June 16, 1953 R. H. JEANNERET 2,641,900

TIMEPIECE WITH CHRONOGRAPH

Filed Nov. 29, 1951

Fig. 1

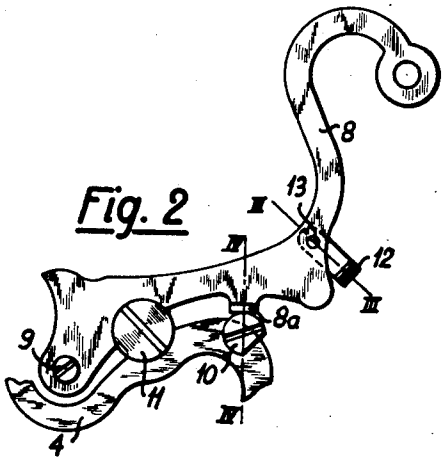

Fig. 2

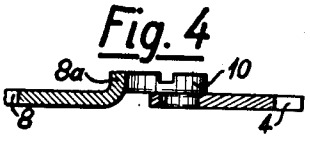

Fig. 4

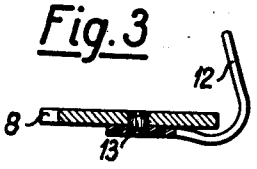

Fig. 3

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TIMEPIECE WITH CHRONOGRAPH

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3 Claims. (Cl. 58—76)

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The present invention has for its object a time piece with chronograph including at least one chronograph lever with an associated controlled clutch. The essential feature of this improved time piece consists in that the chronograph lever carries an elastic member that moves substantially in radial relationship with reference to the chronograph wheel and that is adapted to come into contact with said wheel in order to brake the latter when the chronograph is disconnected.

Accompanying drawing illustrates, by way of example, a preferred embodiment of my improved clockwork. In said drawing:

Fig. 1 is a plan view of the time piece.

Fig. 2 is a detail view of Fig. 1 on an enlarged scale.

Fig. 3 is a cross-section through line III—III of Fig. 2.

Fig. 4 is a cross-section through line IV—IV of Fig. 2.

The improved time piece illustrated includes a chronograph with a minute counter. The chronograph wheel is shown at 1 while the wheel of the minute counter is shown at 2. The drive of the chronograph wheel 1 is performed through the agency of a transmission 3 carried by a lever 4, which latter is pivotally carried at 5 and is controlled directly by the column wheel 6. The counter wheel 2 is controlled by a transmission gear 7 carried by a lever 8 pivotally secured to an eccentric part 9 having a slotted head and fitted with slight friction into the clockwork base plate. The lever 8 is in turn controlled by the lever 4. To this end, it is provided with a tongue 8a folded upwardly and cooperating with an eccentric 10 secured to the lever 4. Said eccentric 10 allows modifying the relative position between the levers. The head of a screw 11 prevents any rising movement of the levers 4 and 8 to either side thereof.

A yielding blade 12 is secured through a rivet 13 to the underside of the lever 8. Said blade is cranked and the arm secured to the lever forms a very small angle with the latter so as not to engage the surface thereof throughout its length which would result in a reduction of the yieldingness of said elastic blade. The free end of this blade 12 is adapted to engage the underside of the chronograph wheel 1 so as to brake said wheel when the chronograph is disconnected. The blade 12 is secured to the lever 8 at a point such that it executes substantially radial movements with reference to the chronograph wheel.

The blade 12 is sufficiently elastic for the pressure exerted by it on the wheel 1 to be very small. When the chronograph is returned to zero, the return to zero lever 14 cooperating with the heart-piece 15 produces an action overcoming the braking action, so that the wheel 1 rotates while frictionally engaging the blade 12.

The spindle forming the eccentric part 9 round

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which the lever 8 is adapted to pivot allows through its eccentricity providing through an angular movement for a slight modification of the position of the lever, which moves the blade 12 further away from the wheel 1 or nearer thereto, without modifying substantially thereby the location of the transmission gear 7.

It is also possible to secure the member braking the movement of the time chronograph wheel to the lever controlling said wheel. It is necessary for this arrangement to be possible for a point of the lever controlling the chronograph to execute radial movements with reference to the chronograph wheel.

What I claim is:

1. In a time piece with chronograph including a chronograph wheel, the combination of at least one lever operatively connected with said wheel, a clutch associated with said wheel, a yielding member controlled by said lever and adapted to move in a direction that is substantially radial with reference to the chronograph wheel and to engage frictionally the latter to brake it when the clutch is inoperative, an eccentric to which said lever is pivotally secured and the angular position of which defines the relative position of the elastic member with reference to the chronograph wheel.

2. In a time piece with chronograph including a chronograph wheel, the combination of at least one lever operatively connected with said wheel, a clutch associated with said wheel, a minute counter, a second lever controlling same and controlled by the first lever and a yielding blade carried by the second lever and adapted to move in a direction that is substantially radial with reference to the chronograph wheel and to engage frictionally the latter to brake it when the clutch is inoperative.

3. In a time piece with chronograph including a chronograph wheel, the combination of at least one lever operatively connected with said wheel, a clutch associated with said wheel and a yielding member carried by said lever and adapted to move in a direction that is substantially radial with reference to the chronograph wheel and to engage frictionally the latter to brake it only when the clutch is inoperative.

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