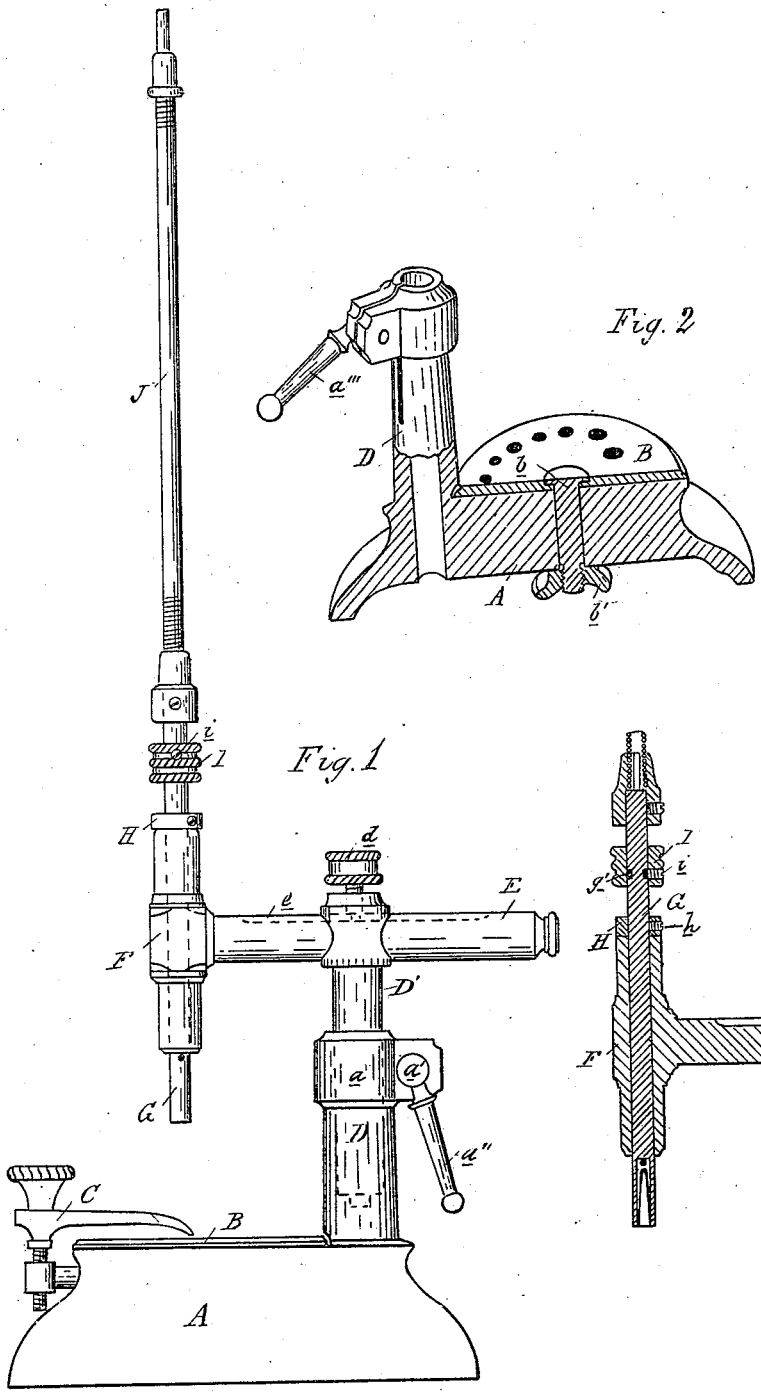
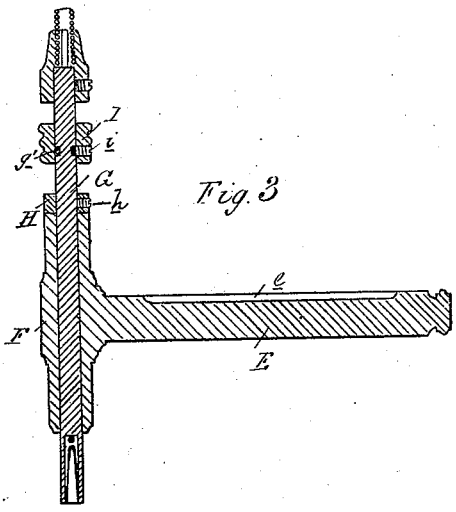
(No Model.)

C. J. OLIN.

ADJUSTABLE STAKING AND JEWELING TOOL.

No. 313,363. Patented Mar. 3, 1885.





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CHARLES J. OLIN, OF PIQUA, OHIO.

ADJUSTABLE STAKING AND JEWELING TOOL.

SPECIFICATION forming part of Letters Patent No. 313,363, dated March 3, 1885.

Application filed March 5, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. OLIN, of Piqua, in the county of Miami and State of Ohio, have invented new and useful Improvements in Adjustable Staking and Jeweling Tools; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction of an adjustable staking, jeweling, and drilling tool, and is especially designed for the use of jewelers, and by means of which the power required is brought to the work, instead of requiring the work to be taken to the power, as is the present practice.

The invention consists in the peculiar construction of the parts and their various combinations, as more fully hereinafter explained.

Figure 1 is a perspective view of my improved device. Fig. 2 is a vertical central section through the base, showing the means of adjusting the base-plate and the clamp for securing articles to the same. Fig. 3 is a vertical section through the spindle and overhanging arm.

In these accompanying drawings, which form a part of this specification, A represents the base or stand, on which is centrally secured the base-plate B, provided with a series of holes of different sizes, such as are required in an implement of this kind, as shown. This base-plate is secured to such base by means of a bolt, *b*, and thumb-nut *b'*, so that by loosening the latter the plate may be rotated to bring any desired hole therein directly under the vertical spindle. This base-plate is also made sufficiently large to admit the full plate of a watch and other articles being clamped to it by means of the clamps C, and rigidly held while undergoing the several operations of staking, jeweling, &c. Rising upon one side of this base is a hollow spindle or standard, D, which on one side is vertically cut through the shell to enable the upper end thereof to be sprung slightly together, and such upper end is provided with a clamp, *a*, with a screw, *a'*, and a lever, *a''*. A vertically-adjustable standard, D', is supported within this hollow standard, and is adapted to have a vertical and a rotary adjustment in such hollow standard by loosening the screw of the clamp.

An arm, E, with a slot, *e*, on its upper side, passes horizontally through the top of the standard D', and a set-screw, *d*, passing through the top of the standard, terminates in a point or feather, which engages with such slot. The set-screw enables the operator to project or retract the arm, while the set-screw, feather, and slot prevent the same from rolling in its bearings; but if it is desired to have the arm roll to either side it may be done by turning the set-screw back far enough to raise the point of the screw out of the slot, thus enabling the operator to drill anything into an article. To the end of this arm that overhangs the base-plate is secured a vertical hollow guide, F, within which the spindle G may have a free rotary motion, and such spindle is rendered vertically adjustable by means of the collar H and set-screw *h* therein. In the lower end of this spindle is bored a tapering hole to receive the tools used for jeweling, milling, drilling, &c., by their being provided with a taper to fit the same. Near the top of this spindle is turned a groove, *g'*, into which is fitted the point of the set-screw *i* in the knurled handle I, for the purpose of enabling the operator to handle the spindle while it is in motion. It is secured to the spindle and held rigidly by screwing in the set-screw *i*. While thus held it is designed to be operated with the hand or a watchmaker's drill-bow; but when to be operated with the lathe by means of the flexible connecting-rod J, this set-screw is loosened just enough to admit it to rotate freely therein.

Fitting on the top of the spindle by means of a socket with set-screw therein is the flexible connecting-rod J, the opposite end of which is designed to be secured to any suitable source of power for imparting a rotary motion to the spindle.

Within the above I have endeavored to make it clear that an article or a part of a watch securely clamped to the base-plate may be milled, drilled, jeweled, and operated upon with very great ease, as the swinging and sliding overhanging arm may easily be placed and secured directly over any point within its

obviates radius, and, with the live-spindle provided with suitable tools, enables the operator to act on the same with very great ease and much speed.

What I claim as my invention is—

1. The combination of the base A, standard D, adjustable standard D′, and spindle G, supported on a bearing carried by said standard D, with the plate B centrally journaled to the said base A, and provided with a series of gradated openings, the said plate being free to turn around its journal to bring the proper opening in conjunction with the spindle G, substantially as and for the purpose specified.

2. As a means for supporting the standard carrying the spindle and firmly holding the same in place, the base A, provided with the extension D, made integral therewith and projecting above the same, said extension having a vertical opening therein and slotted at the side, and the clamp *a* on its upper end constructed to contract said slot and thus clamp the standard, substantially as described.

3. In a combined staking, drilling, milling, jeweling, and uprighting tool, the adjustable base-plate secured to the base, the clamps for securing the work thereto, a hollow spring-standard provided with a clamp, a vertically-adjustable standard rotating upon its own axis within said hollow standard, an arm with a reciprocating adjustment in the top of said standard, such adjustment being controlled by a set-screw and slot, a hollow guide, F, and spindle G, and connecting-rod J, the parts being constructed and operating substantially as and for the purpose described.

4. In a staking, jeweling, and drilling implement, constructed substantially as described, a spindle having a rotary motion in a vertical guide and a vertical adjustment in said guide, and provided with suitable means for holding drills, jeweling-tools, &c., while it may also be made to incline, while it has, also, like adjustment, in combination with the flexible connecting-rod adjustably secured thereto by means of a collar and screw, substantially as and for the purpose set forth.

CHARLES J. OLIN.

Witnesses:
WALTER D. JONES,
GEO. E. LEE.