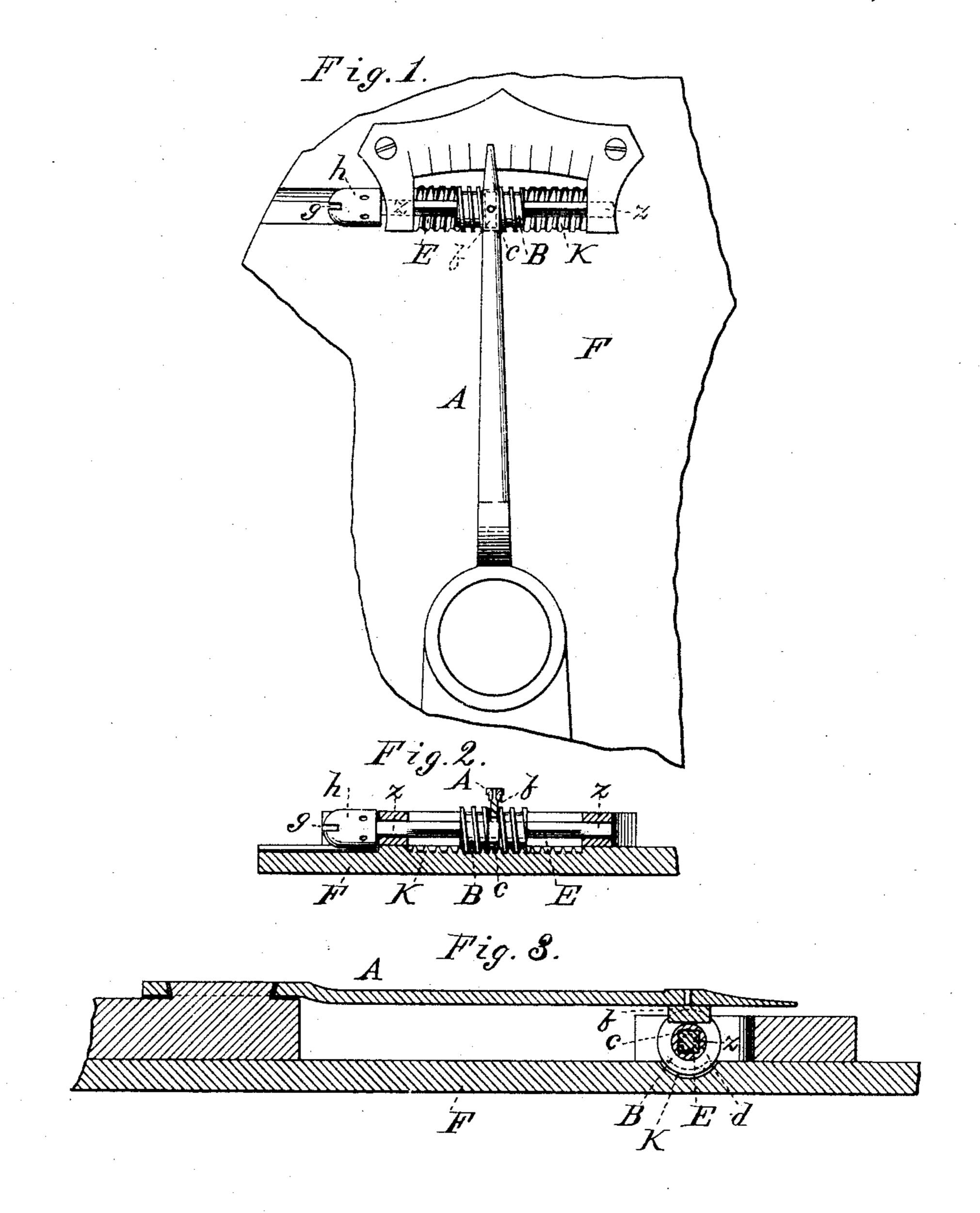
(No'Model.)

## C. E. MASON.

## MICROMETER REGULATOR FOR WATCHES.

No. 288,086.

Patented Nov. 6, 1883.



WITNESSES Willette Inderson. Emory B. Bates. Charles O. mason by anduron Amith Susattorneys

## United States Patent Office.

CHARLES E. MASON, OF COLUMBUS, OHIO.

## MICROMETER-REGULATOR FOR WATCHES.

SPECIFICATION forming part of Letters Patent No. 288,086, dated November 6, 1883.

Application filed July 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, Chas. E. Mason, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Micrometic-Regulator Attachments for 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a top view. Fig. 2 is a vertical section taken in the direction of the shaft. Fig. 3 is a vertical section taken through the regulator-arm and across the shaft and worm.

My invention has relation to micrometricregulator attachments for watches; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and

25 pointed out in the appended claim.

In the accompanying drawings, the letter A designates the regulator-arm, which is provided with a lug or pivoted projection, b, adapted to engage an annular groove, c, formed around the middle portion of a short worm, B. Through the axial part of the worm B is made a bearing, d, which engages the turning shaft E in such a manner that while the worm is

confined to the shaft so as to turn therewith it is allowed a freesliding movement on the shaft. 35 In the construction illustrated the shaft is made square, except at its journals z, and is provided with a head. h, having a key-seat, g.

K designates a screw-threaded rack, which is formed upon or secured to the plate F, and 4c extends transversely with reference to the regulator-arm A. This rack is engaged by the worm B. Rotary motion having been communicated to the shaft E or worm B, the latter is caused to traverse the rack K toward one 45 end or the other thereof, according to the direction of rotary motion. As the worm progresses, the regulator-arm, which engages the groove thereof, is correspondingly moved.

Having described this invention, what I 50 claim, and desire to secure by Letters Patent, is—

The combination, with a regulator-arm having a pivoted projection, and a worm having an annular groove engaging said projection, 55 and an axial bearing adapted to engage a shaft and to have a sliding motion thereon, of a transverse screw-threaded rack engaging said worm, substantially as specified.

In testimony whereof I affix my signature in 60 presence of two witnesses.

CHAS. E. MASON.

Witnesses:
P. H. Wheeler,
Leo Aeley.