

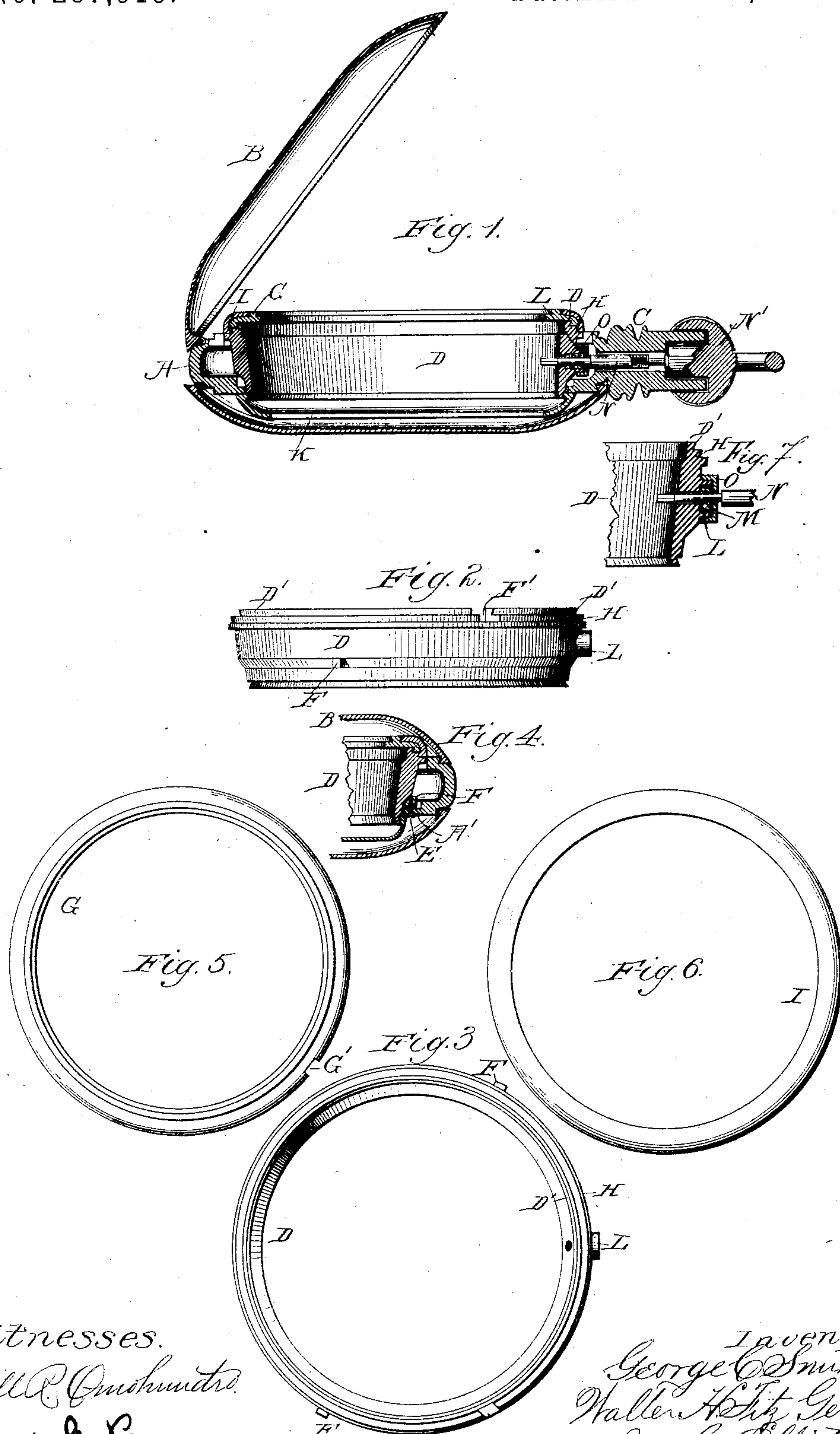
(No Model.)

W. H. FITZ GERALD & G. C. SMITH.

DUST PROOF WATCH CASE.

No. 287,919.

Patented Nov. 6, 1883.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

WALTER H. FITZ GERALD AND GEORGE C. SMITH, OF CHICAGO, ILLINOIS.

## DUST-PROOF WATCH-CASE.

SPECIFICATION forming part of Letters Patent No. 287,919, dated November 6, 1883.

Application filed August 6, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, WALTER H. FITZ GERALD and GEORGE C. SMITH, both citizens of the United States, residing in Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Dust-Proof Watch-Cases, of which the following is a specification.

The object of this invention is to render a watch-case dust and moisture proof in a cheap, simple, and efficient manner, and without involving the use of cumbersome, unsightly, and expensive appendages.

To such end our improvement may be generally stated to consist in a rim for holding the movement seated in the center, and provided with two concentric annular shoulders, upon which an inner and an outer bezel, respectively, are fitted, whereby the outer bezel, constituting an annular cap, which can be readily snapped upon or removed from the rims, serves as a means for effectively closing the opening for the hand-set, and thereby preventing the entrance of dust or moisture into the case.

It also consists in a stuffing-box through which the stem passes, whereby the operation of the stem for purposes of winding up the watch or for actuating the usual catch-spring shall in nowise tend to cause dust to work through into the case, thereby rendering the latter both dust and moisture proof—a feature which is of great importance to a watch.

Figure 1 represents a section taken transversely through a hunting-watch case with our improvement applied thereto. Fig. 2 is a side elevation of an inner ring or rim adapted to be fitted in the center of the case. Fig. 3 is a top view of said rim. Fig. 4 is a detail sectional view of a portion of the case, and illustrates the way in which the rim is secured in the center. Figs. 5 and 6, respectively, illustrate the bezels.

Referring by letter to the several figures of the drawings, in which like letters denote like parts—

A indicates the center of a hunting-watch case, provided with a front, B, and with a pendant, C, as usual.

The movement, which is not herein shown, is seated and held in a ring or annular rim,

D, which is in turn fitted within the center and seated therein upon an annular seat, A', formed with the center. The rim is secured upon the seat by means of two or more small screws, E, passing through the seat into screw-threaded sockets F on the perimeter of the rim, one of said connections between the center and the rim being shown in the detail sectional view, Fig. 4. The rim is provided on its top or front edge with an annular shoulder, D', upon which a bezel is snapped, as usual, and it is also provided in said edge with a notch, F', forming a passage through which the hand-set of the movement can be projected.

The bezel G is formed with a notch, G', which is brought into register with the notch in the rim, when the bezel is snapped upon the latter, so that a free passage shall be afforded for the hand-set with which the movement will be furnished. In order to prevent dust from finding its way through this passage and working in between the movement and the rim, and consequently into the movement, we provide the rim upon its front edge with a second outer and annular shoulder, H, upon which a second outer bezel, I, is snapped or otherwise secured. This outer and larger bezel is dissimilar to the inner bezel in that it has no notch whereby a passage for the hand-set shall be completely covered, and all entrance of dust through the same thereby effectually prevented. Either bezel can be employed for holding the glass, although the inner bezel will preferably be employed for such purpose, while the outer bezel will constitute an annular cap fitted over the inner bezel, and serving to prevent dust from finding its way into the movement of the watch. These bezels are snapped on their allotted shoulders in the same manner as an ordinary watch-bezel is snapped on, and hence, when it becomes necessary to have access to the hand-set, the outer bezel can be readily sprung off, and afterward snapped on the outer shoulder without difficulty. A bezel, K, can also be snapped on the back side of the rim, or the usual hinged back cap can be connected with the center, as preferred, it being seen that the back-cap will of itself serve as means for keeping dust from the interior of the case.

As a further means for rendering the case



dust-proof, we employ a stuffing-box for the stem, so as to avoid any possibility of either dust or moisture finding its way into the case through the pendant. To such end we provide a small hollow boss or box, L, upon the perimeter of the rim, and in such hollow boss fit a suitable elastic packing, M, through which the stem N passes. This boss is covered by a small cap, O, having a perforation registering with the bore through the packing, whereby the stem can pass and work through the said cap and packing, which latter, while fitting the stem, so as to prevent dust from working past the same, will in no wise interfere with the free operation of the stem. The axial bore through the stuffing-box registers with the bore through the pendant, the rim being adapted so that when properly seated the said two bores shall be in line, and thereby admit of the stem passing and working through the same.

The stem is shown provided with a crown, N', as usual, while the requisite springs belonging to the case are omitted, it being understood that any suitable construction of lift and catch springs can be employed where a hinged front is used.

The stuffing-box through which the pendant passes is herein shown located on the rim; but, if desired, it can be arranged in the pendant, where it will efficiently serve to exclude dust from the case.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, in a watch-case, of the center with a rim for holding the movement seated in the center and provided with an inner and an outer annular bezel, both removably secured to the said rim, substantially as and for the purpose described.

2. The combination, in a watch-case, of the center with a rim for holding the movement, seated and secured in said center and provided with two annular shoulders, and a pair of bezels fitted upon the shoulders of the rim, substantially as described.

3. The combination, with the center and the rim provided with two annular shoulders and a notch forming a passage for the hand-set, of the inner notched bezel fitted upon the inner shoulder, and the outer bezel fitted upon the outer shoulder and covering the passage for the hand-set, substantially as and for the purpose described.

4. The combination, with the center provided with a pendant, of the rim having a stuffing-box with an axial bore registering with the bore through the pendant, and the stem passing and working through said stuffing-box, substantially as described.

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