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(54) **Product for ornamental use, in particular a precious or costume jewellery product having a variable form**

(57) Product for ornamental use in the precious and costume jewellery sector comprising at least a sequence of modular elements (1) in the form of pairs of elongated plates (1a, 1b) arranged crosswise and hinged at their point of intersection. The two end pairs of the plates of each modular element are hinged to corresponding end pairs of the plates of two adjacent modular elements, in a manner so that the intersection points of the pair of plates of each modular element are aligned along an axis and the distance can therefore be varied by a pulling or compression action.

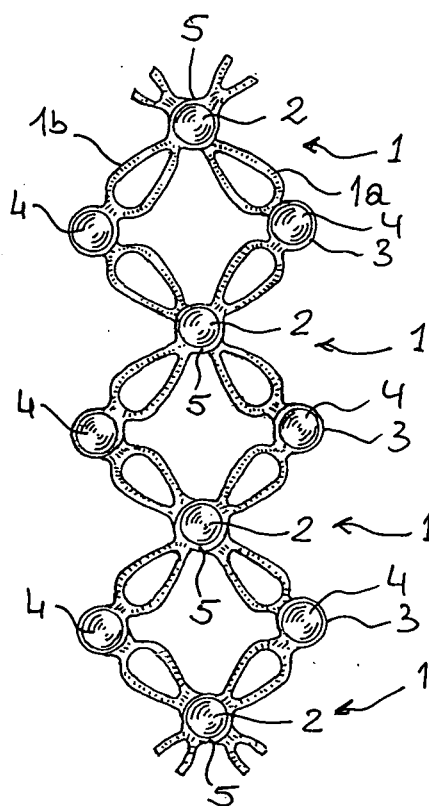


Fig. 2

Description

[0001] The present invention generally relates to products destined for ornamental use and in particular as ornaments for the human body. More precisely, the invention relates to a product in the field of precious and costume jewellery whose form can be modified according to different applicative needs or simply for reasons of appearance.

[0002] In a product destined for ornamental use, in particular when used for personal or body ornament, as in the case of precious and costume jewellery, it is the form rather than the materials employed which constitutes the deciding element in conferring the product's aesthetic value. While the materials will primarily affect the precious nature and therefore the price of the product, the actual form is the element, which is the main factor that attracts the attention of the consumer, either for its pleasing shape, originality or artistic merit.

[0003] As well as the aesthetic value, the form of a product destined for ornamental use, and in particular, a product for precious or costume jewellery, always has a functional value as well which can be important to a greater or lesser degree. The functional aspects condition to a certain extent the product structure, which is generally predefined and almost unalterable by the designer.

[0004] For example, any changes to the form of an item of finished jewellery can be made only by adding or removing certain components, such as pendants on a bracelet or a necklace for example, which can be replaced with pendants of a different shape, or the elements of a bracelet which is composed of modules to lengthen or shorten it, or to compose ornamental subjects or an alphanumerical sequences on the bracelet, and the like.

[0005] The general problem in relation to the present invention involves creating a structure for a product for ornamental use, in particular a precious or costume jewellery product, which allows the shape or form of said product to be varied in order to adapt it for different uses, or simply for the sake of appearance, without requiring the addition or removal of any elements or components.

[0006] The object of the present invention is therefore to provide a product for ornamental use, in particular a precious or costume jewellery product on which it is possible to vary the form to satisfy applicative needs or personal taste without the said variation damaging the aesthetic or ornamental function for which it was designed.

[0007] Another object of the present invention is to provide a product for ornamental use of the aforesaid type, whose form can be modified without the need for adding or removing any parts or components.

[0008] These objects are achieved with a product for ornamental use, in particular for precious or costume jewellery according to the present invention, wherein the main feature consists in that it comprises at least a sequence of modular elements formed by a pair of elongated plates arranged crosswise and hinged at their intersection point. The two pairs of the ends of the plates of

each modular element are also hinged to corresponding pairs of plate ends of two adjacent modular elements, so that the intersection points of the pair of plates of each modular element result as aligned along an axis and their distance can therefore be varied by a pulling or compression action.

[0009] According to a first aspect of the invention the modular elements are aligned according to a straight-line axis, and therefore the ornamental product assumes a flat configuration and can be used to create ear-ring pendants, necklaces, and the like that can be extended according to personal taste and needs.

[0010] According to a second aspect of the invention, the modular elements are combined in a closed ring configuration, being aligned on a substantially circumferential axis, and therefore the ornamental product according to the invention can be used to create rings and bracelets with varying diameters.

[0011] According to a third aspect of the invention the modular elements can also be combined according to a multiple configuration as well, in other words, not only aligned along a first axis, but also along a second axis set at right-angles to the first.

[0012] Further characteristics and/or advantages of the product for ornamental use according to the present invention will be made clearer from the following description of an embodiment thereof made as a nonlimiting example, with reference to the appended drawings, wherein:

Figure 1 shows a flat portion of the product according to the present invention in a first possible configuration;

Figure 2 shows the flat portion illustrated in figure 1 in a second possible configuration;

Figure 3 shows a different embodiment of the product according to the invention in a configuration equal to that shown in figure 2;

Figure 4 shows a component of the basic module of the product according to the invention;

Figure 5 shows the product according to the invention in a first possible ring-shaped configuration;

Figure 6 shows the product illustrated in figure 5 in a second possible expanded ring configuration.

[0013] With reference to Figure 1, a flat length of the product intended for ornamental use according to the present invention comprises a sequence of modules generally indicated at 1, each module being formed of a pair of substantially elongated-eight shaped plates 1a, 1b arranged crosswise over one another and reciprocally hinged at the point of overlay by means of a pin 2 engaged into seats made in ring-shaped expansion elements 5 formed in an intermediate position on the plates 1a and 1b.

[0014] Each module 1 is connected to two adjacent modules through the ends of the plates 1a, 1b. More precisely, each plate 1a or 1b has respective ring-shaped

expansion elements 3 at the ends thereof. Therefore each module has four ring-shaped expansion elements which are connected two by two to corresponding ring-shaped expansion elements of two adjacent modules by pins 4 so that the pins 2 of each module are aligned along an axis identified by X-X in figure 1, that is in the longitudinal direction of the flat length, with the axes of the pins 2 at right angles to said longitudinal axis X-X.

[0015] The pins 2 and 4 are riveted at the ends thereof to ensure the axial stability of the connection, and also to maintain moderately tight contact between the plates 1a and 1b at the ring-shaped expansion elements 3 and 5 in order to also guarantee the stability of the configuration each time the flat length is modified, simply by exercising moderate axial traction or compression forces.

[0016] When a traction force is exerted on the flat length shown in figure 1 in the direction of the longitudinal axis X-X, the resulting configuration is shown in figure 2, wherein the form of the flat length is considerably enlarged and elongated in comparison to the compressed version in figure 1. In fact, the pulling action exercised along the longitudinal axis X-X moves the pins 2 of each module away from the adjacent pins 2, although they remain in alignment with one another, while the pairs of connecting pins 4 between the two adjacent modules move closer together, and the distance between the pins 4 and the longitudinal axis is reduced. Obviously, in this manner, the angle between the two plates 1a and 1b increases because of the pulling action, while it is reduced when the flat length is compressed.

[0017] Figure 5 shows another embodiment of the product for ornamental use according to the invention wherein the various component modules 1 are arranged to form a closed configuration. In practice, in this case the alignment axis of the connection pins 2 between plates 1a, 1b of each module 1 is a circumferential axis.

[0018] In this case as well, it is possible to vary the configuration of the ornamental product according to the invention by exercising pulling pressure in a basically diametrical direction to change from the configuration shown in figure 5 to the expanded version shown in figure 6, or by compressing in the same direction to change from the configuration shown in figure 4 to the compressed version shown in figure 3. As with the flat version shown in figures 1 and 2, moderate reciprocal tightening action on the plates 1a and 1b, made possible by the riveting of the connection pins 2 and 4, ensures the stability of the final configurations.

[0019] In the embodiments shown, the plates 1a, 1b that form the modules 1 of the ornamental product according to the present invention are in the form of a substantially elongated-eight, as shown in detail in figure 4, this form being characterized by two substantially drop-shaped eyelets 6 which extend symmetrically in opposite directions from the central expansion ring element 5, and terminate with the two ring-shaped expansion elements 3 at their free ends. Those skilled in the art will recognize that this configuration can undergo numerous variations

according to the designer's choice as long as these are adapted to allowing the articulated connection between the plates and adjacent modules as described previously.

[0020] Moreover, as shown in figure 3, it is possible to create multiple configurations of the ornamental products according to the invention by simply connecting two modules to one another, not only in the direction of the X-X axis, i.e. along a row of pins 2, but also according to the Y-Y axis at right angles to the X-X axis. In the case showing the duplicated structure, a row of pins 4' is common to the two starting adjacent structures.

[0021] The plates 1a, 1b can be produced in precious or non-precious metals, or in different metals, or in different chromatic tones of the same metal in a single product according to alternate or fancy sequences. In addition, the surface of the plates can also be engraved or enamelled according to techniques commonly used in the jewellery manufacturing sector, or used as a setting support for precious or non-precious stones, thus providing the designer with almost unlimited possibilities of choice as regards the final aspect of the product.

[0022] The ornamental product according to the present invention can be used in the precious or costume jewellery sector to create a large range of articles characterised by the possibility of varying the form and in particular, the length or the diameter. For example, the product shown in figures 1, 2 and 3 can be used to create pendants and necklaces of varying lengths, while the product shown in figure 5 can form rings with varying diameters which can be adapted to the size of the finger and/or transformed to create a bracelet.

[0023] Variants and/or modifications can be applied to the ornamental product according to the present invention while remaining within the scope of protection of the invention as defined in the following claims.

Claims

1. A product for ornamental use in the precious and costume jewellery sector **characterised in that** it comprises at least a sequence of modular elements (1) in the form of pairs of elongated plates (1a, 1b) arranged crosswise and hinged at their point of intersection, the two end pairs of the plates of each modular element being hinged to corresponding end pairs of the plates of two adjacent modular elements, in a manner so that the intersection points of the pair of plates of each modular element is aligned along an axis (X-X) and the distance can therefore be varied by a pulling or compression action.
2. The product for ornamental use according to claim 1 wherein said axis (X-X) is a straight line.
3. The product for ornamental use according to claim 1 wherein said axis (X-X) is circumferential.

4. The product for ornamental use according to any one of the previous claims, wherein each modular element (1) is connected to other modular elements by means of said end pairs of said plates (1a, 1b) not only in the direction of said first axis (X-X), but also in the direction of a second axis (Y-Y) set at right angles to the first axis. 5
5. The ornamental product according to any one of the previous claims, wherein the plates (1a, 1b) of each modular element (1) are pivotally connected by means of a pin (2) adapted to creating a moderate tightening action on both elements, so that reciprocal rotation will be obtained only by applying axially opposed forces of correspondingly moderate strength. 10 15
6. The ornamental product according to any one of the previous claims, wherein the ends of the plates (1a, 1b) of each modular element (1) are connected to corresponding ends of the plates of another modular element with respective pins (4) adapted to creating a moderate tightening action on both elements, so that reciprocal rotation will be obtained only by applying axially opposed forces of correspondingly moderate strength. 20 25
7. The ornamental product according to any one of the previous claims, wherein each plate is in the form of a substantially elongated eight with two ring-shaped expansion elements (3) at the ends. 30
8. The ornamental product according to claim 7, wherein said plate in the of a substantially elongated eight has an intermediate ring-shaped expansion element (5) for the engagement of a connection pin (2) to attach two plates (1a, 1b) of a modular element (1). 35

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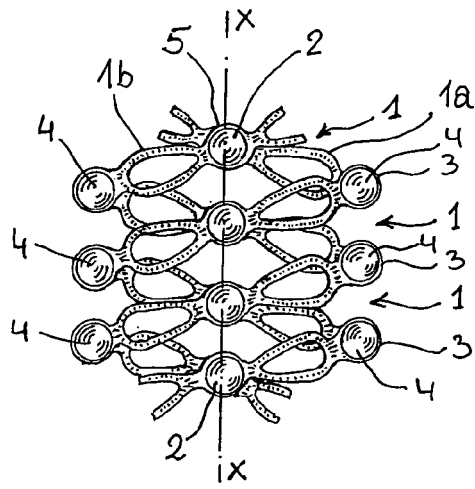


Fig. 1

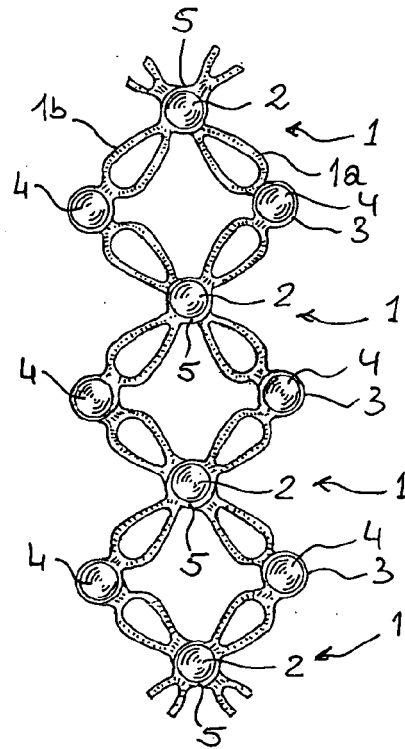


Fig. 2

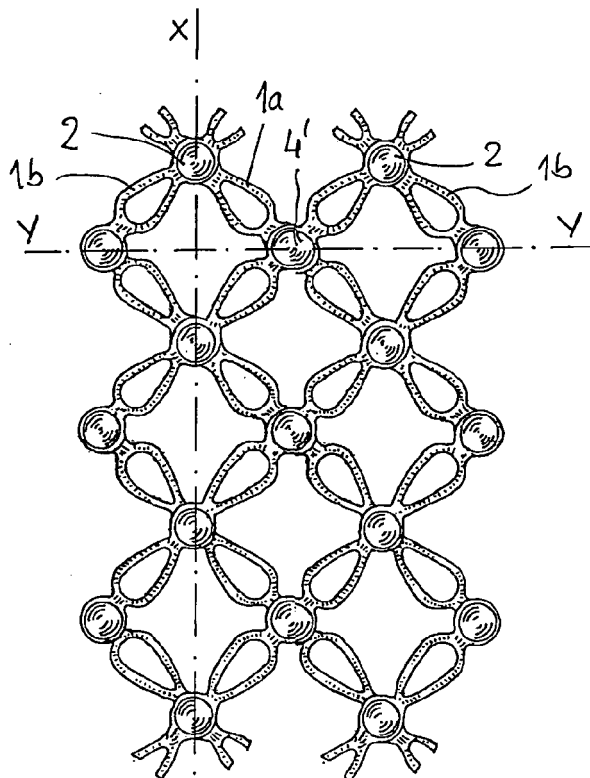


Fig. 3

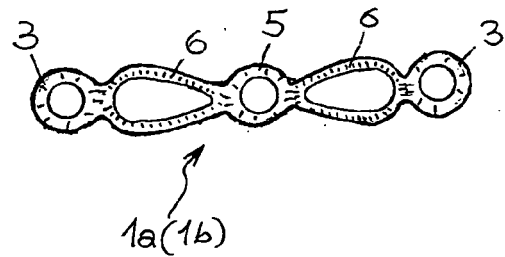


Fig. 4

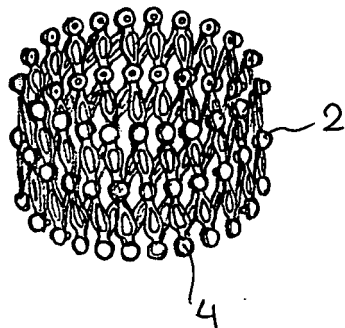


Fig. 5

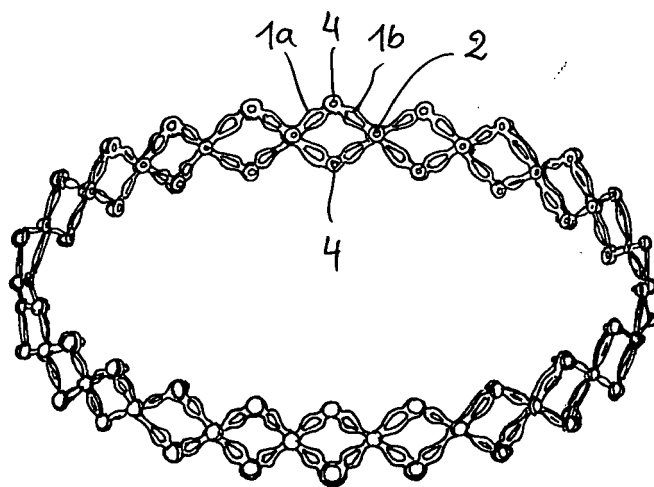


Fig. 6



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 06 42 5704

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 91 00 430 U1 (GEORG LAUER GMBH & CO, 7530 PFÖRZHEIM, DE) 4 April 1991 (1991-04-04) * page 4, line 12 - line 20; figures 1-3 * -----	1-8	INV. A44C5/06
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			TECHNICAL FIELDS SEARCHED (IPC)
			A44C
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 December 2006	Examiner Horubala, Tomasz
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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 06 42 5704

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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20-12-2006

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