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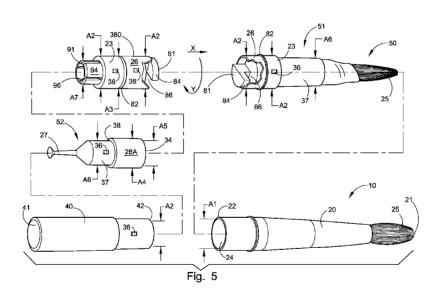
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(54) Title: IMPROVED MULTI-FUNCTION FINGERNAIL COSMETIC DEVICE



(57) Abstract: A multi-function cosmetic device (10) having a first (20) and a second component (50), each removable from one another wherein the second component (50) has a first section (51) and a second section (52) each of which are removable from one another. The front of the first component (20) and the fronts of the first (51) and second sections (52) are working components, such as, but are not limited to, fingernail brushes (25), fingernail scrapers/cleaners (29), fingernail design tips (27), and make-up brushes. Additional independent stackable components (28A, 28B, 28C), each having a similar working component at their respective front ends, are removably stackable onto the fronts of either first component (20) or the fronts of the first (51) and second sections (52) of the second component (50) and are removably stackable onto each other.



TITLE

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IMPROVED MULTI-FUNCTION FINGERNAIL COSMETIC DEVICE

BACKGROUND

The improved cosmetic and manicuring device as set forth in this disclosure relates to an improvement in nail brushes, and more particularly to an improved combination multi-function nail brush, nail cleaner, nail scraper, and nail cleaner/design applicator. Though described in detail herein primarily for manicuring purposes, it must be understood that the brushes associated with this device may also be brushes suitable for applying make-up, such as, but not limited to, eye shadow, eye liner, and mascara.

Attention is brought to the fingernail, however, because it is an important skin appendage. It covers the dorsal surface of the terminal phalanges; *i.e.*, the most distal bones of each finger and toe. Fingernails serve to protect the tips of the fingers and to assist in picking up small objects. They may be decorated or plain as desired by the person.

Fingernails are composed of laminated layers of a protein called keratin, which is also found in one's hair and skin. As a result, fingernails should be kept in good condition and clipped regularly in a rounded or squared shape.

Most of the fingernail is pink because of the underlying vascular tissue. The crescent-shaped half-moon-like white area at the bottom of the fingernail is the lunula. The lunula has a white-ish appearance because the vascular tissue under it does not show through. The lunula is the area in which new fingernail growth occurs.

The cuticle is just below the lunula and the nail body is above the lunula and is basically pinkish in color. The cuticle is the tissue that overlaps the lunula at the base of the fingernail. It serves as a barrier to keep bacteria from entering one's body and protects the new keratin cells that slowly emerge as the fingernail grows

As the fingernail grows, it will extend beyond the fingertip. The part of the fingernail which extends beyond the fingertip is referred to as the free edge and it also is white-ish in color or not a pink as the nail body.

A "pink-and-white" fingernail has become very popular. The process to produce a pink-and-white fingernail is time-consuming, labor-intensive, and multi-faceted in that several

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implements are required. These include a large fingernail brush, a smaller fingernail brush, a fingernail scraper, and a fingernail cleaner.

Reference is now made to Figures 1 through 4 in an attempt to clarify the process. The pink-and-white fingernail process first requires the manicure specialist to prepare the fingernail 60 for application of a nail tip 65 and ultimate application of acrylic on the fingernail 60. Conventional preparation requires "roughening" the surface of the fingernail 60 typically by using a rotary sanding device designed for fingernails. A nail tip 65 is then glued onto the fingernail over and covering the free edge 63 of the fingernail 60 and can be trimmed to any desired length.

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A ridge or step 66 is formed where the bottom of the nail tip 65 meets the fingernail body 62. Using the rotary sanding device, this ridge 66 is typically sanded down leaving a slight incline between the bottom of the nail tip 65, where the ridge 66 was, and the fingernail body 62.

First the entire nail 62 is primed with a conventional primer. Next a white acrylic is applied onto the nail tip 65 by using a large nail brush and dipping it into a conventional monomer, then into a conventional white powder thereby forming a brushable acrylic paste, followed by brush application of the white acrylic paste onto the nail tip 65. The white acrylic paste dries extremely fast and the manicure specialist typically works the white acrylic paste by brushing over it with the monomer using the large nail brush.

This is typically followed by use of the smaller brush to create a crescent moon-like shape on the nail tip 65 by brushing side to side and up and down on the nail tip 65 until the exact crescent shape is perfectly achieved.

The idea is to create a white crescent-moon shape on the nail tip 65 up from the ridge line 66 to the entire nail tip 65 [see Figure 4]. Any excess white acrylic under the nail tip 65 is removed with a nail cleaner. Any dried white acrylic below the ridge line 66 is typically removed by sanding, filing, or scraping; a time-consuming and delicate task.

Next, by using a larger nail brush, the pink acrylic component is applied. This is done by dipping the nail brush into a conventional monomer, then into a conventional pink powder thereby forming a brushable acrylic paste, followed by brush application of the pink acrylic paste downward from the nail tip 65 to, but not onto, the cuticle 71, thereby covering the nail body 62 and lunula 61 in the process. The pink acrylic paste also dries extremely fast and the manicure

specialist typically works the pink acrylic paste by brushing over it with the monomer using the large nail brush.

Inasmuch as it is desired for the crescent-moon shape of the white tip to maintain its purest white color, the manicure specialist must remove any excess pink acrylic paste overlapping the white tip by sanding and filing; also a time-consuming and delicate task. Scraping, however, is a novel method and a better method <u>provided</u> scraping can be done quickly and before the acrylic dries. The device of the present disclosure is suited to accomplish this task.

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I have found that scraping is best accomplished by placing the scraper onto the white tip, adjacent to the nail 62 and over the ridge 66, pressing down on that surface area and scraping from one side to the other side to remove all the excess pink acrylic which overlaps the white tip before the pink acrylic dries. This is repeated as necessary until the white tip is clean of the pink, is the desired crescent shape, and is pure white. This scraping procedure eliminates the need for filing or sanding or both. This also is a delicate task and must be done quickly without searching for necessary implements. The need to do this is so that the white tip does not become clouding in appearance. It is desired that it be as pure white as is possible.

After the pink-and-white fingernail process is complete, the customer may also desire a pattern, such as a flower design, on the pink section or the white section or both. Typically, a round-shaped nail cleaner is used for this purpose. This rounded end may be used to create various patterns and designs on the fingernail [such as, but not limited to, flower patterns, dots, hearts, raindrops, and the like], as desired, when first dipped in a suitable polish, a water-based paint, or other solution before dabbing onto the now-dried pink acrylic component or onto the now-dried white acrylic component or both.

Consequently, to process the pink-and-white fingernail, the manicure specialist must have at hand, [1] a large nail brush to apply the pink and white acrylic, [2] a small nail brush to work the white acrylic/polish to the desired crescent-moon shape and to apply a clear glossy gel as a topcoat for a shiny finished look, [3] a nail scraper to remove any excess pink acrylic overlapping the white tip, [4] a nail cleaner to clean excess acrylic under the fingernail, and [5] a nail-design tip to apply design patterns as may be desired by the customer. With the need to work fast due to the fast-drying acrylics, and the requirement of four or more nail-care implements to perform four to five functions, one or more such nail-care implements may not be

readily handy or found when precisely needed due to the speed in which the manicure specialist must operate.

The device of my co-pending application, application number 11/868,639, combines all these stand-alone prior art nail-care implements required in the pink-and-white fingernail process into a single device to thereby permit the user to be more effective and more efficient in the pink-and-white fingernail process. That single device eliminated the need to switch back and forth between the multiple nail-care implements or the need to locate a misplaced nail-care implement when precisely need. All these components in that single device also eliminated the frustration associated with the very possibility of misplacing one essential prior art nail-care implement and then searching for it or a suitable replacement while in the middle of a pink-and-white fingernail process.

All the user needs to do with that device of my co-pending application is to rotate it from one desired component [large nail brush] to the next desire component [scraper/nail cleaner], or to remove another component [small nail brush] from the handle receptacle of the large nail brush. The pink-and-white fingernail process is simplified and expedited in the process.

Additionally, with all these components incorporated into a single device renders the cost of manufacture and cost to purchase substantially less than the cost of buying several stand-alone prior art nail-care implements. Moreover, if a component is damaged, only that component need be replaced rather than the entire device. The disclosure of my co-pending application, application number 11/868,639, is incorporated by reference into this present disclosure of my improved multi-function cosmetic device.

This new and improved device:

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- a. provides a greater locking capability between the two ends [a twist-lock option and a better friction-lock option];
- b. provides an option for a single-end working component without a second end working component;
- c. gives the user an option to use just a single large brush with a cap at the end or just a single small brush with a cap on the end or a small brush with two inter-changeable working components on each end which are removable from each other; and
- d. with either option above, provides a stackability feature over which more than one working component can be stacked on a previously stacked component.

The foregoing has outlined some of the more pertinent objects of the improved manicuring device as set forth in this disclosure. These objects should be construed to be merely illustrative of some of the more prominent features and applications of the improved manicuring device. Many other beneficial results can be attained by applying the disclosed improved manicuring device in a different manner or by modifying the improved manicuring device within the scope of the disclosure. Accordingly, other objects and a fuller understanding of the improved manicuring device as set forth in this disclosure may be had by referring to the summary of the improved manicuring device and the detailed description of the preferred embodiment in addition to the scope of the improved manicuring device defined by the claims taken in conjunction with the accompanying drawings.

SUMMARY

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The above-noted problems, among others, are overcome by the improved cosmetic and manicuring device as set forth in this disclosure. Briefly stated, the improved cosmetic and manicuring device contemplates an improved multi-function cosmetic device having a first and a second component, each removable from one another. The second component has a first section and a second section each of which are also removable from one another. The front of the first component and the fronts of the first and second sections of the second component are working components, such as, but are not limited to, fingernail brushes, fingernail scrapers/cleaners, and fingernail design tips.

A connecting means for removably connecting the first component to the second component, and for removably connecting the first section to and from the second section of the second component are of a twist-locking mechanism or a friction-locking mechanism. The twist-lock has a shaft extending outward of both components or sections with a half-moon top and a three-quarter moon slot between the top and the shaft. The tops of each twist-lock align with each other, are pushed together, and rotated approximately one-quarter turn to seat the tops of each into the slots of the other thereby locking the two together. The friction-lock has a skirt extending outward from either component and section, with a plurality of slits cut through the skirt, and are insertable into a cooperating receiving chamber of the other component or section.

Individual and independent couplers may have a friction-lock on one side and a twist-lock on the other side which accept any cooperating connector. The independent couplers also

may have a friction-lock on each side or a twist-lock on each side which accept any cooperating connector.

Additional independent stackable components, each having a similar working component at their respective front ends, are removably stackable onto the fronts of either first component or the fronts of the first and second sections of the second component and are removably stackable onto each other.

The foregoing has outlined the more pertinent and important features of the improved cosmetic and manicuring device as set forth in this disclosure in order that the detailed description that follows may be better understood so the present contributions to the art may be more fully appreciated. Additional features of the improved cosmetic and manicuring device will be described hereinafter which form the subject of the claims.

It should be appreciated by those skilled in the art that the conception and the disclosed specific embodiment may be readily utilized as a basis for modifying or designing other structures and methods for carrying out the same purposes of the improved cosmetic and manicuring device as set forth in this disclosure. It also should be realized by those skilled in the art that such equivalent constructions and methods do not depart from the spirit and scope of the improved cosmetic and manicuring device as set forth in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

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For a fuller understanding of the nature and objects of the improved cosmetic and manicuring device as set forth in this disclosure, reference should be had to the following detailed description taken in conjunction with the accompanying drawings in which:

- Figure 1 is a detailed front elevation view of a fingernail.
- Figure 2 is a side elevation view of a fingernail.
- Figure 3 is a side elevation view of a fingernail with a nail tip attached.
- Figure 4 is a front elevation view of a fingernail with a nail tip attached.

Figure 5 is an exploded perspective view of the device of the present disclosure illustrating a large brush on one end the either a cap or a dual-component small brush on the other end.

Figure 6 is an exploded perspective view of the device of the present disclosure illustrating a twist-lock fit of a dual-component.

Figure 7 is an exploded view of the device illustrating a combination twist-lock and skirt-type friction fit coupler and the stackability feature of the device.

Figure 8 is a detailed partial view in cross-section illustrating more than one working component stacked upon another working component.

Figure 9 is a detailed view of the working components of Figure 8 unstacked from each other.

Figure 10 is a detailed view of a connector component having a skirt-type friction-lock on both ends.

Figure 11 is a detailed view of a connector component having a twist-lock on both ends.

Figures 12-15 are detailed views of the twist-lock component.

Figure 16 is an elevation, partially cut-away, view of the device of the present disclosure illustrating a friction-fit.

Figure 17 is an elevation view of the two-component internal brush component illustrating a bayonet-fit of its two components wherein both components have a brush at each end.

Figure 18 is a front elevation view of the internal brush component of the device of the present disclosure illustrating a friction-fit.

Figure 19, as taken on line 19-19 of Figure 18 is a side elevation view of the internal brush component of the device of the present disclosure.

DETAILED DESCRIPTION

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Referring now to the drawings in detail as to Figures 1 through 7, and in particular to reference character 10 of Figure 5, generally designates an improved multi-function cosmetic device constructed in accordance with the preferred embodiments thereof.

Figures 1 through 4 are illustrative of a human finger 70 having a cuticle 71 and fingernail 60. The fingernail 60 consists of, from the cuticle 71 up, the lunula 61 [moon-like white section], the nail body 62 [pinkish section], and the free edge 63 [the basically white-like in color distal end grown out from the distal end of the finger 70].

As discussed in the background, the pink-and-white process for fingernails is timeconsuming, detailed work, and requires several different nail-care implements. Each such nailcare implement is a stand-alone nail-care implements which generally needs to be alternated in

the pink-and-white process. Consequently, the manicure specialist will lay down one nail-care implement and pick up another, and do this repeatedly during the course of the process. The pink-and-white process requires speed, in that the acrylics are extremely fast-drying, and detail or else the user must start over. Mis-placing a nail-care implement when needed most is a prelude disaster and generally will require the manicure specialist to start over.

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The improved multi-function cosmetic and manicure device of the present disclosure has a first component 20 with a front 21 and a back 22 and here illustrating a brush 25 at the front 21 and a removably attachable second component which could be a cap 40 having a front 41 and a back 42 wherein the back 42 inserts into the first component; or it could be a working component [dual or single], as illustrated by reference character 50, which is also insertable from either end into the first component 20.

As illustrated in Figures 5 and 6, the front 21 of the first component 20 is a working component; *i.e.*, comprised of a brush 25, generally for fingernails, or such working component could be, though not limited to, a scraper 29, or even a design tip 27 as illustrated in Figures 7 through 9.

The back 22 of the first component 20 has a receiving chamber 24 which has a width-A1. Where the second component is a cap 40, the back end 42 of the cap 40 has a width-A2 wherein width-A2 is slightly less than width-A1. The back end 42 also has one or more nubs or detents 36 thereon as illustrated in Figure 5. Such configuration permits the insertion of the back end 42 into the receiving chamber 24 so that the back end 42 translates into the receiving chamber 24 and the protruding nubs 36 exert outward force on the inner walls of the receiving chamber 24 to thereby securely retain the cap 40 to the first component 20.

Figures 5 through 9 are illustrative of a preferred embodiment of a second component 50, insertable into the first component 20 wherein the second component 50 is comprised of a working component on one or both sections wherein the sections are removably connectable from and from one another.

Reference character 50 of Figure 50 illustrates the second component 50 having a brush 25 at the outer end of the first section 51 and a design tip 27 at the outer end of the second section 52. The two sections 51, 52 are connectable to one another by a combination coupler 380.

The first section 51 is shown with a twist-lock type connector component 81 at its back end. Reference is made to Figures 12 through 15 for the details associated with the twist-lock type connector component 81. The top 84 of this twist-lock type connector component 81 is approximately half-moon shaped. Between the top 84 and the shaft 87 is an approximately three-quarter-moon slot 86. The half-moon top 84 has a thickness-B1 and the three-quarter-moon slot 86 has a width-B2 wherein width-B2 is slightly greater than thickness-B1 to permit the top 84 of one twist-lock connector component 81 to engage and enter the slot 86 of any cooperating twist-lock connector component 81. A rim or neck 26 surrounds the twist-lock connector component 81 up to the half-moon top to a point approximately one-half of its thickness; about one-half the distance of thickness-B1. As such, a recess is defined with the rim 26 by the half-moon top 84 and the three-quarter moon slot 86. The outer perimeter of the rim 26 has a width-A2 rendering it insertable into the receiving chamber 24 of the first component 20. The rim 26 will also have one or more nubs 36 thereon for a secure fit.

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A similarly configured cooperating twist-lock connector component 81 is on one end of the combination coupler 380. In operation, the respective half-moon tops 84 are to be aligned with one another such that the combination coupler 380 may be pushed in the direction of Arrow-X toward and into the recess of the cooperating twist-lock component connector 81 of the first section 51. Once so inserted, the rim 26 or each respective twist-lock component connector 81 encircles the two opposing twist-lock connector components 81 and the combination coupler 380 is then rotated in the direction of Arrow-Y, approximately one-quarter turn, causing the top 84 of the combination coupler 380 to engage the slot 86 of the first section and the top 84 of the first section to engage the slot 86 of the combination coupler 380.

Once so engaged the first section and the combination coupler 380 are secured to one another. As attached the outer ends of each respective rim 26 approximately abuts its counterpart rim 26.

On the opposite end of the combination coupler 380 is a skirt-type friction-lock connector component 91. In the approximate center of the combination coupler 380 is a collar 82 having a width-A3 wherein width-A3 is greater than width-A1. Extending away from the collar 82 in the direction of the twist-lock component 91 is a rim 26 without a recess and with nubs 36 around the rim 26. Extending away from the collar 82 in the direction of the friction-lock connector component 91 is a collar shaft 23 having a width-A2 and nubs 36 thereon. This

configuration permits insertion of the rim 26 of either side of the combination coupler 380 into the receiving chamber 24 of the first component 20 such that said insertion will terminate at the collar 82. The nubs 36 provide securing outward force on the inner wall of the receiving chamber 24.

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Extending farther out from the collar shaft 23 on this combination coupler 380 is the friction-lock connector component 91. A plurality of slits 96 are cut through the skirt 94 and are approximately perpendicular to the collar 82. The outer perimeter of the skirt 94 has a width-A7 wherein width-A7 is equal to or greater than width-A5. This permits the friction-lock component 91 to compress as necessary as it is being inserted into the receiving chamber 34 of the second section 52 and to exert outward pressure against the inner wall of that receiving chamber 34, which has a width-A5, thereby securing the combination coupler 380 to the second section 52.

The first section 51 also has a collar 82 forward of the rim 26 wherein said collar 82 has a width-A3 followed a collar shaft 23 with one or more nubs 36 thereon. The collar shaft 23 has a width-A2 which facilitates insertion into the receiving chamber 24 of the first component 20 [as described above]. Forward of the collar shaft 23 is a shaft 37 having a width-A6 wherein width-A6 is less than width-A2 and less than width-A5 thereby making it insertable into a receiving chamber 34 as described above.

An additional unique feature of this improved multi-function cosmetic device is its stackability feature and the stacking extensions 28A, B, C. Figure 5 illustrates a stacking extension 28A having a design tip 27 at its front and a receiving chamber 34 at its back. As alluded to above, the cavity in the receiving chamber 34 has a width-A5 which is slightly greater than width-A6 and may be equal to or less than width-A7. As described below, this permits this stackable extension 28A, or any similarly configured extension, to stack onto the shaft 37 of a preceding extension or onto the friction-fit component 91 due to the ability of the friction-fit component 91 to flex inward [or outward].

Rearward of the design tip 27 is a shaft 37 having a width-A6 and one or more nubs 36 thereon. The shaft 37 terminates at the ledge 38 wherein the ledge has a width-A4. The shaft 37 or this extension 28A, and all similarly configured extensions 28B, 28C is removably insertable into a receiving chamber 34 of any preceding extension 28A, 28B, 28C. Figures 5 through 9 are illustrative.

Figure 9 also illustrates that a cap 16 having an inner chamber with a width-A5 or width-A1. With width-A5, the cap 16 may be inserted over onto a shaft 37 of an extension 28C or any extension 28A, 28B. With width-A1, the cap 16 may be inserted over the first section 51 over the collar shaft 23 or any similarly constructed section or extensions.

As illustrated in various figures, a working component may comprise a scraper 29 extending beyond the shaft 37 [stackable extension 28B], and may also include but not be limited to, a brush 25 [stackable extension 28C] or a design tip 27 [stackable extension 28A].

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Though the various locking components have been described as being in combination with another different locking component, they may be in combination with one another as illustrated in Figures 10 and 11. The twist-lock component 81 coupler may have the twist-lock component on each end, as illustrated by reference character 280, Figure 11. The friction-lock component 91 coupler may have the friction-lock component on each end, as illustrated by reference character 180, Figure 10. The structures and widths referenced in and for Figures 10 and 11 are as described above.

Figures 12 through 15 are illustrative of the details associated with the twist-lock 81 component. An additional feature to the component is the beveled edge 85 from the top 84 beveling toward the shaft 87 and the well 83 on the floor 89 of this component. The well 83 may be used to apply a tacky substance or more adhesive substance to thereby strengthen the fit when one twist-lock component 81 is inserted into another twist-lock component 81.

This improved multi-function cosmetic device accords a user greater flexibility of choice in selecting which configuration is best-suited for that user's purpose and greater flexibility and ease in modifying the working components on the device as best-suited for the particular operation. The stackability feature allows easily changing out the working ends. The dual working ends provides ease of switching which working end is desired at the moment. The locking features, twist-lock and friction-lock, make for a sturdy two-working component device; *i.e.*, a working component on both ends of the device each of which are held steadfast in place.

A more basic embodiment of my multi-function fingernail device 110, as described in my U.S. application, Application Number 11/868,639, has a first brush component 120 and a second brush component 140 which is removably insertable into and from the first brush component 120. The first brush component 120 has handle 124 with a brush head 122 at one end [the tip 121] and an open end 126 at its other end. From the open end 126 and up into the

handle 124 is a hollow chamber. The second brush component 140 removably inserts into and out of this hollow chamber.

The second brush component 140 of this basic embodiment itself is a multi-function device having smaller brush 142 on one end and a scraper 152 and applicator 158, or another small brush 142' [see Figure 17], on the other end. The second brush component 140 inserts into the hollow chamber of the open end 126 of the first brush component 120. With the scraper 152 being exposed, the user can apply conditioners, polishes, or acrylics as necessary with the brush head 122 and, by rotating the multi-function fingernail device 110, can scrape and/or clean or apply designs or patterns with the other end without having to place the multi-function fingernail device 110 down and search for a suitable nail-care implement for the particular process.

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If a need arises to use a small brush in conjunction with a large brush, the user merely can remove the second brush component 140 from the first brush component 120, flip it over to insert the scraper end into the hollow chamber of the first brush component 120 thereby exposing the small brush 142 for use.

The second brush component 140 is unique onto itself. Reference is made to Figures 16 through 19. The brush 142 is attached to the brush handle 144 at the forward end 141 of the brush handle 144. The scraper 152 is attached to the scraper handle 154 at the forward end 151 of the scraper handle 154. The brush handle 144 and the scraper handle 154 join together at the adjacency point 148 which generally is the approximate mid-point of the second brush component 140.

The second brush component 140 can be friction-fitted into the open end 126 of the first brush component 120 due to different widths of the various elements of the basic multi-function fingernail device 110. In this regard, the width of the inner surface of the open end 126 of the first brush component 120 has width-W. The adjacency point 148 has width-W1 whereby width-W1 is greater than width-W. The forward end 141 of the brush handle 144 has a width-W2 and the forward end 151 of the scraper handle 154 has a width-W2' wherein width-W1 is greater than both width-W2 and width-W2. Width-W2 and width-W2' may be of approximate equal widths.

Given this configuration, either front end 141, 151 of the second brush component 140 can easily fit into the hollow chamber of the first brush component 120 through the open end 126 but, as the width of the second brush component 140 increases to approximate width-W1 of

the adjacency point 148, which is greater than width-W of the open end 126, a snug and retaining fit results. The fit is snug to permit use of both ends of the multi-function fingernail device 110 and yet releasable to permit removing the second brush component 140 and flipping its end as necessary to brush or to scrape/clean for the intended nail-finishing process.

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The second brush component 140 also may be of a single-piece construction [as illustrated in Figure 16] or may be constructed to permit detachability of the brush handle 144 from the scraper handle 154 at or near their adjacency point 148 [as illustrated in Figures 18 and 19] (or where a second small brush 142' is at the opposite end of the first small brush 142 [as illustrated in Figure 17]). In this regard, the brush handle 144 has a hollow chamber with an opening thereinto at its distal end 147. The width of the inner surface of this opening is width-W3.

The scraper handle 154 has a width-W1' at its distal end 157 whereby width-W3 is greater than width-W1' to thereby permit insertion of the scraper handle 154 distal end 157 into the opening of the brush handle 144 and its distal end 147. The scraper handle 154 has a width-W3' at its approximate mid-section whereby width-W3' is greater than width-W3. This configuration permits for a secure friction-fit of the scraper handle 154 into the open end of the brush handle 144 and permits removal and flipping of the second brush component 140 to whatever implement end is necessary or desired for the nail finishing process.

It must be understood that the configuration and widths as described above for the scraper handle 154 and the brush handle 144 may be inverted respectively such that it is the scraper handle 154 having the open end and hollowed interior which receives thereinto the brush handle 144.

Although a friction-fit has been described in detail herein for this basic embodiment multi-function fingernail device 110, the separability and retainability of the second brush component 140 to the first brush component 120 and of the scraper handle 154 to the brush handle 144, such may be accomplished by a bayonet-type fit wherein the distal end 147 of the brush handle 144 [or conversely, the distal end 157 of the scraper handle 154] has a slot 153 and the distal end 157 of the scraper handle 154 [or conversely, the distal end 147 of the brush handle 144] has a detent 155 which registers into and with the slot 153 for a secure, yet removable, fit.

Similarly, the attachment of the second brush component 140 to the first brush component 120 may also be by bayonet-type fit with slot 153 and registering detent 155 for attaching, securing, and removing as necessary. The slot 153 component could be on the brush handle 124 of the first brush component 120 or on the second brush component 140 with cooperating detents 155 on the second brush component 140 or the first brush component 120, respectively. Because of the overall configuration described for the multi-function fingernail device 110 [*i.e.*, second brush component 140 inserting into the first brush component 120] the brush head 122 of the first brush component 120 is larger than the brush 142 of the second brush component 140. Since it is larger, the brush head 122 is typically meant for applying pink and white acrylic component to the nail and the smaller brush, brush 142 or 142', is typically meant for shaping the crescent moon-like appearance from the white acrylic/polish. The smaller brush may also be used to apply a glossy gel topcoat to the entire nail, nail tip 65 included, for a shiny finished look.

The brush head 122 of this basic embodiment multi-function fingernail device 110, therefore, should generally have a radial arc 129 of between approximately 80° and approximately 140° and the brush 142 should generally have a radial arc 149 of between approximately 60° and approximately 100°. These radial arcs 129, 149 basically conform to the general curvature of a person's cuticle 71 and the curvature of the free edge 63 and thereby simplifies the application process.

The present disclosure includes that contained in the present claims as well as that of the foregoing description. Although this improved cosmetic and manicuring device has been described in its preferred forms with a certain degree of particularity, it is understood that the present disclosure of the preferred forms has been made only by way of example and numerous changes in the details of construction and combination and arrangement of parts and method steps may be resorted to without departing from the spirit and scope of the improved cosmetic and manicuring device as set forth in this disclosure. Accordingly, the scope of the improved cosmetic and manicuring device should be determined not by the embodiment[s] illustrated, but by the appended claims and their legal equivalents.

What is claimed is:

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1. A improved multi-function cosmetic device comprising:

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- (a) a first component on one end of said device wherein said first component has a front and a back wherein said front is comprised of a working component and said back of said first component has a receiving chamber having a width-A1; and (b) a second component having a first section with a front and a back wherein the front of said first section is comprised of a working component, and rearward of said working component is a rearward extending shaft having a width-A6, and rearward of said shaft is a first collar shaft having a width-A2 wherein said width-A2 is less than said width-A1 but greater than said width-A6, and rearward of said first collar shaft is a collar having a width-A3 wherein said width-A3 is greater than said width-A2, and at the back of said first section and rearward of said collar is a first neck having said width-A2 whereby said first collar shaft and said first neck are removably insertable into and out of said receiving chamber.
- 2. The device of Claim 1 wherein said working component of said first component and said second component is selected from the group consisting of fingernail brushes, fingernail scrapers, fingernail design tips, and make-up brushes.
- 3. The device of Claim 1 further comprising one or more nubs protruding from said first neck and from said first collar shaft.
- 4. The device of Claim 1 further comprising a first cap having a first cap front and a first cap back wherein said first cap back has a chamber with a width-A1 and is insertable over either said first collar shaft or said first neck of said first section.
- 5. The device of Claim 1 further comprising a second cap having a second cap front with a width greater than said width-A1 and a second cap back with a second cap neck having said width-A2 wherein said second cap neck is insertable into said receiving chamber.
- 6. The device of Claim 5 further comprising one or more nubs protruding from said second cap neck.

7. The device of Claim 1 wherein second component further comprises a second section removably connectable to said first section, said second section having a front and a back wherein the front of said second section is comprised of a working component, and rearward of said working component is a rearward extending shaft having said width-A6, and rearward of said shaft is a second collar shaft having said width-A2, and rearward of said second collar shaft is a collar having said width-A3, and at the back of said second section and rearward of said collar is a second neck having said width-A2 whereby said second collar shaft and said second neck are removably insertable into and out of said receiving chamber.

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- 8. The device of Claim 7 wherein said working component of said front of said second section is selected from the group consisting of fingernail brushes, fingernail scrapers, fingernail design tips, and make-up brushes.
 - 9. The device of Claim 8 further comprising one or more nubs protruding from said second neck and said second collar shaft.
- 10. The device of Claim 8 further comprising connection means for removably connecting said
 first section to and from said second section, said connection means at the back of each of said
 first section and said second section.
 - 11. The device of Claim 10 wherein said connection means comprises a first twist-lock component at the back of said first section, said first twist-lock component having a first shaft extending outward from said back and encircled by said first neck, an approximate half-moon first top at its distal end having a thickness-B1, and an approximate three-quarter-moon first slot below said half-moon first top having a width-B2 wherein said width-B2 is slightly greater than said thickness-B1, and a second twist-lock component on the back of said second section, said second twist-lock component having a second shaft extending outward from said back and encircled by said second neck, an approximate half-moon second top at its distal end having said thickness-B1, and an approximate three-quarter-moon second slot below said half-moon second top having said width-B2 whereby, the respective tops of each said twist-lock components are aligned with one another and said first top is pushed toward said second slot causing the second

top to align with the first slot after which the respective tops are rotated and locked into the respective slots into which aligned.

12. The device of Claim 1 further comprising a removable stackable extension having a ledge with a width-A4, an extension shaft with said width-A6 extending forward of said ledge, and an extension receiving chamber with a width-A5 wherein said width-A6 is less than said width-A5, and wherein said extension shaft is insertable into said extension receiving chamber whereby one or more said stackable extensions are stackable upon said working component rearward shaft and upon said extension shaft of a preceding said stackable extension.

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13. The device of Claim 12 further comprising one or more nubs protruding from said extension shaft.

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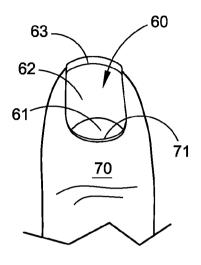


FIG. 1

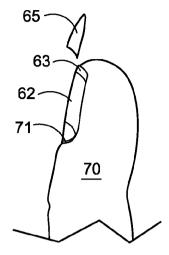


FIG. 2

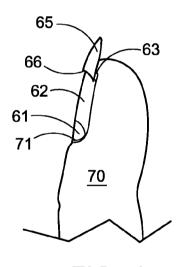


FIG. 3

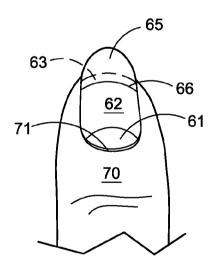
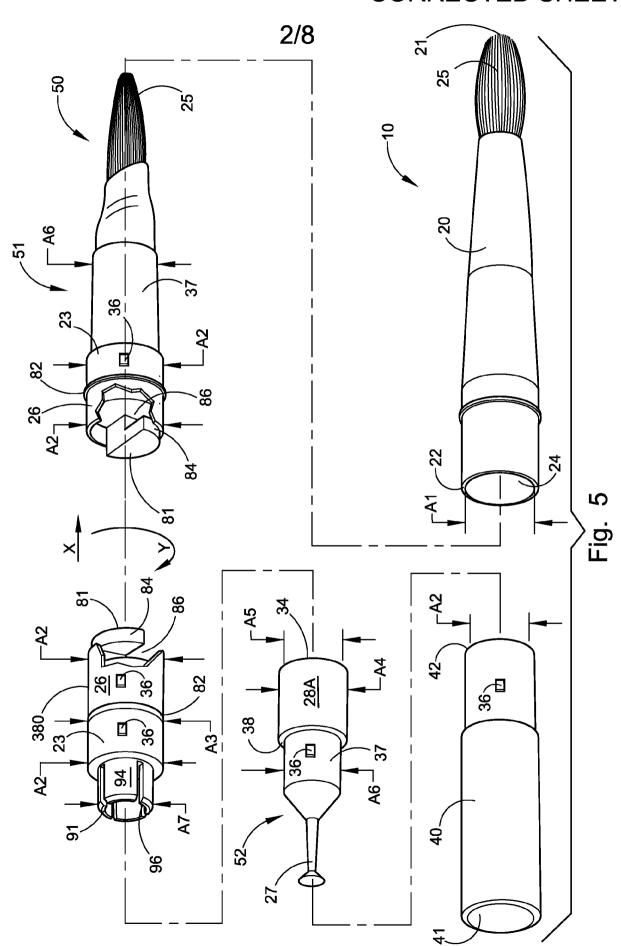
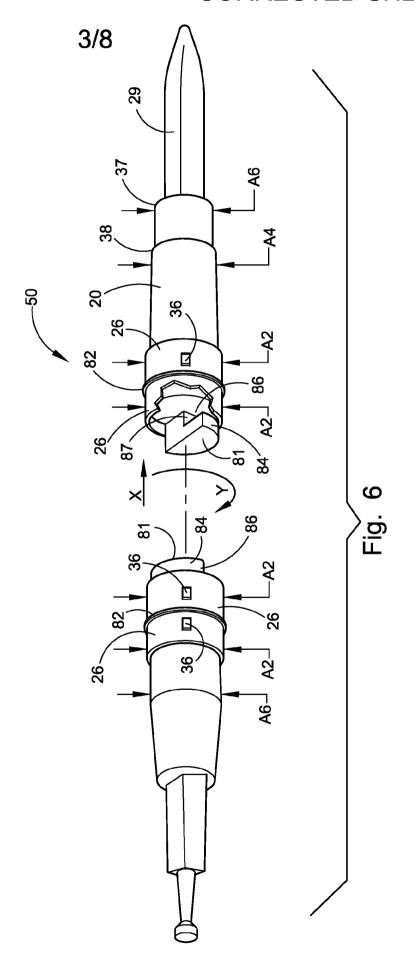
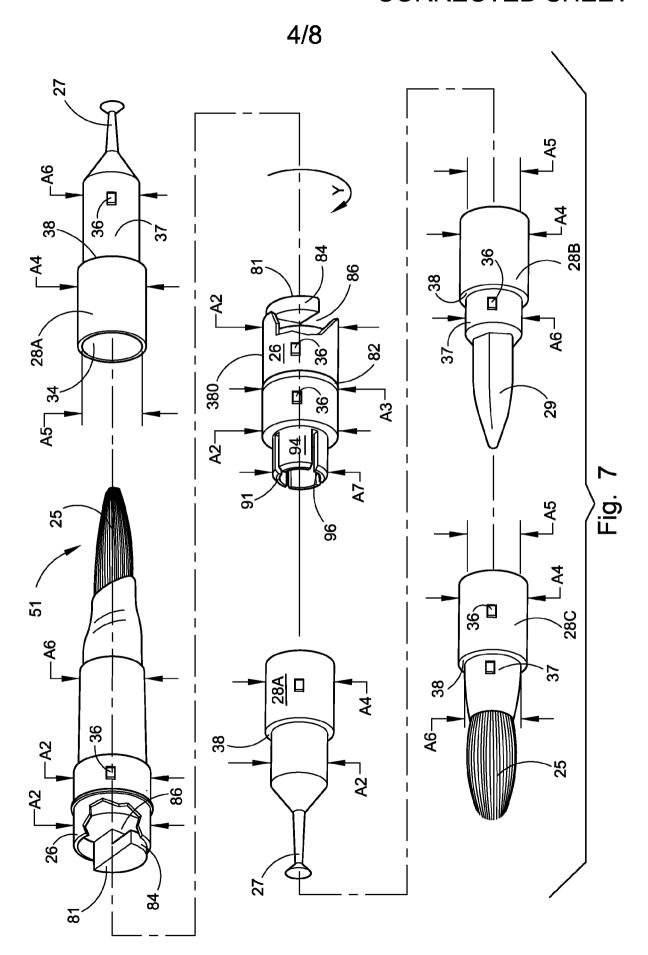
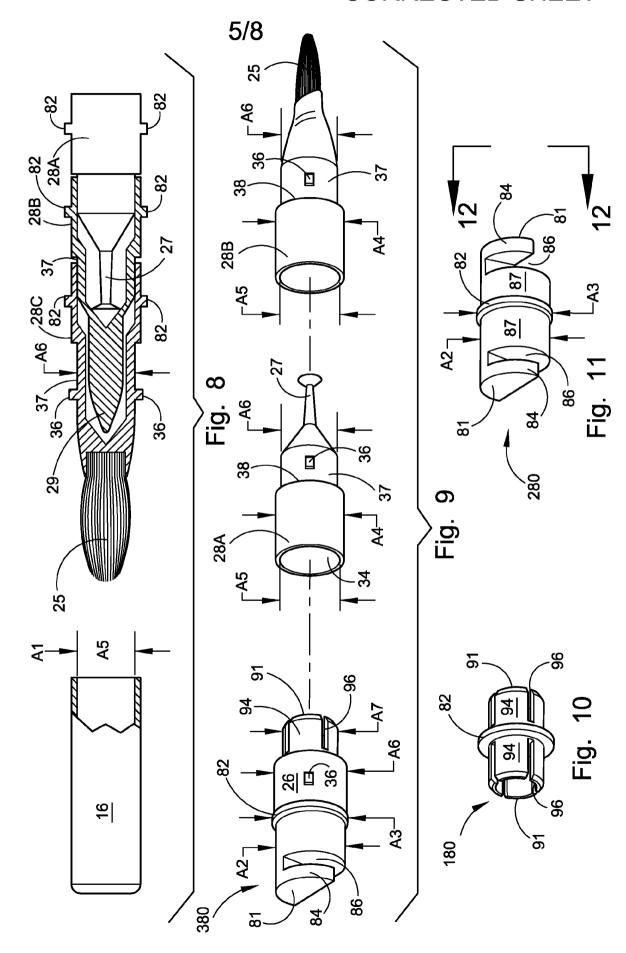


FIG. 4



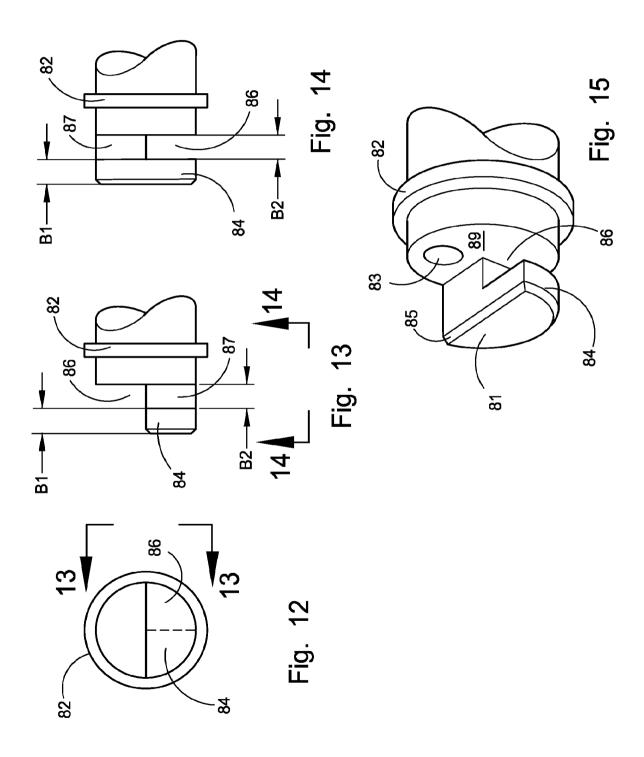






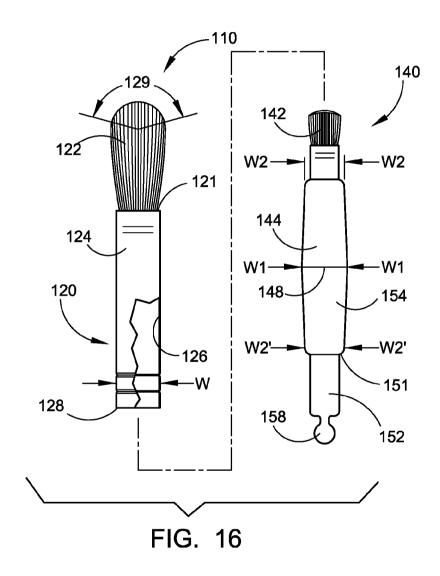
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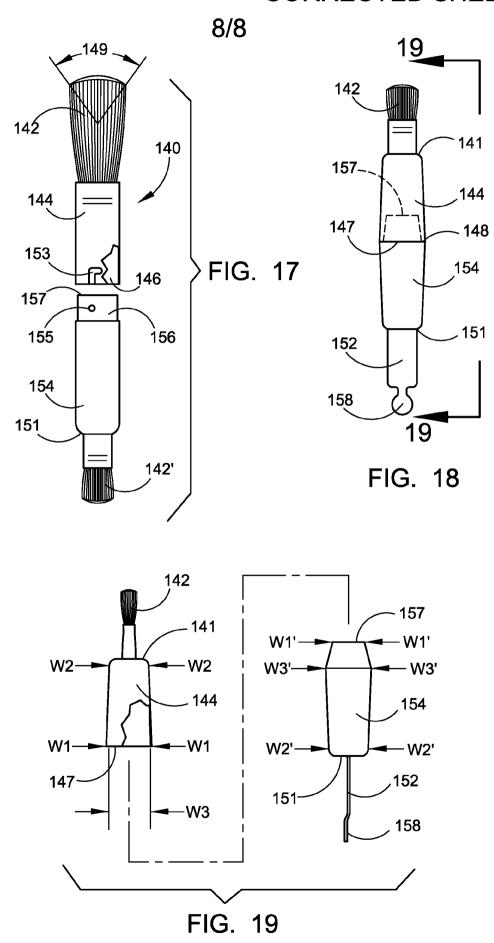
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INTERNATIONAL SEARCH REPORT

International application No. PCT/US2008/077808

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A45D 40/24 (2008.04) USPC - 401/17			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) IPC(8) - A45D 29/17, 34/04, 40/24; B65D 21/02 (2008.04) USPC - 132/75.3, 76.5, 294, 317, 318; 401/16, 17, 18			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
PatBase			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	opropriate, of the relevant passages	Relevant to claim No.
Υ	US D378,026 S (BALAZS) 18 February 1997 (18.02.1997) entire document		1-13
Υ	US 2005/0135866 A1 (WATANABA et al) 23 June 2005 (23.06.2005) entire document		1-13
Υ .	US 3,397,707 A (AVERSA) 20 August 1968 (20.08.1968) entire document		3, 6, 9, 13
Ý	US 6,688,792 B1 (REICHMANN et al) 10 February 2004 (10.02.2004) entire document		5-6, 12, 13
Υ	US 2006/0165474 A1 (ZHANG et al) 27 July 2006 (27.07.2006) entire document		7-11
Υ	FR 2,847,131 A1 (OLIVIER) 21 May 2004 (21.05.2004) entire document		11
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Further documents are listed in the continuation of Box C.			
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25 November 2008 08 DFC 2008			
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Mail Stop PCT, Attn: ISA/US, Commissioner for Patents		Blaine R. Copenheaver	
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