June 7, 1949. M. J. LESSARD 2,472,667

MANICURING DEVICE

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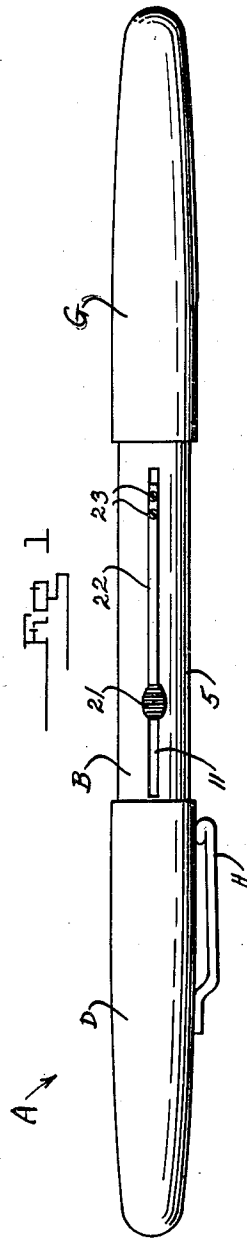


Fig 1

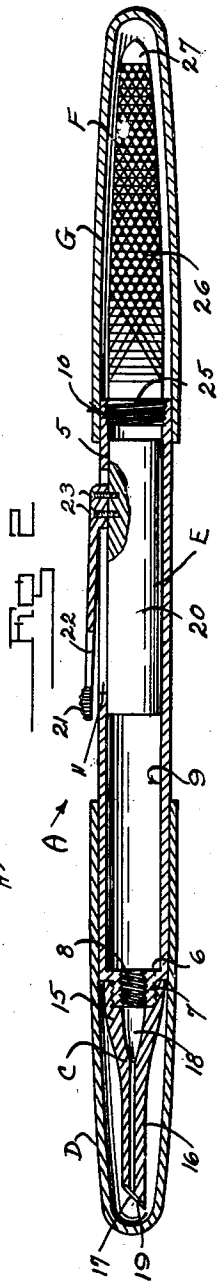


Fig 2

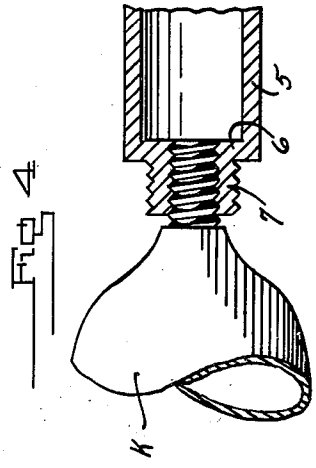


Fig 4

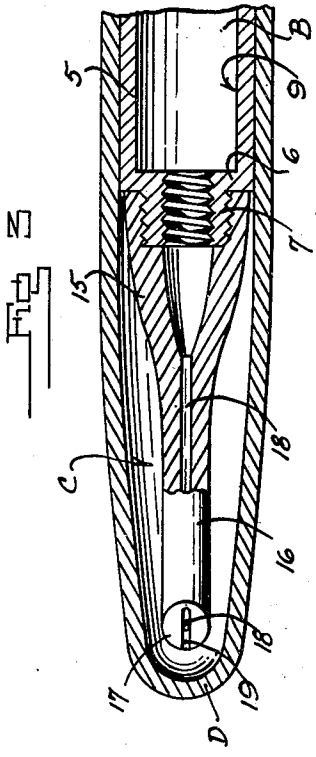


Fig 3

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MANICURING DEVICE

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2 Claims. (Cl. 132—74.5)

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This invention relates to manicuring devices and more particularly to a combined nail file and nail coating containing and applying device.

An important object of the invention is to provide a small, compact device for trimming and cleaning the nails and for coating the inner faces of the projecting ends of the nails with a suitable material, as so-called nail white.

Another important object is to provide a device of this kind which will coat the under, exposed face of the nail from the very base of this exposed face and not leave a ragged edge of coating material spaced from the base.

Still another object is to provide such a device, comprising but few parts, and free of enclosed springs or similar delicate, or readily broken parts.

Other objects and advantages of the invention will be apparent during the course of the following detailed description of the invention, taken in connection with the accompanying drawing forming a part of this disclosure, and in which drawing:

Figure 1 is a plan view of the novel device.

Figure 2 is a longitudinal section thereof.

Figure 3 is an enlarged fragmentary longitudinal section at the discharge end of the device.

Figure 4 is an enlarged section somewhat like Figure 3 but with portions of the assembly removed, and the device coupled to a collapsible tube.

In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of the invention and wherein similar reference characters designate corresponding parts throughout the several views, the novel device is designated generally as A and includes a barrel or housing B, a nozzle C, a cap D for the nozzle C, means E for forcing coating material from the housing B out of the nozzle C, a nail file F, a cap G therefor, means H to detachably secure the foregoing structure to a support, and a collapsible tube K.

All parts of the device A may be of hardened plastic material, or of metal, or combinations of the two.

The barrel or housing B is, preferably, an elongated hollow body having a cylindrical outer main wall 5, an end wall 6 provided with an outwardly-extending, exteriorly screw-threaded neck or projection 7, and the wall 6 and projection 7 have a fairly wide screw threaded opening 8 leading from the exterior of the housing to its chamber or reservoir 9. The end of the chamber 9 opens and the adjacent portion of the main wall 5 may be provided with means to detachably

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couple a member thereto which provides a closure as well as support for the nail file F. This means may be interior screw threads 10 in the wall 5. A narrow longitudinally-extending slot 11 extends through the wall 5 intermediate the terminals of the housing B for accommodation of a part of the means E to be later described.

The nozzle C, shown more particularly in Figure 3, includes a hollow, housing-attachable portion 15, interiorly screw threaded, to accommodate the exterior screw threads of the projection 7, a narrower hollow, neck portion 16, and an outer end face 17 at the end of the neck portion, with the plane of this face inclined to the longitudinal axis of the opening or passageway 18 through the nozzle C. This face 17 is provided with a groove 19 extending from the most forwardly portion of the edge of the face 17 to short of the most rearwardly portion of the edge. The passageway 18 opens into substantially the center of the groove 19. The function of the face 17 and groove 19 will be subsequently explained.

Any suitable cap D may be provided for the purpose of enclosing the nozzle C and, in the example shown, is quite similar to a conventional fountain pen cap, held in frictional contact with the wall of the barrel B adjacent the nozzle C.

The means E for forcing coating material from the reservoir 9 of the housing B through the nozzle C and into its groove 19, preferably includes a piston 20. The piston 20 has a diameter very slightly smaller than the diameter of the reservoir 9 so that no fluent material in front of the piston will pass rearwardly along the piston and wall 5. Means to manipulate the piston 20 may be a toothed projection 21 disposed exteriorly of the wall 5 and an arm 22 on one end portion of which the projection is carried. The other or rear end portion of the arm 21 is detachably secured to the piston 20 as by screws 23, and projects into the slot 11.

The nail file F may be a two-faced blade provided with a disc-like end member 25 having exterior screw threads for detachably coupling it to the wall 5 at the rear end screw threads 10. The nail file may have one or both faces corrugated, as at 26 as is a conventional nail file. The end portion 27 of the file, opposite the member 25, may be arcuate as in a conventional nail file.

Surrounding the file F is a cap G, which may be similar to the cap D and frictionally retained in place upon the barrel 5.

The means H to detachably secure the fore-

going structure to a support may be a conventional fountain pen clip, carried by the cap D.

Upon removal of the cap D and unscrewing the nozzle C from the housing B, a suitable coating material (as the plastic material, nail white) may be introduced into the reservoir 9, after the means E has been positioned substantially as shown in Figure 2. Since such material, as nail white, is marketed in collapsible tubes, such as K, the screw-threaded mouth portion of the tube may be coupled to the projection 7 at its interior screw threads, and when the reservoir has been charged, the tube K is removed. Thereupon, the nozzle is screwed to the housing B and the device A is ready to use. The member 25 limits rearward movement of the piston 20.

By holding the device A in one hand and, with the nail of the thumb or index finger thereof manipulating the projection 21 by moving it forwardly, the piston 20 will move toward the nozzle C. If the sloping face 17 has been inserted under the projecting portion of a nail, the latter will be coated with the coating composition since the latter will fill and over-flow the groove 19 as well as flow out its open end. Of course, the device A will be so manipulated that the face 17 will move longitudinally of the projecting portion of the nail.

Because of the open end of the groove 19 mentioned, the material will extend to the very base of the projecting nail portion, since the material will not simply overflow the longitudinal opening of the groove, but flow out of its end opening as well. This open end makes cleaning of the groove 19 much easier. Such cleaning may be done with the nail file, if desired, by insertion of the tip of the arcuate end portion 27 of the latter into the groove 19 and moving it toward the open end of the groove.

In addition, the same end portion 27 of the nail file may be employed, instead of the fingers to move the projection 21. Consequently, the nail file has dual functions in this operation of this novel device, and its member 25 provides the end wall for the barrel B.

If it is desired to remove the piston, such as for cleaning out the reservoir, after the nail file with its member 25 are removed, the screws 23 unscrewed and the arm 22 lifted away, whereupon the piston 20 is free to slide out of the rear end of the barrel B.

What is claimed is:

1. In a manicuring device, a barrel portion enclosing a reservoir and having an open end and a longitudinally-extending slot falling short of said open end; a nozzle detachably secured to said barrel with the opening therethrough in communication with said reservoir; means to force nail coating material from the reservoir through the opening through said nozzle including an arm, a toothed projection carried thereby and extending outwardly of said barrel portion, said arm having a portion extending into said slot, a piston within said reservoir; means detachably securing said arm to said piston; a nail file having a member at its inner end, constructed and arranged to close said open end, and means detachably securing said member to said barrel to close said open end, and having its other end constructed and arranged to extend between the teeth of said projection when detached from said barrel portion.

2. In a manicuring device, a barrel portion enclosing a reservoir and having a longitudinally-extending slot and an open end, a nozzle detachably secured to said barrel at its other end with the opening through said nozzle in communication with said reservoir and provided with an outermost end portion having an outer face provided with a groove in communication with said opening; means to force nail coating material from the reservoir through the opening through said nozzle and into said groove of said nozzle, including an arm disposed partly within said slot, a toothed projection carried thereby outwardly of said barrel portion, a piston within said housing, means detachably securing said arm to said piston, and a nail file, with one end provided with a member removably disposed within said open end and having its other end constructed and arranged to extend into said groove when said nail file is detached from said barrel portion and is in one position, and to extend between the teeth of said projection when detached from said barrel portion and in another position.

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