June 6, 1950 W. C. BOOTS 2,510,938

WRIST WATCH CONNECTOR

Filed Aug. 27, 1949

Fig. 1

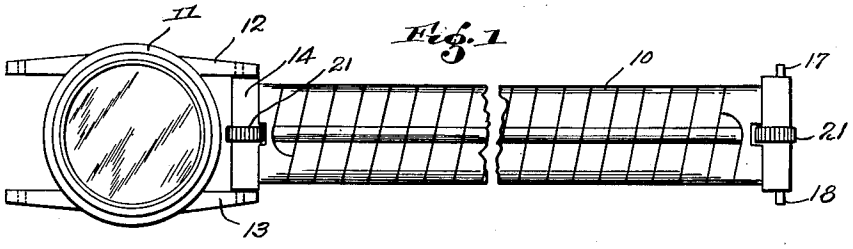


Fig. 2

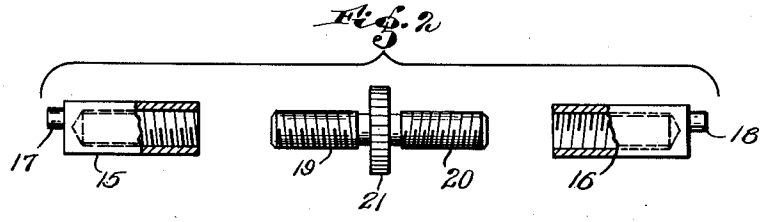


Fig. 3

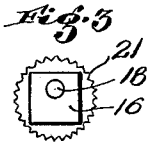


Fig. 4

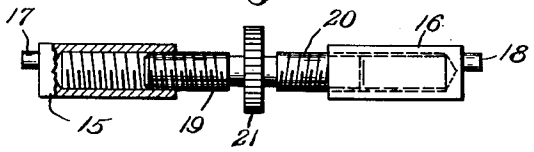


Fig. 5

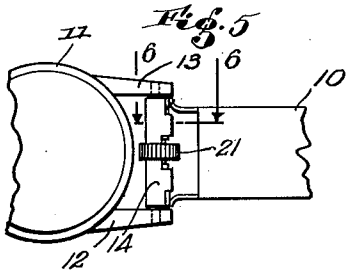


Fig. 6

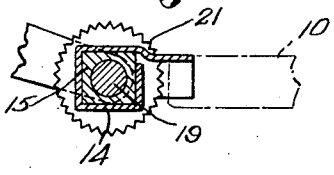


Fig. 7

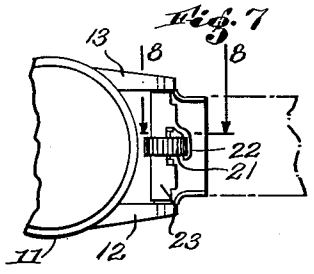


Fig. 9

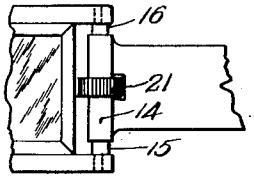
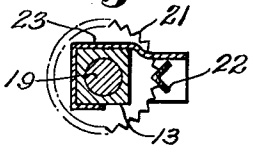


Fig. 8



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WRIST WATCH CONNECTOR

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4 Claims. (Cl. 24—265)

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This invention comprises a new and improved connector for wrist watches providing a convenient and reliable connection between the watch frame and its associated band or bracelet.

Heretofore and extending over many years attempts have been made to provide a connector between the watch frame and the wrist band having a neat and attractive appearance in an ornamental assembly, which could be relied upon absolutely to maintain its connection in wear without danger of being disengaged, and which at the same time could be conveniently manipulated to separate the watch and band when desired and with no danger of accidental release.

This problem of long standing has been solved by the present invention. In one aspect it comprises a connecting bar having a hollow barrel which may be connected to or form a part of the band, a pair of threaded blocks movable in the barrel and held against turning and a right and left hand threaded stud interposed between the blocks and accessible from outside the barrel. Going more into detail the barrel is preferably of right angular cross section and the blocks which are slidable therein are internally tapped respectively with the right and left hand threads. Each of the blocks carries a projecting pin at its outer end which fits into a perforated lug on the watch case. A right and left hand threaded stud is interposed between the blocks and this is provided with a finger disk that projects through the wall of the barrel where it can be conveniently reached when it is desired to retract the blocks and their pins to release the connection or to project the blocks and their pins to form the connection.

It will be noted that in the construction of my invention the blocks which carry the connecting pins are positively held in engaged position by the interposed threaded stud and therefore cannot be displaced accidentially or by any ordinary shock. The interlocking of the pins with the studs of the watch case is fully adequate to prevent accidental disengagement and yet the blocks with their pins may be conveniently and quickly retracted into releasing position when that is desired.

These and other features of the invention will be best understood and appreciated from the following description of preferred embodiments thereof selected for purposes of illustration and shown in the accompanying drawing in which:

Fig. 1 is a view in elevation of a watch and bracelet band assembly,

Fig. 2 is a view in elevation showing the parts

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contained within the barrel in exploded relation and partially in section,

Fig. 3 is a corresponding end view,

Fig. 4 is a view in elevation partly in section showing the same parts in connected relation,

Fig. 5 is a fragmentary view in elevation of the opposite side from that shown in Fig. 1,

Fig. 6 is a sectional view on the line 6—6 of Fig. 5,

Figs. 7 and 8 are views corresponding to Figs. 5 and 6 of a modified construction, and

Fig. 9 is a fragmentary view showing another application of the connector bar.

The connection bar of my invention is designed to connect a band 10 which may be an expansible metal bracelet with a watch case 11 provided for that purpose with spaced perforated lugs 12 and 13. The connector includes a metal barrel 14 which as herein shown is formed as a part of the bracelet 10 but may be connected to it in any convenient manner. The barrel 14 as herein shown is substantially square in cross section and as containing two similar blocks 15 and 16 which are also square in cross section and therefore movable without twisting in the barrel 14. The blocks are longitudinally bored from one end and tapped with right and left hand threads respectively. The block 15 carries at its outer end a projecting pin 17 and the block 16 carries a projecting pin 18. These pins when projected are shaped to fit into the perforated lugs 12 and 13 of the watch case. Preferably and as herein shown the pins 17 and 18 are mounted eccentrically in the ends of the blocks 15 and 16, that is to say, they are offset inwardly so that increased clearance is provided between the barrel and the watch case as compared to what would be provided if the pins were concentrically or symmetrically disposed with respect to the blocks.

The two blocks are connected by an intermediate stud having right and left hand threaded ends 19 and 20 and an intermediate finger disk 21 of substantially larger diameter. The barrel 14 is provided with an intermediate slot through which the finger disk 21 projects. In the construction shown the two parts of the barrel 14 are held together by the body portion of the end link in the bracelet of which they constitute a part. It will be apparent that the barrel 14 may be formed about the threaded stud 19—20 and then the two blocks 15 and 16 inserted in the opposite ends of the barrel and drawn inwardly by rotation of the studs 19—20. When the pins 17 and 18 have been entirely retracted within

the ends of the barrel the latter is inserted between the lugs 12 and 13 and the finger disk 21 rotated to project the blocks with their connecting pins. It will be apparent from an inspection of Figs. 1 and 5 that finger disk 21 is accessible on both sides of the barrel and therefore may be conveniently manipulated.

In Figs. 7 and 8 is illustrated an optional and further feature of my invention. This consists in the addition of a spring retaining pawl 22 which engages corrugations in the circumference of the finger disk 21, normally preventing turning of the disk but clicking over the corrugations when it is forcibly manipulated. As herein shown, but not necessarily, the pawl 22 is formed as a part of the barrel 23, the construction being otherwise identical to that above described.

Important advantages of the connector of my invention are that it eliminates the spring pins which have been formerly employed and which are a constant source of trouble and annoyance, and that it is adjustable for watch cases differing in size over the full range ordinarily encountered.

The spring pins formerly used are not only difficult to reach and retract when the jeweler wishes to separate the watch and its band, but they often corrode due to perspiration and stick in place so that they can be removed only by destroying them. These problems are eliminated by the connector construction of my invention as already explained.

Watch cases are usually manufactured with lugs spaced from five-eighths to three-quarters of an inch apart or in various intermediate sizes. Heretofore it has been necessary to fit the connector bar exactly to the spacing of the lugs. On the other hand the present connector bar has the great advantage that the blocks therein contained may be projected beyond the ends of the barrel 14 so that they constitute in effect an extension of the barrel, and will therefore fit between lugs which are spaced further apart than the length of the barrel. This important advantage is illustrated in Fig. 9 of the drawings from which it will be apparent that though the lugs of the watch case are spaced apart by a greater distance than the length of the barrel 14, the blocks 15 and 16 are projected, giving the barrel

in effect a length completely filling the space between the lugs. Moreover, this result is effected without in any way impairing the ornamental appearance of the connector, since the blocks are nearly of the same cross sectional dimension as the barrel 14.

Having thus disclosed my invention and described in detail illustrated embodiments thereof I claim as new and desire to secure by Letters Patent:

1. A connecting bar for use between a watch case having projecting perforated lugs at one side and a wrist band; the said connecting bar comprising a barrel of rectangular cross section attached to the wrist band, a pair of blocks of rectangular cross section movable in said barrel and being internally tapped respectively with right and left hand threads and each carrying a projecting pin at its outer end which fits into a perforated lug of the watch case, a stud having right and left hand threaded ends threaded into said blocks, and a finger disk carried by the stud and projecting through the wall of said barrel.

2. A connecting bar as described in claim 1 further characterized in that the pins carried by the said blocks are disposed eccentrically with respect to the axis of the blocks.

3. A connecting bar for a wrist watch comprising a barrel having a transverse slot therein, a pair of blocks movable in the barrel and having projecting pins at their outer ends, and a right and left hand threaded stud interposed between said blocks and having a finger disk projecting outwardly through the slot of the said barrel.

4. A connecting bar as described in claim 3 in which the finger disk is serrated and engaged by a spring pawl that prevents accidental displacement thereof.

WILLIAM C. BOOTS.

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