

L. C. BUTCH & A. F. THOMA.

Improvement in Watchmakers Tools.

No. 120,618.

Patented Nov. 7, 1871.

Fig: 1.

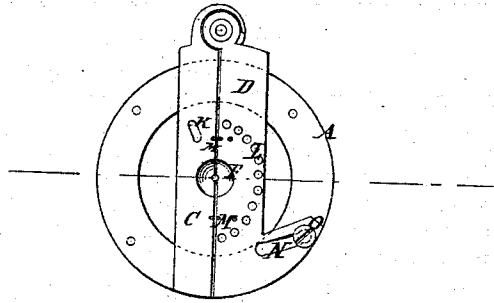


Fig: 2.

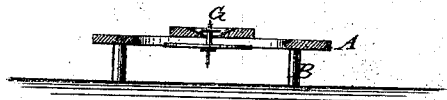
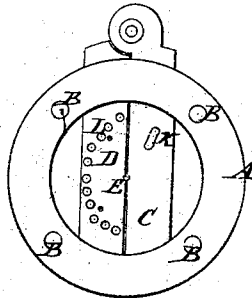


Fig: 3.



Witnesses:

Chas. Nida.
Francis McArde.

Inventors

L. C. Butch
A. F. Thoma
PER *Munn & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

LEONARD C. BUTCH, OF LANCASTER, AND AUGUSTIN F. THOMA, OF PIQUA,
OHIO.

IMPROVEMENT IN WATCHMAKERS' TOOLS.

Specification forming part of Letters Patent No. 120,618, dated November 7, 1871.

To all whom it may concern:

Be it known that we, LEONARD C. BUTCH, of Lancaster, in the county of Fairfield, and AUGUSTIN F. THOMA, of Piqua, in the county of Miami and State of Ohio, have invented a new and useful Improvement in Watchmakers' Tool; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Our invention relates to a new and improved tool adapted for several uses in the watchmakers' or repairers' trade, such as holding the balance-wheel staff for removing the roller-table, replacing the said roller on the staff, "poising" the balance, and holding screws, the said tool being constructed and arranged as hereinafter described.

Figure 1 is a top view of the improved machine. Fig. 2 is a transverse section of the same, and Fig. 3 is a plan of the bottom.

Similar letters of reference indicate corresponding parts.

A is a wide flat ring of metal, mounted on four short legs, B. C is a flat bar, extending across the upper side of said ring and made fast to it, with one edge in the diametrical line and one end projecting beyond the outer edge of the ring, where it is jointed to another bar, D, similar to C, but a little wider, and not made fast to the ring. These bars have each a slight semicircular cavity in the edge, forming a hole, E, where the two are closed together, said hole being at the center of the ring, and the said bars are countersunk around said hole, as shown at F, to make

them thin enough to clamp the balance-staff G between the wheel H and the roller-table I, as indicated in Fig. 3, for removing the said table, by a punch applied to the top of the staff to receive a blow to drive the staff out. The bar C is provided with a vertical slot or mortise, K, through it, for use in applying the roller-table to the staff by laying the roller over said slot, so that the pivot will pass through it and admit of driving the staff by any suitable punch. L represents screw-holes gauged to the different screws used, and numbered according to the gauges, for holding the said screws conveniently for use, and, at the same time, determining the sizes. M represents notches in the edges of the bars C and D, adapted for holding the balance-wheel for poising it. The bar D is provided with a slotted arm, N, and a clamp-screw, O, for securing it at any required distance from the other bar.

The tool thus constructed is complete in itself—that is to say, is self-supporting, and does not require to be fastened in a vise, as other tools for a similar purpose have to be.

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

The improved watchmakers' tool, consisting of the stand A, jointed bars C D, slotted arm and clamp-screw O, the said arms being provided with suitable notches, holes, &c., for holding various parts of a watch, screws, &c., all substantially as specified.

LEONARD C. BUTCH.
AUGUSTIN F. THOMA.

Witnesses:

THOS. J. HANSON,
H. C. DRINKLE.

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