C. HOPKINS.

Watch-Case Tool.

No. 167,174.

Patented Aug. 31, 1875.

Fig. 1.

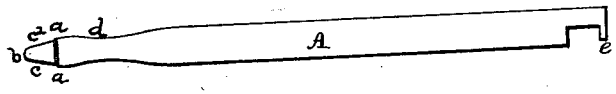
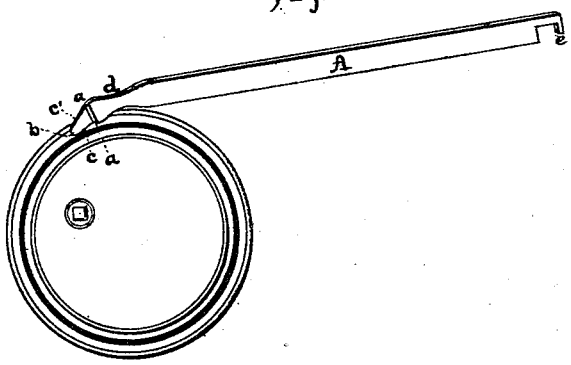


Fig. 2.



WITNESSES:

Richard H. Geo.

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CALEB HOPKINS, OF WALTHAM, MASSACHUSETTS.

IMPROVEMENT IN WATCH-CASE TOOLS.

Specification forming part of Letters Patent No. **167,174**, dated August 31, 1875; application filed January 2, 1875.

To all whom it may concern:

Be it known that I, CALEB HOPKINS, of Waltham, in the county of Middlesex, State of Massachusetts, have invented a Watch-Case Tool, of which the following is a specification.

The object of my invention is to repair watch-cases that open either too hard or too easily, by means of a tool, A, of peculiar form, and having the cutting-edges *a a*, *c c'*, and *e*, and also the burnishing edge or side *d*, a front or face view of which is shown in Figure 1 of the accompanying drawing, and a perspective view thereof in Fig. 2, in the perspective view the tool being represented as applied to one part of the work for which it is intended.

The form and special uses of my invention may be more fully described as follows: In making my invention, I use flat steel of suitable length, and about one-fourth by one-eighth inch in diameter, (or any other suitable size may be employed,) one end of which I forge or bend into somewhat curved shape, flatwise of the steel, and across the inner face of this curved part I form the transverse tooth *a a*, and extending therefrom to the rounded end *b* I form the two knife-edges *c c'*, and on the back of the same curved part, I form the burnisher *d*, while on one side, near the opposite or straight end of the steel, I form the hook-cutter *e*, both ends of which I then carefully harden and temper.

In using my invention for causing a bezel or the back case of a watch to stay shut when it opens too easily, I hold it somewhat as represented in Fig. 2, one edge of the curved end of the tool being rested down level on the rim of the case, and the tooth *a a* and the rounded end *b* being both pressed inward against the catch-edge of the case, or the part to be again undercut, the cutting being done with the tooth *a a* by a forward movement of the tool, the rounded end *b* serving to prevent the tooth *a a* from gaging unduly into the metal of the case. The tooth *a a* being made to extend quite across the face of the tool, and the two edges *c c'* being uniform in shape, it will be readily seen that the tool may be used either right or left handed with equal facility.

For easing a watch-case that opens too hard, I hold the tool in a nearly upright position, with the end *b* resting down on the inside of the dome of the case, and in this position, with one of the knife-edges *c c'*, I shave off the snap-edge of the case to the extent required. The burnisher *d* I use either for smoothing the work after the cutters *a a* or *c c'*, or for burnishing down the snap or catch edge of the case, as occasion may require.

When a case needs repairing because of wear from the action of the spring-catch in hunting-cased watches, I use the hook-cutter *e*.

It will be thus seen that while forming, through peculiarity of form, several tools in one, I have rendered each of the respective parts of my invention specially adapted to the work for which it is intended, without it in any degree interfering with the practical working of the other parts.

I claim as my invention—

The tooth *a a*, across the inner curved face of the tool A, and the knife-edges *c c'*, extending therefrom to the rounded end *d*, substantially as hereinbefore described, and for the purposes set forth.

CALEB HOPKINS.

Witnesses:

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