

(Model.)

W. B. HOWELL.
WATCH HAIR SPRING CUTTER.

No. 248,466.

Patented Oct. 18, 1881.

Fig. 1.

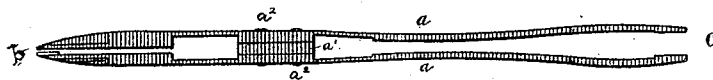


Fig. 2.

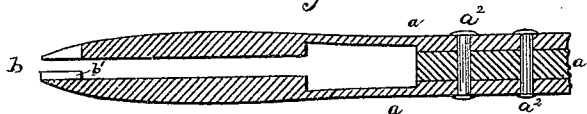
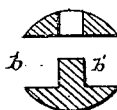


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM B. HOWELL, OF ALBANY, MISSOURI.

WATCH-HAIR-SPRING CUTTER.

SPECIFICATION forming part of Letters Patent No. 248,466, dated October 18, 1881.

Application filed July 1, 1881. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM B. HOWELL, a citizen of the United States of America, residing at Albany, in the county of Gentry and State of Missouri, have invented certain new and useful Improvements in Watch-Hair-Spring Cutters; and I do hereby 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.

My invention relates to an instrument for cutting fine steel springs, and for other purposes, to be hereinafter described.

In the drawings, Figure 1 is a side view of my device; Fig. 2, a section of the cutting end; and Fig. 3 is a cross-section of the cutting end.

a are two steel bars, bent as shown, placed parallel to each other and secured firmly to the center piece, a' , by the rivets a^2 , as shown. The ends b form the cutting portion of the instrument. Upon one of the steels a is formed a square projection, b' , which, when the steels are pressed together, enters a corresponding recess in the opposite steel.

In the operation of this device the spring to be cut is placed between the open ends b and at right angles to them. The steels are then pressed down upon the spring, and the projection b' , having square sharp corners, will be forced through the spring into the recess in the opposite steel, severing the spring at the desired point. A small section of the spring will be cut out at the point of severance and carried into the recess by the projection b' . The ends c are formed so that when pressed together they will hold firmly any article placed between them.

This instrument is designed for the use of watch-makers and jewelers, and is for the cutting and bending of watch-springs.

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

The steels a , secured parallel to each other by the rivets a^2 , having respectively the projection b' and the corresponding recess upon their ends, substantially as shown.

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

WILLIAM BUTLER HOWELL.

Witnesses:

N. M. SMITH,
E. H. GRANTHAM.