

C. I. LOVEREN & J. H. RITZ.
Watch-Key.

No. 224,342.

Patented Feb. 10, 1880.

Fig.1.

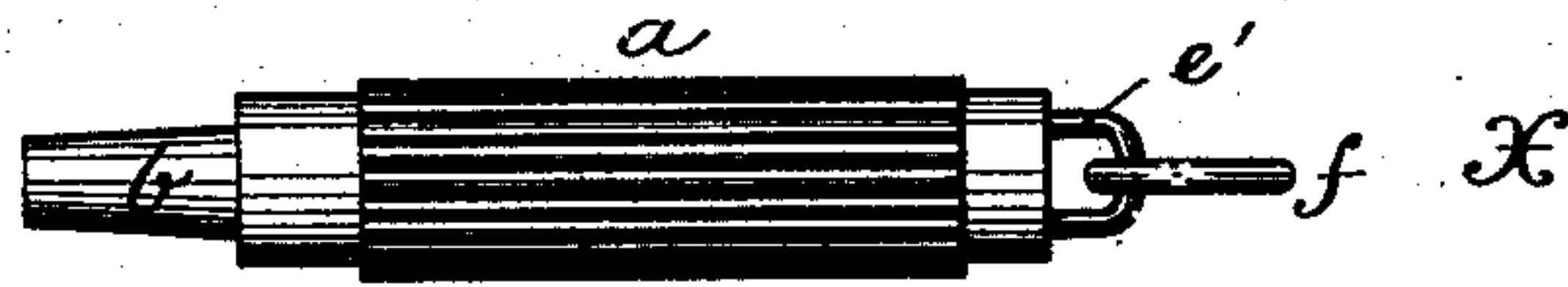


Fig.2.

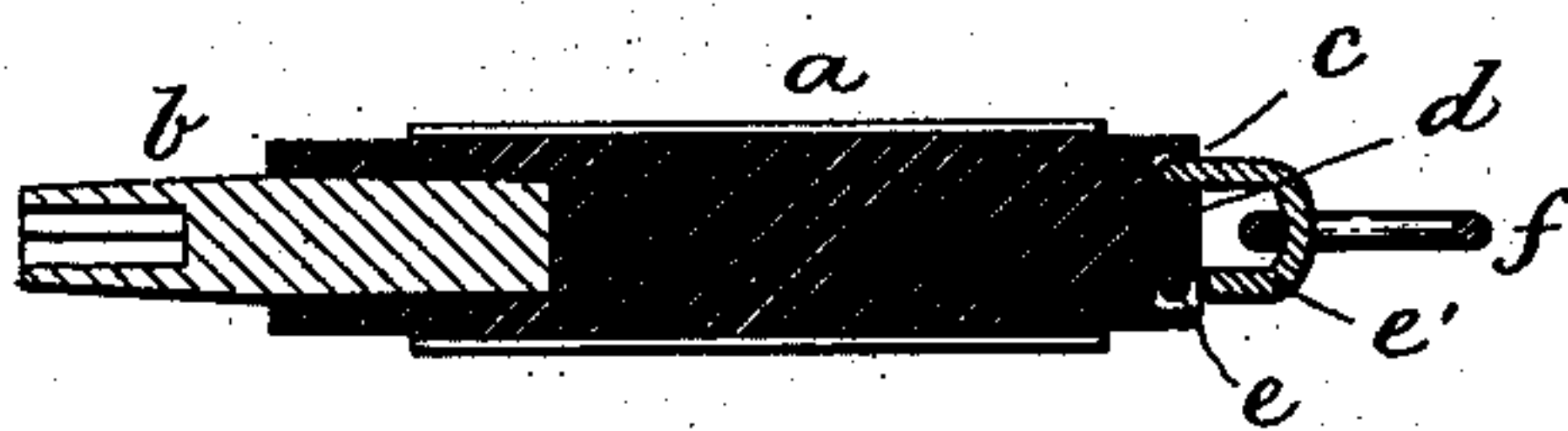


Fig.4.

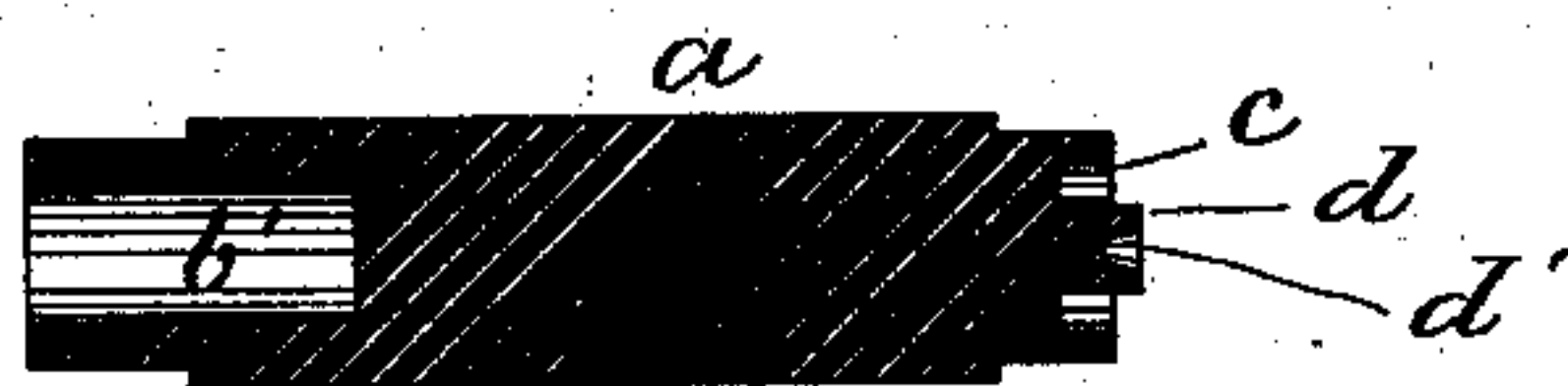


Fig.3.

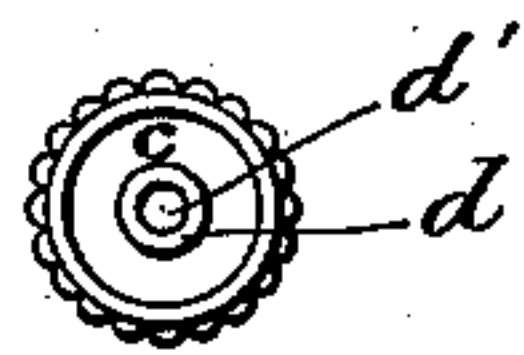


Fig.5.



Witnesses:

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their atty.

UNITED STATES PATENT OFFICE.

CHARLES I. LOVEREN, OF MALDEN, AND JOSEPH H. RITZ, OF JAMAICA
PLAIN, MASSACHUSETTS.

WATCH-KEY.

SPECIFICATION forming part of Letters Patent No. 224,342, dated February 10, 1880.

Application filed August 15, 1879.

To all whom it may concern :

Be it known that we, CHARLES I. LOVEREN, of Malden, in the county of Middlesex and State of Massachusetts, and JOSEPH H. RITZ, of Jamaica Plain, in the county of Norfolk and State of Massachusetts, have jointly invented certain new and useful Improvements in Watch-Keys; and we do hereby declare that the following is a full, clear, and exact description of the invention, which 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 of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings represents a side view of the finished key. Fig. 2 represents a central longitudinal section thereof. Fig. 3 represents an end view (seen from X in Fig. 1) with the swivel detached. Fig. 4 represents a longitudinal section of the handle with both key-pipe and swivel detached, and Fig. 5 represents a perspective view of the swivel.

Similar letters refer to similar parts wherever they occur on the drawings.

In the drawings, *a* represents the handle of the key, that is made of solid corrugated wire, as shown, and is bored out in one end at *b'*, as shown, for the reception of the key-pipe *b*, that is driven in tight into the recess *b'*, as shown in Fig. 2.

In the swivel end of the handle we turn an annular groove or recess, *c*, around a centrally-remaining stud, *d*, the end of which is made with a countersink, *d'*, as shown in Fig. 4. In Fig. 5 is shown the swivel, made of one single piece of wire, that is bent so as to form a ring, *e*, and a bail, *e'*. The ring part *e* of the swivel is placed within the annular groove *c* and around the central stud, *d*, as shown in

Fig. 2, it being confined therein, with freedom to turn around the stud *d*, by riveting or upsetting the outer hollow end of the latter.

f is an ordinary ring inserted through the bail *e'* of the swivel, by means of which the key may be suspended as usual.

We are aware of the Letters Patent granted to G. P. Reed October 5, 1875, No. 168,527, for improvements in watch-keys, and we desire to state that we do not claim the hollow screw-threaded handle and centrally-perforated swivel-block with the swivel, as therein shown, as we consider our invention to consist of a corrugated solid handle, *a*, having a socket, *b'*, in one end for the reception of the key-pipe *b*, and having in its other end an annular groove or recess, *c*, and center stud, *d d'*, combined with the ring and bail-swivel *e e'*, made of one single piece of wire and attached to the swivel end of the handle, as described. In this manner we are able to produce a very neat, tasteful, as well as durable and cheap watch-key.

What we desire to secure by Letters Patent and claim is—

The herein-described watch-key, consisting of the corrugated solid handle *a*, with its socket *b'* and key-pipe *b*, the annular groove or recess *c*, center stud, *d d'*, and the wire swivel *e e'*, all arranged, constructed, and combined substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own and joint invention we have affixed our signatures in presence of two witnesses.

CHARLES I. LOVEREN.
JOSEPH H. RITZ.

Witnesses:

ALBAN ANDRÉEN,
SILAS H. CATE.