J. O. MURRAY.

SHOE POLISHING DEVICE.

APPLICATION FILED DEC. 29, 1920.

1,394,636. Patented Oct. 25, 1921.

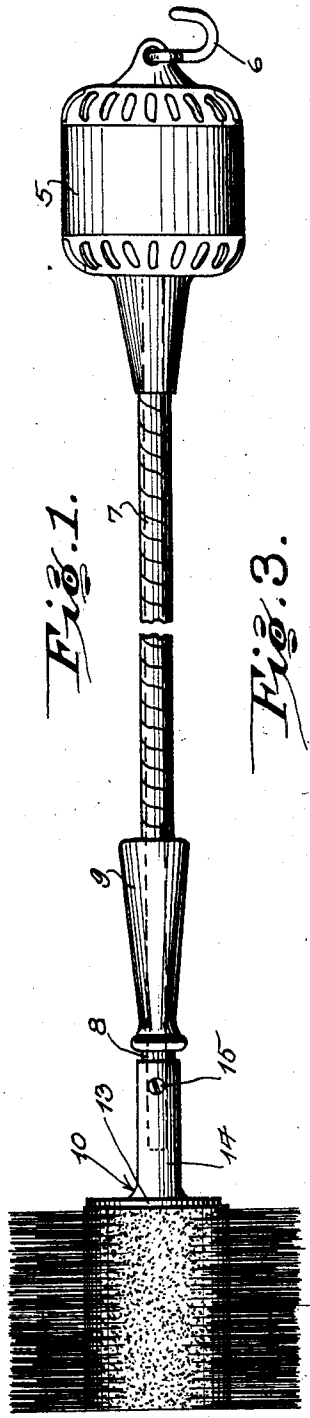


Fig. 1.

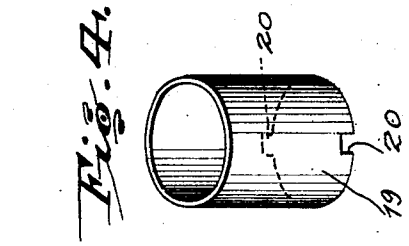


Fig. 4.

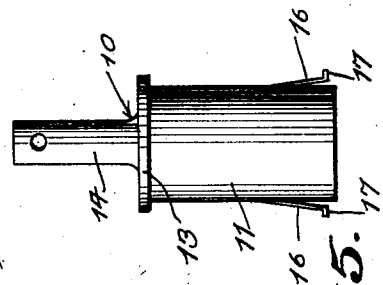


Fig. 3.

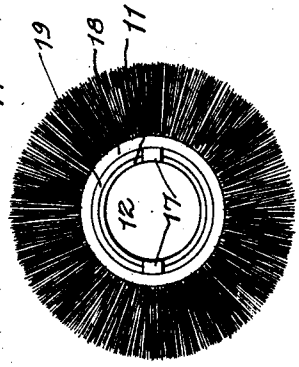


Fig. 5.

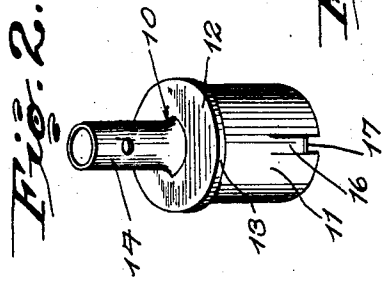


Fig. 2.

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SHOE-POLISHING DEVICE.

1,394,636. Specification of Letters Patent. Patented Oct. 25, 1921.

Application filed December 29, 1920. Serial No. 433,851.

To all whom it may concern:

Be it known that I, JOHN O. MURRAY, a citizen of the United States, residing at Wenatchee, in the county of Chelan and State of Washington, have invented certain new and useful Improvements in Shoe-Polishing Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to shoe polishing devices and has for its object to provide a device of this character wherein a number of shoe polishing implements may be attached to a single operating means.

Another object of the invention is to provide a device of this character including a motor and a flexible shaft, and polishing means carried by the end of the shaft.

Another object of the invention is to provide a device of this character wherein the end of the flexible shaft is provided with a novel mandrel and coupling means whereby various forms of brushes and polishing implements may be readily applied and removed.

A still further object of the invention is to provide a novel mandrel and coupling means of this character adapted to support the polishing implements, said means including catches adapted to engage the polishing implement to hold the implement in engagement with the coupling means regardless of the speed of the flexible shaft.

With the above and other objects in view, the invention consists in the improved construction and arrangement of parts to be hereinafter more particularly described, fully claimed and illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a shoe polishing device constructed in accordance with an embodiment of the invention,

Fig. 2 is a perspective view of the mandrel,

Fig. 3 is a side elevation of the mandrel showing the catches,

Fig. 4 is a perspective view of the inner hub or liner of the polishing implement, and

Fig. 5 is an end view of the polishing implement applied to the mandrel.

Referring to the drawings, 5 designates a conventional form of electric motor of compact design, the casing of the motor including a hook 6 by means of which the motor may be suspended from the rung of a chair or any suitable support. Connected to the motor, is a flexible shaft 7 which is relatively long so as to permit the device to be used in all positions. The end portion of the shaft 7 is provided with a rigid shaft 8 on which a handle 9 is loosely mounted. By this means the operator may grasp the handle without interfering with the rotation of the shafts 7 and 8, as the shaft 8 rotates within the handle.

The end of the shaft 8 projects beyond the end of the handle and is adapted to receive a mandrel 10. The mandrel consists of a tubular body member 11 having an end wall 12, the outer edge of said wall projecting beyond the side wall of the body member to provide an annular stop 13. Projecting from the intermediate portion of the end wall 12 is a socket member 14 adapted to receive the end of the shaft 8, a set screw 15 being provided to secure the socket member to the shaft 8.

A pair of resilient arms 16 are struck from the side wall of the body member, said arms being disposed remote from the end wall 12 and in diametrically spaced relation to each other. The end of each arm is extended at right angles to provide a catch 17 which projects exteriorly of the wall of the body member. These arms are arranged so that the resiliency thereof constantly urges the arms outwardly of the wall of the body member. The arms may be readily operated by the fingers of the operator as the arms are free to move toward or away from each other.

The mandrel is intended to support a variety of polishing implements such as brushes of fine and coarse hair, polishing cloth, wool, etc. Each of these implements consists of a hub 18 preferably of wood adapted to support the polishing implements. This hub is provided with an inner hub or lining 19 preferably of steel or like metal. The lining or hub 19 is provided with a pair of opposed recesses 20 in one end portion thereof. and arranged to be permanently secured within the hub member 18.

In the use of the device, the polishing implement is adapted to surround the body member 11 of the mandrel so as to position the recesses 20 adjacent the catches 17. When the polishing implement is applied, the catches are depressed so as to permit the hub 19 to be moved toward the end wall 12. When the polishing implement comes in contact with the stop 13, the catches then spring into the recesses 20 and firmly hold

the implement on the mandrel, regardless of the speed of rotation of the shaft. The operator may then use the polishing implement in any position. Each implement is applied in the manner above described, the application and the removal being performed rapidly in view of the novel form of catches.

The construction of this device does not limit its use to polishing shoes as the device may be used for all cleaning purposes and where a rotating brush or member is desired, it being possible to convey the motor 5 from place to place as a relatively long connecting cord may be provided for connecting the motor to the source of current. In addition to this the flexible shaft permits the polishing implement to be used in any position desired without decreasing the speed of rotation of the flexible shaft.

What is claimed is:—

A device of the character described comprising a shaft, means for rotating said shaft, a mandrel, a socket member carried by the mandrel adapted to receive the end of the shaft, a stop carried by the mandrel adjacent the socket and projecting beyond the exterior surface of the mandrel, said mandrel having resilient arms struck therefrom, the ends of said arms being extended at right angles to form catches exteriorly of the mandrel, a cleaning and polishing implement including a hub, said hub having opposed recesses in one end thereof, and adapted to engage the mandrel, the catches of the mandrel being adapted to extend into the recesses when the opposite end of the hub is moved into engagement with the stop of the mandrel.

In testimony whereof I hereunto affix my signature.

JOHN O. MURRAY