June 16, 1953 R. H. JEANNERET 2,641,899

CHRONOGRAPH SETTING HAMMER SYSTEM

Filed July 24, 1951

Fig. 1

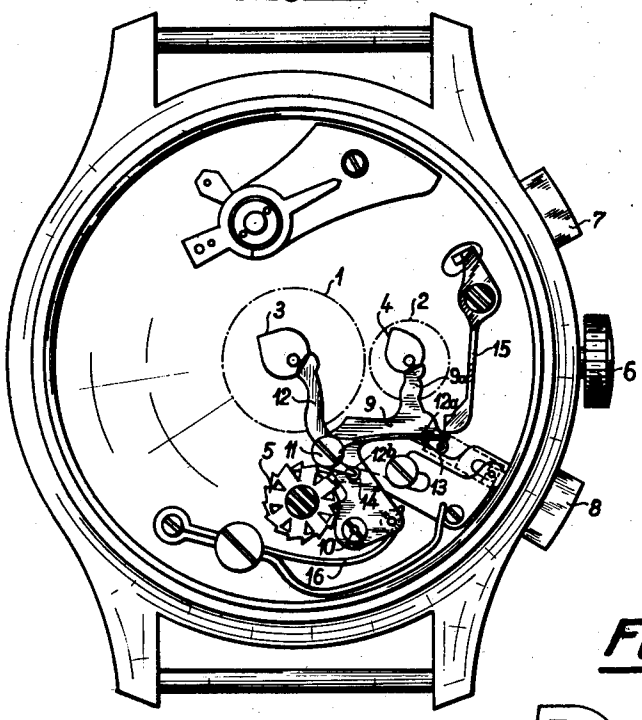


Fig. 2

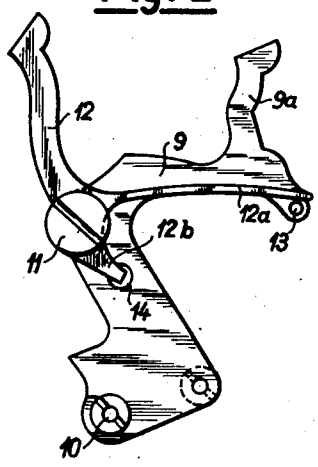
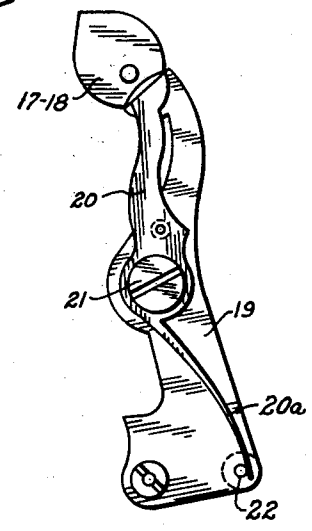


Fig. 3



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CHRONOGRAPH SETTING HAMMER SYSTEM

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My invention has for its object a chronograph of the type provided with a double hammer cooperating with two heart-shaped members adapted to produce the return to zero and carried each by one of the indicator members of the time-piece.

My improved chronograph is characterized by the fact that one of the elementary hammers of the double hammer system is rotatably carried by the other and is submitted to the action of a return spring that is intended to bring it automatically into and then to hold it in a predetermined position with reference to the other elementary hammer.

The annexed drawings show, by way of example, a preferred embodiment of the object of my invention and a modification. In said drawings:

Fig. 1 is a plan view of a watch provided with a chronograph;

Fig. 2 is a view of a detail.

Fig. 3 is a view of a detail of the modification.

In said drawings, only the members required for the understanding of the invention have been actually illustrated.

The wheel of the chronograph is designated by 1, the counter wheel by 2, the heart-shaped member adapted to return to zero the indicator member of the chronograph is designated by 3, the heart-shaped member for returning the counter to zero is designated by 4, and the column wheel by 5. The chronograph considered is provided with a crown 6 and two pushers 7 and 8. A rocking member 9 pivotally secured at 10 carries an arm 9a ending with a hammer providing for the return to zero through cooperation with the heart-shaped member 4; there is pivotally secured at 11 to said rocking member 9 a second hammer 12 cooperating with the heart-shaped member 3; said hammer 12 is in one with a yielding arm 12a bearing against a pin 13 secured to the rocking member 9. A tongue 12b is also in one with the hammer 12 and its outer end is bent at right angles for engagement with an opening 14 in the rocking member 9.

Through this arrangement the hammer 12 is adapted to execute slight movements with reference to the hammer 9a, said movements being limited by the abutting of the tongue 12b against the edges of the opening 14. The elastic arm 12a urges the hammer 12 into a predetermined position with reference to the rocking member 9.

Thus the two hammers may exactly engage the heart-shaped members 3 and 4 even if the latter are slightly inaccurate in their execution. The hammers shift automatically their operative positions so as to take such modifications in.

The control of the rocking member 9 is performed by the pusher 7 through the agency of the jumper 15 cooperating with said rocking member. Depression of the pusher 7 releases the jumper 15 with reference to the rocking member

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9 whereby the latter is urged by the spring 16 into its operative position; said shifting of the rocking member can only be performed for certain positions assumed by the column wheel 5.

The present invention is also applicable to the case where the two hearts serving for setting parts back to zero are arranged in coaxial superposed relationship as for instance in the case of a chronograph provided with a central minute counter or of chronographs used for sporting purposes that include at their centre a counter of hours or of minutes. This modification is shown in Fig. 3, in which the two coaxial superposed hearts are designated by 17 and 18, and the two hammers by 19 and 20. Hammer 20 is pivotally secured at 21 to the hammer 19; it is in one with a yielding arm 20a bearing against a pin 22 secured to the hammer 19.

What I claim is:

1. In a chronograph comprising two return to zero hearts, two hammers cooperating respectively with said hearts, and an indicator member rigid with each heart; means pivotally securing one of the hammers to the other and a spring, situated between both hammers, urging the first hammer into a predetermined position with reference to the other hammer for holding the system of hammers in a predetermined configuration.

2. In a chronograph comprising two return to zero hearts, two hammers cooperating respectively with said hearts, and an indicator member rigid with each heart; means pivotally securing one of the hammers to the other and a spring rigid with one of said hammers and engaging the other to urge the first hammer into a predetermined position with reference to the other hammer for holding the system of hammers in a predetermined configuration.

3. In a chronograph comprising two not coaxial return to zero hearts, two hammers cooperating respectively with said hearts, and an indicator member rigid with each heart; means pivotally securing one of the hammers to the other and a spring, fixed on one of the hammers, urging the other hammer into a predetermined position with reference to the first hammer for holding the system of hammers in a predetermined configuration.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
223,220	Doret	Jan. 6, 1880

FOREIGN PATENTS

Number	Country	Date
2,258	Great Britain	May 3, 1883
5,613	Switzerland	Sept. 9, 1892
213,644	Switzerland	June 3, 1941