

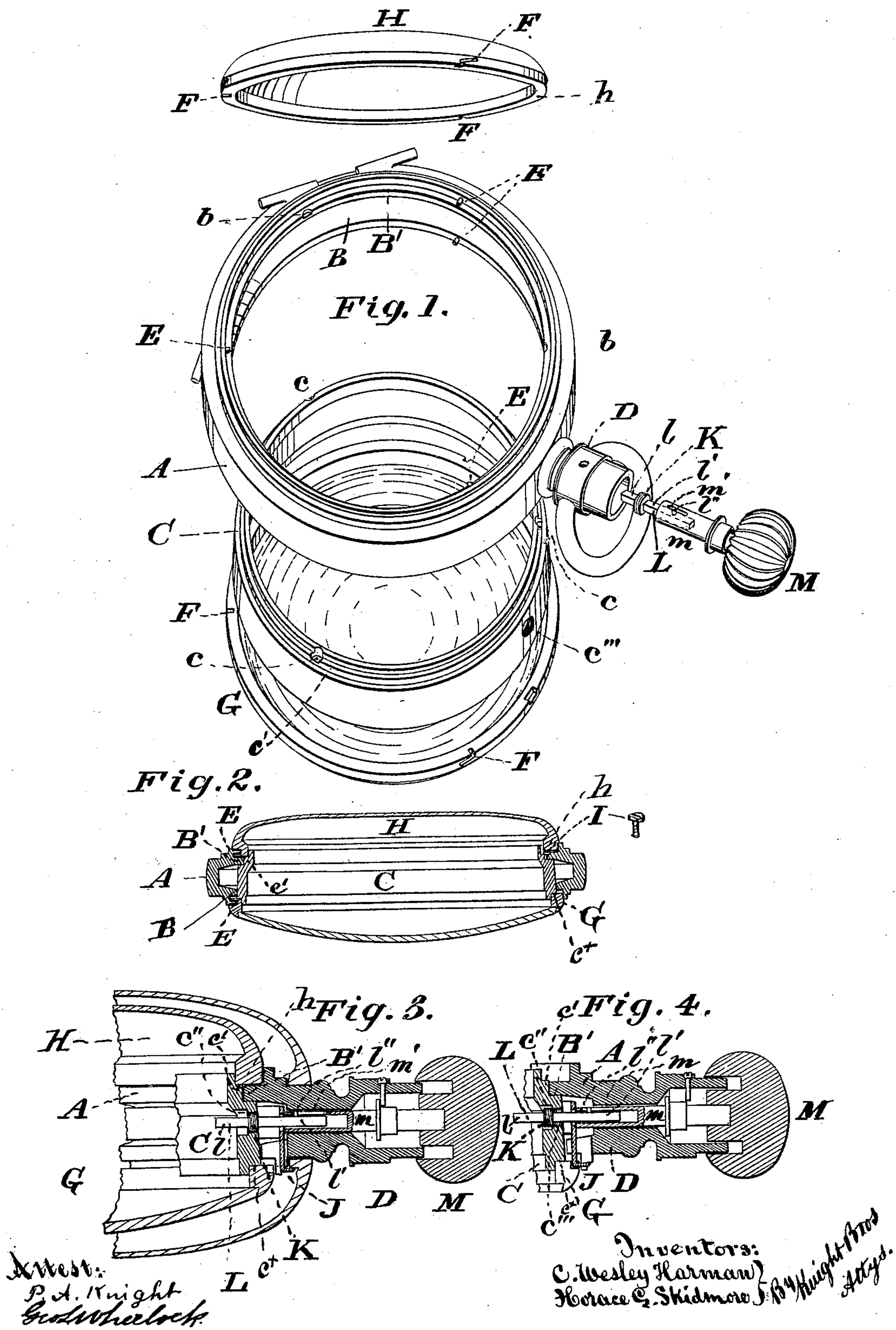
(No Model.)

C. W. HARMAN & H. G. SKIDMORE.

WATCH CASE.

No. 298,197.

Patented May 6, 1884.





# UNITED STATES PATENT OFFICE.

C. WESLEY HARMAN AND HORACE G. SKIDMORE, OF CINCINNATI, OHIO.

## WATCH-CASE.

SPECIFICATION forming part of Letters Patent No. 298,197, dated May 6, 1884.

Application filed December 10, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, C. WESLEY HARMAN and HORACE G. SKIDMORE, both of Cincinnati, Hamilton county, Ohio, have invented new and useful Improvements in Watch-Cases, of which

5 the following is a specification.  
Our invention aims to produce a dust and moisture proof watch-case of great simplicity and at small cost, and relates, first, to a means  
10 of hermetical closure of the movement independently of the outer caps, in which the bezel and the inner back are respectively tightly seated on the movement-containing ring by screw or equivalent connection with the "case-center;" and, secondly, to a means of like closure  
15 of the push-piece socket in stem-winding watches.

In the accompanying drawings, Figure 1 is a perspective rear view of a case-center, a movement-ring, a bezel, and an inner back embodying our invention, the said members being shown detached. Fig. 2 is an axial section of these parts attached. Figs. 3 and 4 are enlarged sections which illustrate (in the closed  
20 and unclosed conditions, respectively) our preferred construction of push and winder stem system for stem-winding watches.

A is a watch-case "center," and B B' interior flanges thereof. The flange B' on its inner side forms a seat for the movement-inclosing ring C, which is recessed to form seats  $c \times c'$  for the bezel G and inner back, H, respectively, the outer sides of the flanges B B' forming seats for the projecting portions of the bezel and inner back.  
35

D is a customary tubular pendant-socket, which in stem-winding watches contains a peculiarly-constructed push-piece and winder-stem, hereinafter described.

40 E are six studs or pins that project interiorly from the case-center, of which pins three near the front engage in oblique grooves F in the bezel G, and three near the rear in like grooves in the inner back or cap, H.

45 I are half-round headed screws, which, being tapped into the ring C, enable said ring, with its contained movement, to be locked within the case-center. Recesses  $b$  and  $c$  in the flange B and the ring C, respectively, permit sufficient  
50 entry of said screws to place their heads out

of contact with rim  $h$  of cap H, so as to permit said rim to so bear upon seat  $c'$  of the ring C as to exclude dust and moisture.

J may represent a customary catch-spring.

The above-described construction is applicable to any form of watch—as, for example, whether key-winding, stem-winding, hunting or open case. 55

When the case is designed to be used for a stem-winding watch, the movement-containing ring C has an orifice,  $c'' c'''$ , whose interior half,  $c''$ , is counterbored, and whose exterior half,  $c'''$ , is screw-threaded for a correspondingly-threaded plug, K, on a square key-pin, L, whose inner end,  $l$ , is adapted to fit and occupy the customary socket in the movement-winding arbor, and whose outer (and likewise square) end,  $l'$ , fits and occupies the correspondingly-formed pipe  $m$  of the combined push-piece and stem-winder M. A pin,  $l''$ , on the portion  $l'$ , occupying a slot,  $m'$ , in the pipe  $m$ , permits a limited longitudinal play of push-piece independently of the said key-pin. In the normal (or closed and dust-proof) condition of these parts, the screw-threaded plug K occupies the correspondingly-screw-threaded portion  $c'''$  of the orifice  $c'' c'''$ , and does not require to be disturbed from this condition for merely releasing the front cap by customary depression of the push-piece, because of the above-explained play of the latter on the key-pin. 60 65 70 75 80

When it is desired either to wind or to set the watch, the member M is revolved to the right until the plug K is forced inward clear of the screw-threaded portion  $c'''$  and into the counterbore  $c''$ —a condition of the parts which liberates the member M to be revolved freely to the right either for winding or for setting. 85

The above-described preferred form of our invention is susceptible of various modifications. For example, the bezel and the inner back, or either of them, may have sufficient diameter to permit their oblique grooves to be located in the concavities of their rims, so as to engage on exterior projections of the case, and ordinary screw-threads may be substituted for such grooves and projections; but, whichever mode of screwing be used, the seating of such cap or bezel will be upon the movement-containing ring, in the manner above explained. 90 95 100



In cases which have but one (single) back—as in some forms of open-case watches—the within expression “inner back” manifestly implies such a single back.

5 We claim as new and of our invention—

1. The combination of a movement-holding ring, a case-center, bezel, and inner back, the movement-holding ring adapted to be held from movement in the case-center, and the bezel and inner back being seated upon the movement-holding ring, and secured to the case-center by a turn-joint similar to a screw or bayonet-joint connection, as set forth.

2. The combination of a movement-holding ring, a case-center, bezel, and inner back, the movement-holding ring adapted to be held from movement in the case-center, and the bezel and inner back occupying seats on the movement-holding ring and case-center, and secured to the case-center by being turned into the latter, as by a screw or bayonet-joint connection, as set forth.

3. The combination of a case-center having

flanges B B', movement-holding ring having seats  $c'$   $c''$ , the bezel, and the inner back, the movement-holding ring being held from movement in the case-center, and the bezel and inner back both being seated against their respective seats and flanges, and connected to the case-center by being turned in, as by a screw or bayonet-joint, as set forth.

4. In a dust-proof stem-winding-watch case, the slotted push and winder piece M, which contains a sliding key-pin, L, having a screw-threaded plug, K, in combination with the screw-threaded and counterbored orifice  $c''$   $c'''$  in the movement-containing ring, substantially as and for the purpose set forth.

In testimony of which invention we hereunto set our hands.

C. WESLEY HARMAN.  
HORACE G. SKIDMORE.

Attest:

GEO. H. KNIGHT,  
S. S. CARPENTER.