Sept. 13, 1927. 1,642,099

F. E. BUCK

DEVICE FOR STOPPING SHOE SQUEAKING

Filed April 5, 1927

Fig. 1.

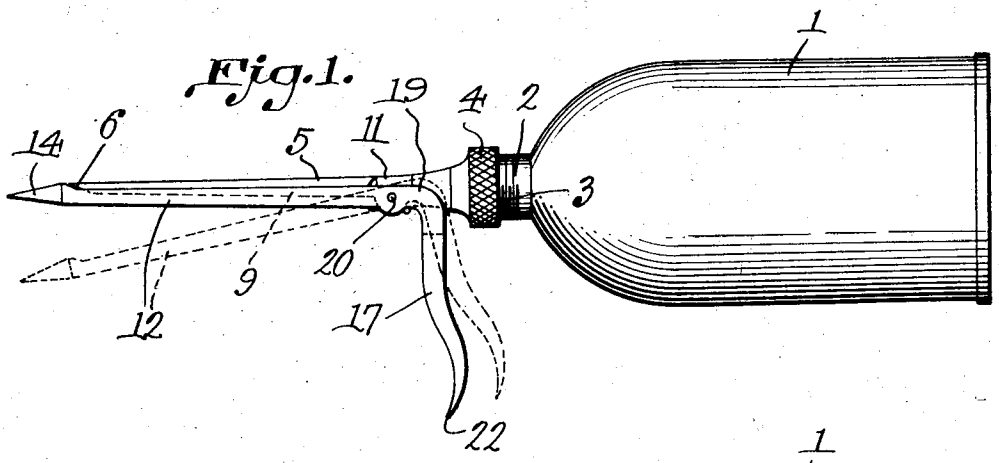


Fig. 2.

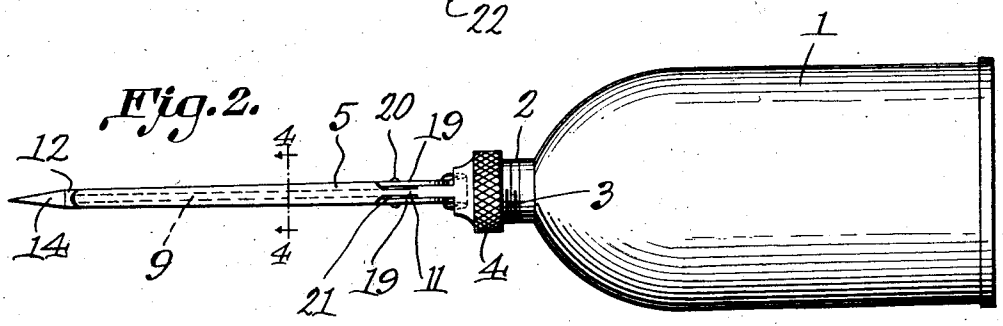


Fig. 3.

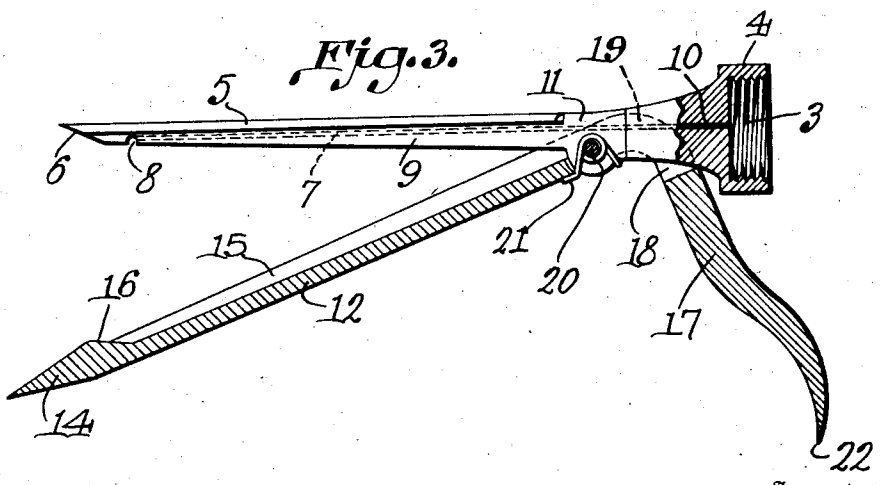
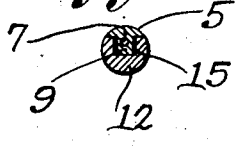


Fig. 4.



Frank E. Buck Inventor

By Cachow & Co.

Attorneys

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UNITED STATES PATENT OFFICE.

FRANK E. BUCK, OF BALTIMORE, MARYLAND.

DEVICE FOR STOPPING SHOE SQUEAKING.

Application filed April 5, 1927. Serial No. 181,177.

This invention aims to provide a simple means whereby the layers of a shoe sole may be opened slightly, to permit the introduction of a substance which will prevent the shoe from squeaking, it being unnecessary to take the layers of the sole apart for the introduction of the material whereby the squeaking is prevented.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the 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 drawings:—

Figure 1 shows in elevation, a device constructed in accordance with the invention;

Figure 2 is a view wherein the device is seen at right angles to the showing of Figure 1;

Figure 3 is a longitudinal section wherein the parts are opened with respect to each other, the receptacle being omitted;

Figure 4 is a cross section on the line 4—4 of Figure 2.

In carrying out the invention, there is provided a receptacle 1 of any desired form, the receptacle being in the form of a squirt can with a yieldable bottom, if desired. The receptacle 1 has a reduced neck 2 whereon is threaded, at 3, a milled cap 4 carrying an elongated delivery member 5, the delivery member 5 being thinned at its rear end, as shown at 11, where it joins the cap. The forward end of the delivery member 5 is beveled as shown at 6. The delivery member 5 has a longitudinal rim 9 in which is located a longitudinal duct 7, which is continued at 10, backwardly through the cap 4, so as to communicate with the receptacle 1. At its forward end, the duct 7 communicates with a cross groove 8 in the rib 9, the cross groove 8 serving as an outlet for the duct 7.

The numeral 12 marks a tapered perforator, which is pointed at its forward end, as shown at 14. The perforator 12 is somewhat longer than the delivery member 5, and has a longitudinal groove 15 in which the rib 9 of the delivery member 5 is received. The forward wall of the groove 15 is inclined, as shown at 16, to correspond with the beveled end 6 of the delivery member 5, and when the parts 12 and 5 are closed together, as shown in Figures 1 and 2, the forward end of the delivery member 5 lies to the rear of the pointed end of the perforator 12, and is protected behind the shoulder shown at 16. The perforator 12 is supplied with a handle 17 disposed about at right angles to the perforator, there being an opening 18 at the point where the handle 17 joins the perforator 12, the opening 18 defining flanges 19 between which the thinned part 11 of the delivery member 5 is received. A pivot element 20 is mounted in the flanges 19 and in the thinned part 11 of the delivery member 5, the construction being such that the parts 12 and 5 can be opened with respect to each other, as shown, for instance, in Figure 3. The parts 12 and 5 are closed together by means of a spring 21, engaged around the pivot element 20, the spring cooperating with the perforator 12 and the delivery member 5, to close these parts together, as aforesaid. The extremity of the handle 17 is thinned and brought to a slightly blunted edge, as indicated at 22.

In practical operation, the substance which is to be used to prevent the shoes from squeaking is placed in the receptacle 1. With the parts 5 and 12 closed together, as in Figure 1, the tapered end 22 of the handle 17 may be used to separate the layers of the sole slightly. Then, with the parts 5 and 12 in the positions shown in dotted line in Figure 1, the pointed end 14 of the perforator 12 is introduced between the layers of the sole of the shoe. By means of the handle 17, the perforator 12 may be swung on the pivot element 20, so as to separate the layers of the shoe sole more or less. Then, by a proper manipulation of the receptacle 1, the contents of the receptacle may be caused to flow through the duct 10—7 and through the outlet groove 8 into the opening that has been formed between the layers of the sole, when the parts 12 and 5 are separated as shown in Figure 3 in dotted line, and as shown in dotted line in Figure 1. Owing to the fact that the delivery member 5 has the longitudinal rib 9 which is received in the groove 15 of the

perforator 12, the parts 5 and 12 mutually reinforce each other, and prevent a bending whilst the aforesaid parts are being introduced into the shoe sole. The head 14 of the perforator 12 lies ahead of the end 6 of the delivery member 5, and protects the delivery member whilst the device is being inserted into the shoe sole.

What is claimed is:—

1. A device of the class described, comprising as cooperating parts, a delivery member and a perforator connected for relative angular movement, the perforator having a puncturing head, one of said cooperating parts having a longitudinal rib, and the other of said cooperating parts having a longitidunal groove receiving the rib, the rib substantially filling the groove, thereby to reinforce the perforator behind the head, when the perforator and the delivery member are closed together.

2. In a device of the class described, a delivery member and a perforator connected for relative angular movement, the perforator having a puncturing head, and the forward end of the delivery member terminating adjacent to the head, the delivery member having a longitudinal internal duct provided with an outlet located closely adjacent to the head, and adapted to discharge into the area which has been penetrated by the head, when the delivery member and the perforator are opened with respect to each other.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

FRANK E. BUCK.