

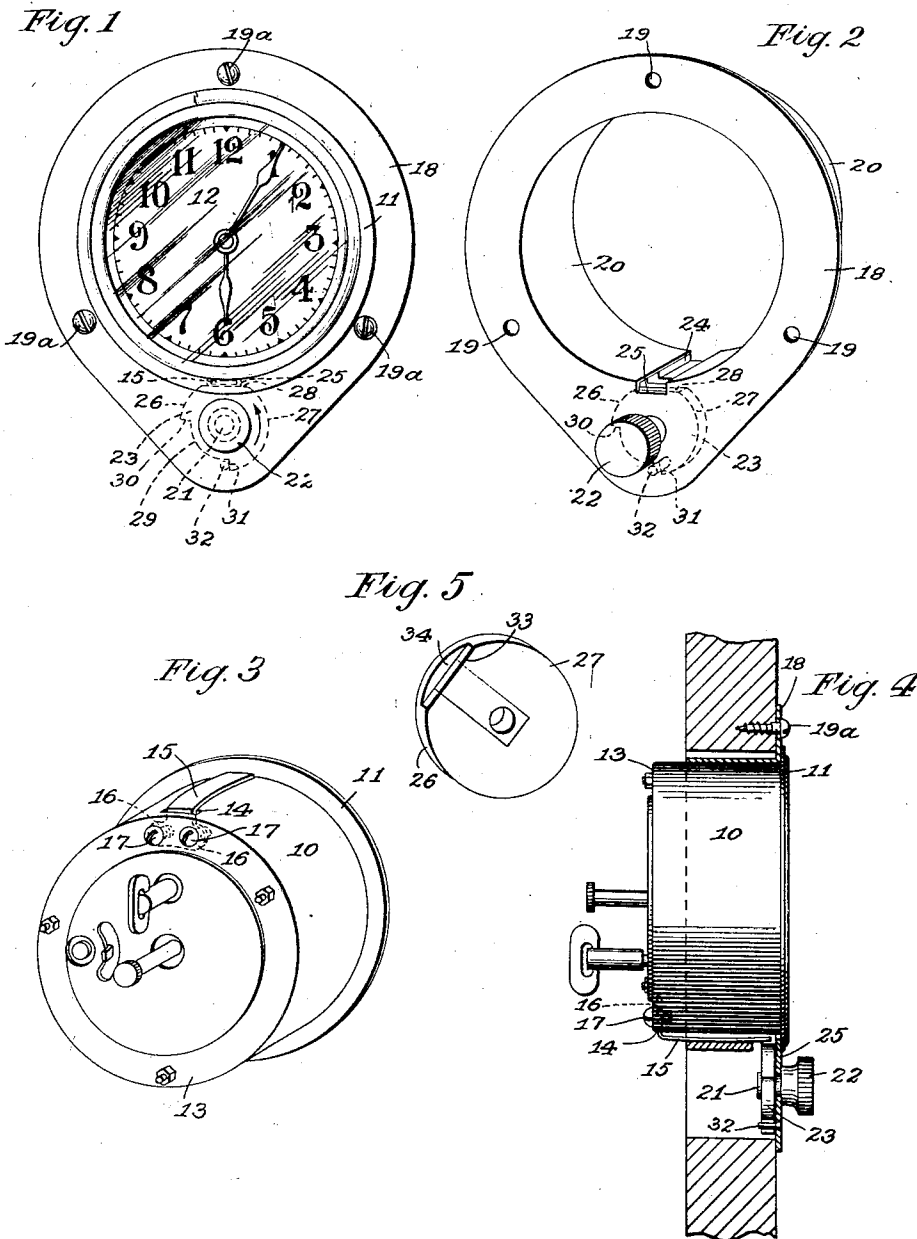
June 17, 1924.

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1,497,922

AUTOMOBILE CLOCK

Filed Sept. 18, 1923



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AUTOMOBILE CLOCK.

Application filed September 18, 1923. Serial No. 663,348.

To all whom it may concern:

Be it known that I, FREDERICK LUX, a citizen of the United States, and a resident of Waterbury, county of New Haven, and State of Connecticut, have invented certain new and useful Improvements in Automobile Clocks, of which the following is a specification.

This invention relates to automobile clocks, and more particularly to a device for detachably supporting a clock casing on the dashboard of an automobile.

One object of the invention is to provide a device of this nature having means for positively holding the clock vertical on the dashboard, and for detachably locking it in position.

A further object is to provide a device of the above nature in which the clock casing is provided with a leaf spring adapted to press outwardly to engage a locking keyway on a holding member, said spring being adapted to be released by the manipulation of a knob located within reach of the driver.

A further object is to provide a device of the above nature which will be simple, cheap to manufacture, easy to manipulate, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing one form in which the invention may be conveniently embodied in practice.

Fig. 1 is a front view of the clock casing and holder in assembled position.

Fig. 2 is a front perspective view of the holder in detached position.

Fig. 3 is a rear perspective view of the clock casing showing the manner in which the resilient leaf spring is attached thereto.

Fig. 4 is a sectional view taken through the dashboard and the center of the holder and showing the casing in operating position.

Fig. 5 is a perspective view of a modified form of cam disk.

Referring now to the drawings in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 denotes a cylindrical casing adapted to contain the clock movement. The casing 10 is provided with a front flange 11 surrounding the usual bezel and dial 12. The casing is provided at its rear

with a substantially flat face 13 through which extend the usual setting, winding and regulating devices as shown. A slot 14 is cut in the periphery of the casing adjacent the face 13. An L-shaped leaf spring projects through the slot 14 and has an outwardly extending resilient tongue 15. The portion of the leaf spring inside of the casing is provided with a pair of ears 16 adapted to be secured to the rear face 13 of the casing in any suitable manner as by screws or rivets 17.

The casing 10 is adapted to fit within a holder having a substantially circular front flange 18, said flange being provided with screw holes 19 adapted to receive screws 19^a, by means of which the holder may be secured to the front of the dash board. The holder is provided with an integral cylindrical sleeve portion 20 within which the casing 10 is adapted to loosely fit. The lower portion of the flange 18 is enlarged, and is adapted to form a bearing for a cam shaft 21, said shaft having a knurled knob 22 in front of said flange, and a cam disk 23 behind said flange. A guideway 24 is formed in the sleeve 20 of the holder to receive the resilient tongue 15 of the leaf spring and prevent the casing 10 from rotation relative to the holder. The front edge 25 of the flange serves as a stop adapted to engage the end of the tongue 15 after the casing has been pushed into the holder as far as it will go. At this time, the tongue 15 will press outwardly into the guideway behind the edge 25 of the flange, and will positively prevent the casing from moving out of the holder.

The cam disk 23 is provided on its periphery with a pair of circular sections 26, 27, between which is a flat segment 28. The cam disk is also provided on its opposite side with a slot 29, the ends of said slot being terminated by shoulders 30, 31. A pin 32 projecting from the rear of the flange 18 is adapted to form a stop to engage said shoulders 30 and 31 and thereby to limit the rotary movement of the cam in both directions. The knob 22 lies in front of the dashboard in a convenient position for manipulation by the driver of the machine.

In operation, when it is desired to lock the clock casing in its holder, the casing will first be pushed in the holder as far as it will go. The knob 22 will then be turned in the

direction opposite to the arrow shown in Fig. 1, as far as it will go, bringing the flat segment 28 into engagement with the spring tongue 15, which will then be locked behind the latch 25 of the holder flange 18.

When, however, it is desired to remove the clock casing from its mounting, as for winding, setting, or regulating, the knob 22 will be turned in the direction of the arrow shown in Fig. 1 as far as it will go causing the cylindrical portion 27 of the cam disk 23 to force the end of the tongue 15 outwardly, whereby it will be lifted out of the keyway above the edge 25 on the flange and will permit the casing to be readily withdrawn from its holder.

In the modified form of cam disk shown in Fig. 5, a segment 33 is provided which is only one half the thickness of the disk, the remainder of the thickness at this point comprising a circular section 34 of the same diameter as the circular sections 26 and 27. When this form of cam disk is employed, the end 25 of the flange at the guideway 24 is cut deeper so that the section 34 can act as the stop for the tongue 15. One advantage of this construction is that the spring not only serves as a key to prevent rotation and a lock to prevent removal of the casing, but the spring also takes up the looseness of the fit between the casing and the holder. The spring thus acts as a vibration absorber, thereby reducing the vibration and resultant wear in the delicate mechanism of the clock movement.

Another advantage of the spring is that when engaged by the segments 28 or 33, it will serve to prevent the cam disk from turning in its socket.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure, but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. In a clock adapted to be located on the dashboard of a motor vehicle, a clock casing having a projecting spring attached thereto, a holder within which said casing is adapted to fit, said holder having a guideway for said spring, said spring serving to lock the casing within the holder and to prevent it from turning relative thereto.

2. In a clock adapted to be located on the dashboard of a motor vehicle, a clock casing having a projecting spring attached thereto, a holder within which said casing

is adapted to fit, said holder having a guideway for said spring, the end of said guideway serving as a latch for the end of said spring, said spring serving to lock the casing within the holder and to prevent it from turning relative thereto.

3. In a clock for use in a motor vehicle, a clock casing, said casing having a spring projecting therefrom, a holder within which said casing is adapted to fit, a seat in said holder for said projecting spring, and means for lifting said spring out of its seat to release the casing from the holder.

4. In a clock adapted to be attached to the dashboard of a motor vehicle, a clock casing containing a clock movement, an outwardly pressing leaf spring secured to said casing, a holder adapted to be secured to said dashboard within which said casing is adapted to fit, said holder having a keyway to receive said leaf spring whereby said casing will be held against twisting in the holder and will be detachably locked against outward sliding movement.

5. In a dashboard, a clock casing containing a clock movement, a leaf spring secured to the outside of said casing, a holder adapted to be secured to said dashboard within which said casing is adapted to fit, said holder having a keyway to receive said leaf spring whereby said casing will be held against twisting in the holder, and a manually-operated cam on said holder for engaging said spring to permit said casing to be withdrawn from said holder.

6. In a dashboard, a clock casing containing a clock movement, a leaf spring secured to the outside of said casing, a holder adapted to be secured to said dashboard within which said casing is adapted to fit, said holder having a keyway to receive said leaf spring whereby said casing will be held against twisting in the holder, a latch to prevent it from sliding out of said holder, and a manually-operated cam on said holder for engaging said spring to permit said casing to be withdrawn from said holder.

7. In a dashboard clock, a cylindrical clock casing having means for attachment to the dashboard, a holder for said casing having a cylindrical sleeve within which said casing is adapted to fit, said casing having a leaf spring adjacent its side edge, a slot in said sleeve for receiving said leaf spring to hold said casing from rotating relative to said holder, means on said holder to engage the end of said leaf spring to prevent the casing from sliding out of the holder, and manually-operated means for lifting said spring out of engagement with said spring-engaging means.

8. In a dashboard clock, a clock casing, a holder for said casing adapted to be secured to the dashboard, and resilient means for locking said casing in said holder

against rotation therein, and a cam mounted in said holder for engaging said resilient means to permit the casing to be removed from said holder, said cam being
5 secured on a shaft mounted to rotate in said holder, the periphery of said cam having a slot, and a pin on said holder adapted to form a stop for the extremities of said slot, said shaft having a manually operated
10 knob on its outer end located within reach of the driver.

9. In a dashboard clock, a clock casing, a holder for said casing adapted to be secured to the dashboard, and resilient means for

detachably locking said casing against
15 movement in said holder, and a manually-operated cam mounted in said holder for engaging said resilient means, said cam having a cylindrical section and a flat segment on its periphery, and means for rotating
20 said cam to bring said cylindrical section into engagement with said resilient means to unlock said casing from said holder.

In testimony whereof, I have affixed my
25 signature to this specification.

FREDERICK LUX.