This invention relates to a device for use in securing to a wrist watch or its strap, an article useful as an ancillary device, such as e.g. a miniature compass, a container suitable to accommodate snugly one or more small coins for insertion in car parking meters, or an emergency supply of medicinal tablets, or a mounting for a small memo pad.

According to the present invention, a device for use as above comprises the said ancillary article, a peripheral groove in such article, and means to connect such article to a wrist watch and its strap, said means comprising a length of wire formed midway between its ends with a loop dimensioned to spring into said groove to firmly grip the article, said length of wire beyond its loop including an opposed pair of spaced arms, and means associated with both of said arms engageable over and closely with the wrist-strap to position the article against the wrist alongside the wrist watch.

Desirably, the said article is circular, e.g. as with the casing of a miniature compass, and its periphery is formed with a groove, or a channel which may be machined in such periphery or obtained by affixing two narrowly spaced rings fixedly to such periphery, or a split collar with a channel and sprung into position, and in such groove or channel is gripped resiliently the appropriately bowed deformation of the length of wire, the remainder of the length of wire comprising a symmetrical deformation affording, in one embodiment, limbs to inter-engage with the usual slotted lugs or wide U-shaped diametrically opposed elements of the wrist watch which receive ends of the wrist-strap.

In another embodiment of the present invention, the device for securing the peripherally grooved article to a wrist-strap comprises a first integer in the form of a length of wire of U-formation, the bend of the U being more than 180°, the side limbs being resilient and slightly splayed apart, and inter-engaging with a second integer, functioning as a retainer for the said first part and comprising a length of wire brought to endless rectangular form and having two opposed parallel sides joined to the other two opposed parallel sides by downwardly cranked relatively short end portions, to afford a pair of upstanding shallow bridge-like parts which are engaged transversely over the wrist-strap so that the relatively lower side parts of the rectangular length of wire form loops within which are engaged the resilient limbs of the said U-shaped member, which latter member extends beneath the wrist-strap, whereby the wrist-strap is held between two sides of the rectangular member and the opposed limbs of the U-shaped member.

In order that the invention may be clearly understood and readily carried into effect, drawings are appended hereto illustrating embodiments thereof, and wherein,

FIGURE 1 is a plan view of an embodiment of the present invention in which the ancillary article is carried by a wire attachment shaped with portions adapted to inter-engage with the opposed strap receiving lugs of a wrist watch.

FIGURE 2 is a side elevation of FIGURE 1 viewed from the left of FIGURE 1.

FIGURE 3 is an exploded view showing the ancillary article separated from the wire device for attaching it to the wrist watch in accordance with the arrangement shown in FIGURES 1 and 2.

FIGURE 4 is a plan view showing a further embodiment of the present invention, in which the means for securing the ancillary device to a wrist-strap comprises two separate integers adapted to be inter-engaged with each other and also to form co-operative retaining engagement with the wrist-strap.

FIGURE 5 is an exploded view of the device shown in FIGURE 4.

FIGURES 6 and 7 are plan views showing modifications of the present invention in which the article to be carried by the wrist-strap of the watch is gripped between opposed parts of a resilient endless length of wire formed with end loops for receiving the ends of two parts of the wrist-strap, the other ends of said parts of the wrist-strap being secured in a normal manner to the watch.

Referring to FIGURES 1, 2 and 3 of the drawings, the ancillary article is shown as comprising a miniature compass 1 of circular form, the shallow cylindrical periphery of the compass casing being formed with a continuous groove 2, or alternatively, has affixed to it a pair of narrowly axially spaced rings to form between them a channel, or alternatively, the desired channel may be formed in a resilient split collar, e.g. a length of channel section sheet metal curved to circular form. The said groove or channel receives a resilient part-circular bend 3 of a length of wire or wire-form material of sufficient gauge which will result in its retaining the shape into which it is deformed, but which is sufficiently resilient to allow itself to be attached to or be sprung into operative retaining relationship with the wrist watch.

The bowed part 3 of the length of wire which is spring into the groove 2 comprises the median part of the said length of wire, such median part being bent to more than 180° to mate in the groove 2, and from the bowed part 3 extend symmetrically two arms 4, diverging away from their junctions to the loop 4, and bent inwardly opposed upwardly directed bridge-like or wide U-shaped parts 5, dimensioned so as to pass upwards into slotted lugs 6 arranged in the usual manner at diametrically opposite points of the wrist watch 7 to receive the ends of the usual wrist-strap 8, the two bridge-like parts 5 of the length of wire being continued as at 9 for relatively short distances to the free ends of the wire to engage under the junction of one end of each of the slotted lugs of the wrist watch, these free ends preferably being returned on themselves as at 10 to avoid sharp extremities liable to catch in a cuff of a garment or be uncomfortable to the user.

With this described embodiment, the length of wire may be regarded as a U-shaped length of wire in which the median part of the U is bent into a symmetrical part-circular loop 3 to spring into the said groove 2 of the ancillary article 1, the side limbs of the length of wire being deformed between their free ends and the junctions thereof to the median part of the U into upwardly directed bridge-like shapes 5, dimensioned to tuck snugly upwardly into the openings of the slotted lugs of the wrist watch, the free ends 10 of the limbs of the U being returned on themselves to afford narrow radiused corners.

Referring to FIGURES 4 and 5 of the drawings, instead of engaging the length of wire by shallow bridge-like parts 5 with the slotted lugs of the wrist watch, the ancillary article 1 is gripped firmly in a clip in the form of a U-shaped length of wire or wire form material constituted by opposed side limbs 11 and 12, joining the bend of the U which takes the form of a loop 13 of more than 180°, the free ends of the limbs 11 and 12 being bent back on themselves as at 13 to avoid sharp corners.
3
This clip is engaged by its side limbs 11 and 12 in a cradle comprising a rectangular length of wire bent to afford a pair of opposed parallel sides 14 and 15 which at their ends are cranked downwardly as at 16 to afford an opposed parallel pair of sides 17 and 18 between which and the back surface of the wrist-strap 8 extend the limbs 11 and 12 of the U-shaped member which, by their tendency to open outwardly, press firmly against the cranked parts 16. By this arrangement, the ancillary article 1 is connected to the wrist-strap of the watch 7 by a clip which mates in the corners of a rectangular length of wire which, by two opposed parallel sides, abuts against the outer face of the wrist-strap.

In the embodiment shown in FIGURE 6, the ancillary article 1 may be secured to the wrist-strap so as to be located on the opposite side of the wrist to that engaged by the watch. It has its groove peripherally engaged by an opposed bowed symmetrical part 19 and 20 of a length of wire brought to endless form and having a symmetrical pair of loops 21 and 22 which serve as anchorage members for the ends of the parts of the wrist-strap 8.

The embodiment shown in FIGURE 7 differs only from that shown in FIGURE 6 by providing, for engagement in the peripheral groove of the article 1, complementary concentric opposed parts which are bent outwardly into two anchorage loops 23 and 24 which receive the ends of the wrist-strap 8.

1 claim:

1. In combination, a wrist watch and wrist strap therefore; an ancillary article having a peripheral groove; and means for connecting said article to said wrist watch and its strap, said means comprising a length of resilient wire-form material formed midway between its ends with a loop dimensioned to spring into said groove and firmly grip said article, said length of wire-form material including a pair of opposed spaced arms extending from opposite ends of said loop and across and being detachably connected to said wrist strap.

2. A combination according to claim 1 in which said length of wire-form material is of generally U-shape, the median part of the U being symmetrical and part circular and providing the aforesaid loop, the side limbs of the U being deformed between their free ends and their junctions to said median part into upwardly directed bridge-like shapes dimensioned to tuck snugly upwardly and over the wrist strap portions adjacent said wrist watch.

3. A combination according to claim 1 in which said arms are substantially parallel with each other, said combination further including a separate member of wire-form material bent to rectangular form and having two opposed parallel sides the ends of which are cranked downwards and join the other two opposed parallel sides of said separate member, said arms nesting between said other two opposed parallel sides and the undersurface of said wrist strap.

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