Jan. 24, 1961 E. PIQUEREZ 2,968,911

FLUIDTIGHT WATCH CASE

Original Filed Nov. 1, 1955

FIG. 1.

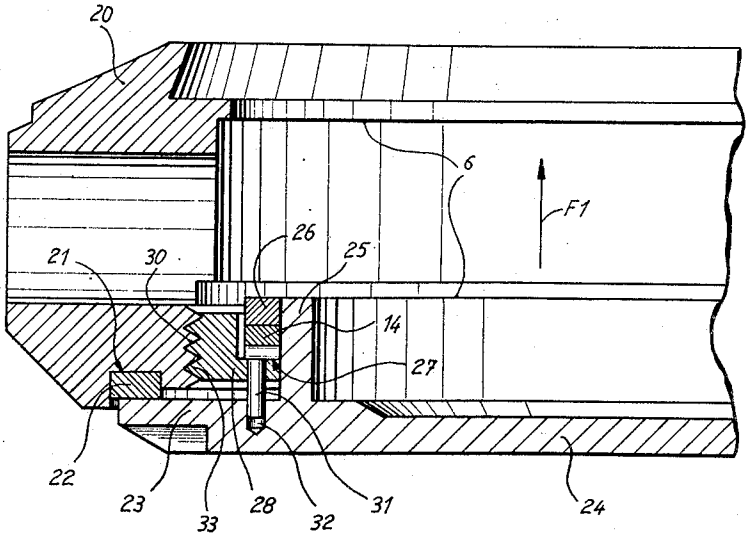

FIG. 2.

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FLUIDTIGHT WATCH CASE

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Original application Nov. 1, 1955, Ser. No. 544,332. Divided and this application Dec. 18, 1959, Ser. No. 860,437

Claims priority, application Switzerland Nov. 22, 1954

1 Claim. (Cl. 58—90)

My present application is a dvision of my copending specification Ser. No. 544,332, filed on November 1, 1955. According to my invention, there are provided annular elastic means compressed between the bottom section of the case and the case band, said bottom section including an annular upstanding member provided with an outer flange urged upwardly by the elastic means under the action of said elastic means which are subjected to the upwardly directed compression exerted by a ring threadedly engaging the inside of the case band.

In the drawings:

Figure 1 is a partial diametrical cross section embodying my invention.

Figure 2 illustrates in detail the elastic means in a partly sectional elevational view.

In the accompanying drawing, the body **20** of the watch case is provided with an annular groove **1** housing a packing **22** held in position by the outer flange **23** on the case bottom **24**. Said bottom is provided with an upstanding cylindrical wall **25** to which is outwardly secured a collar-shaped stop **26** which serves for urging axially a corrugated annular spring **14** against a second stop **27** constituted by the inner flange of an assembling ring **28**. The latter is screwed inside a tapped section **30** of the case body **20**. The ring **28** turns in unison with the bottom **24** of the case as provided by the pins **31**, only one of which is illustrated; however, the connection between the bottom **24** and the assembling ring

28 provides a slight axial clearance between said parts by reason of the fact that the pins **31** are slidingly fitted in blind openings **32**, the depth of which is sufficient to allow such an axial clearance. As a consequence of this arrangement, the corrugated annular spring urges the bottom **24** upwardly in the direction of the arrow F_1 by acting on the collar-shaped stop **26** which leads to making the flange **23** exert a pressure on the packing **22**. By reason of the presence of equidistant corrugations on the spring **14**, said pressure is uniform and constant.

It is possible to substitute for the corrugated annular spring **14** other elastic means held under compressed conditions between an annular axial stop formed either on the case body or on the case bottom or even on another part of the case.

Obviously, the packing is not essential since the desired fluidtightness between the bottom and the case body may be obtained through direct contact between said parts without any packing therebetween.

What I claim is:

In a fluidtight watch case, the combination of two case components, a bottom section and a case band, an annular packing fitted between the peripheral portion of the upper surface of the bottom section and the lower periphery of the case band, an annular member rigid with and extending over the bottom section on the inside of the case band and having an annular surface facing the upper surface of said bottom section, a ring coaxial with the case and threadedly engaging the inner surface of the case band and including an inturned annular flange, the upper surface of which faces the above-mentioned annular surface in the annular member and annular elastic means fitted between the two last-mentioned cooperating annular surfaces and urging the member rigid with the bottom section and therewith the latter upwardly into fluidtight engagement with the case band with the interposition of the packing.

References Cited in the file of this patent

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