

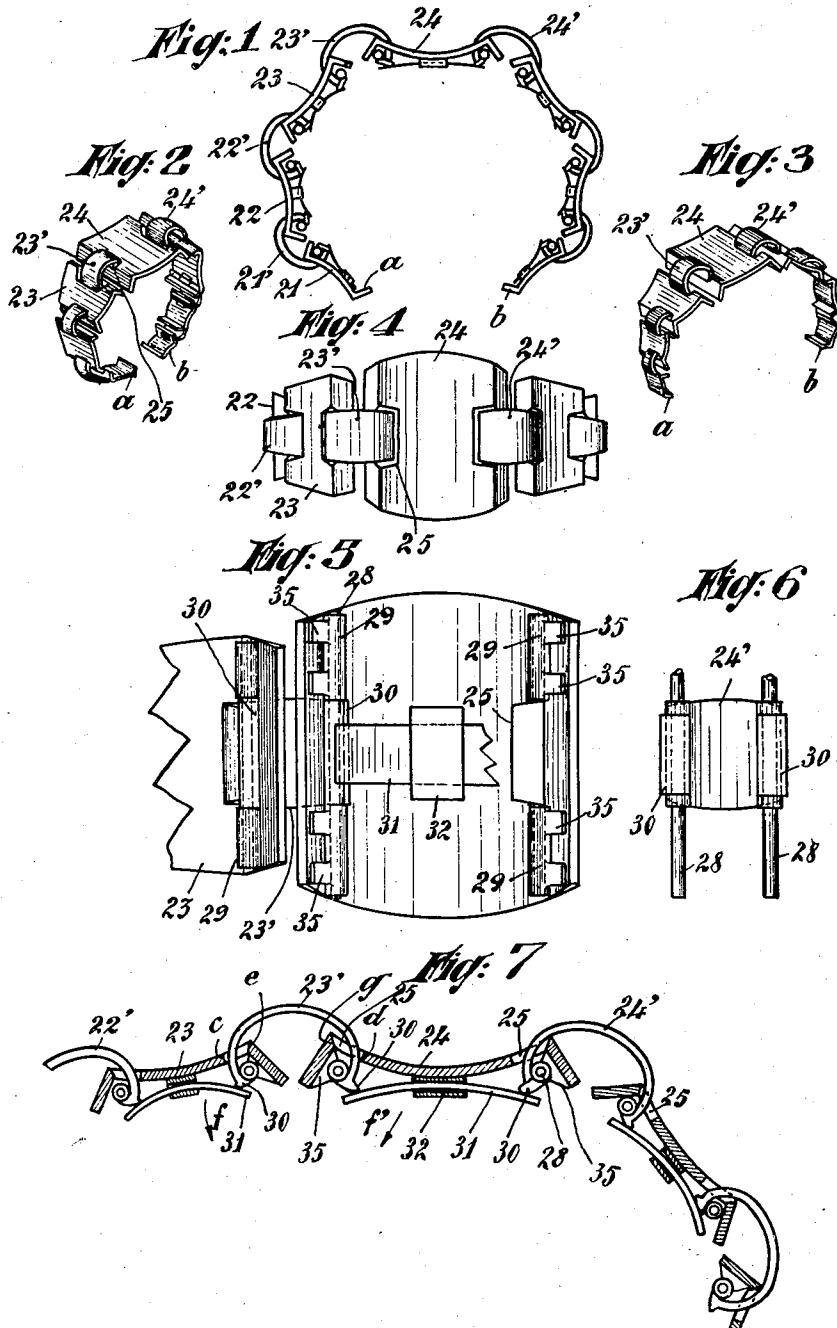
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BRACELET OR OTHER JEWEL

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BRACELET OR OTHER JEWEL

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The present invention has for its object a bracelet or other jewel consisting of a plurality of jointed elements capable of moving angularly with respect to one another when it is desired to put on or to remove the jewel.

This bracelet has, in the state of rest, the general shape of a split annular element and the jointed parts thereof are associated with springs which, in the position of rest, determine the relative positions of said parts, in such manner as to ensure that the whole assumes this form of a split annular element. However, it is possible to pivot the jointed parts of the bracelet with respect to one another against the action of said springs, so as to move the ends of the bracelet away from each other, and thus to permit of putting on or removing said bracelet, which is not possible in the case of rigid annular split bracelets.

Such a bracelet can be fitted exactly to the size of the wrist or ankle, without involving any difficulty for putting on or removing said bracelet.

In a preferred embodiment of the present invention, the articulations connecting together the parts of the bracelet are provided, on one of the knuckles, with a cam associated with a spring, in such manner that the whole of the cams and springs of the various parts of the bracelet is adapted to bring them back elastically into relative positions which are well determined, whereby the bracelet is given a rigid appearance.

The parts of the bracelet may be interconnected by binding means located on the outside and having, for instance, the shape of a portion of a ring, said binding means being pivoted at their ends to the adjacent parts of the bracelet. These binding elements extend through notches of the bracelet parts and the edges of these notches form abutments determining, on the one hand, the shape of the bracelet in the position of rest, and, on the other hand, its maximum deformation when it is desired to put it on or to remove it.

The two last mentioned features can be combined together by mounting the cams on the knuckles rigid with the binding elements and the springs on the bracelet parts connected together by said binding means.

Other features of the present invention will result from the following detailed description of some specific embodiments thereof.

Preferred embodiments of the present invention will be hereinafter described with reference to the accompanying drawing, given merely by way of example, and in which:

Fig. 1 diagrammatically shows one embodiment

of the bracelet according to the invention, seen in projection on a plane at right angles to the axis of articulation of the parts;

Fig. 2 is a perspective view of the bracelet of Fig. 1, in the position of rest;

Fig. 3 is an other perspective view showing the bracelet in the expanded position;

Fig. 4 is a front view of the bracelet of Fig. 1;

Fig. 5 is a detail view showing, on an enlarged scale, a joint of the bracket, seen from the inside thereof;

Fig. 6 shows one of the binding elements, seen separately;

Fig. 7 is a view of the bracelet of Fig. 1 on an enlarged scale, partly in section by a plane at right angles to the pivoting axes, the bracelet being expanded so as to permit of putting it on or removing it.

In the embodiment of the invention shown in the drawing, the bracelet consists of a plurality of elements 21, 21', 22, 22', 23, 23', 24, 24', etc., jointed together. Elements 21, 22, 23, 24 are the main elements, whereas elements 21', 22', 23', 24' constitute binding means between the main elements. In the example shown by the drawing, these binding means have been given the shape of portions of annular members, the ends of which, fitted with knuckles, are engaged inside the main elements by passing through apertures 25 provided in said main elements. The knuckles of the binding means are assembled to knuckles 29 of the main elements by means of spindles 28 and each of them carries a cam 30 (see especially Figs. 5, 6, and 7). These cams bear against the ends of spring blades 31, fixed at 32, in their middle part, to the main elements.

Considering, for instance, in Fig. 7, the two main elements 23 and 24 and the binding element 23' through which they are connected together, it is clear that springs 31, the ends of which bear against the cams 30 of this binding element, tend to cause elements 23 and 24 to pivot in the directions of arrows *f* and *f'*, respectively. In the position illustrated by Fig. 7, the bracelet is shown as expanded to the maximum, a result which is obtained by moving the ends *a* and *b* away from each other, as shown by Fig. 12, for putting it on or removing it. The deformation is limited by the fact that binding element 23', for instance, comes to bear against the edges *c* and *d* of the apertures 25 of elements 23 and 24. If the bracelet is released, springs 31 produce the displacement of elements 23 and 24 in the direction of arrows *f*, *f'* and the bracelet comes back into its position of rest shown by Fig. 2, in which

binding element 23', taken by way of example, comes to bear, under the action of the springs, against the edges *e, g* of the apertures 25.

Of course, the above described embodiment has been given merely by way of example, and it might be modified, for instance by changing the number of elements or of springs, their arrangement or that of the hinges, and so on, without departing from the principle of the invention. The spring blades might be replaced by spiral coils or again by torsional springs constituted for instance by the hinge pins themselves, which would then be fixed at one point to one of the elements and at another point to the adjacent element.

The springs acting upon the cams can be arranged in many other manners than that above described. For instance, I might provide two springs for each main element. These springs would be disposed parallelly to axes 28 and their ends would be fixed to the opposed knuckles 29 of the same hinge, whereby such a spring would work through its central part bearing against the corresponding cam 30.

Furthermore, instead of being constituted by the edges of the apertures 25 of the main elements, the stops limiting the relative displacements of the elements might be carried by the knuckles. These stops, movable in rotation together with the knuckles, would cooperate with fixed projections limiting the rotation.

In the embodiment described, the fixed knuckles 29 of the main elements are secured to these elements by means of lugs 35 soldered to said elements. This arrangement permits of obtaining a good resistance to the stresses supported by said knuckles, but the invention is not in any way limited to this particular arrangement.

If a watch is carried by one of the elements of the bracelet, the latter constitutes a wrist watch the fixation of which to the arm is both simple and original.

Of course, the idea of dividing an annular structure into a plurality of jointed elements provided with return springs can, according to the present invention, be applied to collars or other jewels or ornaments.

In a general manner, while I have, in the above description, disclosed what I deem to be a practical and efficient embodiment of the present invention, it should be well understood that I do not wish to be limited thereto as there might be changes made in the arrangement, disposition and form of the parts without departing from the principle of the present invention as comprehended within the scope of the appended claims.

What I claim is:

1. A jewel, and especially a bracelet, which comprises, in combination, a series of elements pivotally connected to one another about parallel axes so as to form a jointed band, cooperating stops formed on the surfaces of the respective elements arranged in such manner that, when said stops are in contact respectively, the whole of said elements assumes the general shape of a split annular structure which can be opened by forcing the ends thereof away from each other, a spring carried by at least some of said elements, and cams carried by said elements adapted to cooperate with said springs for urging said respective stops against one another.

2. A jewel, and especially a bracelet, which comprises, in combination, a series of main elements, a series of binding elements each interposed between two main elements, hinge joints between each main element and the adjacent binding elements, respectively, each of said joints including cooperating knuckles carried by said main element and each of said binding elements respectively, cooperating stops carried by the respective elements arranged in such manner that, when said stops are in contact respectively, the whole of said elements assumes the general shape of a split annular structure which can be opened by forcing the ends thereof away from each other, a spring carried by each of said main elements, and cams carried by said binding elements adapted to cooperate with said springs for urging said respective stops against one another.

3. A jewel, and especially a bracelet, which comprises, in combination, a series of main elements, a series of binding elements each interposed between two main elements, hinge joints between each main element and the adjacent binding elements, respectively, each of said joints including cooperating knuckles carried by said main element and each of said binding elements, respectively, cooperating stops carried by the respective elements arranged in such manner that, when said stops are in contact respectively, the whole of said elements forms a structure having the general shape of a split annulus, which structure can be opened by forcing the ends thereof from each other, a spring blade fixed in its middle part to each of said main elements, and cams carried by the knuckles of said binding elements adapted to cooperate with the respective ends of said blades for urging said respective stops toward each other.

4. A jewel according to claim 3 in which said main elements are provided with apertures and said binding elements extend through said apertures, said stops consisting, for said main elements, of the edges of said apertures.

5. A jewel according to claim 3 in which said main elements are provided with apertures and said binding elements extend through said apertures, said stops consisting, for said main elements, of the edges of said apertures, all said knuckles, cams, and springs being located on the inner sides of said respective elements.

6. A jewel, and especially a bracelet, which comprises, in combination, a series of main elements spaced apart and provided in their adjacent ends with openings, a bowed binding element extending through the openings of adjacent main elements and terminating in camming members rigid with the ends of each binding element, and leaf springs carried by each main element and bearing against the camming members of the binding elements to normally impel the main and binding elements into substantially annular sequence.

7. A jewel, and especially a bracelet, which comprises, in combination, a series of main elements, a connection unit between each two adjacent main elements and pivoted to both of them, a cam for each adjacent element and rigid with each unit, and a leaf spring carried by each main element and bearing against the corresponding cams of the two adjacent units.

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