

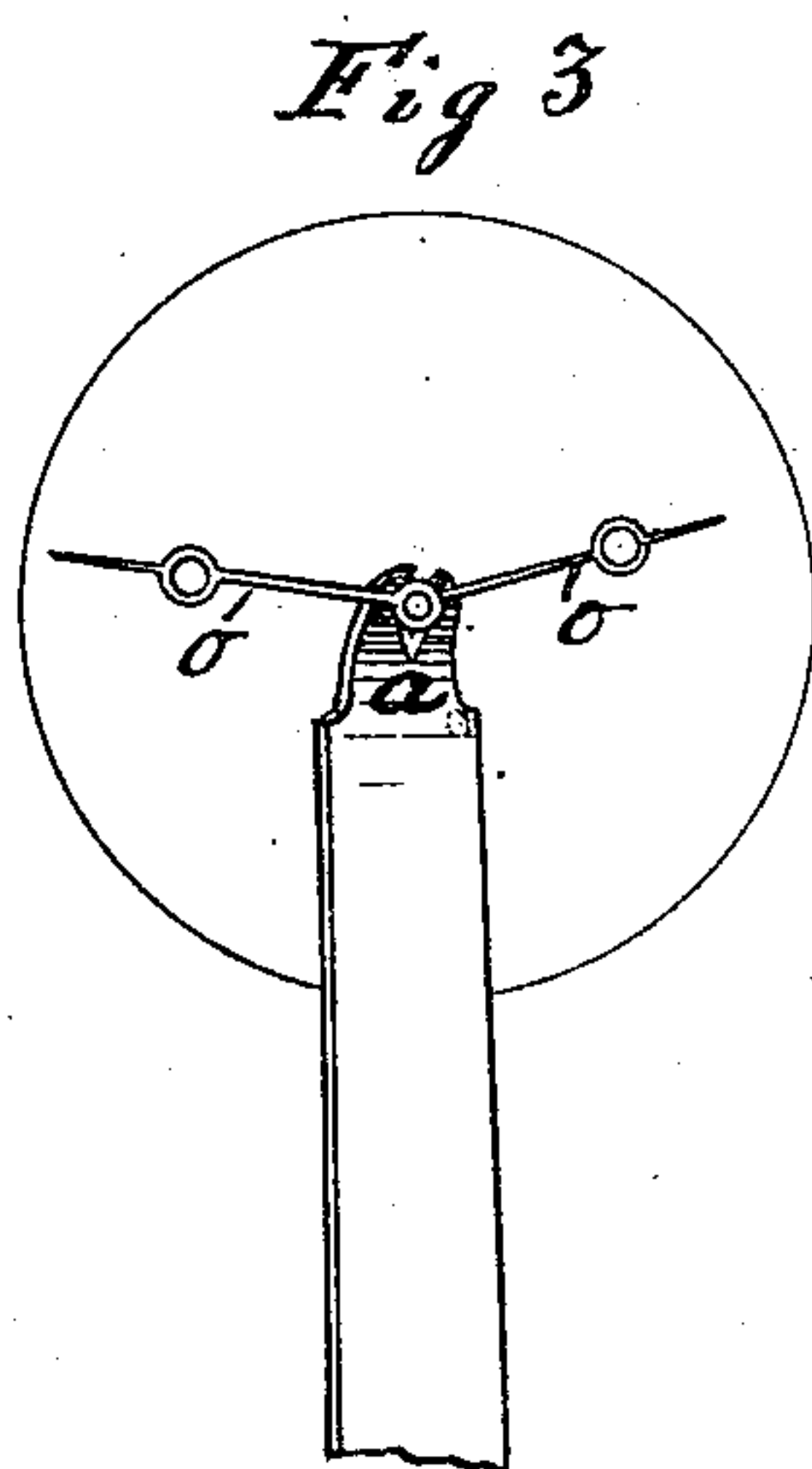
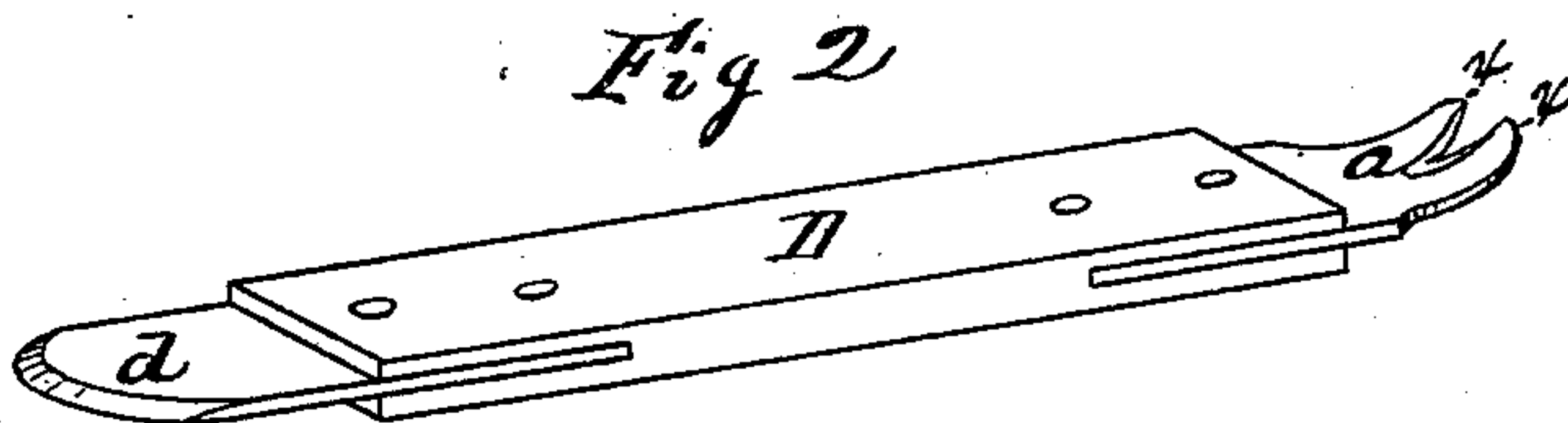
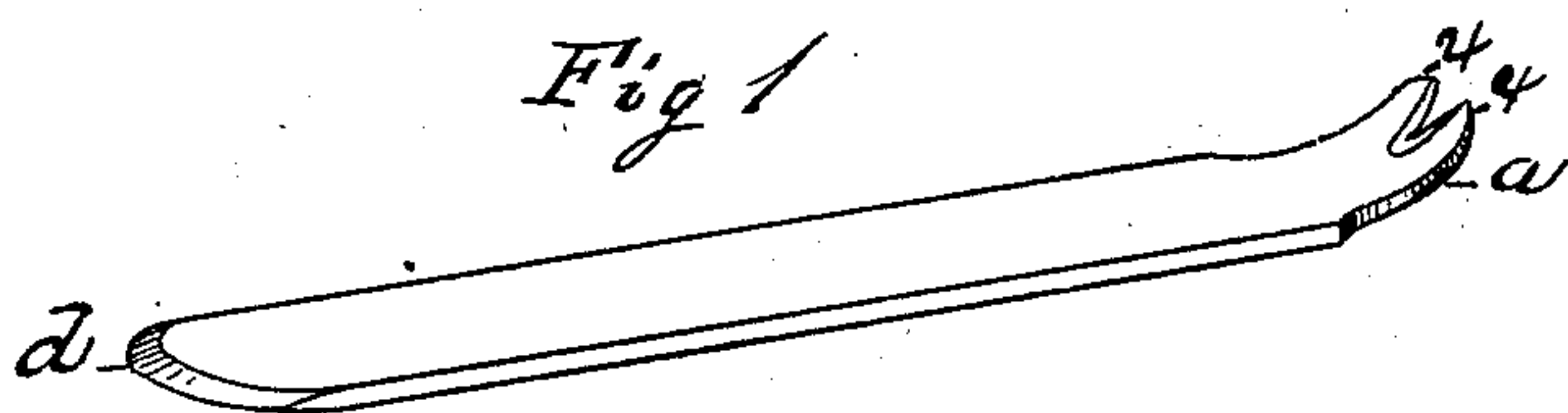
(No Model.)

O. W. BULLOCK.

WATCH MAKER'S COMBINATION TOOL.

No. 251,183.

Patented Dec. 20, 1881.



Witnesses
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WATCH-MAKER'S COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 251,183, dated December 20, 1881.

Application filed November 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, ORVIS W. BULLOCK, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Watch-Makers' Combination-Tools, of which the following is a specification.

This invention relates to an improved combination-tool for watch-makers' use, embracing in its construction what is termed a "watch-hand remover" and a "case-opener," the object being to so combine said implements as to make the frequent change of tools less obligatory, and to combine in one, two devices which watch-makers are very often required to use, one after the other, in immediate succession.

In the drawings forming part of this specification, Figure 1 is a perspective view of a combined watch-hand remover and case-opener embodying my improvements. Fig. 2 is a similar view to Fig. 1, but showing a modification of the manner of constructing said tool. Fig. 3 shows the outlines of a watch-face with the hands thereon, and illustrates the practical application of said hand-remover.

In the drawings, *a* indicates the watch-hand remover, and *d* the case-opener. *D* is a tool-supporting center piece, to the ends of which, in Fig. 2, is riveted a hand-remover and a case-opener. The watch-hands are indicated by the letters *o o*.

In Fig. 1 the combined tool which is the subject of this application is illustrated in its most practical and desirable form of construction, which is that both of said tools be made upon one bar or piece of suitable metal, one upon each end of the latter, as shown. Thus from a suitable bar of steel both of said tools may

be made, the case-opening end being of curved form and having its circular edge tapered to a thin wedge form, which fits it to be employed for opening a watch-case in the usual manner. The watch-hand remover *a* is, like said case-opener *d*, formed upon the same bar with the latter, but upon the opposite end thereof, and consists of a tool having slightly curved and divided claws *x x*.

In Fig. 2 is shown the case-opener *d* and the hand-remover *a*, each made separately and riveted to the respective ends of the center piece, *D*, which may be of hard wood or other suitable material. This construction may be adapted for making said combined tool or implement without departing from the essential feature of this invention, which is to embody in one piece both of said tools; but it is obvious that the construction shown in Fig. 1 is the most desirable.

Fig. 3 illustrates the manner of employing the hand-remover *a*, which is by slipping said claws *x x* under the hands *o o*, one of said claws each side of the hand-pivot, and by bearing down the opposite end of the tool and prying slightly against the watch-face. The above-described position of said tool *a* is shown in the last-named figure.

What I claim as my invention is—

As a new article of manufacture, the within-described improved watch-maker's tool, consisting of the combination, in one implement, of the watch-hand remover *a* and the watch-case opener *d*, substantially as and for the purpose set forth.

ORVIS W. BULLOCK.

Witnesses:

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