

BUCKLE FOR WATCHBAND

The present invention relates to a buckle for watchband and more particularly to a snap buckle for watchband.

Generally, a watchband of precious metal is fastened with a snap buckle. A prior-art snap buckle has a structure in which a buckle lower plate and a buckle upper plate are joined by a hinge, one end of the buckle lower plate is pinned to an end of one watchband, an end of the other watchband is pinned to a hold-down framework having a hold-down pin, the buckle upper plate is folded over the buckle lower plate so that a hook provided on the buckle upper plate seizes the hold-down pin, and a hold-down claw provided on the buckle upper plate snaps an element provided on the buckle lower plate.

However, the prior-art snap buckle has a drawback that the front end of the buckle upper plate tends to stand up to project upwards from the outer surface of the watchband and this front end hits possible surroundings to open the buckle upper plate to slacken the watchband so that a wristwatch is liable to fall. In addition, a very expensive wristwatch having an ornamental precious metal and/or jewels or precious stones is often worn so that the watchband is moderately long. In this case, the snap buckle rarely inadvertently rotates about a pivot to stand up, which may injure the edge of a sleeve of a suit or a dress, an own arm or the body of another person.

Therefore, an object of the present invention is to provide a buckle for watchband which overcomes the drawback in the prior-art buckle for watchband and prevents an inadvertent rotation about a pivot, i.e., a standing up.

In order to achieve the object, the present invention provides a buckle for watchband in which one end of a buckle lower plate is pivotably mounted to an end of a first watchband half, and a buckle upper plate is pivotably mounted to the other end of the buckle lower plate so as to be foldable over the buckle lower plate, the interior surface of the buckle upper plate having a hook, and a hold-down framework is pivotally mounted to an end of a second watchband half and has a pin extending in the direction of the width of the buckle for watchband, the buckle for watchband being characterized in that a central part of the pin of the hold-down framework has a detent projecting toward the first watchband half and preventing the buckle upper plate from an inadvertent swing.

In setting up the buckle for watchband, a user causes the hook of the buckle upper plate attached to the first watchband half to seize the pin of the hold-down framework attached to the second watchband half. He then folds the buckle upper plate over the buckle lower plate. Thereby, the detent is disposed between and along to the buckle upper plate and the buckle lower plate and prevents the buckle upper plate from the inadvertent swing. Thus, the present invention can protect the edge of a sleeve of a suit or a dress and the own body or the body of another person from being injured due to the inadvertent swing.

In the accompanying drawings;

FIG.1A and FIG.1B are a perspective view of a snap buckle for watchband according to a first embodiment of the present invention;

FIG.2 is a perspective view of the interiors of a buckle upper plate and the buckle lower plate;

FIG.3 is a sectional side elevation a snap buckle in operating position; and

FIG.4 is a perspective view of a snap buckle for watchband according to a second embodiment of the present invention having a modified safety plate.

Embodiments of the present invention will be described with reference to the drawings hereinafter.

In FIGS.1 and 3, a first watchband half extending from a part of a peripheral case of a wristwatch adjacent the position of the numeral of 6 on a dial is indicated at 1. The front end of the first watchband half 1 has a joint 2 joined by a pivot 3 thereto. The joint 2 comprises a pair of side arms 4, 4 extending along the longitudinal axis of the first watchband half 1. The front ends of the side arms 4, 4 are joined by a pivot 5 to a buckle lower plate 6. The other or free end of the buckle lower plate 6 is joined by a hinge pin or pivot 8 to one end of a buckle upper plate 7. The buckle upper plate 7 is foldable over the buckle lower plate 6 about the pivot 8.

The interior surface of the buckle upper plate 7 has hooks 9 extending therefrom and having an L-shaped section. Each of the hooks 9 has a bent portion or flange 9a projecting toward the free end of the buckle upper plate 7. The interior surface of a part adjoining the free end of the buckle upper plate 7 has a pair of snap hooks 10, 10 extending therefrom. The snap hooks 10, 10 are spaced transversely to the longitudinal axis of the buckle upper plate 7 at the opposite ends of the width of the buckle upper plate 7. As best shown in FIG.2, the back surface of each snap hook 10 has a snapping recess having an inner cylindrical surface. On the other hand, the interior surface of a free end of the buckle lower plate 6 has a pair of cylindrical snapping projection 11, 11 spaced transversely to the longitudinal axis of the buckle lower plate 6 at the opposite ends of the width of the buckle lower plate 6.

In the operation of the snap buckle, the snap hooks 10, 10 of the buckle upper plate 7 snap the projections 11, 11 of the buckle lower plate 6.

As shown in FIG.2, a safety plate 12 is hinged by a pivot 13 to the interior surface of a part adjoining the pivotal end of the buckle upper plate 7 adjacent the pivot 8. The safety plate 12 extends toward the free end of the buckle upper plate 7. A buckle upper plate side surface of the free end of the safety plate 12 has a snap hook 14 which snaps a groove 15 defined in a bridge between the snap hooks 10, 10 when the snap buckle operates.

In FIG.1 and 3, a second watchband half extending from a part of the peripheral case of the wristwatch adjacent the position of the numeral of 12 on the dial is indicated at 16. The front end of the second watchband half 16 has a hold-down framework 17 joined by a pivot 18 thereto. The hold-down framework 17 comprises a pair of side arms 19, 19 extending along the second watchband half 16. The front ends of the side arms 19, 19 have a pin 20 spanned therebetween and fastened thereto. The center of the pin 20 has a detent 21 fixed thereto and extending forwards in the direction of the longitudinal axis of the hold-down framework 17.

In operation, a user wears the watchband of the wristwatch in the released position on the wrist. The user opens the buckle upper plate 7 and then releases the snap hook 14 of the safety plate 12 from the groove 15. The user then inserts the buckle upper plate 7 into a spacing between the side arms 19, 19 of the hold-down framework 17 upwards from below the hold-down framework 17, then engages the pin 20 having the detent 21 with the hooks 9, then descends the safety plate 12 and inserts the snap hook 14 into the groove 15.

The user then folds the buckle upper plate 7 over the buckle lower plate 6 and causes the snap hooks 10, 10 to snap the projections 11, 11 of the buckle lower plate

6. Thus, the detent 21 is disposed between and along the buckle lower plate 6 and the buckle upper plate 7, as shown in FIG.3, to prevent the buckle upper plate 7 from an inadvertent standing up.

In the first embodiment, the safety plate 12 has the form of a web having a uniform width. In releasing (i.e. swinging upward) the buckle upper plate 7, the detent 21 lifted together with the pin 20 often pushes down the safety plate 12 to inadvertently disengage the snap hook 14 from the groove 15.

In order to eliminate this inadvertence, a snap buckle for watchband according to a second embodiment of the present invention is provided.

FIG.4 shows this snap buckle for watchband having a modified safety plate 22. This snap buckle for watchband has the same structure as the snap buckle according to the first embodiment except the structure of the safety plate 22. The safety plate 22 comprises a base end 22a with a reduced width, an intermediate 22c having the full width of the safety plate 22, and a front end 22b with a reduced width. The intermediate 22c has a rectangular window 23.

In the second embodiment, releasing the buckle upper plate 7 lifts the pin 20 and the detent 21 so that the detent 21 stands up, the detent 21 passes through the window 23. This prevents the detent 21 from inadvertently pushing down the safety plate 12.

In the embodiments described above, the block-shaped detent 21 is fastened to the pin 20. However, the present invention is not restricted to this structure. For example, the center of the pin 20 may be bent in a rectangular form projecting forward.



CLAIMS

1. A buckle for watchband in which one end of a buckle lower plate is pivotably mounted to an end of a first watchband half, and a buckle upper plate is pivotably mounted to the other end of the buckle lower plate so as to be foldable over the buckle lower plate, the interior surface of the buckle upper plate having a hook, and a hold-down framework is pivotally mounted to an end of a second watchband half and has a pin extending in the direction of the width of the buckle for watchband, characterised in that a central part of the pin of the hold-down framework has a detent projecting toward the first watchband half and preventing the buckle upper plate from an inadvertent swing.
2. A buckle for a watchband, substantially as hereinbefore described with reference to and as illustrated in figures 1 to 3 or figure 4 of the accompanying drawings.