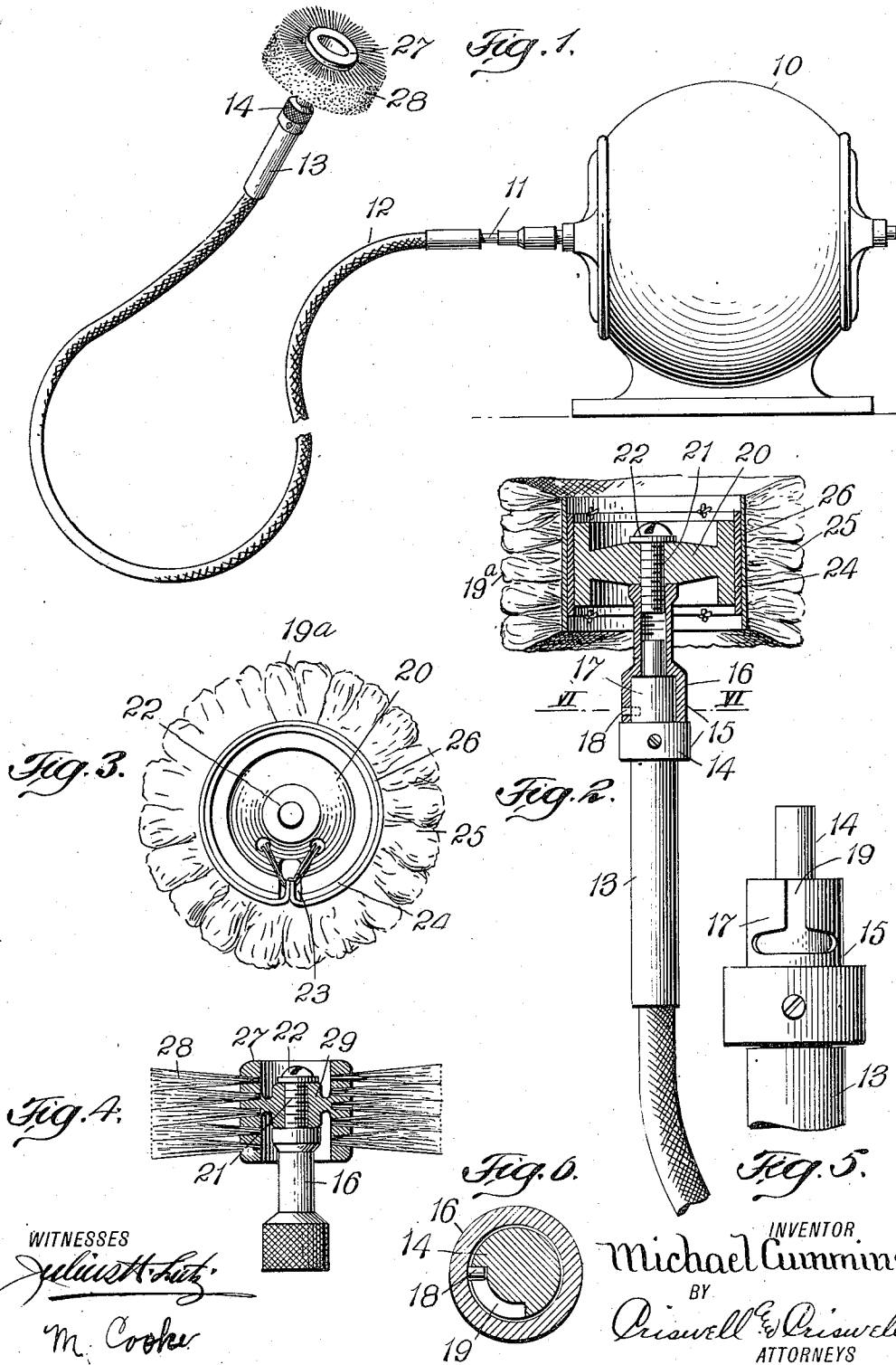


M. CUMMINS.
 ROTARY BRUSH.
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950,128.

Patented Feb. 22, 1910.



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ROTARY BRUSH.

950,128.

Specification of Letters Patent. Patented Feb. 22, 1910.

Application filed December 24, 1908. Serial No. 469,170.

To all whom it may concern:

Be it known that I, MICHAEL CUMMINS, a citizen of the United States, and a resident of Bergenfield, county of Bergen, and State of New Jersey, have invented certain new and useful Improvements in Rotary Brushes, of which the following is a full, clear, and exact description.

This invention relates to an improved rotary brush especially adapted for polishing shoes, the object of the invention being to provide an improved construction of brush which can be readily repaired when worn and which can be quickly attached or detached from an operating machine.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is a detail view, partly in perspective, of one form of machine embodying my invention. Fig. 2 is a sectional view, partly in elevation, of one form of brush element. Fig. 3 is a detail elevation of the brush element shown in Fig. 2. Fig. 4 is a sectional view, partly in elevation, of another of the brush elements. Fig. 5 is an enlarged fragmentary view of the clutch end of the shaft. Fig. 6 is a sectional view taken on a line VI—VI of Fig. 2.

The motor 10 may be the usual form of electric motor, and to the armature shaft 11 may be connected one end of a flexible shaft 12 in any desired way. This shaft 12 may be of any construction which will permit being flexed, and said shaft is usually provided with a covering on the outer side thereof, and to one end of said flexible shaft and surrounding the same is a stationary handle portion 13 by which the shaft may be held in the hand while the latter is rotated at a more or less high speed by the electric or other motor 10.

A coupling member 14 is secured to one end of the rotary part of the flexible shaft, and said end is adapted to rotate within the handle portion 13. This coupling member may be of any suitable construction, and is adapted to form the male member of a coupling 15. The member 16 of the coupling 15 is provided with an opening in one end thereof for the reception of the end 17 of the member 14, and in said opening is adapted to project a pin 18 carried by member 16

which is adapted to fit into a substantially T-shaped slot 19 whereby said member 16 may be locked when moved in either direction and to be quickly and readily detached from the male member. The particular form of coupling is not specifically herein claimed, and the same may be of any suitable construction.

Various elements may be employed for polishing shoes and such elements may be attached to the clutch member 16. As shown in Figs. 2 and 3, a polishing brush 19^a is provided. This brush or element has a collar or hub member 20, which centrally thereof is provided with an opening 21 through which passes a screw or bolt 22, the threaded end of which engages a threaded opening in the outer end of the member 16 whereby the hub member may be rotated with the flexible shaft or quickly detached from the flexible shaft. This hub member 20 has its periphery slotted, as at 23, and passed about the periphery thereof is a member 24 of felt or other flexible material which may be fastened to the hub or collar member 20 in any desired way, as by tacks, the said member 20 being of wood or other material. Said felt member 24 projects, as shown, beyond the edges of the hub 20, and thereby prevents injury or scratching of the leather in using the device, which might occur should the hub 20 come in contact therewith. The brush part of the element for polishing purposes should be free from tacks or similar fastening means which would be likely to injure the leather, and the polishing material should be of such a nature that a desirable polishing effect is produced. The member 25 may be of sheep's wool, and the skin part 26 may be fastened by sewing or otherwise to the felt member 24 on to the hub member 20 so that when placed in position the ends of said member 25 may be passed within the slot 23 so as to make the brush body substantially continuous and to provide an even polishing surface throughout.

In Fig. 4, the brush element 27 has the bristles 28, and said brush element is circular, and has its body or hub 29 secured to the member 16, so that said element 27 may be quickly attached to or removed from the rotary flexible shaft, the said element 27 being principally used for cleaning the shoes or for brushing purposes after the polishing material has been placed on the shoes and to

pack the material into the pores of the leather.

In using the machine, the motor may be placed within a pocket or compartment of the shoe-polishing stand so as to be out of the way of the attendant; and the flexible shaft made long enough to permit both shoes of a person to be cleaned and polished, and each motor may have a switch so connected with the motor and the source of electric supply that the motor may be started and stopped at any time.

By the term "brush" is intended to include any of the elements used for polishing shoes whether a buffer, brush proper or other element that may be used in this connection.

From the foregoing it will be seen that a simple and efficient machine is provided whereby various brush or polishing elements for polishing shoes may be readily attached to or removed from a rotating flexible shaft connected directly to an electric motor; and that said machine may be readily placed in position with the usual form of shoe polishing stand and the rotating elements readily and conveniently manipulated.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent:—

1. A brush of the character described, comprising a hub, a covering of flexible material fast around the hub and projecting at its edges beyond the hub, said hub having a slot in its periphery, a brush member of wool having its body sewed to the flexible covering and means for holding the ends of the brush member in the slot in the hub.

2. A brush of the character described, comprising a hub, a slot in the periphery thereof, a flexible covering fixed on said hub and having its ends located at the walls of the slot and its edges projecting over the edges of the hub, a brush member of wool having a flexible body portion extended at both ends beyond the wool covering, means for securing the ends of the brush member in said slot, and said body portion secured to the projecting edges of the flexible covering.

This specification signed and witnessed this 22d day of December A. D. 1908.

MICHAEL CUMMINS.

Witnesses:

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