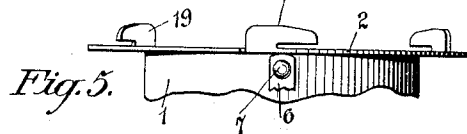
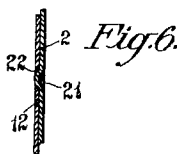
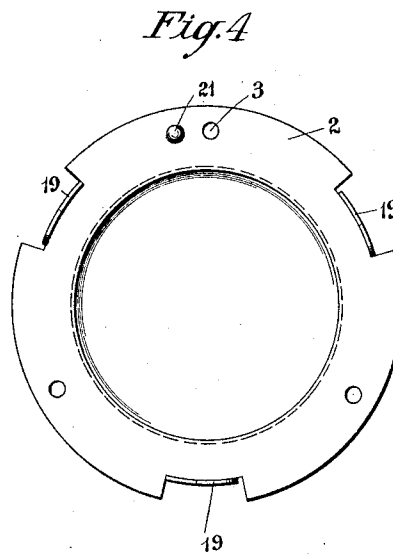
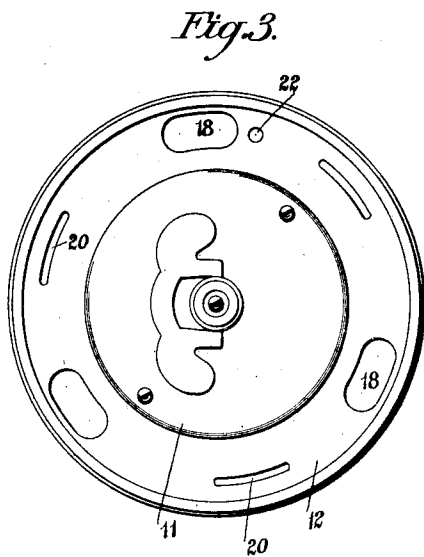
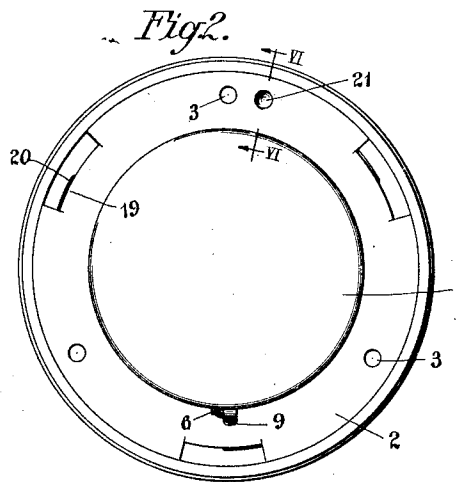
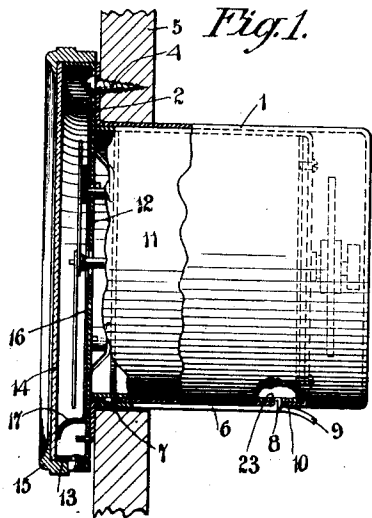


Jan. 9, 1923.

L. A. HAMMARLUND,
CLOCK.
FILED MAR. 25, 1922.

1,441,279.



INVENTOR
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UNITED STATES PATENT OFFICE.

LLOYD A. HAMMARLUND, OF NEW YORK, N. Y., ASSIGNOR TO AUTOMOBILE CLOCK COMPANY, INC., OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

CLOCK.

Application filed March 25, 1922. Serial No. 546,749.

To all whom it may concern:

Be it known that I, LLOYD A. HAMMARLUND, a citizen of the United States, and resident of the borough of Manhattan, in the city and State of New York, have invented a new and useful Improvement in Clocks, of which the following is a specification.

The object of my invention is to provide certain improvements in the construction, form and arrangement of the several parts of a clock, and especially a clock designed for use in connection with automobiles, airships, boats, etc., where the clock is subjected to more or less exposure, to rough usage and to theft.

My improved clock more particularly includes inner and outer casings with novel means for removably securing the inner casing within the outer casing with the fastening means for the outer casing concealed, means being provided for yieldingly holding the inner casing and thereby the clock dial in proper position in the outer casing, and also a manually operated device being provided for locking the inner casing to the outer casing.

My improved clock further includes a structure in which the dial and reflector ring are formed from a single blank of sheet material.

A practical embodiment of my invention is represented in the accompanying drawing which shows my invention as applied to a rear wind and rear set type of clock.

Fig. 1 represents the clock partly in side elevation and partly in section, attached to a suitable support.

Fig. 2 represents a back view of the clock.

Fig. 3 represents a back view of the clock removed from the outer casing.

Fig. 4 represents a front view of the outer casing.

Fig. 5 represents a detail side view of the same.

Fig. 6 represents a detail section taken in the plane of the line VI—VI of Fig. 2.

The outer cylindrical casing 1 is closed at its back end and open at its front end. This outer casing is provided with a peripheral external lateral flange 2, provided with holes 3 for the reception of fastening screws 4 to fixedly secure the outer casing to an instrument board or other suitable support 5.

A swiveled latch 6 is secured by a rivet 7 along the external wall of the outer casing adjacent to the front flange 2. The free end of this latch is provided with an inwardly turned lip 8 and an outwardly turned handle 9. The side wall of the outer casing is provided with a hole 10 in which the lip 8 is located when the latch is in its locking position, as will hereinafter more fully appear.

An inner cylindrical casing 11 has a sliding and rotary fit within the outer casing 1. The rear end of the inner casing is closed and the front end is closed by a front plate 12 which is arranged to lie flat against the front flange 2 of the outer casing when the inner casing is inserted into position within the outer casing. The front plate is provided with a forwardly extended peripheral flange 13 on which the glass 14 is held seated by the rim 15.

The combined dial 16 and reflector ring 17 is formed from a single blank of sheet material, thus materially strengthening the structure as well as simplifying the same, as distinguished from those structures in which the dial and reflector ring are made from separate pieces. This dial is suitably secured to the face of the front plate 12.

The front plate 12 has holes 18 for receiving the heads of the fastening screws 4, the reflector ring 17 and the internal flange of the rim 15 serving to conceal the said fastening screws when the parts are assembled.

The means which I have shown for removably interlocking the inner casing of the clock to the outer casing by a slight rotary movement of the inner casing, is herein shown as a bayonet joint connection between the front plate 12 and flange 2, the flange 2 being cut and bent to form a plurality of forwardly projecting hooks 19 arranged to enter a plurality of slots 20 in the front plate 12.

I have provided yielding means for positioning the inner casing and thereby the clock dial with respect to the outer casing, which means is herein shown as a projection 21, struck forwardly from the front flange 2 of the outer casing, and a hole 22 in the front plate 12 of the inner casing, into which hole the projection 21 snaps when the inner casing has been rotated during its interlocking movement to the proper extent.

The two casings may be locked together by the latch 6 hereinbefore described; in which case the wall of the inner casing is provided with a hole 23, into which the lip 8 of the latch 6 snaps when the inner casing, and thereby the dial, has been properly positioned by the coaction of the projection 21 and hole 22 of the positioning means. If it is not desired to use the latch 6, it may be swung out of its operative position because of its swiveled connection with the outer casing.

It is evident that various changes may be resorted to in the construction, form and arrangement of the several parts without departing from the spirit and scope of my invention; hence, I do not wish to limit myself to the particular embodiment herein shown and described, but

What I claim is:

1. In a clock, an outer casing provided with a peripheral external lateral front flange having hooks struck therefrom, and an inner casing provided with a front plate arranged to lie flat against the front flange, said plate having slots for receiving said hooks whereby the inner casing is removably secured to the outer casing by a rotary movement of the inner casing.

2. In a clock, an outer casing provided with a peripheral external lateral front flange having hooks struck therefrom, an inner casing provided with a front plate arranged to lie flat against the front flange, said front flange having slots for receiving said hooks whereby the inner casing is removably secured to the outer casing by a rotary movement of the inner casing, and means for yieldingly positioning the inner casing and thereby the clock dial with respect to the outer casing.

3. In a clock, an outer casing provided with a front flange cut and bent to form hooks projecting forwardly therefrom, and an inner casing provided with a front plate having slots for receiving said hooks, whereby the inner casing is removably secured to the outer casing by a rotary movement of the inner casing.

4. In a clock, an outer casing provided with a front flange, an inner casing provided with a front plate, interlocking means carried by the plate and flange for removably securing the inner casing to the outer casing by a rotary movement of the inner casing, and a coacting stud and hole connection between the plate and flange for yieldingly positioning the inner casing and there-

by the clock dial with respect to the outer casing.

5. In a clock, an outer casing, an inner casing, interlocking means for removably securing the inner casing to the outer casing by a rotary movement of the inner casing, the walls of said casings having holes arranged to be brought into alinement, and a separate device for locking the inner casing to the outer casing, said device comprising a spring latch having a projection arranged to enter the said alined holes in the walls of the inner and outer casings.

6. In a clock, an outer casing, an inner casing, interlocking means for removably securing the inner casing to the outer casing by a rotary movement of the inner casing, the walls of said casings having holes arranged to be brought into alinement, and a separate device for locking the inner casing to the outer casing, said device comprising a spring latch having a projection arranged to enter the alined holes in the walls of the inner and outer casings, said spring latch being manually movable into and out of operative position.

7. In a clock, an outer casing, an inner casing, means for removably securing the inner casing to the outer casing by a rotary movement of the inner casing, means for yieldingly positioning the inner casing with respect to the outer casing, and a separate device for locking the inner casing to the outer casing.

8. In a clock, an outer casing provided with a front flange, an inner casing provided with a front plate, interlocking means carried by the plate and flange for removably securing the inner casing to the outer casing by a rotary movement of the inner member, said flange having holes for the reception of fastening screws, and said front plate having holes for receiving the heads of said screws.

9. In a clock, an outer casing provided with a front flange, an inner casing provided with a front plate, window and attaching rim, a dial and a reflector ring, interlocking means for removably securing the inner casing to the outer casing, the flange having holes for the reception of fastening screws and the front plate having holes for receiving the heads of said screws, the rim and reflector ring serving to conceal the heads of the screws.

In testimony, that I claim the foregoing as my invention, I have signed my name this 21st day of March, 1922.

LLOYD A. HAMMARLUND.