Oct. 11, 1960 R. UEBELHARDT 2,955,357

WRIST WATCH

Filed March 11, 1957

2 Sheets-Sheet 1

Fig. 1.

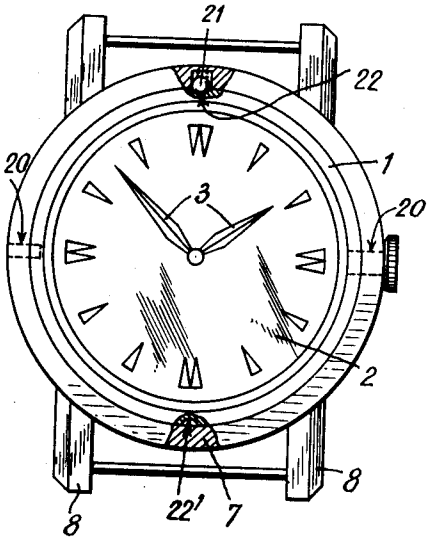



Fig. 2.

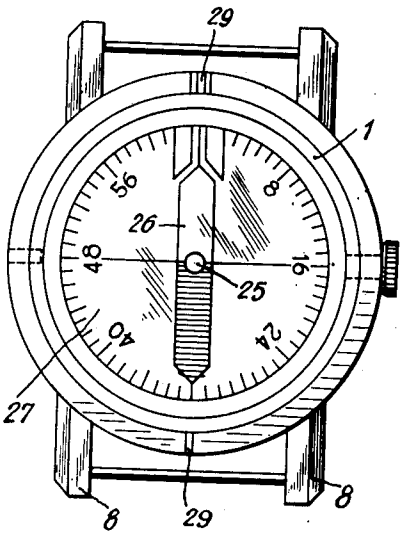
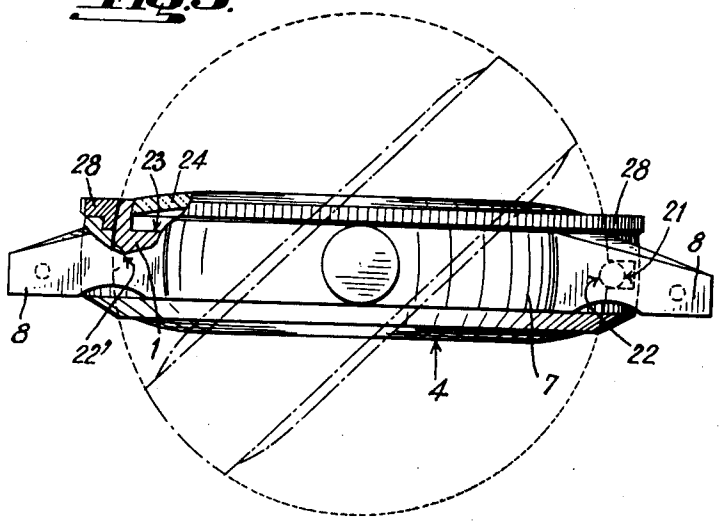



Fig. 3.




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Fig. 4.

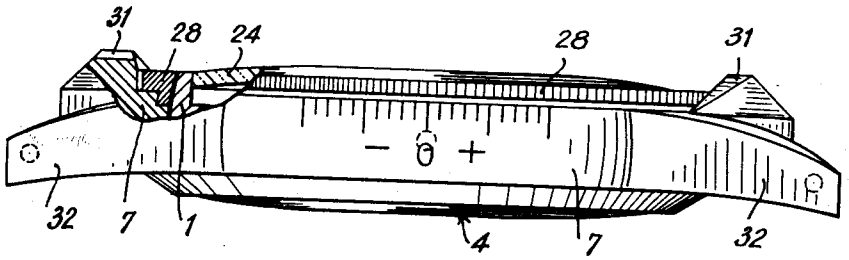
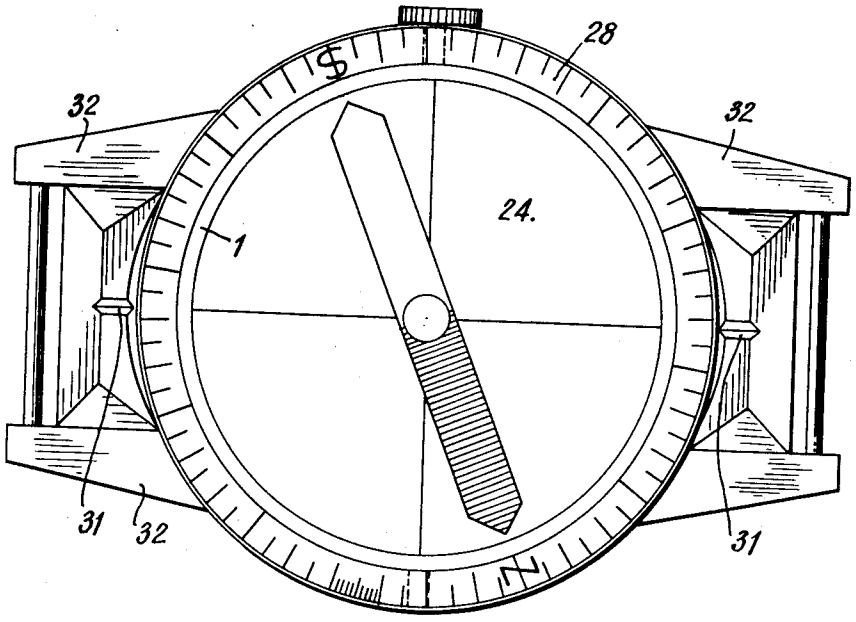



Fig. 5.




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2,955,357

Patented Oct. 11, 1960



2,955,357

# WRIST WATCH

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Filed Mar. 11, 1957, Ser. No. 645,253

2 Claims. (Cl. 33—72)

The object of the present invention is to provide a wrist watch comprising a case and lugs carried by a case band in which the case is pivotable in order to enable it to be turned in both directions on the wrist.

This wrist watch is characterized in that it comprises an adjustable bezel carried by the case band to which the lugs are secured.

In a preferred embodiment, the wrist watch has on the face which is opposite to that carrying the hour dial, a recess closed by a glass and containing a compass.

The accompanying drawing illustrates, by way of an example, an embodiment of the wrist watch constituting the object of the present invention.

Figure 1 is a plan view of this embodiment with the hour dial visible.

Figure 2 is a view similar to that shown in Fig. 1, the case having been turned 180°.

Figure 3 is a side elevation view, on an enlarged scale, of the embodiment of Fig. 1.

Figure 4 is a side elevation view of another embodiment of the wrist watch.

Figure 5 is a plan view of the embodiment of Fig. 4.

The wrist watch illustrated comprises a case **1** of a round shape containing the movement with the hour dial **2** and hands **3** the whole being covered by a glass **4**. Diametrically opposed pivots **20**, one of which is the stem, serve to mount the case **1** pivotally in a case band **7** having lugs **8**.

The case **1**, which instead of being round could be of any other shape, can be turned 180° around its pivots in order to cause its bottom to appear on the wrist, the hour dial then being brought against the wrist. With an extensible wrist band, this pivoting movement can be effected without the watch having to be removed from the wrist.

Spring stop means are arranged between the case **1** and the case band **7** in order to retain the said case in a fixed position in relation to the case band, these means comprising a ball **21** mounted in the case band **7** and urged by a spring (not shown) into a cavity **22** provided in the case **1** when the latter is in the position shown in Fig. 1 in relation to the case band. When the case **1** is pivoted 180° around the pivots **20**, a cavity **22'** provided in the said case and diametrically opposed to the cavity **22** comes opposite the stop ball **21**, the case **1** then being retained in the position illustrated in Fig. 2.

The spherical faces on the exterior of the pivoting case **1** and on the interior of the fixed case band **7** while enabling the case to be displaced easily, also enable its two faces to be brought just inside the adjustable bezel without it being too evident that these two elements (face of the case and bezel) are carried by different parts.

The ball locking means **21** maintains the pivoting case in one of two positions which are such that the two faces of this case are positioned just within the adjustable bezel.

The portion of Fig. 3 which is broken away indicates that the described wrist watch has in the bottom of the



case **1**, that is on the face opposite to that carrying the hour dial, a recess **23** closed by a glass **24**.

The bottom of the recess **23** has therein a central pivot **25** on which rotates a compass needle **26** as shown in Fig. 2. The dial **27** of the compass is formed by a disk fixed to the bottom of the recess **23**. This dial could also be marked or drawn directly on the bottom of the said recess.

On its visible side the case band **7** carries an adjustable bezel **28** provided with sights **29** to be utilized in conjunction with the compass. This bezel **28** is milled at its periphery which, in the embodiment illustrated, protrudes beyond the edges of the case band **7**. It would of course be possible to mount on the case band **7** a bezel **28** the periphery of which would not extend beyond the edges of the former. The arrangement of the adjustable bezel **28** on the case band **7** rather than on the pivoting case makes it possible to keep the total thickness of the wrist watch, which is determined by the thickness of the pivoting case, to a minimum. On the other hand this bezel does not come into contact with the user's wrist.

The sights **29**, which enable the sighting direction to be seen by day and by night, can be phosphorescent or not, and can be formed by hollow parts or by parts in relief or by simple marks.

These sights could also be provided on a part other than the bezel.

In the variant illustrated in Figs. 4 and 5, the wrist watch has thereon diametrically opposed sights **31**, fixed to lugs **32** carried by the case band **7**. These sights can either be integral with the lugs or removably mounted on the same in order to permit adjustment thereof, for instance by means of pins similar to the telescopic pins used to fix the extremities of the wrist band. The bezel **28** rotatably mounted on the case band **7** serves to indicate the direction of the north and carries graduations, either in degrees (360°) or in artillery mils (6400 mils/360°).

As shown in Fig. 5, the case band **7** has on its outside edge a graduation for the correction of the declination, the positive and negative degrees of which are marked respectively to the left and to the right of a 0 point. This graduation allows the angular difference between the magnetic pole and the geographical pole resulting from the geographical position in which one is located to be taken into account by turning the bezel **28** in one direction or the other. In order to facilitate the readings, the milling on the bezel could be such that the distance between the successive quoins of the gaps formed between the teeth of the milling is equal to one division of the said graduation, the ridges of the teeth then corresponding to the half divisions of this graduation. In addition, the division in artillery mils, for instance, with which the bezel **28** is provided, could be arranged in such a fashion on the latter that each division corresponds exactly to the quoins of the gaps of the milling.

In the variant described, the bottom of the recess containing the compass could have thereon indications relating to the determined angle of declination for different geographical points.

An advantage of this variant is that a sight can be taken in the marching direction by bringing the wrist to eye level, the sights being arranged transversely of the wrist.

The compass could also comprise a casing which could be fixed in the recess **23** by screwing it in or by other appropriate means, the compass itself thus forming the bottom of the watch case. On the other hand, the recess designed to contain the compass can be made fluid tight and filled with a liquid in order that sudden oscillations of the magnetic needle may be avoided.

The described wrist watch offers the advantage that

it can be used either as a watch, as a compass or game according to the user's fancy.

In cases where the described wrist watch would not comprise a compass or a recess closed by a glass on the face opposite to that bearing the hour dial, the mobile bezel **28** coulde be used advantageously to mark certain positions of at least one of the hands of the watch. It could also be made to serve in the following fashion: a circular logarithmic graduation would be provided on the bottom of the case and a similar graduation would be provided on the bezel which together would constitute a circular slide-rule.

What I claim is:

1. In a wrist watch having a case, a case band about the peripheral edge of the case, and lugs on the case band on which the case is pivotable, the improvement comprising providing a recess in the back of said case, a glass covering said recess, a compass mounted in the recess, a rotatable bezel mounted on the case band around the recess, and diametrically opposed sighting members bodily fixed to the lugs carried by the case band.



2. The improvement as claimed in claim 1 in which the case band bears on its outside edge a graduation for measuring the declination.

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