

Oct. 19, 1943.

W. A. MUNEY ET AL

2,332,459

WATERPROOF WATCHCASE

Filed Jan. 13, 1943

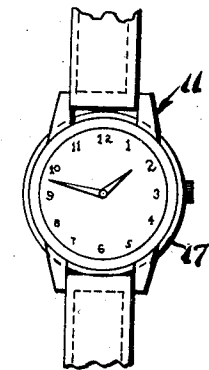


FIG. 1.

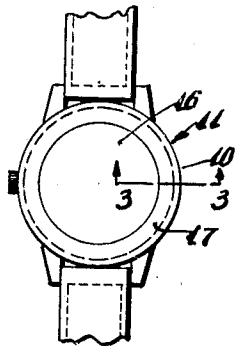


FIG. 2.

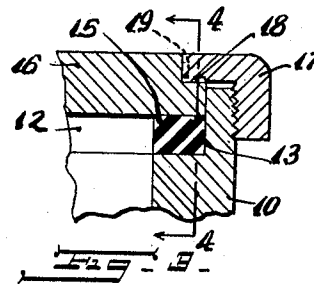
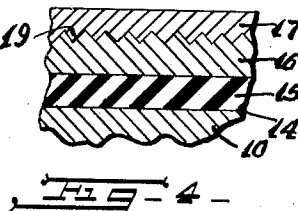
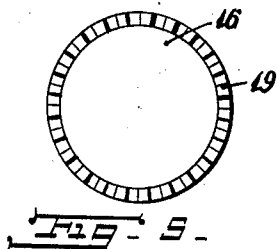


FIG. 5.

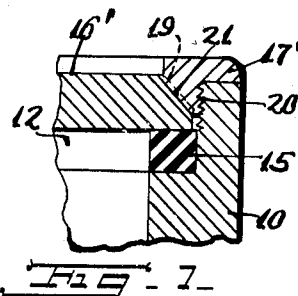


FIG. 6.

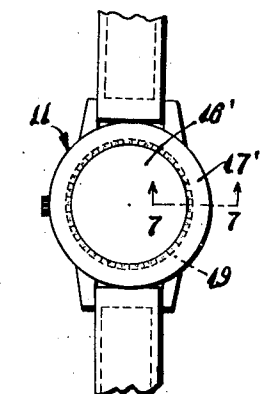


FIG. 7.

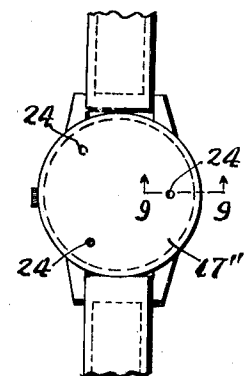


FIG. 8.

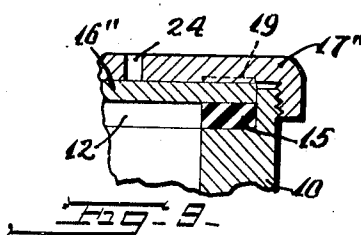


FIG. 9.

INVENTORS
William A. Muney
Charles Wapner
BY
R. H. H. H. H.
ATTORNEY

UNITED STATES PATENT OFFICE

2,332,459

WATERPROOF WATCHCASE

William A. Muney and Charles Wapner,
Brooklyn, N. Y.

Application January 13, 1943, Serial No. 472,194

7 Claims. (Cl. 58—90)

This invention relates to new and useful improvements in a waterproof watch case.

More specifically, the invention contemplates constructing a watch case as mentioned which is characterized by a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, and novel means for closing said open end and cooperative with said gasket for rendering the watch case waterproof.

More particularly, it is proposed to so construct the closure means that the friction quality of the gasket holds the closure means from coming off.

Still further the invention contemplates characterizing the new closure means by a gland or other member threadedly mounted on the cylindrical body and cooperative with a disc extended across the open end of the cylindrical body and having its edges resting on said gasket.

Still further the invention proposes the provision of small radially extending ribs and grooves on the contacting faces of said gland and disc for locking the gland from accidentally unscrewing.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a face view of a watch provided with a waterproof case constructed in accordance with this invention.

Fig. 2 is a rear view of the watch shown in Fig. 1.

Fig. 3 is a fragmentary enlarged sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is a plan view of the disc of the watch case, supra, illustrated per se.

Fig. 6 is a back view of a waterproof watch case constructed according to a modified form of this invention.

Fig. 7 is a fragmentary enlarged sectional view taken on the line 7—7 of Fig. 6.

Fig. 8 is another back view of a watch embodying another form of this invention.

Fig. 9 is a fragmentary enlarged sectional view taken on the line 9—9 of Fig. 8.

The waterproof watch case, in accordance with the form of the invention illustrated in Figs. 1 to 5, includes a cylindrical body 10 for the watch

11. This body 10 has an open end 12 formed with a recess 13 having a base shoulder 14. A resilient compressible friction gasket 15 is disposed on said shoulder 14. A disc 16 extends across said open end 12 and has its edges resting on said gasket 15. A gland 17 is threadedly mounted on the cylindrical body 10 and holds down the disc 16. More specifically, the gland 17 has an edge portion extending over a reduced portion 18 formed upon the top edge of the disc 16. A plurality of small radially extending ribs and grooves 19 are disposed on the contacting faces of said gland 17 and disc 16 for locking the gland from accidentally turning.

With the parts in the condition shown in Fig. 3, the waterproof watch case is closed. The gasket 15 prevents any water leaking into the case. The gland 17 cannot be turned and unscrewed because of the inter-engaging ribs and grooves 19 for locking it to the disc 17, which in turn is frictionally held by the gasket 15. However, the gland 17 may be freed by first pressing the disc 16 inwards to disengage the ribs and grooves 19. The disc 16 may be pressed inwards because the gasket 15 is compressible. Now the gland 17 is free to be turned and unscrewed.

In Figs. 6 and 7, a modified form of the invention is disclosed which distinguishes from the prior form in several respects. This watch case is provided with a gland 17' having external threads formed on the open end 12 of the cylindrical body 10. The gland 17' is also provided with a frusto-conical portion 21 cooperating with a complementary edge portion formed upon the edge of the disc 16'. These contacting portions are provided with the radially extending ribs and grooves 19. In other respects this form of the invention is similar to the previous form and like parts are indicated by like reference numerals.

With the parts as illustrated in Fig. 7 the watch case is locked closed. However, the disc 16' may be slightly pressed downwards, compressing the gasket 15 and disengaging the ribs and grooves 19. Then the gland 17' may be unscrewed.

In Figs. 8 and 9 still another modified form of the invention has been disclosed which distinguishes from the first form in the fact that the gland 17'' is in the nature of a cap extending completely across the open end 12 of the cylindrical body 10. This cap 17'' engages against the disc 16'' which rests upon the gasket 15. The disc 16'' has a plurality of inter-engaging ribs and grooves 19 in conjunction with the gland 17''. The cap or gland 17'' is formed with sev-

eral openings 24 through which the prongs of a tool may be engaged for pressing the disc 16" downwards to disengage the ribs and grooves 19. Then the cap or gland 17' is free to be unscrewed.

While we have illustrated and described the preferred embodiments of our invention, it is to be understood that we do not limit ourselves to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described our invention, what we claim as new, and desire to secure by United States Letters Patent is:

1. A waterproof watch case comprising a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning.

2. A waterproof watch case comprising a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning, said disc being formed with a recessed top outer edge against which an edge portion of said gland engages.

3. A waterproof watch case comprising a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning, said gland being in the nature of an annular member.

4. A waterproof watch case comprising a cylindrical body having an open end formed with

a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning, said contacting faces of said gland and disc being frusto-conical.

5. A waterproof watch case comprising a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning, said gland being provided with internal threads threadedly engaging external threads on said cylindrical body.

6. A waterproof watch case comprising a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning, said gland being provided with external threads threadedly engaging external threads on said cylindrical body.

7. A waterproof watch case comprising a cylindrical body having an open end formed with a recess having a base shoulder, a resilient compressible friction gasket disposed on said shoulder, a disc extended across said open end on its edges resting on said gasket, a gland threadedly mounted on said cylindrical body and holding said disc down, and small radially extending ribs and grooves on contacting faces of said gland and disc for locking said gland from accidentally turning, said gland being in the nature of a cap extended completely across the open end of said cylindrical body and having several small openings through which said disc may be reached and depressed.

WILLIAM A. MUNEY.
CHARLES WAPNER.