HAIR BRAIDING APPARATUS

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Apparatus having three hinged arms for separating portions of a person's hair during a French-braiding process. The two elongated outer arms attach to a connector body via pivots while the middle elongated arm attaches via rivets, allowing the elongated outer arms to open and close. The elongated outer arms each include a set of prongs extending towards the middle elongated arm. The middle elongated arm includes apertures or grooves in which the prongs of the elongated outer arms can nest. The elongated outer arms also include a securing mechanism such that they can fasten to the middle elongated arm via a post, for example, to maintain the hair braiding apparatus in a closed position. In preferred embodiments, the third or middle arm of the device uniquely separates the hair (e.g. at a part) to effect simplified braiding.
HAIR BRAIDING APPARATUS

FIELD OF THE INVENTION

[0001] This invention relates to an apparatus having three hinged arms for separating portions of a person’s hair during a French-braiding process. In preferred embodiments, the third or middle arm of the device uniquely separates the hair (e.g., at a part) to effect simplified braiding.

BACKGROUND OF THE INVENTION

[0002] Hair braiding has been practiced throughout the world for many centuries. Various braid types, such as French braids, have become quite popular in the United States as hair styles in themselves or simply as recreational activities for young girls, for example.

[0003] In a typical braiding operation, hair is separated into distinct sections, and, thereafter, the sections are interwoven to form distinctive ornamental designs or appearances. Because maintaining separate hair sections while simultaneously weaving the sections together is a complex task, braiding hair without assistance is difficult and requires considerable manual dexterity and practice. Therefore, in order to overcome this difficulty as well as the need for hair braiding experience or practice, various apparatus have been developed in the art which are insertable into a person’s hair to assist in braiding type operations.

[0004] For example, U.S. Pat. No. 5,655,550, issued Aug. 12, 1997 and U.S. Pat. No. 5,775,343, issued Jul. 7, 1998, each disclose devices which are insertable into a person’s hair for assisting in the separation of hair into sections during braiding processes. As such, the devices disclosed in the aforementioned patents both employ a pair of opposing comb-like structures which interlock one to the other to effect a separation of hair portions in preparation for braiding. Employing such devices, however, due to the inability of the devices to separate the hair prior to the locking together of the comb structures, uneven separation of hair sections often results. Consequently, uneven, less visually attractive braids are typically achieved.

[0005] In view of the above-mentioned drawbacks, it is apparent that there exists a need in the art for apparatus which overcomes at least one of the above drawbacks. It is a purpose of this invention to fulfill these needs in the art, as well as other needs which will become apparent to the skilled artisan once given the above disclosure.

SUMMARY OF THE INVENTION

[0006] Generally speaking, this invention fulfills the above-described needs in the art by providing:

[0007] A hair braiding apparatus comprising:

[0008] a connector body having first and second pivots;

[0009] a first elongated outer arm connected to the first pivot and having a first set of prongs extending therefrom;

[0010] a second elongated outer arm connected to the second pivot and having a second set of prongs extending therefrom;

[0011] a middle elongated arm connected to the connector body intermediate the first and the second pivots and located between the first and the second elongated outer arms;

[0012] the first and the second sets of prongs extending generally towards the middle elongated arm;

[0013] In one embodiment, each elongated outer arm contains a set of prongs extending perpendicularly from the elongated outer arms toward the middle elongated arm. The middle elongated arm contains grooves in which the prongs from the elongated outer arms may rest such that separated hair sections will remain separate. However, alternative methods can be used in place of the prongs and grooves.

[0014] In an alternative embodiment, each elongated outer arm contains a securing mechanism allowing the elongated outer arms to fasten to the post of the middle elongated arm thereby effectively holding the hair braiding apparatus in a closed position. The middle and outer elongated arms are substantially parallel to one another when the apparatus is in a closed position, and all three arms are generally curved to conform to the crown of the human head.

[0015] One objective of this invention is to more evenly divide the hair for easier braiding operation.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIG. 1 is a three dimensional perspective view of one embodiment of a hair braiding apparatus illustrated in an example environment in which the embodiment finds utility.

[0017] FIG. 2 is a three dimensional perspective view of the embodiment shown in FIG. 1 illustrated in a “closed” position with certain parts shown in x-ray.

[0018] FIG. 3 is a three dimensional perspective view of the embodiment shown in FIG. 1 illustrated in an “open” position.

[0019] FIG. 4 is a profile view of the embodiment shown in FIG. 1 of hair braiding apparatus illustrating a preferred configuration in which the hair braiding apparatus is curved to match the shape of a person’s head.

DETAILED DESCRIPTION OF CERTAIN EMBODIMENTS

[0020] For a more complete understanding of the present invention and advantages thereof, reference is now made to the following description of various illustrative and non-limiting embodiments thereof; taken in conjunction with the accompanying drawings in which like reference numbers indicate like features.

[0021] Referring initially to FIG. 1 and FIG. 2, therein is illustrated one embodiment of hair braiding apparatus 1 according to the subject invention. As illustrated, hair braiding apparatus 1 generally comprises a connector body 3 having a first elongated outer arm 5 attached at one end via pivot 11 and a second elongated outer arm 7 attached at the opposite end via pivot 13. Middle arm 9 is connected to connector body 3 via rivets 15 at a location intermediate arms 5 and 7 and is preferably rigidly (i.e. non-pivoting) attached thereto. Arms are preferably parallel to one another while in a closed position to ensure that separated hair sections are relatively equal in size for obtaining uniform looking braids.

[0022] As may be seen in FIG. 3, each elongated outer arm 5 and 7 includes a plurality of prong sets 6 and 8, respectively, each set extending outwardly from the elongated outer arms towards middle arm 9. These prongs preferably extend generally perpendicularly from arms 5 and 7 and are the mechanism by which vertical separation of hair sections is effected such as will be discussed in further detail below. Via their pivot-type connections, outer arms 5 and 7 are pivotable towards and away from middle arm 9 and, as such,
are positionable alternately in open and closed positions as will be discussed when describing the operation of the invention below.

In preferred embodiments, such as illustrated in FIG. 3, middle arm 9 includes a plurality of apertures 17 (or grooves 17 as illustrated in an alternative embodiment depicted in FIG. 5) which are so located and positioned so as to receive and “nest” prong sets 6 and 8 when outer arms 5 and 7 are in the closed position. In this manner, the spaces between individual prongs are effectively closed-off or sealed thus ensuring that separated hair sections remain separate from adjacent sections when apparatus 1 is inserted in a person’s hair for braiding purposes. Although the illustrated embodiment employs apertures 17 for this purpose, other embodiments employing alternative mechanisms or structures for receiving prong sets 6 and 8 are, of course, contemplated (such as shown in FIG. 5, for example).

In preferred embodiments, such as illustrated in FIG. 3, elongated outer arm 5 includes a securing mechanism 10 and elongated outer arm 7 includes a securing mechanism 12. Via securing mechanisms 10 and 12, elongated outer arm 5 and elongated outer arm 7 can fasten to the middle elongated arm 9 at post 14, thereby effectively holding the hair braiding apparatus in a closed position while a user braids hair. Although the embodiment illustrated in FIG. 3 shows securing mechanisms 10 and 12 on elongated outer arms 5 and 7, respectively, and includes post 14 on the middle elongated arm 9, any alternative, conventional securing mechanism can be used without departing from the scope of the invention.

Referring now to FIG. 4, a profile view of braiding apparatus 1 illustrates a generally preferred embodiment in which arms 5, 7, and 9 are curved so that the device mirrors the curvature of a person’s head. Employing such a curved shape, apparatus 1 can be inserted closer to a person’s scalp, therefore allowing more hair to be “captured” in prong sets 6 and 8. Consequently, employing such an embodiment, a longer overall braid can be achieved.

In yet a further preferred embodiment illustrated in FIG. 6, transverse members 19 are provided spanning the distance angularly between individual prongs (e.g. of prong sets 6 and/or 8) and their respective, associated arm 5 or 7. In such an embodiment, transverse members 19 are preferably flexible so as to possess a spring-like character. In this manner, employing such a construction, individual hair sections are more securely separated due to the biasing force of the tensioning members (present when apparatus 1 is “closed”) which, in effect, traps the hair section between respective prongs.

Although various materials may be used to construct the subject invention, it is noted that a plastic-type material is thought to be most efficacious as well as cost effective (e.g. for manufacturing, etc.). Nevertheless, the invention as described herein is not intended to be limited to any specific material or combination thereof and may, alternatively, be constructed of wood, for example.

Once given the above disclosure, many other features, modifications, and improvements will become apparent to the skilled artisan. Such other features, modifications, and improvements are therefore considered to be part of this invention, the scope of which is to be determined by the following claims:

1. A hair braiding apparatus comprising:
   a connector body having first and second pivots;
   a first elongated outer arm connected to said first pivot and having a first set of prongs extending therefrom;
   a second elongated outer arm connected to said second pivot and having a second set of prongs extending therefrom;
   a middle elongated arm connected to said connector body intermediate said first and said second pivots and located between said first and said second elongated outer arms;
   said first and said second sets of prongs extending generally towards said middle elongated arm.

2. Apparatus according to claim 1 wherein said first and said second elongated outer arms are pivotable towards and away from said middle elongated arm between closed and open positions, respectively.

3. Apparatus according to claim 2 wherein said middle elongated arm includes a plurality of receiving structures so located and shaped so as to seat said first and said second sets of prongs when said first and said second elongated outer arms are oriented in said closed position.

4. Apparatus according to claim 3 wherein said middle elongated arm and said first and said second elongated outer arms are substantially parallel one to another when said apparatus is in a closed configuration.

5. Apparatus according to claim 4 wherein said middle elongated arm and said first and said second elongated outer arms are generally curved to conform to the crown region of a human head.

6. Apparatus according to claim 1 wherein said middle elongated arm is non-pivotingally connected to said connector body.

7. Apparatus according to claim 5 wherein said prongs comprising said first and said second prong sets are so spaced one from another such that said prongs are capable of separating generally vertically spaced sections of hair in preparation for a braiding operation.

8. Apparatus according to claim 7 wherein said middle elongated arm is so located and oriented with respect to said first and said second elongated outer arms such that said middle elongated arm is capable of separating left and right sections of hair in preparation for a braiding operation.

9. Apparatus according to claim 8 wherein at least one of said first and said second elongated outer arms includes a securing mechanism for maintaining said first and said second elongated outer arms in a closed position.

10. Apparatus according to claim 8 further including means for securing said apparatus in a closed position.

11. Apparatus according to claim 9 wherein said middle elongated arm includes a post such that said securing mechanism located on at least one of said first and said second elongated outer arms can fasten to said post on said middle elongated arm.

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