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(54) **PERSONAL NAIL TRIMMER**

(57) **ABSTRACT**

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**Related U.S. Application Data**

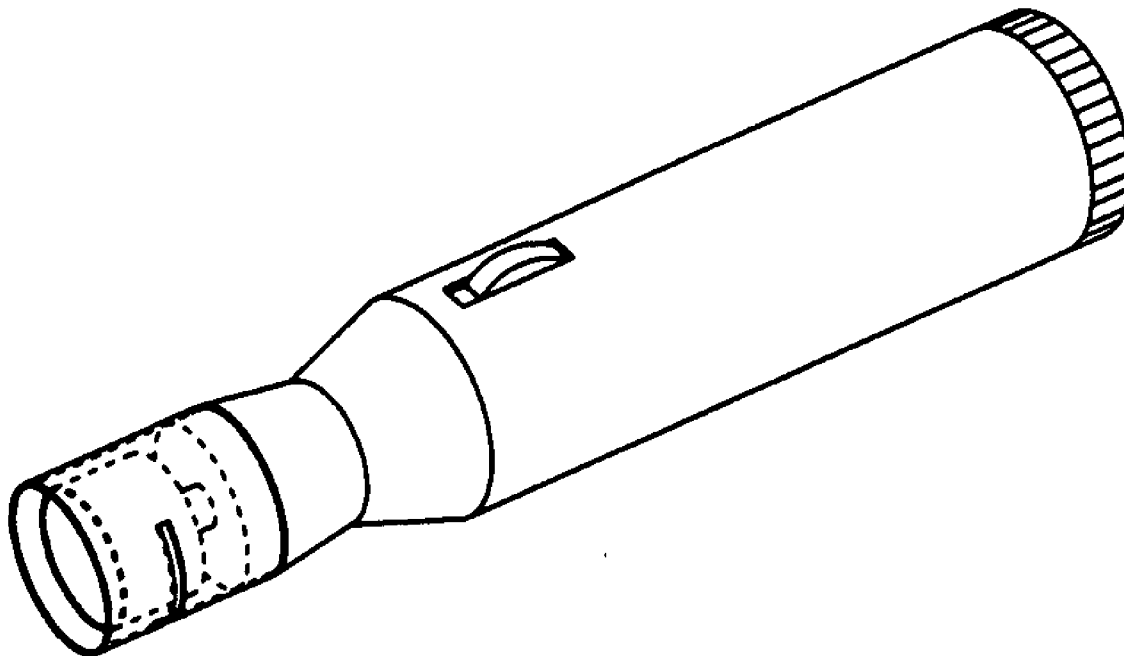
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The present invention provides a Personal Nail Trimmer comprising a battery-powered nail trimmer designed for use on humans by humans. The unit is cylindrical, approximately four inches in length and one inch in diameter, with the lower portion of the handle containing a chamber for the batteries housing a pair of AA-cells batteries, or in another embodiment, one C-cell battery. A thumb-operated On/Off switch is located on the exterior of the plastic housing just above the battery compartment, and the upper portion of the cylinder contains a small electric motor, powered by the battery and terminating in a driveshaft oriented in the center of, and in line with, the cylinder. This driveshaft terminates in a precision filing wheel, a round emery board which revolves via the driveshaft when the motor is activated. A clear plastic, snap-on sheath fits over the end of the Personal Nail Trimmer, and this sheath presents a slot, or in other embodiments, a series of variously sized slots, into which the user presses his or her fingertip and fingernail. Since fingertip size varies not only between the fingers of any one person, but also between, for example, adults and children, several sheath-caps are included to accommodate the range of slot sizes needed.



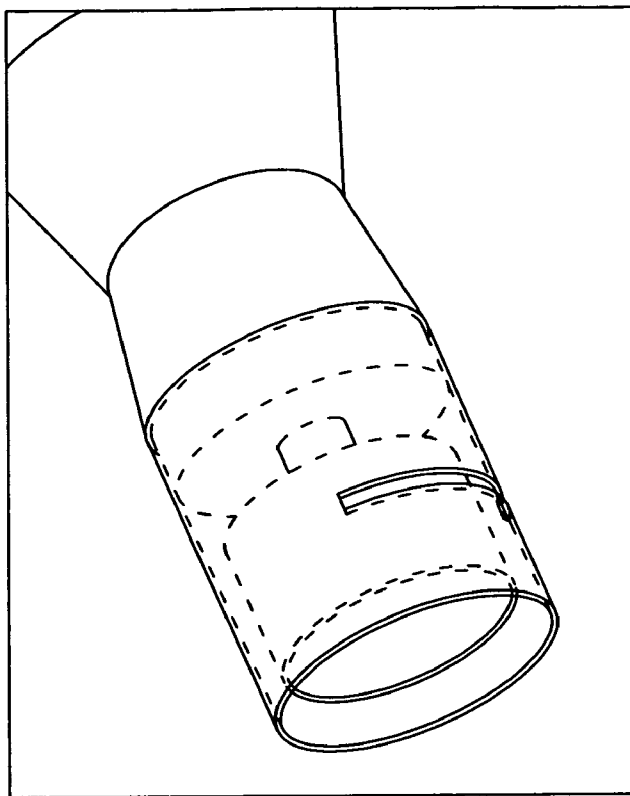


Fig. 2

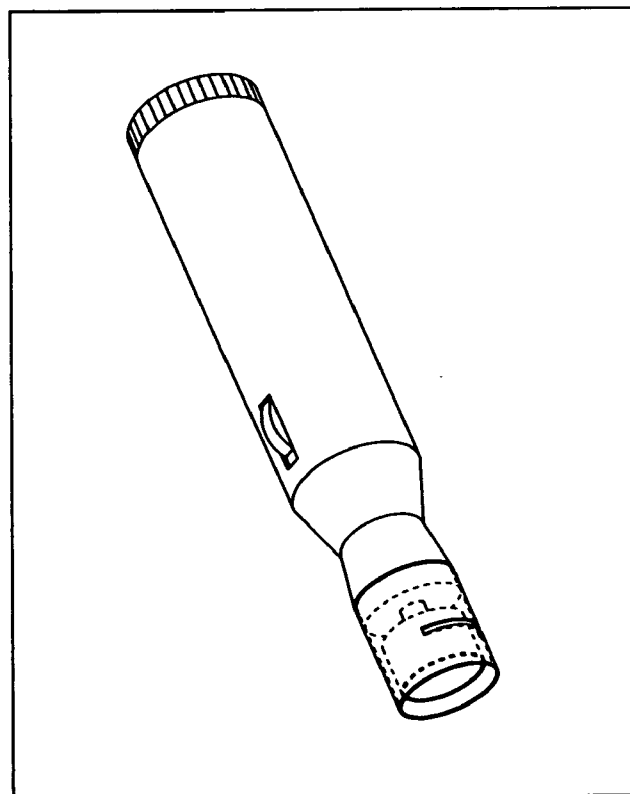


Fig. 1

**PERSONAL NAIL TRIMMER**

**CLAIM OF PRIORITY**

**[0001]** This patent application claims priority under 35 USC 119 (e) (1) from U.S. Provisional Patent Application Ser. No. 61/340,048 filed Mar. 12, 2010, of common inventorship herewith entitled, "Personal Nail Trimmer."

**FIELD OF THE INVENTION**

**[0002]** The present invention pertains to the field of personal hygiene devices, and more specifically to the field of motorized nail trimming devices.

**BACKGROUND OF THE INVENTION**

**[0003]** The prior art has put forth several designs for motorized nail trimming devices. Among these are:

**[0004]** U.S. Pat. No. 4,683,897 to Julia K. McBride describes an electric fingernail or toenail filing device which includes a rotatable filing member having a fine particulated abrasive surface, and a protective skin guard for shielding the skin adjacent the nail from damage by the rotating filing member when the device is in use.

**[0005]** U.S. Pat. No. 4,854,334 to Hsiu-Kuei Su describes a nail trimmer which comprises a power supply means, a driving means, a switch means, a trimming means and a frame means. When the switch means is placed in the ON position, the trimming means is caused to rotate and achieve automatic trimming function as long as the trimming means is put in contact with the nail to be trimmed.

**[0006]** U.S. Pat. No. 6,865,812 to Roy C. Martin, Jr. describes a nail trimmer for enabling a person to comfortably trim toenails without having to take on an awkward or uncomfortable posture. The nail trimmer has a long extension housing, which has a handle at its upper end and a trimmer unit at its lower end. A dado cutting blade and a gear unit are enclosed in the trimmer unit. An opening in the trimmer unit housing provides access to the cutting edge of the blade.

**[0007]** None of these prior art references describe the present invention.

**SUMMARY OF THE INVENTION**

**[0008]** It is an object of the present invention to provide an improved motorized nail trimming device.

**BRIEF DESCRIPTION OF THE DRAWINGS**

**[0009]** FIG. 1 is an elevational angled perspective view of the device of the present invention.

**[0010]** FIG. 2 is a close-up elevational angled perspective view of the head portion of the device of the present invention.

**DETAILED DESCRIPTION OF THE INVENTION**

**[0011]** The present invention, hereinafter referred as the Personal Nail Trimmer, is a self-regulating, battery-powered fingernail trimmer. This invention is superior to the conventional, lever-operated trimmers now widely in use, because while those trimmers pinch and cut the skin of the fingertip, a serious problem for diabetics, the elderly, and anyone who attempts to trim their children's nails, the Personal Nail Trimmer gives a good, neat trim with no possibility of an accidental cut.

**[0012]** The Personal Nail Trimmer is provides an effective battery-powered nail trimmer designed for use on humans by

humans. The unit is cylindrical, approximately four inches in length and one inch in diameter, with the lower portion of the handle containing a chamber for the batteries housing a pair of AA-cells batteries, or in another embodiment, one C-cell battery. A thumb-operated On/Off switch is located on the exterior of the plastic housing just above the battery compartment, and the upper portion of the cylinder contains a small electric motor, powered by the battery and terminating in a driveshaft oriented in the center of, and in line with, the cylinder. This driveshaft terminates in a precision filing wheel, a round emery board which revolves via the driveshaft when the motor is activated. A clear plastic, snap-on sheath fits over the end of the Personal Nail Trimmer, and this sheath presents a slot, or in other embodiments, a series of variously sized slots, into which the user presses his or her fingertip and fingernail. Since fingertip size varies not only between the fingers of any one person, but also between, for example, adults and children, several sheath-caps are included to accommodate the range of slot sizes needed. With the Personal Nail Trimmer activated, the spinning emery wheel simply files and smoothes the nail to desired length and shape. Because the Personal Nail Trimmer files, rather than cuts, the nail, this device eliminates all possibility of accidental cutting, and leaves the nail-tip smooth and rounded. The clear plastic sheath-guard, as well, catches all the detritus and residua of the filed nails, and the sheath simply snaps off for easy emptying. Replacement emery wheels are available, and are sold separately. The Personal Nail Trimmer is manufactured by the Electric Housewares and Fans industry, Standard Industrial Code 3634, the same industry that produces electric shavers and toothbrushes.

**[0013]** If you've ever pinched or cut yourself, or worse, cut your child or an aged parent, with standard nail-clippers, you know there needs to be a better way. The Personal Nail Trimmer is that way, a battery-powered, self-adjusting tool that quickly and painlessly files, rather than cuts, the fingernails of adults and children. Inspired by the popular rotary-file trimmers recently introduced for use with pets, the Personal Nail Trimmer employs the same emery-wheel technology, and fingertip slots, to achieve clean, attractive, and completely painless results on fingernails. Obviously, the Personal Nail Trimmer appeals strongly to all households, but most especially to households with small children, who are terrified of clippers, and among those consumers who are diabetic or elderly. In the case of diabetics, even the slightest cut is highly susceptible to infection and among the aged, routine activities like clipping one's nails is difficult to perform physically, and with failing eyesight. Clearly, the Personal Nail Trimmer, like the pet-trimmers on which the design is based, finds a wide and enthusiastic market upon its introduction.

**[0014]** Although this invention has been described with respect to specific embodiments, it is not intended to be limited thereto and various modifications which will become apparent to the person of ordinary skill in the art are intended to fall within the spirit and scope of the invention as described herein taken in conjunction with the accompanying drawings and the appended claims.

1. A motorized nail trimming device, comprising: a battery-powered nail trimmer wherein the unit is essentially cylindrical, approximately four inches in length and approximately one inch in diameter, with the lower portion of the handle containing a chamber for housing one or more batteries, further comprising a thumb-operated On/Off switch located on the exterior of the housing, and wherein the upper

portion of the cylinder contains a small electric motor, powered by the battery and terminating in a driveshaft oriented in the center of, and in line with, the cylinder, and wherein the driveshaft terminates in a precision wheel, wherein the wheel has a removable emery board cover which revolves by means of the driveshaft when the motor is activated.

2. The device of claim 1 wherein the batteries are a pair of AA-cells batteries.

3. The device of claim 1 wherein the batteries are one C-cell battery.

4. The device of claim 1 wherein the housing is plastic.

5. The device of claim 1 further comprising a clear plastic, snap-on sheath wherein the sheath fits over the end of the device and wherein the sheath presents a slot into which the user presses his or her fingertip and fingernail.

6. The device of claim 1 further comprising a clear plastic, snap-on sheath wherein the sheath fits over the end of the device and wherein the sheath presents a series of various sized slots.

7. The device of claim 1 further comprising a multiplicity of clear plastic snap on sheaths presenting a variety of slot sizes to accommodate the range of slot sizes needed.

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