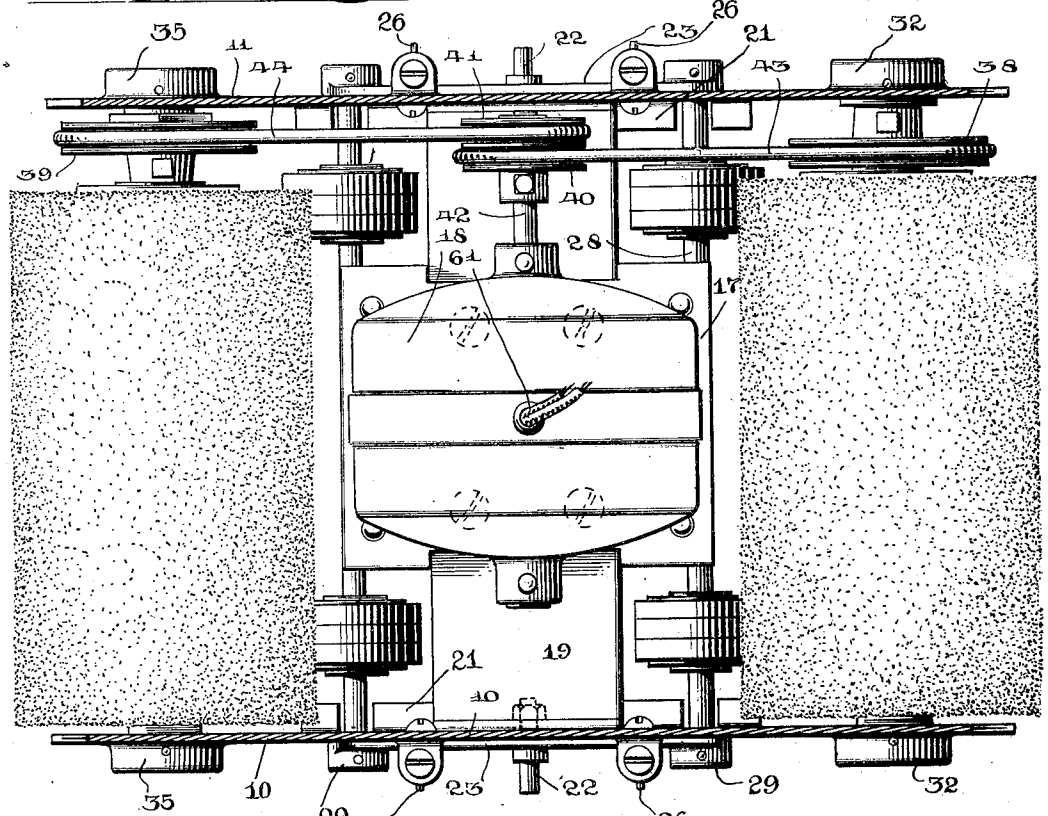


Fig. 4.

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UNITED STATES PATENT OFFICE

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FLOOR POLISHER

Application filed January 8, 1927, Serial No. 159,961. Renewed April 5, 1930.

This invention relates to floor polishers adapted to be driven by some suitable power.

An object of the invention is the compact, unitary structure which may be readily applied to the floor and easily operated with means for adjusting the horizontal position of the brushes.

A further object of the invention is the provision of a device for polishing floors which is of such simple construction that a metal casing is adapted to support the operating handle and a carriage for supporting the brushes, the carriage and brushes being removable as a unit from the casing.

This invention will be best understood from a consideration of the following detailed description, in view of the accompanying drawings forming a part of the specification; nevertheless it is to be understood that the invention is not confined to the disclosure, being susceptible of such changes and modifications which shall define no material departure from the salient features of the invention as expressed in the appended claim.

Figure 1 is a view in perspective of the floor polisher,

Figure 2 is a bottom plan view of the same,

Figure 3 is a vertical longitudinal section of the polisher, and

Figure 4 is a horizontal section taken along the line 4—4 of Figure 3.

Referring to the drawings, a casing is shown formed of a pair of side walls 10 and 11 having flanges 12. Each flange is provided with a channel portion 13 adapted to receive an edge of a cover plate 14. The upper end of each side plate is V-shaped, as shown at 15, and a cover plate is bent at 16 intermediate its ends to conform to the design of the V-shaped portion of the side walls.

A carriage is removably mounted on the bottom of the casing and provided with a table plate 17 adapted to provide a support for an electric motor 18. The plate is carried by a transversely disposed table 19 having depending flanges 20 resting upon flanges 21 formed integrally with the side walls 10 and 11. The ends of the table are secured by means of bolts 22 to the side walls of the casing.

An adjusting plate 23 is secured to the outer face of a side wall and is provided with slots 24 adapted to receive bolts 25 upon which are threaded thumb nuts 26. By means of the slots and bolts and nuts the plates may be adjusted vertically for raising or lowering the supporting rollers 27 rotatably mounted on axles 28, the axle being carried in bearings 29 formed in the plates 23.

A brush 30 is rigid with an axle 31 carried at its opposite ends by bearings 32 which are formed integrally with the side walls. A radial passage 23′ is provided in each bearing whereby the end of the shafts may be lubricated. A shaft 34 is mounted in bearings 35 formed integrally with the side walls and a revolving brush 36 is rigid with the shaft 34.

A grooved pulley 38 is rigidly mounted on the shaft 31 while a grooved pulley 39 is rigidly mounted on the shaft 34. A pair of pulleys 40 and 41 are pinned to the motor shaft 42 and are driven by the motor. A belt 43 is trained around the pulleys 40 and 38 while a belt 44 is trained around pulleys 39 and 41 so that as the shaft 42 is revolved the pulleys 38 and 39 are revolved as are their respective brushes 30 and 36.

The ends of the axles 28 project through slots 45 formed in the side walls of the casing so that when the plates 23 are adjusted the axles may be moved bodily as a unit with said plate.

Lugs 50 project laterally from the side walls and are provided with internally threaded passages to receive screws 51. These screws have at their upper free ends a slotted portion 52 adapted to be engaged by some suitable tool for causing rotation of the screws. The lower free ends 50 of the screws are adapted to engage lips 54 projecting laterally from the adjusting plates 23 in order to limit the upward movement of the plates and for aiding in maintaining the predetermined position of said plates.

The bolts 22 extend sufficiently beyond the side walls of the casing to receive eyes 56 at the free ends of a bail 57. This bail engages around the upper part at the rear of the casing to which is connected a handle 58. The handle also provides means for supporting an

electric cord 59 which has a plug 60 adapted to be connected with the usual house socket with the end of the cord projecting through the top 14 of the casing and connected, as shown at 61, to the motor 18. A switch 63 projecting through an opening 64 in the top of the casing is adapted to provide means for cutting off the current to the motor.

I claim:

A floor polisher comprising a casing provided with side walls having inturned flanges projecting in a horizontal plane, a table providing a support for a motor located within the casing and having depending flanges resting on the inturned flanges, the ends of the table having means for securing the table to the casing, lugs projecting from the sides of the casing and provided with threaded vertical passages, screws mounted in the passages of the lugs, a plate associated with each side wall of the casing, means including the screws for adjustably positioning each plate in a vertical plane, lips projecting from the upper edges of each plate and adapted to be engaged by the screws, axles mounted on the plates and adapted to be adjusted vertically when the plates are adjusted, supporting rollers on the axles, brushes rotatably carried on the interior of the casing and projecting below the bottom of the casing, the adjustment of the plates and likewise the axles being adapted to regulate the polishing contact of the brushes with the floor, the casing being vertically adjustable on the plates when the screws are moved towards or away from the lips.

WILLIAM HENRY HUGHES.