June 9, 1964 R. SINNER 3,136,139

EXTENSIBLE BRACELET STRAP INCLUDING A RESILIENT COIL AND NON-EXTENSIBLE BAND

Filed Jan. 31, 1961

FIG. 1



FIG. 2

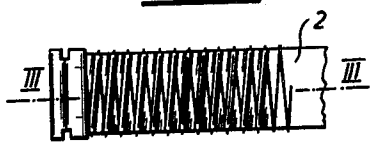
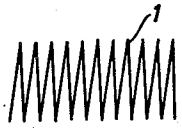


FIG. 4



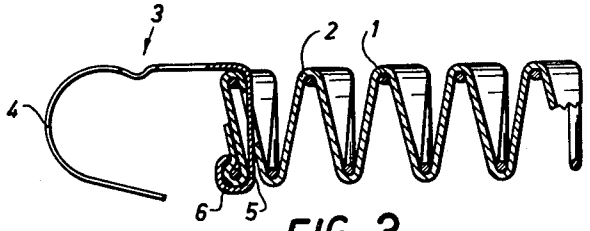


FIG. 3

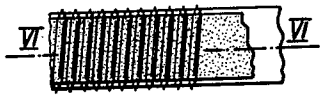


FIG. 5

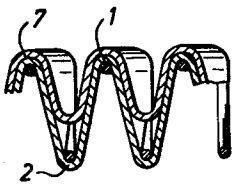


FIG. 6

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EXTENSIBLE BRACELET STRAP INCLUDING A RESILIENT COIL AND NON-EXTENSIBLE BAND

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1 Claim. (Cl. 63—5)

The invention concerns an extensible bracelet, which may be used for example as a wrist-watch strap.

The first embodiment of a bracelet according to the present invention comprises a spring in form of a flat helical coil and a soft band or strip of foldable material which is threaded through the windings of the spring so that the flat part or major side surface of each spring convolution is covered on the outer side by the strip or band.

A second embodiment of the invention comprises the same parts as the first embodiment and additionally a second soft band or strip glued on one side of the first band and penetrating partly in the space between the adjacent folds of the first band.

Two embodiments of the invention are shown in the annexed drawing. In the drawing:

FIGURE 1 is a plan-view of a bracelet according to the invention.

FIGURE 2 is a fragmentary view of the embodiment of FIGURE 1 the bracelet in a partially extended condition.

FIGURE 3 is a section through the embodiment shown in FIGURE 1 along the line III—III in FIGURE 2.

FIGURE 4 is a diagrammatic view of the spring alone.

FIGURE 5 is a view similar to FIGURE 1 of a second embodiment of the invention.

FIGURE 6 is a section through the embodiment shown in FIGURE 5 taken along the line VI—VI in FIGURE 5.

Referring to the drawing the bracelet shown in FIGURES 1 through 4 comprises a spring 1 (see FIGURE 4) having the form of a flat helical coil which may be obtained by winding a wire in form of the helical coil upon a bar having rectangular cross-section. A soft band 2 made, for example of leather or plastic, is threaded through the convolutions of the spring 1, in a manner clearly shown in FIGURE 3 of the drawing, so that folds are formed which surround the windings of the spring so that the outer major side surfaces of the flat parts of each convolution of the spring are covered by said band.

The bracelet shown in the drawing is provided with a metallic armature 3 on each end intended to fix the bracelet to a wrist-watch. The armature 3 comprises a buckle 4 intended to grip over the pin provided between the corners on one side of the housing of the wrist-watch. On the side showing the bracelet the armature 3 is provided with a bridge 5 passing between the last and the preceding winding of the spring 1. The bridge is terminated by a roll 6 surrounding the last winding of the spring 1.

In the second embodiment shown in FIGURES 5 and 6 of the drawing on one side of the bracelet a second soft band or strip 7, made of a foldable fabric for example, is glued. Said band 7 is glued while the bracelet is partly extended. The band is pressed on the bracelet, and when the bracelet is allowed to return to its normal position shown in FIGURE 1 of the drawing the second band 7 enters partly between the adjacent or successive folds as may be seen in FIGURE 6. When the bracelet is extended again the second band 7 will return to its original flat form preventing any further extension of the wrist watch band or strap.

What I claim is:

An expansible wrist watch strap, comprising in combination, a wire wound into a flattened rectangular, elastic helical coil having a longitudinal axis and a plurality of convolutions each having two external major side surfaces extending transversely of and facing in opposite directions away from said longitudinal axis, a first band of foldable material disposed threaded on said helical coil and looped over successive ones of said external major side surfaces of said convolutions at alternating sides of said band and having successive folds defining the wrist watch strap, and a second band of foldable material bonded adjacent its ends to said first band and disposed overlying said first band, said second band being shorter than the overlying portion of said first band and having successive folds disposed between the folds of said first band, said second band passing externally only of the ones of said external major side surfaces which face in one of said directions, whereby when said wrist strap is in extended condition said second band of material is disposed in a stretched condition and limits the extension of said helical coil and thereby limits the extension of said wrist watch strap.

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