(No Model.)

A. C. DALZELL, Jr.

PROCESS OF MANUFACTURING WATCH CROWN PIECES.

No. 435,802. Patented Sept. 2, 1890.

Fig. 1.

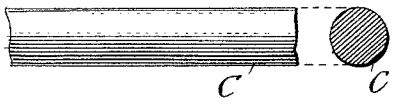


Fig. 2.

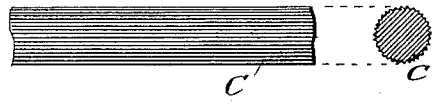


Fig. 3.

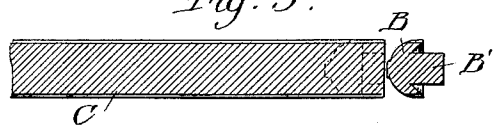


Fig. 4.

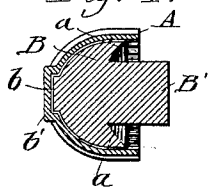
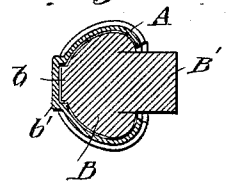


Fig. 5.



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ALLAN C. DALZELL, JR., OF SAG HARBOR, NEW YORK.

PROCESS OF MANUFACTURING WATCH CROWN-PIECES.

SPECIFICATION forming part of Letters Patent No. 435,802, dated September 2, 1890.

Application filed December 16, 1889. Serial No. 333,956. (No specimens.)

To all whom it may concern:

Be it known that I, ALLAN C. DALZELL, JR., of Sag Harbor, in the county of Suffolk and State of New York, have invented a new and useful Process of Manufacturing Watch Crown-Pieces, of which the following is a full, clear, and exact description.

My invention relates to improvements in the manufacture of watch crown-pieces, of crown-cores for the same, and in the manner of attaching the crown-shells to said cores; and the object of my invention is to provide an improved watch crown-piece and a cheap and efficient process of manufacturing crown-cores and of attaching the shells to the same.

To this end my invention consists in a watch crown-piece and in the process of manufacture, which will be hereinafter fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, which illustrate the articles at different stages of manufacture, and in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side and end elevation of a rod from which the said crown-cores are cut; Fig. 2, a side and end view of said rod with corrugations upon its surface; Fig. 3, a longitudinal section of the corrugated rod, showing a crown-core cut therefrom; Fig. 4, a longitudinal section of a crown core and shell, the crown-core being inserted in the shell ready to have the shell closed upon it; and Fig. 5, the same section, but with the crown-shell closed over the crown-core.

The crown-pieces consisting of the shell A and core B, with stem B′, are attached to stem-winding watches, the watch-pendant being slipped over the stem B′, and the crown-piece serving as a handle to turn the winding mechanism, the core B being inserted in the crown-shell A to stiffen the same.

My process of manufacture is as follows: I take a rod C, of brass or other suitable material, of the same diameter as the crown-core A, and draw it through an especially-prepared draw-plate, which corrugates said rod throughout its entire length, the corrugations being of the same size as the corrugations of the crown-shell A. The rod is then placed in a suitable screw machine or lathe, which turns the stem B′ to fit the watch-pendant and which chambers the crown-core B around the inner end of the stem B′, as shown in the drawings, the chamber *a* thus formed being deepest next the stem and tapering to the edge of the crown-piece. A forming-tool is then brought against the rod C, which rounds the outer end of the core B, forms a nipple *b* thereon, and cuts the core from the rod. The corrugations will thus be left on a little more than half the outer surface of the core B—*i. e.*, on the part not rounded by the forming-tool. The crown-piece is then placed in the crown-shell A, which is of the usual construction, being a hollow corrugated shell open at one end, so that the corrugations of the core will fit the corrugations of the crown-shell, and the nipple *b* will fit into a corresponding socket *b*′ at the inner end of the crown-shell A. The crown-core B and shell A are then placed in a device which closes the shell over the core and crushes in the chambered end of the core B upon the stem B′, thus firmly uniting the core B and shell A and forming a smooth oval crown-piece, as shown in Fig. 5.

I have not shown the machinery for manufacturing the crown-piece, as I claim the process above described and the crown-piece manufactured in this way without regard to the machinery employed.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The herein-described process of manufacturing watch crown-pieces, which consists, essentially, in corrugating a rod of the same diameter as the watch crown-core, placing said rod in a suitable machine, and turning the stem and chambering one end of the crown-core around said stem, and bringing a forming-tool against said rod, so as to round the other end of the crown-core and cut the core from the rod, substantially as described.

2. The herein-described process of manufacturing watch crown-pieces, which consists, essentially, in corrugating a rod of the same diameter as the crown-core, placing said rod in a suitable machine, and turning the stem and chambering one end of the crown-core around said stem, bringing a forming-tool against said rod, so as to round the other end

of the crown and cut the core from the rod, placing said crown-core in the crown-shell, and closing said shell and chambered end of the core around the stem of said core, substantially as described.

3. In the manufacture of watch crown-pieces, the herein-described process of attaching the crown-shell to the crown-core, which consists, essentially, in placing a crown-core having one end chambered around the stem thereof in the crown-shell and closing said crown-shell and chambered end of the crown-core around the stem of the crown-core, substantially as described.

ALLAN C. DALZELL, JR.

Witnesses:
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