(No Model.)

V. NIVOIS.

WATCH CASE.

No. 481,809. Patented Aug. 30, 1892.

Fig. 1.

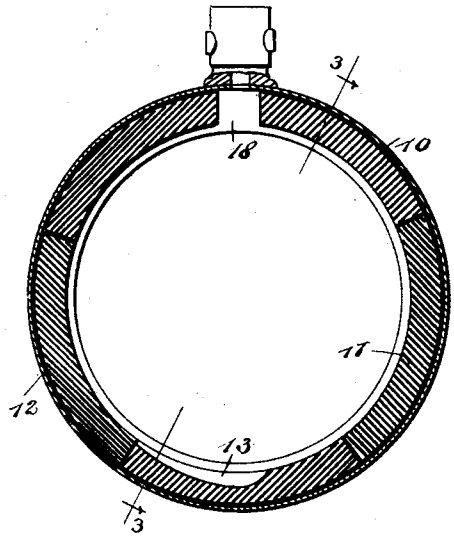


Fig. 2.

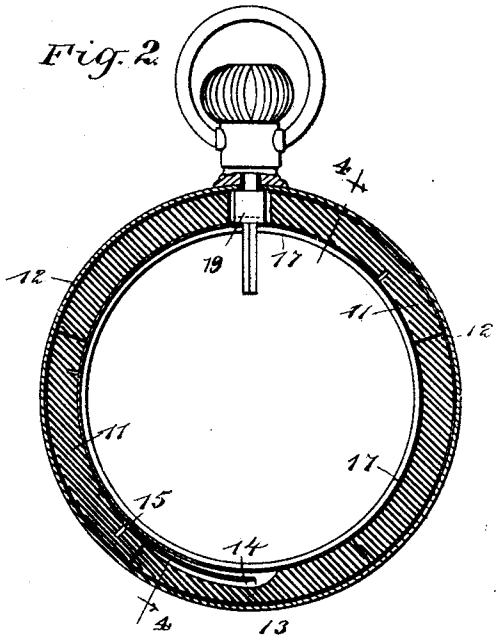


Fig. 3.

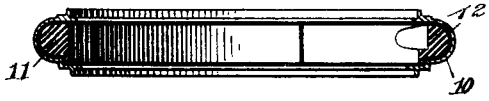


Fig. 4.

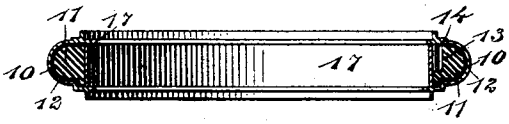


Fig. 5.

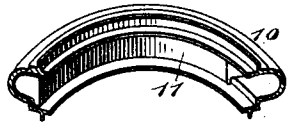


Fig. 6.

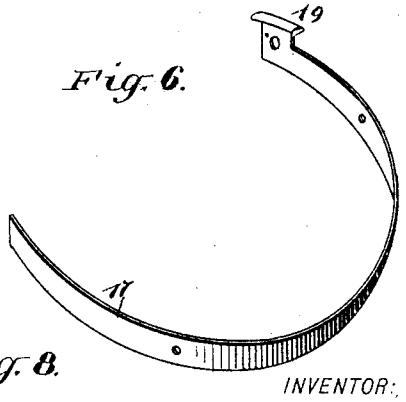


Fig. 7.

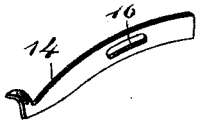
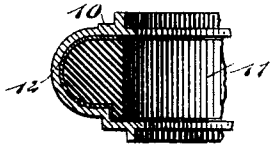


Fig. 8.



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WATCH-CASE.

SPECIFICATION forming part of Letters Patent No. 481,809, dated August 30, 1892.

Application filed February 2, 1892. Serial No. 420,071. (No model.)

To all whom it may concern:

Be it known that I, VICTOR NIVOIS, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Watch-Cases, of which the following is a full, clear, and exact description.

My invention relates to an improvement in gold watch-cases, and has for its object to especially improve the construction of the center of the case and to so construct the center that a filling may be inserted therein and manipulated to essentially constitute an integral portion of the shell of the center, and thus not only strengthen the shell, but prevent an abrasion of the shell made by the passage through it of an engraving-tool being detected, and, further, whereby the filling will obviate the necessity of the usual bearings or stay-strips ordinarily employed to brace the center where the joints of the cap and backs are to be placed, and also the bearing below the pendant.

A further object of the invention is to provide a lift-spring for the watch-case, capable of being expeditiously, conveniently, and adjustably secured to the center without exerting tension to any great degree upon the shell of the center, and, further, to provide in connection with the center and the lift-spring a combined dust-band and catch-spring which shall not only form a finish for the center, but which will also effectually prevent the dust from entering the case through the openings of the cap or backs at the joints, and especially through the opening usually provided in the center for the outward projection of the lift-spring, the said dust-band being provided at its upper end with the ordinary releasing or catch spring for the front cap or back, and, instead of attaching a releasing or catch spring to the dust-band, the said dust-band in itself constitutes a spring.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section through a center, illustrating the filling in position therein but not soldered to place. Fig. 2 is a similar section to Fig. 1, illustrating the filling as soldered and the shell of the center and the lift-spring and combined dust-band and catch-spring in position. Fig. 3 is a section taken through the center on the line 3 3 of Fig. 1. Fig. 4 is a similar section taken on the line 4 4 of Fig. 2. Fig. 5 is a detail perspective view of one of the sections or segments of the filling and the shell of the center, illustrating the manner in which the two fit together. Fig. 6 is a detail perspective view of the combined dust-band and releasing or catch spring. Fig. 7 is a detail perspective view of the lift-spring; and Fig. 8 is a section through the shell of the center and the filling, the said view illustrating the manner in which the two are connected, the section being taken upon a large scale.

In carrying out the invention the center consists, primarily, of a shell 10 of any approved shape in cross-section, and in connection with the shell a backing or filling 11 is employed. This backing or filling for the center is constructed of a base metal; but silver may, if preferred, be used. This filling is constructed in segments, and in cross-section conforms perfectly to the inner cross-sectional contour of the shell 10 of the center. This filling or backing is made of any desired thickness. Preferably, however, its thickness is less than the depth of the shell of the center, and it extends entirely around the center, a break being made only for the admission into the center of the winding-arbor. When the segments of the backing or filling have been placed in position in connection with the shell of the center, solder, preferably in the shape of powder, is so distributed over the filling that it enters between the abutting ends thereof, and solder, preferably in the same powdered form, is made to intervene the outer face of the filling and the inner face of the center shell, as illustrated at 12 in the drawings. The solder is then subjected to heat, whereby the filling or backing is made an integral portion of the shell, strengthening it, adding to its solidity, and virtually making the two parts at that time integral portions. By this means the shell of the center is so steadied that the pendant and also the joints

for the two backs and cap may be attached to the center without having to put in bearings for the pendant, front back, back back, and cap, as is always done in gold cases to strengthen the above parts mentioned, this being unnecessary, as the center is practically one solid piece of metal. Furthermore, when the shell of the center is to be engraved or chased in the event the engraving-tool should pass through the shell, as the shells are ordinarily made very thin, said tool will enter the backing and the error will not be discernible, nor will the shell be at all weakened by such mishap. It will thus be seen that I provide a center formed in any desired shape in cross-section, the shell of which center may be exceedingly thin, and I also provide a backing, stay, or support capable of being expeditiously and conveniently placed in position and which will strengthen the shell to such an extent that it may be manipulated in like manner as one solid piece of metal.

In one of the segments or one portion of the entire backing a recess 13 is produced, and this recess is adapted to receive the lower portion of a lift-spring 14, adapted to act upon the front back. This lift-spring is shown in detail in Fig. 7 and in position in Fig. 2. The curved end extends outward beyond the center to an engagement with the front back in the usual manner. The body portion, however, of the lift-spring above the recess 13, which admits of the inclination of the lower portion of the spring, is attached by a screw 15 or its equivalent to the backing and the screw is passed through an elongated opening 16 in the spring, whereby the spring may be adjusted upward or downward, and thereby be accommodated for use in connection with centers of different sizes, and in connection with the lift-spring and the backing I employ a dust-band 17, which is preferably made of spring metal and extends from one side of the opening 18, occurring between the upper ends of the backing or filling and adapted to receive the winding-arbor around and in engagement with the inner surface of the backing, the other end of the dust-band terminating in the usual releasing-head 19 for the front back, adapted to be acted upon by the winding arbor or stem of the case in any suitable or approved manner and in one article combining a dust-band and catch or releasing-spring.

The combination dust-band and catch or spring is secured to the filling at proper intervals through the medium of screws or equivalent devices and covers and conceals the lift-spring and the recess 13, occupied by the major portion of the spring, as shown in Fig. 2, and effectually prevents dust sifting into the center through said opening or any opening in the case leading into it.

I do not claim, broadly, a filling of base material secured in a gold or other shell of a watch-center nor a spring attached to the inner side of such filling.

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

In a gold watch-case, the combination, with the shell of the center and a backing or filling of baser metal corresponding strictly in cross-sectional contour to the cross-sectional contour of the shell, the said backing or filling being integrally attached to the shell through the medium of solder applied over its entire inner surface and provided at its lower portion upon its inner face with a recess, of a lift-spring adjustably secured to the backing or filling, the major portion of which lift-spring occupies a recess in the filling, and a catch or releasing spring forming a dust-band, constituting, essentially, a circle within the center and made of such width that it conceals the filling, its recess, and the lift-spring, as and for the purpose specified.

VICTOR NIVOIS.

Witnesses:
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EDGAR TATE.