

I. N. HOPKINS.
WATCH-CASE SPRING.

No. 172,827.

Patented Feb. 1, 1876.

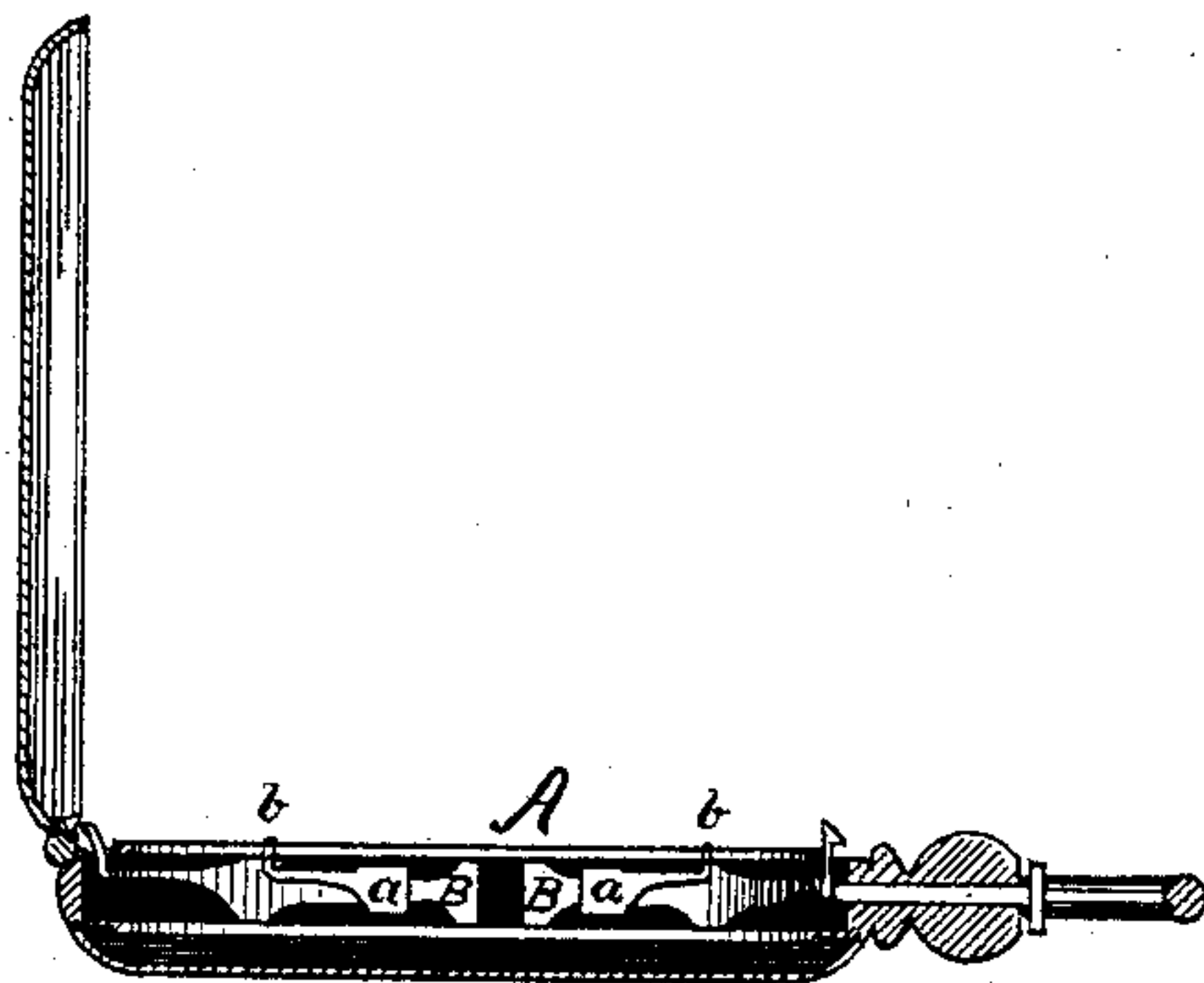


Fig 1.



Fig 2.

Witnesses:

A. D. Tytler

J. A. Straight.

Inventor:

Isaac N. Hopkins.

Per G. M. Hopkins,
Atty.

UNITED STATES PATENT OFFICE.

ISAAC N. HOPKINS, OF LOCKPORT, ASSIGNOR OF ONE-HALF HIS RIGHT TO
H. W. PRESTON, OF ALBION, NEW YORK.

IMPROVEMENT IN WATCH-CASE SPRINGS.

Specification forming part of Letters Patent No. **172,827**, dated February 1, 1876; application filed
November 9, 1875.

To all whom it may concern:

Be it known that I, ISAAC N. HOPKINS, of Lockport, in the county of Niagara and State of New York, have invented certain Improvements in Watch-Case Springs, of which the following is a specification:

My invention consists in the combination of a sliding auxiliary spring, having a nib which is capable of fitting into the hole in the case ordinarily occupied by the screw which holds the springs in, with the lifting and catch springs, the object of the invention being to provide springs which may be readily fitted without making new holes in the case, or fitting screws.

In the drawing, Figure 1 is a transverse section of a case, showing the lifting and catch springs. Fig. 2 is a detail view of one of the springs, showing the manner in which the auxiliary spring is attached.

A is the body of the case containing the springs B B. These springs differ from the ordinary case-spring only in having the fixed end lighter, and provided with a neck, around which the fixed end of the auxiliary spring *a*

is clasped, so that it may slide longitudinally thereon. The free end of the spring *a* is provided with a nib, *b*, which is capable of springing into the hole in the case, through which the screw passes which fastens the ordinary spring. When these holes differ in distance from the end of the spring the spring *a* may be made to slide on the spring B until the nib *b* is in the desired position.

The advantages claimed for my invention are, the great saving in time in applying the springs, and their greater durability when applied, the auxiliary spring used for retaining the case-springs being less liable to break than the screws ordinarily used for that purpose.

What I claim as my invention is—

The combination of the auxiliary spring *a*, or its equivalent, with the catch and lifting spring B, substantially as shown and described.

ISAAC N. HOPKINS.

Witnesses:

G. M. HOPKINS,
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