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K. C. AUGENSTEIN

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FLEXIBLE BAND

Filed May 31, 1928

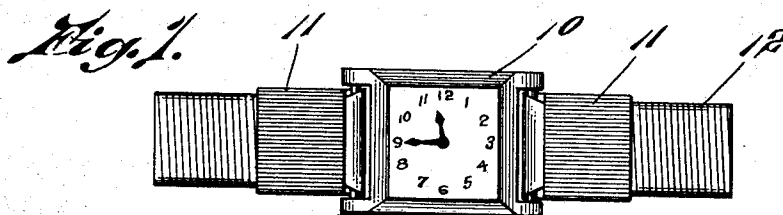
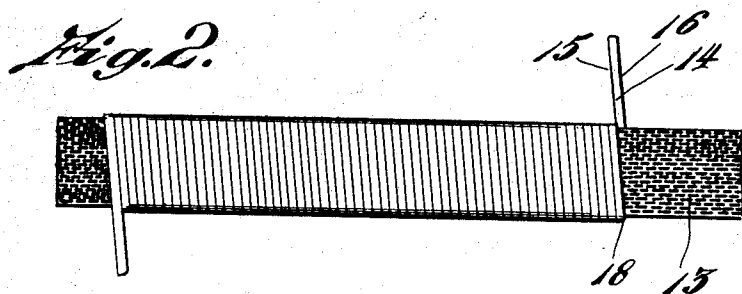


Fig. 3.

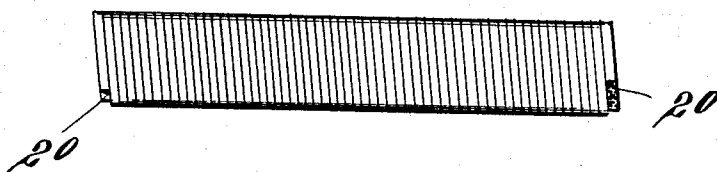


Fig. 4.

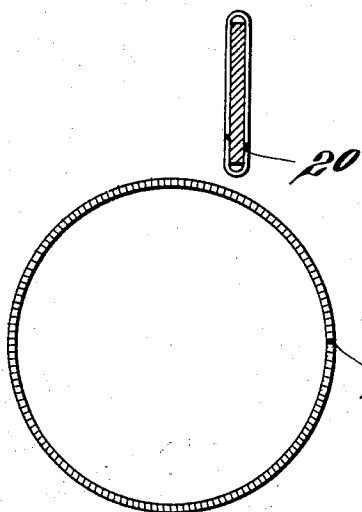


Fig. 5.

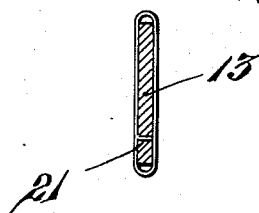
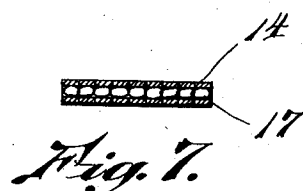


Fig. 6.

INVENTOR.
Karl C. Augenstein.
BY *Barlow & Barlow*
ATTORNEYS.

UNITED STATES PATENT OFFICE

KARL C. AUGENSTEIN, OF CRANSTON, RHODE ISLAND, ASSIGNOR TO AUTOMATIC GOLD CHAIN COMPANY, A FIRM COMPOSED OF EDWIN F. M. SPEIDEL AND ALBERT E. R. SPEIDEL, OF PROVIDENCE, RHODE ISLAND

FLEXIBLE BAND

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This invention relates to a flexible band of the type to be worn for personal wear as a wrist watch strap or the like; and has for its object to provide a construction which

5 will be very thin in appearance and extremely flexible so that when worn as a wrist watch strap it will not interfere with the manipulation of the wrist by the wearer as in writing, etc.

10 A further object of the invention is the provision of a non-elastic core with a ribbon of thin material wound about the same, the ribbon being very narrow and disposed helically about the core so as to form a flexible

15 band.
This invention further consists in winding a thin narrow flat metal band helically about a mesh fabric core with the edges of the coils closely adjacent each other so as to hide the mesh fabric core, the relative

20 stiffness of the core and the metal ribbon being such that the ribbon may be bent at the edges of the band about the core as an arbor without crushing the core.
25 With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

30 In the accompanying drawings:

Figure 1 is a top plan view of the band as attached to a watch through extendible members one at either side of the watch.

35 Figure 2 is a top plan view of a mesh fabric core with the metal ribbon wound about a portion thereof.

40 Figure 3 is a view similar to Figure 4 showing the ends as secured against unwrapping by soldering the same to the mesh core.

Figure 4 is an end view of the construction shown in Figure 3.

45 Figure 5 is an end view showing a modified form of attaching the ribbon to the mesh core.

50 Figure 6 is a side elevation of the band formed as a complete hoop or bracelet in which case the two ends of the ribbon are soldered together to prevent their unwrapping.

Figure 7 is a sectional side view showing the relative dimension of the coils of the mesh and the width of the ribbon wound about the same.

It is found desirable in the formation of 55 flexible bands of the type used as wrist watch straps to make the same extremely thin in appearance so as to reduce their weight when worn by the wearer and also to avoid obstruction to writing when the 60 strap is worn about the wrist to attach a wrist watch to the arm, and in order to provide such a construction, I have utilized a core of very thin flexible material, such as mesh fabric or the like which is at the same 65 time sufficiently stiff to serve as an arbor and have a narrow ribbon helically wound about such a core with the edges of the ribbon in close adjacency or touching one another so as to hide the mesh fabric or 70 core and provide a strap which has a very even appearance and one which is smooth to the arm of the wearer and may be inexpensively formed; and the following is a detailed description of the present embodiment of this invention and showing the preferred form by which these advantageous 75 results may be accomplished:

With reference to the drawings, 10 designates a wrist watch to which folding extension members 11 are secured on either side 80 thereof with a flexible band 12 of a size to encircle the wrist at its ends to the extension members. This flexible band consists of a core 13 of non-extendible extremely flexible 85 material which I have herein shown as mesh fabric about which I have helically wound a narrow ribbon 14. As illustrated in Figures 2 and 3, the edges 15 and 16 of the ribbon are in close adjacency or practically abutting 90 so that the mesh fabric core 13 is hidden from view and a smooth thin band which will not abrade or be uncomfortable upon the arm of the wearer is formed. The metal ribbon 14 is of a width substantially the 95 width of one of the wire links 17 of the mesh fabric so that an extremely flexible construction is secured, it being understood that the core which I use is of a stiffness sufficient to serve as an arbor and permit 100

bending of the ribbon about its edge as at 18 in winding the same in position.

The ends of the ribbon are secured against unwrapping in some desirable manner, in Figures 3 and 4, I have illustrated the ends as soldered to the metal mesh fabric as at 20, while in Figure 5, I have illustrated a modified fastening which consists in the end 21 of the ribbon being bent so that the same may be pierced through the mesh fabric 13 to secure the same in position, while in still other cases, where a complete hoop or bracelet is provided, as in Figure 6, the two ends of the helically wound ribbon may be soldered together as at 22 to prevent their unwrapping.

The band which I have thus formed is extremely flexible and the helical coils of ribbon are prevented from stretching by the core around which they are wound which is not yieldingly extendible. The band has the strength against longitudinal strain of the core about which it is formed and is of a uniform appearance which makes it highly attractive for personal wear use such as herein described and may be readily formed by use of an ordinary winding machine common in the trade.

By the term "core of flexible material" used in the claims I mean a material which has practically no inherent stiffness in one lateral dimension such as a strap of leather or textile fabric but I do not wish to be confined to these materials or the mesh heretofore mentioned as these are merely illustrative of the general characterization of the conception of the core used.

The foregoing description is directed solely towards the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:—

1. A flexible, ornamental bracelet or the like comprising a core of flexible, inelastic material of a width substantially many times its thickness and a covering for said core comprising a thin, flat, flexible metal ribbon helically wound in contact with said core and with its edges substantially contiguous.

2. A flexible, ornamental bracelet or the like comprising a core of flexible, inelastic wire mesh of a width substantially many times its thickness and a covering for said core comprising a thin, flat, flexible metal ribbon helically wound in contact with said core and with its edges substantially contiguous.

In testimony whereof I affix my signature.