July 1, 1924. 1,499,692

W. A. REED

WATCH

Filed Sept. 20. 1921 2 Sheets-Sheet 1

Fig. 1.

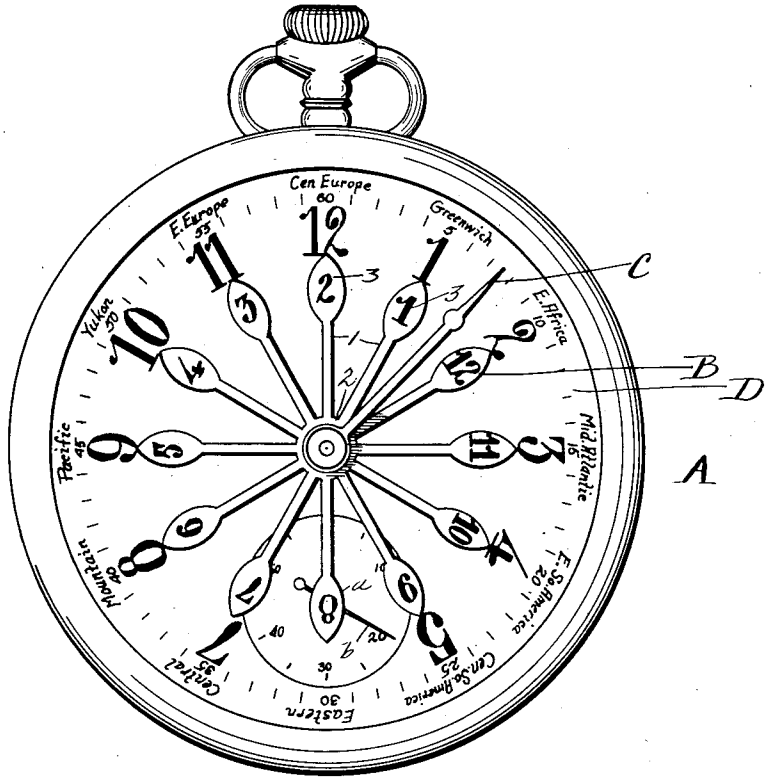
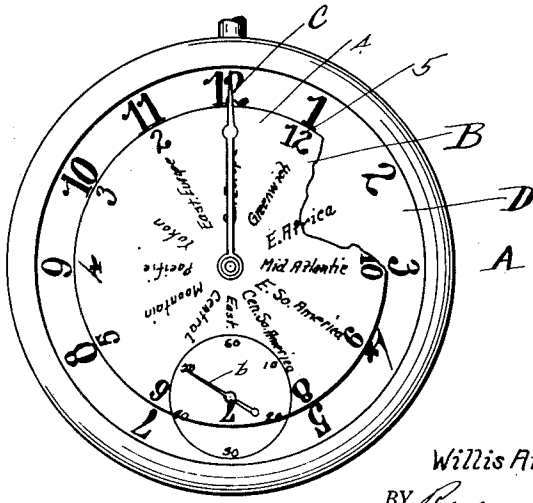


Fig. 2.



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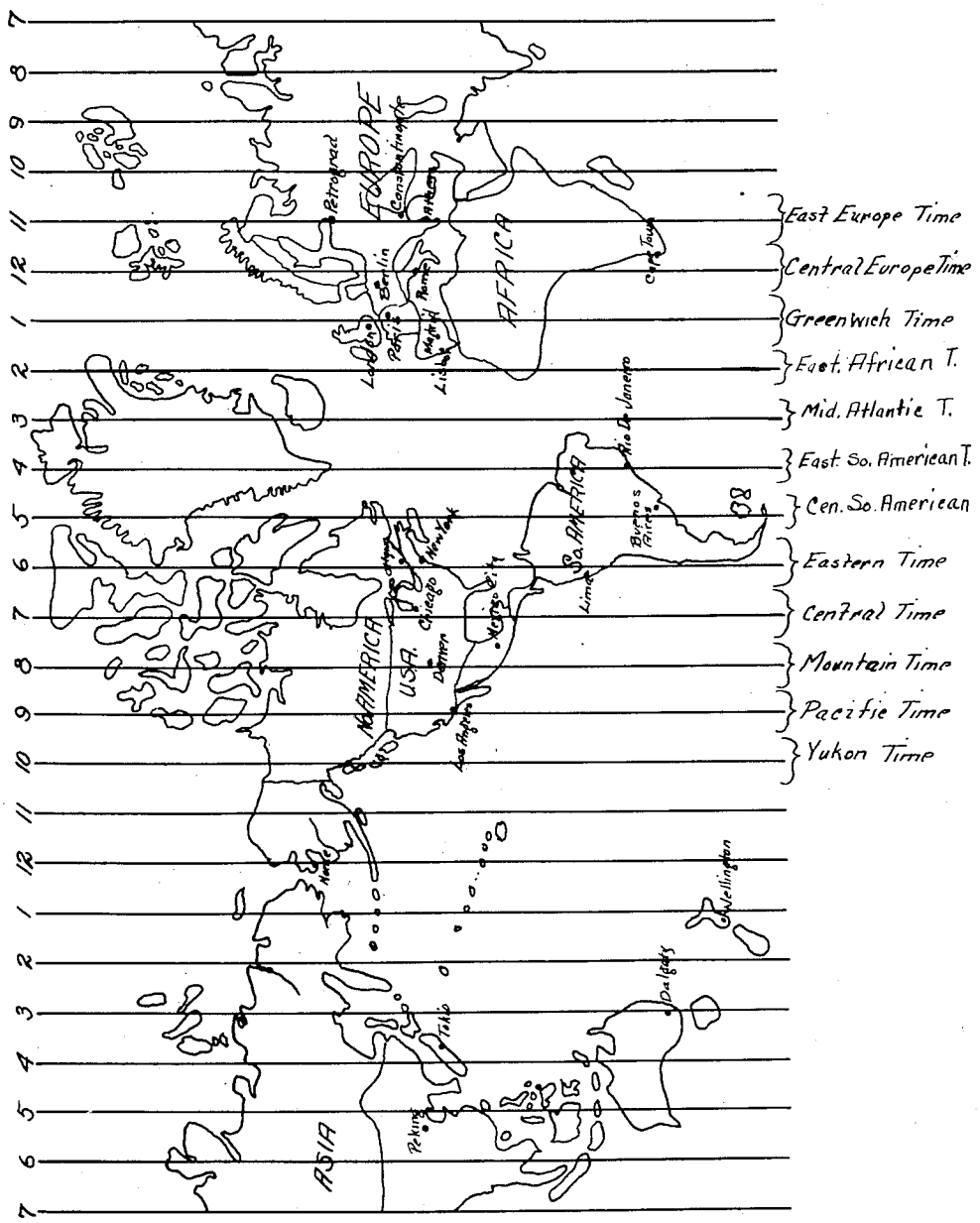


Fig. 5.

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Patented July 1, 1924. 1,499,692

UNITED STATES PATENT OFFICE.

WILLIS ARTHUR REED, OF DINUBA, CALIFORNIA.

WATCH.

Application filed September 20, 1921. Serial No. 501,922.

To all whom it may concern:

Be it known that I, WILLIS ARTHUR REED, a citizen of the United States, residing at Dinuba, in the county of Tulare and State of California, have invented new and useful Improvements in Watches, of which the following is a specification.

This invention relates to watches, and in particular to a watch which is so constructed as to be able to tell the time of day in any part of the world.

In practicing the invention I provide a disc having hour indications thereon or a plurality of hour hands each of which bears a numeral, which disc or plurality of hour hands are adapted to take the place of the ordinary hour hand now carried by the usual watch. Assuming that a plurality of hour hands are provided I provide twelve of said hour hands numbered counter to their direction of rotation. I then assign to certain numerals on the face of the watch time meridians, such as Eastern, Central, Mountain and Pacific, etc. The minute hand moves as before and the hour hand is always read in connection with the time meridian on the face of the watch. By memorizing or referring to a chart of locations, it is possible to tell the time of day at a moment's glance at the watch at any desired place in the world.

A watch of this type will be of great use to mariners, aviators, globe trotters, telegraph stations, telephone stations, etc.

The invention has for further objects the provision of an improved watch which will be superior in point of relative simplicity and inexpensiveness, taken in conjunction with utility, durability and general efficiency and serviceability.

With the above mentioned and other objects in view, the invention consists in the novel and useful provision, formation, construction, combination, association and inter-relation of parts, members and features, as illustrated in some of its embodiments in the accompanying drawings, described in the following detailed statement, and finally pointed out with particularity in the claims.

In the drawings:

Figure 1 is a plan view of a watch incorporating my invention;

Figure 2 is a fragmentary plan view showing a modification of the form of my invention shown in Figure 1; and,

Figure 3 is a chart giving locations of the principal cities of the world with a series of time meridians so that the time in any given place may be readily ascertained. Corresponding parts in all the figures are designated by the same reference characters.

Referring with particularity to the drawings A designates a watch in its entirety and of which B is the hour indicating means, C the minute hand, and D the watch face. The means B includes in the showing of Figure 1 twelve radial hands or arms 1 all joined to a common central member 2, which central member is provided with means for engaging the hour hand stem. The angle included between any two arms or hands is 30 degrees. It will thus be seen that according to the showing of Figure 1 each arm or hand will point to a figure on the watch face. Each of the hands or arms 1 is provided with numbers 3 thereon, and the number on any hand is counter to the indications on the watch face. Thus it will be seen that the numeral 12 on the watch face in the showing of Figure 1 registers with the numeral 2 on the hand 1, and that the numeral 9 on the watch face registers with 5 on the hour hand.

In Figure 2 I have illustrated a modification of the hand members 1 and in place of the hand members 1, I provide a translucent disc or disc of any formation 4, which has indications marked thereon as at 5, the same as would normally be carried by the hands 1. The result to be obtained is identical in either modification.

Referring now to Figure 3 which shows a chart of the world, it will be noted that the meridians are marked thereon and that at the top of the lines are numbers representing the longitudes. For instance, for the cities of New York, Washington, etc., in the United States, I have the line 6. Referring now to Figure 1 the numeral 6 would be the number to refer to on the watch face. It will thus be seen that on the hour hand, immediately above the numeral 6, is the numeral 8, as shown at *a*. The minute hand reads 7½ minutes past the hour. Therefore the time in New York or Washington would be 7½ minutes after 8 o'clock. The numeral 9 on the watch face would be Western time and would pass through Los Angeles. It is therefore 7½ minutes after five o'clock at Los Angeles when it is 7½ minutes after eight o'clock in Washington. Also in Lon-

don, which is 1 on the chart shown in Figure 3, representing Greenwich time, it would be 7½ minutes past one o'clock. It is therefore possible by learning the location of a few large cities of the world and likewise studying the map showing the locations and divisions of the world into the various times, to easily estimate or determine the time of day in any city of the world. The numbers on the chart of Figure 3 will be of course the hour numbers on the face of the watch.

In Figure 2 the disc 4 may be made of a translucent substance so that the names of various cities may be printed upon the watch face and still show through the disc member 4. The disc member 4 would be useful in small watches, as printing could be included on the watch face and still be readable. The watch may include the usual second-hand *b*, as well as all other features now included in watches, and an invention of this type might as readily be applied to clocks. The device is accurate and inexpensive in construction, is easily attached to a watch and does not interfere with the working parts or change the construction of the watch in the least.

It is obvious that many changes and variations and modifications may be made in departure from the particular description and showing of the accompanying drawings, in adapting the invention to varying conditions and requirements of use and service, without departing from the true spirit of the invention.

Having thus disclosed my invention, I claim and desire to secure by Letters Patent:

1. A time-piece, including the usual dial having the usual hour and minute indications thereon, meridian indications on said dial opposite said hour indications, an hour hand member including twelve arms numbered consecutively counter-clockwise from 1 to 12, and a minute hand adapted to play over said dial and hour hand member.

2. A time-piece, including the usual dial having the usual hour and minute indications thereon, an hour hand member numbered counter-clockwise near its edge from 1 to 12 so that said numbers may register respectively with the hour indications on said dial, meridian indications read in conjunction with the numbers respectively on said hour hand and the hour indications on said dial, and a minute hand adapted to play over said dial, hour hand member and meridian indications.

3. A time-piece, including the usual dial having thereon hour and minute numbers, each hour number corresponding to a map number of a time meridian, the time of said meridians being indicated on said dial opposite said hour numbers from 1 to 12 consecutively, as follows: Greenwich, E. African, Mid. Atlantic, E. So. American, Cen. So. American, Eastern, Central, Mountain, Pacific, Yukon, E. Europe, and Cen. Europe, an hour hand member numbered counter-clockwise to register with said hour numbers, and a minute hand adapted to play over said dial and hour hand member.

4. A time-piece, including the usual dial having thereon hour and minute numbers, said hour numbers corresponding to numbers of a map indicating the standard time meridians, an hour hand member numbered counter-clockwise to register with said hour numbers, and a minute hand adapted to play over said hour hand member and said dial.

5. A time-piece, including the usual dial having hour and minute indications thereon, meridian indications on said dial opposite said hour indications from 1 to 12 respectively as follows: Greenwich, East African, Mid-Atlantic, E. So. American, Cen. So. American, Eastern, Central, Mountain, Pacific, Yukon, East Europe and Central Europe, an hour hand member including twelve arms numbered consecutively counter-clockwise from 1 to 12 so that said numbers may register respectively with the hour indications on said dial, and a minute hand adapted to play over said dial and hour hand member.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIS ARTHUR REED.

Witnesses:
J. SHUTT,
J. CALVIN BROWN.