Sept. 22, 1936. K. C. AUGENSTEIN 2,055,328

BRACELET STRUCTURE

Filed Sept. 7, 1935

Fig. 1.

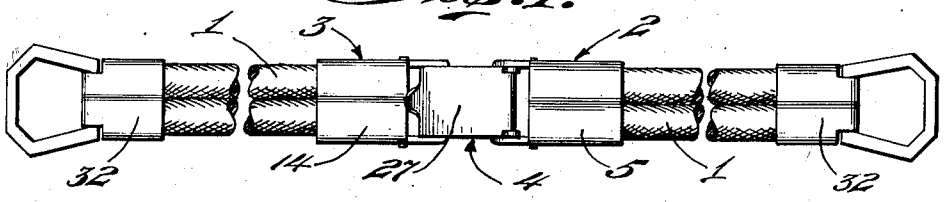


Fig. 2.

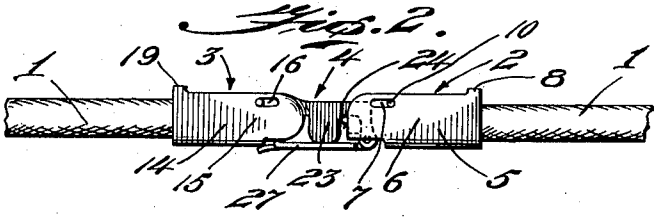


Fig. 3.

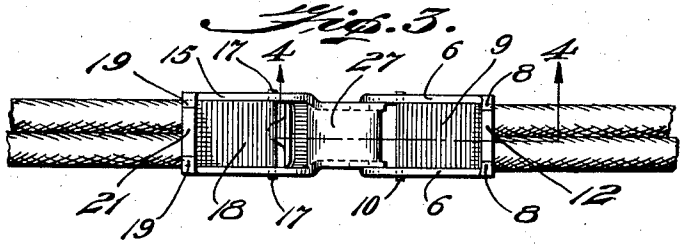


Fig. 4.

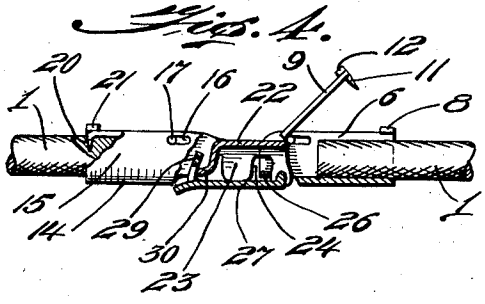


Fig. 5.

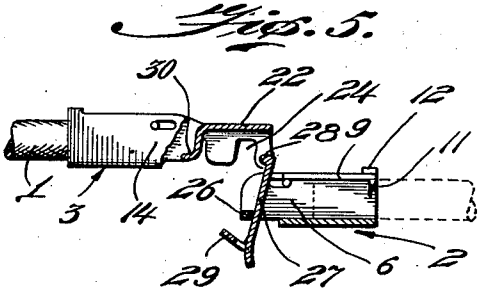
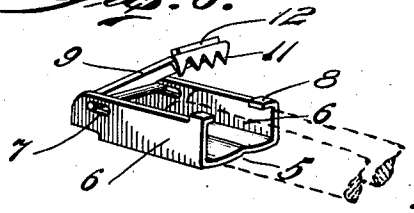


Fig. 6.



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BRACELET STRUCTURE

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Application September 7, 1935, Serial No. 39,573

6 Claims. (Cl. 24—75)

This invention relates to an improved bracelet structure of the type in which cords or other flexible members are employed for forming parts of the bracelet, and wherein the cords or flexible members are connected together by suitable connecting means the parts of which may be adapted for detachable connection to provide a convenient means for separating the flexible members.

One object of the invention is the provision in a device of this character of novel means for securing the end portion of a flexible member to a part of a connecting means in such a manner as to permit the detachment of the flexible member end from the connecting means when desired while holding it securely against accidental release.

Another object of the invention is the provision of readily releasable latching means between parts of the connecting means for readily separating the parts from each other or securing them together without separating either of the flexible members from its connection with the adjacent part of the connecting means.

A further object of the invention is the provision of a novel form of clamping means for connecting one end of a flexible member with a connecting member which contains no outwardly projecting part and is normally incapable of being accidentally released by pressure or by a blow.

Other objects and advantages of the invention relate to various improved details of construction and novel arrangements of the parts as will be more fully set forth in the detailed description to follow.

Referring to the drawing:—

Fig. 1 is a top plan view of one form of watch bracelet embodying the improved structure,

Fig. 2 is a side elevational view of the same,

Fig. 3 is a bottom plan view of the connecting means for connecting adjacent ends of flexible members together.

Fig. 4 is a longitudinal sectional view through a portion of the connecting means, taken substantially along the line 4—4 of Fig. 3, showing the flexible member clamping means in open position and with the latch member in closed position,

Fig. 5 is a longitudinal sectional view, similar to that shown in Fig. 4, showing the clamping member in its closed flexible member holding position and with the latch member partially extended to indicate the manner of separating parts of the connecting means, and,

Fig. 6 is a perspective view of one of the connecting members showing the clamping member in open position and illustrating the location of the flexible member ends relative to the channel portion of the connecting member prior to their engagement by the clamping member.

In that form of the invention illustrated herewith, 1 designates the flexible members which in the present case are shown as parallel cords formed to present adjacent ends to engage with a portion of a wrist watch or suitable attaching means carried thereby, while the opposite ends of the cords are secured in a connecting link member 2 or 3, forming part of a connecting means 4 for connecting the flexible members.

The connecting link member 2 as shown comprises a channel shaped holder 5 provided with side walls 6 each having a longitudinally extending slot 7 formed therein adjacent to one end thereof and having an inturned lug 8 located adjacent to the opposite end and overhanging the channel portion. A slidable clamping member 9, shaped to fit within the open side of the channel portion of the connecting link member 2, is provided with oppositely positioned pins 10 extending outwardly therefrom and adapted to be positioned within the oppositely arranged slots 7 formed in the side walls of the member 2. The slidable clamping member 9 is of such length as to be adapted to slide beneath and be held in closed position by the lugs 8 when moved to the limit of its forward or advanced movement as permitted by the pins 10 sliding within the slots 7, and is so formed as to be capable of being slid rearwardly so as to clear the lugs 8 when moved to the limit of its rearward movement as allowed by the pins 10. The clamping member 9 is provided at the end opposite to that carrying the opposed pins 10 with downturned teeth 11 adapted to engage the free ends of the cords 1 and hold them firmly in position within the channel portion of the connecting link member when the clamping member is in its closed position. The clamping member has a plate 12 secured to or formed integral with the outer face thereof and located between the inturned lugs 8 when the clamping member is in closed position with its outer end portion underlying the inturned lugs 8.

The connecting link member 3, as illustrated herein, comprises a channel shaped holder 14 provided with spaced side walls 15 having oppositely positioned longitudinally extending slots 16 for receiving opposed pins 17 carried by a clamping member 18. The side walls 15 are

also provided with inturned lugs 19 for holding the clamping member 18 in closed position when it is pressed downwardly between the side walls and slid forwardly to the limit of sliding movement permitted by the pins 17 in the longitudinal slots 16.

The clamping member 18, like the clamping member 9, is provided with downturned teeth 20 upon or adjacent to that end portion most remote from the opposed pin 17, which teeth are adapted for engagement with the end portion of the flexible member when the clamping member is in its closed position to retain the free ends of the flexible member securely in position within the channel portion of the connecting link member. The clamping member 18 is also provided upon its outer face with a plate 21 secured to or formed integral with the clamping member at the end adjacent to the teeth 20, the plate 21 being of such dimensions as to substantially fit between and appear as a continuation of the lugs 19 when the clamping member is moved to fully closed position.

In securing the end of cords 1, or other suitable flexible members, to the connecting link members 2 or 3, the adjacent ends of the flexible members may be positioned within the channel portion of the connecting link member, with the clamping member pressed rearwardly to the limit of its movement and tilted upwardly after the manner shown in Figs. 4 and 6 of the drawing. The clamping member may then be turned about its opposed pins to close substantially the open side of the channel portion of the connecting link member, and slid forwardly to the limit of its forward sliding movement to bring the end portion thereof beneath the inturned lugs carried by the side walls of the connecting link member.

When moved into this position, the downturned teeth carried by the clamping member engage portions of the flexible member ends to hold them securely within the channel portion of the connecting link member and prevent them from becoming separated therefrom accidentally. It will be noted that the construction is such that any pull exerted upon the flexible member will tend to draw the clamping member more securely beneath the inturned lugs and thus more firmly lock the clamping member in its holding position.

Pressure may be applied to the plate 12 or 21 to press the teeth into the flexible member ends and force the clamping member forwardly beneath the inturned lugs to a position approximating the limit of forward movement of the clamping member, and when moved to such position the plates 12 and 21 are respectively positioned between and are substantially continuous with the opposed inturned lugs to provide substantially continuous transverse surfaces and eliminate a multiplicity of sharp edges. These plates provide convenient means for engaging the clamping members in sliding them either into closed position or moving them rearwardly from beneath the inturned lugs to release the flexible member ends.

In releasing the free ends of one of the flexible members from the connecting link member, the clamping member is slid rearwardly to or adjacent the limit of its rearward movement as permitted by the opposed pins within the longitudinal slots. This results in sufficient rearward movement of the clamping member so that the end will clear the inturned lugs, thus permitting it to be tilted into the position shown in Figs. 4 and 6 of the drawing to permit removal of the free ends of the flexible member from the channel portion of the connecting link member.

The connecting link member 3 is provided with an extension 22, somewhat narrower than the overall width of the connecting members 2 and 3, which extension is provided with spaced side walls 23, each having a depression 24 formed therein. The depressions 24 in the opposed side walls are oppositely positioned relative to each other to receive a bail 26 carried by the connecting link member 2. A latch 27 is pivotally mounted, as at 28, adjacent to the end of the extension 22 and is capable of being moved into closed position to securely retain the bail 26 within the depressions 24 of the spaced side walls 23, the latch 27 being provided with an inturned lug 29 adapted to snap over and engage a portion 30 of the extension 22 to hold the latch securely in place and retain the bail 26 against separation from the extension member 22. The extension member 22 and latch 27 are of such width as to permit the bail 26 to be passed thereover when the latch is open in order to provide for the complete detachment of the connecting members 2 and 3 or their separation from each other in applying the bracelet to the wrist or removing it therefrom without detaching either flexible member from its connecting link member and without detaching either flexible member from the watch.

From the above it will be seen that the free ends of the cords or flexible members may be detachably secured to the connecting members 2 and 3 in such a manner as to be clamped firmly thereto, and by fastening means which present a smooth surface appearance free from any substantial projecting part, such as might inconvenience the wrist of the wearer or be liable to catch in the clothing. The provision of the latching member 27 between the connecting members, and so positioned as to be operable from the side of the bracelet opposite to that from which the clamping members 9 and 18 are operated, permits the separation or connection of the connecting members without interference with the clamping members 9 and 18 so that the bracelet may be applied to or removed from the wrist without disturbing the connections between the flexible members and the watch or between the flexible members and the connecting members.

In the normal position of wear of the bracelet, as shown in Fig. 1, the latch member 27 is located outwardly and in a position where it is readily accessible for manipulation to connect or disconnect the connecting members 2 and 3. The outer surface of the base or bottom wall of the channel portion of each connecting member is thus located outwardly of the wrist when the bracelet is in normal position, and this base portion may be shaped or ornamented to present an attractive appearance upon the wrist of the wearer.

While the flexible members, as shown, consist of round cords arranged in parallelism with the ends remote from the connecting member secured in a holding plate 32, they may be doubled back upon themselves to form loop portions adapted for attachment to a wrist watch of a conventional type as is common in the art, or flexible members of other shapes or forms and in other arrangements may be utilized and are capable of being securely connected to the con-

necting members by the clamping means shown and described.

What I claim is:

1. In a device of the character described, a connecting member having a channel portion for receiving the end of a flexible member, a flexible member having an end portion adapted to lie within the channel portion of said connecting member, a clamping member pivotally and slidably supported adjacent to one end thereof by said connecting member and provided at a point adjacent to its free end with means for engaging a portion of said flexible member, and means carried by said connecting member engaging said clamping member when in a position approximating the limit of its forward sliding movement for retaining said clamping member in closed clamping position and holding said clamping means in engaging contact with said flexible member while permitting opening of said clamping member when moved to a position approximating the rearward limit of its sliding movement.

2. A fastener for flexible members comprising a channel shaped connecting member provided with an open end for receiving a portion of a flexible member, a clamping member slidably supported by said connecting member and provided with means for gripping engagement with a flexible member located in the channel portion of said connecting member, and means carried by said connecting member and overlying a part at least of the channel portion for retaining said clamping member in clamped relation with a flexible member when adjacent to one extremity of its sliding movement while releasing said clamping member for movement from clamping engagement with such flexible member when the clamping member is located in a position adjacent to the opposite extremity of its sliding movement.

3. A watch bracelet comprising flexible member sections, connecting means connecting the free ends of one of said flexible member sections with the free ends of the other of said flexible member sections comprising separate connecting members, means for detachably securing the free ends of each of said flexible member sections to one of said connecting members, and means carried by and forming parts of said connecting members for detachably connecting said connecting members to each other, comprising an extension member formed integral with one of said connecting members and provided with bottom and side walls, and a latch member pivotally supported by said extension member and movable into position to serve as a closure for the remaining side of said extension member, said latch member engaging a portion of the other connecting member in its closed position to provide a connection between said connecting members.

4. A bracelet member comprising a pair of flexible member sections, connecting means connecting adjacent ends of said flexible member sections to each other comprising separate connecting members, means located upon one side of each of said connecting members for detachably securing an end of one of said flexible member sections to one of said connecting members, an extension member carried by one of said connecting members and provided with bottom and side walls, and a latch member having one end pivotally supported by the side wall of said extension member and movable into position to serve as a closure for the open side of said extension member, said latch member engaging a portion of the other connecting member in its closed position to provide a connection between said connecting members.

5. In a flexible member connecting means, a holder member of channel shaped construction provided with bottom and side walls, a clamping member pivotally supported adjacent to one end thereof by the side walls of said channel shaped member for pivotal movement towards and from and bodily movement longitudinally of the channel shaped member, said clamping member being provided with flexible member gripping means located adjacent to its free end, and means carried by said holder member engaging the free end of said clamping member when the same is moved into closed position relative to the holder member and longitudinally thereof in the direction of its free end to retain the clamping member in closed position relative to the holder member and in clamping relation with a flexible member located within the holder member.

6. A connecting means for bracelet parts comprising a channel shaped holder member provided with bottom and side walls, a clamping member fitting substantially between the side walls to provide when closed a top wall for said holder member, means carried by said clamping member and side walls for pivotally supporting said clamping member adjacent to one end thereof for movement towards and from said holder member or bodily movement longitudinally of said holder member into retracted or advanced position relative thereto, means carried by the free end of said clamping member and projecting within the channel shaped portion of said holder member in the closed position of the members for engagement with a part to be held within the holder member, and means carried by said holder member and out of engagement with said clamping member when in its retracted position for engagement with said clamping member in its closed advanced position relative to said holder member to retain said clamping member in closed position relative to the holder member.

KARL C. AUGENSTEIN.