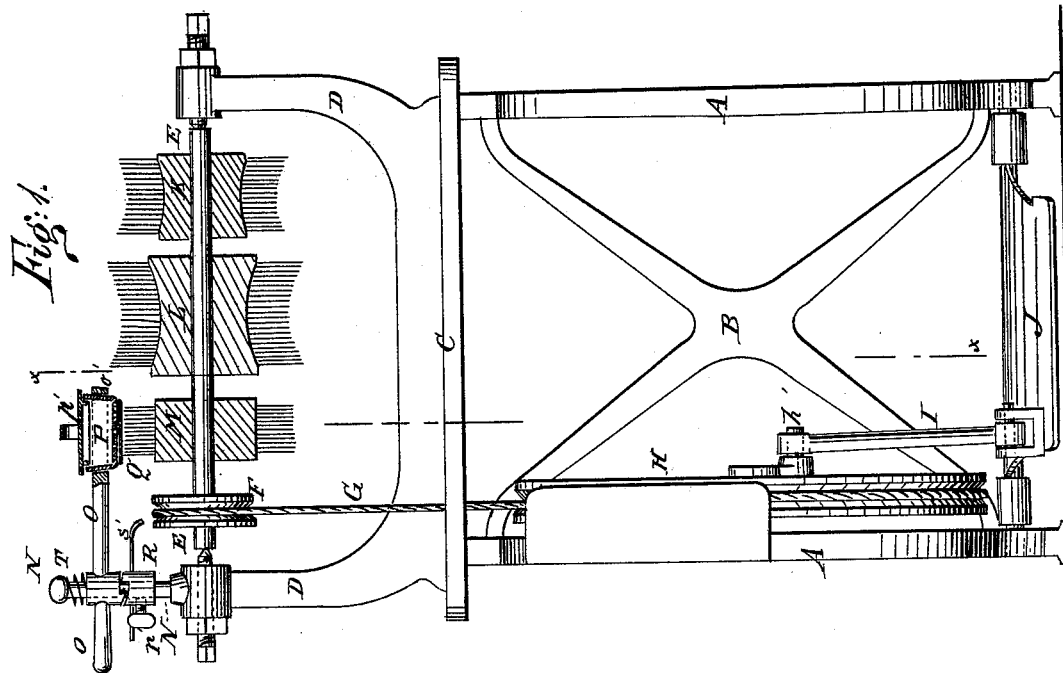
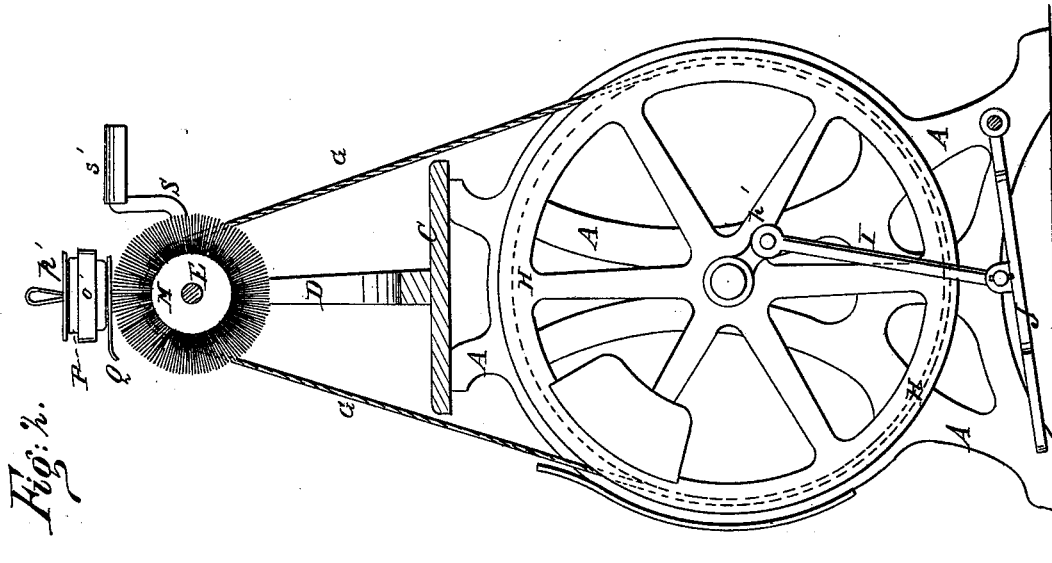


J. T. SCHULTZ.  
 Boot and Shoe Cleaning and Polishing Machine.  
 No. 220,671.      Patented Oct. 14, 1879.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

J. THEODOR SCHULTZ, OF UHLENHORST, NEAR HAMBURG, GERMANY.

## IMPROVEMENT IN BOOT AND SHOE CLEANING AND POLISHING MACHINES.

Specification forming part of Letters Patent No. **220,671**, dated October 14, 1879; application filed August 19, 1879.

### *To all whom it may concern:*

Be it known that I, J. THEODOR SCHULTZ, of Uhlenhorst, near Hamburg, Germany, have invented a new and useful Improvement in Boot and Shoe Cleaning and Polishing Machines, of which the following is a specification.

Figure 1 is a side view of my improved machine, partly in section, to show the construction. Fig. 2 is a cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for cleaning and polishing boots and shoes, which shall be so constructed as to do its work rapidly and well, and which shall be simple in construction and convenient in use.

The invention consists in the arrangement of the blacking-holder upon a swinging arm, in combination with the blacking-applying brush, substantially as described, so that the blacking may be conveniently brought over the said brush or moved back out of the way, as set forth; in the construction of the swinging arm of the blacking holder or cup with a yielding motion, to allow the cup to be swung over and to hold it down upon the stationary plate, to prevent leakage and waste of the blacking; and in the arrangement of the swinging arm of the blacking-holder upon a pin, in combination with the spring and the adjustable collar, so that the said holder may be adjusted to take up the wear of the brush, as hereinafter fully described.

A represents the side frames of the machine, which are connected together at their rear edges by the brace-frame B. To the upper ends of the frame A is attached the bed-plate or table C, to the end parts of the upper side of which are attached, or upon them are formed, two upwardly-projecting arms, D. To the upper ends of the arms D are pivoted the ends of a shaft, E, by means of adjustable screw-points, as shown in the drawings, or by journal-boxes. To the shaft E, near one end, is attached a pulley, F, around which passes a band, G. The band G also passes around a pulley, H, pivoted to one of the side frames, A, and which is made large and heavy to adapt it to serve as a fly-wheel.

The wheel H is provided with a crank-pin, *h'*, to which is pivoted the upper end of a connecting-rod, I. The lower end of the connecting-rod I is pivoted to the treadle J, which is pivoted at its forward corners to the side frames, A.

To the shaft E are attached three brushes, K L M. The brush K is designed for cleaning the dust and dirt from the boots and shoes preparatory to blacking and polishing them, and is formed of short stiff bristles attached to a concaved wooden cylinder. The brush L is designed for polishing the boots and shoes after the blacking has been applied, and is formed by attaching horse-hair or soft bristles to a concaved wooden cylinder. The concaved form of the brushes K L allows them to fit better upon the rounded surfaces of the boots and shoes, and more readily enter the cavities at the sides of the instep and between the uppers and soles, and at the same time come in contact with a greater surface. The brush M is designed for applying the blacking to the boots and shoes, and is formed by attaching horse-hair or soft bristles to a wooden cylinder.

To the upper end of the arm D, next the pulley F, is attached an upwardly-projecting pin, N, to enter a bearing-hole formed through the middle part of the bar O. One end of the bar O projects to serve as a handle, and upon its other end is formed, or to it is attached, a small frame, *o'*, to receive the cup P, that contains the blacking. The cup P is designed to be formed of porcelain or other suitable material, and has perforations formed in its bottom to allow the blacking to ooze through slowly.

To the bottom of the cup P is attached a cloth, Q, through which the blacking percolates to pass to the brush M, and which is made longer than the cup P, so that its rear end may project to serve as a flap, to prevent the blacking from being spattered when the bristles or hair of the brush M pass out from beneath the cup P. The cloth Q also serves to spread the blacking more evenly over the brush M, and causes it to be applied evenly to the boots and shoes.

If desired, the cloth Q may be attached to the rear part of the bottom of the cup P, to

act only as a spreader and anti-spatterer, without affecting the discharge of the blacking from the said cup.

The bar O and the cup P are supported at such a height that the brush M may just come in contact with the bottom of the said cup P, by a collar, R, placed upon the pin N, and secured in place by a set-screw, *r'*, so that it can be lowered, to lower the bar O and the cup P as the brush M wears. The adjacent edges of the collar R and the hub of the bar O have notches formed in them, or other stops attached to them, to prevent the bar O from being turned so far as to carry the cup P past the brush M.

To the upper end of the arm D is attached, or upon it is formed, an arm, S, which projects outward and upward, and has a plate, *s'*, formed upon or attached to its upper end, to receive the cup when not in use for applying the blacking. The end of the plate *s'* is inclined or curved downward slightly, so that the bottom of the cup P may pass on and off the said plate *s'* readily.

The bottom of the cup P should rest upon the plate *s'*, to prevent the blacking from escaping when not in use.

The cup P is provided with a cover, *p'*, to prevent the blacking from evaporating.

The cup P should be over the brush M only when applying the blacking; at all other times it should stand upon the plate *s'*.

The bar O is held down against the collar R by a spiral spring, T, placed upon the upper end of the pin N.

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

1. In combination with the brush M of a boot-blackening machine, the blacking-holder P, having the cloth Q attached to its perforated bottom, and arranged on the vertically-adjustable and horizontally-swinging arm O, substantially as and for the purpose set forth.

2. In a boot-blackening machine, the combination, with the blacking-holder P, arranged on a swinging arm, of the plate *s'*, as and for the purpose set forth.

3. In a boot-blackening machine, the combination, with holder P, of the spring T and collar R, for the purpose specified.

J. THEODOR SCHULTZ.

Witnesses:

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