March 18, 1930. H. GRASMERE 1,750,667

CLASP FOR A BRACELET

Filed Sept. 30, 1926

Fig. 1.

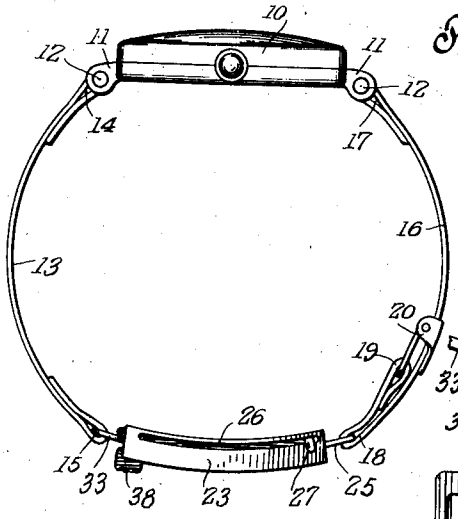


Fig. 2.

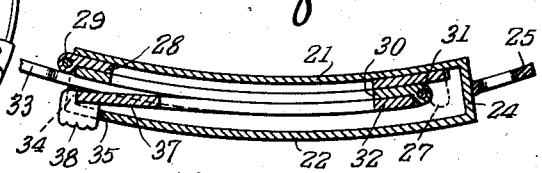


Fig. 3.

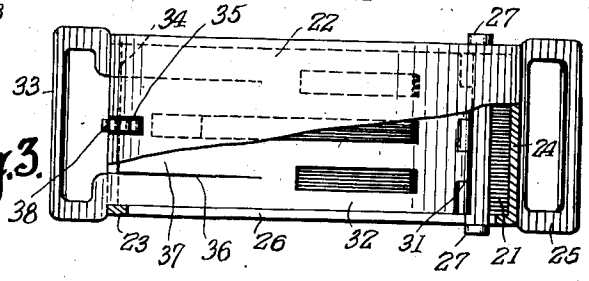


Fig. 4.

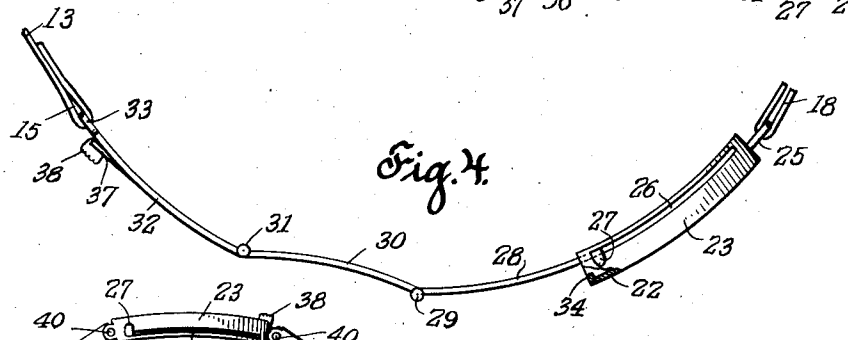
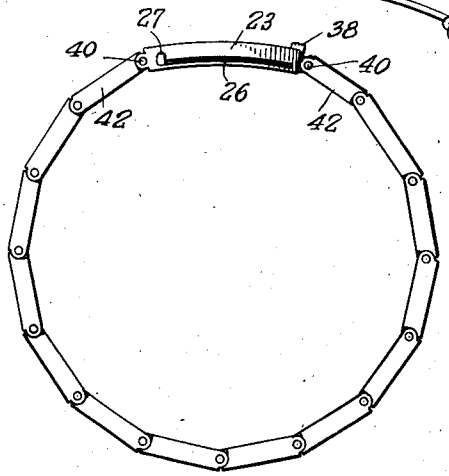


Fig. 5.



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UNITED STATES PATENT OFFICE

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CLASP FOR A BRACELET

Application filed September 30, 1926. Serial No. 138,621.

This invention relates to watch bracelets used as supports for watches of the wrist type.

With ordinary wrist watch straps it is the common practice to rest the back of the hand upon any convenient level support when fastening, unbuckling or releasing the ends in order to prevent the said ends from becoming momentarily unmanageable, thereby possibly permitting the watch to drop and thereby become damaged.

It is therefore one purpose of the present invention to produce an endless band, non-separable but readily extensible to slip freely over the hand and then, by suitable manipulation, to closely fit the wrist, thus avoiding danger in removing or putting on the bracelet.

A further feature is in the provision of a housing normally containing a plurality of hingedly connected, foldable plate links held therein by a positive spring catch, which upon release permits of lineal extension whereby the diameter of the band is increased, such release being accomplished by finger pressure properly applied.

Other advantages, in addition to security against unintentional opening, are simplicity in construction, economy of manufacture and ease of operation, one hand only being required in the said manipulation.

These several valuable improvements are attained by the novel design, construction and combination of parts hereinafter described and shown in the accompanying drawing, forming part of this disclosure, and in which:—

Fig. 1 is a front elevational view of a safety watch bracelet including parts of an adjustable leather band connected by an embodiment of the invention arranged opposite a watch.

Fig. 2 is a central longitudinal sectional view of the non-separable bracelet end connecting device, drawn on an enlarged scale.

Fig. 3 is a top plan view of the same, parts being broken away to show the construction.

Fig. 4 is a fragmentary front view similar to Fig. 1, but showing the leaf-link elements in extended position.

Fig. 5 is a view similar to Fig. 1, but showing a type of lady's flexible link bracelet, its end links being engaged by the same type of connector.

In Figure 1 a conventional type of wrist watch will be seen, the same being designated by the numeral 10, the case of the watch having opposed extensions 11 carrying pivots 12.

A flexible strap 13 is folded at both ends to produce loops 14 and 15 secured on the inner side of the strap, one loop 14 engaging around one of the pivots 12.

The strap 16 on the other side has a loop 17 to engage around the other pivot, its opposite portion forming a bight 18, then continuing into a loop 19 of a slidable catch 20 adjustably movable on the strap 16 and by which its operative length is regulated.

The connector is composed of a thin hollow, oblong rectangular casing, curved in the direction of its length, and presenting inner and outer walls 21 and 22 respectively, side walls 23 and a closed end 24, from which extends an apertured clip 25 to engage the strap bight 18.

The side walls 23 each contain arcuate slots 26 adjacent the inner wall 21, and slidable therein are projections 27 having their ends bent to closely engage the outer surface of the side walls and act as limiting guides or stops for a curved plate 28, slidable on the inner wall 21 of the casing.

A hinge joint 29 on the slightly extending, opposite end of the plate 28 connects a second leaf link 30, curved reversely to fold closely over the plate 28 when desired, or to extend outwardly as in Figure 4.

A similar hinge 31 connects the plate 30 with the third and last leaf-link 32, at the end of which is an apertured extension 33 secured in the strap loop 15, thereby permanently fastening the ends of the straps 13 and 16.

The outer wall 22 of the casing at its open front end, is bent abruptly down forming a ledge 34 and centrally in the front end of the wall is a recess 35.

The plates 28 and 30 may have openings to lighten their weight, as shown in Figures 2 and 3, and also the rear portion of the plate

32, but the front portion of the outer plate 32 is sheared as at 36, the cuts extending in parallel from the aperture in the clip element 33 rearwardly to produce a spring tongue 37, which, when the plates are folded in the casing, presses against the inner surface of the outer wall 22 and the free end of the tongue engages the ledge 34 retaining the leaf plates within the casing until the tongue has been depressed to clear the ledge.

This is accomplished by a lug 38 fixed on the outer end of the tongue and adapted to enter the recess 35 to extend slightly outward therebeyond, the extending portion being corrugated to present a positive grip surface to engage the finger of the wearer when pressed upon to release the leaf plates which may then be readily withdrawn, as in Figure 4.

To reduce the length of the band, the plate 30 is folded over the plate 28 bringing the plate 32 over the plate 30, these several plates being of such length and width as to fill the casing, while their thickness fill the entrance, the plates being confined by the spring 37 against the ledge and are entirely concealed within the casing.

In the modification shown in Figure 5, the side walls 23 are extended at the rear to form lugs 40, and a corresponding lug is formed on the front edge of the outer plate 32, these lugs being pivotally connected with the end links 42 of any of the usual types of chain bracelets.

From the foregoing it will be seen that while no actual separation of the bracelet elements can take place, they may be expanded to a reasonable degree when desired, or closed to normal size by the fingers of one hand in an easy manner.

Although I have described my improvements with considerable detail and with respect to certain particular forms of my invention, I do not desired to be limited to such details since many changes and modifications may well be made without departing from the spirit and scope of my invention in its broadest aspect.

Having thus described my invention, what I claim as new and desire to secure in Letters Patent, is:—

1. In a flexible bracelet having extensible, non-separable link elements interposed in its length, some of said elements being compactly foldable, a casing constituting one of said elements into which the others may be disposed, said casing having a notch in its outer wall; said casing having longitudinal slots in its side walls, a spring detent on one of said link elements to retain all of said elements firmly within the casing by engagement in the mentioned notch, projections extending through the slots in said casing and a corrugated knob on said detent to facilitate its release.

2. In a band having a hollow curved casing interposed in its length, said casing having longitudinal slots in its sides, a plate having edge extensions slidably engaged in the slots, said plate being slidable closely adjacent the inner wall of the casing, a second plate hinged at its end to the first named plate and curved to fold closely thereover, a third plate hinged to the second plate to fold thereon, said third plate being pivotally attached to one end of said band, said casing being engaged with the other end of the band, a spring tongue sheared from said third plate, a ledge in said casing to engage said tongue when said plates are folded within the casing, and a corrugated knob on said tongue manually operable to depress the tongue and release said plates permitting their withdrawal from the casing.

3. In a bracelet comprising a flexible band having spaced end members, a casing engaged with one of said end members and open at its opposite end, said casing having longitudinal slots in its side walls, a series of plate links, one having projections extending slidably through the casing slots, a second link hinged to the outer end of the first link, a third link hinged to the inner end of the second link, the opposite end of said band being connected to the outer end of the third link, all of said links being foldable to enter said casing or extend outwardly therefrom, a ledge at the open end of said casing, a spring detent integral with the third link to engage said ledge, and means on said detent to facilitate its release from said ledge.

4. In a bracelet comprising a flexible band having spaced end members, a casing engaged with one of said end members and open at its opposite end, said casing having longitudinal slots in its side walls and a central notch in its outer wall, said wall being inbent to constitute a ledge, a series of three links hinged to fold closely together to enter said casing, guide means on the innermost link engaged in the slots of said casing, means on the outermost link to engage the opposite end member of said band, a spring detent integral with the outermost link to engage said ledge, and a knob carried by said detent normally disposed in said casing notch, whereby said detent may be disengaged.

In testimony whereof I have hereunto affixed my signature.

HENRY GRASMERE.