

L. STONE.
Watch-Case Springs.

No. 149,960.

Patented April 21, 1874.

Fig: 1

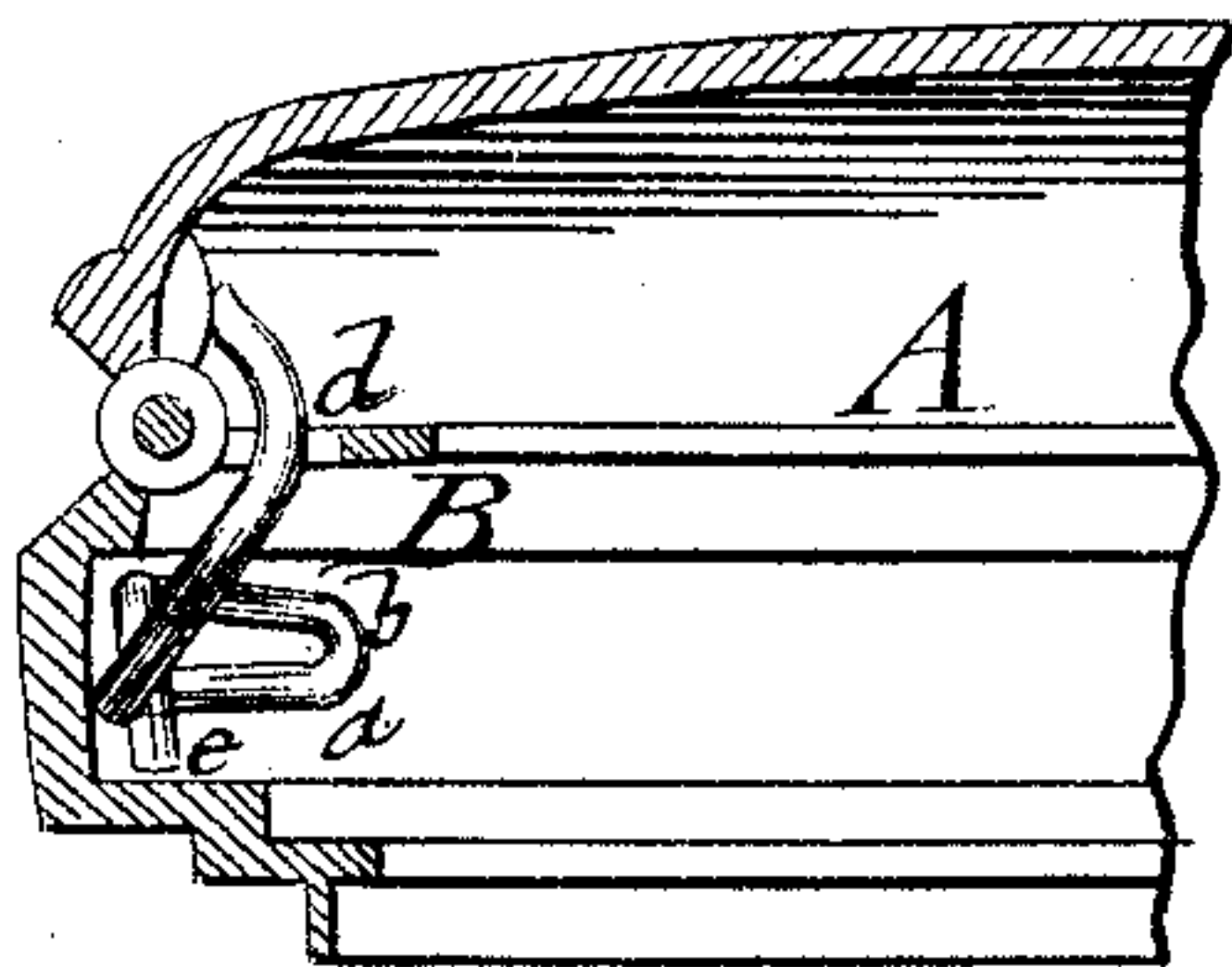
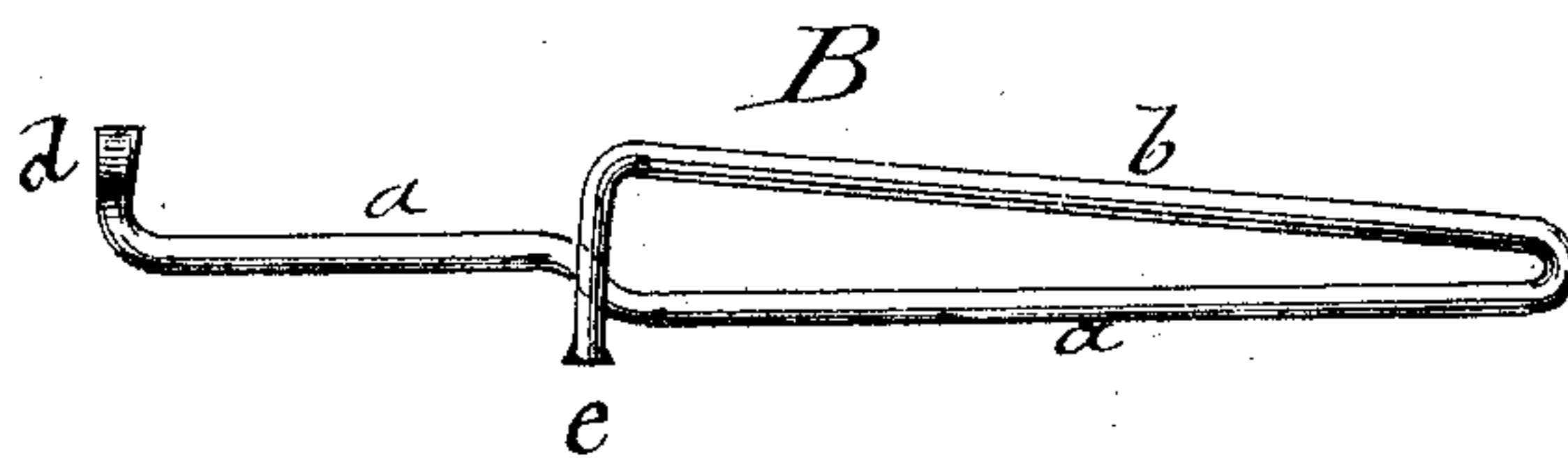


Fig: 2.



Witnesses:

Chas. Viola.
Perugini

Inventor:

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UNITED STATES PATENT OFFICE.

LEVI STONE, OF MOUNT VERNON, OHIO.

IMPROVEMENT IN WATCH-CASE SPRINGS.

Specification forming part of Letters Patent No. **149,960**, dated April 21, 1874; application filed August 4, 1873.

To all whom it may concern:

Be it known that I, LEVI STONE, of Mount Vernon, in the county of Knox and State of Ohio, have invented a new and Improved Watch-Case Spring, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical section through a watch-case, which shows my spring applied therein; and Fig. 2 is a front elevation of the spring detached.

Similar letters of reference indicate corresponding parts.

The invention relates to wire springs for watches; and consists in providing one end with a fastening-brace, whereby the same spring may be adapted to any case by cutting off a little, more or less, from the end of the brace.

In the drawing, A represents the watch-case, into which is set sidewise from the hinge of the spring, front or back, the spring B, which is made of steel wire of different sizes, to suit the different weight of the watch-cases. The spring B is formed of two legs, *a* and *b*, which are bent toward each other till nearly parallel, and curved to fit into the inner circumference of the watch-case center. Leg *a* is longer than leg *b*, and bent upward at the end at a right angle, and then outside toward the rim of the case, forming a projecting curved hook, *d*. The flattened and sharpened end of hook *d* rests against the part to be lifted,

while leg *a* passes along the downward-turned brace end *e* of leg *b*, which rests on the inside of the watch-case center. The brace *e* is also sharpened, so as to embed itself in the center sufficiently to retain its position thereon, so that no screw-pin or other fastening is required.

The ends of hook *d* and brace *e* are the only points which require cutting off in order to make the spring of sufficient size to fit the case; and, if made long enough, the springs may be easily used for all cases by reducing the length of the hook and brace ends till they are adjusted exactly to the case. The hook *d* is then placed in position to act on the rim of the part which requires spring action, and the legs pressed into the center along the circumference, the brace *e* taking hold of the metal. The spring action of legs *a b* forces hook *d*, and with it the front or back of the case, up by means of a simple and easily-replaceable device.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A wire spring, *a b d*, having the bent brace end *e*, as described, to adapt the spring to fasten readily in any ordinary size of watch-case.

LEVI STONE.

Witnesses:

G. T. PORTER,
C. P. GREGORY.