Aug. 26, 1924. 1,506,696

R. WALSER

SHOE CLEANING DEVICE

Filed March 23, 1922 2 Sheets-Sheet 1

Fig. 1.

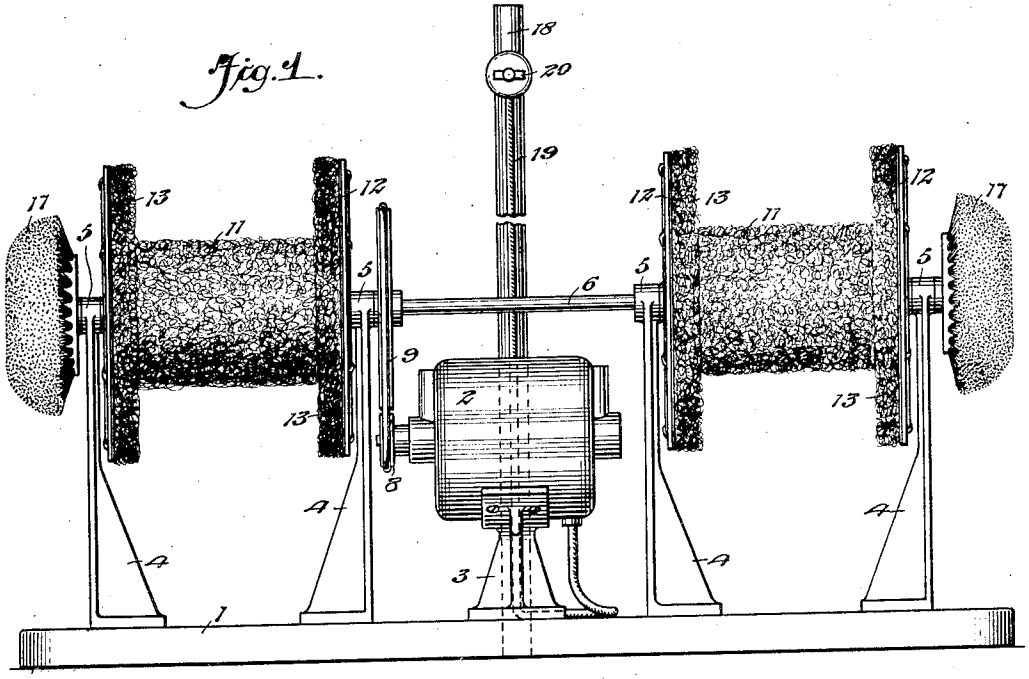
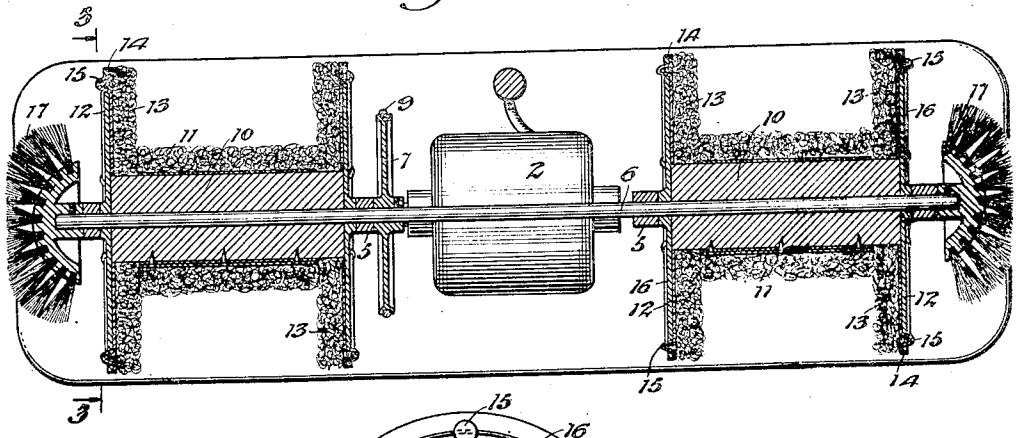


Fig. 2.



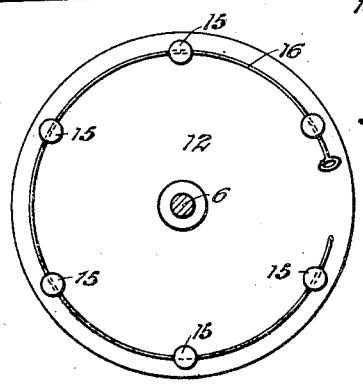


Fig. 3.

WITNESSES

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Fig. 4.

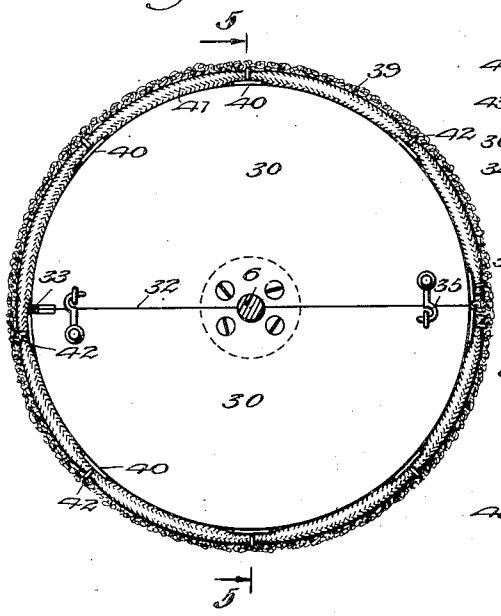


Fig. 5.

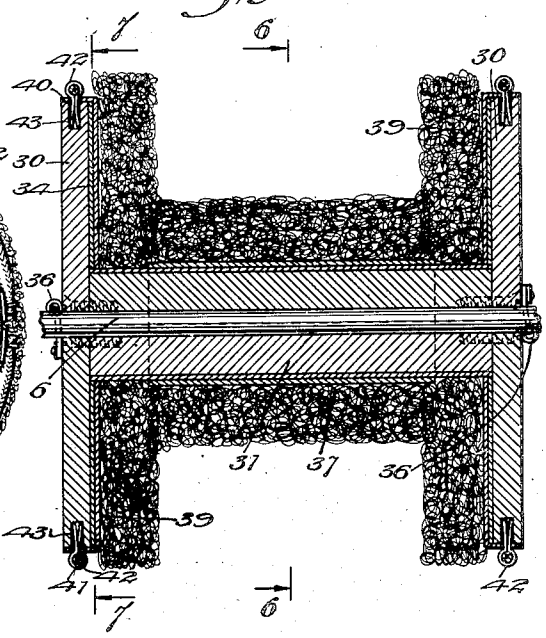


Fig. 6.

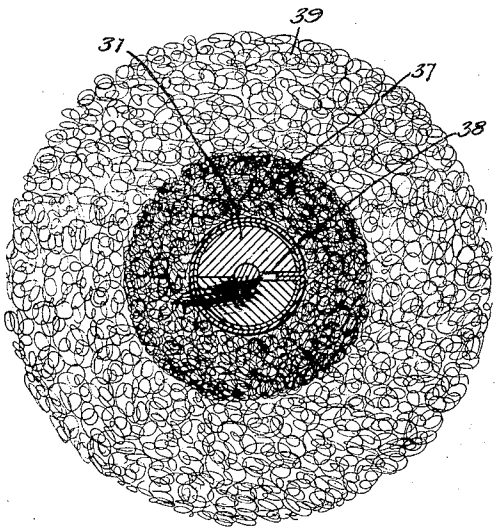
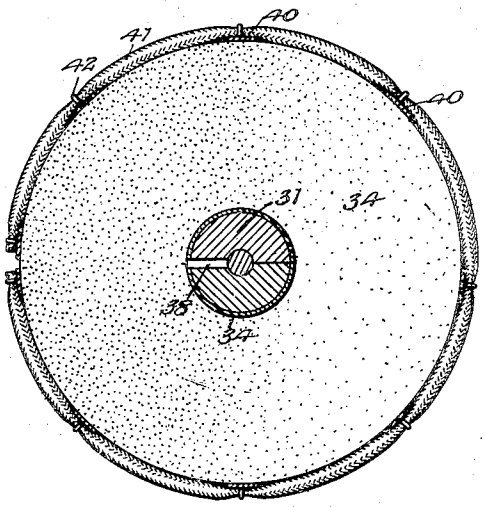


Fig. 7.



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UNITED STATES PATENT OFFICE.

ROBERT WALSER, OF UNION HILL, NEW JERSEY.

SHOE-CLEANING DEVICE.

Application filed March 23, 1922. Serial No. 545,956.

To all whom it may concern:

Be it known that I, ROBERT WALSER, a citizen of the United States, and a resident of Union Hill, in the county of Hudson and State of New Jersey, have invented a new and Improved Shoe-Cleaning Device, of which the following is a full, clear, and exact description.

This invention relates to improvements in shoe cleaning devices, an object of the invention being to provide an electrically driven machine of this character primarily designed for household use.

A further object is to provide a shoe cleaning device which may be attached to any ordinary source of electric current, and which is provided with improved means for scouring and buffing shoes.

A still further object is to provide a machine which will be simple and practical in construction, which will occupy a comparatively small amount of space, which will be durable and efficient in use, and capable of economical manufacture.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a view in side elevation of my improved machine;

Figure 2 is a view in longitudinal section therethrough;

Figure 3 is an end view of one of the disks taken on the line 3—3 of Figure 2;

Figure 4 is an end view of a modified form of spool;

Figure 5 is a view in section therethrough on the line 5—5 of Figure 4;

Figure 6 is a transverse sectional view on the line 6—6 of Figure 5; and

Figure 7 is a similar view on the line 7—7 of Figure 5.

Referring in detail to Figures 1, 2 and 3 of the drawings, I have used the reference numeral 1 to designate a base plate. Centrally of this plate a conventional type of electric motor 2 is mounted upon a bracket 3 fixed to the base plate. Pairs of brackets 4 secured to the plate on opposite sides of the motor and in alignment with each other terminate at their upper ends in bearing sleeves 5 wherein a shaft 6 is journaled.

The shaft 6 may be driven by the motor in any approved manner. I have shown for the purpose of illustration a driven pulley 7 fixed to the shaft and connected to the drive pulley 8 of the motor by a flexible belt or other power transmitting device 9.

Spools 10 are keyed to the shaft 6 between the pairs of brackets 4, and wiping, buffing, or polishing brushes are provided by wrapping sheets of polishing or buffing material, such as 11, around the spools. I may use sheepskin or any other material suitable for the purpose, and it is to be noted in these brushes that the working surfaces of the brushes are located in parallelism with the shaft around which they rotate.

Disks 12 are secured to the ends of the spools 10 and the inner faces of these disks are also covered by sheepskin or buffing material 13. The material 13 may be readily removed from the disks, said disks having openings 14 arranged around their edges through which perforated portions 15 of the material 13 extend. A flexible wire connecting device 16 passed through all of the perforated members 15 on the outside of the disk 12 serves to securely hold the buffing or polishing material 13 in place on the inner face of the disk.

These polishing disks serve to prevent the foot from slipping off of the brushes 11 as well as serving to clean or polish the sides of the shoe. Rotary brushes 17 are carried by the ends of the shaft 6, these brushes including relatively stiff bristles. The brushes 17 are adapted to perform the scrubbing or scouring operation incidental to removing mud from the shoes, and it will be noted that their working surfaces are located in a transverse plane to the plane of the shaft 6.

It has been hereinbefore noted that the motor 3 might be coupled to any suitable source of power and with this end in view, I provide an upright 18 rising from the base and carrying a current supply wire 19 to the motor. A switch 20 mounted on the upright controls the motor and it will of course be understood that the upright and the switch carried thereby are sufficiently high to permit a user to turn on the current without stooping over.

Operation of the motor simultaneously rotates all of the brushes as will be readily understood, and a shoe cleaning operation

may be performed by using successively the rotating scrubbing brushes 17 and the rotating polishing brushes 11.

Referring in detail to Figures 4, 5 and 6 of the drawings, it will be seen that I provide a slightly modified form of spool including disks 30 and a central cylindrical member 31 secured to the disks. The spool is longitudinally split, as indicated at 32, and the split sections of the disks are hinged together at one edge by a suitable hinge 33. The inner faces of the disks and also the cylinder are lined with sand paper 34 so that the buffing or brushing material fixed to the spool will be firmly held against slipping thereon. When the spool is placed upon the shaft 6, suitable securing devices or separable fastener elements 35 are provided for locking the disk sections against relative separation, and keys 36 hold the same against slipping on the shaft. The buffing material 37 which is wrapped around the cylindrical center of the spool has its edges clamped between the two spool sections, as seen most clearly in Figure 6, the adjacent faces of these sections being provided with shallow recesses 38 therein for this purpose. The other pieces of buffing material, designated by the reference numeral 39 which are secured upon the inner faces of the disks 30 include perforated flexible tabs 40 overlying the edges of the disks. Elastic bands 41 encircling the edges of the disks carry pins 42 adapted to be passed through the perforations in the tabs and enter recesses 43 provided in the edges of the disks for their reception. This manner of attaching the buffing material to the disks facilitates the ready detachment of the same therefrom.

It is understood that while I have shown sheepskin or similar substance and have called the material upon the spools 30 buffing material, the term "buffing material" is intended to be sufficiently broad to cover brush bristles as well as skin, and that the term "buffing material" or "buffing devices" appearing in the claims shall be construed to include brushes as well as sheepskin, or similar material.

Although I have illustrated certain of the preferred embodiments of my invention, it will be obvious that numerous slight changes might be made in the general form and arrangement of the parts described without departing from the invention, and hence I do not wish to limit myself to the precise details set forth, but shall consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of the appended claims.

I claim:

1. In a shoe cleaning device, a shaft, means for turning the shaft, spools including cylindrical body portions, and disks fixed to the ends of the body portions, said spools being formed in two sections hingedly connected together, means for securing the spool upon the shaft, and buffing means carried by the spool, said buffing means including pieces of buffing material fixed to the inner faces of the disks, tabs integral with said material and overlying the edges of the disks, and means engageable with the tabs to hold the material in place.

2. In a shoe cleaning device, a shaft, means for turning the shaft, spools including cylindrical body portions, and disks fixed to the ends of the body portions, said spools being formed in two sections hingedly connected together, means for securing the spools upon the shaft, buffing means carried by the spool, said buffing means including pieces of buffing material fixed to the inner faces of the disks, tabs integral with said material and overlying the edges of the disks, means engageable with the tabs to hold the material in place, said tabs having perforations therein, the edges of said disks having openings therein registering with the perforations, elastic devices encircling the edges of the disks, and pins carried by said elastic devices passed through the openings in the tabs and located in the recesses in the disks.

3. In a shoe cleaning device, a shaft, means for turning the shaft, spools fixed to the shaft, buffing material carried by the spools, and sand paper on the spools over which said buffing material is laid.

4. In a shoe cleaning device, a shaft, split spools for mounting on the shaft, friction members for mounting on the spools, and buffing members for mounting on the spools over said friction members, the buffing members being clamped between the sections of the split spools.

5. In a shoe cleaning device, a shaft, split spools for mounting on the shaft, friction members for encircling said split spools, buffing members in the form of bands for wrapping about the spools over said friction members, the edges of said buffing members being gripped between the sections of the spools.

6. A shoe cleaning device, comprising a shaft, means for operating said shaft, a plurality of spools, including split drums and disks, fixedly mounted on the shaft, friction members encircling said drums, buffing members in the form of bands wrapped about said drums over said friction members and having their ends gripped between the sections of the drums, buffing members mounted on the faces of said disks, and means provided in conjunction with the disks and buffing members mounted thereon for lacing the buffing members to said disks.

ROBERT WALSER.