United States Patent

Axisa

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[54] **BRACELETS AND THE LIKE**

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[52] **U.S. Cl.** .....**24/206**, 24/230 AL

[51] **Int. Cl.** **A44b 17/00**, A44b 11/25

[58] **Field of Search** .....24/230 SL, 230 AP, 230 AL, 24/230 AN, 230 R, 206, 194, 163

[56] **References Cited**

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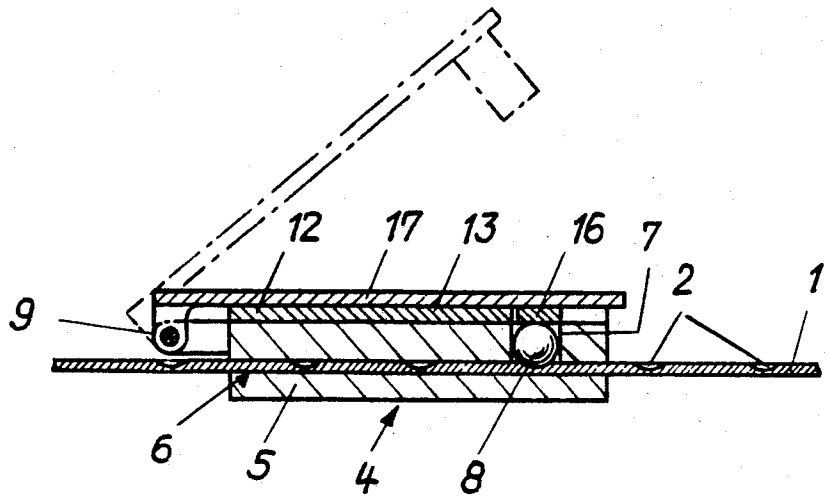
Primary Examiner—Bernard A. Gelak

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[57] **ABSTRACT**

A bracelet comprises a flexible blade having recesses spaced therealong, a sheath slidably receiving the blade, and a clasp at a blade-receiving end of the sheath. A member incorporating a spring is slidably mounted on the clasp body between a position in which a ball is locked in a recess of the blade by the member, and a position in which the ball can be moved out of a recess by deformation of the spring.

5 Claims, 4 Drawing Figures



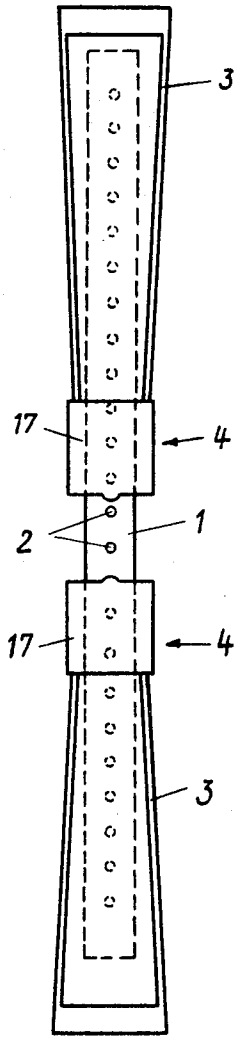
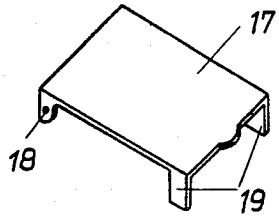


Fig. 1



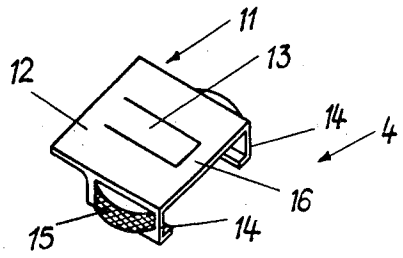
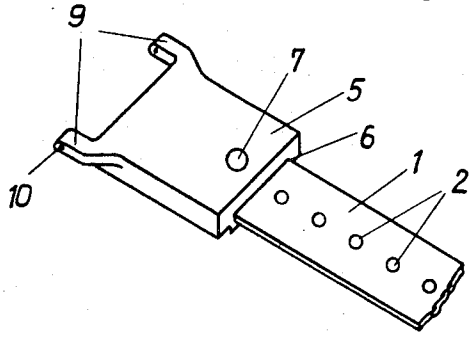


Fig. 2



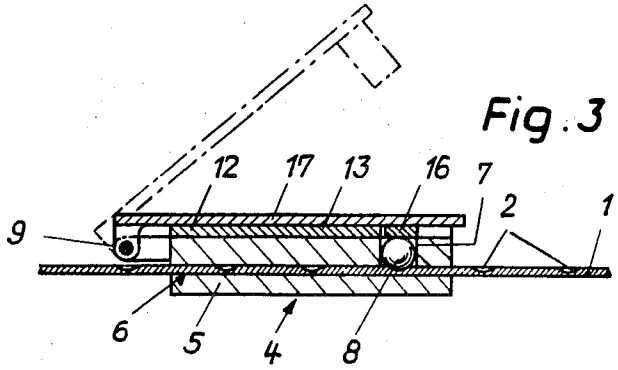


Fig. 3

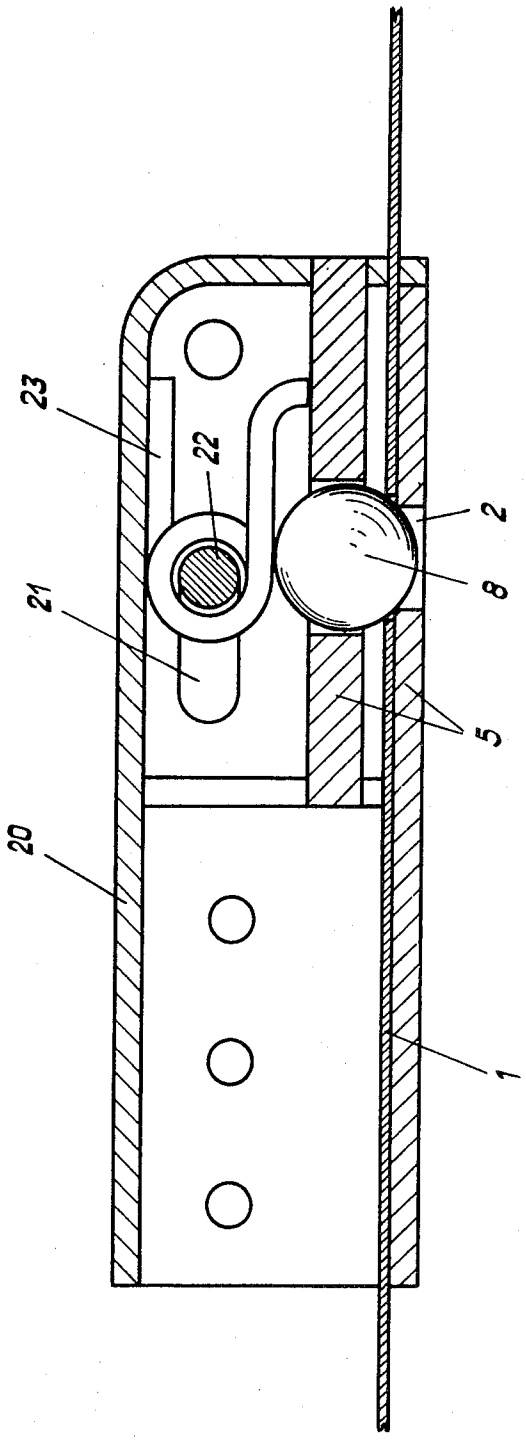


Fig. 4

BRACELETS AND THE LIKE

This invention relates to length-adjustable bracelets, loops, belts, collars, or straps, and other similar bands, all of these items being hereinafter denoted by the term "bracelets". The invention is particularlly, but not exclusively, concerned with strap-like wrist watch bracelets as opposed to watch bracelets of the elastically extensible type.

According to the invention, there is provided a bracelet comprising a flexible blade having a plurality of longitudinally spaced recesses, a sheath slidably receiving the blade, and a clasp secured at a blade-receiving end of the sheath, said clasp comprising: a body having a slot for passage of the blade; a housing in the body for a ball adapted to cooperate with the recesses in the blade; and a member incorporating a spring being slidably mounted on the body between a first position in which the ball bears against the spring and allows movement of the blade relative to the sheath and clasp by deformation of the spring, and a second position in which the member holds the ball in a recess in the blade to lock the blade-relative to the sheath and clasp.

Preferably, the clasp also comprises a safety closure piece mounted on the body for movement between an open position in which the member can be slid to its first position and a closed position in which the member is held in its second position.

The invention will now be described, by way of example, with reference to the accompanying drawings, in which :

FIG. 1 is a plan view of a watch bracelet according to the invention;

FIG. 2 is an exploded perspective view of a clasp for the bracelet of FIG. 1;

FIG. 3 is a longitudinal cross-section through such a clasp member when assembled; and

FIG. 4 is a cross-section through a varied form of clasp member.

The watch bracelet shown in FIG. 1 comprises a flexible blade 1 comprising a series of hollows 2 disposed centrally along one face thereof, and two sheaths 3 having central longitudinal housings in which ends of the blade 1 are slidably received. The sheaths 3 are also flexible in a direction perpendicular to the plane of FIG. 1 and are preferably non-extensible or only slightly longitudinally extensible. Two clasps 4 are attached to the adjacent blade-receiving ends of the sheaths 3 by any suitable fixture means, not shown.

Each clasp 4 comprises a body 5 having a slot 6 for passage of the blade 1 and a hole 7 forming a housing for a ball 8 adapted to cooperate with the hollows 2 in blade 1. Body 5 has a pair of projecting feet 9 pierced with transversal holes 10. A member 11 having edges 14 shaped to closely fit around the body 5 is slidably mounted along the body. The edges 14 have knurled protrusions 15 to facilitate gripping of the member 11 by the hand. The upper or principal face of the member 11 is cut so that a central tongue portion 13 forms a resilient blade spring the free end of which is adjacent an end part 16 rigid with the main part of member 11.

In the position of the member 11 on the body 5 as shown in FIG. 3, the ball 8 is engaged in a hollow 2 of the blade 1 and is prevented from moving up and out of this hollow by the end part 16 of member 11 which is disposed exactly over the hole 7. The contact of the ball 8 and part 16 tends to hold the member 11 fixed on the body 5, and the body 5 fixed relative to the blade 1. By sliding the member 11 along the body 5 towards the right of FIG. 3, the free end of the spring portion 13 of member 11 is located over the hole 7 and ball 8, so that it is possible to move the blade 1 relative to the body 5, the ball 8 jumping from one hollow to the next by moving in its hole 7 with deformation of the spring 13.

Each clasp 4 further comprises a safety closure piece 17 pivotally mounted by its feet 18 and pins cooperating with the holes 10 of body 5. Further feet 19 of the piece 17 serve to elastically grip the edges 14 of the member 11 when the piece is closed on the member, in the position represented in full lines in FIG. 3, the feet 19 fitting over the right hand side of projections 15, looking at FIG. 2. In this closed position, the closure piece 17 prevents any movement of the member 11 in relation to the body 5, so that the ball 8 remains firmly engaged in a hollow 2 and the blade 1 cannot be moved in relation to the body 5. However, when the closure piece 17 is pivoted to its open position shown in dotted-dashed lines in FIG. 3, it is possible to slide the member in relation to the body 5 to bring the spring portion 13 over the hole 7 and ball 8 in which position the blade 1 can be moved relative to the body 5 to permit adjustment of the length of the bracelet.

It is thus possible to adjust the bracelet to a desired length by setting the position of each of the clasps 4 on the blade 1, and to firmly lock the bracelet with the desired length.

It should be noted that when the member 11 is in the length adjusting position, the closure piece 17 cannot be closed because the feet 19 would abut against the projections 15 on member 11. In the closed position of piece 20, abutment of the feet 19 and projections 15 ensures that the member 11 is held in the clasp locking position.

In the variant of FIG. 4, a safety closure piece 20 analogous to the piece 17 of FIGS. 1 to 3, is fixed to the body 5 which has on either side a slot 21 in which is slidably mounted a transversal pin 22 carrying a spring 23, the pin 22 and spring 23 forming a slidable member. In the position shown, a non-deformable part of the spring 23 adjacent the pin 22 bears against the ball 8, so that the spring cannot allow movement of the ball 8 in its housing, but to the contrary holds the ball 8 firmly in a hole 2 in the blade 1. If the pin 22 is pushed to the left hand end of the slots 21 by gripping on protruding ends of the pin 22, the free end of the spring 23 comes to bear against the ball 8 so that by pulling the blade 1 relative to the body 5, the ball 8 can be moved out of the hole 2 by deformation of the spring 23.

The pin 22 is preferably constantly urged from the left to the right of slots 21 (looking at FIG. 4) by means of a spring or similar; this function can be performed by spring 23. Alternatively, or additionally, it would be possible to provide a safety catch or closure device to releasably lock the pin 22 in the ball-locking position, i.e. at the right hand end of the slots 21, as shown.

Either of the types of clasps shown in FIGS. 2 and 3 and FIG. 4, can be incorporated in a bracelet of the type shown in FIG. 1 having two sheaths 3 each with a clasp 4 at the blade-receiving end thereof and, possibly, means such as a transversal pin hole for attaching the

non-blade receiving ends to a watch. Alternatively, a bracelet could be provided with a single sheath having two blade-receiving ends each provided with a clasp.

What is claimed is:

1. A bracelet (as hereinbefore defined) comprising a flexible blade having a plurality of longitudinally spaced recesses, a sheath slidably receiving the blade, and a clasp comprising: a body having a slot for passage of the blade; housing in the body for a ball adapted to cooperate with the recesses in the blade; and a member incorporating a spring being slidably mounted on the body between a first position in which the ball bears against the spring and allows movement of the blade relative to the sheath and clasp by deformation of the spring, and a second position in which the member holds the ball in a recess in the blade to lock the blade relative to the sheath and clasp.

2. A bracelet as claimed in claim 1, in which the clasp also comprises a safety closure piece mounted on the body for movement between an open position in which the member can be slid to its first position and a closed position in which the member is held in its second position.

3. A bracelet as claimed in claim 2, comprising two sheaths, each sheath having a clasp at a blade-receiving end thereof.

4. A bracelet as claimed in claim 3, comprising means at the non-blade receiving ends of the sheaths for fixing the bracelet to a watch.

5. A bracelet as claimed in claim 2, comprising a single sheath having tow blade-receiving ends.

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