(No Model.)

O. F. GUNZ.

STEM WINDING AND SETTING WATCH.

No. 411,146. Patented Sept. 17, 1889.

Fig 1.

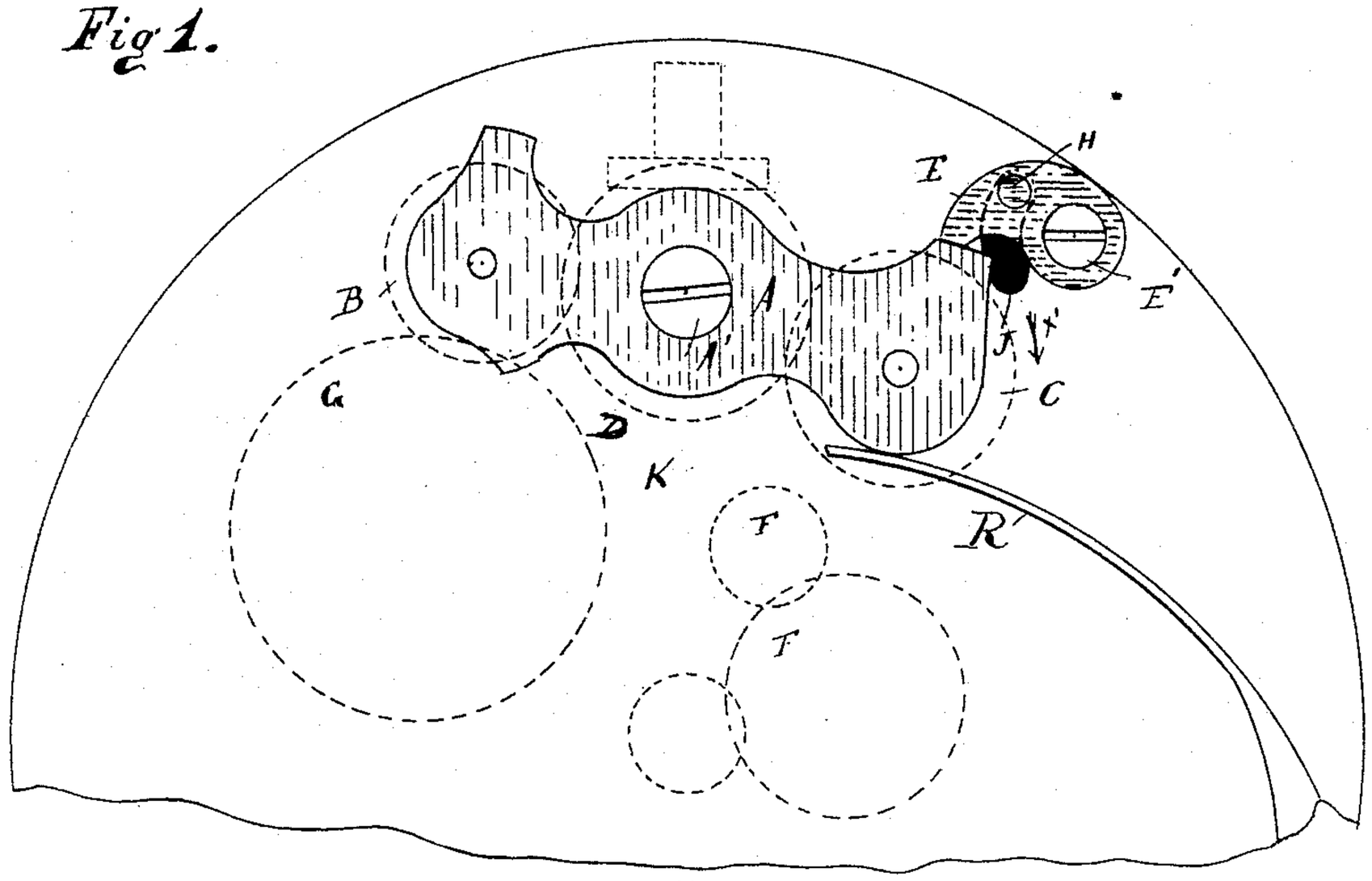
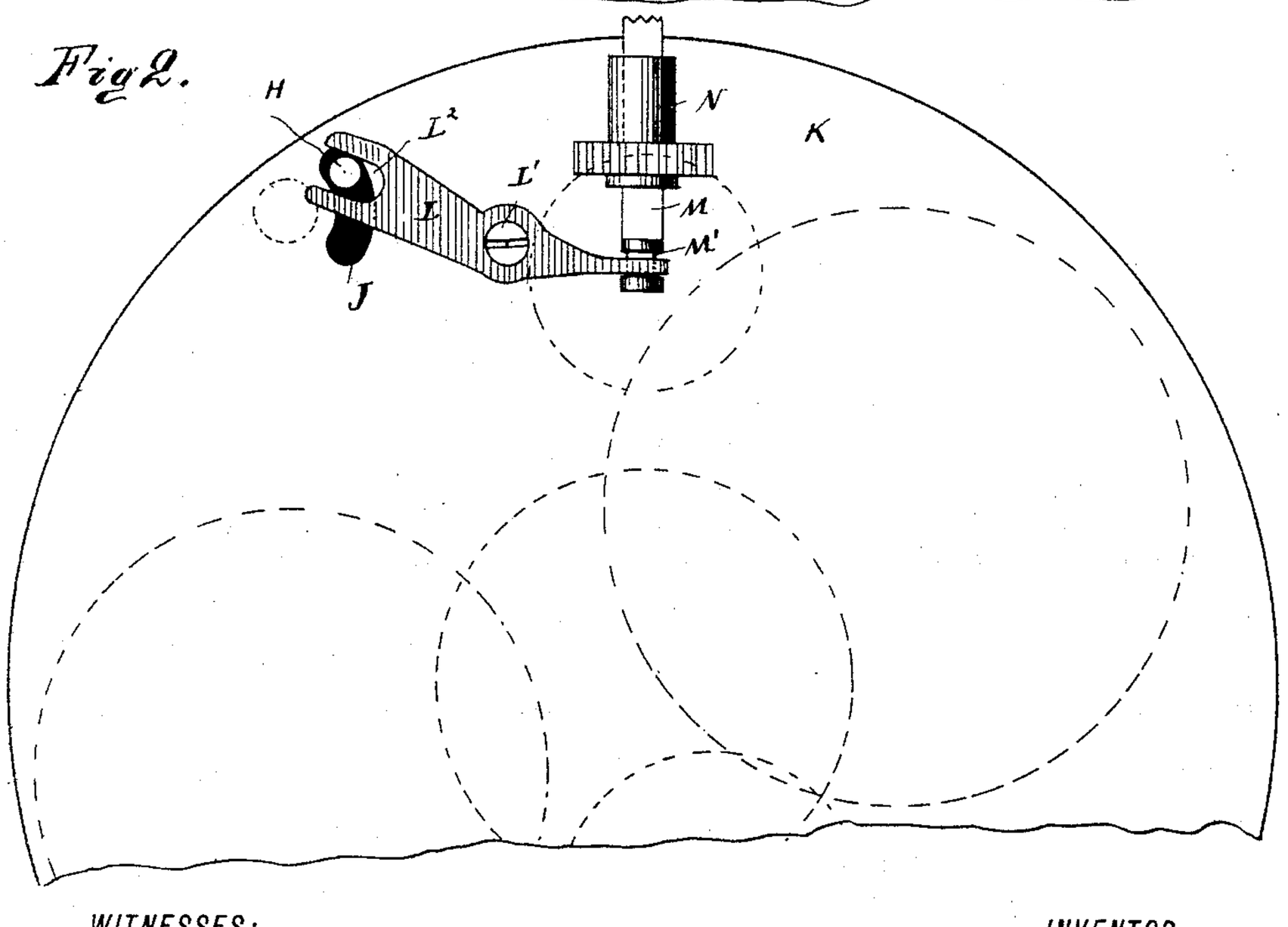


Fig 2.



WITNESSES:

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STEM WINDING AND SETTING WATCH.

SPECIFICATION forming part of Letters Patent No. 411,146, dated September 17, 1889.

Application filed March 30, 1889. Serial No. 305,452. (No model.)

To all whom it may concern:

Be it known that I, OSCAR F. GUNZ, a citizen of the United States, residing at Rutherford, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Stem-Setting Watches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in that class of watches having an oscillating yoke carrying a train of gearing for rotating the spring-barrel wheel and the hands-setting wheels.

The object of my invention is to provide a watch of this kind in which the hands can be set from the stem after pulling said stem outward, which watch is simple in construction and positive in its movements.

The invention consists in the construction and combination of parts and details, as will be fully described and set forth hereinafter, and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a face view of part of the main plate of the watch, showing that face that is adjacent to the back of the dial, parts being omitted and others shown by dotted lines. Fig. 2 is a view of part of the opposite face of the main plate, parts being omitted and others shown by dotted lines.

Similar letters of reference indicate like parts in both figures.

The yoke A, pivoted at A′, carries at its ends the two cog-wheels B and C, both being engaged with the central wheel D, mounted on the pivot of the yoke A. The wheel B serves for turning the spring-barrel wheel, and the wheel C for turning the hands-setting wheels. The cam E is pivoted at E′ and rests upon an end edge of the yoke A and can press the said end in the direction of the arrow x', thereby bringing the cog-wheel C in engagement with the hands-setting wheels F, and at the same time disengaging the wheel B from the spring-barrel wheel G. The cam E has a fixed pin H, which projects through the slot J in the main plate K. On the opposite face of the main plate K the lever L is pivoted at L′, one end of said lever having the notch L^2 for receiving the pin H of the cam E. The opposite end of said lever L is flattened and extends into an annular groove M′ of the push-pin or stem M, which is squared and passed through the tubular pinion N, engaged with the central wheel D of the yoke A. The push-pin or stem is squared so as to turn the tubular pinion N, and can slide lengthwise in said pinion. If the push-pin or stem M is pulled outward, that end of the lever L acting on the pin H is pressed inward, and causes the cam to swing inward and press that end of the yoke carrying the wheel C in the direction of the arrow x', whereby said wheel C is engaged with the hands-setting wheels F. Thereby the spring R, acting on the yoke and pressing the same in the inverse direction of the arrow x', is brought in greater tension. The cam E holds the yoke in this position, and if the push-pin or stem is now turned the hands are set. By pushing the push-pin or stem inward the cam E is swung outward and the spring R throws the yoke A in the inverse direction of the arrow x', thus engaging the wheel B with the barrel-wheel G and disengaging the wheel C from the hands-setting wheels F.

The above-described attachment is very simple and inexpensive and can easily be applied on any lever-set stem-winding watch.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with an oscillating yoke carrying wheels for engagement with the spring-barrel wheel and the hands-setting wheels, of a tubular pinion engaged with the central wheel of the yoke, a sliding stem or push-pin in the tubular pinion and provided with an annular groove, a cam pivoted to act on one end of the yoke and provided with a pin or lateral projection passing through a slot in the main plate, a pivoted lever engaging at one end said pin or projection of the cam and at the opposite end entering the annular groove in the stem or push-pin, and a single spring acting on the yoke and tending to engage with a wheel on the same with the spring-barrel wheel of the watch, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

OSCAR F. GUNZ.

Witnesses:
ADRIENNE GUNZ,
M. VAN GRASBECK.