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(54) **DEVICE FOR ADJUSTING THE FIT AND APPEARANCE OF AN ARTICLE OF APPAREL OR HAIR AND METHOD OF ASSEMBLY**

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(52) **U.S. Cl.**

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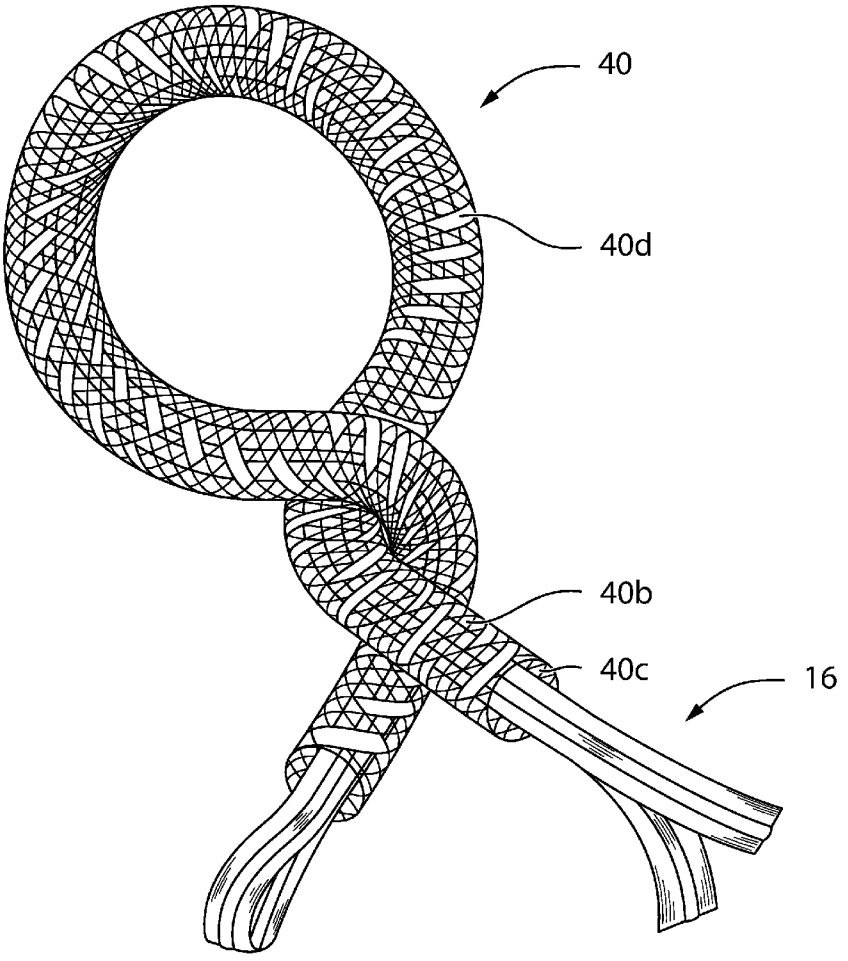
(57) **ABSTRACT**

A fastening device and a method of manufacturing a fastening device, the fastening device comprising a flexibly deformable length of wire, the wire substantially encased in a coating, a flexible length of tube mounted to the wire and a casing mounted to the tube and wire, whereby the wire remains encased in the coating and the tube when a break occurs in the body of the wire.



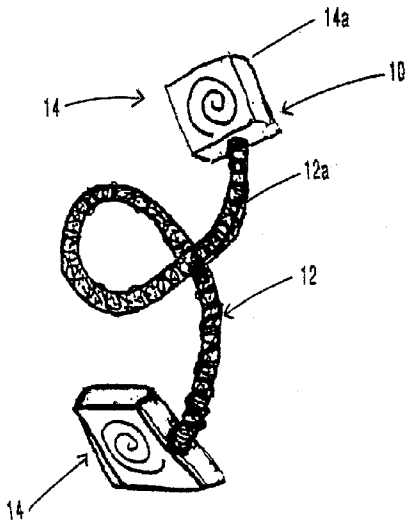
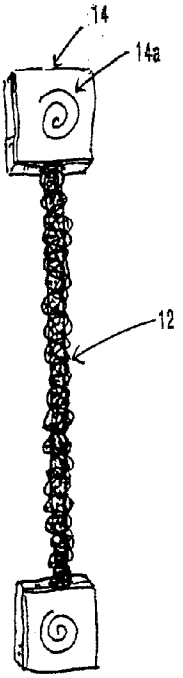


Fig 1



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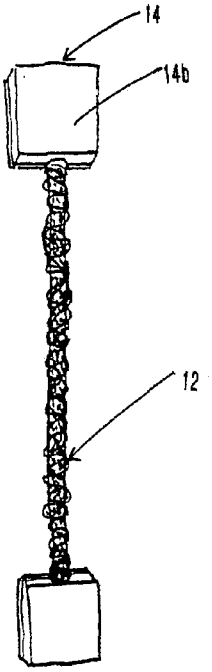

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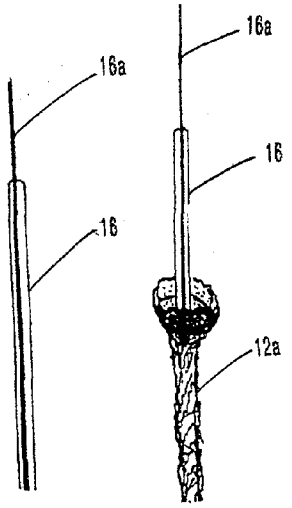
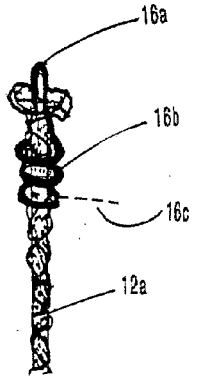


Fig 4 Fig 5



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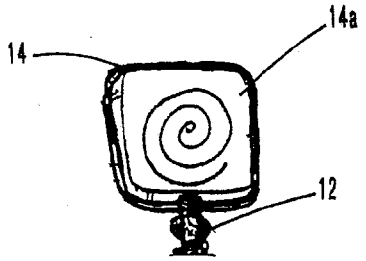

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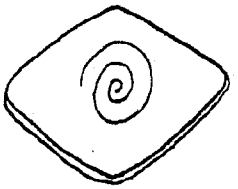

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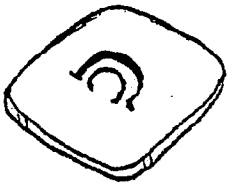

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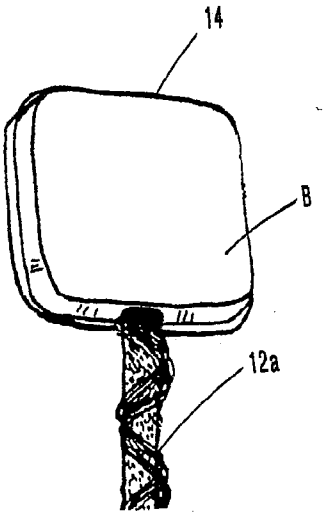

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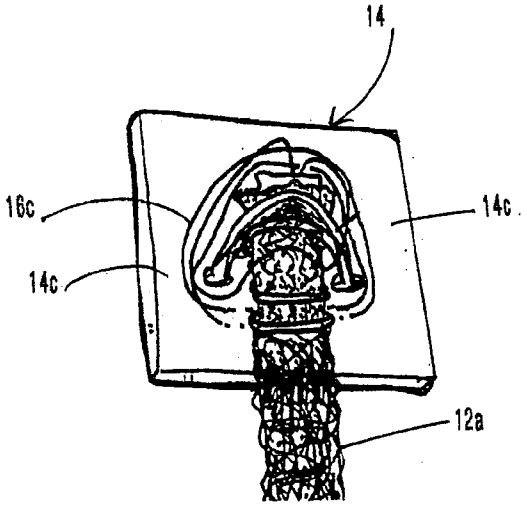

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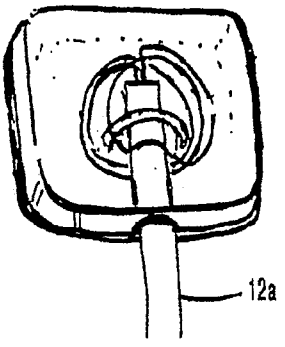

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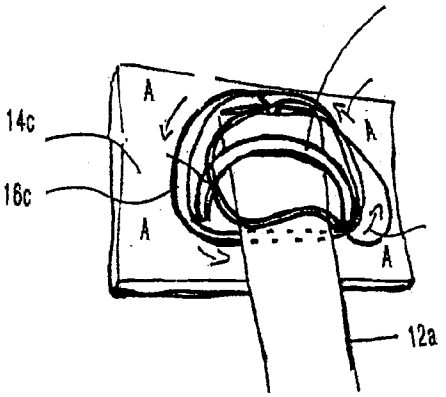

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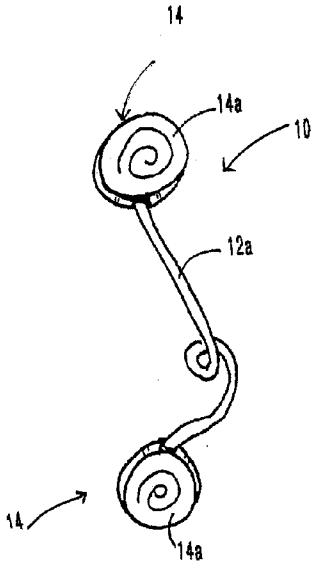

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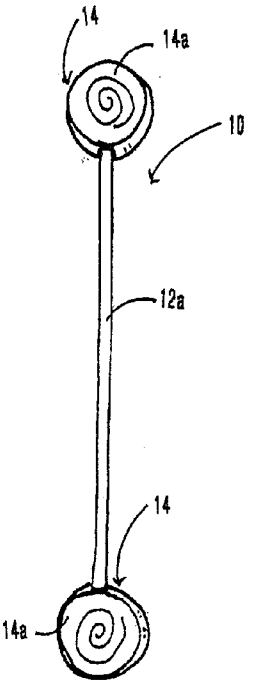

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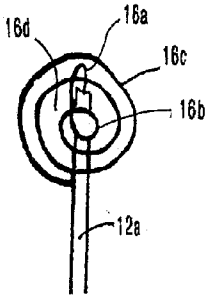

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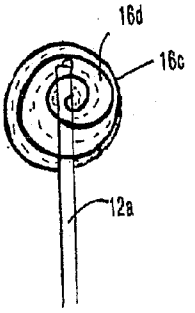

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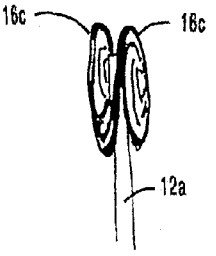

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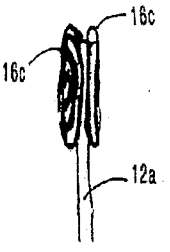

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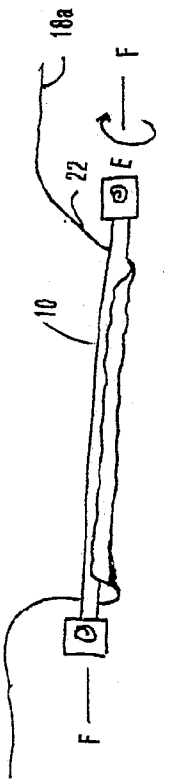

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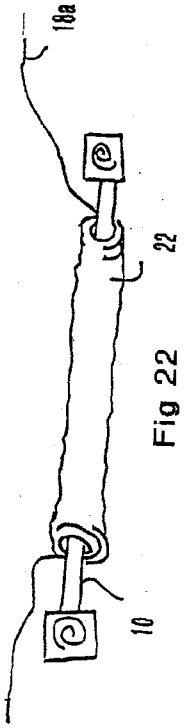

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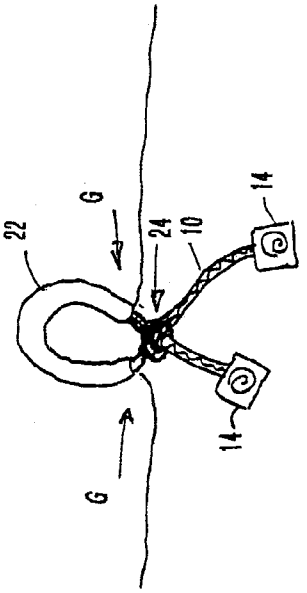

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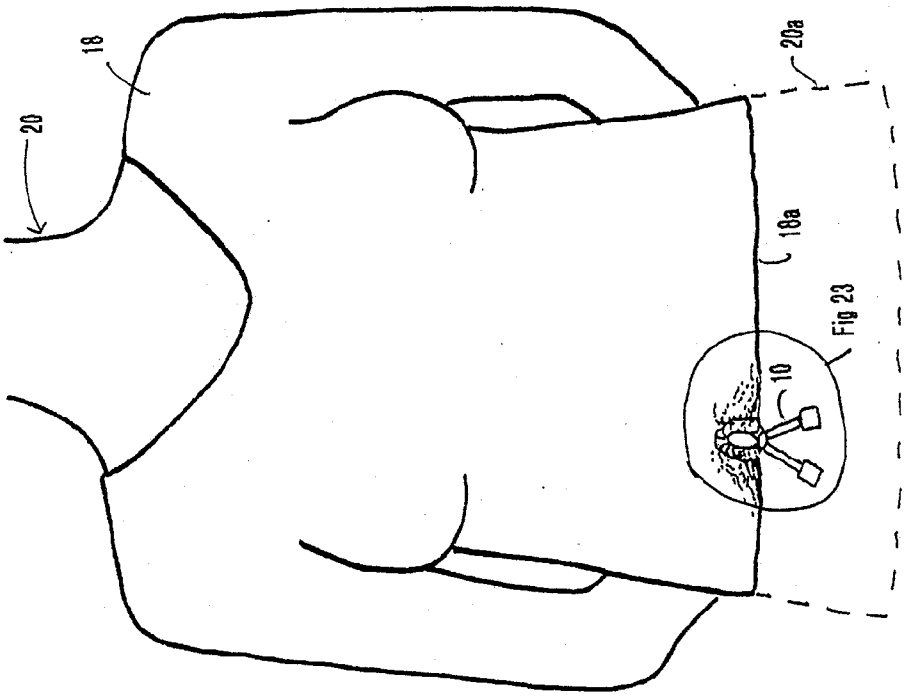

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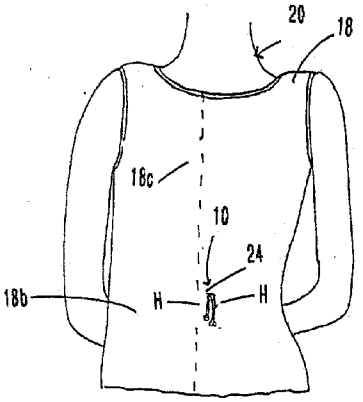

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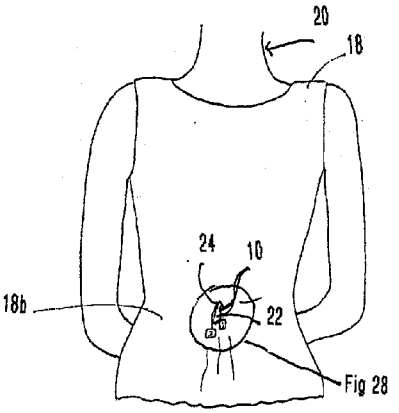

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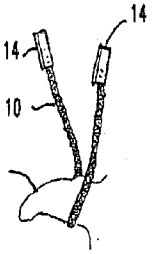

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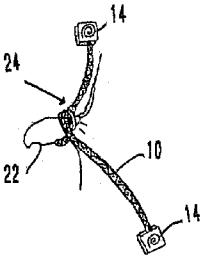

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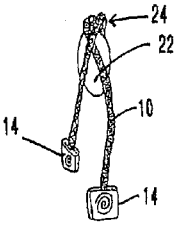

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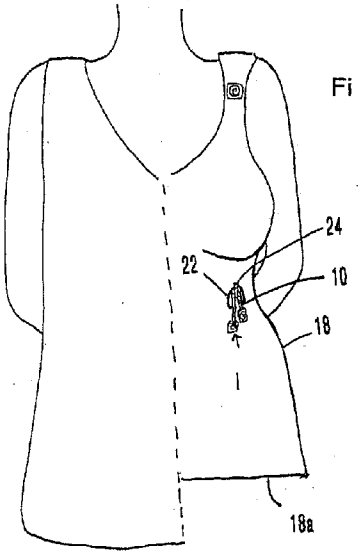

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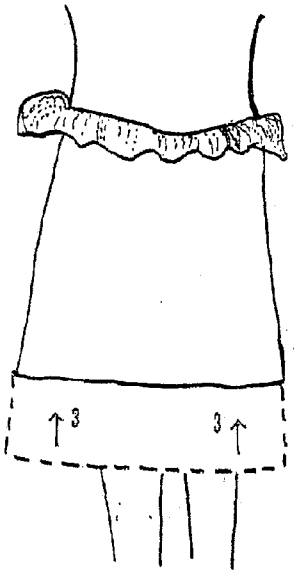

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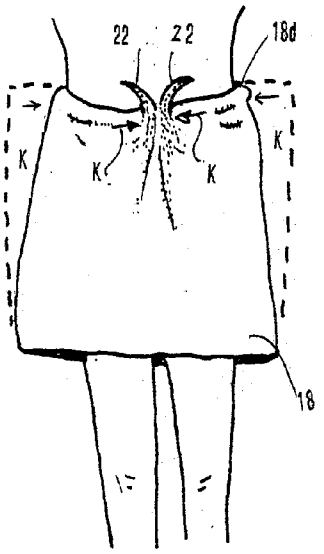

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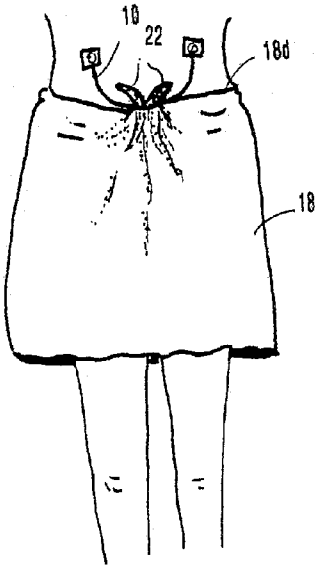

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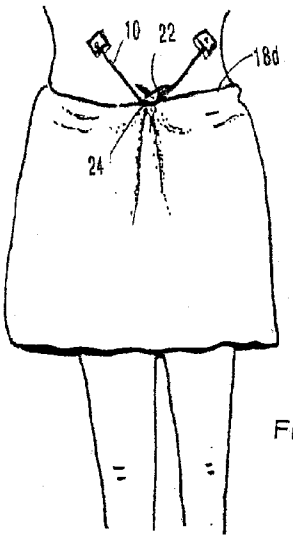

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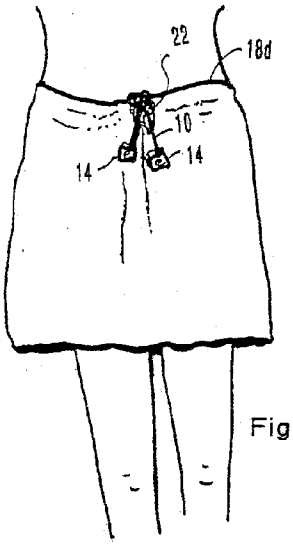

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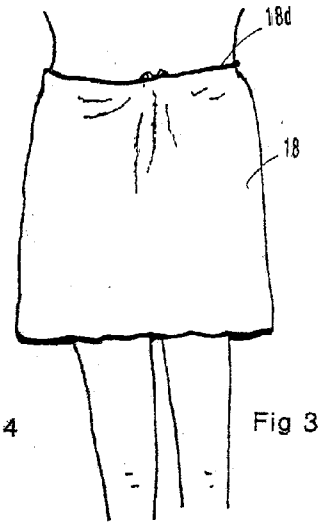

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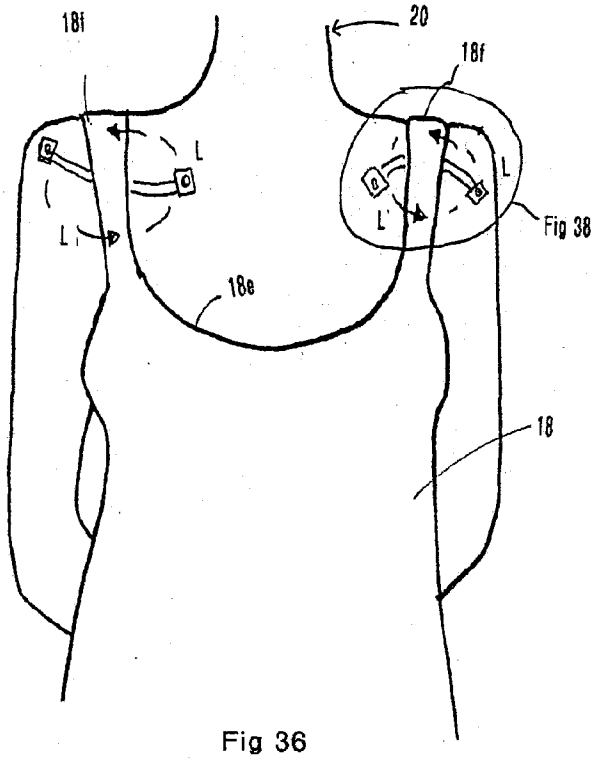

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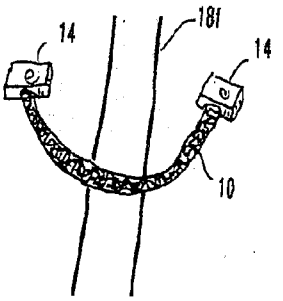

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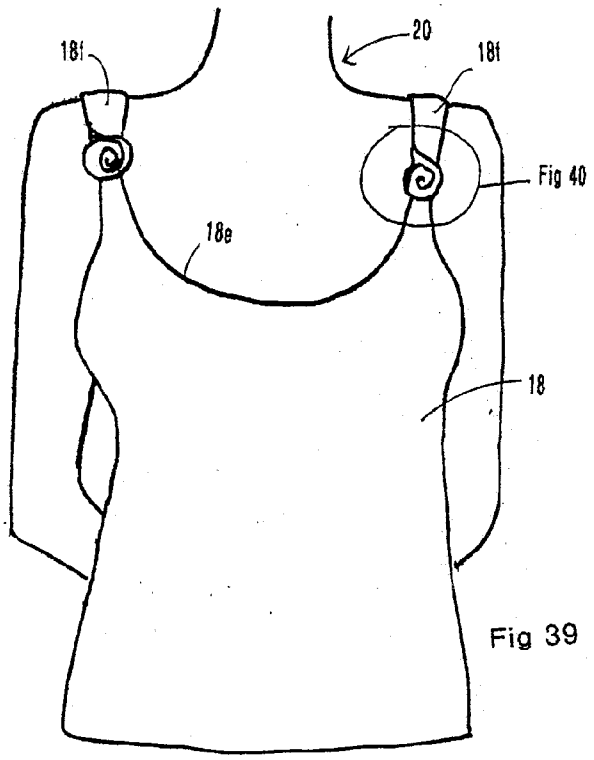

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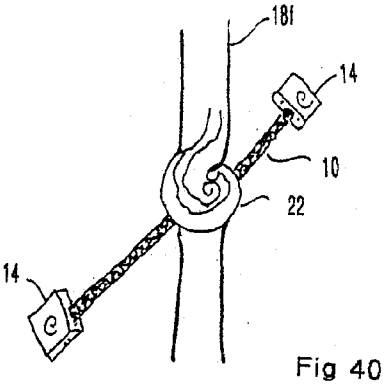

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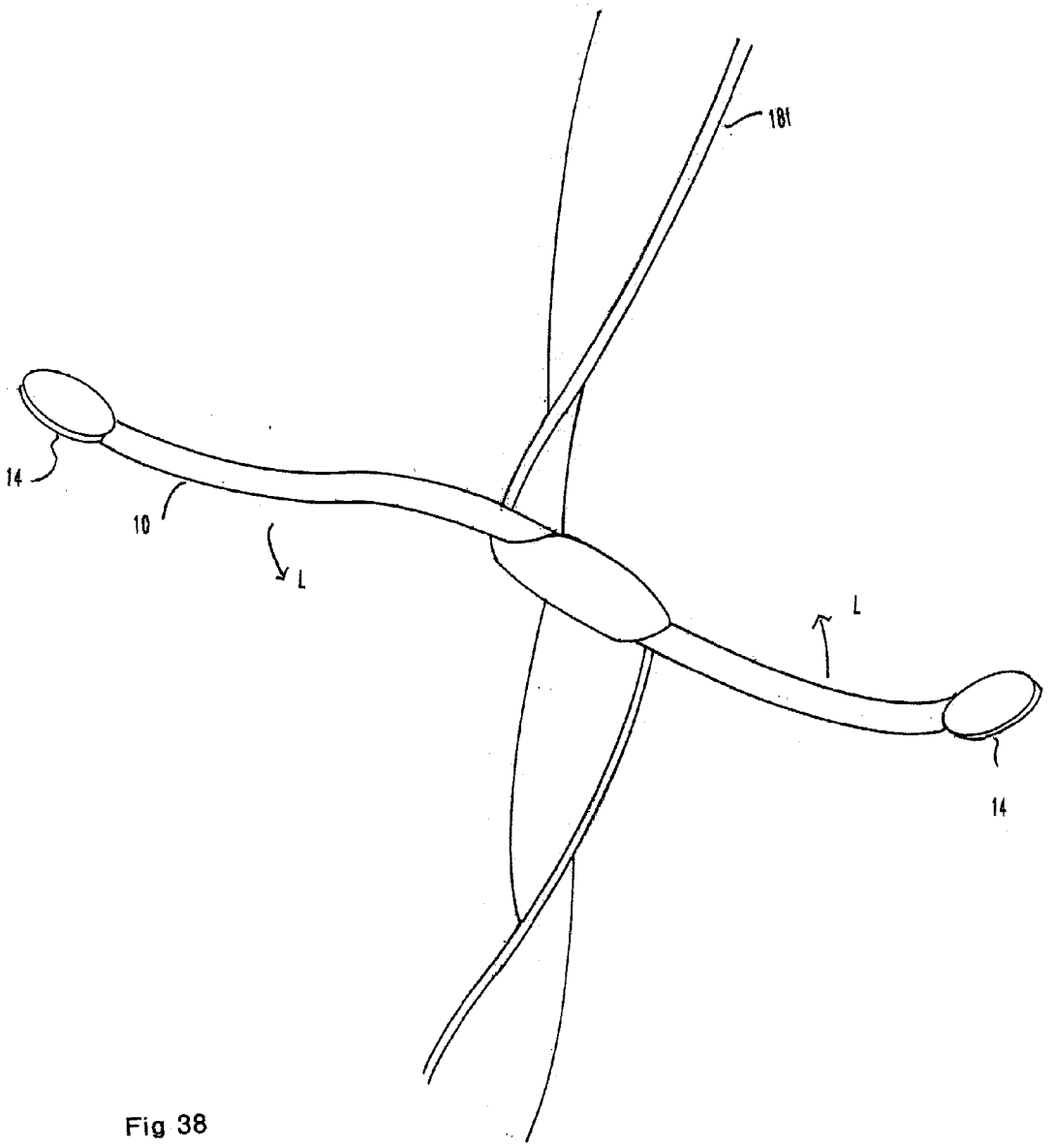

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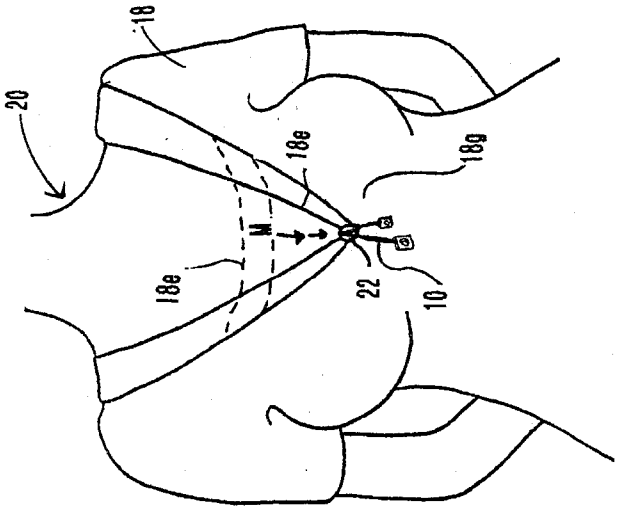

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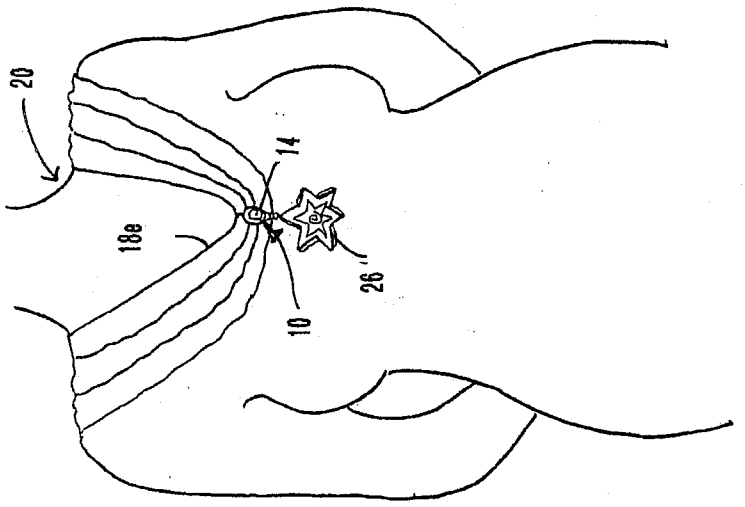

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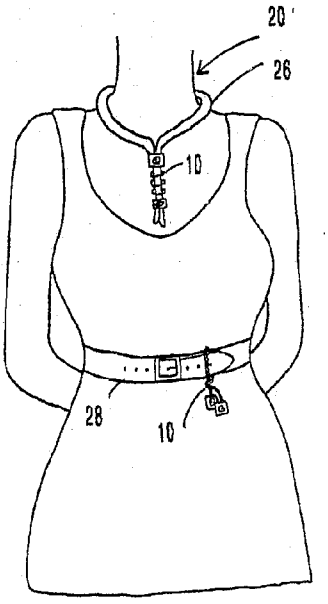

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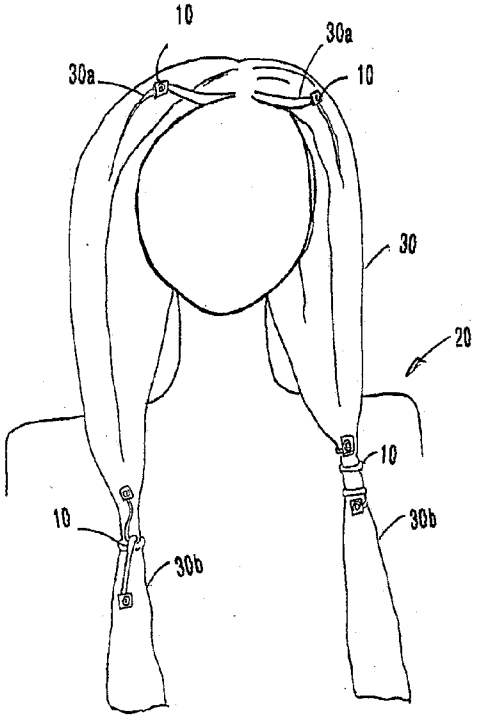

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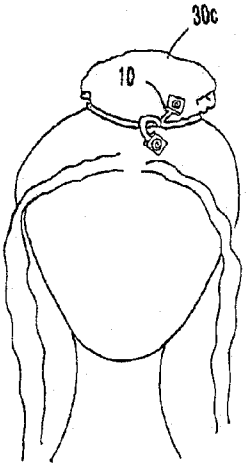

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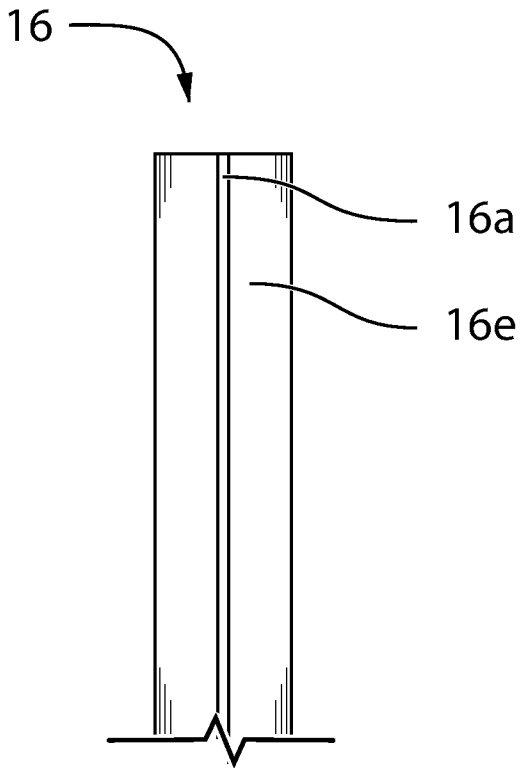

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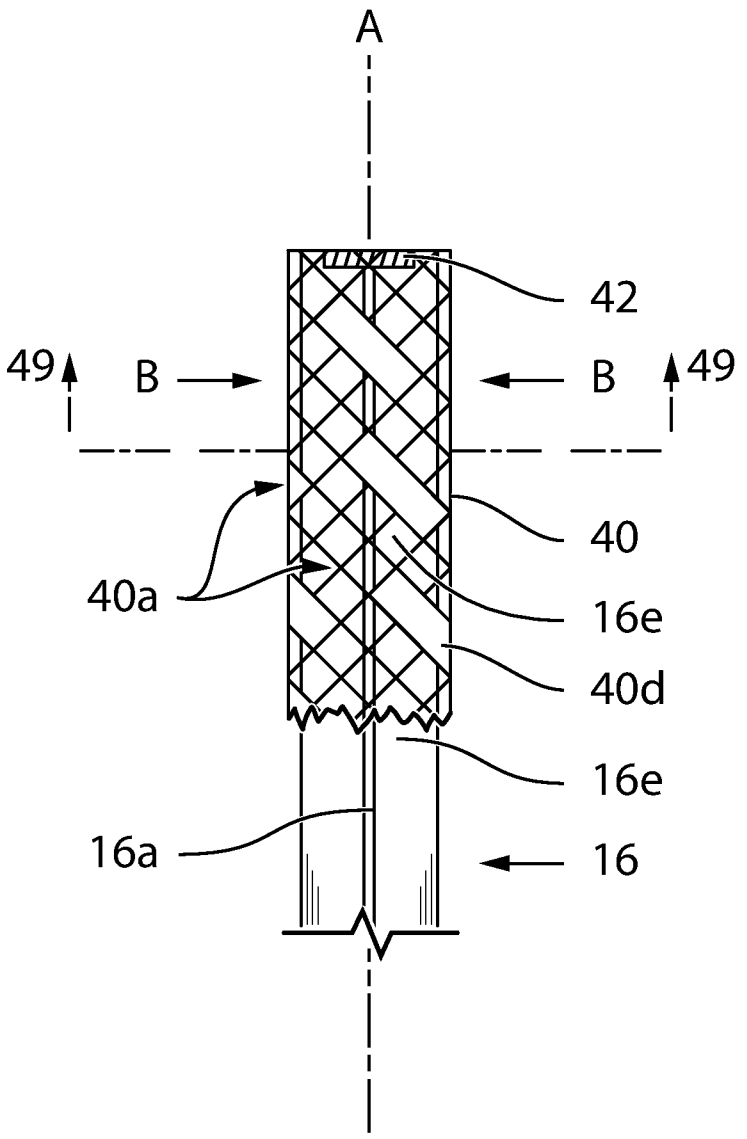

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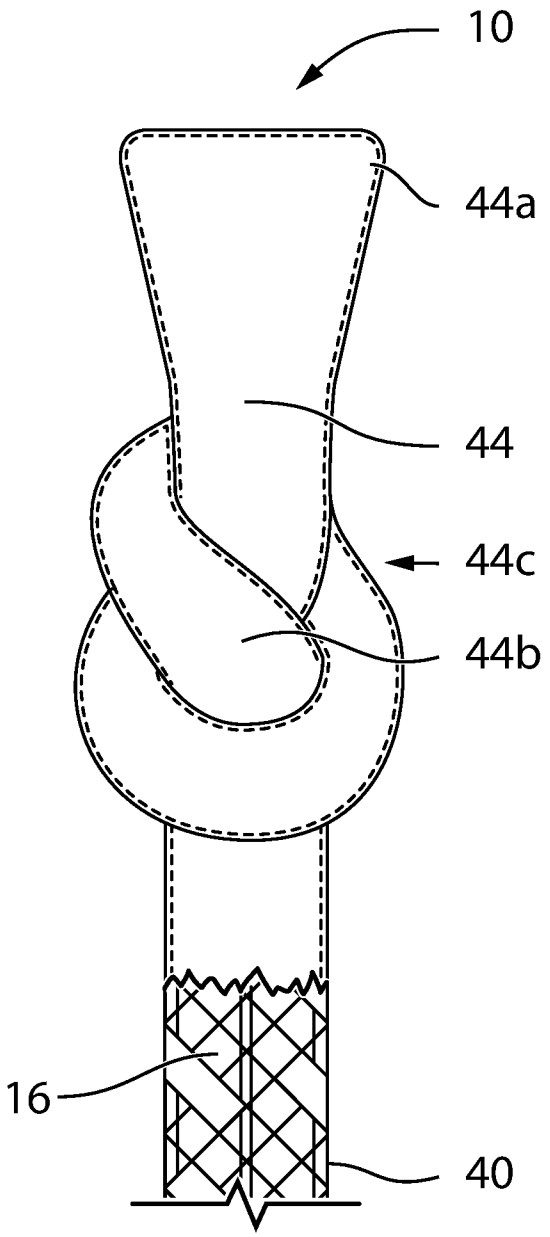

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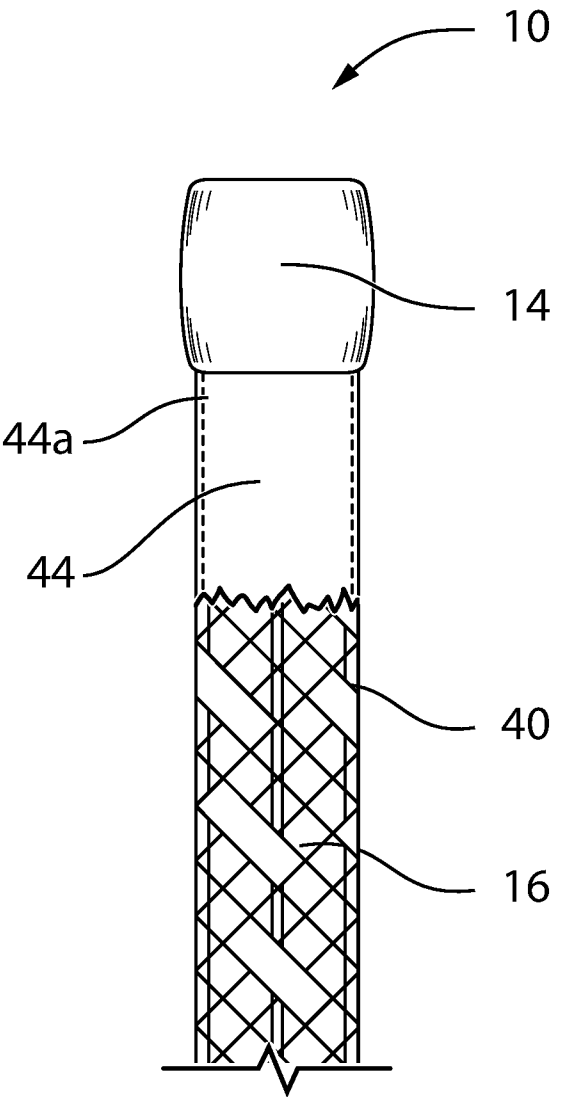

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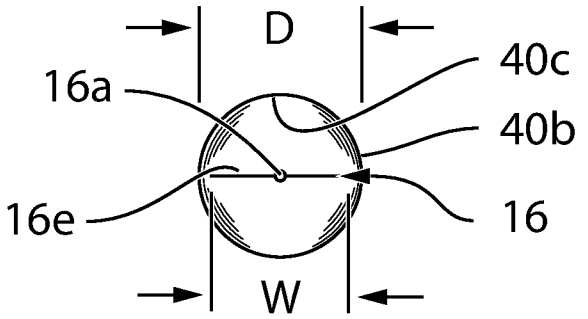

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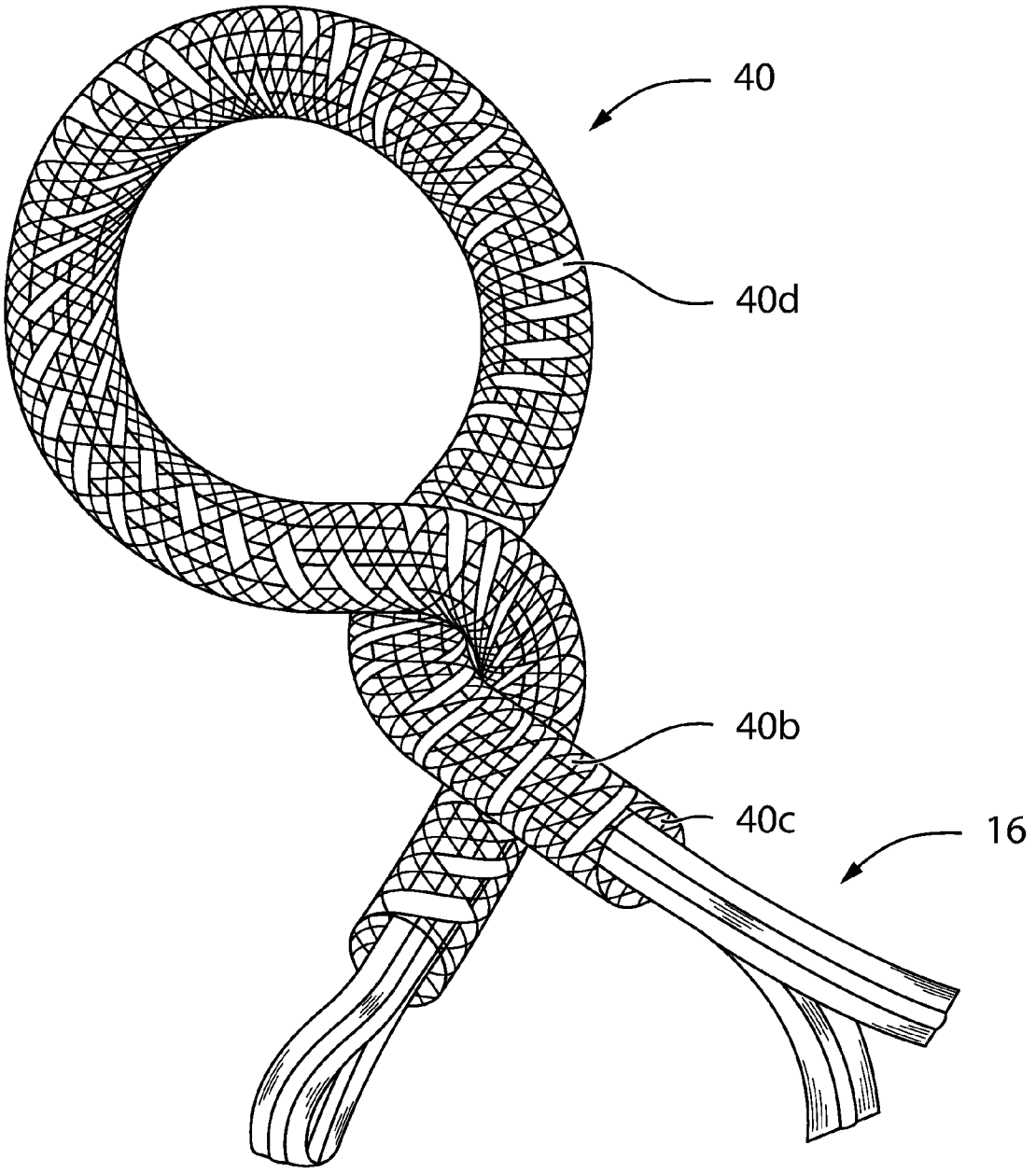

Fig. 50

DEVICE FOR ADJUSTING THE FIT AND APPEARANCE OF AN ARTICLE OF APPAREL OR HAIR AND METHOD OF ASSEMBLY

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of U.S. patent application Ser. No. 14/181,413, filed on Feb. 14, 2014, entitled METHOD AND APPARATUS FOR ADJUSTING THE FIT AND APPEARANCE OF AN ARTICLE OF APPAREL. application Ser. No. 14/181,413 claims priority from U.S. Provisional Patent Application No. 61/764,885 filed on Feb. 14, 2013, entitled METHOD AND APPARATUS FOR ADJUSTING THE FIT AND APPEARANCE OF AN ARTICLE OF APPAREL.

FIELD

[0002] This invention relates to the field of devices and methods of use and methods of manufacture for altering the fit and appearance of a person's clothing and for temporarily fastening objects or adjusting a person's hair, and in particular to such device and method employing wire ties.

BACKGROUND

[0003] Clothing is made for the masses. Not everyone has a body shape that fits into standard sizes. For example: a small person in body may have big arms therefore needing to buy a larger size blouse that fits the arms but leaves the torso area too big so that the neckline is too low and the blouse is baggy around middle, etc. Because custom tailoring is expensive and therefore not an option for most people, the problem is then that a lot of standard sized clothes do not fit properly and thus may be unappealing, inappropriately revealing, or uncomfortable to wear.

[0004] Each piece of clothing has a built in style. People search for those pieces that show off their style. Thus, a person's choice of clothes is a statement.

[0005] Clothes, especially women's clothes, are quite often complicated to fit properly. Once fitted, people change as they get older. They may grow bigger or smaller, or develop or obtain other issues that they try to hide (scars, tattoos, fat, etc.). In addition, styles which are considered fashionable change over time. What worked for attire a year or two ago may not work anymore. Applicant has found that there is not an off-the-rack solution for everyone, for all situations and seasons. Consequently, many people spend a lot of time searching for the right clothing. In general, clothes are not very versatile. It is often a struggle to find what fits and what looks good.

[0006] Applicant has determined that, at times, all it would take for people, especially women, to look and feel better about their appearance is to provide a tuck, hold, lift or gather in the right places on a garment. There are many types of clasps, clips, pins, magnets, that have been used to create temporary holds for clothes. These many types of clasps, clips, pins, magnets have been used in endeavoring to provide an effective means for removeably holding fabric together without damage. Safety pins create damage including holes in clothing and are typically used for emergency situations to immediately secure clothing, bandages, etcetera. Brooches include a pin as well and thus also will put holes in clothing. A brooch is typically meant and used for decoration only. A scarf clip sits on the clothing joining the two ends and has a small clasp for its limited purpose. A magnetic clothes gathering clasp is capable of creating a temporary hold without damaging the fabric but it is very visibly performing its function. It is able to gather the clothing like a rubber band, but is obvious in its use and limited to one hold and the strength of a magnet.

[0007] The applicant is aware of the U.S. Pat. No. 6,397,854, issued to Bailey on Jun. 4, 2002. The Bailey patent describes a flexible wire tie manufactured of a bare, uncoated wire wherein the wire ends are dipped into a substance which hardens into a rounded protective tip, so as to prevent the sharp, cut ends of the wires from poking through fabric tube that surrounds the wire. The Bailey wire ties, manufactured of an aluminum-based alloy and, preferably, made of 14 gauge wire, are primarily described for use in holding and styling hair, amongst other uses.

[0008] The Bailey wire ties are made of substantially bare, relatively thick, wires which are covered only by a thin strip of fabric or similar material. A cylindrical, 14 gauge wire is approximately 1.63 mm in diameter, whereas a 20 gauge wire is approximately 0.81 mm in diameter, or in other words, approximately half the diameter of a 14 gauge wire. Generally speaking, thicker wires are much more difficult to bend and manipulate than thinner wires, and a user of the tie taught in Bailey would find it takes a significantly greater amount of force, applied by the user's finger tips to the ends of the tie, to bend and manipulate a Bailey tie manufactured of 14 gauge wire, as opposed to a different tie that might, for example, be manufactured of a 20 gauge, or higher gauge, wire; it would therefore be much more difficult to achieve the same level of manipulation of a Bailey tie made of 14 gauge wire, as opposed to other ties made of higher gauge wires.

[0009] As mentioned above, the body of the tie taught in Bailey is, essentially, a bare, relatively thick wire covered by a tubular-shaped fabric or similar covering. As the wire itself is still much thinner than the open space provided within the tubular fabric covering, the wire is essentially free to move about in a lateral direction relative to the inner surfaces of the fabric covering, giving the tie an overall "floppy" appearance and feel that is aesthetically displeasing. Furthermore, the applicant has observed that the wires contained within fabric-covered ties, such as those described in Bailey, may eventually break after repeated bending and twisting of the ties, which breakage may result in creating two sharp wire ends located at the point where the wire snapped. These sharp wire ends may poke through the fabric cover of the tie so as to poke, or cause abrasions to, the skin or scalp of the wearer, or otherwise catch in the fabric of the wearer's clothing, causing snagged threads or holes in the fabric that are unsightly and may be impossible to repair. Thus, there is a need for an improved tie (otherwise referred to herein as a fastening device).

[0010] The following is a partial list of clothing issues which often have to be addressed in fitting off-the-rack standard sized clothing: the style is not versatile, the neckline is too low or too high or of the wrong shape, there is no definition in the body/torso area, the shoulder straps are too long/loose/falling, the shoulder bra straps show where they shouldn't, garment material keeps riding up torso looking messy and showing stomach, there are not enough belt loops or belt loops are in the wrong spot to hold a belt end or a garment is lacking belt loops, a garment needs to be cinched at the waist line, a dress is too long, a dress billows out more

than desired, a dress is too wide, a blouse is too long, a blouse is too wide or billows out at bottom, sleeves are too wide, sleeves are too long and will not stay up with folding over, seams turn over to the wrong side exposing the back of the seam, a bathing suit top gaps at sides, ties are too short to make nice bow or loose knot, or ties have too much material and therefore the bow is too big.

SUMMARY

[0011] Embodiments described herein refer to a decorative wire ties that when used according to the method described herein create temporary holds on fabric and hair that does not harm the fabric or hair. The wire ties are used to selectively adjust the look, lift and feel of a user's garment or hair. The wire tie may be used by creating a loop and pulling a hank of fabric through the loop and tightening the loop, or by encircling the wire tie around the hair or fabric, and then wrapping so as to be tightly wrapped around the fabric or hair. Examples of the results of such use include creating pleats in clothing, shortening hem lines in tops, skirts, dresses and sleeves, and altering neck lines, to name just a few uses. More uses are listed below.

[0012] The decorative wire tie and method described herein may be used to make clothing fit better and/or to change the style of clothing, and/or as a hold for hair, either joining pieces of hair together for unique styles or to wrap around hair lengths for decoration. The wire ties may in one embodiment for example be made from wires that are for example 20 to 22 gauge, depending on the flexibility, strength and desired decorative aspect of the piece. One example of a decorative wire tie is five inches long made from 22 gauge half soft wire and includes two clearly defined decorative ends, referred to herein collectively as beads. This length is not intended to be limiting as other lengths may also work for different weight fabrics, etcetera, so that the length of the wire tie may range for example from one or two inches, to eighteen inches.

[0013] In a further embodiment, a decorative tie (and other ties falling within the appended claims, collectively referred to interchangeably herein as ties or fastening devices) and a method of manufacturing such fastening devices is described wherein the fastening device incorporates an elastically deformable, cylindrical tube mounted on a coated wire so as to surround the coated wire and wherein a cover encloses or is adapted to enclose the tube mounted on the wire, whereby when repeated bending and manipulation of the wire causes the wire to break, the sharp ends of the broken wire may be inhibited from protruding through the tube and the cover.

[0014] In a further embodiment, the coating on the wire is a planar, flexible coating having a length and a width, wherein the length of the coating is substantially equal to the length of the wire, and the width of the coating is greater than the diameter of the wire and less than or substantially equal to the inner diameter of the tube, whereby the width of the coating may further assist in positioning the wire along the centroidal axis of the tube and whereby the coating on the wire in combination with positioning the coated wire within the tube provide a cushioning function and tactile feel to the fastening device, and may further inhibit broken ends of the wire from protruding through the tube and the cover of the fastening device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] In the drawings wherein like reference numerals denote corresponding parts in each view,

[0016] FIG. **1** is a wire tie according to one embodiment shown in front elevation and bent into a single medial loop.

[0017] FIG. **2** is, in front elevation view, the tie of FIG. **1**, when straight.

[0018] FIG. **3** is, in rear elevation view, the tie of FIG. **2**.

[0019] FIG. **4** is, in partially cut-away front elevation view, a length of coated wire used in the manufacture of the tie of FIG. **2**.

[0020] FIG. **5** is, in partially cut-away view, the coated wire of FIG. **4** partially shrouded in a fabric covering.

[0021] FIG. **6** is, in partially cut-away view, the coated and covered wire of FIG. **5** showing the non-coated end of the wire used to double back and wrap the end of the wire covering.

[0022] FIG. **7** is, in partially cut-away view, the covered wire end of FIG. **6** mounted into a clay bead.

[0023] FIG. **8** is, in top perspective view, a decorative button which may be employed to form part of bead of FIG. **7**.

[0024] FIG. **9** is, in rear perspective view, the button of FIG. **8**.

[0025] FIG. **10** is, in partially cut-away view, the interior of the bead of FIG. **7** showing the end of the covered wire and the spiraling of the exposed end of the wire so as to form a laterally extending anchor within the bead.

[0026] FIG. **11** is, in perspective view, the bead of FIG. **10** end casing the wire anchor.

[0027] FIG. **12** is, the partially cut-away view, of FIG. **10** showing the wrapping procedure so as to form the wire anchor.

[0028] FIG. **13** is the bead of FIG. **11** partially cut-away to show the relative dimensions of one embodiment of the wire-anchor encased within the bead.

[0029] FIG. **14** is, in from elevation view, a further embodiment of a wire tie having a loop along the covered wire.

[0030] FIG. **15** is the tie of FIG. **14** when straight.

[0031] FIG. **16** is, in partially cut-away front elevation view, a further embodiment of the wire anchor formed at one end of the covered wire for encasing in a bead.

[0032] FIG. **17** is, in partially cut-away rear elevation view, a second wire anchor formed behind the wire anchor of FIG. **16**.

[0033] FIG. **18** is, in left side elevation view, the pair of wire anchors formed on opposite sides of the end of the covered wire of FIGS. **16** and **17**.

[0034] FIG. **19** is, in right side elevation view, the wire anchors of FIG. **18**.

[0035] FIG. **20** is, in front elevation view, a user wearing a garment wherein a waist of the garment has been adjusted by using a wire tie to gather a hank of the waist material.

[0036] FIG. **21** is, in partially cut-away front elevation view, the initial forming of the hank which is shown gathered in FIG. **20**.

[0037] FIG. **22** is the view of FIG. **21** with the hank rolled onto the tie.

[0038] FIG. **23** is an enlarged view of a portion of FIG. **20** showing the hank gathered by the tie.

[0039] FIG. **24** is, in back elevation view, a further use of a wire tie by the gathering of a hank of garment material worn by a user so as to draw in the waist of the garment, wherein one side of the garment has been gathered.

[0040] FIG. **25** is the view of FIG. **24** wherein both sides of the garment have been gathered so as to snug the waist of the garment around the user.

[0041] FIG. **26** is, in side elevation view, the forming of a hank of garment material in FIG. **25** and showing a wire tie being positioned to gather the hank.

[0042] FIG. **27** is the view of FIG. **26** with the tie snugged and locked around the base of the hank of material.

[0043] FIG. **28** is, in front elevation view, the hank and tie of FIG. **27** wherein the hank has been folded down over the material of the garment and secured in place by the folding down of the ends of the tie.

[0044] FIG. **29** is an illustration of the use of a wire tie to gather a hank of material so as to shorten a garment and cinch the waist, and so as to change the shape of neckline and strap.

[0045] FIG. **30** is, in front elevation view, the use of a wire tie to shorten a skirt, showing the first step to shorten a skirt, wherein the user lifts the skirt to desired length with excess fabric showing at top.

[0046] FIG. **31** is, in front elevation view, the forming of a pair of hanks of skirt material so as to draw in the waist of the skirt around the waist of a user.

[0047] FIG. **32** is the view of FIG. **31** wherein a wire tie has been positioned around the base of the pair of hanks.

[0048] FIG. **33** is the view of FIG. **32** wherein the tie has been wrapped tightly around the base of the pair of hanks and locked.

[0049] FIG. **34** is the view of FIG. **33** wherein the tie has been folded down over the pair of hanks so as to lay the pair of hanks flush down against the surface of the garment.

[0050] FIG. **35** is the view of FIG. **34** wherein the hanks and tie have been tucked in behind the waist of the skirt.

[0051] FIG. **36** is, in front elevation view, a user wearing a garment having shoulder straps and illustrating the mounting of a wire tie onto each of the shoulder straps.

[0052] FIG. **37** is, in partially cut-away view, the wrapping of one of the ties around one of the shoulder straps in FIG. **36**.

[0053] FIG. **38** is the view of FIG. **37** wherein the shoulder strap and the tie have been twisted together and rotated so as to entwine the strap with the tie thereby shortening the shoulder strap.

[0054] FIG. **39** is the view of the FIG. **36** with the shoulder straps of the garment shortened.

[0055] FIG. **40** is, a partially cut-away enlarged view of a portion of FIG. **39** showing the shortening of a shoulder strap by the twisting of a tie with the shoulder strap according to the illustration of FIG. **38**.

[0056] FIG. **41** is, in front elevation view, a user wearing a scarf which has been gathered on the users chest using a single wire tie and wherein a decorative object is suspended from the tie.

[0057] FIG. **42** is, in front elevation view, a user wearing a garment wherein the neckline of the garment has been lowered by the use of a wire tie gathering a hank formed from the front centre of the neckline.

[0058] FIG. **43** is, in front elevation view, a user wearing a scarf secured by wrapping a tie tightly around the ends of the scarf from top to bottom.

[0059] FIG. **44** is, in front elevation view, a user wherein wire ties are used to secure the user's bangs and to secure the user's pigtails, wherein one pigtail is tied, the other one wrapped.

[0060] FIG. **45** is, in front elevation view, the head of a user showing a wire tie used to create a bun or ponytail on the top of the user's head.

[0061] FIG. **46** is, in partially cut-away front elevation view, a length of coated wire used in the manufacture of the tie of FIG. **48**.

[0062] FIG. **47** is, in partially cut-away front elevation view, a length of flexible tube surrounding a length of coated wire used in the manufacture of the tie of FIG. **48**.

[0063] FIG. **48** is, in partially cut-away front elevation view, a tie manufactured in accordance with an embodiment of this disclosure.

[0064] FIG. **48**A is, in partially cut-away front elevation view, a tie manufactured in accordance with an alternative embodiment of this disclosure.

[0065] FIG. **49** is a cross-section view, along line **49-49**, of the tube and coated wire illustrated in FIG. **47**.

[0066] FIG. **50** is, in front perspective view, a length of flexible tube surrounding two lengths of coated wire.

DETAILED DESCRIPTION OF EMBODIMENTS

[0067] A decorative wire member or tie is described that, when applied properly, can create a strong temporary hold on a hank of fabric so as to adjust the fit of the fabric as part of wearing apparel, and to flatten the hank for example. While performing its function, the function of the decorative wire tie is overlooked by an observer; that is, the function is disguised or not so readily apparent when viewed as primarily only the decorative aspect is noticed.

[0068] By creating a loop of decorative wire tie around the hank of fabric, and then tightening the wire and giving the wire half a turn, creates a locked, secure hold with the wire tie which will not harm the fabric or hair, and which is not permanent.

[0069] To make a blouse or dress fit better, to give just two examples, to change the apparel's style from formal to sexy or to modest with a few twists of wire ties is a new way of dressing. A user will find that clothes that have been passed over are worth putting on again, with the user seeing what can be done using decorative wire tie as described below. The lifespan of many wardrobes may thus be extended.

[0070] To make pleats using the decorative wire tie the fabric of the clothing itself must be flexible. The lighter the fabric the more flexibility the fabric has and the more ways the decorative wire tie may be used.

[0071] The wire tie may be used to create many different effects on fabric clothing by using multiple gathering points. The wire tie may be used to re-direct the fabric away from a fold to make the fold less bulky while not drawing a viewer's attention the wire tie's function as hardware but instead leaving the viewer with primarily the decorative impression only. Again, the body of the wire tie is looped around a hank formed in the fabric, and the ends of the tie are pulled tightly together, and secured by turning or twisting the ends around one another where they meet. This may be used to create a pleat. Multiple pleats may be created with the same length of wire tie. The decorative parts such as the beads on the ends of the tie are positioned over, and may be pressed down onto, the fabric hank, thereby hiding the hank.

[0072] The wire tie may also be used as discussed further below by rolling it in the fabric so that the tie is encased in a tube of fabric, and then looping or twisting the tube of fabric containing the wire to a desired shape. As used herein, the gathering of the fabric around the wire tie to form the fabric tube around the wire tie is also referred to as the gathering of a hank of fabric, in that the function and end result is of drawing in fabric from the garment into the hank, and secur-

ing the hank in place with the tie. Again, the hank is finished by manipulating the wire ends to encircle, and cover or fold over onto the hank.

[0073] The wire ties may be used to encircle shoulder straps, and may also be used on the inside of clothing to create fit adjustments with no hardware/decoration showing.

[0074] The wire ties may also be used as an accessory for hair. The wire twist can be used to manipulate hair in the same fashion as on fabric/cloth. It can have many holding positions with one wire tie; that is, it can be used to direct hair, hold hair or just as an adornment.

[0075] The use of the wire ties described herein to adjust the fit, look, and the feel to the user of a garment may be described as including, but not limited to the following uses: change the style of clothing, elevate neckline, drop neckline, create definition in the torso, create false seams, shorten dresses, shorten blouses, shorten skirts, modify the style of shoulder straps, to replace a knot or bow, as a scarf tie, lengthen or shorten a strap, to secure or curl hair.

Construction

[0076] The following description describes methods of making a wire tie, which are not intended to be limiting.

[0077] A 22 gauge, round cross-section, stainless steel half-soft length of wire has its opposite ends coiled or balled (herein reflectively referred to as being formed as a spiral) to have a pleasing and distinct appearance at each end. The finished length of the tie may be for example one inch for light weight fabric or narrow straps, up to for example eighteen inches for bulky fabrics, beach towels, etcetera. The ends of the wire may be formed as various shapes using for example a formable, curable material including moldable clay, metal, rubber, glue, latex, plastic etc. The ends of the wire tie are encased in this way to form beads, and so as to ensure that no sharp point of wire is left protruding which may catch and harm fabric/people.

[0078] Although the wire tie has a minimum of one and preferably two distinct decorative beads, that is, preferably one at each end, there may also be more beads along the body of the wire tie, for example, at the medial point along its length etc.

[0079] The wire is sufficiently flexible for ease of manual manipulation, so that it may be manipulated to create a secure temporary hold or lock (herein collectively referred to as a lock), because the tie can fold or twist over onto itself thereby temporarily locking the hold.

[0080] The body of the wire tie, that is, the length of the tie extending between the beads at the opposite ends of the tie, may be made with a variety of different gauge wires. The body may also include beading along its length of wire and/or coating of the wire with plastic, rubber, silicone, etc.

[0081] The ends of the tie need to be easily identifiable for ease of the user securing and releasing a locking twist of the tie, for example around so as to lock a hank of fabric.

[0082] The ends are formed as what are referred to herein as "beads". Beads are decorative pieces secured to the ends of the body of the tie. Each bead is a separate piece; and may include a bead, button, jewel or ornament. The bead may either be attached by the wire going through it and glued or set in place as described better below.

[0083] The prior art is replete with examples of mechanical clamping devices useful for clamping soft objects such as clothing and hair. What is not found however is a method of decoratively and functionally adjusting the style and fit of clothing or the way hair is worn using a device which may be inexpensively mass-produced and may be easily used once the method of its use according to one aspect of the present invention is known to the user.

[0084] One such device is shown by way of example in FIGS. **1-3**, and whose construction is better understood by a review of the illustrations in FIGS. **5-12** described below. In FIG. **1**, tie **10** is shown with the central body **12** looped between the beads **14** formed on either end. Beads **14** may have a decorative face **14***a* or an undecorated face **14***b*, as seen in FIGS. **2** and **3** respectively. Body **12** is advantageously covered along its entire length in a flexible sheath or sleeve or wrap **12***a*. Advantageously, the faces, for example either faces **14***a* or **14***b*, of beads **14** provide a sufficiently large surface area to allow ease of manipulation of body **12** by a user when forming spirals, loops and other shapes for the purposes of adjusting for example clothing and the disguising of the presence of operation of tie **10** as described below.

[0085] As seen in FIG. **4**, in one preferred embodiment, body **12** includes coated wire **16** within coating **12***a*. One example of the coating of coated wire **16** is polyolefin heat-shrunk tube mounted onto a core of wire **16***a*, wherein wire **16***a* is of known malleable material of sufficient gauge to allow repeated bending of coated wire **16** while in use without the excessive fatiguing and breaking. Without intending to be limiting, it is been found that 20 or 22 gauge copper wire works, for example, wire marketed by Beadalon™ as 22 gauge, round, medium temper, German style wire. On the wire hardness scale provided by Beadalon™, such medium tempered wire has a ⅜ hardness.

[0086] If starting with bare Beadalon™ German style wire, then coated wire **16** may be formed by sliding a length of polyolefin tube, such as sold by 3M Corporation as thin-wall tube, model no. FP301 polyolefin tube, over a length of the aforesaid German style Beadalon™ wire. For example, 1/16 inch diameter polyolefin tube may be used to cover 22 gauge wire and heating the combined wire and polyolefin tube is heated at 270° Centigrade for 20 minutes. As would be known to one skilled in the art, the use of polyolefin tube is not intended to be limiting, as other coatings **12***a* such as of silicon or rubber may also work. Applicant has found that, using a 12 inch length of the aforesaid German style wire and centering an approximately 5½% inch length of polyolefin tube on the length of Beadalon™ wire will work to produce a tie **10** of a useful size. Applicant has found that this coating of the wire considerably lengthens the life of the wire. In use, coated wire does not break, presumably from bending fatigue, for quite some time much longer than uncoated wire. Applicant has observed that the coated wire not only has an extended lifespan, but also prevents permanent, sharp breaking of the wire.

[0087] Coated wire **16** may be subsequently covered with a sheath, sleeve or wrap **12***a* (herein referred to as a sleeve **12***a*), leaving the uncoated ends of wire **16***a* protruding from either end thereof. Sleeve **12***a* may for example be a wrapped length of fabric or like cushioning material, such as for example a length of material akin to a soft shoelace, wrapped in a tight spiral along the entire length of coated wire **16**.

[0088] If using shoelace, the shoelace core may be removed and the wire journalled through the remaining sleeve of the shoelace. The sleeve may for example be a braided tube. The braided tube may be tensioned so as to tighten the braided tube around the wire. The ends of the shoelace sleeve may advantageously be embedded into the clay of beads **14** so as

to lock the sleeve in place and tensioned once the clay is baked. This removes the need to glue the ends of the shoelace sleeve in place. Applicant has found that this manner of securing the ends of the sleeve in the clay results in a longer lasting fastening than the use of glue alone.

[0089] The ends of sleeve **12***a* may be secured as seen in FIG. **6** using the uncoated protruding ends of wire **16***a*. Uncoated ends of wire **16***a* may, as shown, be doubled back onto a corresponding end of sleeve **12***a*, and the wire wound therearound to secure the sleeve in place on top of coated wire **16**. In FIG. **6** the wound ends of uncoated wire **16***a*, where they are wrapped onto the corresponding ends of sleeve **12***a* are indicated by reference numeral **16***b*. The securing of wire **16***a* onto the ends of sleeve, may take the form of several spiraled snug turns of the wire, leaving excess wire **16***a*, indicated in FIG. **6** by reference numeral **16***c*, dangling. The excess wire **16***c* of wire **16***a* should be of sufficient length so that it may be formed as an anchor to be mounted into, so as to be formed integrally with, a corresponding bead **14**.

[0090] As seen in FIGS. **10** and **12**, a desirable form of anchor using end **16***c* of wire **16***a* within bead **14** is not only secured around the end of sleeve **12***a* by wire segment **16***b*, but also extends laterally outwardly from the sides of the end of sleeve **12***a*. For example the anchor may be formed in a roughly circular spiral-like (or similar functional effect) pattern extending laterally outwardly into the side flanges **14***c* of bead **14**. As shown by arrows A in FIG. **12**, the end wire portions **16***c* may be formed in a circular fashion in direction A, for example as a flattened spiral so that coated wire **16** within sleeve **12***a* is embedded within bead **14**. Because of the anchor formed by the extension of wire portions **16***c* laterally outwardly into the bead flanges **14***c*, in the end product such as seen FIG. **11**, a force applied by the user for example in direction B against one of the bead flanges **14***c* of the finished bead **14** may rotate bead **14** about its axis of rotation C, which extends along the longitudinal axis of coated wire **16** when wire **16** is linear, i.e., straight. Thus the user may twist bead **14** into a useful orientation while also twisting the coated wire **16** and sleeve **12***a* held securely within the bead by reason of the anchoring using the wire end portion **16***c* to provide the lateral mounting foundation within the bead.

[0091] A further example of the anchoring of the ends of the wire within a corresponding bead is shown in FIGS. **16-19**. In FIG. **16** wire end portion **16***c* is shown in a substantially planar spiral, which spirals outwardly from the wire portion **16***b*, where it is clamping the corresponding end of sleeve **12***a*. The distal end of the wire end portion **16***c* as seen in FIG. **16**, appears to disappear behind sleeve **12***a*. Advantageously, as seen in FIG. **17-19**, rather than the distal end of the wire end portion **16***c* merely terminating, it extends to the opposite side of the corresponding end of sleeve **12***a* where it is formed in a substantially mirror image spiral as seen in the view of FIG. **17**. Thus as seen in the opposite side elevation views of FIGS. **18** and **19**, the two substantially planar spirals formed from wire end portions **16***c* provide a pair of anchoring coils which sandwich therebetween the end of sleeve **12***a* and the corresponding end of wire **16**.

[0092] A bead **14** such as seen in the examples of round beads in FIGS. **14** and **15**, may then be formed as described below so as to fully encase the oppositely disposed pair of substantially planar anchor coils within each bead **14**.

[0093] Beads **14** may be formed of many different materials, in many various ways as would be known to one skilled in the art. One example, which is not intended to be limiting in any way, is the forming of beads **14** using a heat curable clay, such as for example commercially available sculpting clay which may be formed and then baked or otherwise heated so as to set the clay. One such commercially available sculpting clay is sold under the trade-mark Sculpey. If for example beads **14** are to be formed of clay, the clay is pressed into the spaces between the anchor coils of the wire end portions **16***c*, without forming air pockets, so that the area sandwiched between the oppositely disposed planar coils of wire end portions **16***c* and the spacing voids **16***d* within the coils, are completely filled with clay. Further clay is moulded around the outside of the pair of anchoring coils so as to fully encase them or so as to leave the wire exposed. As desired, a decorative finish such as for example the swirl effect shown in FIGS. **14** and **15**, may be applied before or after curing of the clay to thereby form the decorative face **14***a* on each bead **14**. Glazes or other finishing coatings as would be known to one skilled in the art may be applied. In the case of the Sculpey example, the entire tie **10** is heated at 270° C. for 30 minutes.

[0094] Beads **14** may also be formed so as to incorporate conventional decorative objects such as decorative buttons. The eye typically found on the rear face of the button may be used to secure the button to the wire anchor, for example by the threading one length of the wire through the eye and then forming the bead around the wire as described above, so as to encase or frame the button. This then anchors the button into bead **14** while leaving the decorative surface of the button exposed, for example on one of the faces of the bead.

[0095] It will be noted that, although only two beads **14** have been described for mounting at the opposite ends of tie **10**, more beads may be formed along the length of tie **10** to provide further decorative aspects and thereby provide further locations along tie **10** where a user may easily manipulate the shape and lie of the tie.

[0096] An alternative embodiment of the present disclosure includes ties or fastening devices that are manufactured utilizing conventional twist ties, which are cheaply and widely available in a variety of lengths and wire gauges. For example, not intended to be limiting, in FIG. **46** there is illustrated one end of a conventional twist tie, which may otherwise be referred to as a coated wire, **16**. The coated wire **16** includes an uncoated wire **16***a*, which is surrounded by and encased in a rectangular, planar and flexible coating **16***e*. Coating **16***e* may be manufactured of a plastic or other suitably flexible material capable of coating, or otherwise encasing, a wire. This embodiment of a fastening device further includes an elastically deformable tube **40**, such as for example the 4 mm plastic, mesh tubing supplied by Panda Hall, an online retailer of beading supplies. In some embodiments, the applicant believes the mesh tubing supplied by Panda Hall may be manufactured of the polymer commonly referred to by the trade-mark, Nylon™. The tube **40** may be manufactured of a resilient mesh that may be bent or partially crushed or compressed laterally by the user applying a force of temporary duration, using a hand or a finger, to the surface of the tube **40**, wherein the force is generally directed laterally inwardly towards the centroidal axis A or in other words, the center of the tube. A laterally applied force may be applied, such as in direction B. The tube is resilient so as to readily spring back to its cylindrical shape once the force applied to the surface of the tube **40** has been removed. This disclosure is not intended to be limited to a Nylon™ mesh tube **40**, as a person skilled in the art will appreciate that cylindrical tubes made of other elastically deformable resilient materials, including other

polymers besides Nylon™, and which may not be mesh, may also be suitable for the manufacture of a fastening device and are within the scope of the present disclosure. Furthermore, in some embodiments a thin, shiny ribbon **40***d*, manufactured of plastic or some other suitable material, may be interwoven through the mesh strands of the mesh tube **40**, as shown in FIG. **47**.

[0097] As best viewed in FIG. **49**, the cross-section of the cylindrical mesh tube **40**, in the absence of a force applied to the surface of the tube **40**, is substantially circular in shape and has a diameter D. The coated wire **16**, and its planar coating having a width W, may be inserted or journaled into, and along, the length of the tube **40**. The width W of the rectangular coating **16***e* may be less than or equal to the inner diameter D of the tube **40**. In the latter, the coated wire **16** is held snugly in a tube **40** so that wire **16***a* is substantially along axis A. The ends of the coated wire **16** and of the tube **40** may be coupled together at a coupling **42** by any suitable means, such as for example exposing the ends of the coated wire **16** and the tube **40** to a heat source of a temperature sufficient to melt the plastic of the mesh tube **40** and the plastic coating **16***e* at the coupling **42**, thereby binding the tube **40** to the coated wire **16**. However, this method of coupling together the ends of the tube **40** and the coated wire **16** is not intended to be limiting, and a person skilled in the art will know of other suitable means for coupling the ends together, such as for example by crimping, clamping, gluing or tying the ends together, or any other suitable means known to a person skilled in the art.

[0098] As may be best seen in FIGS. **48** and **48**A, the coupled together tube **40** and coated wire **16** may be further enclosed and enveloped in a cover, such as for example a cloth or fabric tube, sheath, sleeve, hollow braided cord or similar suitable cover for the fastening device. In the embodiment illustrated in FIG. **48**, a sheath is provided as a cover **44**, which is manufactured of suitable fabric by sewing together two strips of fabric with stitches **44***a*, or by any other suitable method, such as using adhesive, known to a person skilled in the art. In FIG. **48**A, the cover **44** comprises a braided, hollow cord made of braided strands of polyester, spandex, nylon-cotton blends or similar materials, such as those used in the manufacture of shoe laces. As would be known to a person skilled in the art, reference herein to spandex is intended to include functional equivalents and those similar products referred to by different names, such as Lycra™, elastane or other such variants.

[0099] The cover **44** is sized so as to snugly fit around and enclose the coupled together tube **40** and coated wire **16**. Once the tube **40** and coated wire **16** are fitted into the cover **44**, each end of the opposite ends of the cover **44** may be coupled to the respective opposite couplings **42** of the tube **40** and coated wire **16** by any suitable means. For example, not intended to be limiting, as illustrated in FIG. **48** this coupling of the cover **44** to the tube **40** and the coated wire **16** may be accomplished by tying a knot **44***c* in a manner so as to ensure that the ends of the tube **40** and coated wire **16** are incorporated (although not shown) into the midst **44***b* of the knot **44***c*. As another example illustrated in FIG. **48**A, not intended to be limiting, the opposite ends of the cover **44** may be coupled to the respective opposite couplings **42** of the tube **40** and coated wire **16** by means of tightly securing the cover end **44***d* and the coupling **42** within a bead **14** or similar device, such as a rivet, a button or a vinyl end cap, so as to ensure the coupling **42** is located securely within the center of the bead **14** or similar device.

[0100] The fastening device **10** shown in FIGS. **48** and **48**A, constructed in accordance with the description above, may thus be used to gather fabrics so as to alter the fit and/or appearance of garments, as described throughout this specification, and may also be used in the gathering of fabrics of other household objects, such as for example duvets or curtains, or to gather hair into various different hair styles. It is known that metal objects, such as metal wires, which are subjected to repeated bending and manipulation, may eventually break after prolonged use. However, the wires utilized in the manufacture of ties **10** in accordance with this specification, which are coated with a flexible plastic or another suitably flexible material, tend to last longer prior to breaking due to the additional strength of the coated wire **16** provided by the coating **16***e*.

[0101] Furthermore, where a conventional twist tie is utilized in the manufacture of a device **10**, the gauge of the wire **16***a* is typically 27 gauge, which is a wire with a much smaller diameter compared to 20 or 22 gauge wire, and which therefore tends to be susceptible to further bending or movement after it has been manipulated into the desired shape. However, in a further embodiment of this disclosure, advantageously two or more twist ties or coated wires **16**, or a doubled-over coated wire **16**, may be used in a single device **10**, thereby providing better stability to a device **10** that has been manipulated into a desired shape and position, while also maintaining the ease of manipulation provided by a thinner wire (such as a 27 gauge wire, as compared to a 14 gauge wire). The wire may be manufactured of copper, aluminum, stainless steel, any metal alloy suitable for this application or any other suitable metal.

[0102] Additionally, should the wire **16***a* eventually break, the coating **16***e* surrounding the wire at the breaking point at least partially covers the broken ends of the wire **16***a* and helps prevent the broken ends of wire **16***a* from poking through the mesh tube **40** and cover **44**, thereby preventing the broken ends of the wire **16***a* from scratching the skin or scalp of a user or causing damage to a garment being modified by the fastening device **10**. Advantageously, where the coated wire **16** is a conventional twist tie, comprising a planar plastic coating that encases the metal wire, if the wire **16***a* does eventually break due to prolonged use of the device **10**, the width W of coating **16***e* is likely substantially greater than the spaces **40***a* in the mesh tube **40** and the spaces between the threads of the fabric cover **44**, thereby substantially inhibiting the sharp points of the broken wire **16***a* from protruding through the tube **40** and the cover **44**.

[0103] As well, the incorporation of the tube **40** into the fastening device **10** provides an aesthetically and tactilely pleasing shape and feel to the device **10**, which maintains a substantially cylindrical shape even after extensive bending, twisting, compression and other manipulations of the device **10**. Furthermore, in embodiments where the selected width W of the coating **16***e* is incrementally lesser than the inner diameter D of the tube **40**, such that the longitudinal edges **16***f* of coated wire **16** snugly engage with the interior surface **40***c* of tube **40**, the wire **16** is held in a position substantially coaxial with the centroidal axis A, which enhances the aesthetically pleasing tubular look and feel of the device **10**.

[0104] In addition, where a mesh tube **40** is utilized, the outer surface **40***b* of the tube **40** has a texture comprising of

ridges and valleys. When opposite ends of the device **10** are locked together so as to secure a hank of hair or fabric, and where the cover **44** comprises a relatively thin fabric or similar material that is snugly fitted to the tube **40** so as to enable the texture of the outer surface **40***b* of the tube **40** to be felt along the cover **44**, the series of ridges and valleys on the outer surface **40***b* tend to mate with each other when resting adjacent each other, so as to enhance the locking and secure holding of opposite ends of the device **10**.

[0105] A further problem addressed by the present invention is that of tying laces, wherein the reference herein to shoe laces is understood to include laces for all forms of footwear. Not everyone knows how to tie shoe laces. Often people avoid buying lace-up shoes for their children of the elderly because don't how to or no longer can tie the laces.

[0106] To solve this problem, wire tie **10** may be used. A tie **10** may be threaded through the eyelets and the ends of tie **10** twisted around each other at the upper eyelets to lock the tension. Alternatively separate ties **10** may be used in separate nodules, each holding their own position. The ends of tie **10** may be hidden inside the shoe. Another feature of the tie **10** is that very little of the shoe face is hidden. The use of ties **10** gives people who cannot tie a shoelace the option to buy shoes that require laces.

[0107] A further problem addressed by the present invention is that, in bedding, a duvet shifts around inside its cover, leaving some spots with no coverage and leaving the duvet bunched up in others. The duvet cover is large and therefore this problem is cumbersome and may be difficult to fix, yet it may become uncomfortable if it is left. To cure this problem it is known to sew snaps to both a duvet and its cover, or to sew on strings or straps, but this takes time and requires a knowledge of sewing. Often there is excess material on the sides of a duvet cover, making it difficult to secure the duvet to its cover with straps or clips. Using the present invention, a tie **10** may be easily applied anywhere the duvet and its cover come together. Tie **10** will not harm the fabric, such as by putting holes through it, be heavy or hard to lay on, and may be hidden and secured from the inside or the outside of the cover. It does not matter if the duvet cover is bigger than the duvet as it will secure one to the other anywhere they meet by pinching a piece of fabric away from the body of the duvet and from the cover so as to form a hank from the duvet and cover, and twisting a tie around the hank and locking it.

[0108] As seen in the Figures commencing in FIG. **20** onwards, a method according to a further aspect of the present invention is illustrated by the sequence of steps shown in several examples. Thus in FIG. **20**, the material of a garment **18** being worn by a user **20** is snugged around the user's waist **20** a by the gathering of a hank **22**, in this instance from the waist or hem **18***a* of garment **18**, and the gathering of hank **22** using tie **10**. In this example, not intended to be limiting, tie **10** is rolled up into a tubular form of hank **22** so as to thereby bind hank **22** onto tie **10** by the rolling of the end of hank **22** and tie **10** in direction E about the longitudinal axis of tie **10** when linear, designated by reference numeral F as seen in FIG. **21**. With hank **22** rolled onto tie **10** as seen in FIG. **22**, tie **10** is then looped so as to loop tie **10** and hank **22** as seen in FIG. **23**. This is referred to as one form of wrapping tie **10** around hank **22**. This pulls the fabric of the material of waist **18***a* together in directions G thereby snugging the waist of garment **18**. With tie **10** formed into a loop so as to gather hank **22**, the exposed ends of tie **10** may be twisted around one another to form a releasable, or twisted lock **24** consisting of the ends of the tie wrapped around themselves to thus secure gathered hank **22**. The exposed ends of tie **10** including beads **14** may then be left to decoratively extend below waist **18***a* or may be manipulated so as to bend tie **10**, thereby allowing the exposed ends of tie **10** to be tucked up under waist **18***a* to hide them from view. One of the beads **14** may be bent over so as to cover the loop of hank **22** to again thereby decoratively cover the loop.

[0109] In the example of FIGS. **24-29**, the midriff **18***b* of garment **18** is tightened to cause a waisting of garment **18** around the user's midriff. The desired position of a hank **22** which will cause the desired waisting of garment **18** is first located on the midriff **18***b*. For example, hank **22** shown formed in FIG. **26** of the material of midriff **18***b*, may be initially pulled outwardly from the garment substantially on the centerline **18***c* (showing in dotted outline) so as to symmetrically cause a waisting of midriff **18***b*. The material of midriff **18***b* is pulled outwardly, that is, away from the torso of user **20**, to form hank **22** and then gathered by wrapping tie **10** around the base of hank **22** as seen in FIG. **27**. The size of the hank **22** may be adjusted to pull out more or less material from midriff **18***b* to thereby, respectively, increase or decrease the waisting effect. With the desired size of hank **22** formed, tie **10** is tightened around the base of hank **22** and releasably locked into position by forming for example a lock **24** where tie **10** is twisted onto itself. Lock **24** is advantageously formed approximately midway along the length of tie **10**, midway between beads **14**. To cause the waisting effect around $\mathbf{18}_b$, the material of midriff **18***b* is gathered in directions H to form hank **22**.

[0110] As seen in FIG. **29**, a similar method may be employed to shorten the length of a dress or other garment **18**, that is, so as to raise the hemline **18***a* in this instance by forming hank **22** from a gathering of material into the hank by tensioning the material vertically, for example in direction I as seen in FIG. **29**. Although shown as a gathering of hank **22** on the front of garment **18** it will be understood that the location of hank **22** will be located to as cause the optimized or desired effect on the garment, and thus may be positioned along the side or even the back, top or bottom of any relatively light fabric garment **18**.

[0111] Further it will be understood that although hank **22** is shown in the illustrations as being relatively large, this is by way of example only and intended for ease of understanding the illustration. Hank **22** may in use be relatively small or relatively large depending on the amount of adjustment to the garment which is desired by the user. The smaller the hank **22**, the more easily it is disguised when for example folded over or rolled around (herein collectively referred to as being gathered) by or into tie **10**, whereafter tie **10** may be then folded over by manipulating the covered wire and beads **14** of tie **10**. In the line illustrations of the Figures it is difficult to convey, but the folding or rolling of hank **22**, where hank **22** is of course matched to the rest of the fabric of garment **18** (as it is formed from the same material), significantly camouflages the existence of hank **22** when the hank is folded or rolled or otherwise compressed up, against or into the body of the remainder of the garment. An observer viewing such an adjusted garment sees the decorative effect of tie **10**, and in particular of beads **14**, and generally doesn't notice the presence of hank **22** or understand its significance in the shaping of the appearance of the material, for example, the fabric of garment **18**. The lighter the weight of the fabric, the more

easily it is disguised. Examples of lighter weight fabrics include, but are not limited to: polyester and spandex blend, cotton, nylon, silk, etcetera.

[0112] As seen in the example of FIGS. **30-35**, a skirt may be shortened by forming a pair of hanks **22**. In the illustration, which again is not intended to be limiting, hanks **22** are formed in the front of the waist **18** *d* so as to draw the material upwardly in direction J in the case of FIG. **30** or so as to draw the waist inwardly in direction K in the case of FIG. **31**. As seen in the sequence of views thereafter, in FIGS. **32-35** respectively, a tie **10** is wrapped around so as to gather the pair of hanks **22**, and with the size of the hanks conFigured to provide the desired adjustment to the waist size. Tie **10** is wrapped around the bases of hanks **22** in FIG. **33** and twisted together to form a knot **24**. In FIG. **34** the exposed ends of tie **10** and beads **14** are folded over to disguise hanks **22** against the waist of the garment. As seen in FIG. **35**, hanks **22** and tie **10** may be tucked behind the waistband of the garment.

[0113] In the example of FIGS. **36-40**, when it is desired to either shorten garment **18** or specifically to raise the neckline **18***e* of garment **18**, when garment **18** has shoulder straps **18***f* a hank **22** may be gathered from each shoulder strap **18***f*. This may for example be done by intertwining a corresponding tie **10**, for example using the circular or twisting motion in direction L seen in FIG. **38** which results in a spiral form of hank **22** as shown in FIG. **40**. The exposed ends of tie **10** may then be decoratively displayed for example by bending them to extend more or less downwardly along strap **18***f*, or maybe tucked in behind the strap so as to hide the exposed ends of tie **10**.

[0114] In the example of FIG. **41**, tie **10** is affixed to neckline **18***e* so as to suspend a decorative pendant **26** therefrom. Pendant **26** may be suspended from the body of tie **10**, that is, from the covered wire which extends between the pair of beads **14**. Beads **14** serve to prevent the pendant from sliding off the end of the tie **10**. Tie **10** may be folded over so as to expose one bead **14** on the front of the neckline **18***e* and so as to hide the other bead **14** behind the neckline **18***e*.

[0115] In FIG. **42**, a tie **10** is used to gather material in the centre of bust **18***g* to thereby lower the lower vertex of neckline **18** in direction M between the normal position shown in dotted outline and the desired lowered adjusted position shown held in place using tie **10**. In this instance, hank **22** is formed of the gathered material at bust **18***g* and may be folded over and compressed using one bead **14** so as to disguise the hank in the manner of the previous example of FIG. **28**.

[0116] In FIG. **58** a tie **10** is illustrated being used to clamp two ends of a scarf **26**, or other elongate fabric neck-wrap, around the neck of a user **20**. A tie **10** is also used as a belt keeper for the loose end protruding from the buckle of belt **28**. Extra ties **10** may be kept on the belt loops, etcetera, and will appear as decorations on the clothing until needed elsewhere during the day.

[0117] In FIGS. **44** and **45** ties **10** are used, respectively, to secure the hair **30** of user **20**; firstly, by retaining bangs **30***a* out of the face of the user; secondly, for clamping the long hair into pigtails **30***b* (in one instance by twisting tie **10** so as to form a knot, and in the other instance to form tie **10** into a clamping spiral); and, thirdly, in FIG. **45** to pull the hair **30** of the user up so as to form a bun **30***c*. Applicant has forward that the use of conventional elastic loops to hold a pigtail creates static when the pigtail is pulled through the elastic loop. The use of tie **10** avoids the creation of static in the user's hair. Further, in addition to what is shown in FIGS. **44** and **45**, a user may use a tie **10** to hold hair which is very loosely pulled back or up, so as to allow the hair to hang in a swoop, while securely holding the end of the hair against the hair on the user's scalp. Applicant has found that trying to use barrettes for this purpose does not work as the ends of the loosely hanging hair quickly works itself free of or slips in the barrette.

[0118] As will be apparent to those skilled in the art in the light of the foregoing disclosure, many alterations and modifications are possible in the practice of this invention without departing from the spirit or scope thereof. For example ties **10** may be used to form, and disguise, hanks in curtains so as to change the shape or dimensions of the curtains. Ties **10** may also be used to tension cloth tablecloths by pulling taunt a hank of the tablecloth material under the corners of the table. Accordingly, the scope of the invention is to be construed in accordance with the substance defined by the following claims.

What is claimed is:

1. The fastening device comprising:

at least one flexibly deformable wire, said wire comprising a first end, a second end and a body having a length from said first end to said second end, the wire substantially encased in a flexible coating,

an elastically deformable tube mounted on said wire and substantially surrounding the body of the wire, the tube comprising a substantially cylindrical body, a first end, a second end and a length from said first end to said second end, wherein the length of the tube is substantially equal to the length of the wire,

a cover mounted on said tube, the cover comprising first and second ends, wherein said cover substantially encloses said wire and said tube, wherein the first end of the wire is coupled to the first end of the tube and the first end of the cover, collectively forming a first end of the fastening device, and a second end of the wire is coupled to the second end of the tube and the second end of the cover, collectively forming a second end of the fastening device,

wherein the user applies pressure to substantially the first and second ends of the fastening device to manipulate said device by bending or looping the device or twisting the first and second ends of the device to releasably lock said ends of said fastening device to each other into a locked position whereby the body of the tube maintains a substantially cylindrical shape when in said locked position and substantially along the entire said length of the tube,

whereby when a break occurs in the wire, the break comprising at least two sharp wire points, the at least two sharp wire points remain encased in the tube and cover so as to inhibit the sharp wire points from protruding through the tube and the cover.

2. The fastening device of claim **1**, wherein the tube comprises a polymer tube.

3. The fastening device of claim **2**, wherein the polymer tube comprises a mesh.

4. The fastening device of claim **3**, wherein the polymer tube is Nylon™.

5. The fastening device of claim **1**, wherein the wire is manufactured of a metal selected from a group comprising: copper, stainless steel, aluminum.

6. The fastening device of claim **1**, wherein the wire is of a gauge in the range of 20-22 gauge.

7. The fastening device of claim **1**, wherein the wire is 27 gauge and the wire comprises at least two wires.

8. The fastening device of claim **1**, wherein the cover is selected from a group comprising:

sleeve, sheath, wrap, tube, braided cord.

9. The fastening device of claim **1**, wherein the coating comprises a substantially planar coating having a length and a width, wherein the coating length is substantially equal to the wire length, and wherein the coating width is greater than a diameter of the wire and lesser than or substantially equal to a diameter of the tube.

10. A method of manufacturing a fastening device, comprising:

a) selecting at least one flexibly deformable wire comprising a first end, a second end, a body having a length from said first end to said second end and a flexible coating substantially encasing the wire,

b) selecting an elastically deformable tube comprising a substantially cylindrical body having a diameter, a first end, a second end and a length from said first end to said second end, wherein the length of the tube is substantially equal to the length of the at least one wire,

c) mounting said tube onto said wire,

d) selecting a cover comprising first and second ends, wherein said cover substantially encloses said tube mounted on said wire,

e) coupling the first end of the wire to the first end of the tube and coupling the second end of the wire to the second end of the tube,

f) coupling the first end of the cover to the first ends of the wire and tube and coupling the second end of the cover to the second ends of the wire and tube.

11. The method of claim **10** wherein coupling the first ends of the tube and wire and coupling the second ends of the tube and wire is selected from a group comprising: heat fusing, crimping, clamping, gluing, tying.

12. The method of claim **10** wherein coupling the first ends of the tube and wire to the first end of the cover and coupling the second ends of the tube and wire to the second end of the cover is selected from a group comprising: heat fusing, crimping, clamping, gluing, tying, vinyl end caps, beads, rivets.

13. The method of claim **10** wherein the coating comprises a planar coating having a length and a width, wherein the coating length is substantially equal to the wire length, and wherein the coating width is greater than a diameter of the wire and lesser than or substantially equal to a diameter of the tube.

14. The method of claim **13** wherein the width of the coating and the diameter of the tube are selected whereby the tube is snugly mounted onto the wire.

15. The method of claim **10** wherein the tube comprises a nylon mesh tube.

16. The method of claim **10** wherein the wire is manufactured of a metal selected from a group comprising: copper, stainless steel, aluminum.

17. The method of claim **10** wherein the wire is of a gauge in the range of 20-22 gauge.

18. The method of claim **10** wherein the wire is 27 gauge and the wire comprises at least two wires.

19. The method of claim **10** wherein the cover is selected from a group comprising: sleeve, sheath, wrap, tube, braided cord.

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