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(54) **Device for joining and/or supporting jeweller articles, such as precious metals and pearls**

(57) The present invention relates to a device for joining elements forming jeweller articles, such as precious metals and pearls, which device comprises: a pair of pin arranged at respective cross sections of a metal

half-ring shaped link, made of a precious material; a pair of opposite holes arranged on the outer surface of a pearl so that the pair of pins can be housed in the holes to form a coupling element between the pearl and the metal ring-shaped link.

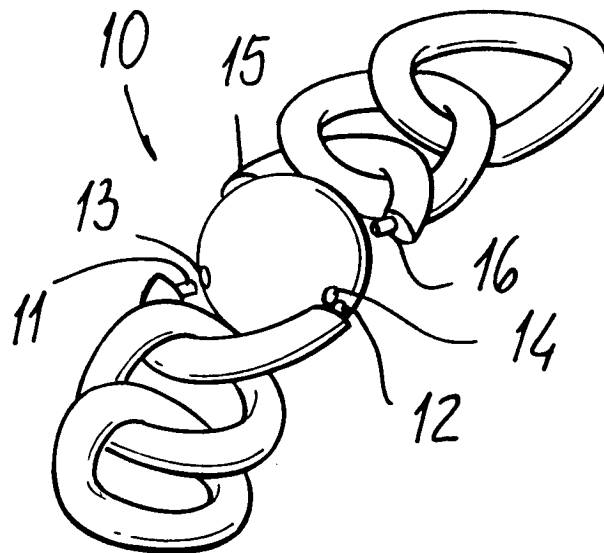


FIG. 1

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Description**BACKGROUND OF THE INVENTION**

[0001] The present invention relates to a device for coupling elements forming jeweller articles or precious articles in general.

[0002] More specifically, the present invention relates to a device allowing to easily and quickly join element made of precious metals to elements comprising pearls.

[0003] Prior devices used for coupling the above mentioned precious elements usually comprise a housing in which are set pearls and possible precious stones.

[0004] These prior devices, however, greatly limit making and decorating possibilities in the jewellery field.

[0005] Moreover, the mentioned prior devices frequently use glueing substances for firmly holding the pearls in their housings, thereby, frequently, the glued pearls can detach and be lost.

SUMMARY OF THE INVENTION

[0006] The aim of the present invention is to solve the above mentioned problems, by providing a device which allows to firmly and quickly join elements forming jeweller articles.

[0007] This object is achieved by providing a pair of pins engaging in respective engaging holes formed on the surface of the pearl.

[0008] Thus, a joining device is provided which can be easily used for properly mounting a pearl in a desired firmly locked condition.

[0009] Moreover, the device according to the invention can be easily made on a large scale and at a comparatively low cost.

[0010] Accordingly, the invention specifically relates to a device for joining elements forming jeweller articles, such as precious metals and pearls, characterized in that said device comprises: a pair of pins arranged at respective cross sections of a metal half-ring shaped link, made of a precious material; a pair of opposite holes formed on an outer surface of a pearl, allowing said pair of pins to be engaged in said pair of holes thereby providing a joining element between said pearl and said metal half-ring shaped link.

[0011] According to the present invention, each pin comprises, in turn: a base element, provided with a spring, and engaged in a respective hole formed in the cross-section of said half-ring shaped link; a projecting element, coated by an adhesive substance and engaged in a hole formed on the surface of the pearl.

[0012] According to a further aspect of the invention, the metal half-ring shaped link is arranged at one end of a metal chain construction.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The present invention will be disclosed herein-

after, by way of an illustrative, but not limitative example, in preferred embodiments thereof, with reference to the figures of the accompanying drawings, where:

Figure 1 is a perspective view of a jeweller article, including a metal chain, and provided with a first embodiment of the joining device according to the present invention;

Figure 2 is a top plan view of the jeweller article shown in Figure 1;

Figure 3 is a side view of the jeweller article shown in Figures 1 and 2;

Figure 4 is a perspective view of a metal link ring element, constituting a second embodiment of the device according to the invention;

Figure 5 is a top plan view of the ring element of Figure 4;

Figure 6 is a side view of the ring element shown in Figures 4 and 5.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0014] Two preferred embodiments of the invention will be disclosed hereinafter by way of a merely indicative example.

[0015] With reference to Figures 1 and 3, the joining device 10, according to a first embodiment of the invention, comprises: a first pair of pins 11, 12; a first pair of opposite holes 13 and 14; a second pair of pins 15 and 16 and a second pair of opposite holes 17 and 18.

[0016] The device 10 has been applied to a jeweller article comprising a metal chain construction made of a precious material.

[0017] At one end of the mentioned metal chain is arranged a metal half-ring shaped link, at the cross-sections of which are provided pin elements.

[0018] on the outer surface of the pearl are provided opposite holes, specifically designed for engaging therein said pins.

[0019] In particular, the pearl is mounted by spreading apart the end portions of the link, which link will automatically re-close owing to the resiliency of the metal material thereof.

[0020] Figures 4 and 6 show a second embodiment of the joining device 20, as applied to a ring.

[0021] This device comprises two pins 21 and 22, which are in turn provided with springs 23 and 24.

[0022] These springs are provided for facilitating the insertion of said pins 21 and 22 into said holes 25 and 26 formed on the surface of the pearl.

[0023] Figures 5 and 6 specifically show the perfect coupling of the pearl to the body of the ring provided by the subject device 20.

[0024] The procedure for mounting the pearl in its housing, according to the invention, is very simple and provides the following operating steps:

- a) spreading apart the end portions of the metal element;
- b) engaging the pins in their respective holes formed on the surface of the pearl;
- c) releasing the end portions of the metal element, 5
so as to lock the pearl in its related housing.

[0025] In order to provide a better coupling, it is provided, according to the present invention, to apply on the surface of the mentioned pins a suitable adhesive substance. 10

[0026] Thus, it should be apparent that the invention fully achieves the intended aim and objects, since the invention provides a device allowing to easily and firmly join elements forming jeweller articles. 15

[0027] In this connection it should be apparent that the inventive device can be also used for different elements, both in the jeweller field and in the gift article field.

[0028] While the invention has been disclosed and illustrated with reference to preferred embodiments thereof, it should be apparent that the disclosed embodiments are susceptible to many modifications and variations, all of which will come within the scope of the appended claims. 20
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Claims

1. A device for joining elements forming jeweller articles, such as precious metals and pearls, characterized in that said device comprises: a pair of pins arranged at cross sections of a metal half-ring shaped link, made of a precious material; a pair of opposite holes, arranged on an outer surface of a pearl, for engaging therein said pair of pins thereby providing a firm joining between said pearl and said metal half-ring shaped link. 30
35
2. A device for joining elements forming jeweller articles, according to Claim 1, characterized in that each said pin comprises a base element provided with a spring, engaged in a hole, formed on the cross-section of said half-ring shaped link, and a projecting ring element engaged in a said hole formed on said surface of said pearl. 40
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3. A device for joining elements forming jeweller articles, according to Claim 1, characterized in that said metal half-ring shaped link is arranged at one end of a metal chain. 50

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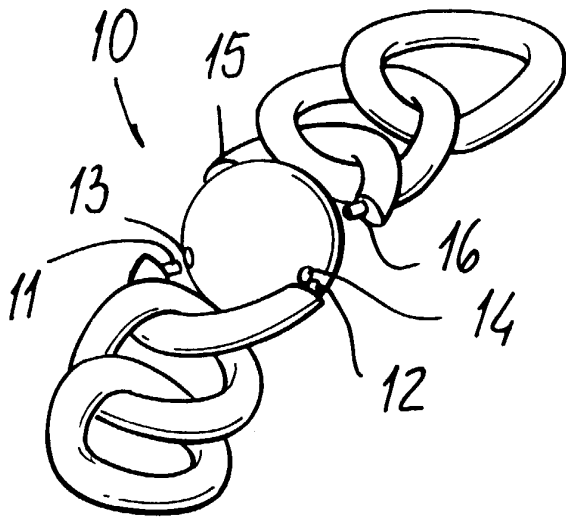


FIG. 1

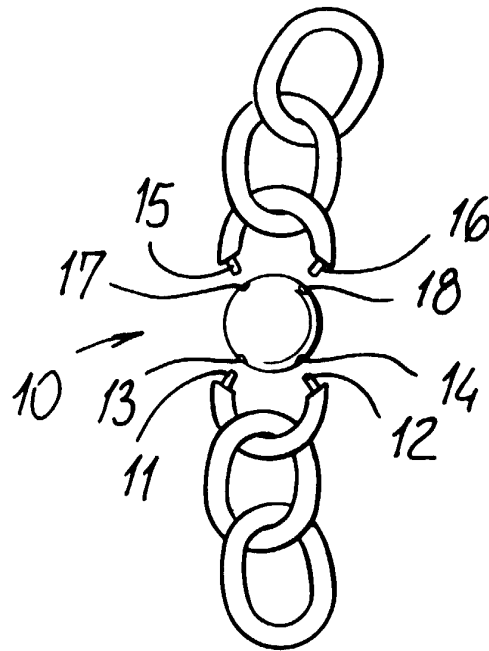


FIG. 2

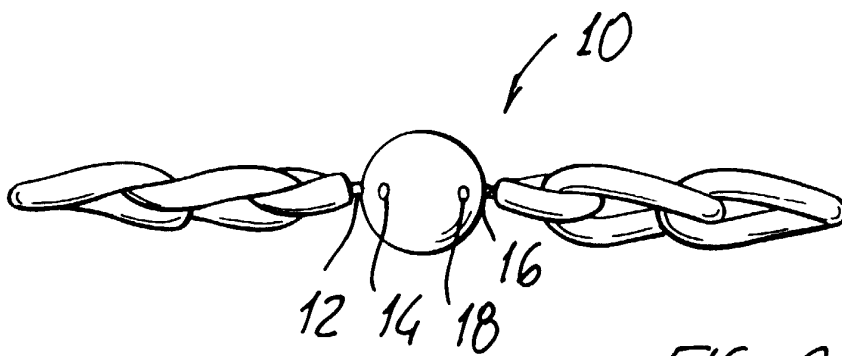
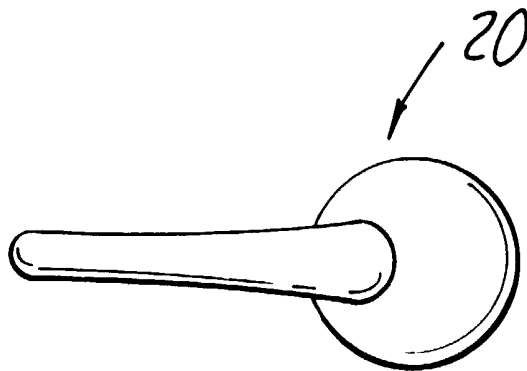
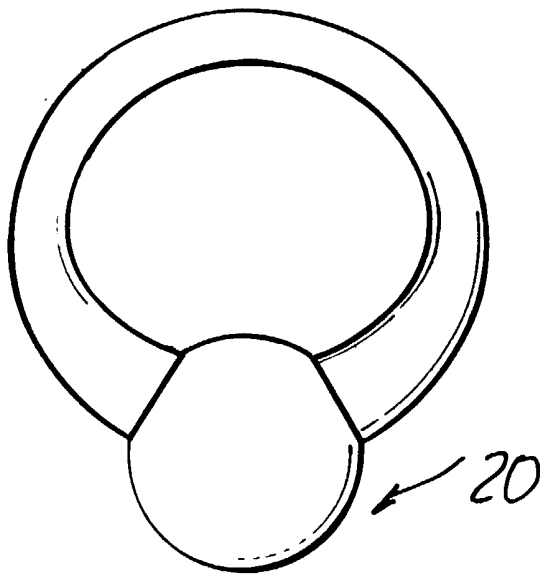
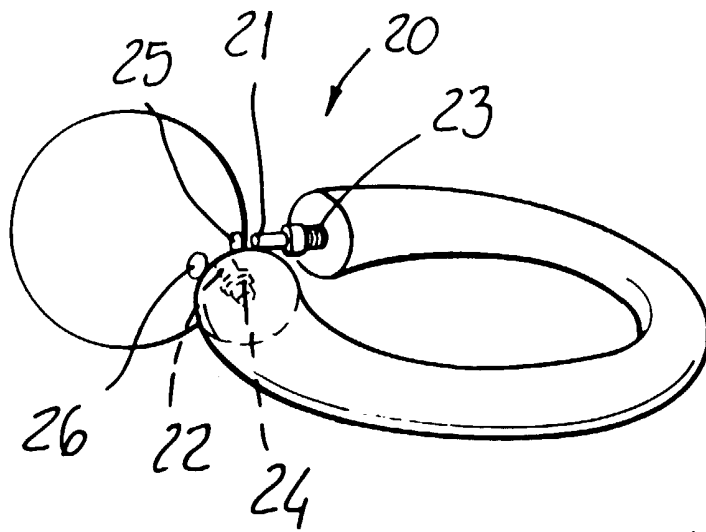


FIG. 3





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EUROPEAN SEARCH REPORT

Application Number
EP 98 12 0460

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	EP 0 848 918 A (OTTO EHINGER FA) 24 June 1998 * column 3, line 27 * * column 3, line 30 * * column 3, line 38 * * column 3, line 44 * * column 3, line 53; figures 1,2 * ---	1-3
A	GB 2 090 724 A (LISTER JEWELLERY LTD) 21 July 1982 * page 1, line 75-76; claim 1; figure 4 * ---	1
A	FR 2 531 323 A (TENENHAUS SA) 10 February 1984 * claim 1; figures 3,4 * -----	1
		CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
		A44C17/02
		TECHNICAL FIELDS SEARCHED (Int.Cl.6)
		A44C
The present search report has been drawn up for all claims		
Place of search	Date of completion of the search	Examiner
THE HAGUE	29 March 1999	Monné, E
CATEGORY OF CITED DOCUMENTS		
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 98 12 0460

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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29-03-1999

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82