March 23, 1943. L. S. GUY 2,314,394

SHOE POLISHER

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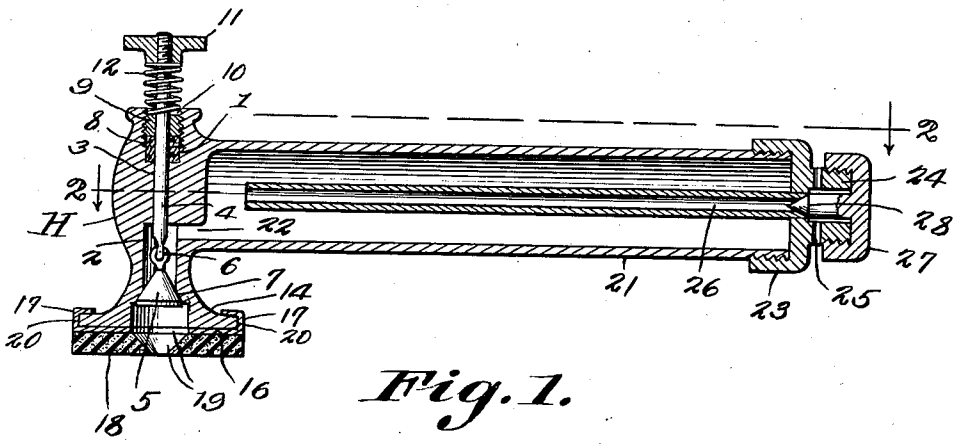


Fig. 1.

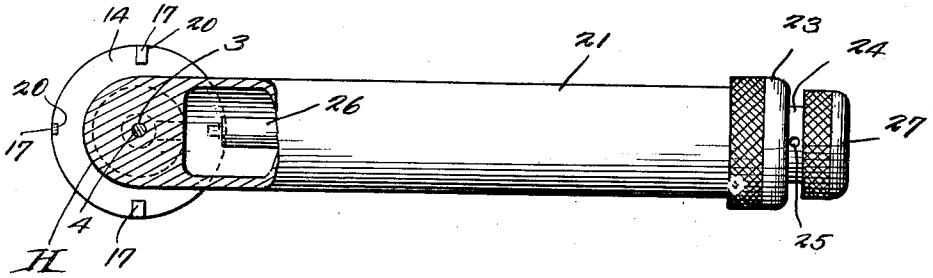


Fig. 2.

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SHOE POLISHER

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2 Claims. (Cl. 15—138)

The device forming the subject matter of this application is adapted to be used for many purposes, such as applying a liquid dressing to shoes. The invention aims to supply novel means for governing the flow of liquid and to provide novel means whereby the liquid is spread upon the shoe or other object.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing:

Fig. 1 shows in longitudinal section, a device constructed in accordance with the invention; and

Fig. 2 is a section on the line 2—2 of Fig. 1.

The applicator forming the subject matter of this application may be made of any desired material or combination of materials. It comprises a head H, having a first recess 1 in one end, and a second recess 2 in its opposite end, the head having a reduced bore 3 connecting the recesses.

A plunger 4 is slidable in the bore 3. A conical valve 5 is pivotally connected to one end of the plunger 4, for free swinging movement, as shown at 6, the valve being adapted to cooperate with a seat 7, formed in the head H at the outer end of the second recess 2. Owing to the conical form of the valve 5, the liquid will not accumulate upon it, a consideration which is especially desirable if the liquid is of a well known, white, chalky nature.

A compressible packing 8 is located in the first recess 1. A combined packing-compressor and guide 9 is threaded into the first recess 1, the outer end surface of the compressor being spaced inwardly from the outer end surface of the head H, to form a seat 10 in the outer end of the first recess.

A push button 11 is threaded for adjustment on the outer end of the plunger 4. A compression spring 12 surrounds a portion of the plunger 4, the compression spring abutting at one end against the button 11, the opposite end of the spring being disposed in the seat 10 and having abutment against the compressor 9.

The spring 12 serves primarily to hold the valve 5 seated. It serves, also, to some extent, to prevent the compressor 9 from unthreading. Since the lower end of the spring 12 is received in the seat 10, the spring is held spaced from the plunger 4.

The numeral 14 marks a disk provided with a reduced neck 15 formed integrally with the head H, if desired. The disk 14 is provided with peripheral notches 20.

The numeral 16 marks a plate having bendable fingers 17 which are received in the notches 20 of the disk 14, the fingers overhanging the upper surface of the disk 14, the plate 16 being in engagement with the lower surface of the disk.

A spreader 18 is secured by cementing or otherwise to the plate 16 and may be of any desired form. If preferred, the spreader 18 may be made of sponge rubber, felt or the like. The plate 16 and the spreader 18 have registering, tapered openings 19 for the passage of the liquid which is to be applied. The tapered form given to the openings 19 gives a better control of the liquid after discharge past the valve 5, while the the liquid is being spread. When the spreader 18 becomes worn, it may be replaced by another spreader, the fingers 17 simply being bent upwardly through the notches 20 of the disk 14, and inwardly, to overhang the disk.

A tubular, combined handle and reservoir 21 is secured to the head H and projects laterally therefrom, the reservoir communicating with the second recess 2 of the head, by way of a port 22 in the head. An inner closure 23 is threaded on the outer end of the reservoir 21 and has a reduced neck 24, supplied with lateral air vents 25.

A vent tube 26 is secured at one end to the closure 23 and is extended to a point closely adjacent to the place 22 of discharge from the reservoir into the head.

The liquid (which is placed in the reservoir 21 by removing the closure 23) generally is not of a markedly fluid nature, and the flow of the liquid is promoted because the air traversing the vents 25 and the tube 26 is delivered close to the port 22.

A cap or outer closure 27 is threaded for adjustment on the neck 24 of the closure 23, and is provided with a spur valve 28 which is pointed to cooperate with the outer end of the vent tube 26, the valve operating inwardly of the vents 25, to govern the flow of air through the tube 26.

The device is operated by pressing the push

button 11, thereby to open the valve 5, the liquid flowing readily to the spreader 18.

The amount that the valve 5 is opened may be regulated by threading the push button 11 inwardly or outwardly along the plunger 4.

It will be noted that the operator has two means of control at his command. One of those means is the valve 5. The other of the aforesaid means consists of the spur valve 28, which governs the amount of air admitted.

If, for example, the somewhat restricted port 22 becomes clogged, then the spur valve 28 may be backed off, to bring about an increased air supply.

It will be observed that the cap 23 may be removed from the reservoir 21, along with the tube 26, the applying head being in nowise disturbed. The cap 27 may be removed, carrying with it the spur valve 28, and, then, the tube 26 may be flushed out with water or cleaned out with a wire or the like, if the inner end of the tube has become clogged. The tube 26 terminates in close relation to the port 22. Because the port 22 is restricted, and because air traversing the tube 26 can bubble upwardly in close relation to the port, the port is kept reasonably clear, and, at the same time, there is no undesirable entrance of air into the head, it being a matter of common knowledge that if the liquid is full of air, as the liquid is applied, the best results are seldom secured.

The device is simple in construction but will be found thoroughly advantageous in use.

What is claimed is:

1. In an applicator for liquids, a tubular reservoir, an applying head on one end of the reservoir and in communication therewith, an inner closure, an air vent tube secured to the inner closure and extended into the reservoir, into close relation to the head, the inner closure having an air inlet discharging into the tube, an outer closure, a spur valve carried by the outer closure and controlling air flow from the inlet to the tube: means for attaching the inner closure detachably to the opposite end of the reservoir, and the tube being spaced from the head, whereby the inner closure and the tube may be removed in one piece, to enable the tube to be cleaned without disturbing the head: and means for attaching the outer closure detachably to the inner closure, whereby the outer closure and the valve may be removed in one piece, to open the tube for cleaning.

2. In an applicator for liquids, a tubular reservoir, a transverse applying head on one end of the reservoir and so located thereon that the reservoir may be used as an approximately horizontal handle, the head having a restricted port leading into the head from the lowermost portion of the reservoir, an air vent tube and means for mounting the tube on the opposite end of the reservoir, the tube terminating in close relation to the port and slightly above the port, whereby air entering the reservoir by way of the tube may bubble upwardly in close relation to the port and tend to keep the port clear, without causing an appreciable flow of air into the head.

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