J. K. WORRELL.

WATCHCASE.

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969,680.

Patented Sept. 6, 1910.

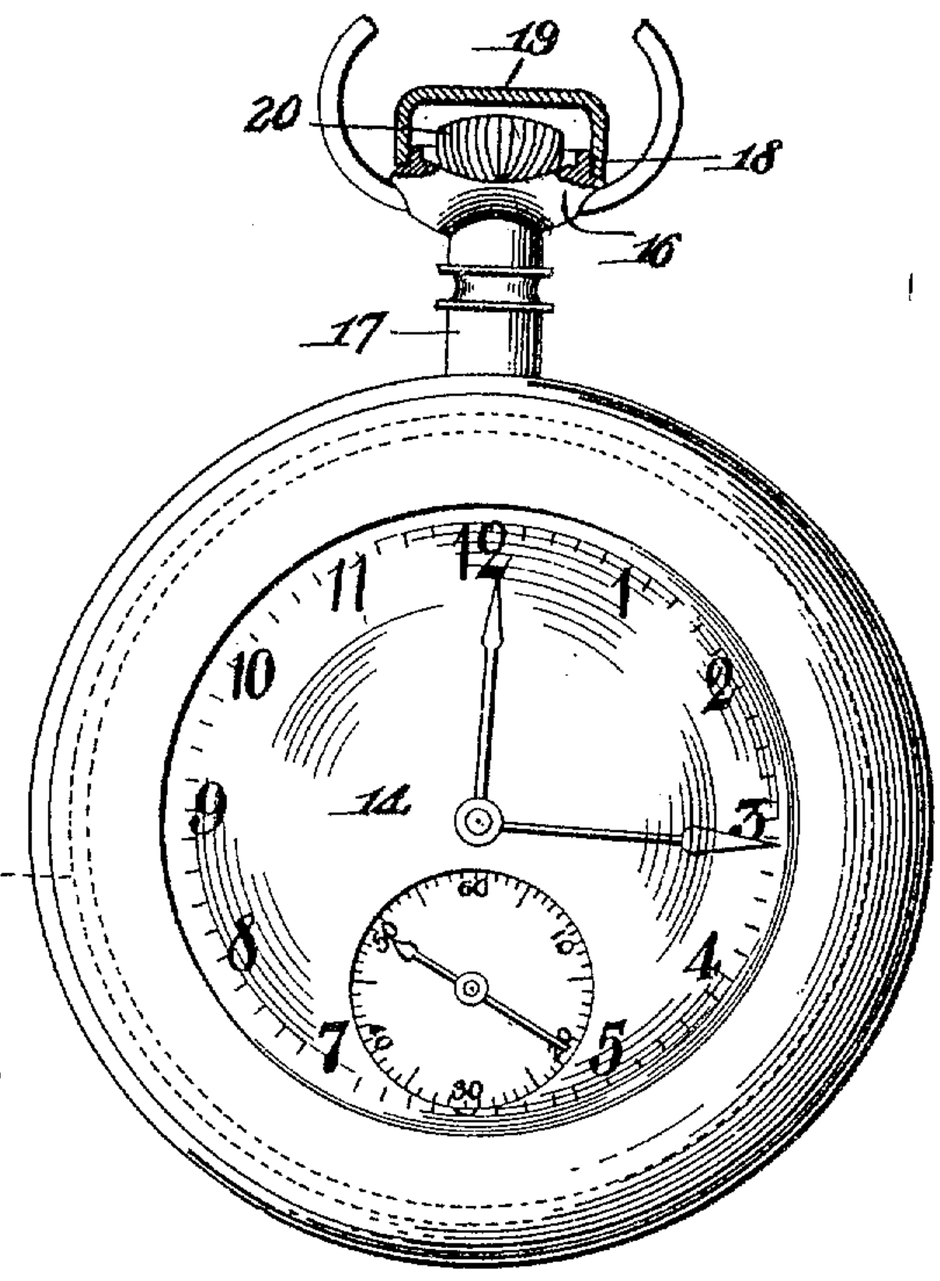

Fig. 1.

Fig. 2.

Witnesses

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JAMES K. WORRELL, OF HUMBLE, TEXAS.

WATCHCASE.

969,680. Specification of Letters Patent. Patented Sept. 6, 1910.

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To all whom it may concern:

Be it known that I, JAMES K. WORRELL, a citizen of the United States of America, residing at Humble, in the county of Harris and State of Texas, have invented new and useful Improvements in Watchcases, of which the following is a specification.

This invention relates to watch cases and particularly to one employing stem-wind and stem-set mechanism, the object of the invention being to provide a housing for the knurled finger-manipulating member of the winding and setting shaft and to provide effective means excluding the entrance of water, gas or oil into the casing, holding such substances out of contact with the watch mechanism.

The above mentioned and other objects are attained by the construction, combination and arrangement of parts, as disclosed on the drawing, set forth in this specification, and particularly pointed out in the appended claim.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is an elevation of my improved casing, parts being shown in section to clearly illustrate the invention. Fig. 2 is a horizontal section taken through the casing.

My improved casing consists of a main body-forming member 1 which is preferably of cylindrical form. The member is formed with spaced parallel flanges 2 and 3 from which extends right angularly outwardly extending flanges 4 which are exteriorly threaded as shown in Fig. 2 of the drawing. The back 5 of the casing is formed adjacent its peripheral edge and upon its inner face with an enlarged portion 6 which is threaded interiorly for engaging the correspondingly threaded portion of the outwardly extending flange 4 upon the wall 3. The wall 3 is formed with an annular substantially semicircular cavity 7 in which the bead 8 on the enlarged portion 6 of the back 5 is adapted to snugly fit. The construction so far described is such that the back when in its applied position will effectively exclude entrance into the casing of water, gas or oil or other injurious matter that might interfere with the proper working of the watch mechanism.

The flange 5 on the wall 2 has its threads engaged with the interiorly threaded portion 9 of a crystal retainer, the said retainer having formed thereon an inwardly extending annular bead 11 which fits into a correspondingly formed socket 12 in the wall 2. The crystal-retaining member is adapted for adjustment on the flange 4 of the wall 2 to be tightly engaged therewith to form an effective joint. The crystal retainer is formed with a flanged offset portion 13 against which is seated a crystal 14, the said crystal being confined preferably to the offset portion of the crystal retainer by means of cement or its equivalent 15. The construction of the crystal-retaining member is somewhat similar to the construction of the back 5 and the construction as described is such that foreign matter cannot enter the casing.

The ring-supporting member 16 at the outer end of the winding and setting-shaft-bearing 17 is formed with an exteriorly threaded flange 18 to receive the interiorly threaded portion of a removable cap or housing 19. The casing herein described and shown is intended principally to be used by those employed in oil fields, machine shops or like places where gaseous surroundings are extremely injurious to the mechanism of a watch. By protecting the knurled manipulating member 20 of the winding shaft by the cap 19, the said member cannot be operated by one whose hands are muddy and it will be appreciated that before the winding or setting shaft can be operated the cap or housing 19 must be removed. In oil fields, machine shops or like places, workmen or mechanics usually protect their hands by gloves and in their haste to ascertain the time and to adjust their watches they invariably wind or set the watch without removing their gloves. With the invention disclosed it will be readily grasped that its user cannot wind or set the watch without first removing the cap or housing and to do this he necessarily would have to remove his gloves. The protecting cap or housing while serving to guard the knurled manipulating member 20 of the winding shaft against clogging by mud or other foreign matter through its engagement with the head 1 forms therewith an effective joint to exclude water, gas, oil or the like from the case.

The construction of the main body member is such that a pair of annular shoulders is formed at the sides of each of the hereinbefore described concavities. Correspond-

ing shoulders 11′ are formed on the inner faces of the front and back members to engage the shoulders. This construction forms a very effective joint and in connection with the concavities and the beads which fit therein a perfect water and dust tight connection is formed. By constructing the main body member so that its opposite faces are identically formed the article may be manufactured at a minimum cost. It may be stated that the said front and back members are substantially identically formed on their inner faces at points where they fit the correspondingly formed faces of the main body member. This also affords cheapness of construction as it will be seen that a tool or machine which is adapted to form the main body connecting portion of either of the front and back members can be used for forming both of such members.

I claim:—

A watch case comprising a main body member having identically formed front and back faces, each face being provided with an outwardly extending threaded flange and formed adjacent to said flange with an annular concavity, a back member formed on its inner face with a threaded flange for engaging the flange on the back of the said main body member and formed to provide an annular bead which is seated in the concavity in the back face of the said main body member, a crystal-carrying member formed to provide a crystal-supporting shoulder and provided outwardly of the said shoulder with a flange, the said flange having a bead fitting in the concavity in the front face of the said body member and formed adjacent to the said bead with a threaded portion for engaging the threaded flange in the front face of the body member, the said body member having annular shoulders at each side of the said concavities, and shoulders formed on the front and back members respectively for engagement with the first named shoulders.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES K. WORRELL.

Witnesses:

I. F. Bain,

W. H. Roberts.