Sept. 16, 1924. 1,508,541

H. J. S. CROSS

COMBINED FLOOR WAXER AND POLISHER

Filed March 29, 1923

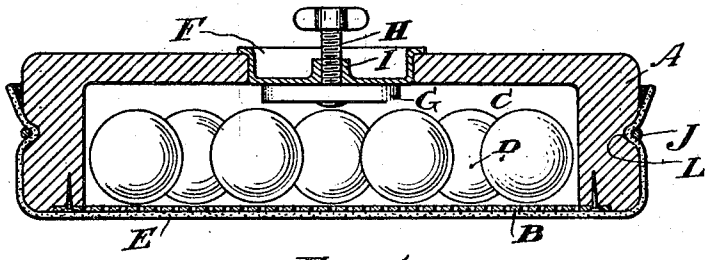


Fig. 1.

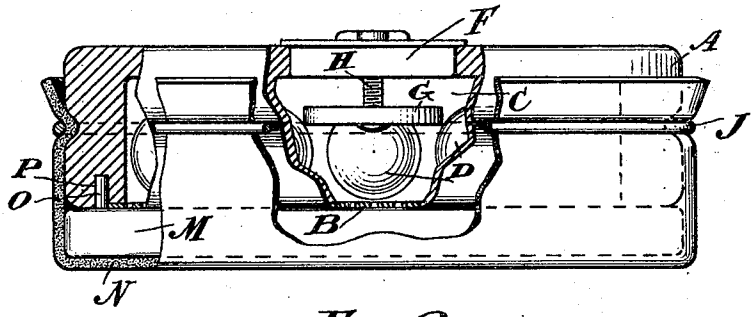


Fig. 2.

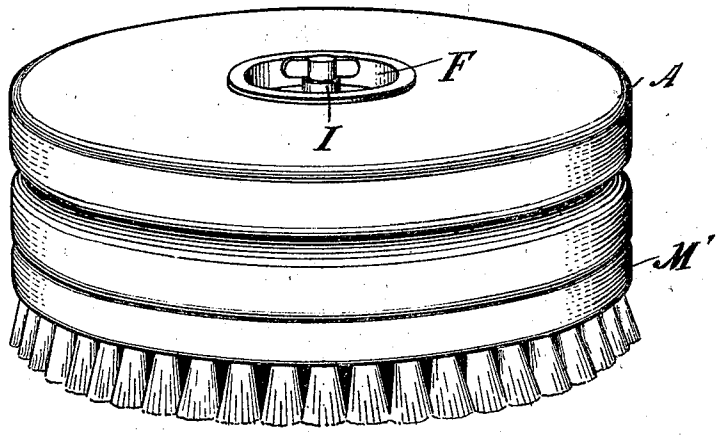


Fig. 3.

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UNITED STATES PATENT OFFICE.

HENRY JAMES STEWART CROSS, OF TORONTO, ONTARIO, CANADA.

COMBINED FLOOR WAXER AND POLISHER.

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To all whom it may concern:

Be it known that I, HENRY JAMES STEWART CROSS, a subject of the King of Great Britain, residing in the city of Toronto, county of York, Province of Ontario, Canada, have invented certain new and useful Improvements in Combined Floor Waxers and Polishers, of which the following is a specification.

My invention relates to improvements in combined floor waxers and polishers, and the object of my invention is to design a device capable of performing the dual function noted, and one which will be very much lighter in weight than the waxing and polishing devices now on the market, and will also be much cheaper to manufacture, and in the following specification I shall describe two disclosures within my invention, and what I claim as new will be set forth in the claims forming part of this specification.

Fig. 1 is a vertical cross-section through my device, showing the same adapted for waxing. Fig. 2 is in part a side elevation of my device, showing certain parts in section to show how my device is adapted for polishing, and Fig. 3 is a perspective view of a modified form of my device adapted for polishing.

In the drawings, like characters of reference refer to the same parts.

The shape and size of the device of course are immaterial, and although it forms no part of my invention, a handle may be attached to the device, if desired.

The device comprises a container A, having a perforated bottom B suitably attached thereto, which bottom is preferably made of metal, such as aluminum.

Within the chamber C of the container I place a plurality of balls D relatively quite heavy, so that as the device is moved over the floor the movement of the balls within the chamber C (in which chamber the wax is placed) will force the wax through the bottom B and saturate the fabric E which is suitably coupled to the container so as to cover the outer surface of the bottom B.

The top of the container A is apertured, and this aperture is closed by a removable closure member F, which of course is replaced when the wax has been placed within the chamber C.

The balls D are preferably made of metal, though they may be made of any suitable material.

When it is desired to limit movement of the balls D within the chamber C, specially when polishing the floor, I provide an interfering or limiting device, which, when positioned for use will greatly limit the movement of the balls. In the disclosure made, the said interfering or limiting device comprises a disc-like member G having a threaded stem H operating through an internally threaded hub I carried by the closure member F. The said interfering or limiting device, when not in use occupies the position shown in Fig. 1, and consequently the balls D or their equivalent may freely move thereunder and so have their greatest range of movement. When the disc-like member G is in the position shown in Fig. 2, the balls cannot pass thereunder, and consequently their sphere of action will be greatly restricted. In fact, the said disc-like member can be of such a size as to allow the balls D to have very little movement.

The fabric E is shown as attached to the container by means of a clamping member J and co-acting with a groove L externally formed in said container. The clamping member J is of such a character as to readily permit of the removal of the fabric E.

When it is desired to polish the floor, the fabric E is removed, and is replaced by a shoe M preferably made of wood, and associated with a polishing fabric N. This fabric N is detachably coupled to the container in any suitable manner, preferably by means of the clamping member J beforementioned.

The shoe M is removably coupled to the container A by any suitable means such as pins O (one only of which is shown), which enter into the pockets P formed in said container A.

A modified form of shoe M is shown in Fig. 3 where the shoe M′ is in the form of a brush.

Obviously the wax used may be in any suitable form, and although I have specifically mentioned balls as used, I do not limit myself specifically to balls, as any members movably mounted within the cham-

ber C and performing the function of said balls I consider as falling within the terms of my claims.

The prior art discloses means having vertical movement to feed wax through a perforated member, but such feeding means is not capable of free movement within the containing means in a horizontal plane in respect of said perforated member. In other words, vertically applied pressure is utilized through the instrumentality of certain means to feed the wax, but these feeding means do not function after the manner of the movable elements mounted within a container within my invention. The balls D, or their equivalents, have momental movement apart from the movement of the device as a whole, and in the same and different directions as that of said bottom.

What I claim is:

1. A device of the class described comprising a chambered container; a perforated member closing the bottom of said chamber, and a plurality of elements which while partaking of the movement of the device as a whole have individual momental movement apart from the horizontal movement of said member, and in the same and different directions within said chamber and adapted to force the wax therein through said perforated closure member, as said device is moved.

2. A device of the class described comprising a chambered container; a perforated member closing the bottom of said chamber; a plurality of elements which while partaking of the movement of the device as a whole have individual momental movement apart from the horizontal movement of said member, and in the same and different directions within said chamber and adapted to force the wax therein through said perforated closure member, as said device is moved, and a fabric covering the outer face of said perforated member and removably associated therewith, and adapted to distribute the wax over the surface to be waxed, as the device is moved.

3. A device of the class described comprising a chambered container; a perforated member closing the bottom of said chamber; a plurality of elements which while partaking of the movement of the device as a whole have individual momental movement apart from the horizontal movement of said member, and in the same and different directions within said chamber and adapted to force the wax therein through said perforated closure member, as said device is moved, and means carried by said container and adapted to restrict the movement of said distributing means for the wax within said chamber, when desired.

4. A device of the class described comprising a chambered container; a perforated member closing the bottom of said chamber; a plurality of balls mounted within said chamber and adapted to force the wax therein through said perforated closure member; means carried by said container and adapted to restrict the movement of said balls within said chamber; a removable polishing shoe associated with the underside of said container and faced up against the outer side of said perforated closure member.

5. A device of the class described comprising a chambered container; a perforated member closing the bottom of said chamber; a plurality of metal balls mounted within said chamber; a closure member for the feed opening formed in the top of said container through which the wax is passed, and an interfering device associated with said closure member and adapted to be manipulated to restrict the movements of said balls when desired.

6. A device of the class described comprising an apertured or perforated member; a plurality of elements which while partaking of the movement of the device as a whole have individual momental movement apart from the horizontal movement of said member, and in the same and different directions and adapted to force wax therethrough, and means adapted to retain said apertured member and said movable elements in cooperative relationship.

HENRY JAMES STEWART CROSS.