No. 885,500. PATENTED APR. 21, 1908.

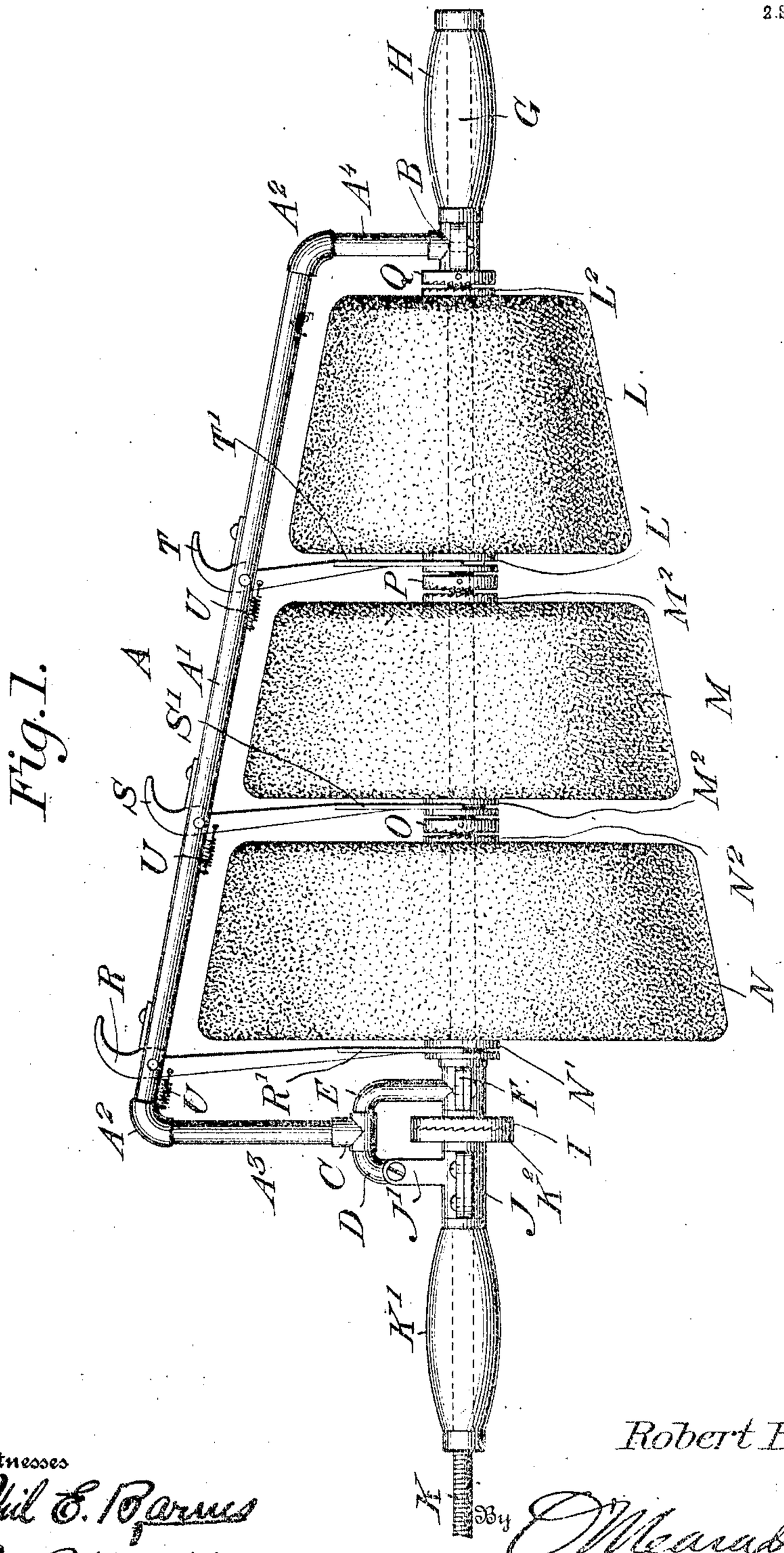
R. B. MARTIN.

SHOE POLISHING BRUSH.

APPLICATION FILED JAN. 22, 1907.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

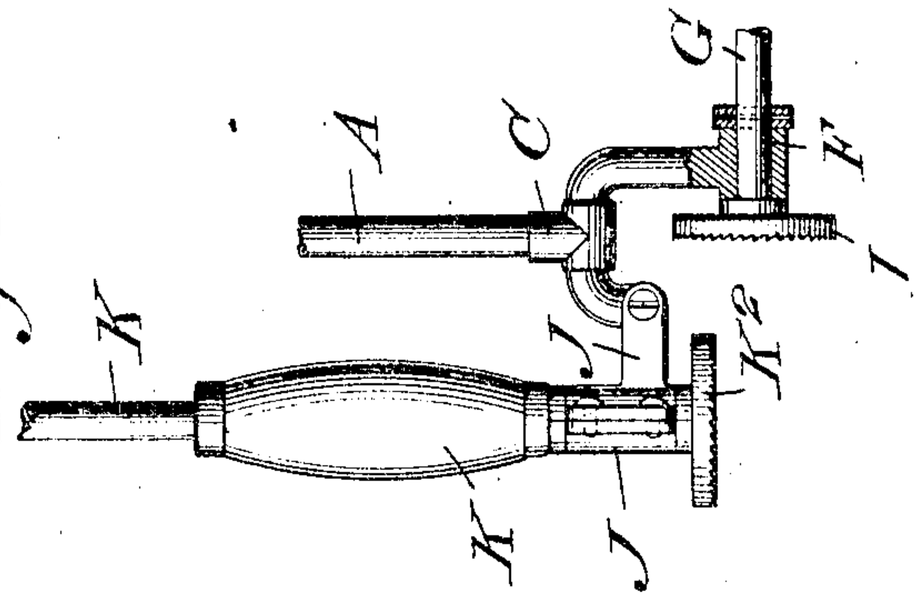


Fig. 3.

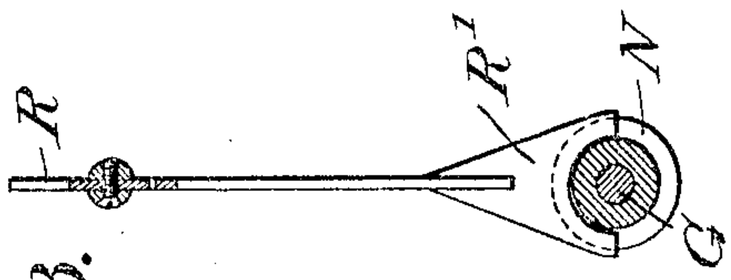


Fig. 5.

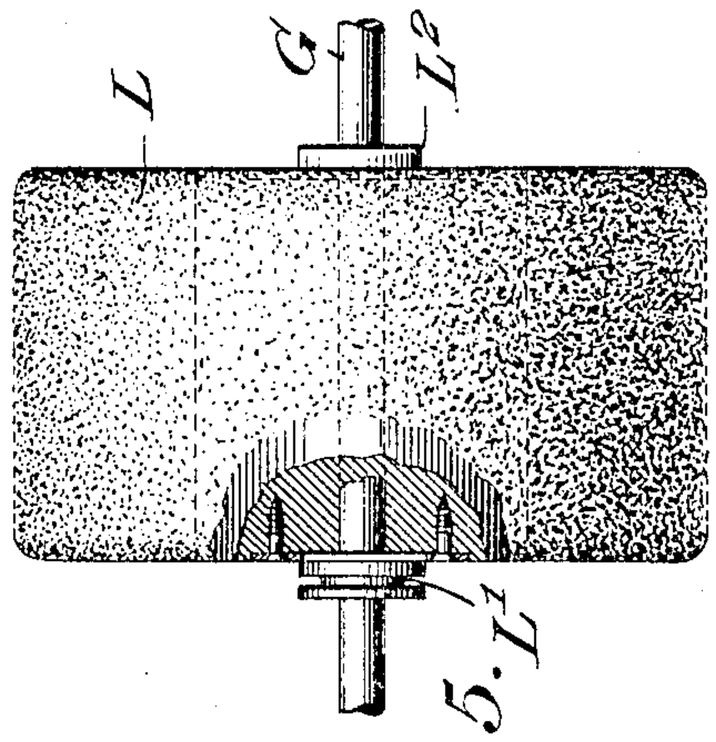
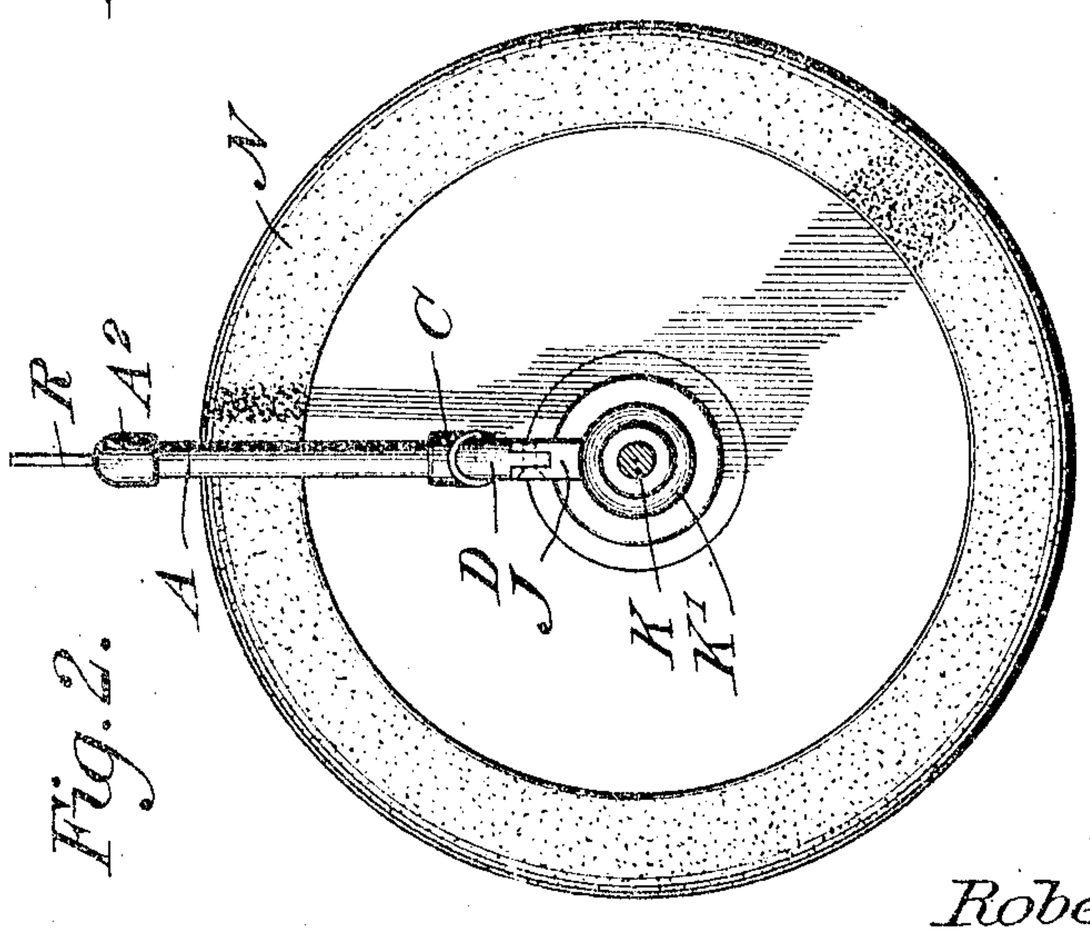


Fig. 2.



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SHOE-POLISHING BRUSH.

No. 885,500. Specification of Letters Patent. Patented April 21, 1908.

Application filed January 22, 1907. Serial No. 353,475.

To all whom it may concern:

Be it known that I, ROBERT B. MARTIN, a citizen of the United States, residing at Brooklyn, in the borough of Manhattan and State of New York, have invented a new and useful Improvement in a Shoe-Polishing Brush, of which the following is a specification.

This invention relates to shoe polishing brushes, and more particularly to rotary brushes adapted to be operated by an electric motor, the object being to provide a series of brushes so arranged on a shaft that any one of the brushes can be rotated by operating a bar so that the shoes can be cleaned and polished.

Another object of my invention is to provide very novel means for connecting the shaft carrying the brushes to the flexible shaft connected to the motor, so that they can be easily and quickly thrown in and out of engagement with each other.

With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts, hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a side view of my improved brush. Fig. 2 is an end view of the brush. Fig. 3 is a section through the grooved collar showing the operating lever in position. Fig. 4 is a side elevational view of the frame carrying the back shaft and flexible shaft, showing the manner of connecting the two. Fig. 5 is a plan view of one of the brushes partly broken away showing the manner of connecting the brush to the sleeve.

Referring to the drawings A indicates the frame of a tube A′ provided with elbows A^2 at its end, in which are secured tubes A^3 A^4 of different length.

Secured on the end of the shorter tube A^4 is a collar B carrying a journal box formed of two sections connected together by screws in the ordinary manner. The stem of a T-coupling C is secured on the end of the longer tube A^3 in which are secured the angled ends of a tube D of different length. The longer tube E carries a journal box F at its end formed of two sections connected together by screws. Mounted in the journal-boxes B and F of the frame, is a shaft G provided with a loosely mounted handle H at one end, and a fixed toothed-clutch wheel I at the other end. Pivoted on the end of the shorter tube D, is an arm J′ carrying a journal box J formed of two sections and connected together in a similar manner, as the other boxes, in which is mounted a flexible shaft K which is adapted to be connected to an electric motor for operating the same.

A handle K′ is loosely mounted on the shaft K to one side of the journal box J, and a toothed clutch-wheel K^2 is fixed on the end of the shaft adapted to engage the clutch wheel I on the end of the shaft G and rotate the same. It will be readily seen that the clutch wheel can be readily swung in and out of engagement with the clutch wheel I by the handle as desired.

Loosely mounted on the shaft G is a coarse brush L adapted to clean the shoes, a fine brush M for polishing the shoes, and a buffer wheel N for giving the shoes a finer polish. The periphery of the brushes and buffer-wheel are formed tapering and the brush L is formed smaller and wider than the brush M and the brush M is formed smaller than the buffer-wheel so that the surface of the brush and buffer-wheel will be parallel with the tube A^1 of the frame.

Secured to one side of the brushes and buffer-wheel by screws are the apertured flanges of grooved-sleeves L^1, M^1, N^1, for the purpose hereinafter described. Secured to the other side of the brushes and buffer-wheel are toothed clutch-wheels L^2, M^2 and N^2 which are adapted to engage the toothed clutch-wheels, O, P and Q formed on the shaft. Spring actuated levers R, S and T are mounted on pins in slots formed in the tube A^1 provided with enlarged lower ends R^1, S^1 and T^1 having curved notches formed in their ends adapted to fit in the grooves of the sleeves L^1, M^1 and N^1, respectively, so that the clutch-wheels carried by the brush and buffer can be thrown into engagement with the clutch-wheels fixed on the shaft as desired.

It will be readily seen that by pressing on the lever working in the sleeve carried by anyone of the brushes, or buffer-wheel, the clutch-wheel carried by the same will be thrown into engagement with the adjacent clutch-wheel fixed to the shaft so that the same will be rotated. The spring U on the brush holds the clutches out of engagement with each other so that only the brush or buffer-wheel as the case may be, being used, will be rotated.

From the foregoing description it will be

readily seen that I have provided a frame with a series of brushes so arranged that by simply pressing on a lever, the brush desired to be used will be rotated so that the shoe can be cleaned and polished in a very few minutes with a very little work.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. The combination with a frame, of a shaft mounted in said frame provided with brushes, a clutch wheel secured on one end of said shaft, an arm pivoted to said frame carrying a power shaft, and a clutch wheel secured on the end of said shaft adapted to engage the clutch wheel on the shaft carrying the brushes.

2. The combination with a frame having a shaft loosely mounted thereon, provided with a clutch-wheel at one end, brushes mounted on said shaft and a flexible shaft pivotally connected to said frame provided with a clutch-wheel at its end adapted to be thrown into engagement with the clutch-wheel on the shaft carrying the brushes for the purpose described.

3. The combination with a frame provided with journal-boxes, of a shaft mounted in said boxes provided with spaced clutch-wheels, brushes loosely mounted on said shaft provided with clutch-wheels, a clutch-wheel secured on one end of the shaft, a flexible shaft pivotally connected to said frame provided with a clutch-wheel adapted to engage said clutch-wheel on the shaft and means for throwing the clutch-wheels of the brushes into engagement with the clutch-wheels of the shaft, for the purpose described.

4. The combination with a frame provided with journal-boxes, of a shaft loosely mounted in said boxes provided with spaced clutch-wheels, a series of brushes provided with clutch-wheels loosely mounted on said shaft, grooved sleeves carried by the brushes, spring actuated levers mounted in said frame provided with enlarged notched ends working in said grooves of the sleeves, and means for operating said shaft, for the purpose described.

5. The combination with a frame provided with journal-boxes, of a shaft mounted in said boxes provided with a clutch-wheel at one end, an arm pivoted to said frame provided with a journal-box, a flexible shaft mounted in said box provided with a clutch-wheel adapted to engage the clutch-wheel of the shaft, and brushes mounted on said shaft, for the purpose described.

ROBERT B. MARTIN.

Witnesses:
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