

July 30, 1935.

J. DINHOFER

2,009,484

CONNECTION DEVICE FOR WRIST WATCHES

Filed March 14, 1935

Fig. 1.

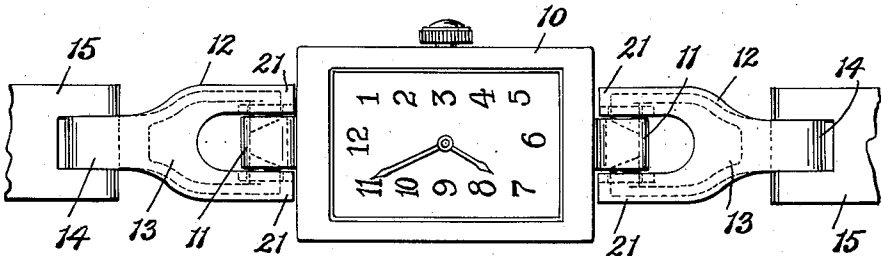


Fig. 2.

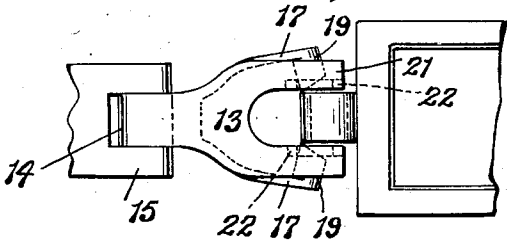


Fig. 4.

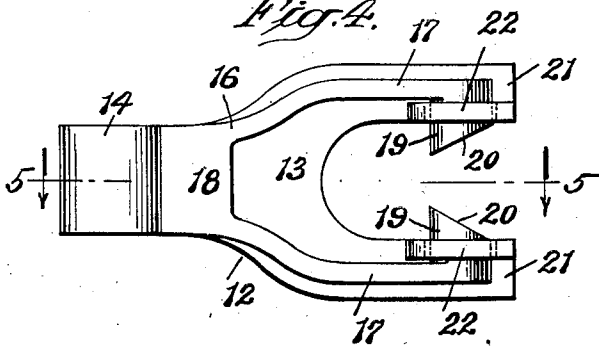


Fig. 3.

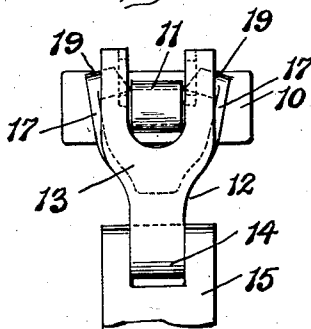
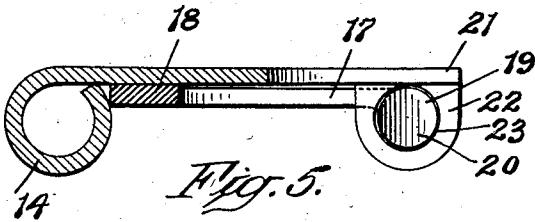


Fig. 5.

INVENTOR
JULIUS DINHOFER
BY
Harry R. Rasmussen
ATTORNEY

UNITED STATES PATENT OFFICE

2,009,484

CONNECTION DEVICE FOR WRIST WATCHES

Julius Dinhofer, New York, N. Y.

Application March 14, 1935, Serial No. 11,023

3 Claims. (Cl. 24—265)

This invention relates to an improvement in connection devices for wrist watches of the general character shown in my co-pending application, Serial No. 1,151, filed January 10th, 1935.

The invention has for its object to provide a means for facilitating an easy, yet perfectly secure connection between the wrist band, cord or strap and case of the wrist watch. Such a connection, as contemplated by this invention, facilitates the removal of a wrist band or strap from a watch and enables said band, cord or strap to be easily fitted to the wrist by either a jeweler or store keeper or by the purchaser.

A further object of the invention is to provide a connection device, which, despite its easy application to a watch case, will permit movement of the wrist without causing the device to become inadvertently open and the watch lost.

A still further object of the invention is to provide a connection device of the character mentioned, wherein adjustments, small springs, and other small parts usually employed in wrist watch connection devices, are entirely dispensed with.

In the accompanying drawing, Fig. 1 is a front elevation of a wrist watch provided with connection devices at the end of the wrist band or cord; Fig. 2 is a front elevation of a part of the watch case and one of the connection devices, showing how the connection device is engaged with the loop on the watch case; Fig. 3 is a view of the structure shown in Fig. 1, taken at right angles thereof, showing how the connection member is moved to disengage it from the watch case loop; Fig. 4 is a rear view of the connection member; and Fig. 5 is a sectional view on the line 5—5 of Fig. 4, looking in the direction of the arrows.

In the drawing, 10 indicates a watch case of conventional form or shape, provided at its opposite ends with the usual projecting loops or eyes 11 for engagement by the connection device 12. The connection device has a substantially U-shaped front plate 13, formed at one of its ends with a loop 14 for receiving and holding the ends of the wrist-encircling bands or cords 15. Secured to the rear face of the plate 13 is a U-shaped spring member 16 having a pair of elongated spring arms 17 connected at one end by the fixed portion 18, which is rigidly secured, by being soldered or otherwise securely fastened, to the plate 13. The spring arms 17 in their normal position of separation are shown in Figs. 1 and 4. These arms are provided at their free ends with inwardly projecting parts or studs 19, which have beveled or inclined end surfaces 20 converging

toward the part 18 of the U-shaped spring member 16, as clearly shown in Fig. 4. The arms 21 of the plate 13 are each provided with an inwardly extending lug or ear 22 which are each provided with an opening 23, through which the studs 19 may freely move. The lugs or ears 22 on plate 13 are so spaced apart that the loop 11 on the watch case will snugly fit between them.

The spring arms 17 are adapted, when the loop 11 is inserted between the inclined surfaces 20 on studs 19, to spread outwardly as shown in Fig. 2, permitting the studs 19 to then snap within the loop 11 to the position shown in Fig. 1. The inclined surfaces 20 thus constitute cam surfaces which facilitate the entry of the studs 19 into the loop 11. When the connection device has thus engaged the loop, it will be obvious that it cannot become inadvertently disengaged therefrom, since all strain is imposed longitudinally of the connection member in a direction away from the watch case.

The two lugs or ears 22 on plate 13 prevent a twisting movement of the connection member about its longitudinal axis so that the possibility of the connector becoming disengaged from the loop 11 by the imposition of such a twisting strain is prevented.

The removal of the connection device is shown in Fig. 3. When the watch is removed from the wrist, the connection member is swung to a vertical position or to a position substantially at right angles to the plane of the watch case, as shown in Fig. 3, and the connection member is then pushed upwardly or the watch pushed down. When movement of the parts in this direction occurs, the inclined cam surfaces 20 on studs 19 moving against the upper part of the loop 11 will cause the spring arms 17 to spread apart, as shown in Fig. 3, so that the connection device is freed from its engagement with the loop. Before this easy disconnection of the device, as shown in Fig. 3, can be had, it is obvious that the connection device must be disposed vertically or nearly so, or to a position substantially at right angles to the watch, as shown in Fig. 3. This abnormal position of the connection device is one which it never assumes in normal wear of the watch, so that the possibility of the connection device being inadvertently disengaged from the watch case during normal wear of the watch is avoided. The lugs 22 act to guide the connection device into engagement with the watch case loop and they also co-operate with the studs 19 to hold said studs positively engaged with the loop 11. They also effectively prevent the possible disengagement of

such studs from the loop by impinging against the sides of the loop and resisting twisting strain on the connection device.

What I claim is:

- 5 1. A device of the character described comprising, a base plate, a U-shaped spring member secured thereto and provided with a pair of spaced, projecting spring arms, each of said arms being provided at its free end with an inwardly extending portion, said inwardly extending portions co-operating to enter through the sides of a watch case loop, inclined cam surfaces on the ends of said inwardly extending portions to facilitate the entry of said portions into the watch case loop, and spaced lugs on the back of the base plate provided with openings through which the inwardly extending portions can freely move, said lugs being positioned on the opposite sides of the watch case loop and impinging against the same to resist twisting movement of the base plate.

- 15 2. A device of the character described, the combination of a watch case loop, a connection member having a face plate, a pair of spaced lugs

projecting from the back of the plate and fitting on opposite sides of the loop, a spring attached to the back of said plate and provided with a pair of arms having ends for snap engagement with the loop, the lugs having apertures through which the ends of the arms project to enter the loop. 5

3. A device of the character described comprising the combination of a watch case loop, a connection device having a body portion, a pair of projections supported thereon and extending toward one another and resiliently supported, cam surfaces on said projections causing the projections to snap into the watch case loop by movement against said loop in a plane substantially parallel to that of the watch case, and also causing said projections to become disengaged from the loop by movement of said cam surfaces against the loop in a direction across the plane of the watch case, and lugs formed on the back of the body portion through which the projections extend, said lugs lying on both sides of the watch case loop. 10 15 20

JULIUS DINHOFER.