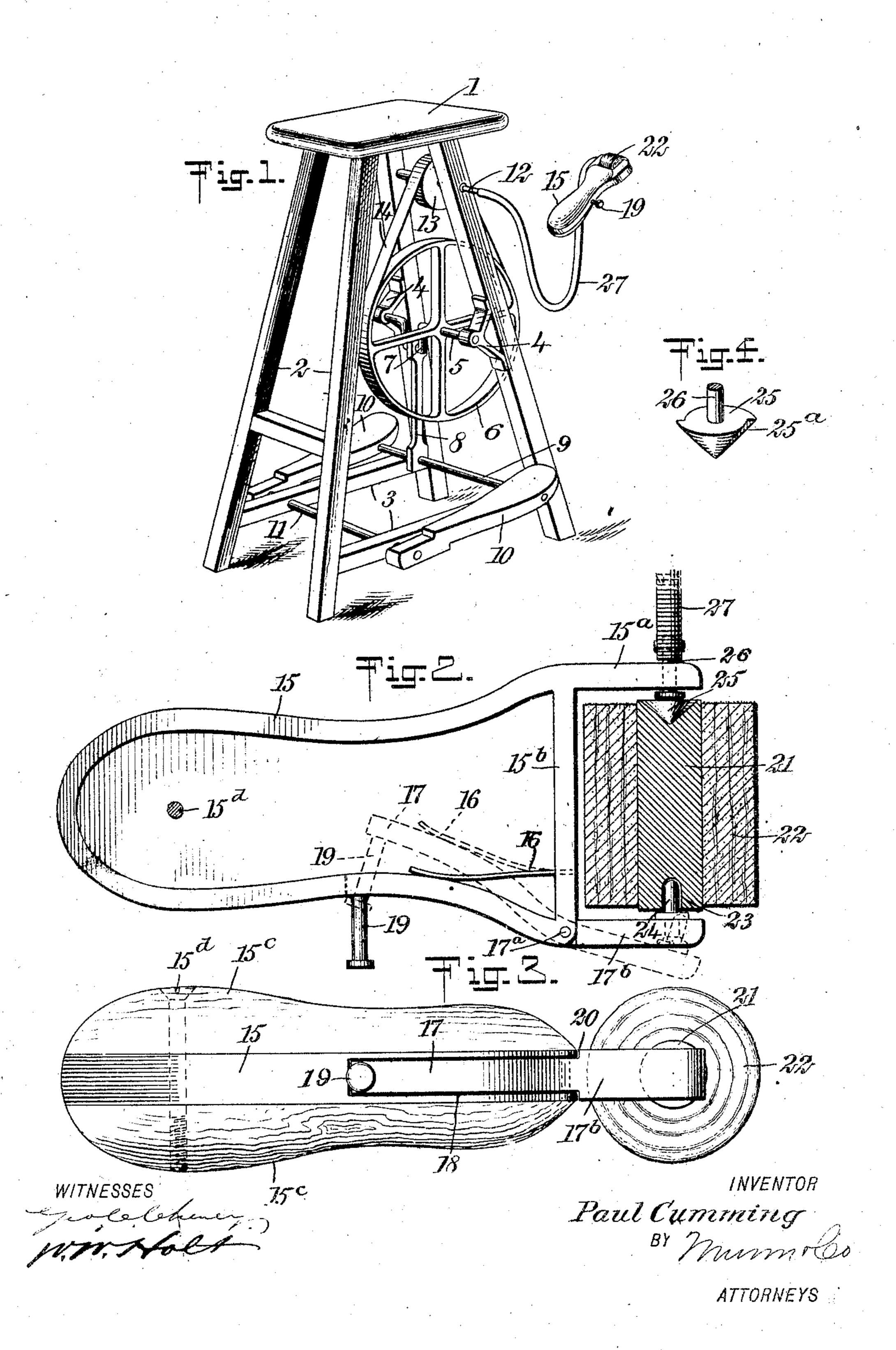
P. CUMMING. SHOE POLISHING MACHINE. APPLICATION FILED JUNE 7, 1908.



STATES PATENT OFFICE.

PAUL CUMMING, OF KEY WEST, FLORIDA.

SHOE-POLISHING MACHINE.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed June 7, 1906. Serial No. 320,545.

To all whom it may concern.

Be if known that I, Paul Cumming, a citizen of the United States, and a resident of Key West, in the county of Monroe and State of Florida, have invented 5 a new and Improved Shoe-Polishing Machine, of which the following is a full, clear, and exact description.

This invention is an improved shoe polishing machine designed to do effective work in the polishing of shoes, boots or the like.

10 The invention has for its objects, among others, the production of a machine of this character embodying a novelly-constructed brush holder in which the brushes may be readily and quickly changed to suit the different stages and kinds of shoe-shining required, 15 also to provide a seat for the operator having suitable foot power means for driving the brushes or polishers

when in use. The invention consists of a stand or stool provided with foot driven means to rapidly rotate a flexible shaft which is attached at its free end to a brush engaging means journaled in the handle or brush holder. Directly opposed to the brush engaging means of the handle is a pivotally mounted center or pin designed to coöperate with the brush engaging means and re-

25 movably holding the brush in place. Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the machine as it - appears when completely assembled; Fig. 2 is a plan view of the brush holder, partly in section and with the upper grip removed, showing the position taken by the pivotally mounted center in dotted lines, when de-35 sired to remove the brush or polisher; Fig. 3 is a side elevation of Fig. 2, and Fig. 4 is a perspective view of the center designed to positively engage a brush to rotate it.

Referring to the drawings, Fig. 1 indicates the seat 40 of a stool supported on inclined legs 2 suitably braced near their feet by parallel cross bars 3. Journaled in brackets 4 carried by a pair of legs, is a shaft 5 having fixed to the center of its length a band wheel or pulley 6 and bent to form at one side thereof a crank 7, 45 on which is journaled a link 8 journaled at its opposite end on a rod 9 which, in turn, has fixed at each end and at each side of the stool a pedal-10. These pedals are fashioned to fit the sole of the shoe, and are supported at their heel ends by a rod 11 journaled in the 50 cross bars 3. Above the pulley 6 is fixed on a shaft 12, a smaller pulley 13 rapidly driving the shaft 12 from the pulley 6 by a belt 14 when the pedals 10 are operated.

15 is a frame forming the handle of my improved polisher, said frame comprising a metal strip fashioned in the shape of the handle, with an extending arm 15° and 1

a cross-tie 15^b adjacent to its outer end. The frame is covered at each side with grips 15° exactly fitting the frame, with a slight raised portion on their opposed faces in order that they will fit the inclosed part of the 60 handle, and can be securely held in place by a single screw 15b. To the cross-tie, on its inner face, is secured a flat spring 16 pressing on a lever 17 pivoted on a pin 17^a and entering a slot 18 and conforming in shape thereto. The outer end 17b of the lever 17 is similar 65 to the arm 15° and forms with it a yoke. As shown, that member of the lever 17 entering the slot 18 has a pin 19 for pressing inwardly against the tension of the spring 16, and is reduced in width to provide shoulders 20, forming stops which limit its further outward move- 70 ment when in register with the slot in the frame.

The brushes or polishers are constructed as best shown in Fig. 2 and consist of a core 21 surrounded by bristles or some buffing material 22, according to the kind or stage of polishing in which it is to be used. The 75 core 21 has a recess 23 at the center of one end, adapted to be loosely engaged by a pin 24 carried by the member 17^b of the lever 17 when the polisher is in place. The opposite end of the core is recessed to form an exact counterpart of the engaging center 25 shown in detail in 80 Fig. 4, consisting of a conical body with two eccentric, conical faces forming diametrical shoulders 25° and a spindle 26 extending from the base of the core. This spindle is journaled in the arm 15^a and fastens at the outside thereof to a flexible shaft 27 connected to one 85 end of the shaft 12.

In the use of the machine, the operator grasps the handle in one hand, seats himself on the stool and drives the flexible shaft 27 by working the pedals 10 with his feet. This rapidly rotates the brush or pol- 90 isher held in the yoke of the handle through the action of the engaging shoulders 25° of the center 25, turning it on the stationary pin 24. The polisher is then applied to a shoe held in the other hand, or to shoes on the feet of some one scated on an elevated chair to face the op- 95 erator. When it becomes necessary to change the polisher, this is done by simply pressing the pin 19, which throws the lever 17 to the dotted position shown in Fig. : 2, allowing the polisher to be removed and another substituted therefor with rapidity.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

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1. In a shoe polishing machine, in combination, a handle comprising a metal frame, an arm rigidly projecting at the outer end thereof, grips secured to each side of the 105 frame, said frame having a slot at one side thereof, a lever pivoted in the slot having an outer arm corresponding to the rigidly connected arm, means for normally holding the lever in register with the slot, a pin fixed at the outer end of the lever, a shouldered center journaled in the rigid 110 arm, a flexible shaft for driving the center, and means for driving the shaft, for the purpose described.

2. In a shoe polishing machine, in combination, a handle comprising a metal frame, grips secured at each side from one end of the frame, a lever pivoted in a slot in the frame and having an arm opposed to and corresponding to the rigidly connected arm, a spring in the handle pressing on the lever to hold it in position, a pin fixed to one of said arms, brash engaging means journaled in the other of said arms, and means for rotating the brush engaging

3. In a shoe polishing machine, a handle comprising a metal frame having an arm rigidly projecting from one end thereof, grips secured at each side of the frame, an arm

pivotally mounted at one side of the frame opposed to said first-named arm, means carried by said arms for holding a polishing device, and means for swinging the inner end of the pivoted arm between the grips for releasing said 15 device.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PAUL CUMMING.

Witnesses:

BENJAMIN DEAL, EMIL HOLM.