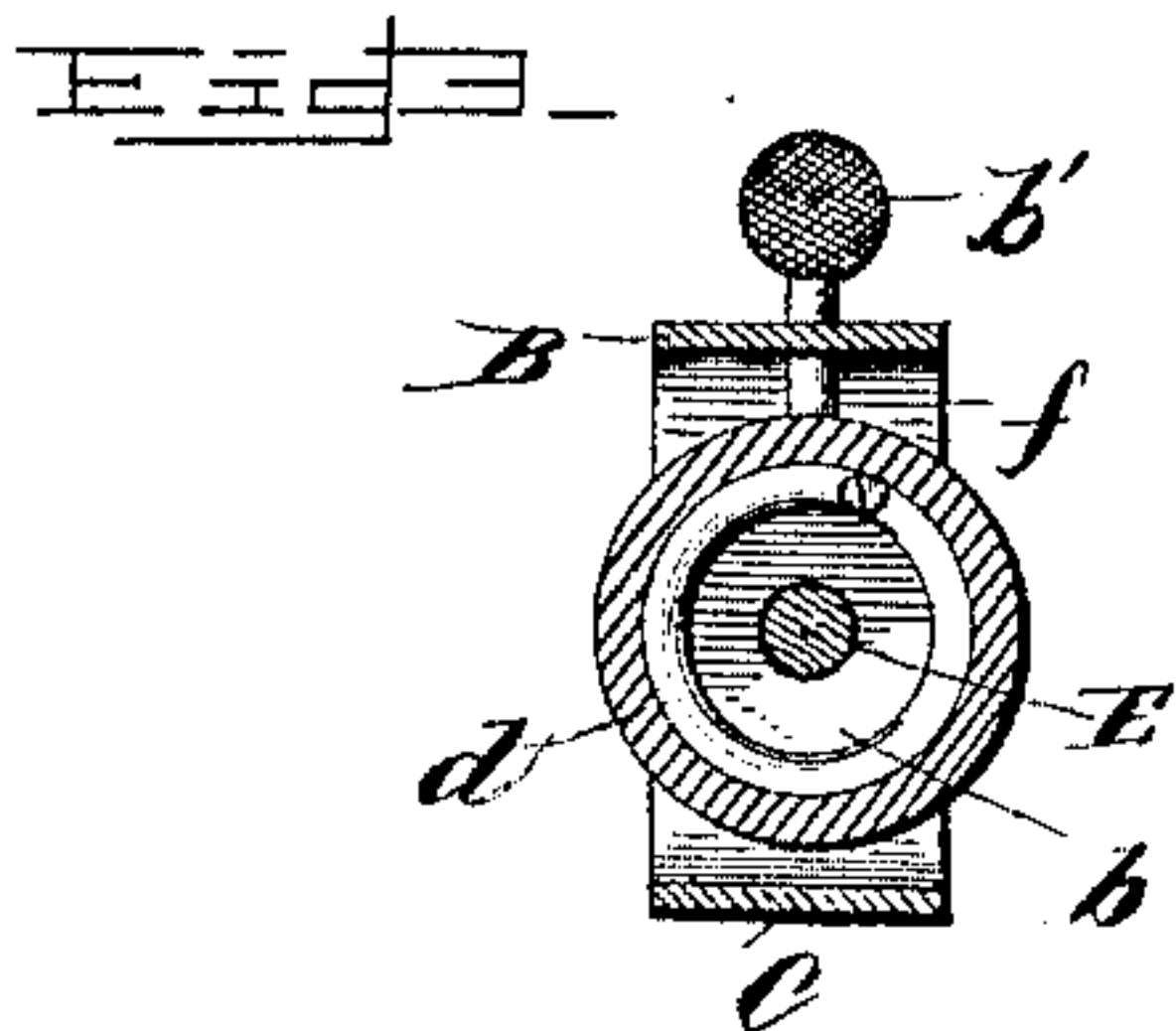
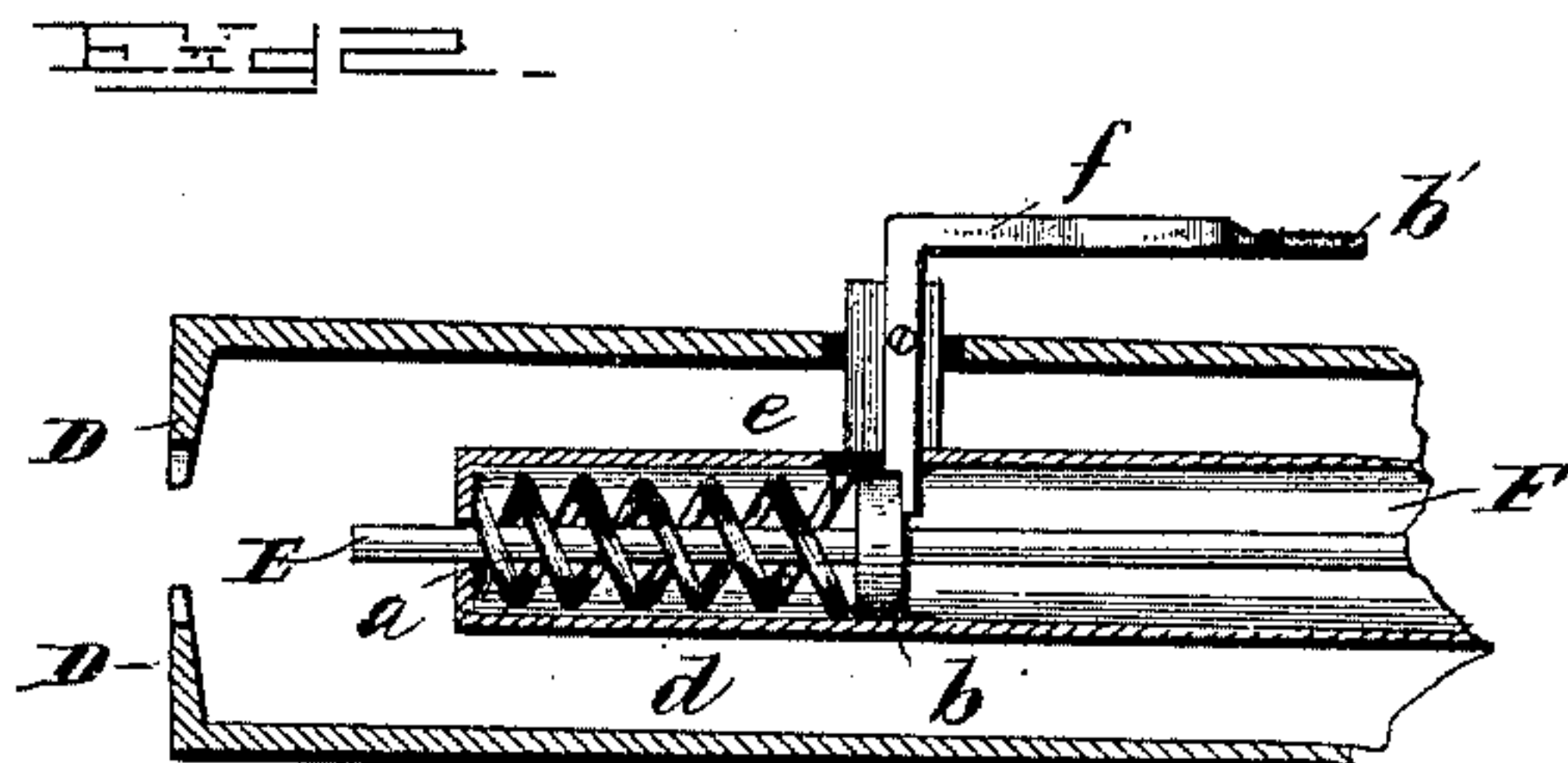
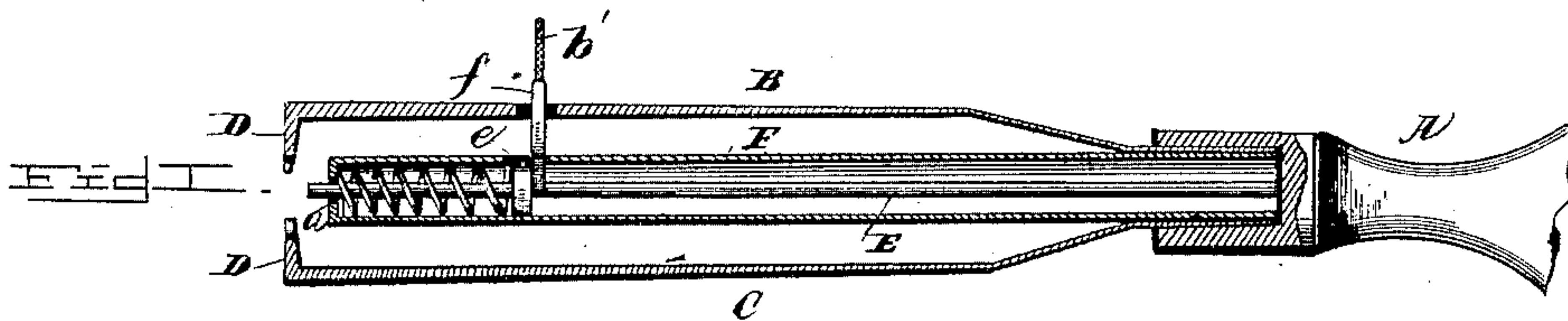


(No Model.)

P. H. NEFFLEN.  
WATCH HAND REMOVER.

No. 440,496.

Patented Nov. 11, 1890.



Witnesses

Paul D. Stearns  
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# UNITED STATES PATENT OFFICE.

PAUL H. NEFFLEN, OF KEYSER, WEST VIRGINIA.

## WATCH-HAND REMOVER.

SPECIFICATION forming part of Letters Patent No. 440,496, dated November 11, 1890.

Application filed June 17, 1890. Serial No. 355,724. (No model.)

*To all whom it may concern:*

Be it known that I, PAUL H. NEFFLEN, a citizen of the United States of America, residing at Keyser, in the county of Mineral and State of West Virginia, have invented certain new and useful Improvements in Watch-Makers' Tools, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention pertains to an improvement in watch-makers' tools or watch-hand removers; and it consists in the novel construction, combination, and arrangement of the parts, substantially as hereinafter more fully shown and described.

In the accompanying drawings, Figure 1 is a longitudinal section, and Fig. 2 is a modification, of my improvement in watch-tools or watch-hand removers. Fig. 3 is a cross-section of Fig. 2.

In the construction of my watch-hand remover I secure in handle A, in any ordinary manner, two metallic strips B and C. These strips are secured in the handle in a slightly-inclined position, and thus caused to flare or project apart slightly at their ends, where they are bent at right angles to form the nippers. Nippers D are wedge-shaped or sharpened at their ends, and each nipper has formed therein a corresponding semicircular recess to admit passage therethrough of the pin E. Pin E is disposed in its cylindric holder F and projects through orifice *a*, and has secured thereto a rigid metallic disk *b*, which actuates spiral spring *d*, which encircles it. The cylindric holder F is provided with slot

*e*, through which projects thumb-piece *f*, which carries disk *b'*.

In practice the metallic strips are compressed, and thus caused to nip the watch-hand on its lower side, and simultaneously pin E is pressed down upon the center-post of the watch, and a slight relaxation of the hand-pressure causes retraction of the metallic strips B and C and lifts the watch-hand off the post.

My hand-remover thus constructed prevents all danger of cracking the dials, breaking the center-post, and losing the watch-hands, and as the pressure is equally distributed it follows that however tight the hands are fastened on the center-post they are readily removed.

A modification of my invention is shown in Fig. 2, where lever G is secured to cylindric holder F and is retained in place by shoulder H.

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

The watch-hand remover consisting of metallic strips having concave recesses in their wedge-shaped ends, the pin, the holder having slot *e*, and the spiral spring, substantially as shown and described.

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

PAUL H. NEFFLEN.

Witnesses:

S. A. TERRY,  
W. E. CROOKS.