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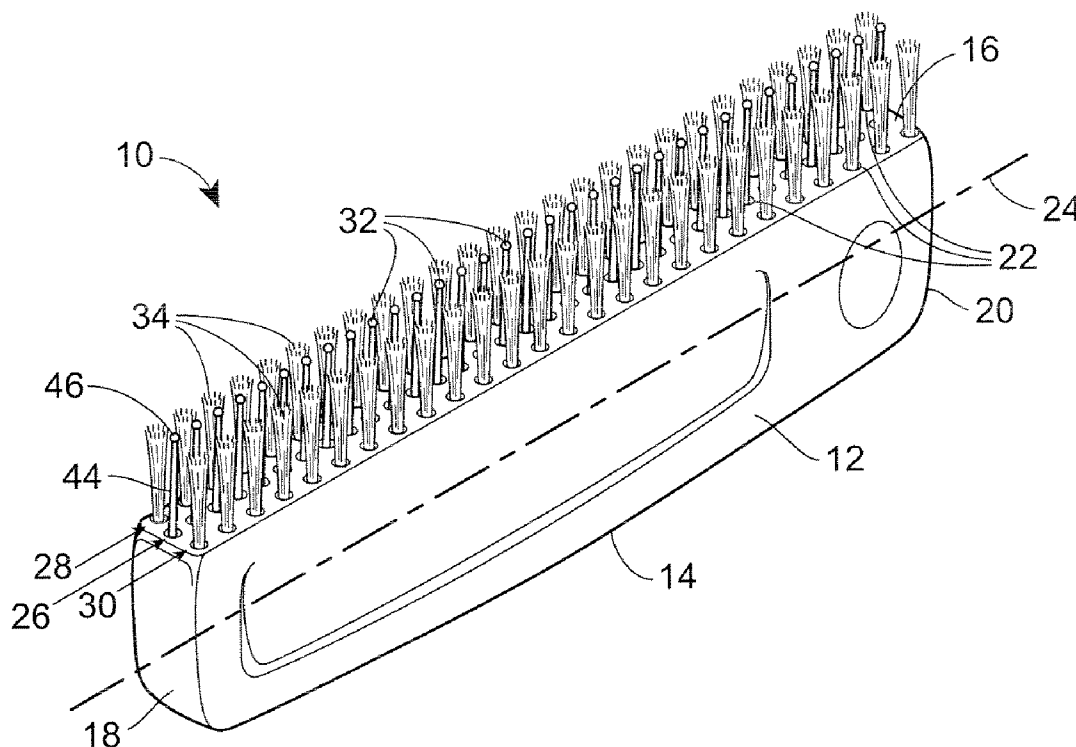
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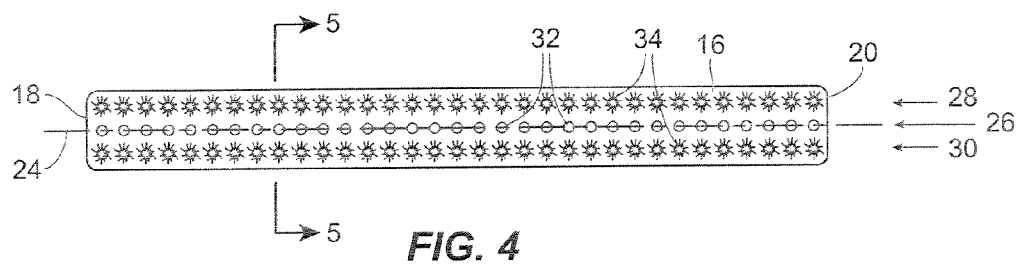
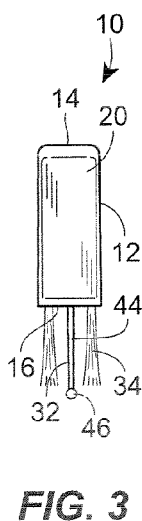
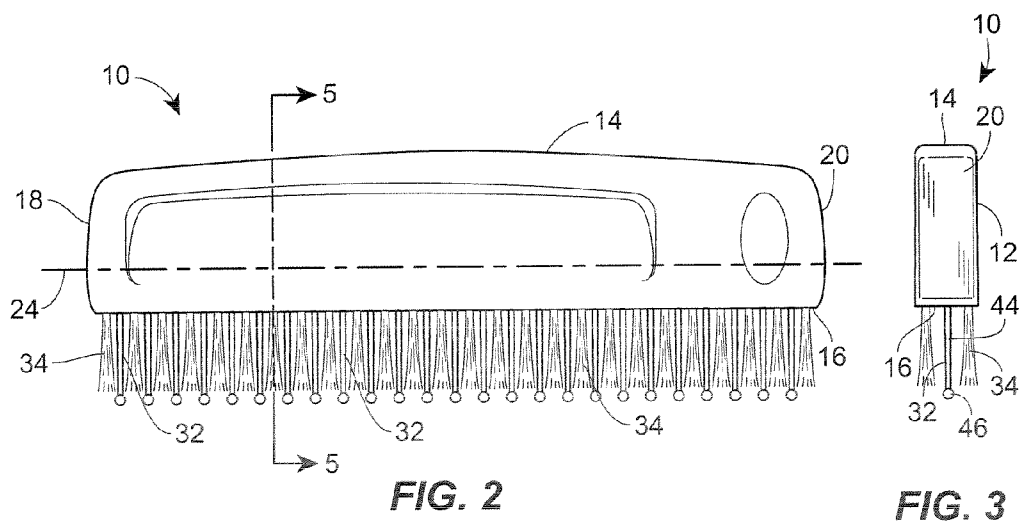
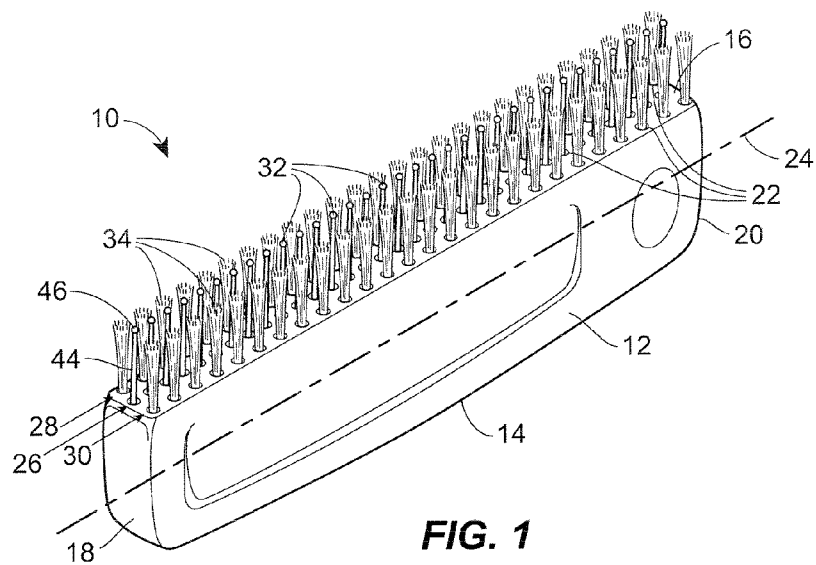
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(57) **ABSTRACT**

A finishing comb designed to meet the grooming needs of men is disclosed. The finishing comb has an elongated body having three parallel rows of bristles extending from end to end from the bottom surface of the body. The rows of bristles are a combination of natural bristles and synthetic bristles arranged so that the synthetic bristles penetrate the hair pack and the natural bristles distribute the natural sebum of the hair along the lengths of the hair shafts. In one embodiment, the center row of bristles comprises synthetic bristles and the outer rows of bristles comprise tufts of natural bristles. In an alternative embodiment, the inner row of bristles comprises tufts of natural bristles and the outer rows of bristles comprise synthetic bristles.

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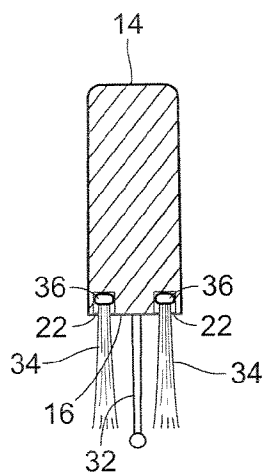


FIG. 5

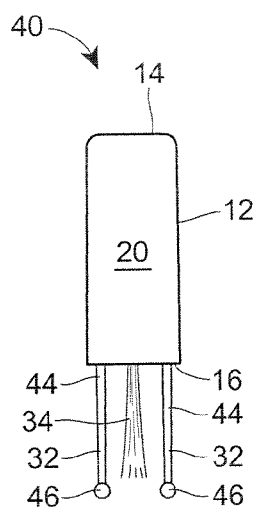


FIG. 6

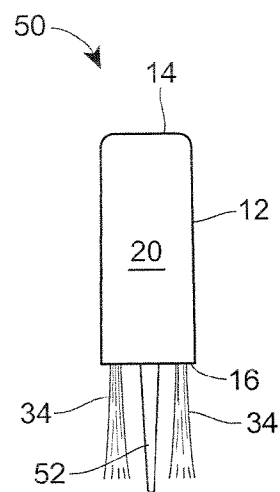


FIG. 8

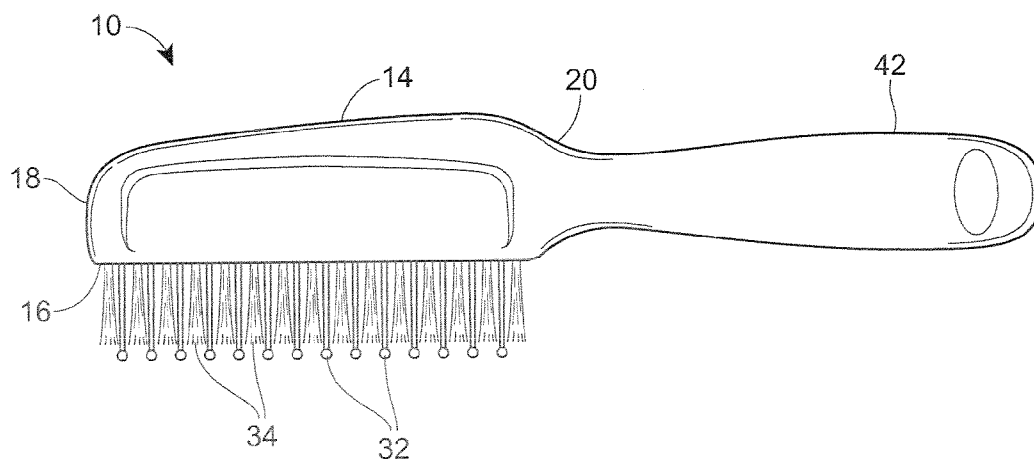
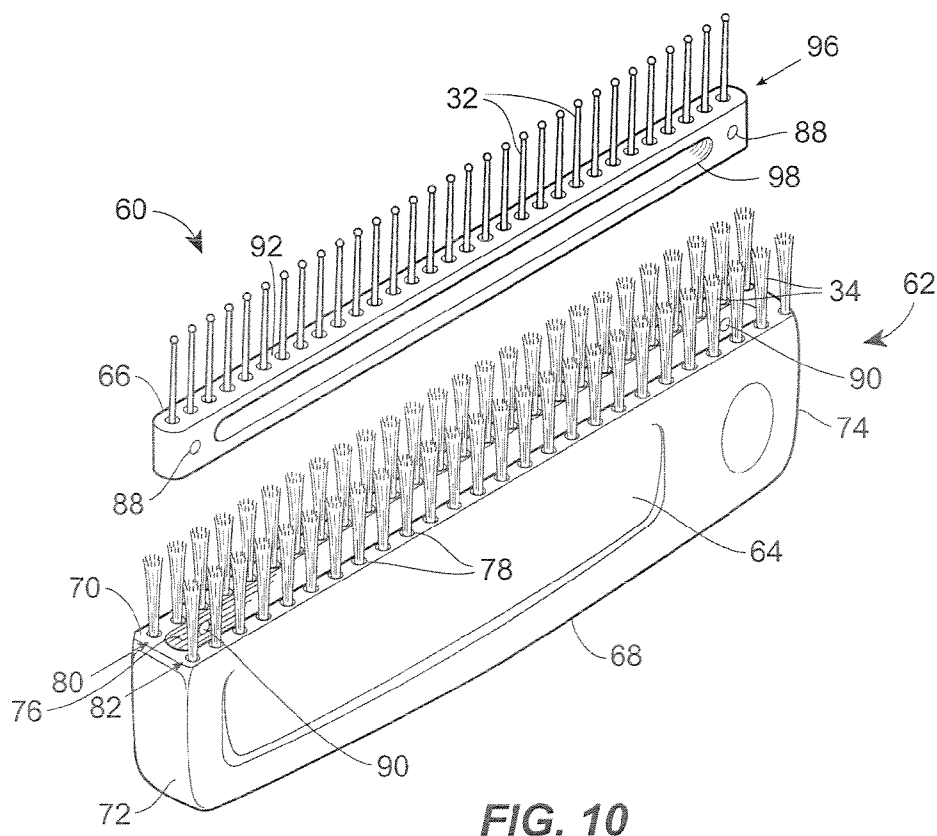
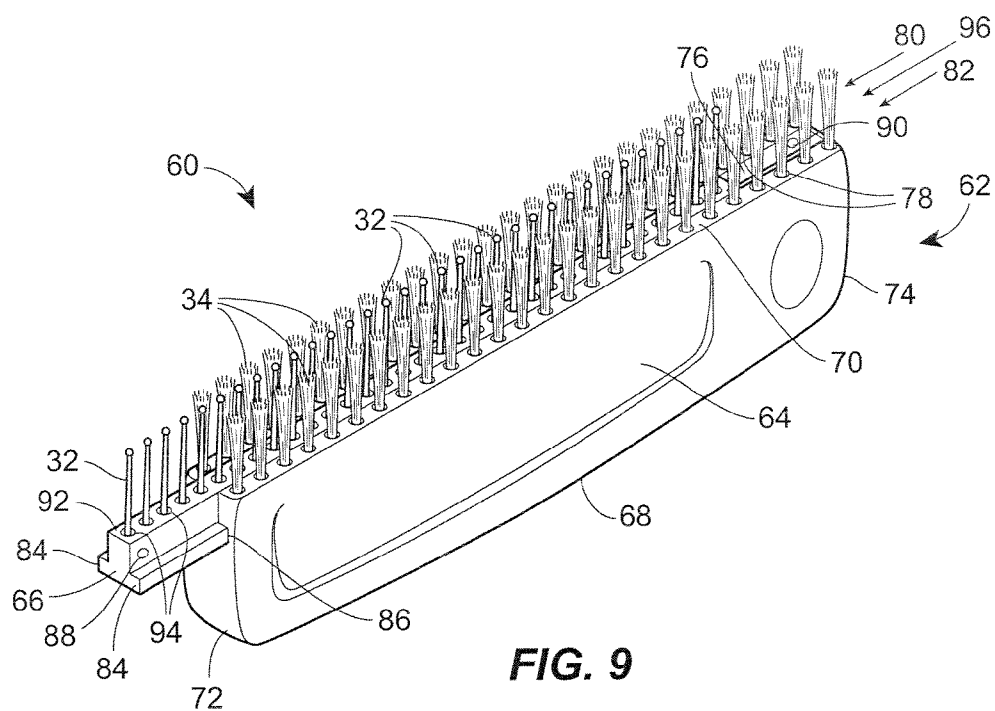


FIG. 7



FINISHING COMB

FIELD OF THE DISCLOSURE

[0001] The present disclosure is generally directed to finishing combs and, more particularly, to finishing combs and brushes having alternating rows of synthetic and natural bristles.

BACKGROUND OF THE DISCLOSURE

[0002] In the area of male grooming, men do not currently possess away to “touch-up” their hair before going out. “Touching-up” one’s hair involves checking that the hair is positioned and distributed the way the man or woman would want and adding a “shine” to the hair to give the hair a styled salon look. Some men experience frustration using currently available combs because such combs do not provide the “shine” to the hair they would like before going out. Another issue identified by women is “smoothing” out the look of the hair for any “Up-doo” hair style.

[0003] Currently, one way to provide “shine” in the hair is through the use of a 100% boar hair bristle brush or a mixture of nylon/boar hair bristles in a brush. The boar hair has been shown to distribute the natural sebum of the hair along the length of the hair shaft providing the “shine” to the hair follicle that is desired by both men and women. Boar hair bristle brushes usually come in paddle style brush heads where the design of the brush head is rectangular and possesses many rows of tufted boar hair bristles in cushion flexible pad or in a solid piece of material such as wood, plastic or metal. The rectangular brush head size can vary but often is large enough to cover more surface area of the hair quickly. The size (often 3.25" width by 4.75" length) is attributable to the brush being designed for use by women, who often have long hair. Other boar hair bristle brush head designs, such as oval, narrower-rectangular, or triangular head types, are used when a “quick” finishing brush is needed to provide shine. These smaller brush head designs having fewer tufted boar bristles attached to a cushion flexible pad or a solid material are often utilized by women. Boar hair is also used in conjunction with other bristles made of other materials such as nylon, polypropylene, polyethylene, acrylonitrile butadiene styrene (ABS), styrene, thermoplastic elastomers (TPEs), and the like. The use of the secondary bristles is mainly for penetrating the hair to allow the boar hair to come in contact with hair shafts deeper into the “hair-pack” or scalp. For example, many brushes use a mixture of boar hair bristles surrounded by monofilament nylon bristles in varying percentages of bristle amounts within a tuft of bristles. One will often hear many brushes of this type called a 50/50 boar brush, where 50% of the bristle tuft is boar hair bristles and the other 50% of the bristle tuft is bristles formed from nylon or other plastic materials. Another term often used in the trade is “porcupine brush.” A porcupine brush possesses a single monofilament (alternate material) bristle centered among a tuft of boar hair bristles. As with the brush discussed above, the porcupine brush allows the boar hair bristles to penetrate deeper into the “hair pack,” thereby allowing the boar hair bristles to contact hair shafts below the surface level. This penetration allows the boar hair bristle to distribute the sebum of the hair follicle/scalp and provide the desired “shine” within the hair at many levels giving the appearance of a healthier hair condition.

[0004] “Club” and “military” brushes are men’s tufted brushes that are often used by multicultural consumers. These brushes can possess many rows of tufted bristles secured in a wood, plastic, or metal substrate. “club” brush is typically a tufted boar hair bristle brush with a smaller rectangular head design, and often times with a smaller handle. A “military” brush is typically a rectangular boar hair bristle brush without a handle. The boar hair bristle concentration can be 100% boar hair, or a mixture of boar hair and nylon bristles. These brushes are designed mainly for the African-American customer due to their specific hair needs, such as the special attention that must be paid to the hair shafts due to the coiled, fragile structure of their hair type. The ability of boar hair to be cut from the animal in varying lengths and with varying rigidities provides a range of bristle rigidity such that boar hair brushes may be offered with “softer” feeling boar hair bristles or “stiffer” feeling boar hair bristles to satisfy the customers’ particular needs and preferences. However, despite this flexibility, the club and military type brushes presently known and offered for men do not provide the penetration into the hair pack offered by the 50/50 boar brushes and porcupine brushes described above and are designed primarily for use by women.

[0005] Men can use a boar brush if they so choose, but often times they believe that the amount of boar bristles in a brush are not necessary since they have less amounts of hair and length of the individual hair shafts in comparison to the average woman’s amount and length of hair. For these reasons, a need exists for a finishing brush designed to meet men’s grooming needs since most brush head designs are engineered for use by women, who usually possess a greater amount of hair than most men.

SUMMARY OF THE INVENTION

[0006] In one aspect, the invention is directed to a finishing comb having a body, a single row of synthetic bristles, and first and second single rows of natural bristles. The body may include a top surface, a bottom surface and oppositely disposed end surfaces. The single row of synthetic bristles may extend outwardly from the bottom surface of the body, and may extend from one end of the body to the opposite end of the body. The first single row of natural bristles may extend outwardly from the bottom surface of the body, may extend from one end of the body to the opposite end of the body parallel to the single row of synthetic bristles, and may be disposed on one side of the single row of synthetic bristles. The second single row of natural bristles may extend outwardly from the bottom surface of the body, may extend from one end of the body to the opposite end of the body parallel to the single row of synthetic bristles, and may be disposed on the opposite side of the single row of synthetic bristles from the first single row of natural bristles.

[0007] In another aspect, the invention is directed to a finishing comb having a body and three rows of bristles. The body may include a top surface, a bottom surface and oppositely disposed end surfaces. The first row of bristles may extend outwardly from the bottom surface of the body, and may extend from one end of the body to the opposite end of the body. The second row of bristles may extend outwardly from the bottom surface of the body, may extend from one end of the body to the opposite end of the body parallel to the first row of bristles, and may be disposed on one side of the first row of bristles. The third row of bristles extending outwardly from the bottom surface of the body, wherein the third row of

bristles may extend from one end of the body to the opposite end of the body parallel to the first row of bristles, and may be disposed on the opposite side of the first row of bristles from the second row of natural bristles. The first row of bristles may be one of synthetic bristles and natural bristles, and the second and third rows of bristles may be the other of synthetic bristles and natural bristles.

[0008] In a further aspect, the invention is directed to a finishing comb having a body and three rows of bristles. The body includes a top surface, a bottom surface, and oppositely disposed end surfaces, and the body comprises a base and an insert. The base includes a top surface, a bottom surface, oppositely disposed end surfaces, and an inner surface defining a channel having an opening through the bottom surface of the base. The insert includes a bottom surface, and may be received by and slidable within the channel of the base such that the insert slides into the channel and is received therein with the bottom surfaces of the base and the insert forming the bottom surface of the body. The three rows of bristles may extend outwardly from the bottom surface of the body, with the rows of bristles being parallel and extending from one end of the body to the opposite end of the body, with the center row of bristles extending outwardly from the bottom surface of the insert.

[0009] Additional aspects of the invention are defined by the claims of this patent.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] Objects, features, and advantages of the present device will become apparent upon reading the following description in conjunction with the drawing figures, in which:

[0011] FIG. 1 is a perspective view of an embodiment of a finishing comb having a single row of synthetic bristles between rows of natural bristles;

[0012] FIG. 2 is a side view of the finishing comb of FIG. 1;

[0013] FIG. 3 is an end view of the finishing comb of FIG. 1;

[0014] FIG. 4 is a bottom view of the finishing comb of FIG. 1;

[0015] FIG. 5 is a cross-sectional view of the finishing comb of FIG. 1 taken along lines 5-5 of FIGS. 2 and 4;

[0016] FIG. 6 is an end view of an alternative embodiment of the finishing comb of FIG. 1 having a single row of natural bristles between rows of synthetic bristles;

[0017] FIG. 7 is a side view of another alternative embodiment of the finishing comb of FIG. 1 having an outwardly extending handle;

[0018] FIG. 8 is an end view of a further alternative embodiment of the finishing comb of FIG. 1 having alternative synthetic bristles;

[0019] FIG. 9 is a perspective view of yet another alternative embodiment of the finishing FIG. 1 having a slidable insert for the synthetic bristles that is slidably received in a through an end of the body of the finishing comb; and

[0020] FIG. 10 is a perspective view of a still further alternative embodiment of the finishing comb of FIG. 1 having a slidable insert for the synthetic bristles that is slidably received in a channel through the top of the body of the finishing comb.

[0021] While the method and device described herein are susceptible to various modifications and alternative constructions, certain illustrative embodiments thereof have been shown in the drawings and will be described below in detail. It should be understood, however, that there is no intention to

limit the invention to the specific forms disclosed, but on the contrary, the intention is to cover all modifications, alternative constructions, and equivalents falling within the spirit and scope of the disclosure.

DETAILED DESCRIPTION OF THE DISCLOSURE

[0022] Although the following text sets forth a detailed description of numerous different embodiments of the invention, it should be understood that the legal scope of the invention is defined by the words of the claims set forth at the end of this patent. The detailed description is to be construed as exemplary only and does not describe every possible embodiment of the invention since describing every possible embodiment would be impractical, if not impossible. Numerous alternative embodiments could be implemented, using either current technology or technology developed after the filing date of this patent, which would still fall within the scope of the claims defining the invention.

[0023] It should also be understood that, unless a term is expressly defined in this patent using the sentence "As used herein, the term '_____' is hereby defined to mean . . ." or a similar sentence, there is no intent to limit the meaning of that term, either expressly or by implication, beyond its plain or ordinary meaning, and such term should not be interpreted to be limited in scope based on any statement made in any section of this patent (other than the language of the claims). To the extent that any term recited in the claims at the end of this patent is referred to in this patent in a manner consistent with a single meaning, that is done for sake of clarity only so as to not confuse the reader, and it is not intended that such claim term be limited, by implication or otherwise, to that single meaning. Finally, unless a claim element is defined by reciting the word "means" and a function without the recital of any structure, it is not intended that the scope of any claim element be interpreted based on the application of 35 U.S.C. § 112, sixth paragraph.

[0024] A finishing comb designed to meet the grooming needs of men is disclosed. The finishing comb has an elongated body having three parallel rows of bristles extending from end to end from the bottom surface of the body. The rows of bristles are a combination of natural bristles and synthetic bristles arranged so that the synthetic bristles penetrate the hair pack and the natural bristles distribute the natural sebum of the hair along the lengths of the hair shafts. In one embodiment, the center row of bristles comprises synthetic bristles and the outer rows of bristles comprise tufts of natural bristles. In an alternative embodiment, the inner row of bristles comprises tufts of natural bristles and the outer rows of bristles comprise synthetic bristles. To facilitate manufacturing of the finishing comb, the body may comprise a base having an inner surface defining an interior channel, and an insert having at least the center row of bristles extending outwardly from a bottom surface thereof. After the bristles are connected to the insert and/or the base, the insert may slide into the channel of the base to form the completed body of the finishing comb.

[0025] Referring to FIGS. 1-4, an embodiment of a finishing comb 10 in accordance with the disclosure is illustrated. The finishing comb 10 includes an elongated body 12 having a top surface 14, a bottom surface 16, and oppositely disposed end surfaces 18, 20. The bottom surface 16 of the finishing comb 10 includes a plurality of openings 22 therethrough configured in three rows extending between the end surfaces

18, 20 of the body 12 parallel to a longitudinal axis 24 of the body 12. The openings 22 are configured to receive the ends of bristles as discussed further below such that the bristles extend outwardly from the bottom surface 16 of the body 12.

[0026] In the illustrated embodiment, three rows 26, 28, 30 of bristles extend outwardly from the bottom surface 16 of the body 12. The center row 26 of bristles extends along the centerline of the bottom surface 16 of the body 12 between the end surfaces 18, 20. The center row 26 of bristles is formed by a plurality of synthetic bristles 32 extending from the openings 22 in the bottom surface 16 along the center row 26. The synthetic bristles 32 may be any type of synthetic bristles currently known by those skilled in the art such as those discussed further below, or that may later be developed, and may be connected to the body 12 of the finishing comb 10 within the corresponding openings 22 in any appropriate manner so that the synthetic bristles 32 extend outwardly from the bottom surface 16 of the body 12.

[0027] Disposed on either side of the center row 26 of synthetic bristles 32, single outer rows 28, 30 of bristles extend parallel to the center row 26 of synthetic bristles 32 between the end surfaces 18, 20. The outer rows 28, 30 are formed by pluralities of tufts 34 of natural bristles extending from the openings 22 in the bottom surface 16 along the outer rows 28, 30. The natural bristles in the tufts 34 may be any type of natural bristles commonly used in hair brushes, such as boar hair bristles. The synthetic bristles 32 and the tufts 34 of natural bristles may be dimensioned so that the tips of the synthetic bristles 32 extend beyond the ends of the tufts 34 of natural bristles to improve the penetration of the synthetic bristles 32 into the hair pack. However, the synthetic bristles 32 may be the same length or shorter than the tufts 34 of natural bristles if necessary, such as for the finishing comb 10 to provide a desired grooming performance. The tufts 34 of natural bristles may be connected to the body 12 of the finishing comb 10 within the corresponding openings 22 in any appropriate manner so that the natural bristles of the tufts 34 extend outwardly from the bottom surface 16 of the body 12. For example, FIG. 5 illustrates one mechanism for connecting the tufts 34 within the corresponding openings 22. Before inserting the tufts 34 of natural bristles into the openings 22, the ends of the natural bristles may be inserted into anchors 36 having openings for receiving the natural bristles and being sized such that the anchors 36 must be forced into the openings 22. After the ends of the natural bristles are inserted, the anchor 36 may be pressed into the corresponding opening 22 such that the anchor 36 is compressed within the opening 22 and crimped around the natural bristles so that the anchor 36 is retained within the opening 22 and the natural bristles of the tuft 34 are retained within the anchor 36. Of course, other methods and mechanisms for securing the tufts 34 of natural bristles within the openings 22 of the body 12 are known to those skilled in the art and are contemplated by the inventors as having use in finishing combs in accordance with the present disclosure.

[0028] While the finishing comb 10 as illustrated in FIGS. 1-5 includes a single center row 26 of synthetic bristles 32 and outer single rows 28, 30 of tufts 34 of natural bristles, it is contemplated that the finishing comb 10 may be implemented with the types of bristles in the rows 26, 28, 30 reversed. Such variation in the configuration of the rows 26, 28, 30 may be implemented to meet a particular customer preference or grooming requirement. An alternate embodiment of a finishing comb 40 having such a reverse bristle configuration is

shown in FIG. 6. The finishing comb 40 may have the same general configuration as the finishing comb 10, including the body 12 as described above with three rows 26, 28, 30 of openings 22 with bristles extending outwardly from the bottom surface 16 of the body 12. However, in this embodiment, the single center row 26 of bristles is formed by tufts 34 of natural bristles such as those described above. Further, the outer single rows 28, 30 of bristles are formed by synthetic bristles 32 extending from the openings 22 in the bottom surface 16 along the outer rows 28, 30.

[0029] The use of three alternating rows of natural and synthetic bristles is exemplary, and those skilled in the art will understand that finishing combs in accordance with the present disclosure may have alternate row configurations depending on the particular grooming needs and user preferences to be met by a particular finishing comb. For example, a finishing comb may be provided with two rows of synthetic bristles surrounded by outer rows of natural bristles, or vice versa. Further, a finishing comb may be provided with two rows of synthetic bristles alternated with two rows of natural bristles such that the outer row on one side is a row of synthetic bristles and the outer row on the opposite side is a row of natural bristles. A finishing comb having this configuration of rows of bristles may be provided, for example, where one grooming need is met when the synthetic bristles are in the outermost row and another grooming need is met when the natural bristles are in the outermost row, and both needs may be met by a single finishing comb. Other finishing comb configurations having combinations of rows of natural and synthetic bristles will be apparent to those skilled in the art and are contemplated by the inventors as having use in finishing combs in accordance with the present disclosure.

[0030] Returning back to FIGS. 1-5, the components of the finishing comb 10 may be in any manner necessary to achieve the desired grooming performance and to facilitate manufacturing. The body 12 of the finishing comb 10 may be fabricated from wood with the openings 22 in the bottom surface 16 being drilled out. Alternatively, the body 12 may be molded from a resin material into the shape of the body 12, with the openings 22 either being formed during the molding process or being drilled into the body 12 after the body 12 is molded. Examples of resins that may be used to form the body 12 may include ABS, styrene, polypropylene, polyethylene, kostrate, propionate, high impact polystyrene (HIPS), TPEs, thermoplastic urethane (TPU), thermoplastic vulcanizate (TPV, such as santoprene/neoprene), nylon, ABS/polycarbonate mixture, acetate, acrylic, and the like. Additionally, the body 12 of the finishing comb 10 may have alternate configurations, such as the additional of a handle 42 (FIG. 7) extending outwardly from one of the end surfaces 20 of the body 12. Where the body 12 is molded from the same material as the synthetic bristles 32, the synthetic bristles 32 may be integrally molded with the body 12 to form the row or rows of synthetic bristles 32. Integral molding of the body 12 and the synthetic bristles may eliminate the need for separate fabrication of the synthetic bristles 32, drilling of the corresponding openings 22, and attachment of the synthetic bristles 32 to the body 12, thereby leaving only the drilling or molding of the openings 22 for the tufts 34 of natural bristles and the attachment of the tufts 34 once the base 12 and synthetic bristles 32 are formed. As a further alternative, the body 12 and, if desired, the synthetic bristles 32 may be formed from an appropriate metal.

[0031] As previously discussed, the synthetic bristles 32 may be any appropriate type of synthetic bristle capable of penetrating the hair pack of the user. In the embodiment illustrated in FIGS. 1-5, the synthetic bristles 32 may include an elongated monofilament bristle 44 extending outwardly from the corresponding opening 22, and having a rounded end cap 46 disposed on the end of the monofilament bristle 44 opposite the bottom surface 16 of the base 12. The synthetic bristles 32 may be integrally formed from a single material, such as a molded nylon or plastic resin such as the resins discussed above, or a formed metal wherein the elongated monofilament bristle 44 has the rounded tip or cap 46 integrally formed on the end. Alternatively, the synthetic bristles 32 may have a multi-piece construction, with the monofilament bristle 44 being formed from nylon, resin or metal and the cap 46 being formed by dipping the end of the monofilament bristle 44 in an epoxy compound to deposit a rounded comfort tip on the end of the monofilament bristles 44. In a further embodiment shown in FIG. 8, the synthetic bristles 32 may be replaced in a finishing comb 50 by a tapered synthetic bristle 52. The tapered synthetic bristle 52 may have a larger diameter proximate the bottom surface 16 of the body 12, taper down as the bristle 52 extends away from the bottom surface 16, and terminate in a rounded comfort tip. As with the synthetic bristle 32, the tapered bristle 52 may extend beyond the tufts 34 of natural bristles to improve the penetration of the tapered bristles 52 into the user's hair pack.

[0032] The synthetic bristles may be formed from homogeneous materials, or the material from which the synthetic bristles are fabricated may also include other materials such as tourmaline, anti-static additives, anti-bacterial additives, silicone, carbon, silver, copper, and the like that have therapeutic properties when the finishing comb 10 is used on the hair. In some implementations, the therapeutic materials may be mixed with the resin forming the synthetic bristles 32, 52 so that the therapeutic materials are integrally formed within the bristles 32, 52. Alternatively, the synthetic bristles 32, 52 may be pre-formed and materials such as silver, copper and other metals may be deposited on the exterior of the formed synthetic bristles by a plating process or by dipping the bristles 32, 52 into the material to be disposed thereon.

[0033] The natural bristles in the tufts 34 may be any appropriate type of animal hair bristles typically used in brushes and known to those skilled in the art to fulfill the grooming requirements of the finishing comb 10, 40, 50. For example, as discussed above, boar hair bristles may be used where it is desired to distribute the natural sebum of the hair along the length of the hair shaft thereby providing "shine" to the hair follicles. Other animal hair bristles may be used to derive other benefits provided thereby. Moreover, the tufts 34 may include a mix of natural bristles types to provide a desired feel to the finishing comb 10, 40, 50 or to provide a desired combination of grooming benefits in the finishing comb 10, 40, 50. In addition to the tufting method discussed above, those skilled in the art will understand that other tufting methods may be used to connect the tufts 34 of natural bristles to the body 12 of the finishing combs 10, 40, 50. For example, boar bristles can be tufted into the openings 22 of the body 12 using a bristle tufting machine known in the art. The bristle tufting machine may take a designated length of boar bristles and insert the bristles into the openings 22 of the body 12 by folding the boar bristles in half with a "striker" of the bristle tufting machine. The tip of the "striker" holds an "anchor" or staple that assists in folding the boar bristles, with the

"anchor" or staple being used to secure the tuft 34 of boar bristles within the openings 22 of the body 12. In a further alternative, the body 12 may be injection molded, and the boar bristles may be secured therein without using anchors, such as by directly tufting the boar bristles into the openings 22 and securing the bristles therein with an appropriate adhesive, or by positioning the boar bristles during the molding process such that the bristles are captured in the body 12 of the finishing comb 10 as the body 12 is being molded.

[0034] To facilitate manufacturing of the finishing combs, alternate configurations of the body of the finishing comb are contemplated by the inventors. FIG. 9 illustrates an alternative embodiment of a finishing comb 60 having a body 62 with a two-piece construction comprising a base 64 and an insert 66. The base 64 has a top surface 68, a bottom surface 70, and oppositely disposed end surfaces 72, 74. The base 64 further includes an inner surface defining a channel 76 having openings through the bottom surface 70 and one of the end surfaces 72. In the illustrated embodiment, the bottom surface 70 of the base 64 includes a plurality of openings 78 similar to the openings 22 discussed above forming outer rows 80, 82 disposed in either side of the channel 76 extending between the end surfaces 72, 74 of the base 64 parallel to the longitudinal axis of the body 62.

[0035] The insert 66 is configured to be slidably received into the channel 76 of the base 64 through the opening in the end 72 of the base 64 defined by the inner surface of the base 64. To facilitate alignment and retention of the insert 66 within the channel 76, the insert 66 may include outwardly extending longitudinal rails or wings 84 disposed on either side of the insert 66. The wings 84 of the insert 66 are accommodated by the channel 76 of the base 64 by corresponding recesses 86 defined by the inner surface in which the wings 84 are disposed when the insert 66 slides into the channel 76. To further retain the insert 66, the insert 66 may have outwardly extending raised surface portions or detents 88 on either side thereof, and the inner surface of the base 64 may further define corresponding dimples or recesses 90 of the channel that are configured to receive the detents 88 when the insert 66 slides fully into the channel 76. The insert 66 has a bottom surface 92 having a plurality of openings 94 similar to the openings 22, 94 discussed above forming the center row 96 disposed between the outer rows 80, 82 when the insert 66 is disposed within the channel 76, at which time the bottom surfaces 70, 92 of the base 64 and insert 66, respectively, combine to define the bottom surface of the body 62.

[0036] Once assembled, the finishing comb 60 may be substantially similar to the finishing combs 10, 40, 50 with alternating rows of synthetic bristles 32 and tufts 34 of natural bristles extending from the bottom surfaces 70, 92 of the base 64 and insert 66, respectively. The base 64 and insert 66 are fabricated separately, and the corresponding rows of bristles are attached to the bottom surfaces 70, 92 before the base 64 and insert 66 are assembled, which may facilitate the disparate attachment process that may be required for attaching the natural and synthetic bristles. Further, the two-piece construction of the base 62 may allow the body 64 to be fabricated from one material, such as wood to give the finishing comb 60 a desired appearance, and the insert 64 to be fabricated from a different material, such as a plastic resin or rubber that may be more conducive to attachment of the particular bristles being attached thereto. Further, where the synthetic bristles 32 form the center row 96 of bristles on the bottom surface 92 of the insert 66, the insert 66 may be fabricated from the same

synthetic material as the synthetic bristles 32 such that the insert 66 and synthetic bristles 32 may be integrally molded as a single component, thereby eliminating the steps of forming the openings 94 in the bottom surface 92 of the insert and attaching the synthetic bristles 32 to the insert 66.

[0037] Those skilled in the art will understand that other variations of the finishing comb 60 and the process by which the finishing comb 60 is fabricated are possible and are contemplated by the inventors as having use in finishing combs in accordance with the present disclosure. For example, as discussed above with respect to FIG. 6, the center row 96 may be formed by tufts 34 of natural bristles, and the outer rows 80, 82 may be formed by synthetic bristles 32. Further, if desired, both the center row 96 of bristles and the outer rows 80, 82 of bristles may extend outwardly from the bottom surface 92 of the insert 66 instead of being split across both bottom surfaces 70, 92. Such a construction may be desired where the bristles may not be easily attached to the material from which the base 64 is formed.

[0038] FIG. 10 shows a further alternative embodiment of the finishing comb 60 wherein the insert 66 may be inserted into the channel 76 of the base 64 through the opening in the bottom surface 70 of the base 64. In this embodiment, the inner surface of the base 64 does not define an opening through the end surface 72 of the base 64 or recesses 86, and the insert 66 does not include the longitudinal rails or wings 84. During assembly, the insert 66 slides downwardly into the channel 76 of the base 64, and is retained therein when the detents 88 on either side of the insert 66 are disposed within the corresponding recesses 90 of the channel 76. FIG. 10 further illustrates that insert 66 may be configured to deflect when sufficient force is applied to the tips 46 of the synthetic bristles 32. The insert 66 may be provided with a slot 98 passing therethrough and being dimensioned so that the spine portion of the insert 66 above the slot 98 and to which the synthetic bristles 32 are attached deflects inwardly when the finishing comb 60 is used to comb a user's hair and sufficient force is applied to the synthetic bristles. Such a configuration allows the synthetic bristles 32 to contour to the shape of the user's scalp, thereby increasing the comfort of the user while brushing in comparison to similar combs that do not flex to conform to the scalp. Similar combs having the ability to flex and conform to a user's scalp are disclosed in co-pending U.S. patent application Ser. No. 11/339,210 filed Jan. 25, 2006, entitled "Ouchless Comb," the specification of which is expressly incorporated by reference herein for all purposes.

[0039] The finishing combs according to the present disclosure address the particular grooming needs of men by combining the attributes of a boar brush with the attributes of a comb. The attributes borrowed from a boar brush include the use of a boar bristle in its various bristle combinations (e.g., 100% boar bristles, 50/50 boar/nylon bristle mixture, "porcupine" boar/monofilament bristle mixture) tufted into a flexible pad or a solid material such as wood, plastic, or metal. The attributes borrowed from a comb include the use of monofilament resin or metal bristles in a single row or multiple rows that are used in conjunction with the boar bristles and penetrate the hair pack of the user.

[0040] Finishing combs according to the present disclosure can also be used for mustache and beard combs. Moreover, finishing combs having metal monofilament bristles may be useful in wig grooming where both natural and synthetic hair is used in wigs. The finishing comb can be used to detangle the hair of the wig and to assist in providing the "shine"

desired in the hair of the wig. Alternatively, in the commercial environment, the bristling pattern and method of the finishing comb may be applied in push brooms, dustpan brooms, vacuum sweeper broom cylinders and the like.

[0041] The finishing combs in accordance with the present disclosure may be an improvement over existing combs and brushes in that they allow for more controlled styling of a user's hair with fewer rows of bristles in a smaller selected area. The dual bristle system of boar and monofilament allows for the advantageous features of both bristle systems to work in conjunction with one another providing a "combing" experience that is very favorable to the male consumer in particular. At the same time, the finishing comb also allows women to create a smooth look to finished "Up-doo" hair styles.

[0042] While the preceding text sets forth a detailed description of numerous different embodiments of the invention, it should be understood that the legal scope of the invention is defined by the words of the claims set forth at the end of this patent. The detailed description is to be construed as exemplary only and does not describe every possible embodiment of the invention since describing every possible embodiment would be impractical, if not impossible. Numerous alternative embodiments could be implemented, using either current technology or technology developed after the filing date of this patent, which would still fall within the scope of the claims defining the invention.

1. A finishing comb comprising:

- a body having a top surface, a bottom surface and oppositely disposed end surfaces;
- a single row of synthetic bristles extending outwardly from the bottom surface of the body, wherein the single row of synthetic bristles extends from one end of the body to the opposite end of the body;
- a first single row of natural bristles extending outwardly from the bottom surface of the body, wherein the first single row of natural bristles extends from one end of the body to the opposite end of the body parallel to the single row of synthetic bristles and is disposed on one side of the single row of synthetic bristles; and
- a second single row of natural bristles extending outwardly from the bottom surface of the body, wherein the second single row of natural bristles extends from one end of the body to the opposite end of the body parallel to the single row of synthetic bristles and is disposed on the opposite side of the single row of synthetic bristles from the first single row of natural bristles, wherein at least some of the synthetic bristles extend farther from the bottom surface of the body than the natural bristles, and wherein the body and the rows of bristles cooperatively define the finishing comb.

2. A finishing comb in accordance with claim 1, wherein the synthetic bristles are monofilament bristles.

3. A finishing comb in accordance with claim 1, wherein each synthetic bristle comprises a monofilament bristle and an epoxy cap disposed on an end of the monofilament bristle opposite the bottom surface of the body.

4. A finishing comb in accordance with claim 1, wherein the synthetic bristles are tapered from a maximum diameter proximate the bottom surface of the body to a minimum diameter at ends opposite the bottom surface of the body.

5. A finishing comb in accordance with claim 1, wherein ends of all of the synthetic bristles extend beyond ends of all of the natural bristles.

6. A finishing comb in accordance with claim 1, wherein the first and second single rows of natural bristles comprise rows of tufts of natural bristles extending outwardly from the bottom surface of the body.

7. A finishing comb in accordance with claim 1, wherein the natural bristles are boar hair bristles.

8. A finishing comb in accordance with claim 1, further comprising a handle extending outwardly from one of the ends of the body.

9. A finishing comb in accordance with claim 1, wherein the body comprises:

a base having a top surface, a bottom surface, oppositely disposed end surfaces, and an inner surface defining a channel having an opening through the bottom surface of the base; and

an insert having a bottom surface with the single row of synthetic bristles extending outwardly therefrom, the insert being received by and slidable within the channel of the base such that the insert slides into the channel and is received therein with the row of synthetic bristles extending outwardly from the bottom surface of the body of the finishing comb.

10. A finishing comb in accordance with claim 9, wherein the insert is inserted through the opening in the bottom surface of the base.

11. A finishing comb in accordance with claim 9, wherein the inner surface of the base further defines an opening through one of the ends of the base, and wherein the insert slides into the channel through the opening in the end of the base.

12. A finishing comb in accordance with claim 11, wherein the insert has outwardly extending longitudinal wings disposed on either side of the insert and extending parallel to the single row of synthetic bristles, and wherein the inner surface of the base defines corresponding recesses of the channel configured to slidably receive the wings of the insert when the insert is inserted into the channel through the opening in the end of the base.

13. A finishing comb in accordance with claim 9, wherein the insert has outwardly extending detents on either side of the insert, and wherein the inner surface of the base defines corresponding recesses of the channel configured to receive the detents of the insert when the insert is inserted into the channel to retain the insert within the channel.

14. A finishing comb in accordance with claim 9, wherein the first and second single rows of natural bristles extend outwardly from the bottom surface of the insert.

15. A finishing comb comprising:

a body having a top surface, a bottom surface and oppositely disposed end surfaces;

a first row of bristles extending outwardly from the bottom surface of the body, wherein the first row of synthetic bristles extends from one end of the body to the opposite end of the body;

a second row of bristles extending outwardly from the bottom surface of the body, wherein the second row of bristles extends from one end of the body to the opposite end of the body parallel to the first row of bristles and is disposed on one side of the first row of bristles; and

a third row of bristles extending outwardly from the bottom surface of the body, wherein the third row of bristles extends from one end of the body to the opposite end of the body parallel to the first row of bristles and is dis-

posed on the opposite side of the first row of bristles from the second row of natural bristles,

wherein the first row of bristles is one of synthetic bristles and natural bristles, and the second and third rows of bristles are the other of synthetic bristles and natural bristles, and wherein the body and the rows of bristles cooperatively define the finishing comb.

16. A finishing comb in accordance with claim 15, wherein the first row of bristles comprises synthetic bristles and the second and third rows of bristles comprise natural bristles.

17. A finishing comb in accordance with claim 15, wherein the first row of bristles comprises natural bristles and the second and third rows of bristles comprise synthetic bristles.

18. A finishing comb in accordance with claim 15, wherein the synthetic bristles are monofilament bristles.

19. A finishing comb in accordance with claim 15, wherein ends of the synthetic bristles extend beyond ends of the natural bristles.

20. A finishing comb in accordance with claim 15, wherein the natural bristles are boar hair bristles.

21. A finishing comb in accordance with claim 15, wherein the synthetic bristles are tapered from a maximum diameter proximate the bottom surface of the body to a minimum diameter at ends opposite the bottom surface of the body.

22. A finishing comb in accordance with claim 15, wherein a row of natural bristles comprises a row of tufts of natural bristles extending outwardly from the bottom surface of the body.

23. A finishing comb in accordance with claim 15, wherein the first, second, and third rows of bristles are the only rows of bristles of the finishing comb.

24. A finishing comb comprising:

a body having a top surface, a bottom surface and oppositely disposed end surfaces, the body comprising:

a base having a top surface, a bottom surface, oppositely disposed end surfaces, and an inner surface defining a channel having an opening through the bottom surface of the base, and

an insert having a bottom surface, the insert being received by and slidable within the channel of the base such that the insert slides into the channel and is received therein with the bottom surfaces of the base and the insert forming the bottom surface of the body; and

three rows of bristles extending outwardly from the bottom surface of the body, wherein the rows of bristles are parallel and extend from one end of the body to the opposite end of the body, wherein the three rows of bristles comprise a center row of bristles and two outer rows of bristles flanking the center row of bristles, wherein the center row of bristles comprises synthetic bristles and extends outwardly from the bottom surface of the insert, wherein the outer rows of bristles comprise natural bristles, and wherein the body and the rows of bristles cooperatively define the finishing comb.

25. (canceled)

26. A finishing comb in accordance with claim 24, wherein the insert is inserted through the opening in the bottom surface of the base.

27. A finishing comb in accordance with claim 24, wherein the inner surface of the base further defines an opening through one of the ends of the base, and wherein the insert slides into the channel through the opening in the end of the base.

28. A finishing comb in accordance with claim **27**, wherein the insert has outwardly extending longitudinal wings disposed on either side of the insert and extending parallel to the row of synthetic bristles, and wherein the inner surface of the base defines corresponding recesses of the channel configured to slidably receive the wings of the insert when the insert is inserted into the channel through the opening in the end of the base.

29. A finishing comb in accordance with claim **24**, wherein the insert has outwardly extending detents on either side of

the insert, and wherein the inner surface of the base defines corresponding recesses of the channel configured to receive the detents of the insert when the insert is inserted into the channel to retain the insert within the channel.

30. A finishing comb in accordance with claim **24**, wherein the outer rows of bristles extend outwardly from the bottom surface of the insert.

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