May 26, 1942. H. JACOT GUYOT 2,284,418

WATCH

Filed March 7, 1941

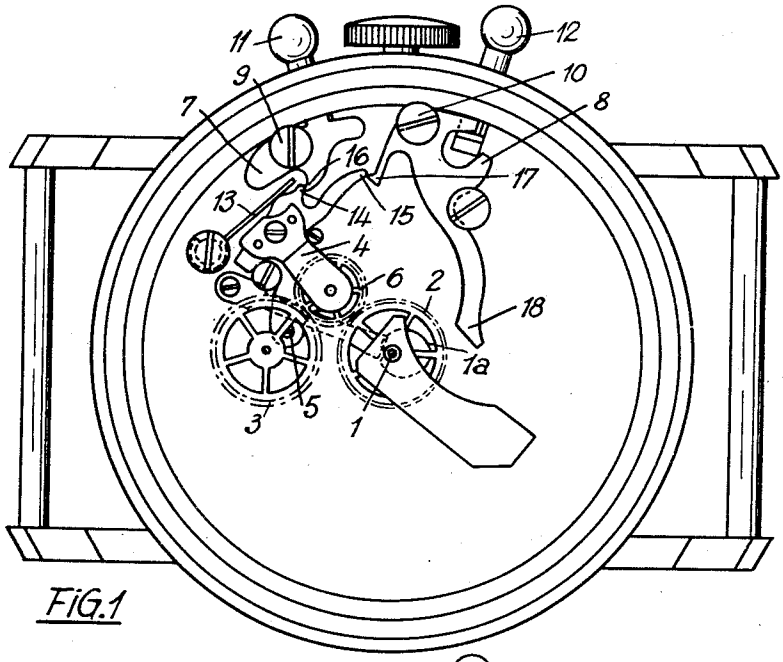


FIG. 1

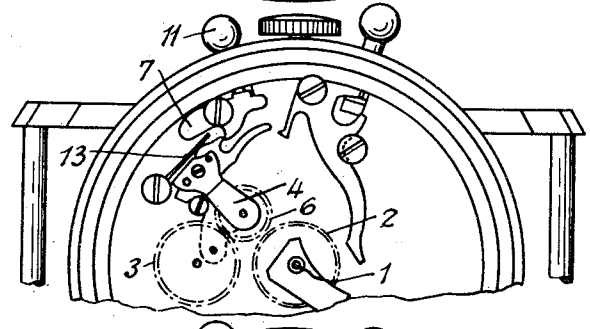


FIG. 2

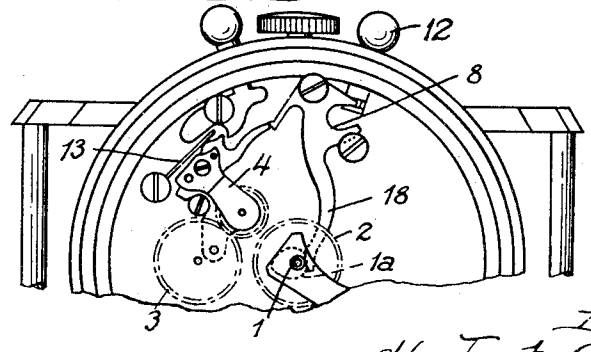


FIG. 3

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WATCH

Henri Jacot Guyot, Neuchatel, Switzerland

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1 Claim. (Cl. 58—76)

The present invention relates to a watch of the type having an ordinary seconds wheel and a center wheel, the latter carrying a heart-cam and an independent seconds hand in the center of the watch movement, a driving wheel mounted on the axle of and above the ordinary seconds wheel, and a rocking lever carrying an intermediate wheel constantly meshing with said driving wheel and adapted to be brought into gear with said center wheel for coupling the independent seconds hand with the watch movement and to be moved clear from said center wheel for disconnecting said seconds hand from the watch movement.

The object of the invention is to provide a watch of the above mentioned type having simple and efficient means which permit of disconnecting and stopping temporarily the independent seconds hand without restoring it to the zero position and which are also adapted to be used for both the stopping and restoring to zero of said seconds hand.

With the aforesaid object in view, the invention consists in the novel combination and arrangement of parts hereinafter described in their preferred embodiment, pointed out in the subjoined claim, and illustrated in the annexed drawing, wherein like parts are designated by like reference characters throughout the several views.

In the drawing:

Figures 1, 2 and 3 are plan views embodying the invention and showing, the first the normal position of the watch movement, that is, the operative connection of the independent seconds hand with said movement, the second the position wherein the independent seconds hand has been simply disconnected from the watch movement, and the third the position corresponding to both the disconnecting and restoring to zero of said seconds hand.

In the said figures, 1 represents the axle of the center wheel 2 to which are fixed a heart-cam 1a and an independent seconds hand not represented. The latter which may be of any form is preferably made solid with said center wheel and heart cam. 3 indicates a driving wheel mounted on the axle of and above the ordinary seconds wheel, and 4 is a rocking lever pivoted at 5 and carrying an intermediate wheel 6 which constantly meshes with the driving wheel 3 and which can be brought into gear with the center wheel 2 for coupling the independent seconds hand with the watch movement or moved clear from said center wheel for disconnecting and stopping said seconds hand.

The numerals 7 and 8 indicate two oscillatable levers pivoted at 9 and 10, respectively, and subjected to the action of the pushers 11 and 12, respectively. The rocking lever 4 is shown having two noses 14 and 15 which are adapted to contact, the first with a nose 16 of the lever 7, and the second with a nose 17 of the lever 8. A spring 13 is applied against the rocking lever 4 and tends to bring the same into the operative position wherein the intermediate wheel 6 engages the center wheel 2; said spring also urges said rocking lever into contact with the levers 7 and 8 by the abutment of the noses 14, 16 and 15, 17, respectively. The lever 8 comprises also a resetting hammer 18 adapted to act upon the heart-cam 1a.

Figure 1 shows the the normal or operative position of the above described mechanism, wherein the spring 13 maintains the intermediate wheel 6 in gear with the center wheel 2 to cause rotation of the independent seconds hand. Besides, owing to the said spring the rocking lever 4 bears upon both the oscillatable levers 7 and 8.

When it is desired to stop the independent seconds hand temporarily without restoring the same to the normal or zero position the pusher 11 may be pressed down (see Figure 2). The lever 4 is then rocked by the lever 7 against the action of the spring 13 and thereby throws the intermediate wheel 6 out of gear of the center wheel 2. Upon releasing of the pusher 11 the spring 13 returns the different levers to the normal position shown in Figure 1.

Let it be supposed now that it is desired to return the independent seconds hand to the zero position. In this event the pusher 12 may be pressed down. The lever 4 is then rocked by the lever 8 against the spring action so as to cause the disconnection of the intermediate wheels 6 and the center wheel 2, while simultaneously the hammer 18 falls upon the heart-cam 1a for setting the independent seconds hand to zero as shown in Figure 3. If at last the pusher 12 is released, the different parts are again returned by the spring 13 to the normal position of Figure 1.

From the foregoing, it is believed that the construction and advantages of the present invention may be readily understood by those skilled in the art without further description, it being borne in mind that changes may be made in the details disclosed without departing from the

spirit of the invention as set out in the following claim.

What is claimed and desired to be secured by Letters Patent is:

A watch having in combination an ordinary seconds wheel and a center wheel, the latter carrying a heart-cam and an independent seconds hand in the center of the watch movement, a driving wheel mounted on the axle of and above the ordinary seconds wheel, a rocking lever carrying an intermediate wheel constantly meshing with said driving wheel and adapted to be brought into gear with said center wheel for coupling the independent seconds hand with the watch movement and to be moved clear of said center wheel for disconnecting said seconds hand from said movement, a first and a second oscillatable lever cooperating each with said rocking lever, a resetting hammer formed integral with the second oscillatable lever and adapted to act upon said heart-cam, a spring acting upon the rocking lever and tending, on the one hand, to maintain said rocking lever in a position wherein said intermediate wheel is in gear with said center wheel and, on the other hand, to apply said rocking lever against both said oscillatable levers, a pusher acting upon the first oscillatable lever and being adapted to pivot the rocking lever against the spring action by means of said first oscillatable lever for disconnecting the seconds hand from the watch movement, and a second pusher acting upon the second oscillatable lever and being adapted first to pivot the rocking lever against the spring action by means of said second oscillatable lever for disconnecting said seconds hand and then to apply the hammer of said second lever upon the heart-cam for resetting said seconds hand to zero.

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