

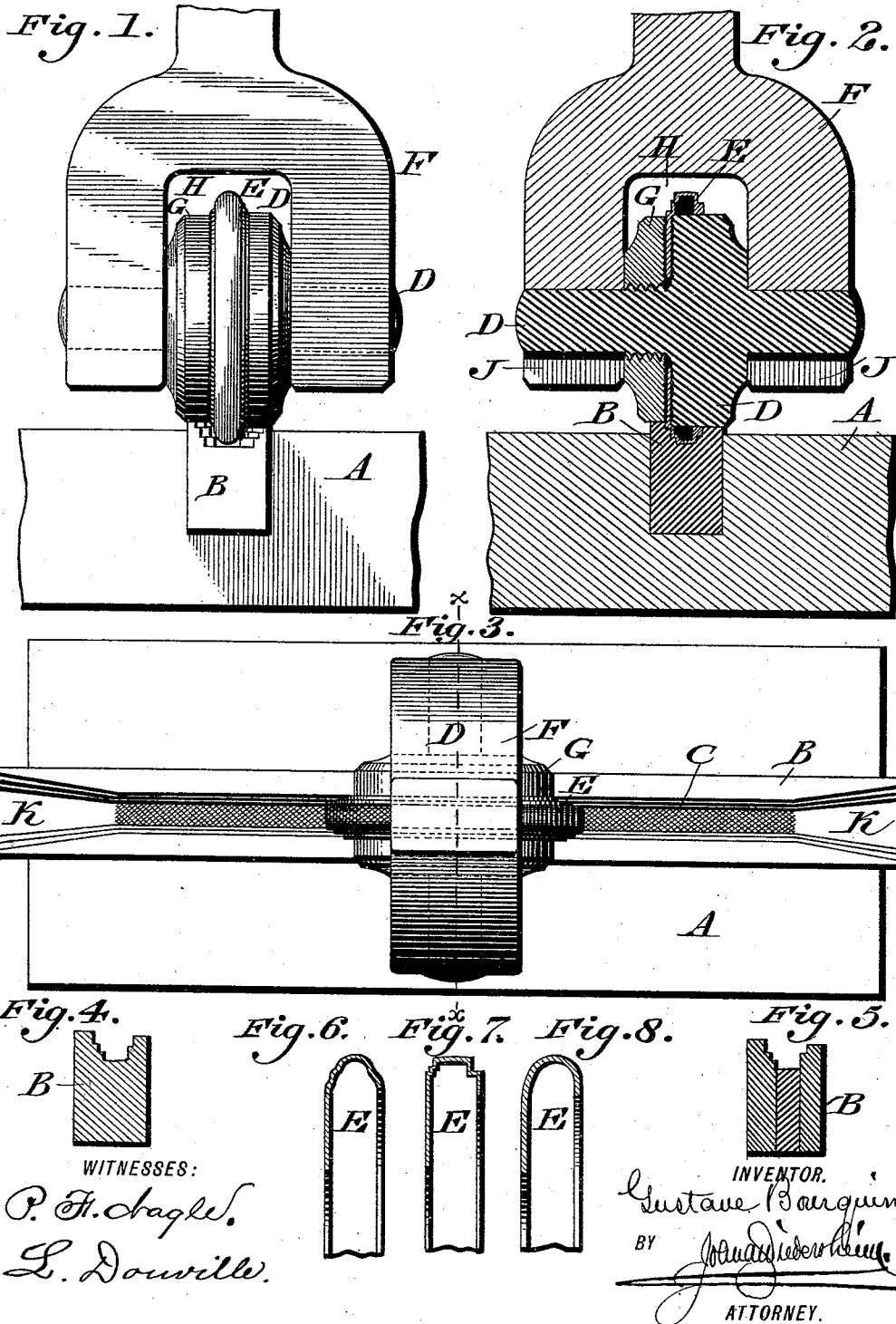
(No Model.)

G. BOURQUIN.

APPARATUS FOR SHAPING AND ORNAMENTS WATCH CASE CENTERS.

No. 454,707.

Patented June 23, 1891.



UNITED STATES PATENT OFFICE.

GUSTAVE BOURQUIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
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APPARATUS FOR SHAPING AND ORNAMENTING WATCH-CASE CENTERS.

SPECIFICATION forming part of Letters Patent No. 454,707, dated June 23, 1891.

Application filed December 8, 1890. Serial No. 373,900. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE BOURQUIN, a citizen of the Republic of Switzerland, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Shaping and Ornamenting Watch-Case Centers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in apparatus for shaping and ornamenting watch-case centers; and it consists of the combination of parts hereinafter set forth.

Figure 1 represents an end view of a portion of an apparatus for shaping watch-case centers embodying my invention. Fig. 2 represents a sectional view of the same parts on line *x x*, Fig. 3. Fig. 3 represents a plan view of the parts shown in Fig. 1. Figs. 4 and 5 represent transverse sectional views of different constructions of dies. Figs. 6 and 8 represent sections of different forms of blanks of portions of watch-cases. Fig. 7 represents a section of a portion of a watch-case after the shaping thereof.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the movable bed of the device, having a recess extending lengthwise of the same and adapted to hold therein a die B of proper form, and having thereon a pattern C, designed to be rolled on the watch-center. The chuck D, for holding a watch-case center E, is provided with a bearing F, having a suitable support. One of the journals of the chuck has a screw-threaded portion, on which works a nut G, which secures the watch-case center to an enlarged portion of the said chuck. The bearing F has a recess H, in which the enlarged portion of the chuck, carrying the watch-center and the nut, is permitted to rotate, and the side walls of the recess have openings J, in which the journals of the chuck are inserted from the under side of the bearing F.

The manner of operating the device is as follows: The chuck-bearing F is displaced, so as to permit the removal of the chuck D and the securing thereon of a watch-case center E. The chuck is then replaced and the bear-

ing lowered, so as to bring the case-center in a widened channel K in the end of the die. The bed A is then moved in the direction of its length, whereby the close contact of the die B with the watch-case causes the rotation of the chuck, thereby bringing every portion of the periphery of the case in contact with the die.

It will be seen that the pattern or design C is of the exact length of the periphery or circumference of the watch-case, so that there will be no superimposing of one end of the design on the other on the case.

In Fig. 4 the die is shown as composed of a single piece of material, while in Fig. 5 it is composed of separate side and center pieces, either form being applicable with the device.

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

1. An apparatus for shaping and ornamenting watch-case centers having a movable bed with a die, a rotary chuck with a bearing, and a nut working on a threaded portion of said chuck within a recess in said bearing, said parts being combined substantially as described.

2. An apparatus for shaping and ornamenting watch-case centers, consisting of a movable bed with a die, a rotary chuck with a support, and a clamping-nut on said chuck, said chuck being removable from its support, said parts being combined substantially as described.

3. An apparatus for shaping and ornamenting watch-case centers, consisting of a chuck with a support, a movable bed containing a die, and means, substantially as described, for clamping a watch-case center on said chuck, said die being brought into contact with the watch-case center on the chuck, said parts being combined substantially as described.

4. An apparatus for shaping and ornamenting watch-case centers, consisting of a rotary chuck having a bearing, a bed having a die, and a nut on a threaded portion of said chuck to secure a watch-case center to an enlarged portion of the said chuck, said chuck being removable from the bearing and the case on the chuck being adapted to be in con-

tact with the die, said parts being combined substantially as described.

5 5. A movable bed with a die thereon, a chuck with a support, and a clamping-nut on the chuck for the watch-case center, said chuck being removable from said support, and said support being adapted to hold the

watch-case center in contact with the die, said parts being combined substantially as described.

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Witnesses:

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