No. 821,193. PATENTED MAY 22, 1906.

F. L. ROLPH.

BOOT AND SHOE CLEANER.

APPLICATION FILED SEPT. 13, 1904.

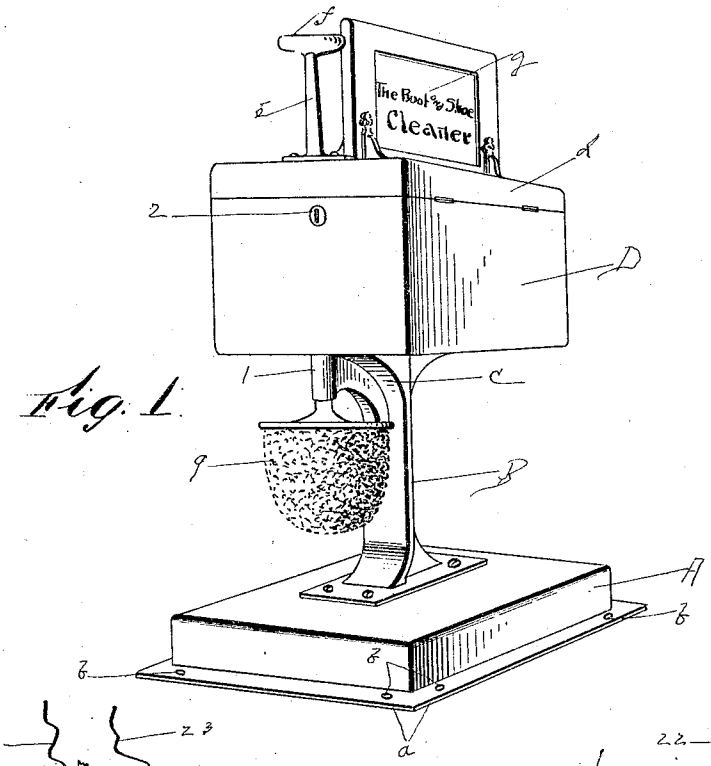


Fig. 1.

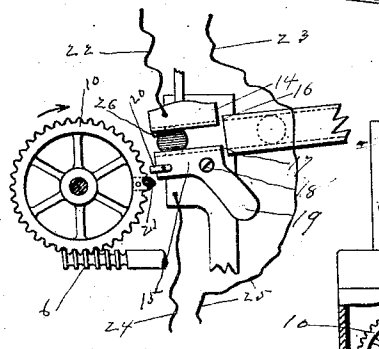


Fig. 3.

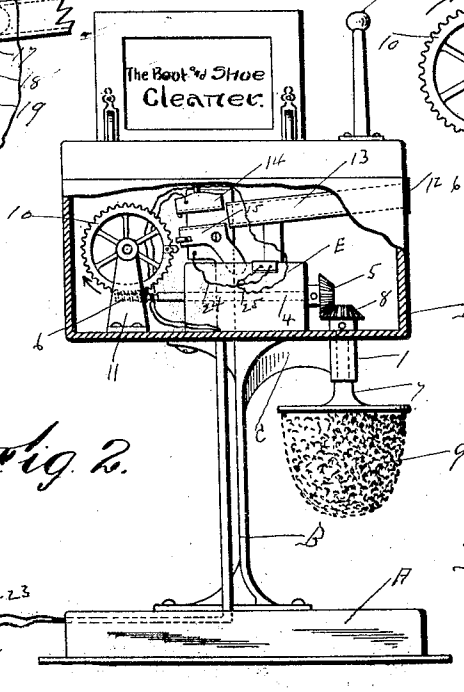


Fig. 2.

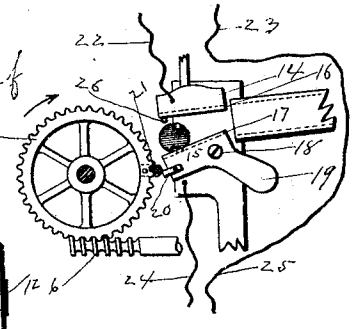


Fig. 4.

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BOOT AND SHOE CLEANER.

No. 821,193. Specification of Letters Patent. Patented May 22, 1906.

Application filed September 13, 1904. Serial No. 224,256.

To all whom it may concern:

Be it known that I, FREDERICK L. ROLPH, of Fitchburg, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Boot and Shoe Cleaners; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to boot-cleaners, and more particularly to that class known as "check-controlled."

The object of the invention is to provide a device of this character that is operated by electricity. A still further object of the invention is to provide means whereby the current of electricity is under control of a coin.

The invention also has for an object novel means whereby the coin can be displaced from its operative position, and thereby limit the time of the operation of the machine.

The invention also has for an object the construction of such an apparatus which will not necessitate stooping on the part of the user and which will also produce a machine that can be easily placed in any suitable locality.

A further object of the invention is to produce a device of this character that will be simple in construction, efficient in practice, and economical to manufacture.

With the above and other objects in view the invention consists in the arrangement and combination of parts to be hereinafter more fully described and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a view in perspective of the machine when in applied position. Fig. 2 is a view in elevation and partly in section, showing the operative parts of the invention. Fig. 3 is a detail view of the circuit-controlling means, a circuit being made. Fig. 4 is a view similar to Fig. 3, with the exception that the circuit is broken and the controlling-coin is in position to drop.

In the drawings, A indicates a base having the lower flanges *a*, which are provided with the openings or apertures *b*, through which bolts, screws, or other suitable means are adapted to pass to secure the base in a predetermined location. Secured centrally of the base and extending upward therefrom is a standard B. Formed integral with and extending to one side of the standard, at the top thereof, is a wing C, having formed in its end a bushing 1. Suitably secured to the top of the standard A is a housing D, having a suitable lid *d* hinged thereto at one end and adapted to be held in a closed position by means of the lock 2. Within the housing is secured a dynamo E, which imparts motion to a shaft 4, which has on one end a gear-wheel 5 and on the opposite a worm 6. Mounted in the bushing 1 and extending within the housing is a shaft 7, having on its upper end and within the housing a gear-wheel 8, meshing with the gear-wheel 5 on the shaft 4. Attached to the lower end of the shaft 7 is a suitable polishing-head 9. This head is preferably removably secured to the shaft 7 in order that it can be readily replaced when it has become worn or otherwise unfit for use. The worm-gear 6 on the shaft 4 meshes with a gear 10, which is mounted in the support or journal 11, secured at one end to the base of the housing.

One of the faces of the housing has formed therethrough a slot 12, which communicates with a channel or coinway 13 within said housing. This coinway should be formed of non-conductive material. This coinway 13 leads to two conductive plates 14 and 15, suitably spaced apart and secured to but insulated from a side of the housing. These plates are provided with opposing grooves 16 and 17, and thereby form a way for the reception of a coin discharged therebetween from the coinway 13. The upper plate 14 is rigidly secured; but the lower plate 15 is pivoted, as at 18. This plate 15 has formed integral therewith an arm 19 at one end, which provides sufficient weight to hold the plate normally in a parallel position with the upper plate. Secured to the opposite end of the plate 15 is an arm 20, which is adapted to come into contact with an arm or extension 21, secured to the side of the wheel 10. These arms 20 and 21 are removably secured in their positions in order that they may be easily replaced for any cause. From any suitable electrical source, preferably exterior of the housing, the plate 14 is connected by the wires 22 and 23. In the drawings and the preferred form the wires extend through the base A and up through the standard B to the plate. The plate 15 is connected to the dynamo E by means of the wires 24 and 25.

In practice normally the arm 21 is just be-

low the arm 20. A coin is inserted through the slot 12 into the coinway 13, from which it passes between the plates 14 and 15, and thereby closes a circuit which operates the dynamo. This causes the shaft 4 to rotate. The gear 5, meshing with the gear 8, causes the head 9 to revolve. The worm 6 causes the wheel 10 to operate, and as it passes around its shaft it carries the arm 21 along. This arm 21 comes in contact with the arm 20 on the pivoted plate 15, and thereby depresses said plate and causes the coin to drop, which breaks the circuit and stops the machine. The arm 19 is of sufficient weight as to return the plate to its normal position.

In the outer end of the groove 16 of the plate 14 is formed a stop 26. This stop may be a depending lug formed with the plate. It may be made removable or may be of any preferred construction. By the means of this stop the movement of the coin is limited and is positively held between the two contact-plates 14 and 15 until the plate 15 is tripped.

Extending up from the cover or lid *d* is a post *e*, provided at its upper end with a handle *f*, adapted to be grasped by a person in using the apparatus for convenience and support. Any suitable sign or advertising device *g* may also be secured to the lid, according to fancy or requirements.

The operation and construction of the invention is thought to be clearly apparent from the foregoing. It must be observed that any and all changes may be resorted to that fairly fall within the scope of the claims attached hereto without sacrificing the value thereof.

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

1. In combination, a housing having a slot in one of its faces, a chute within the housing leading from the slot, a shaft within the housing, a dynamo carried by the shaft to rotate the same, two plates suitably spaced apart to form a continuation of the chute, one of said plates being immovable, while the remaining plate is pivoted, a weighted arm carried by the pivoted plate to hold it normally parallel with the first-named plate, a stop carried by the fixed plate, means operated by the shaft to contact with and impart motion to the pivoted plate, and a suitable connection from an electrical source to the plates and dynamo.

2. In combination, a housing having a slot in one of its faces, a chute within the housing leading from the slot, a shaft within the housing, a dynamo carried by the shaft to rotate the same, two plates suitably spaced apart to form a continuation of the chute, one of said plates being immovable, while the remaining plate is pivoted, a weighted arm carried by one end of the pivoted plate to hold said plate normally parallel with the fixed plate, an extension on the opposite end of the pivoted plate, means operated by the shaft adapted to contact with the extension of the pivoted plate to impart motion thereto and a suitable connection between an electrical source, plates and dynamo.

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