April 20, 1948. J. H. LUDWICK 2,440,014

POLISHING IMPLEMENT WITH WORK FACE CONSISTING OF REPLACEABLE FABRIC SHEETS

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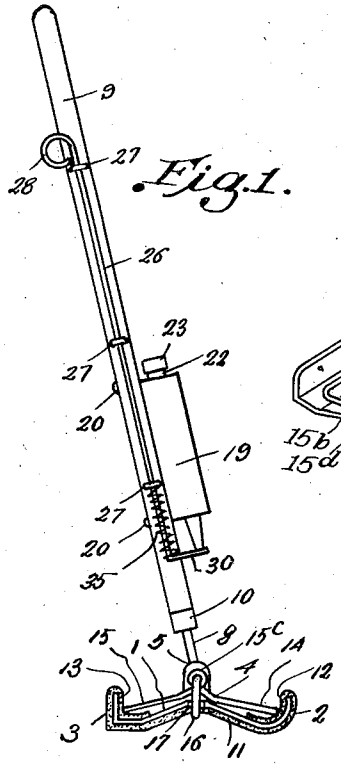


Fig. 1.

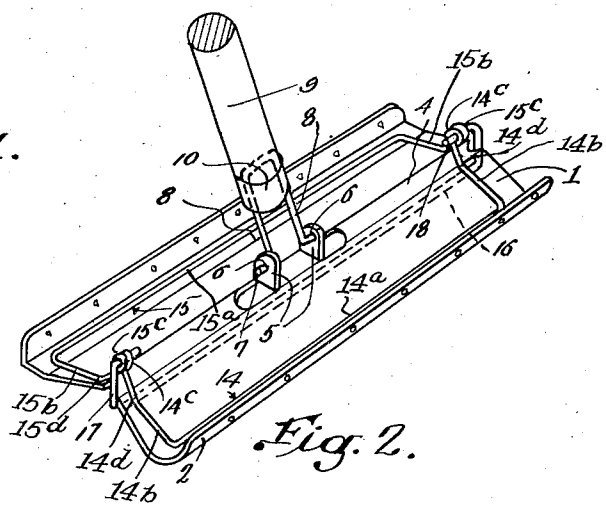
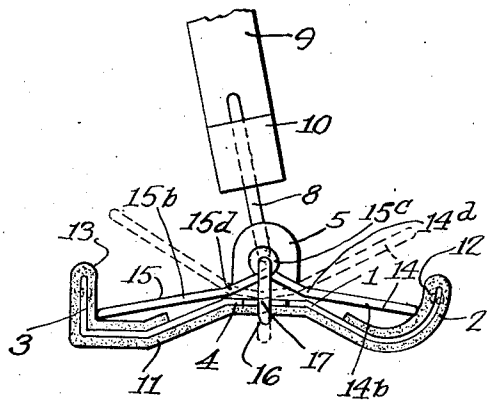


Fig. 2.

Fig. 3.



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POLISHING IMPLEMENT WITH WORK FACE CONSISTING OF REPLACEABLE FABRIC SHEETS

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4 Claims. (Cl. 15—231)

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This invention relates to a floor waxer and it is the object of the invention to provide a waxer which is hand operated and has a head so formed that a cloth may be readily applied to it and firmly secured in position for use as means for applying wax to a floor and also as a polishing cloth.

Another object of the invention is to provide the waxer with a head so formed that when the waxer is in use and pushed across a floor it may ride over rough places, the opposite edge portion of the head being so formed that it will fit close to the junction of a floor with a wall and cause all portions of the floor to be covered with wax.

Another object of the invention is to provide improved clamping means for securing a cloth to the head, the clamp being so formed and so mounted that while it may have tight gripping engagement with a cloth it may be loosened very easily and when loosened be entirely freed from the cloth and permit ready removal of a cloth and substitution of another cloth.

Another object of the invention is to provide the waxer having a wax container so mounted upon its handle that when a valve carried by the handle is moved to opened position liquid wax may flow from the container and onto a floor where it will be spread by the cloth carried by the head of the waxer.

Another object of the invention is to provide a waxer having valve means for controlling the flow of wax from a container so formed that the valve will be normally held closed and may be opened by pull upon a rod extending along the handle of the waxer.

The invention is illustrated in the accompanying drawings wherein:

Figure 1 is a side view of the improved waxer.

Figure 2 is a perspective view of the waxer, the handle being broken off close to its lower end.

Figure 3 is a view showing the head and lower portion of the handle in elevation, the clamping means for the cloth being indicated in released position by dotted lines.

This improved floor waxer has a head 1 formed of sheet metal. The metal plate from which the head is formed has its forward portion bent to form an upwardly curving lip 2 and its rear portion bent to form an upstanding flange 3 which is disposed perpendicular to the plane of the head at right angles thereto. Since the lip 2 is curved the head may ride easily over rough places in a floor as it is pushed forwardly and since the flange is disposed at right angles to the head it will fit close to the base board of a wall

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and thus allow wax to be applied along edge portions of a floor close to the walls of a room. The midportion of the head is bent to provide a bridge 4 having sloping front and rear portions and midway the width of the head the bridge has tongues struck from it which are bent upwardly to form ears 5 through which openings 6 are formed to receive outstanding fingers 7 at lower ends of the forks 8 carried by a handle 9. The forks 8 are formed from portions of a metal rod which is passed through the handle and then bent downwardly to form the forks and since a ferrule 10 is applied to the lower end of the handle the forks will be held close to the opposite side portions of the handle and the handle prevented from splitting.

The cloth 11 fits against the under face of the head 1 and has portions 12 and 13 folded over the lip 2 and the flange 3 where they are held by clamps 14 and 15. These clamps are formed of strong wire strands which are bent to provide bridge portions 14*a* and 15*a* and side arms 14*b* and 15*b* terminating in loops or eyes 14*c* and 15*c*. A bar 16 formed of strong wire extends longitudinally of the bridge 4 for engagement with the under face thereof and this bar has its end portions bent to form upstanding arms 17 terminating in inwardly extending fingers constituting pins which engage through the eyes 14*c* and 15*c* and hingedly mount the clamps 14 and 15 for vertical swinging movement from the lowered clamping position shown in full lines in Figure 3 to the raised position indicated by dotted lines in this figure.

When the clamps are in the raised position the bar 16 drops out of contact with the under face of the bridge 4 and the cloth may then be applied to the under face of the head and front and rear portions folded over the lip 12 and the flange 13, and when the clamps are returned to the clamping position they will be rocked upon the upper face of the bridge by engagement of the bends 14*d* and 15*d* of the arms of the clamps with the bridge, as shown in Figure 3, and the bar 16 drawn upwardly as the clamps are forced into tight binding engagement with the portions of the cloth folded inwardly over the lip and the flange. Therefore the cloth will be held firmly and smoothly against the under face of the head and prevented from slipping loose. When the cloth becomes worn to such an extent that it must be replaced the clamps are swung upwardly to the releasing position and the bar drops to the dotted line position, thus releasing the cloth and permitting easy removal thereof.

It will also be obvious that after wax has been applied to a floor the applying cloth may be removed and a polishing cloth substituted. The pivotal connection between the handle and the ears 5 not only allows the handle to have tilting movement relative to the head 1 during use of the waxer but also allows the head to be tilted rearwardly and upwardly to an inactive position where it will be out of the way and allow the waxer to be set in place close against a wall of a closet when not in use.

Having thus described the invention, what is claimed is:

1. A floor waxer comprising a head formed of sheet material and having its forward portion bent to form an upwardly curved lip and its rear portion bent to form an upstanding flange, the intermediate portion of the head being bent upwardly to form a bridge having sloping front and rear portions, tongues struck from said bridge and bent upwardly to form ears spaced from each other longitudinally of the bridge and perforated, a handle having forks at its lower end engaged through perforations of said ears and mounting the head for tilting movement from a substantially horizontal position under the handle for use to a raised substantially vertical inactive position, a bar extending longitudinally of said head under its bridge and having arms at its ends projecting upwardly above ends of the bridge and terminating in inwardly extending pins, a cloth for covering the under face of said head extending between the bar and the bridge and having front and rear portions folded inwardly over the lip and the flange respectively and resting upon the upper face of the head, and front and rear clamps each having a bridge portion and arms extending from ends thereof and terminating in eyes, said pins passing through said eyes and mounting the clamps for swinging movement from a lowered position in which their bridge portions are disposed close to the lip and the flange of the head and cooperate therewith for gripping contact with the folded portions of the cloth to a raised position for releasing the cloth, said clamps having rocking engagement with the upper surface of the bridge of the head when swung to a lowered position and causing the bar to be drawn upwardly and hold the cloth tightly against the under face of the head and when raised removing pull upon the bar whereby the bar may then have downward movement away from the under face of the bridge and release the cloth.

2. A floor waxer comprising a head formed from a plate bent to form an upwardly curved lip along the front of the head and an upstanding flange along the back of the head, the head having an intermediate portion bent and forming a longitudinally extending upstanding bridge, a handle pivotally connected with the bridge and mounting the head for tilting movement relative to the handle, a bar extending longitudinally of said head under the bridge and having arms at its ends projecting upwardly above the ends of the bridge and at their upper ends provided with inwardly extending pins positioned over the bridge, said bar being free from said head, and clamps for gripping end portions of a cloth and holding the cloth in place under the head with the said end portions folded over the lip and the flange, said clamps having arms formed with eyes received on said pins and mounting the clamps for swinging movement to raised and lowered positions, the arms of the clamps when swung downwardly having rocking engagement with the upper face of the head and thereby exerting upward thrust upon the pins and move the bar into pressing engagement with an intermediate portion of the cloth to hold the cloth firmly against the under face of the head.

3. A floor waxer comprising a head formed of sheet material and having a lip along its front edge and a flange along its rear edge and having a portion bent upwardly and forming a longitudinally extending upstanding bridge spaced from its front and rear edges, a handle secured to said head, a bar extending longitudinally of said head under the bridge for holding a cloth against the under face of the head, said bar having arms at its ends extending upwardly above the bridge at the ends thereof and formed with pins extending inwardly over the bridge, and clamps for releasably securing end portions of the said cloth folded over the lip and the flange, said clamps having portions cooperating with the lip and the flange for gripping end portions of the cloth and arms extending from the cloth engaging portions and pivoted to said pins and adapted to engage the bridge as a fulcrum and draw the bar upwardly under the bridge for tightening the cloth when the clamps are swung downwardly to a securing position.

4. A floor waxer comprising a head formed of sheet material and having a lip along its front edge and a flange along its rear edge and having a portion bent upwardly and forming a longitudinally extending upstanding bridge spaced from its front and rear edges, a handle secured to said head, a bar extending longitudinally of said head under the bridge and having arms at its ends extending upwardly above the bridge and formed with pins extending inwardly over the bridge, said bar being free from the bridge and shiftable upwardly under the bridge for tightening a cloth against the under face of the head, and clamps for securing end portions of the said cloth folded about the lip and the flange, said clamps being pivoted to said pins and having rocking engagement with the bridge to shift the bar upwardly to its cloth tightening position when the clamps are swung downwardly to a clamping position.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
869,842	Hill	Oct. 29, 1907
1,250,375	Stansel	Dec. 18, 1917
1,709,331	Waters	Apr. 16, 1929
1,776,710	Thorburn	Sept. 23, 1930
1,792,589	Johnson	Feb. 17, 1931
1,983,363	Glover	Dec. 4, 1934
1,993,571	Soderberg	Mar. 5, 1935
2,061,216	Thompson	Nov. 17, 1936
2,073,170	Pieper	Mar. 9, 1937
2,124,220	Winston	July 19, 1938
2,300,911	Cravis	Nov. 3, 1942