(No Model.

W. LAWES.

SHOE BURNISHING TOOL.

No. 417,872. Patented Dec. 24, 1889.

Fig. 1

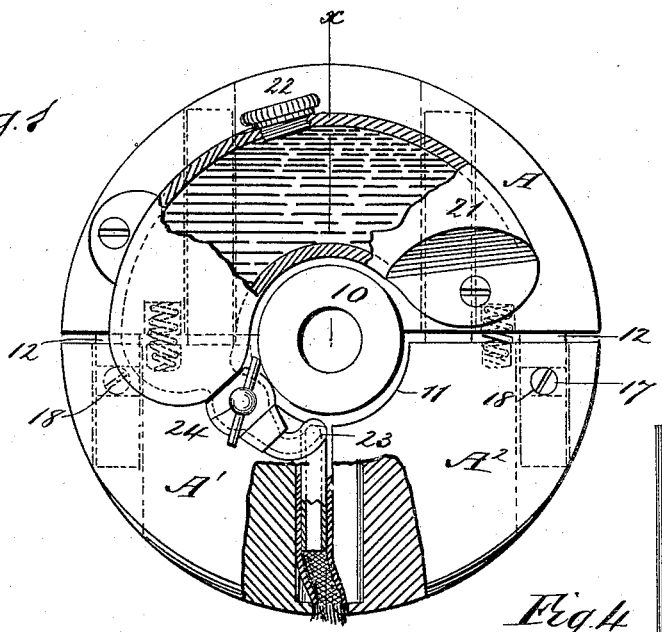


Fig. 4

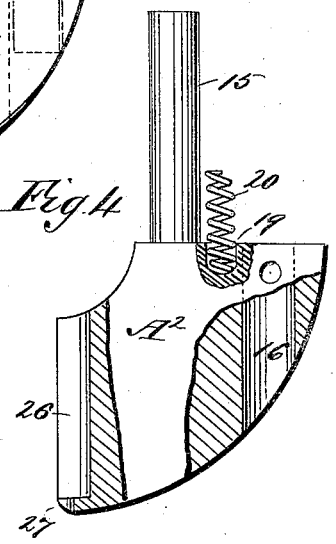


Fig. 2

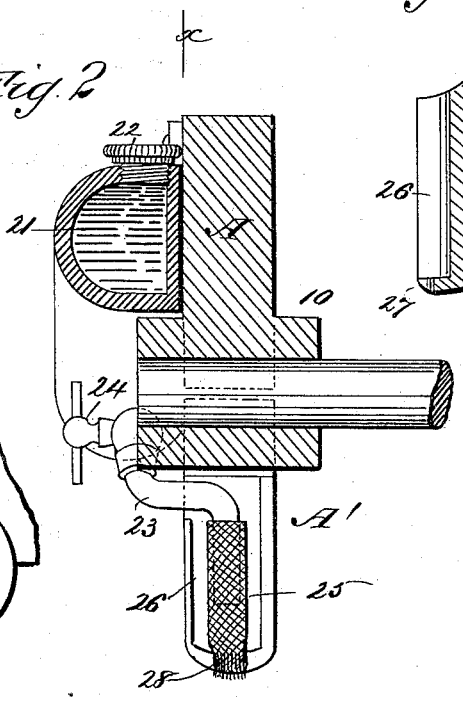
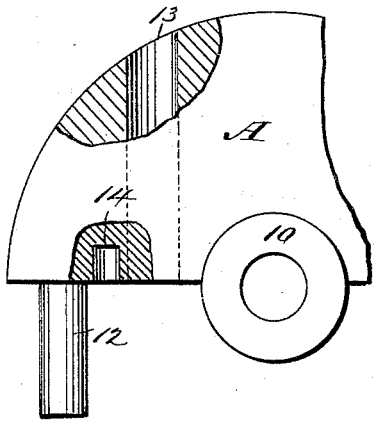


Fig. 3.



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SHOE-BURNISHING TOOL.

SPECIFICATION forming part of Letters Patent No. 417,872, dated December 24, 1889.

Application filed April 11, 1889. Serial No. 306,876. (No model.)

To all whom it may concern:

Be it known that I, WALTER LAWES, of New Bedford, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Shoe-Burnishing Tools, of which the following is a full, clear, and exact description.

My invention relates to an improvement in shoe-burnishing tools, and especially relates to that class of tools capable of being revolved and attached to a shoe-finishing machine.

The invention has for its object to provide a tool having sectional or twin burnishers, and in which each section will be capable of burnishing the heel or sole of a shoe, one section following the other, and wherein the wax will be automatically fed to the shoe during the revolution of the device.

A further object of the invention is to burnish the dry blacking, wax the surface burnished, and burnish the waxed surface without stopping the motion of the machine to which the burnisher is attached.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the burnisher, partially in section, illustrating the wax-chamber and the wax-conductor. Fig. 2 is a central vertical section on line x x of Fig. 1; and Figs. 3 and 4 are partial side elevations and sectional views of the opposed sections of the burnisher, showing the manner in which one section is grooved to receive the studs of the opposed sections.

The burnisher is made up, primarily, of three sections A, A′, and A^2, the section A constituting one half of the device, which is ordinarily constructed in the form of a disk, and the sections A′ and A^2 the other half.

The hub 10, whereby the device is attached to the spindle of the shoe-finishing machine, is formed integral with the main section A, and the two opposed sections A′ and A^2 are provided at one inner edge with a cavity 11 to receive the projecting cylindrical surface of the hub, as best illustrated in Fig. 1.

At each side of the hub 10 a stud 12 is projected from the inner edge of the main section A, as illustrated in Fig. 3, and between the hub and each of the studs 12 a bore 13 is horizontally produced in the said main section A, extending from the inner edge out to its periphery, and between each of the said bores 13 and each stud 12 a socket or recess 14 is formed in the said inner face of the main section, as is likewise illustrated in Fig. 3. The inner edge of each of the sections A′ and A^2 of the device is likewise provided upon its inner face, near the cavity 11, with a stud 15, which studs are purposed to slide into the bores 13 of the main section, as illustrated in dotted lines in Fig. 1.

Near the periphery of each of the sections A′ and A^2 a bore 16 is produced, (illustrated in Fig. 4,) extending from the inner edge outward, the said bore 16 of each of the said sections A′ and A^2 being adapted to receive, respectively, the said studs 12, projected from the main section, as is also best illustrated in dotted lines in Fig. 1.

Preferably in the upper face of one of the studs 12 and the lower face of the opposed stud 12 of the main section a recess 17 is formed, (illustrated in dotted lines in Fig. 1,) and a screw 18 is passed down through each of the sections A′ and A^2 into the recesses 17 of the studs 12, thereby securing the said sections A′ and A^2 substantially in contact with the main section A. The recesses 17 are of sufficient length to permit the sections A′ and A^2 to have a slight lateral movement.

Between the studs 15 of the smaller sections A′ and A^2 and the bores 16, contained therein, a recess 19 is produced, as shown in Fig. 4, adapted to receive one end of a spring 20, the other end of the said spring being seated in the recesses 14 of the main section A. The said springs tend to keep the opposed edges of the main and smaller sections a slight distance apart.

Upon one face of the main section A a chamber or tank 21 is secured or formed integral therewith, which chamber or tank is preferably semicircular in general contour and provided with a threaded opening closed

by a cap 22 and adapted to receive the wax employed in burnishing, which wax is introduced into the chamber through the cap-opening. At one end of the chamber a tube 23 is connected, controlled by a valve 24, of any approved construction, located in the said tube near the tank or chamber. The tube 23 is bent downward a slight distance parallel with the longitudinal axis of the hub 10 and carried outward in the direction of the periphery of the device through a space 25 between the opposed edges of the sections A′ and A^2, which space is formed by producing a channel 26 in the said opposed faces of the smaller sections, as illustrated in Figs. 1 and 4. The outlet of the channel 26 at the periphery of the sections is quite small, as illustrated at 27 in Fig. 4.

The end of the tube 23 is stopped quite a distance back from the peripheral opening 27, and upon the end of said tube a feed-tube 28 is attached, usually constructed of a woven material solid at the outer end, which extends slightly through the peripheral opening 27 and tubular at the inner extremity, which tubular extremity is made to contact with the outer surface of the tube 23, as best shown in Fig. 1.

The wax which is contained in the tank or chamber 21 is heated in any well-known manner by means of a gas-flame or the flame from an oil or an alcohol lamp, and as the said wax is reduced to a molten state when the valve 24 is opened it flows through the tube 23 into the feed-tube 28, the outer end of which feed-tube is adapted for contact with the surface to be burnished.

When the sections are in their normal position, as indicated in Fig. 1, the outer end of the feed-tube 28 is almost within or projects very slightly beyond the peripheral aperture 27. When, however, the sections A′ and A^2 are brought in contact with the surface to be burnished, the said sections are pressed inward toward the main section A, whereupon a sufficient length of the feed-tube is exposed to properly distribute the wax over the heel or sole of a shoe, for instance.

When the burnisher is in operation, the section A first burnishes the dry blacking, with which the heel or sole is covered, and as the sections A′ and A^2 are brought in contact with the burnished surface the smaller sections are forced inward in the direction of the larger section, the feed-tube 28 deposits a coating of wax upon the said burnished surface, and one of the said sections A′ or A^2 immediately follows and effectually burnishes the waxed surface. Thus the operation of burnishing the blackened surface and the waxed surface is accomplished without stopping the rotation of the device and consequently the movement of the machine to which the device is attached.

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

1. The improved disk-shaped burnisher hereinbefore described, the same consisting of segmental pieces or sections A A′ A^2, having studs 12 arranged and adapted to slide in sockets, as described, and the springs interposed between said sections, as and for the purpose specified.

2. The combination, with a burnisher constructed of two or more united sections, of a wax tank or chamber and a textile feed-tube connected with the said chamber and extending between two of the sections of the burnisher out to the periphery of the same, substantially as shown and described.

3. The combination, with a burnisher constructed of two or more connected sections having lateral play and provided with interposed springs, of a wax tank or chamber attached to one section of the burnisher, a delivery-pipe projected from the said burnisher between two opposed sections, and a textile feed-tube secured upon the delivery-pipe and extending beyond the periphery of the said sections, substantially as shown and described.

4. The combination, with a burnisher consisting of a series of united sections having a slight lateral play and provided with interposed springs, of a wax tank or chamber secured upon one section, provided with a delivery-pipe and a valve in said pipe, said delivery-pipe extending in the direction of the periphery of the burnisher in a channel formed between the opposed edges of two of the sections, and a textile feed-tube secured to the delivery-pipe and extending outward through an aperture in said periphery, substantially as and for the purpose specified.

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