

Feb. 4, 1969

KIYISHI MOCHIZUKI

3,425,104

BAND FIXING DEVICE

Filed Feb. 29, 1968

Fig. 1.

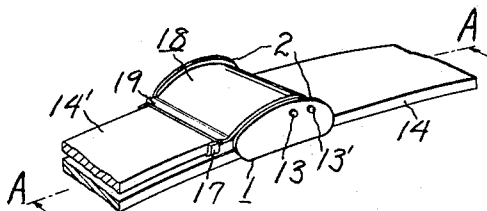


Fig. 4.

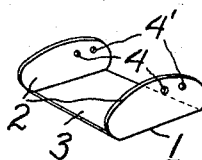


Fig. 5.

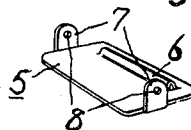


Fig. 2.

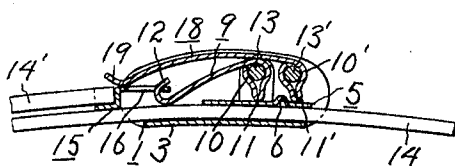


Fig. 6.

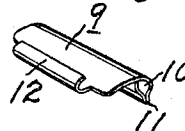


Fig. 7.

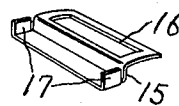


Fig. 3.

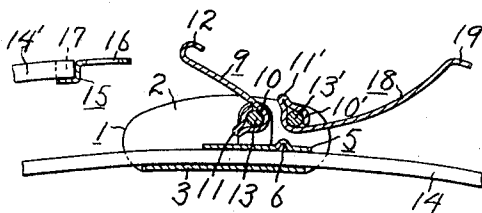
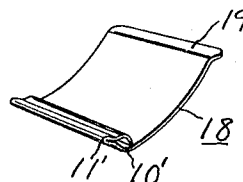


Fig. 8.



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3,425,104

BAND FIXING DEVICE

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Int. Cl. A44b 11/25, 11/12; A44c 5/18

1 Claim

ABSTRACT OF THE DISCLOSURE

A band fixing device consisting of a base frame, a pressing plate, a locking member, an eye member, a locking cover and two coupling shafts, all of the component members except said shafts being preferably made of resilient sheet metal, said pressing plate and said locking member being mounted on said base frame with one of said shafts, said pressing plate being held apart from said base frame for permitting insertion of one part of a band, said locking member serving to press said pressing plate, said eye member serving to fasten another part of said band and to engage said locking member, and said locking cover being mounted on said base frame with another of said shafts and serving to press said pressing plate and to cover the fixing mechanism of said device.

The present invention relates to band fixing devices, and particularly devices for fixing a wrist watch band to an arm.

A band fixing device according to the invention provides the following features and advantages:

(1) Said band fixing device consists of five component members and two coupling shafts, all of said members being preferably made of resilient sheet metal, and can be easily assembled.

(2) By means of said device a wrist watch can be easily fixed to an arm and easily released from said arm.

(3) The fixation of said wrist watch is firm and steady, a free end part of a wrist watch band being pressed to a base frame of said device by two locking members through a pressing plate.

(4) The fixing mechanism of said device is concealed by a locking cover, thereby affording a good appearance.

Other features and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing:

FIG. 1 is a perspective view of a band fixing device according to the invention, which is in use;

FIG. 2 is a sectional enlarged elevation of said device taken along a line A—A in FIG. 1;

FIG. 3 is a sectional elevation of said device in a state which is different from the above;

FIG. 4, FIG. 5, FIG. 6, FIG. 7 and FIG. 8 are perspective views of a base frame, a pressing plate, a locking member, an eye member and a locking cover, respectively.

The preferred embodiment of the invention shown in the drawing consists of a base frame 1, a pressing plate 5, a locking member 9, an eye member 15, a locking cover 18 and two coupling shafts 13 and 13', all of them except said shafts being preferably made of sheet metal.

The base frame 1 is U-shaped as shown in FIG. 4 and has nearly-semicircular upright portions 2 at both ends of its base portion 3, each of which portions is provided with an inside shaft-receiving hole 4 and an outside shaft-receiving hole 4' at its upper right part.

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As shown in FIG. 5 the pressing plate 5 is rectangular and smaller than the base frame 1, especially in lateral width (FIG. 3). Said plate is provided with a long upheaval 6 along its right longitudinal edge, and opposing upright ears 7 at its lateral edges, respectively, each of said ears having a second shaft-receiving hole 8.

The locking member 9 is shaped as shown in FIG. 6 and its rectangular end portion is downwardly folded to form a shaft-passing sleeve 10 and a wide projection 11 serving to press the plate 5 down, a left shortened end portion of said member being upwardly folded to form a hook 12.

As shown in FIG. 3, inserted through the sleeve 10 is the coupling shaft 13, both slender ends of which respectively pass through the second shaft-receiving holes 8 of the pressing plate 5 and are rigidly secured to the end portions 2 of the base frame 1 passing through the inside shaft-receiving holes 4, whereby said plate is held apart from the base portion 3 of said base frame for permitting insertion of a free end part of a wrist watch band 14.

The eye member 15 is of rectangular crooked shape as shown in FIG. 7. Its upper right portion is provided with a rectangular large hole forming an eye 16 to engage the hook 12 of the locking member 9, the lower left portion of said eye member having upright ears 17 at its end parts, respectively, which serves to fasten another free end part 14' of said band.

The rectangular locking cover 18 is convexly shaped as shown in FIG. 8 which illustrates its reverse side. The right end portion 19 of said cover is downwardly bent and the left end portion thereof is upwardly folded to form a shaft-passing sleeve 10' and a wide projection 11' serving to press the pressing plate down.

The coupling shaft 13' is inserted through the sleeve 10' and both slender ends of said shaft are rigidly secured to the end portions 2 of the base frame 1 passing through the outside shaft-receiving holes 4' as shown in FIG. 3.

The band fixing device is thus assembled and its operation is as follows:

As shown in FIG. 3 a free end part of the wrist watch band, for example of leather, 14, two parts of which are respectively secured to both sides of a wrist watch, is passed between the base portion 3 of the base frame 1 and the pressing plate 5, and another end part 14' of said band is rigidly secured to the lower portion having the ears 17 of the eye member 15. After engaging the eye portion 16 of said eye member with the hook 12 of the locking member 9, said locking member is turned in the left-hand direction about the shaft 13 as shown in FIG. 2, then the wide projection 11 of said locking member presses the pressing plate 5 down, and said plate presses the band part 14 to the base portion 3 of the base frame 1, thereby said band part being locked.

Next, the locking cover 18 is turned in the left-hand direction about the shaft 13' until the bent portion 19 touches the eye portion 16, then the wide projection 11' presses the pressing plate 5 down after crossing over the upheaval 6, whereby the band part 14 is more firmly locked, thus the band consisting of the two parts 14 and 14' together with the wrist watch is firmly fixed to an arm, and the fixing mechanism of said device is concealed by the locking cover 18, thereby affording a good appearance.

As above stated the fixing operation of said device is very easy, and its releasing operation is quite opposite to said fixing operation, said band together with the wrist watch can be easily released from said arm. However, undesirable release of the locking cover 18 is defended by the upheaval 6 engaging the wide projection 11'.

What I claim is:

1. A band fixing device consisting of a base frame, a pressing plate, a locking member, an eye member, a locking cover and two coupling shafts, all of the component members except said shafts being preferably made of resilient sheet metal, said pressing plate and said locking member being mounted on said base frame with one of said shafts, said pressing plate being held apart from said base frame for permitting insertion of one part of a band, said locking member serving to press said pressing plate, said eye member serving to fasten another part of said band and to engage said locking member, and said locking cover being mounted on said base frame with another of said shafts and serving to press said pressing plate and to cover the fixing mechanism of said device.

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U.S. Cl. X.R.

24—78