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E. KEHRER

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CLOSING BUCKLES FOR FLEXIBLE ATTACHMENTS

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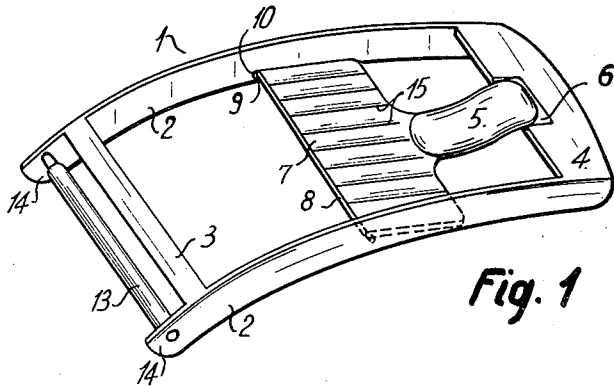


Fig. 1

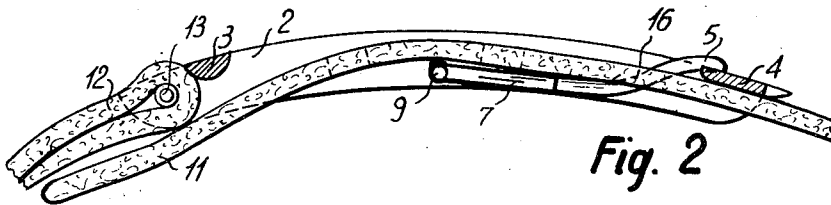


Fig. 2

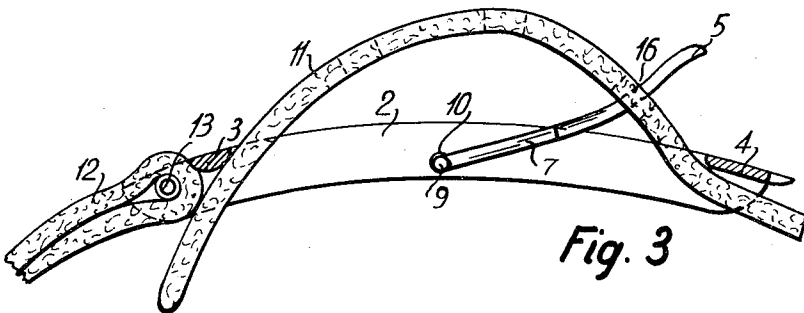


Fig. 3

INVENTOR  
EDMOND KEHRER

BY

Emory L. Droff  
ATTORNEY

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**CLOSING BUCKLES FOR FLEXIBLE ATTACHMENTS**

Edmond Kehrer, 9 Jardinetés, La Chaux-de-Fonds, Switzerland

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1 Claim. (Cl. 24—178)

The present invention has for its object a closing buckle for flexible attachment, particularly for a watch bracelet, comprising a frame in the central part of which is hinged a tongue, of which the end is adapted to bear against one of the transverse sides of the frame.

Closure buckles of the type indicated above are already known and are used particularly for belts. However, in the case of these known buckles, one of the ends of the flexible attachment of which it forms part, is hooked directly to the transverse side of the frame of the buckle opposed to that against which the tongue bears. For this reason, this side of the frame is hidden by the end of the attachment and the frame is no longer visible completely. For this reason the aesthetic aspect of the closing buckle has disappeared, which is very prejudicial in the case of the application of the closing buckle of this type to a watch or to a lace closure of elegant shoes.

The closing buckle according to the invention has for its object to remedy this disadvantage. It is characterized by the fact that it comprises a hinge bar for the attachment of one of the limbs of the bracelet, this bar being disposed in proximity to the transverse side of the frame opposite that against which the tongue bears, a sufficient space remaining between the transverse side of the frame and the axis of the tongue so as to permit of introducing into the same, the free end of the other end of the bracelet band so as to cover it underneath the closed bracelet.

One form of construction of the closing buckle according to the invention is illustrated, diagrammatically and by way of example in the accompanying drawings, wherein:

FIG. 1 is a view in perspective of a buckle not provided with the lace limbs forming the attachment.

FIG. 2 is a side view, partly broken away, of the closing buckle showing the flexible attachment of which it forms part in the closed position.

FIG. 3 is a view similar to the preceding one, showing the buckle in the course of its closing or opening phase.

This closing buckle for flexible attachment, particularly for a watch bracelet, comprises a frame 1 formed by two vertically slightly arched longitudinal sides 2 and a transverse flat, narrow, horizontal end wall 3 and a transverse flat horizontal end wall 4, both of which are flush with the upper edges of the sides 2—2. In the central portion of the frame 1 is hinged a tongue 5 of which the end is adapted to bear against the transverse side 4 of the frame 1, in a recess 6 provided for this purpose in the transverse side 4. As shown in FIG. 1, the tongue 5 is carried by a plate 7 hinged by its edge 8 to medial portions of the sides 2—2 of the frame 1. The edge 8 is opposite the edge from which the tongue 5 projects. In fact, the rear corners of the edge 8 of this plate 7 has extensions 9 forming a trunnion, which are engaged in blind holes 10 provided in the longitudinal sides 2 of the frame 1. These blind holes 10 are displaced towards the interior of the bracelet at the longitudinal sides 2 of the frame 1, in such a manner that the hinge axis of the plate 7 is displaced towards the wrist carrying the bracelet, in such a manner as to permit of the effacement of the free end of the limb 11 of the flexible bracelet band 12 in the thickness of the frame 1.

As will be seen in the drawing, the other end of the flexible band 12 is hooked to a hinge bar 13 disposed

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in proximity to the transverse side 3 of the frame 1 opposed to that against which the tongue 4 bears. In the example shown, said bar 13 is disposed on the outside of the transverse sides 3 and 4 of the frame 1, on extensions 14 of the longitudinal sides 2 of the frame. Preferably this bar 13 is of the removable type, to permit of an easy replacement of the bracelet 12, after wear thereof.

It is advantageous to form ribs 15 on the plate 7, in view of its reinforcement.

The utilization of a closing buckle such as that described above with reference to the drawing, is effected in the following manner:

After having wound the bracelet 12 around the wrist, it suffices to engage the free end or limb 11 of this bracelet 12 under the transverse side 4 of the frame 1, in the usual manner and to retain this end 11 in engagement with the tongue 5 in a hole 16 of this bracelet, at the desired size. Then, the end of the limb 11 is slid into the sufficient space remaining between the transverse side 3 of the frame 1 and the axis of the tongue 5 itself constituted by the edge 8 of the plate 7. In the case of the application of this closing loop to a bracelet, this engagement of the free end of the limb 11 of the bracelet 12 is rendered particularly easy by reason of the presence of a recess in the lower face of the wrists of the majority of persons. Once the limb 11 has engaged completely under the transverse side 3 and the corresponding end of the bracelet 12, the said limb disappears into the thickness of the frame 1 and particularly into the thickness of the longitudinal side 2 of the frame, as shown in FIG. 2.

Such a closing loop thus permits of extra flat realization of a bracelet closure. However, it will be understood that the advantages of such a closing buckle may be found in any other field of application, particularly in the field of belts or laces for elegant shoes.

Numerous modifications of this closing buckle may be contemplated, according to the application for which they are adapted. Thus, in the case of a belt, it is not absolutely necessary to provide longitudinal sides 2 of arcuate shape. These may equally well be rectilinear. As regards the transverse sides 3 and 4, they may have any imaginable decorative shapes. Thus, it is possible to dispose the bar 13 under the transverse side 3, so that this covers the corresponding end of the bracelet 12. However, when it is desired to have an extra flat construction of the closing buckle, it is advantageous to displace the axis of the bar 13 towards the outer face of the bracelet, in such a manner as to facilitate the engagement of the free limb 11 under the end of the bracelet 12 hooked to the bar 13.

As regards the plate 7, this is not absolutely indispensable and may be replaced by an ordinary simple hinge axis. However, its presence is advantageous, on the one hand, to permit of diminishing to the greatest extent, the thickness of the hinge axis of the tongue 5 and, on the other hand, for serving to guide the free limb 11 of the bracelet 12.

Another advantage of the closing loop described above resides in the fact that it permits of the suppression of the necessary fixed loops of all the belts or bracelets of usual manufacture, from which results an increased durability of the flexible attachment. In fact, particularly in a leather bracelet, the first slide is sewn. For this reason, the introduction of the free limb of the attachment in the slide, not only damages this but also the bracelet.

I claim:

In a buckle for watch brackets, the combination comprising,  
a flexible band,  
an integrated frame including opposite parallel vertical longitudinally disposed side walls whose outer edge portions are connected by integral transverse right

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angularly and horizontally disposed narrow and wide end walls having flat faces disposed flush with the plane of the said outer edge portions of the longitudinally disposed interconnected side walls, said horizontally disposed wide end wall having a medially disposed recess, 5  
 said narrow end wall spaced inwardly of the related terminal portions of the side walls,  
 a bracelet band hinge bar having its ends secured to the side walls between and below the terminal portions thereof and below the narrow end wall, 10  
 and also having one end of said flexible band looped thereabout adjacent said end wall, whereby, said hinge bar is concealed but exposing said narrow end wall, 15  
 and a plate having one edge pivoted at opposite corners to the side walls adjacent their lower edges between the wide and narrow horizontal end walls,

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and a tongue extending angularly upwardly and outwardly from the edge of the plate opposite the hinged edge to provide a free extremity to fit in said recess, and  
 whereby, when the bracelet is in use and the lead end of said band is fitted beneath the wide horizontal end wall, its free end after engagement with said tongue will pass under the narrow horizontal end wall beneath the band material on the hinge bar to expose only the narrow end wall, the edges of the side walls, and the end portion of the tongue lying in said recess.

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UNITED STATES PATENT OFFICE  
CERTIFICATE OF CORRECTION

Patent No. 3,036,352

May 29, 1962

Edmond Kehrer

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 2, line 67, for "brackets" read -- bracelets --.

Signed and sealed this 11th day of September 1962.

(SEAL)

Attest:

ERNEST W. SWIDER  
Attesting Officer

DAVID L. LADD  
Commissioner of Patents