

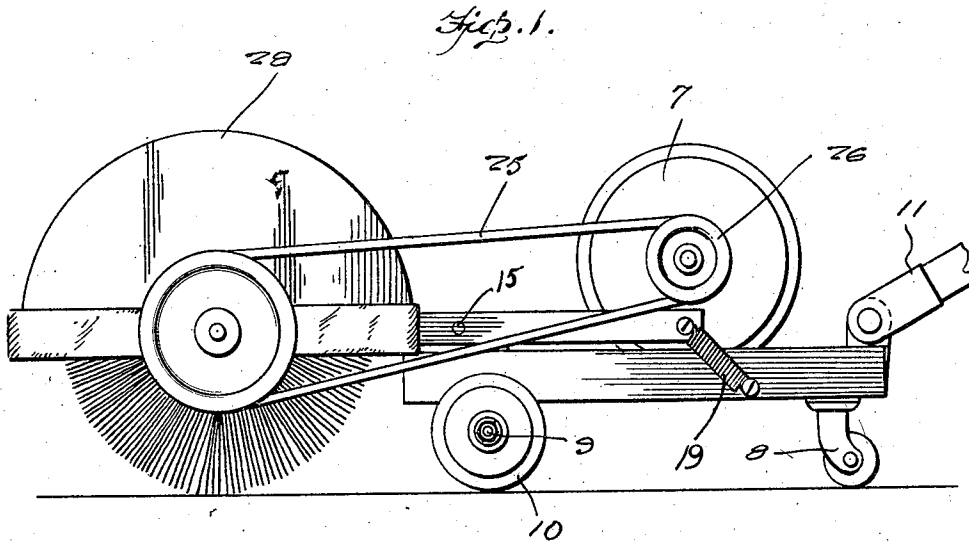
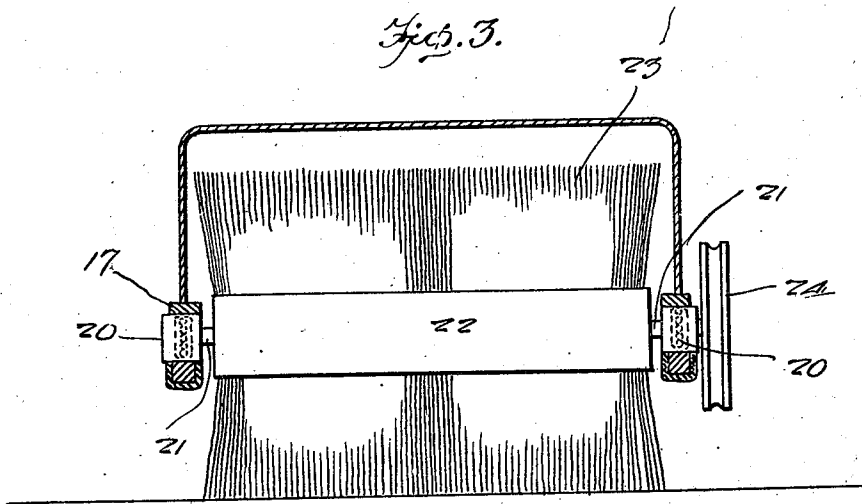
Aug. 9, 1927.

1,638,591

R. E. MERRILL
FLOOR POLISHING MACHINE

Filed April 6, 1926

2 Sheets-Sheet 1



Inventor
R. E. Merrill

By *Clarence A. O'Brien*
Attorney

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Fig. 2.

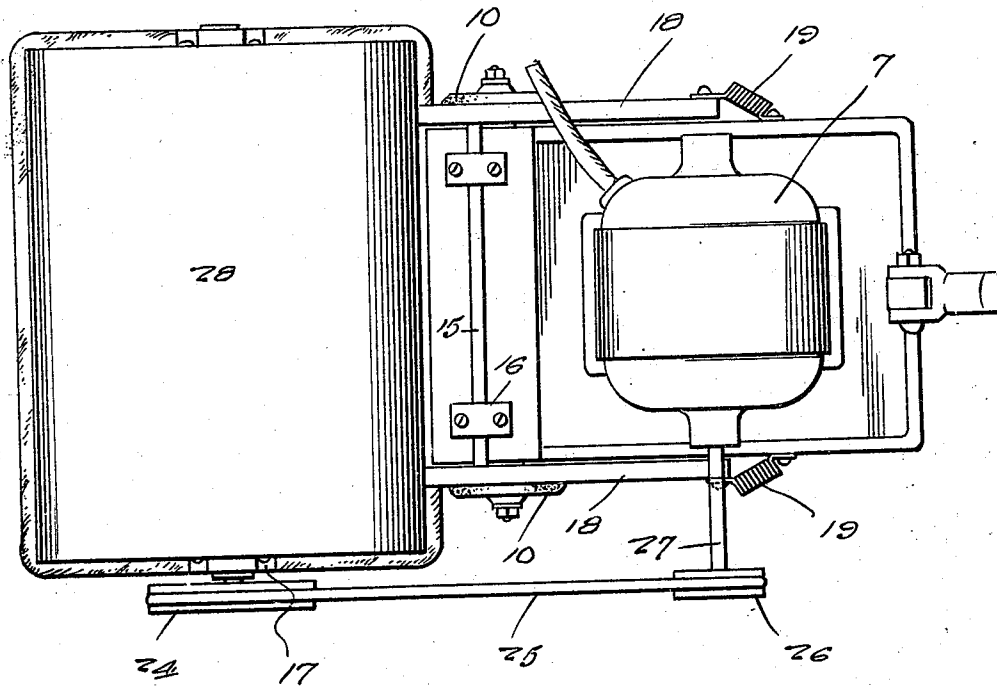
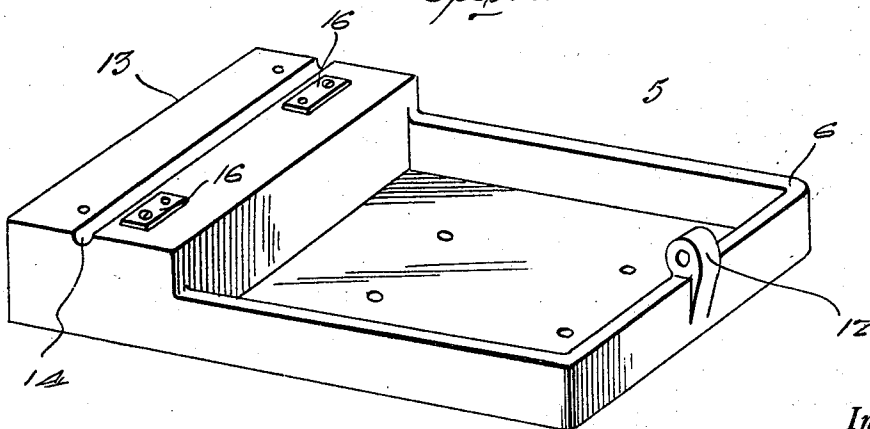


Fig. 4.



Inventor
R. E. Merrill

By *Clarence A. O'Brien*
Attorney

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UNITED STATES PATENT OFFICE.

RILEY E. MERRILL, OF AUSTIN, TEXAS.

FLOOR-POLISHING MACHINE.

Application filed April 6, 1926. Serial No. 100,105.

This invention relates to a floor polishing machine and has for its primary object to provide such a device that may be readily moved over the floor surface by hand, the same including a rotary polishing brush that is driven by an electric motor supported upon the frame of the machine in order that the floor will be highly polished during said movement.

10 A further object of the invention is to provide a floor polishing machine of this character wherein the brush carrying frame is pivotally mounted upon the base of the machine in order that the same may raise and lower with respect thereto for compensating for the uneven surfaces of a floor.

Other objects will become apparent as the nature of the invention is better understood, the same comprising the novel form, combination and arrangement of parts hereinafter more fully described shown in the accompanying drawing and claimed.

In the drawing wherein like reference characters indicate corresponding parts throughout the various views:

Figure 1 is a side elevation of a floor polishing machine constructed in accordance with the present invention.

Figure 2 is a top plan view thereof.

30 Figure 3 is a transverse section through the brush carrying ends of the machine for more clearly disclosing a protecting hood for the top of the brush for preventing particles of dirt, oil, and the like from being thrown upwardly during the rotation of the brush, and

Figure 4 is an enlarged perspective of the motor carriage of the machine.

40 Now having particular reference to the drawing, my novel floor polishing machine constitutes the provision of a carriage 5 of substantially rectangular shape that is formed at its side and rear edges with a vertical flange 6 within which is arranged a high speed electric motor 7 that is secured to the carriage by bolts or other attaching means.

Depending from the carriage 5 at the rear edge thereof is a roller caster 8 while extending beneath the carriage at its forward end is an axle 9 upon the opposite ends of which are mounted supporting wheels 10—10, said caster and said wheels obviously permitting the carriage to be readily moved from place to place through medium of an operating handle 11, fragmentarily disclosed in Fig-

ures 1 and 2, that is pivotally secured to an ear 12 formed upon the upper edge of the flange 6 at the rear edge of said carriage.

The carriage 5 is in the form of a casting 60 as clearly disclosed in Figure 4 and at the forward side thereof is a transversely extending block 13 that is formed on its top surface with a cross groove 14 within which is disposed a rod 15 that is secured in position by reason of metallic plates 16—16 that are arranged thereacross and secured at their opposite ends to the block at opposite sides of the groove, Figures 2 and 4.

The machine further constitutes the provision of a rectangular shaped brush carrying frame 17 at the forward end of the carriage 5, the length thereof being at right angles to the length of the carriage as clearly shown in Figure 2. Formed integrally 75 with the rear bar of this frame is a pair of spaced rearwardly extending arms 18—18 that are formed with openings adjacent their forward ends for receiving the opposite projecting ends of the rod 15 secured within the block 13 of said carriage 5 in order that the frame may swing upon the carriage in the manner hereinafter more fully described.

Said brush frame is normally maintained 85 in a position horizontally with respect to the carriage through medium of coil springs 19—19 that are anchored to the ends of the arms 18—18 and the adjacent sides of the carriage respectively.

90 Journaled within roller bearings 20—20 upon the opposite side bars of the brush frame are pintles 21—21 upon the opposite ends of the central roller 22 of a rotary floor polishing brush 23. One of the pintles of the brush roller extends through its respective bearings and is equipped with a grooved pulley 24 to have trained therearound a belt 25 that extends rearwardly and is in turn trained around a smaller pulley 26 upon the adjacent end of the armature shaft 27 of said motor 7.

For preventing particles of wax, dirt, or the like from flying upwardly during the operation of the device, there is provided 105 a metallic shield 28 of semi-cylindrical shape that is arranged over the top side of the brush as more clearly shown in the sectional view of Figure 3, the edge of the shield adapted to rest or be suitably secured to the top of the brush frame 17 as desired. 110 It will thus be seen that I have provided

a highly novel, simple, and efficient form of floor polishing machine that is well adapted for all the purposes heretofore designated and even though I have herein shown 5 and described the device as consisting of certain detailed structural elements, it is nevertheless to be understood that changes may be made in the present embodiment of the invention which fall within the 10 spirit and scope of the appended claim.

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

15 In a floor polishing device of the character described a wheeled carriage, a motor an-

chored upon the carriage, a transversely extending block formed integrally with the carriage at the forward side thereof, said block being formed with a cross groove, a 20 rod within said groove, a brush frame at the forward end of said carriage and pivotally secured to the opposite ends of the rod, springs secured to said carriage and brush frame normally holding said frame horizontal, a rotary brush within the frame and 25 a driving connection between the brush and said motor.

In testimony whereof I affix my signature.

RILEY E. MERRILL.