

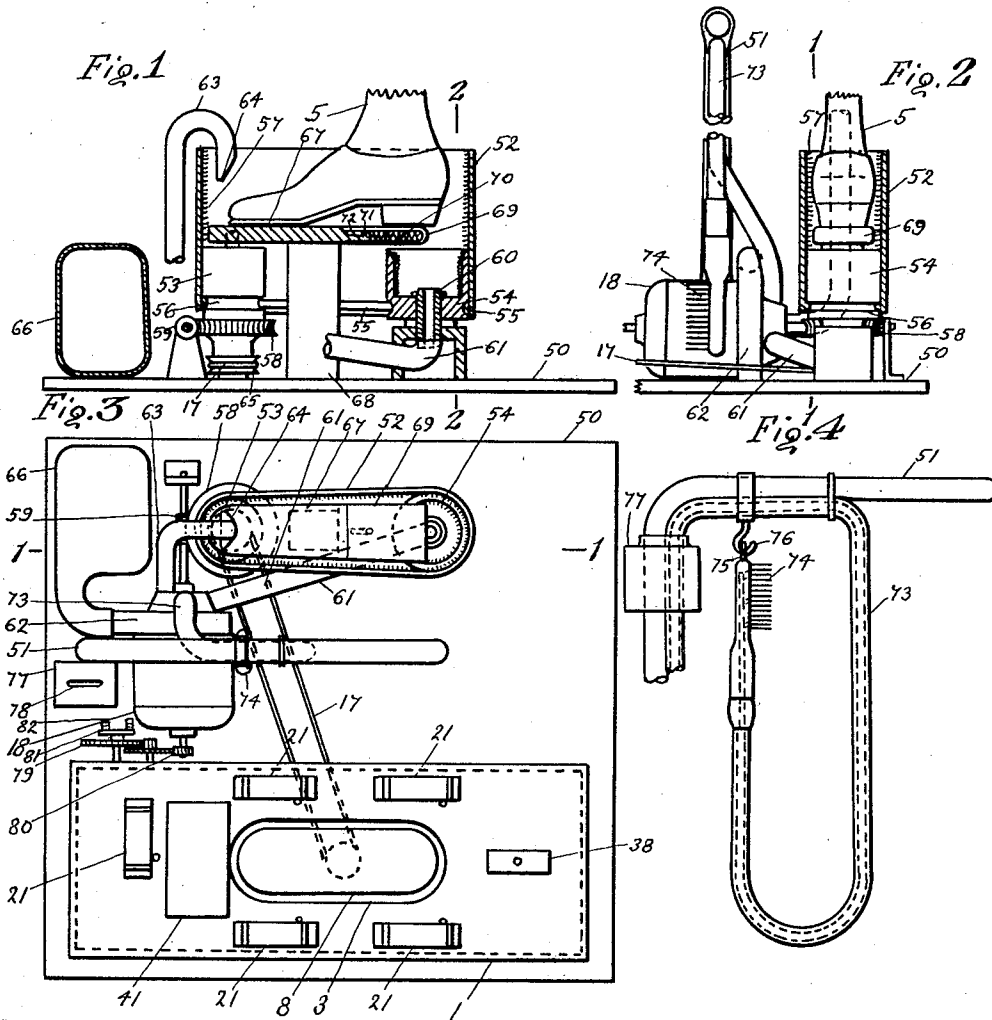
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SHOE SHINING MACHINE

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SHOE SHINING MACHINE

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My invention relates to shoe shining machines and has a particular reference to machines for applying polishing composition to shoes and for polishing the shoes.

5 The object of my invention is to provide a machine which will automatically polish the shoe. Another object of my invention is to provide an automatic shoe shining machine operated by an electric motor during a pre-

10 determined time after the motor has been started by a coin dropped into a receptacle for same. I also provide my machine with a suction device for removing dust and dirt away while the shoes are being shined.

15 My invention is more fully explained in the accompanying specification and drawing in which—

Fig. 1 is a sectional elevation of the polishing portion of my machine taken on the line 1—1 of Fig. 2, Fig. 2 is a cross section taken on the line 2—2 of Fig. 1, Fig. 3 is a plan view of my machine, and Fig. 4 is a detail view of a clothes brush.

20 My polishing machine consists of an endless belt 52 placed with its lower edge on rollers 53 and 54. The belt has an additional flexible strip 55 on the inside of its lower edge, fitting in corresponding grooves 56 in the rollers. The inside surface of the belt

30 above the rollers is provided with polishing bristles 57, or is covered with a suitable polishing cloth.

One of the rollers has a worm gear 58 in mesh with a worm 59 on the end of the shaft of the electric motor 18. The other roller is made hollow and is lined inside with a soft cloth, such as felt. It is mounted on a hollow shaft 60 connected by a pipe 61 with the intake side of a blower 62. The shaft of the blower forms extension of the motor shaft, or the blower impeller is mounted on the motor shaft.

35 A second exhaust pipe 63 is connected with the intake of the blower and extends inside of the belt, terminating with a flat nozzle 64.

The worm gear 58 has a pulley 65 connected with it for the belt 17 which turns the mixer for shoe polish.

50 The exhaust of the blower is connected with a dust collector 66, which may be made of

cloth, similar to ordinary vacuum cleaner bags, or it may be of metal with dust screens in its sides.

A shoe supporting board 67 is mounted on a post 68 above the ends of the rollers 53 and 54. Its rear end 69 represents a U-shaped slide. A spring 70 keeps the slide in its extended position. A hook 71 retains the slide in this position. This hook slides in a groove 72.

60 A hand post or hand railing 51 is mounted on the board 50. A flexible hose 73 is supported on the post and extends from the intake of the blower 62. A brush 74 is attached to the end of the hose 73 and has a hook 75 for hanging it on a hook 76 clamped to the post 51 and holding at the same time the hose 73. The brush is hollow inside for drawing the dust from it through the hose 73.

A coin box 77 is mounted on the post 51 and has an electric switch inside of an ordinary construction (not shown) for closing the circuit for the electric motor when a requisite coin is dropped through a slot 78.

75 A chain of gears 79 are operated by a pinion 80 on the end of the motor shaft. The gears operate a disc contact switch 81 with stationary contacts 82 which open the circuit after the motor has completed a predetermined number of revolutions.

80 The switch arrangement operated by the gears 79 may be of any standard arrangement used in connection with ordinary coin operated switches.

85 The brush 74 may be made to hang freely on the end of the hose 73 as shown in Fig. 7, or it may be attached to the vertical and horizontal portions of the post as per Fig. 9, or only to the horizontal portion as per Fig. 8.

90 The operation of my machine is as follows.

The user places his foot on the board 67. The foot is moved around while the belt moves on the rollers 53 and 54, until all sides become sufficiently polished. The foot is then removed and inserted with the toe down, pushing with the sole the slide 69. The toe and the upper of the shoe are then polished against the belt brush, permitting the toe to enter inside of the hollow roller 54 so as to reach the instep of the shoe.

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The user braces himself against the hand post 51. He may also use the hand brush 74 for cleaning his clothes and his hat.

The dust from the shoe is sucked away by the blower 62 through pipes 61 and 63.

5 At the expiration of a certain time, as determined by a certain number of motor revolutions, the switch 81 opens the circuit, and the motor stops, until another coin is inserted in the box 77.

10 I claim as my invention:

1. In a shoe shining machine, the combination with an endless belt for polishing a shoe, vertical rollers supporting the lower edge of said belt, said rollers being provided with circumferential grooves, a flexible rib on the inside surface of said belt adapted to fit in said grooves, a support for said shoe above the upper ends of said rollers and inside of said belt, a polishing material attached to the inside surface of said belt above said rollers, and means to rotate said rollers thereby moving said belt.

2. In a shoe shining machine, the combination with an endless belt, of rollers supporting one edge of said belt, means to retain said belt on said rollers, a polishing material on the inside surface of said belt beyond the ends of said rollers, a support for a shoe inside of said belt, one of said rollers being cup-shaped and lined with polishing material and adapted to admit the toe portion of said shoe when said shoe is turned around for polishing its upper portion, and means to rotate said rollers thereby moving said belt around said shoe.

35 In testimony whereof, I affix my signature.
JACOB T. UDEN.

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