

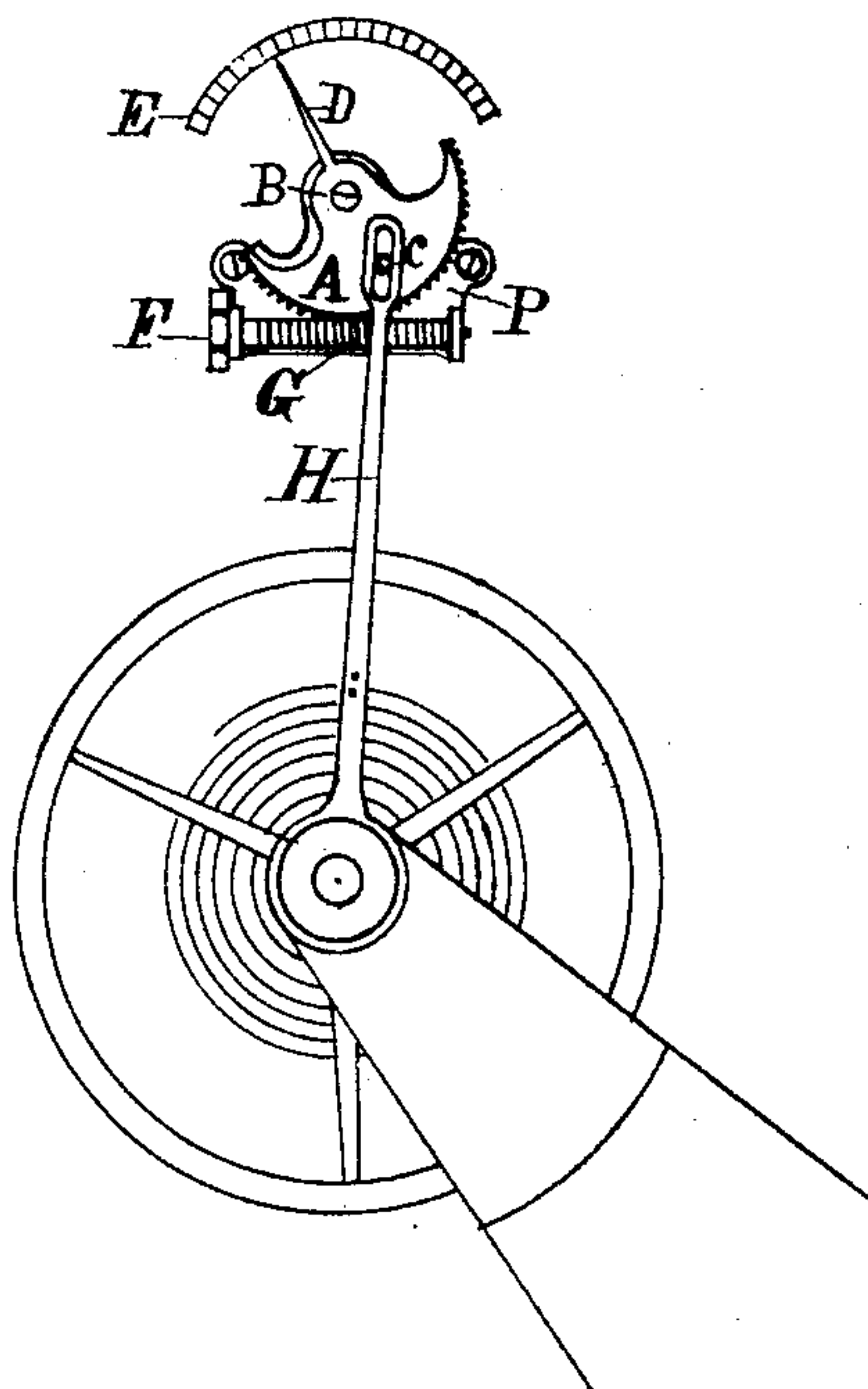
(No Model.)

A. DUCOMMUN.  
WATCH REGULATOR.

No. 460,957.

Patented Oct. 13, 1891.

*Fig. 1.*



*Fig. 2.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

ARMAND DUCOMMUN, OF CHIPPEWA FALLS, WISCONSIN.

## WATCH-REGULATOR.

SPECIFICATION forming part of Letters Patent No. 460,957, dated October 13, 1891.

Application filed January 29, 1891. Serial No. 379,605. (No model.)

*To all whom it may concern:*

Be it known that I, ARMAND DUCOMMUN, a citizen of the United States, residing in the city of Chippewa Falls, in the county of Chippewa and State of Wisconsin, have invented a new and useful Improvement in Regulators for Watches, of which the following is a specification.

My invention relates to improvements in watch-regulators in which a toothed segment is operated by a worm or screw, the segment having on one of its sides or face a stud or pin, which is placed within a link or slot at the outer end of the regulator-arm, whereby the most delicate and fine adjustment may be obtained by turning the worm or screw forward or back, as may be desired.

The invention consists of the peculiar combination of all the several parts, as more fully set forth and hereinafter described.

I am aware that various regulators have been patented wherein a screw or threaded bolt has been employed to act upon the regulator-arm.

It is well understood by watch-makers that in order to regulate a watch accurately the movement of the regulator-arm should be exceedingly delicate and minute, yet the movements should be positive, easily operated, and remain fixed when the adjustment is correct and provided with an index-pointer, showing on the scale the delicate movements of the regulator-arm. By means of the arrangement of the parts the index-pointer travels over a comparatively wide space with a very minute movement of the regulator-arm.

It is the object of my invention to construct a regulator that is easy to operate by any person and very minute and accurate in the adjustment.

In the drawings, Figure 1 is a plan view showing all of the parts. A represents the

segment, provided with cogs or teeth on its circular edge, which meshes into the threads of the screw or worm G. The segment A is also provided with an index-pointer D, the index-scale being shown at E. The segment A makes its partial revolution around its central stud B. The bed-plate P forms the foundation for the segment A and the worm G. The worm G is provided with a spur or toothed head F, by means of which the worm G can readily be turned either to the right or left by a touch of the finger or any suitable instrument. The segment A is also provided with a stud or pin, as shown at C, over which the link or slot on the outer end of the regulator-arm H is placed.

Fig. 2 represents the worm or screw G and the toothed head F.

It will be seen that in practice by turning the screw G the segment A will be moved on its center stud D, carrying along the linked regulator-arm H by the stud C. It is also seen that in taking the bridge from the watch for repairs the link at the end of the regulator-arm simply slips off from the stud C, leaving the regulator intact and undisturbed. I show in the drawings the slot or link on the end of the regulator-arm, and the stud C, which this link engages, placed on the segment A. These parts, however, may be reversed, so as to make the slot in the segment A and place the stud C on the regulator-arm.

What I claim as my invention is—

The worm or screw G and toothed segment A, in combination with the stud C, link or slot H, and index-pointer D, substantially as herein shown and described.

ARMAND DUCOMMUN.

Witnesses:

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