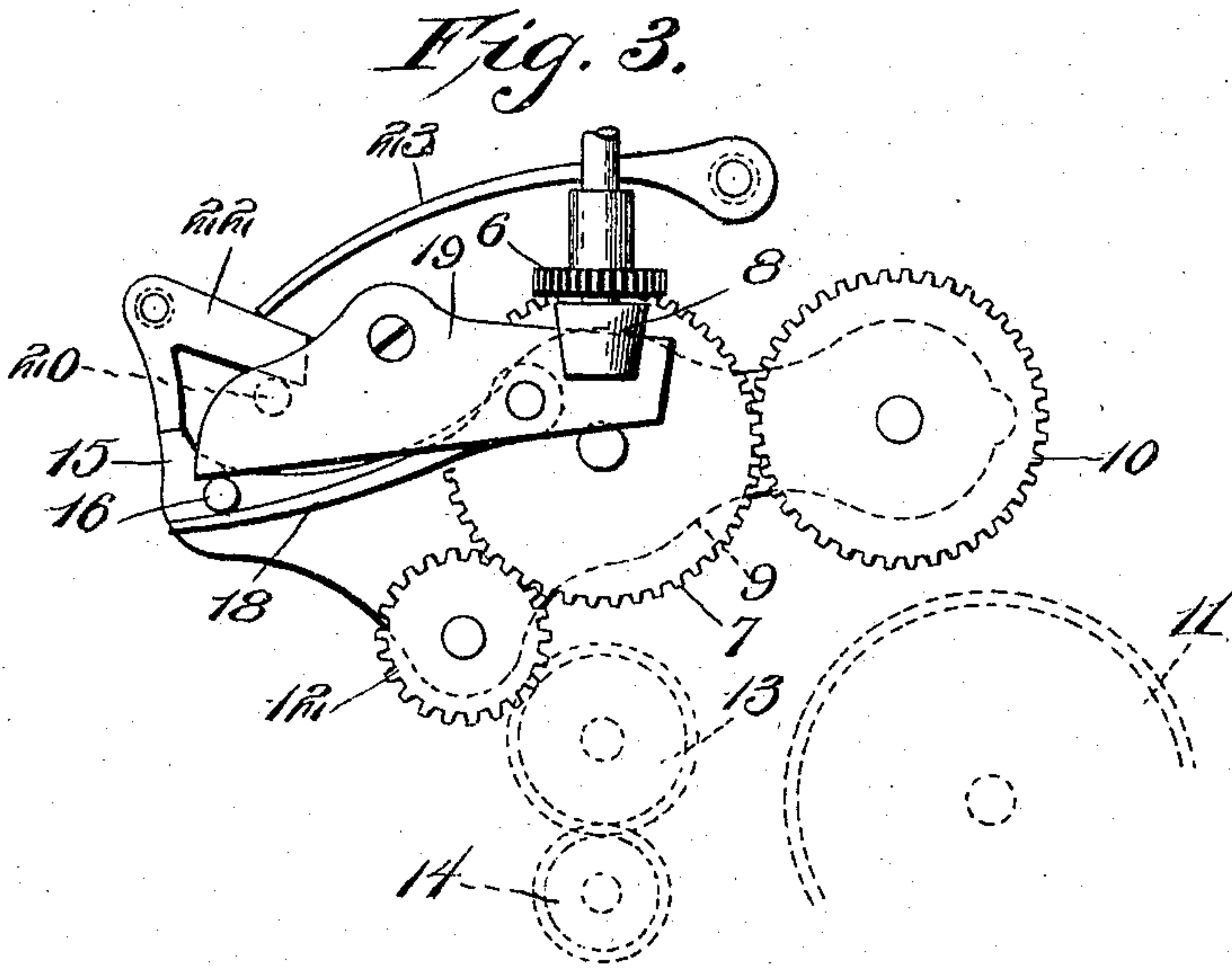
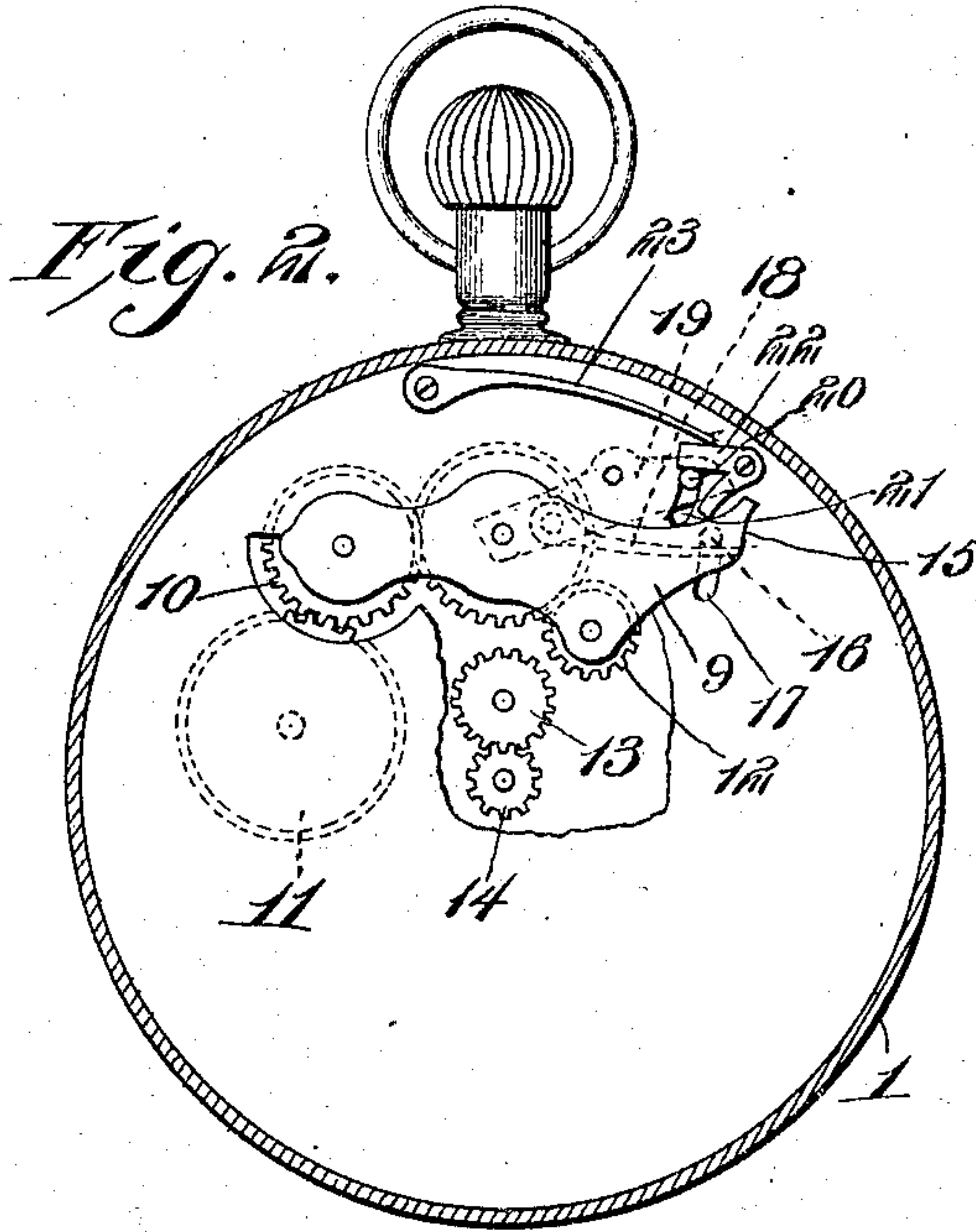
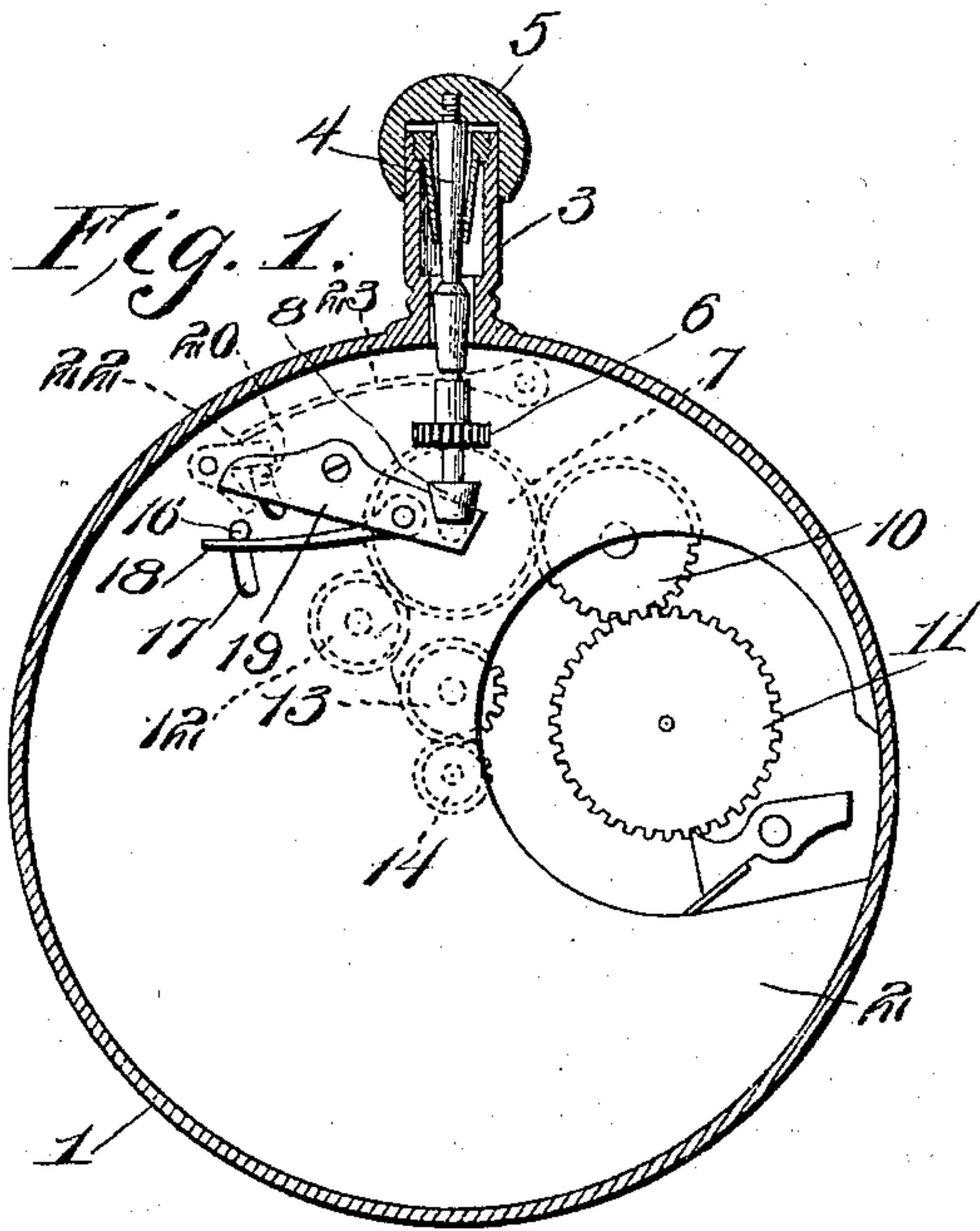


No. 795,702.

PATENTED JULY 25, 1905.

R. K. HOHMANN & O. J. KAATZ.
STEM WINDING AND SETTING WATCH.

APPLICATION FILED SEPT. 20, 1904.



Witnesses

Louis D. Heinrichs
J. S. Elmore

Inventors

Richard K. Hohmann
Otto J. Kaatz

By

Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

RICHARD K. HOHMANN AND OTTO J. KAATZ, OF SAN DIEGO,
CALIFORNIA.

STEM WINDING AND SETTING WATCH.

No. 795,702.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed September 20, 1904. Serial No. 225,289.

To all whom it may concern:

Be it known that we, RICHARD K. HOHMANN and OTTO J. KAATZ, citizens of the United States, residing at San Diego, in the county of San Diego and State of California, have invented new and useful Improvements in Stem Winding and Setting Watches, of which the following is a specification.

This invention relates to setting mechanisms for watches, and has for its objects to produce a simple efficient device of this character which may be readily applied to any class of watches now in general use without necessitating changes in the construction of the cases or other parts of the movement and one wherein the number of parts in the setting mechanism will be reduced to a minimum.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is an elevation of a setting mechanism embodying the invention. Fig. 2 is a reverse elevation of the same. Fig. 3 is an enlarged diagrammatic view of the improved mechanism.

Referring to the drawings, 1 designates a casing having therein a division-plate 2 and provided with a pendant 3, in which is arranged for longitudinal movement a winding stem or arbor 4, adapted to be operated by means of a crown 5, attached to the outer end of the arbor in the usual manner, there being provided upon said arbor between its ends a winding-pinion 6, designed to mesh with a winding-gear 7, and at the inner end of the arbor a bearing-head 8. The gear 7 is arranged at the center of a yoke-plate 9, in turn pivoted at its center to the division-plate 2 and carrying at one end a gear 10, adapted to normally mesh with the winding-gear 11, fixed upon the spring-barrel, there being also carried by the yoke-plate a pinion 12, adapted to mesh with an intermediate pinion 13, which is in turn constantly in mesh with the pinion 14 upon the hand-post. The yoke-plate 9 has its end opposite that carrying the gear 10 terminated in an engaging portion or finger 15 and also has fixed adjacent to said end a pin or stud 16, which projects through a guide-slot 17, formed in the plate 2, to the opposite or front side of said plate, where it is engaged by a spring 18, fixed upon and carried by a setting-lever 19, pivoted adjacent to its longi-

tudinal center to the plate 2 and having one end disposed within the path of the arbor-head 8. The setting-lever 19 carries at its outer end a fixed pin 20, extended through a guide-slot 21 in the plate 2 and in engagement with one arm of an elbow or shipper-lever 22, the terminal of the other arm of which is designed for engagement, as hereinafter explained, with the engaging portion or tip 15 of the yoke-plate 9, the shipper-lever when in such engagement being pressed to engaging position by means of a leaf-spring 23.

In practice the parts will normally occupy the position illustrated in Figs. 1 and 2 with the arbor depressed and the setting-lever 19 shifted on its pivot and maintained in such position by the action of the arbor-head 8. When the lever 19 is in this normally shifted position, the pin 20, carried thereby, will act to trip the shipper-lever 22 against the action of spring 23, thus releasing the adjacent end of the yoke 9, whereupon the spring 18, acting upon the pin 16, maintains the yoke in normal position with the gear 10 in mesh with the gear 11 and the pinion 12 out of mesh with the pinion 13 or, in other words, with the parts in winding position. When, however, it is desired to move the parts to setting position, the crown is pulled outward, thereby retracting the arbor 3, as usual, and relieving the adjacent end of the setting-lever 19 from pressure, whereupon the spring 23 acts upon the shipper-lever 22 to rock the latter on its pivot and move its arm into engagement with the tip 15 of the yoke 9, thereby rocking the yoke on its pivot and throwing the pinion 12 into mesh with the pinion 13 and the gear 10 out of mesh with the gear 11, while at the same time the setting-lever 19 will, through the action of the main arm of the shipper-lever upon the pin 20, be rocked to the position illustrated in Fig. 3, the parts being now in setting position.

It is obvious from the foregoing that there is produced an extremely simple mechanism in which the number of parts is reduced to a minimum and one which may be readily applied to the various classes of watches now in general use and this without necessitating changes in either the case or the ordinary parts of the movement. In attaining these ends it is to be understood that minor changes in the form, proportions, and general assemblage of the parts herein set forth may be re-

sorted to without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new is—

In a setting mechanism, a pivoted yoke-plate provided with a stud and carrying a winding-gear and a setting-pinion, a setting-lever carrying a spring in engagement with the stud for positively moving the yoke, a winding-stem free from engagement with and designed to act upon the setting-lever for maintaining the parts normally in winding position, a shipper-lever, a spring adapted to act upon the latter for automatically moving

and locking the parts in setting position upon movement of the winding-stem to release the setting-lever, and a pin carried by the setting-lever and adapted to act upon the shipper-lever for positively moving the latter to releasing position upon movement of the winding-stem to normal position.

In testimony whereof we affix our signatures in presence of two witnesses.

RICHARD K. HOHMANN.

OTTO J. KAATZ.

Witnesses:

T. J. DALEY,

E. E. PERKINS.