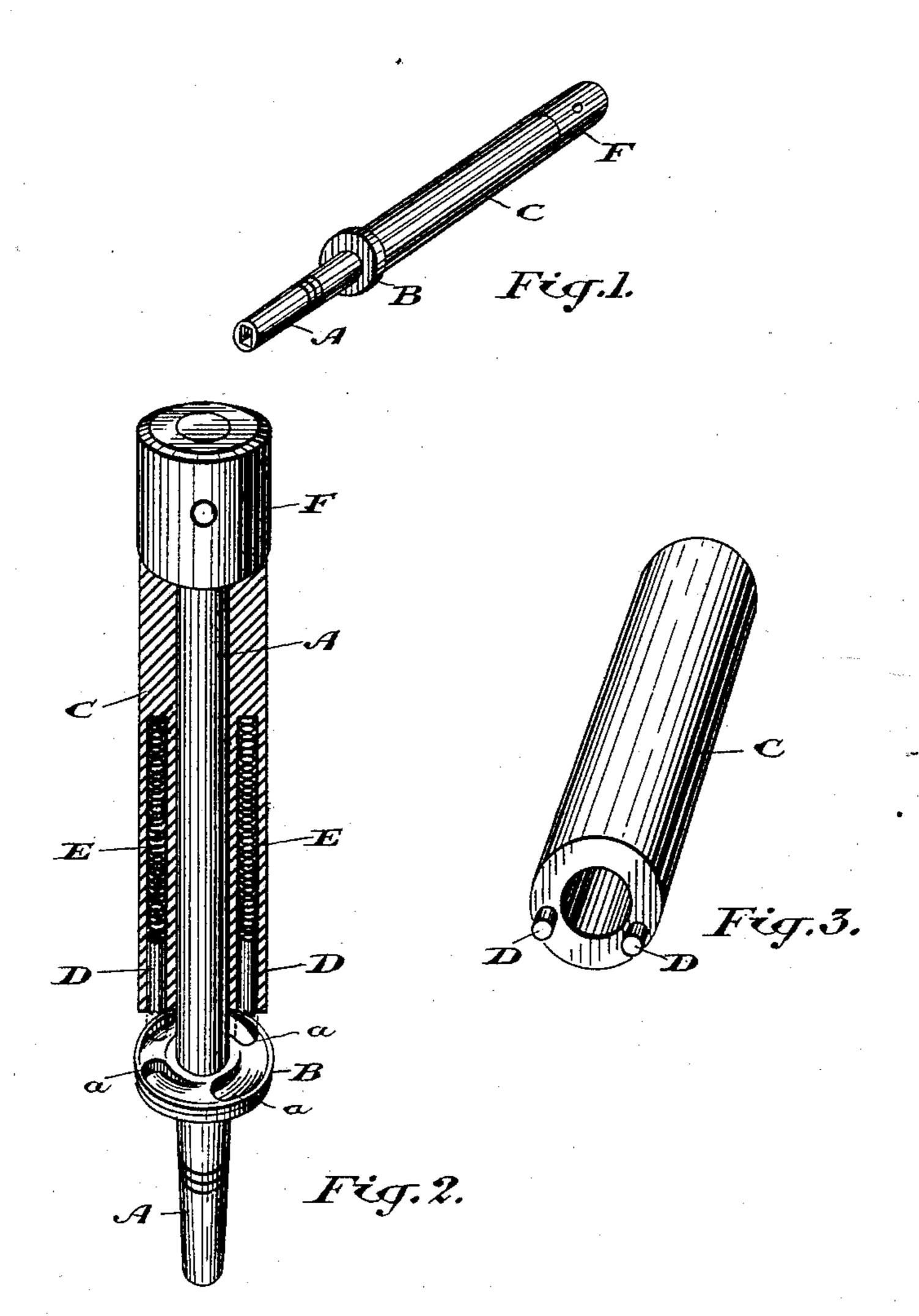
G. S. & W. W. CONOVER. WATCH KEY.

No. 360,563.

Patented Apr. 5, 1887.



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United States Patent Office.

GEORGE S. CONOVER, OF GEORGETOWN, COUNTY OF HALTON, AND WILL-IAM W. CONOVER, OF TORONTO TOWNSHIP, COUNTY OF PEEL, ONTARIO, CANADA.

WATCH-KEY.

SPECIFICATION forming part of Letters Patent No. 360,583, dated April 5, 1887.

Application filed June 17, 1886. Serial No. 205, 438. (No model.)

To all whom it may concern:

Be it known that we, GEORGE SAMUEL CON-OVER, of the village of Georgetown, in the county of Halton, in the Province of Ontario, 5 watch-maker, and WILLIAM WALLACE CON-ONER, of Toronto township, in the county of Peel, in the Province of Ontario, Canada, watch-maker, have jointly invented an Improved Watch or Clock Key, of which the

ic following is a specification.

The object of the invention is to design a ratchet watch or clock key which will operate without jarring the works and which may be used as a solid watch-key when desired; and 15 it consists, essentially, of a watch or clock key having a disk fixed to its stem, the inner surface of the said disk having a series of sloping notches or ratchets made in its face and designed to engage with one or more pins actu-20 ated by springs and projecting from the end of a sleeve journaled on the stem of the key and held thereon by a collar fixed to the said stem. and so holding the sleeve thereon that it shall not move longitudinally, substantially as and 25 for the purposes hereinafter more particularly explained.

Figure 1 is a perspective view of our watch or clock key. Fig. 2 is an enlarged perspective elevation, partially in section, showing the 3c interior construction of our improved watch or clock key. Fig. 3 is a perspective detail

of the sleeve.

The drawings are purposely exaggerated in dimensions, in order that the construction of 35 our improved key may be better illustrated.

A represents the stem or shank of the watch or clock key, made to suit the style of watch or clock it is to be used for.

B is a disk fixed to the stem or shank A 40 and having a series of sloping notches or ratchets, a, formed on its inner face.

A sleeve, C, is journaled on the stem A and has inserted in its end one or more pins, D, designed to project beyond the end of the sleeve 45 C, to engage with the notches or ratchets a.

A spring, E, is placed behind each pin D, so as to hold it in the notches or ratchets a and prevent the sleeve when turned in one direction from revolving without taking with it the disk and stem, while it may be revolved freely 50 in the opposite direction without impediment from the pins and ratchets referred to. A collar, F, is secured to the end of the stem A, so as to hold the sleeve C in position to prevent it moving longitudinally.

We are aware that ratchet watch-keys have been made before our invention; but in the kind that we have seen the ratchet-teeth are cut in the sleeve, as well as in the face of the disk attached to the stem. Consequently, the 60 sleeve must necessarily have a longitudinal movement, and in revolving it acts as a hammer against the disk, thereby conveying a jar to the works of the watch, which is naturally injurious to so delicate a mechanism.

In our construction the sleeve C revolves smoothly, and there is no injurious jar caused by the pin D falling into the ratchets.

When we desire to set the hands, it is merely necessary to seize hold of the collar F, when 70 the key may be revolved in any direction desired.

What we claim as our invention is—

The improved key herein described, consisting of the stem A, disk B, rigidly secured 75 to said stem and formed on its inner face with sloping notches or ratchets, and the collar F. rigidly secured to one end of said stem, combined with the sleeve C on said stem between said disk and collar and prevented from lon- 80 gitudinal movement by said collar and disk, and the spring actuated pins D, working in grooves in the end of the said sleeve, all substantially as and for the purpose specified.

Toronto, May 27, 1886.

G. S. CONOVER. W. W. CONOVER.

In presence of— CHARLES C. BALDWIN, ALICE K. THOMPSON.