

Jan. 2, 1923.

F. WEHINGER.
PIVOTAL GUARD FOR CLOCK SPRINGS.
FILED SEPT. 29, 1922.

1,440,426

Fig. 1.

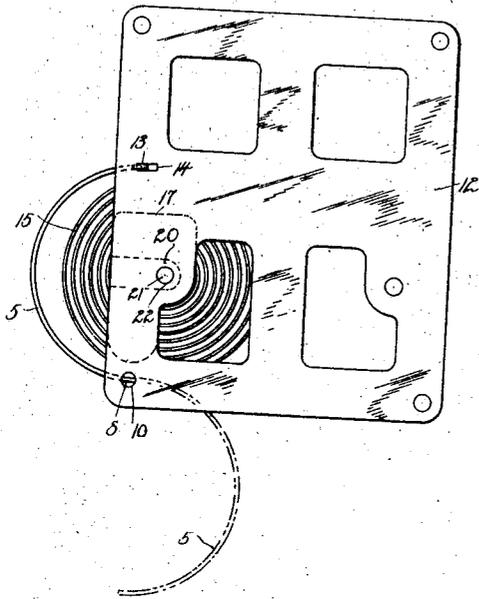


Fig. 2.

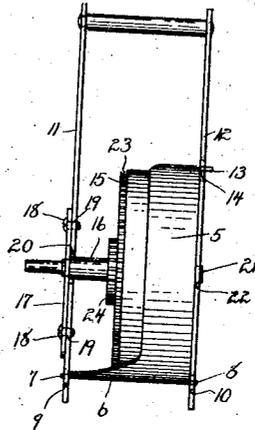


Fig. 3.

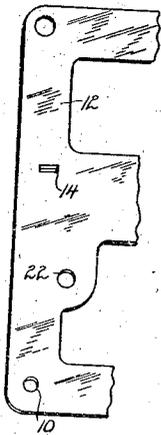
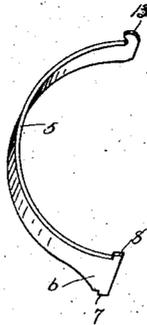


Fig. 4.



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UNITED STATES PATENT OFFICE.

FREDERICK WEHINGER, OF WATERBURY, CONNECTICUT, ASSIGNOR TO WATERBURY CLOCK CO., OF WATERBURY, CONNECTICUT, A CORPORATION.

PIVOTAL GUARD FOR CLOCK SPRINGS.

Application filed September 29, 1922. Serial No. 591,242.

To all whom it may concern:

Be it known that I, FREDERICK WEHINGER, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Pivotal Guards for Clock Springs; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent in—

Fig. 1 a view in rear elevation of a clock-movement provided with my improved pivotal guard for clock springs.

Fig. 2 an edge view thereof.

Fig. 3 a broken perspective view of the rear movement-plate thereof.

Fig. 4 a detached perspective view of the pivotal guard.

My invention relates to an improvement in clock-movements, the object being to provide a clock-movement with a simple, cheap, effective and convenient spring guard.

With these ends in view, my invention consists in the combination with the movement-plates of a clock, of a pivotal spring-guard mounted between the same.

My invention further consists in the combination with the movement-plates of a clock, of a demountable spring-unit, and a pivotal spring-guard for the protection of the spring of such unit.

My invention further consists in a pivotal guard for clock springs, having certain details of construction as will be hereinafter described and pointed out in the claims.

In carrying out my invention, as herein shown, I employ a substantially semicircular spring-guard 5 made of heavy spring metal, uniform in width throughout the main portion of its length, but having the rear edge of its lower end laterally extended to form an integral mounting-arm 6 terminating in a trunnion 7 complemented by a trunnion 8 located upon the lower end of its forward edge, the said trunnions respectively entering bearing-holes 9 and 10 in the rear and front movement-plates 11 and 12, between which the guard is thus pivotally mounted, so as to be swung into its closed or guard position, as shown by full

lines in Figs. 1 and 2, and into an open or clearance position, as shown by broken lines in Fig. 1. At its opposite, or upper, end, the guard terminates in a forwardly-turned, integral, retaining-hook 13 adapted to be hooked into an anchoring-slot 14 suitably positioned in the front movement-plate 12, the spring of the guard, as a whole, permitting it to be sufficiently sprung for the entrance of the said hook 13 into the slot 14 and its disengagement therefrom. When in its closed position, the guard forms an effective protection for the alarm-spring 15, though equally applicable for the protection of the time-spring of the movement. As shown, the alarm-spring arbor 16 has bearing in its rear end in a removable bridge 17 secured in place by two screws 18 entering suitable threaded screw-holes 19 in the rear movement-plate 11, which is formed with a clearance-notch 20, which permits the bearing 21 at the forward end of the arbor to be inserted into and removed from a bearing-hole 22 in the front movement-plate 12 in the usual manner. By swinging the guard 5 into its open position, the alarm-spring 15 is rendered as accessible for any required attention as though the guard were not present. If the alarm-spring unit is demountable as a unit, as shown, the swinging of the guard into its open position permits the alarm-spring unit to be mounted and demounted without disturbing the plates 11 and 12 by removing and re-attaching the arbor-bridge 17 in the usual manner. As shown, the alarm-spring unit consists of the spring 15, arbor 16, wheel 23 and ratchet-wheel 24, organized to be handled as one piece. Although my improved spring-guard is shown herein as combined with a demountable alarm-spring unit, it is applicable for use in clocks in which the alarm-spring is not so demountable, and for the protection of time, as well as alarm-springs.

I claim:

1. In a clock-movement, the combination with the movement-plates thereof, of a spring, and a spring-guard pivotally mounted between the said plates in position to guard the said spring.

2. In a clock-movement, the combination with the movement-plates thereof, of a spring-guard pivotally mounted between the

said plates and formed at one end with mounting trunnions and at its opposite end with an anchoring-hook.

3. In a clock-movement, the combination
5 with the front and rear movement-plates
thereof, of a demountable spring-unit, a re-
movable bridge therefor, and a spring-
guard pivotally mounted between the said
plates in position to guard the spring and
10 provided with means for engagement with

one of the plates for being held in its closed position.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

FREDERICK WEHINGER.

Witnesses:

J. R. PUTNAM,

J. C. GARRICK.