

(Model.)

L. W. LEVY.  
Watch-Case Spring.

No. 227,116.

Patented May 4, 1880.

fig. 1.

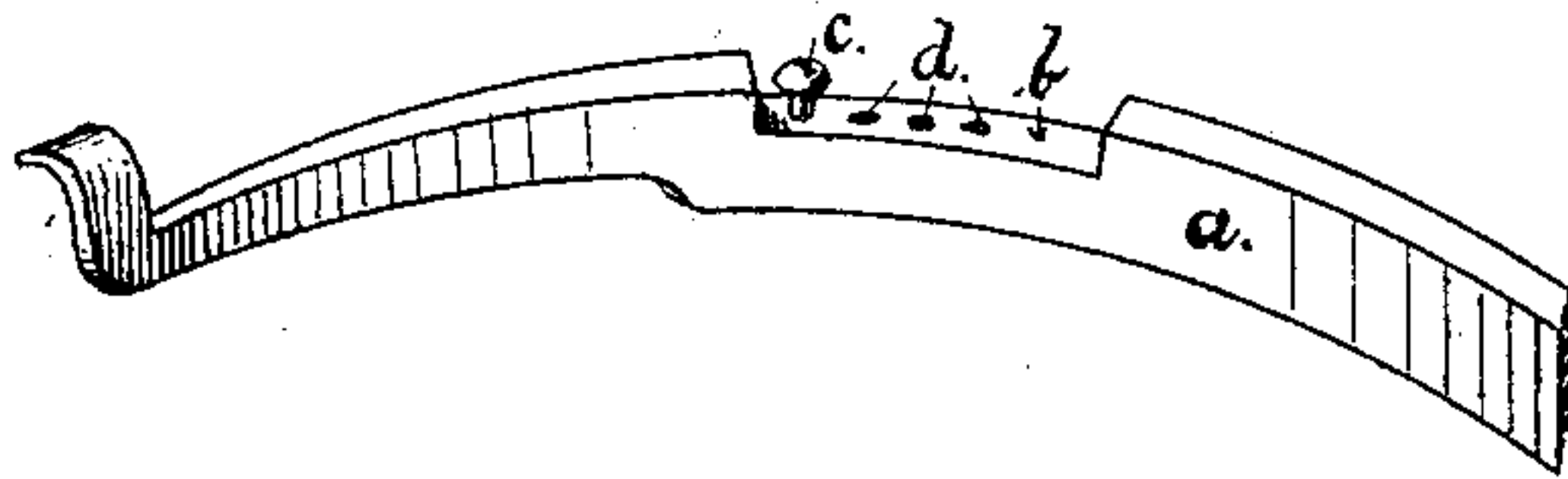


fig. 2.

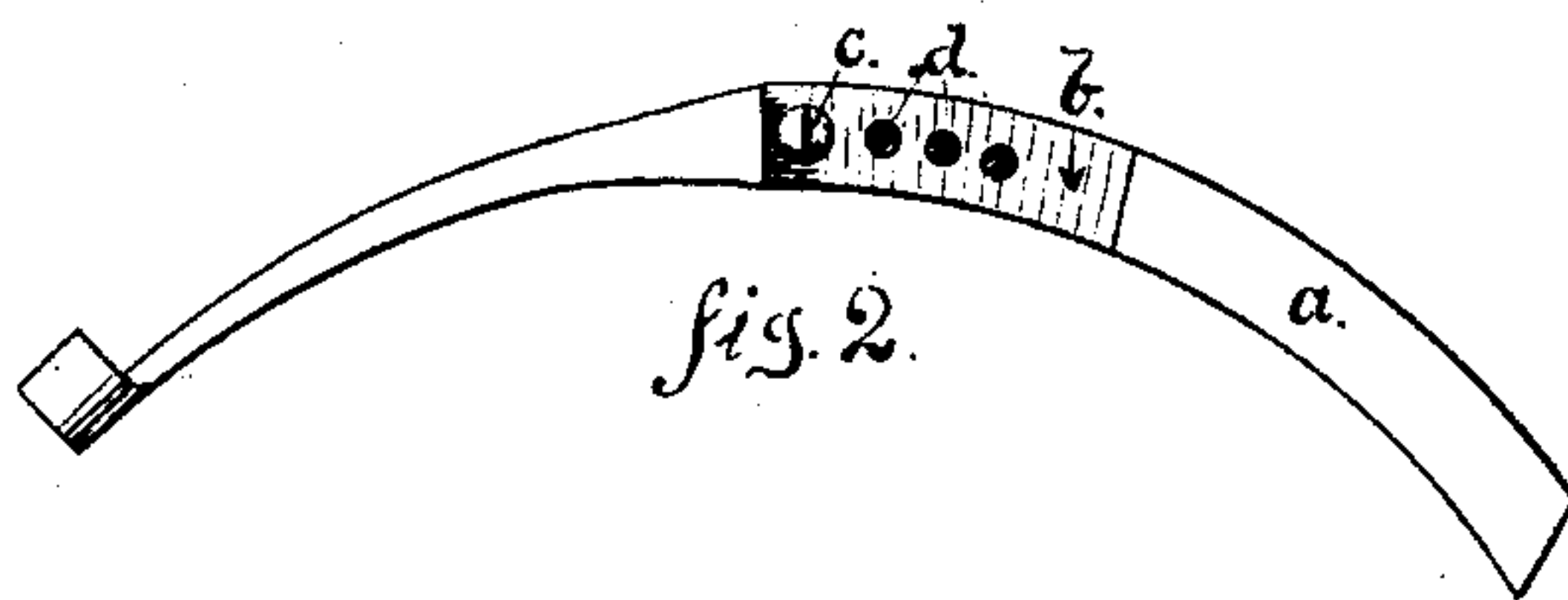


fig. 3.

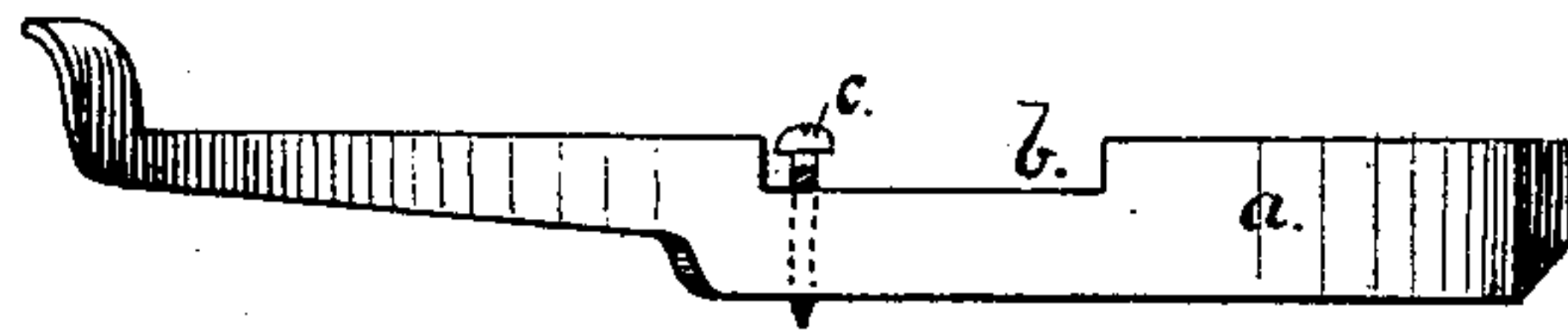
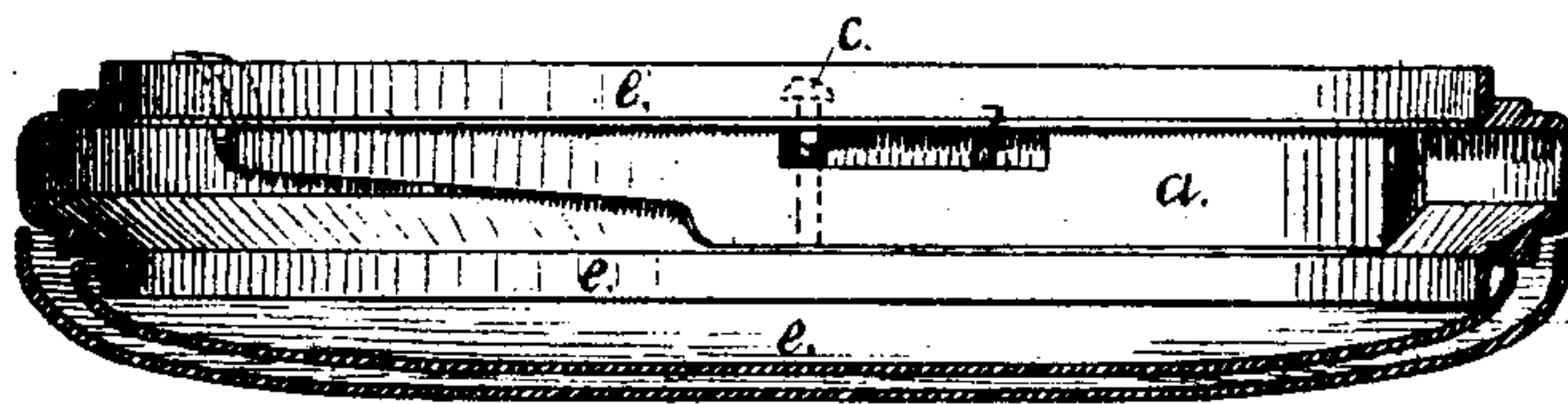


fig. 4.



Witnesses:

Philip Hecht  
Henry Wolfson.

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# UNITED STATES PATENT OFFICE.

LOUIS W. LEVY, OF NEW YORK, N. Y.

## WATCH-CASE SPRING.

SPECIFICATION forming part of Letters Patent No. 227,116, dated May 4, 1880.

Application filed March 3, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, LOUIS W. LEVY, of the city, county, and State of New York, have invented a new and useful Improvement in Watch-Case Springs, of which the following is a specification.

The invention relates to watch-case springs used to raise the lid and to catch or clasp the same in watches of the various types now in use; and it also relates to springs used substantially for the same purposes in other instruments.

It is the object of my invention to render a watch-case spring easily detachable, and to facilitate the removal of the same from the watch-case in which it is embedded in case the screw, rivet, plug, or other device for holding said spring in the watch-case becomes rusty or defective or the head or thread of the screw becomes mutilated or detached, so that the screw, rivet, plug, or other fastening cannot be removed from its socket.

Heretofore, when the spring, which is held in its place by a screw, rivet, or plug, was to be removed and a new one put in its place, great difficulty was experienced in detaching the spring and the various parts thereof, if the screw, rivet, or plug holding the said spring to the case was mutilated, as aforesaid.

Since the springs now in use are fitted tightly to the upper or lower part of the case, and since, consequently, there is no space or interstice between the said springs and the case, allowing of the insertion of any file or other tool to remove and detach it or to seize hold of the said screw, rivet, or plug, it will be necessary, in case the screw, rivet, or plug becomes rusty, mutilated, or broken, as aforesaid, either to drill the said screw, rivet, or plug from its bed or to wrench or otherwise force the spring from its place—operations which invariably result in great injury and damage to the case, and which involve great risk, besides waste of time and labor.

In the accompanying drawings, in which the same letters of reference indicate identical parts, Figure 1 is a perspective view of a watch-case spring embodying my invention. Fig. 2 is a view of the upper side of the same. Fig. 3 is a side elevation of the same; and Fig. 4 shows a sectional side elevation of the case of a watch in which are exhibited the position and working of a watch-case spring embodying my invention.

The watch-case spring *a*, during the process of manufacture, is provided with the notch, recess, or depression *b* on the upper side, or on that side which is to be fastened to the case, and which is to be used as a bed for the screw *c*, to such a depth as may be consistent with the strength of the spring *a*.

The length of the notch, recess, or depression is optional, and may be cut to meet the requirements of the various classes of springs.

In Fig. 4 is shown the application of the spring *a* in one of its forms to the watch-case *e*.

It will be seen that the screw *c* fastens the spring *a* from the upper surface of the case *e*.

Now, should it be desired from any cause to remove the spring *a*, and the screw *c* be broken, mutilated, or rusty, as above specified, in order to remove the spring *a* we need simply file away the body of the screw *c* below its head, the notch, recess, or depression *b* providing a suitable space for the insertion and manipulation of a file or other like tool. This does away with all probable injury and damage to the watch-case *e*, avoiding the risk incurred by the use of the present form of watch-case springs, and greatly facilitates the removal of the said spring.

It is obvious that this diagram and the remarks explanatory thereof are equally applicable where, instead of the screw *c*, any rivet, plug, or other fastening device is used.

It is also obvious that the notch, recess, or depression *b* can be applied in the manufacture of every variety of watch-case spring, and its form may be varied to meet all requirements.

I claim as my invention—

The combination of a watch-case spring provided with a recess, depression, notch, or indentation on that side of the spring into which the screw, rivet, or plug enters, said recess, depression, notch, or indentation being in the bed of the screw, rivet, or plug in said spring, so as to expose a portion of the screw or other fastening device in the interstice or space so formed between the case of the watch and the said spring, substantially as and for the purposes hereinbefore set forth and described.

LOUIS W. LEVY.

Witnesses:

PHILIP HECHT,  
CHAS. W. BARRY.