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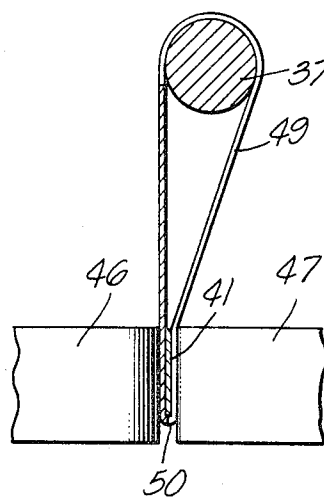
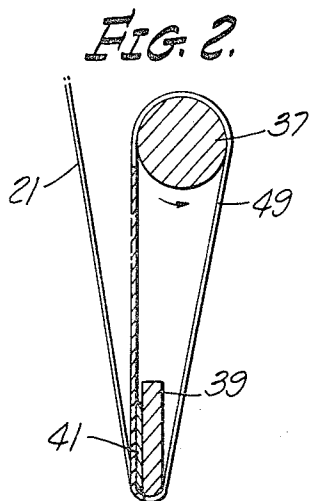
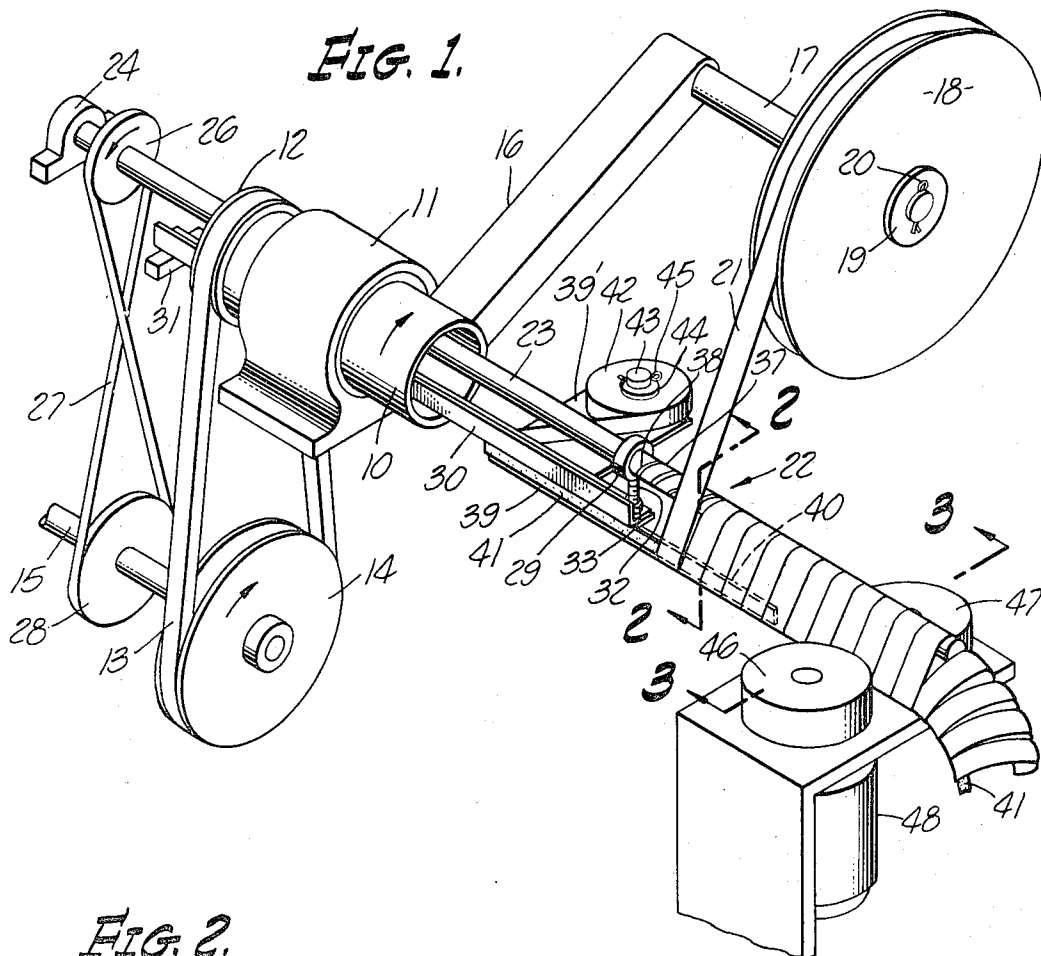
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3,553,061

DECORATIVE PRODUCTS WITH RIBBON LOOPS

Filed Oct. 2, 1967

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

FIG. 4.

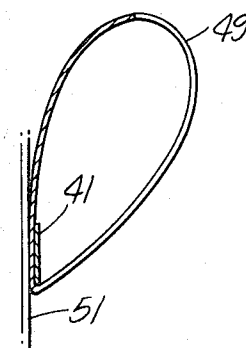
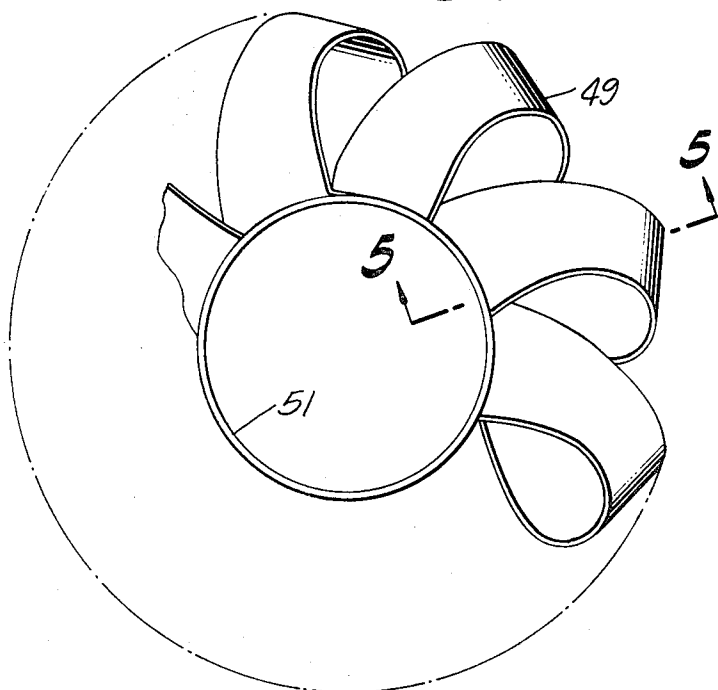


FIG. 5.

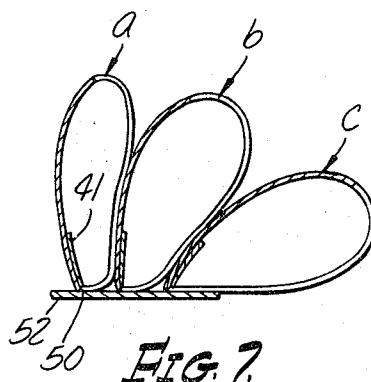
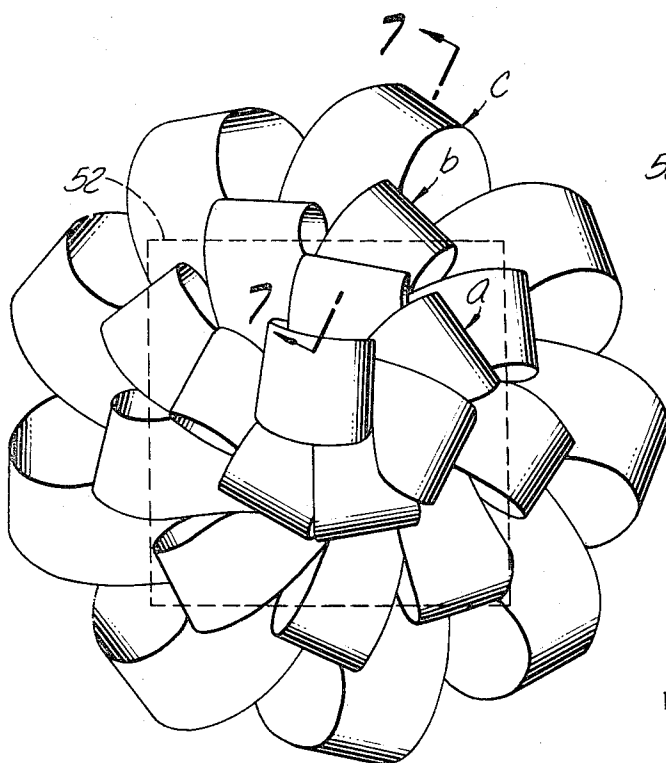


FIG. 6.

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PRE-ASSEMBLED DECORATIVE PRODUCTS WITH RIBBON LOOPS

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5 Claims

ABSTRACT OF THE DISCLOSURE

Apparatus for fabricating a pre-assembled decorative trimming article in which a ribbon is spirally wound around a composite mandrel structure to form successive loops, such mandrel having an elongate fixed tape guide member in parallel relation with a spaced rotatable feed screw, an adhesive tape being fed along the guide member in a position to be engaged by the successive ribbon loops, these loops after being thus secured together being then passed between a pair of pressing rollers by which they are creased along an edge of the tape so as to continuously produce a pre-assembled trimming as an article of manufacture which can be utilized per se for wrapping around a support to provide a decorative trim with the ribbon loops extending outwardly from the tape, or if desired utilized as a basic component for fabricating a unique composite decorative article such as a rosette or the like in which, for example, concentric rings of the pre-assembled trimming material are adhesively secured adjacent the loop creases to a base member in such a manner that the tape forms an upstanding collar, and the loops will extend in an upstanding position with their outer ends in spaced relation.

BACKGROUND OF THE INVENTION

The present invention relates generally to the field of making and fabricating trimmings.

Heretofore pre-fabricated bows, pompons, rosettes and the like have been obtainable as a ready-made article which could be attached as a decorative trimming for packages and the like. Such articles have in general been made on a machine which winds and forms a ribbon directly into the required design depending upon whether it is to be bow, pompon, rosette or other configuration, which is then attached as a unit to a base, usually of paper, by means of a staple or clip. In the above concept, the use of a single ribbon becomes a virtual necessity, if the article is to be produced in large quantities. For example, such a procedure does not readily lend itself to a change of ribbon in the machine during the formation of the article. Such procedure materially limits the variations which are obtainable with respect to color, design and other characteristics in the finished article. For such reason, the finished article is therefore usually composed of a ribbon of one color, a single width, and a ribbon having a single design with respect to its fabrication and texture.

The herein described invention overcomes the above inherent disadvantages by utilizing a unique concept whereby greater versatility is possible with respect to the appearance of the finished article. According to this concept, the machine is not utilized to make a complete bow, rosette, pompon or the like, but instead is utilized to make a pre-assembled trimming which is of such a nature that it may be utilized per se as a decorative article, or as a basic component to provide in combination with a plurality of similar components a finished article having a variety of colors, ribbon widths and textures.

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SUMMARY OF THE INVENTION

The present invention relates generally to trimmings and means for making the same; and is more particularly concerned with apparatus for making a pre-assembled trimming as an article of manufacture for general decorative use, and for fabrication into a unique composite decorative article such as a bow, rosette and the like.

It is one object of the herein described invention to provide a new concept with respect to the decorating of packages, as well as other articles, wherein a pre-assembled trimming can be used as a basic decorative medium or combined with similar trimmings to compositely produce a bow, pompon, rosette or the like of unique design and fabrication, and which can be easily and economically produced on a production basis, and yet embody a variety of colors, fabrics, ribbon widths, and general design appearance.

It is another object of the present invention to provide unique apparatus for producing a pre-assembled trimming of looped ribbon on a continuous production basis.

Still another object is to provide a bow, pompon, rosette or similar decorative article of unique construction having a pleasing design, and which is easily applied to a package or other means for decorative purposes.

The invention briefly comprises a machine for making a basic decorative trimming which is in the form of a pre-assembled article having a succession of spiraled loops secured together by an adhesive tape extending lengthwise of the axis of the successive loops, the loops being creased along a crease line extending along one edge of the tape. This pre-assembled trimming can be applied directly to a surface of the object to be decorated merely by pressing portions of the tape against the surface at the desired location thereon with the loops projecting outwardly so as to form a looped ribbon decoration on the surface. One or more of the pre-assembled trimmings can also be adhesively secured in any design configuration on an attaching base member along the crease line with the tape forming an upstanding support and the outer ends of the loops projecting therefrom and being free to assume varied positions.

BRIEF DESCRIPTION OF THE DRAWINGS

Referring to the accompanying drawings, which are for illustrative purposes only:

FIG. 1 is a perspective view diagrammatically illustrating apparatus for continuously producing a pre-assembled decorative trimming according to the present invention;

FIG. 2 is a fragmentary sectional view taken substantially on line 2—2 of FIG. 1, and showing the initial formation of the ribbon loops;

FIG. 3 is a fragmentary sectional view taken substantially on line 3—3 of FIG. 1 showing a subsequent operation in the formation of the loops;

FIG. 4 is a fragmentary plan view illustrating the manner of utilizing the pre-assembled trimming article per se as a decorative medium;

FIG. 5 is a fragmentary sectional view through one of the loops, taken substantially on line 5—5 of FIG. 4;

FIG. 6 is a plan view of a decorative device in the form of a rosette which embodies a plurality of the preassembled trimmings according to the present invention; and

FIG. 7 is a fragmentary section through a plurality of the loops taken substantially on line 7—7 of FIG. 6.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring more specifically to the drawings, for illustrative purposes, there is shown in FIG. 1 an apparatus

for producing a pre-assembled trimming of such unique character that it can be utilized per se as a decorative medium, or in combination with a plurality of similar trimmings to provide a decorative device such as a bow, pompon, rosette or the like.

As shown in FIG. 1, the apparatus includes a ribbon winding mechanism which is shown as comprising a tubular shaft 10 rotatably supported in a main bearing 11 with its ends respectively projecting on opposite sides of the bearing. One end of the shaft carries a suitable pulley 12 adapted to be driven by a flexible belt 13 from a drive pulley 14 carried by a power delivery shaft 15 connected to a source of power such as an electric motor (not shown).

The other end of the shaft 10 is provided with a radially extending arm 16 which is secured at its innermost end directly to the shaft 10 for rotation therewith, and at its outermost end carries a fixed shaft or spindle 17 serving as a support for a ribbon reel 18 rotatable thereon. The reel is retained on the spindle by means of a washer 19 and cotter key 20, the washer in this case being of rubber or other suitable material to provide a friction drag with respect to the rotation of the ribbon reel. As thus arranged, rotation of the shaft 10 carries the reel in an orbital path around the axis of the shaft, whereby a ribbon 21 may be fed from the reel onto a composite mandrel means, as generally indicated at 22.

As shown in FIG. 1, the mandrel means 22 includes an elongate driven shaft 23 mounted axially within the tubular shaft 10 and rotatably supported at one end in a suitable bearing 24. Inwardly spaced from this bearing, the shaft is provided with a pulley 26 over which there is trained a crossed driving belt 27 from a drive pulley 28 fixedly secured to the power delivery shaft 15. As thus arranged, it will be evident that the tubular shaft 10 and shaft 23 will be rotated in opposite directions.

Between the other end terminus of the shaft 23 and the adjacent end of shaft 10, there is provided an outboard bearing 29 which is adjustably supported at one end of an elongate bracket 30 in the form of an angle-bar which also extends through the tubular shaft 10 to the other side of the pulley 12 where it is appropriately supported on a spacer pillow block 31. The bearing 29 has a threaded stem 32 and associated nut 33 by means of which the bearing may be raised and lowered within limits to vary the spacing at this point between the bracket 30 and the shaft 23. Corresponding changes are made at the secured end of the bracket 30 by substituting pillow blocks of a proper height.

The outer end extremity of the shaft 23 is arranged to form a feed screw portion 37 by providing a lead thread or other means on the shaft surface. In the present instance, the feed screw portion is spirally wrapped with a tape strip 38. This feed screw portion forms one component of the mandrel means and is associated with a laterally spaced fixed elongate arm 39 which is welded or otherwise secured at one end to the under side of the bracket 30. This arm is positioned so that the adjacent surface of the bracket 30 forms an overhanging ledge which extends slightly outwardly over the exposed vertical face of the arm as seen in FIG. 1. At its free end, the arm 39 has a vertically tapered end portion 40 which extends axially in spaced relation to the feed screw portion 37. The spaced relationship of the feed screw portion and arm are best shown in FIG. 2.

The arm 39 forms a guide track for an adhesive tape 41 which is carried along the outer surface thereon below the above mentioned ledge, this tape being fed from a tape reel 42 mounted on a supporting spindle 43 secured in an upright position on a plate-like frame extension 39' over which the tape 41 rides as it is fed from the reel 42. This plate and the ledge as described above coact to vertically retain the tape in a proper position as it travels along the arm 39. Free rotation of the reel is opposed by

a rubber washer 44 which is held in place by a retaining cotter key 45.

With the above arrangement, as the ribbon reel 18 is carried through an orbital path around the mandrel means, the ribbon 21 will be looped around the tape 41 on the arm 39 and thence carried around the feed screw portion 37 to form successive loops. The feed screw portion 37 acts to move the outer ends of the loops along the feed screw, while movement of the lower ends of the loops is accomplished by a pair of pressure rollers 46 and 47. The front roller 46 is rotatably driven by a motor 48, while the back roller 47 is an idler roller.

Referring to FIGS. 2 and 3, it will be seen that as the tape 21 is carried around the mandrel means, a loop 49 will be formed, the top of the loop being around the feed screw portion 37, and the bottom of the loop extending around the arm 39 and adhesive tape 41 which is positioned so that its adhesive side will be outwardly disposed. As the assembled loops and tape 41 leave the tapered end portion 40 of the arm 39, the rollers 46 and 47 act to press the tape at adjacent portions together as shown in FIG. 3. This action forms a crease 50 at the bottom of the loop along the bottom edge of the tape 41. The trimming as it now leaves the mandrel means is in the form of a preassembled article which is susceptible of decorative use either directly or by being fabricated into a decorative unit similar to a rosette, pompon, bow and the like as will hereinafter be more fully explained.

As exemplary of the decorative trimming per se, the preassembled article of decoration may be applied to a surface of varied configuration to form a series of decorative loops thereon. More specifically, as shown in FIG. 4, the preassembled trimming is applied to a cylinder support 51. The manner of applying the trimming is clearly indicated in FIG. 5 wherein it will be seen that the tape 41 is trained around the surface of the support. As thus mounted the trimming may be secured by extensions of the tape 41, or by a short length of adhesive tape placed over the adjacent ends of the trimming when mounted in a desired position on the cylinder support. As thus mounted, the bottom portion of each loop is anchored to the support, while the outer end of the loop is free to assume spaced relation, the loops being in general disposed in upstanding relation on the support. While the use of the decorative trimming per se has been illustrated in connection with a cylindrical surface, it will be readily apparent that the surface does not have to necessarily be cylindrical but may have other configurations as well.

Referring now to FIG. 6, the decorative trimming as produced by the apparatus shown in FIG. 1 may be utilized to produce a composite decorative unit composed of a plurality of the basic trimmings which may vary as to color, width of ribbon, as well as texture so as to produce a variety of decorative units or devices. As thus utilized, the decorative trimming is mounted upon a bottom base member 52 of square, round or other configuration, and may be provided with an adhesive lower surface normally covered with a strip sheet which upon removal will permit mounting of the unit on a package or other support.

As shown in FIGS. 6 and 7, the decorative unit will comprise one or more rings, for example, as indicated at *a*, *b*, and *c*. If more than one ring is utilized, they will in general be arranged in concentric relation. The rings would be formed by the basic trimming medium in each case, the loops being adhesively secured to the base member at the crease line 50 with the tape 41 in each case forming an upstanding reinforcing collar at the base of the loop. As the outer rings are applied, for example, the rings *b* and *c*, a greater portion of a bottoms of the loops may be adhesively secured so as to in general orient the loops into a more horizontal inclination than a vertical position as occupied by the loops of the inner ring *a*. As thus arranged, the loops

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are generally upstanding with respect to the base member 52, and the upper ends of the loops are free to adjust themselves in spaced relation.

From the foregoing description and drawings, it will be clearly evident that the delineated objects and features of the invention will be accomplished.

Various modifications may suggest themselves to those skilled in the art without departing from the spirit of my invention, and, hence, I do not wish to be restricted to the specific form shown or uses mentioned, except to the extent indicated in the appended claims.

I claim:

1. As an article of manufacture, a pre-assembled structure for use as a decorative and ornamental means, comprising:

- (a) an elongate ribbon spiralled about a loop axis to provide adjacently disposed successive loops with respect to said loop axis; and
- (b) a loop retaining tape extending along the axis of the spiralled loops, said tape being adhesively secured to said loops and said loops being spiralled about said loop retaining tape.

2. An article of manufacture according to claim 1, wherein the successive loops are similarly transversely creased on one side along a line of crease extending parallel to said loop axis, and said tape has one edge positioned substantially coincident with said line of crease.

3. A pre-assembled decorative article adapted for securement around the outside of a supporting member, comprising:

- (a) an elongate ribbon spiralled along an axis and providing successive loops; and
- (b) an adhesive tape extending along said axis and secured to said loops and retaining said loops in pre-assembled relation, and said loops being spiralled about said loop retaining tape whereby upon wrapping around the supporting member the loops therealong will be anchored while leaving their outer loop portions free to assume spaced apart relation.

4. A decorative article such as a pompon bow, comprising:

- (a) a plurality of concentrically positioned rings, each

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of said rings embodying a length of a pre-formed composite assembly curved into a ring configuration and interconnected at its contiguous ends, said assembly including:

- a ribbon material spiralled to provide successive adjacent loops, and
- a loop retaining tape extending along the spiralled loops and adhesively secured thereto and said loops being spiralled about said loop retaining tape; and
- (b) a base member having the concentrically disposed rings each adhesively secured thereto adjacent one edge of its retaining tape, so that the tape provides an upstanding collar portion with the connected loops oriented in a generally upstanding position and with the upper ends of the respective loops in spaced relation.

5. As an article of manufacture, a pre-assembled structure for use as a decorative and ornamental means, comprising:

- (a) an elongated ribbon having spiralled successive portions formed to provide adjacently disposed loops with respect to a loop axis; and
- (b) a loop retaining tape extending along the axis of said loops, said tape having a portion at each loop adhesively secured thereto and said loops being spiralled about said loop retaining tape.

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U.S. Cl. X.R.

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