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COORDINATED COMBINED RELEASABLE DAY AND DATE JUMPER
MECHANISM FOR CALENDAR TIMEPIECES
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3,608,305

FIG. 1

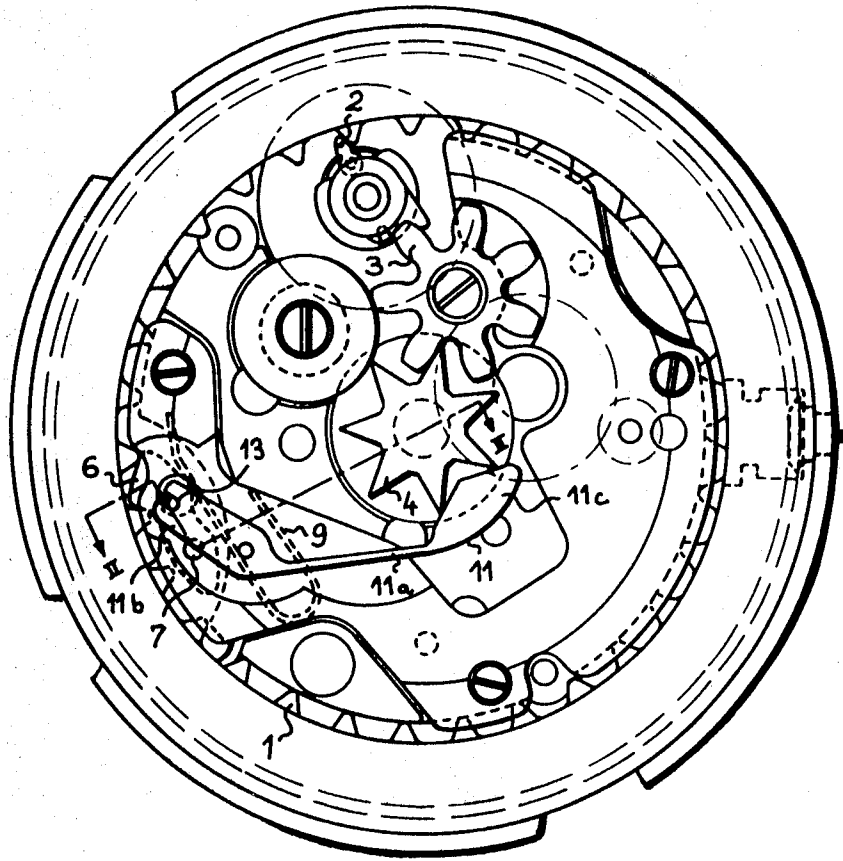
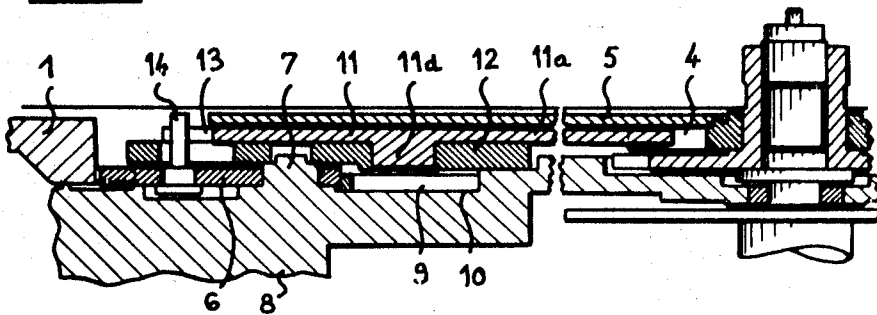


FIG. 2



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COORDINATED COMBINED RELEASABLE DAY AND DATE JUMPER MECHANISM FOR CALENDAR TIMEPIECES

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2 Claims

ABSTRACT OF THE DISCLOSURE

A calendar timepiece has a toothed day ring and a star wheel carrying means for indicating days of the week, and comprises a first jumper lever urged into engagement with the teeth of the date ring by a jumper spring and a pivotally mounted second jumper. The second jumper has an elastically deformable first arm terminating in a jumper beak engaging in the teeth of the star wheel and a second arm kinematically solid with the first jumper lever.

The invention relates to jumper mechanisms for calendar timepieces comprising a date ring and a star wheel bearing an indicator for the days of the week.

In known timepieces of this type the date ring and the days wheel are positioned by two independent jumpers each exerting a braking force at the moment the indication of the date changes.

These braking forces are cumulative and in order to maintain the braking effect within acceptable limits, it is necessary to exactly adjust the braking force of each jumper.

It is an object of the invention to remedy this drawback. The invention accordingly provides a jumper mechanism for a calendar timepiece comprising a toothed date ring and a star wheel bearing means for indicating the days of the week, a first jumper consisting of a lever engaging in the teeth of the date ring by means of a jumper spring, and a pivotally mounted second jumper having two arms, an elastically deformable first arm terminating in a jumper beak engaging in the teeth of said star wheel, and a second arm kinematically solid with said first jumper.

In a timepiece including this mechanism the jumper for the days wheel is separated from the days wheel by the date jumper and the days wheel is thus not subject to a braking effect by its jumper. On the other hand, the days wheel jumper does not require to be adjusted and the force of its sprung arm can be much higher and consequently more resistant than that of the traditional jumper.

The accompanying drawings show, by way of example, a timepiece provided with the mechanism according to the invention.

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FIG. 1 is a plan view.

FIG. 2 is a section along line II—II of FIG. 1.

The wristwatch shown schematically in the drawings comprises a date ring 1 provided with interior teeth adapted to be advanced intermittently by a device 2 of known design and which is not described in detail herein. This advancing device 2 simultaneously drives a pinion 3 itself driving a star wheel 4 bearing a disc 5 on which the days of the week are indicated.

The date ring 1 is moved into position by a jumper 6 consisting of a small lever provided with a hole about which it pivots on a shoulder 7 of the bottom plate 8 of a watch movement. The tension of spring 9 located in a hollow 10 of the bottom plate maintains the jumper 6 in the teeth of date ring 1.

The days wheel 4 is moved into position by a jumper 11 comprising two arms 11a and 11b, the arm 11a being springly and ending by a jumper beak 11c engaging in the teeth of star wheel 4. This jumper is pivoted in bridge 12, and is provided with a cylindrical stud 11d engaged in a hole bored in this bridge. The rigid arm 11b has a slot 13 at its extremity, in which slot a pin 14 integral with the jumper 6 is engaged.

When changing the date, the jumper 6 is raised by the rotation of the date ring 1 and by this movement works the jumper 11 which is dislodged from wheel 4.

In addition, it can be seen that this mechanism has the advantage of being assembled without using any screws.

What is claimed is:

1. Jumper mechanism for a calendar timepiece comprising a toothed date ring and a star wheel bearing means for indicating the days of the week, a first jumper consisting of a lever engaging in the teeth of the date ring by means of a jumper spring, and a pivotally mounted second jumper having two arms, an elastically deformable first arm terminating in a jumper beak engaging in the teeth of said star wheel, and a second arm kinematically solid with said first jumper.

2. Mechanism according to claim 1, wherein said first jumper is pivotally mounted on a shoulder on a bottom plate of said timepiece, and said second jumper includes a stud pivotally engaging in an aperture in a bridge member.

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