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2,178,572

DETACHABLE CONNECTION

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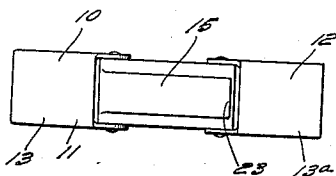


Fig. 1

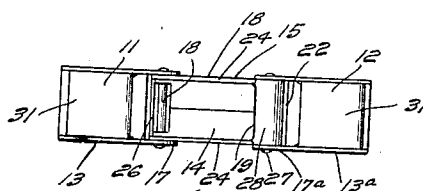


Fig. 2

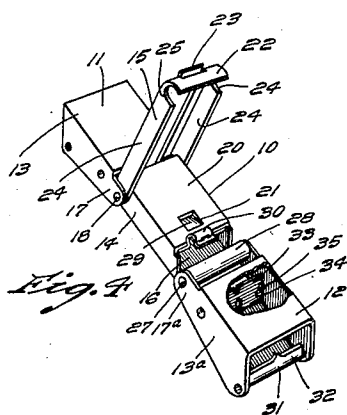


Fig. 3

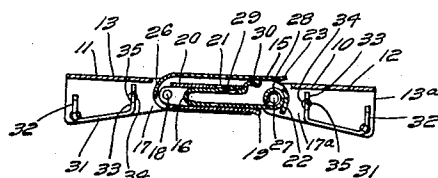


Fig. 4

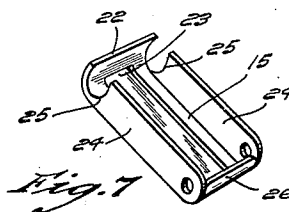


Fig. 5

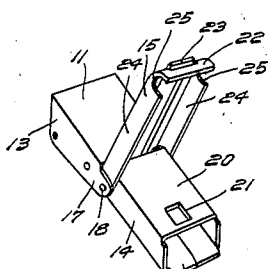


Fig. 6

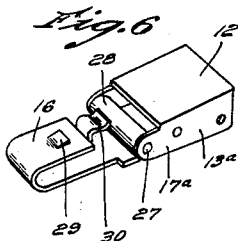


Fig. 7

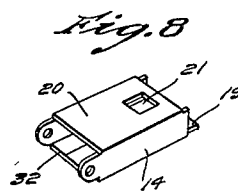


Fig. 8

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DETACHABLE CONNECTION

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3 Claims. (Cl. 24—230)

My present invention relates to the jewelry art and has particular reference to a detachable connection for wrist watch straps.

Detachable connections for small size wrist watch straps such as are suitable for use with ladies' wrist watches, comprise separable sections which may be unlocked for permitting removal of the wrist watch from the wrist, and which are secured together to retain the wrist watch on the wrist.

It is the principal object of my invention to improve the type of connection described, and thus insure against accidental separation of the parts.

It is a further object of my invention to provide a construction which facilitates the locking and unlocking of the separable parts.

It is an additional object of my invention to provide a construction that is made up of easily manufactured parts, readily assembled together, whereby the cost of manufacture is reduced.

With the above and other objects and advantageous features in view, my invention consists of a novel arrangement of parts more fully disclosed in the detailed description following, in conjunction with the accompanying drawing, and more specifically defined in the claims appended thereto.

In the drawing,

Fig. 1 is a top plan view of the novel connection;

Fig. 2 is a bottom view thereof;

Fig. 3 is a central longitudinal section thereof;

Fig. 4 is a perspective view, partly broken away, showing the relative position of the operating parts;

Fig. 5 is a perspective view of one section;

Fig. 6 is a perspective view of the cooperating section;

Fig. 7 is a perspective view of the cover plate; and

Fig. 8 is a perspective view of the housing portion of the first section.

Referring to the drawing, the novel strap connection 10 comprises a section 11 and a second section 12 which is detachably securable thereto, the section 11 including a clamp member 13, a housing 14 and a cover plate 15, and the section 12 including a clamp member 13a and a spring tongue element 16 which is adapted to be detachably received in the housing 14. All the parts are preferably made of sheet metal stamped into the form illustrated.

The clamp member 13, see Fig. 5, is formed U-shaped, with the sides slightly tapered and

extending forwardly of the upper portion as indicated at 17 to provide bearings for a hinge pin 18; the housing 14 nests in the cover 15, and both are hingedly mounted on the pin 18. The housing 14 is generally of box shape, see Fig. 8, and is open at the front to provide an entrance, the base of the box having a slightly downwardly curved extension 19, to assist in receiving the inserted spring tongue member 16, and the upper face 20 of the box having an opening 21 formed forwardly therein, for the purpose hereinafter described.

The cover 15 has its forward end rounded as indicated at 22, a finger engageable tab 23 being struck up from the stock, the sides 24 of the cover being arcuately cut out as indicated at 25, and the rear end being slightly extended between the sides at the hinged portion as indicated at 26, see Fig. 7, for the purpose hereinafter described.

Referring now to Fig. 6, the clamp member 13a of the rear section 12 is similar to the clamp member 13 of the front section 11, the spring tongue 16 being hinged at the forward end thereof between the sides 17a, by means of a hinge pin 27; the top is cut back, and the tongue 16 has its rear end rolled to provide an end roll 28, and is bent as illustrated, with a spring lug 29 cut out of the upper stock and extending above its surface to function as a spring latch in connection with the forward edge of the opening 21, the end of the tongue being reduced in width and shaped as indicated at 30 to serve as a finger pressure element.

The clamp members 13 and 13a each have mounted therein a bracelet lock cam 31, see Figs. 3 and 4, comprising a forward element 32 hingedly secured between the respective sides of the members and a rear cam element 33 which extends upwardly when in locking position and has edge recesses 34 for snapping engagement with projections 35 on the sides of the members 13 and 13a, the ends of the elements 32 being shaped, as by providing teeth or the like, to firmly grip a strap or bracelet end and to retain the same within the members 13 and 13a.

Referring now to Figs. 5 and 6, illustrating the two end connection sections separated but in relative attaching position, the section 12 may be moved forwardly to insert the tongue 16 into the housing 20, until the spring latch 29 snaps upwardly into locking engagement with the front edge of the opening 21; the cover 15 is then swung downwardly until the recesses 25 fit over the roll 28, and the end 22 snaps thereover, whereby

the parts are thus doubly locked against separation, first because of the spring latch engagement of the tongue in the housing, and second, because the cover locks over the roll 28. To separate the parts, the cover 15 is first lifted by means of the finger tab 23, the end 26 of the cover engaging the forward edge 22 of the lower portion of the housing, see Fig. 8, which serves as a limit stop for preventing excessive swinging movement of the cover, and the finger element 30 is then depressed to disengage the latch 29 and permit separation of the sections.

It is thus evident that the novel invention is made up of very simple elements, readily manufactured out of stamped metal and easily assembled together, the construction providing a positive lock against accidental separation of the parts, and yet permitting easy separation when desired. Although the invention has been described as applied to wrist watch straps, it may be used for bracelets and other articles which are detachably securable together.

While I have described a specific constructional embodiment of my invention, desired changes in the shape, material, relative size, and relative proportions of the parts may be made to suit the requirements for different uses, without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. In a detachable connection, a section having a housing, said housing having a catch opening, a

cover pivoted to said section and extending over said housing, the free end of said cover being rounded, a second section having a spring tongue, one end of said second section forming a roll, said spring tongue having a latch projecting therefrom, said latch extending into said catch opening and said cover detachably engaging said roll when said spring tongue is seated in said housing.

2. In a detachable connection, a section having a housing, said housing having a catch opening, a second section having a spring tongue, one end of said second section forming a roll, said spring tongue having a latch projecting therefrom and adapted to extend into said catch opening when said spring tongue is seated in said housing, said first section having a pivoted closure element, the free end of said element being detachably engageable with said roll when said spring tongue is seated in said housing.

3. In a detachable connection, a section having a housing, said housing having a catch opening, a second section having a spring tongue, one end of said second section forming a roll, said spring tongue having a latch projecting therefrom and adapted to extend into said catch opening when said spring tongue is seated in said housing, said first section having a pivoted closure element, said element extending over said housing, the free end of said element being detachably engageable with said roll when said spring tongue is seated in said housing.

WILLIAM FORSTNER.