

(No Model.)

W. B. ATKINSON.

JEWELING TOOL.

No. 258,690.

Patented May 30, 1882.

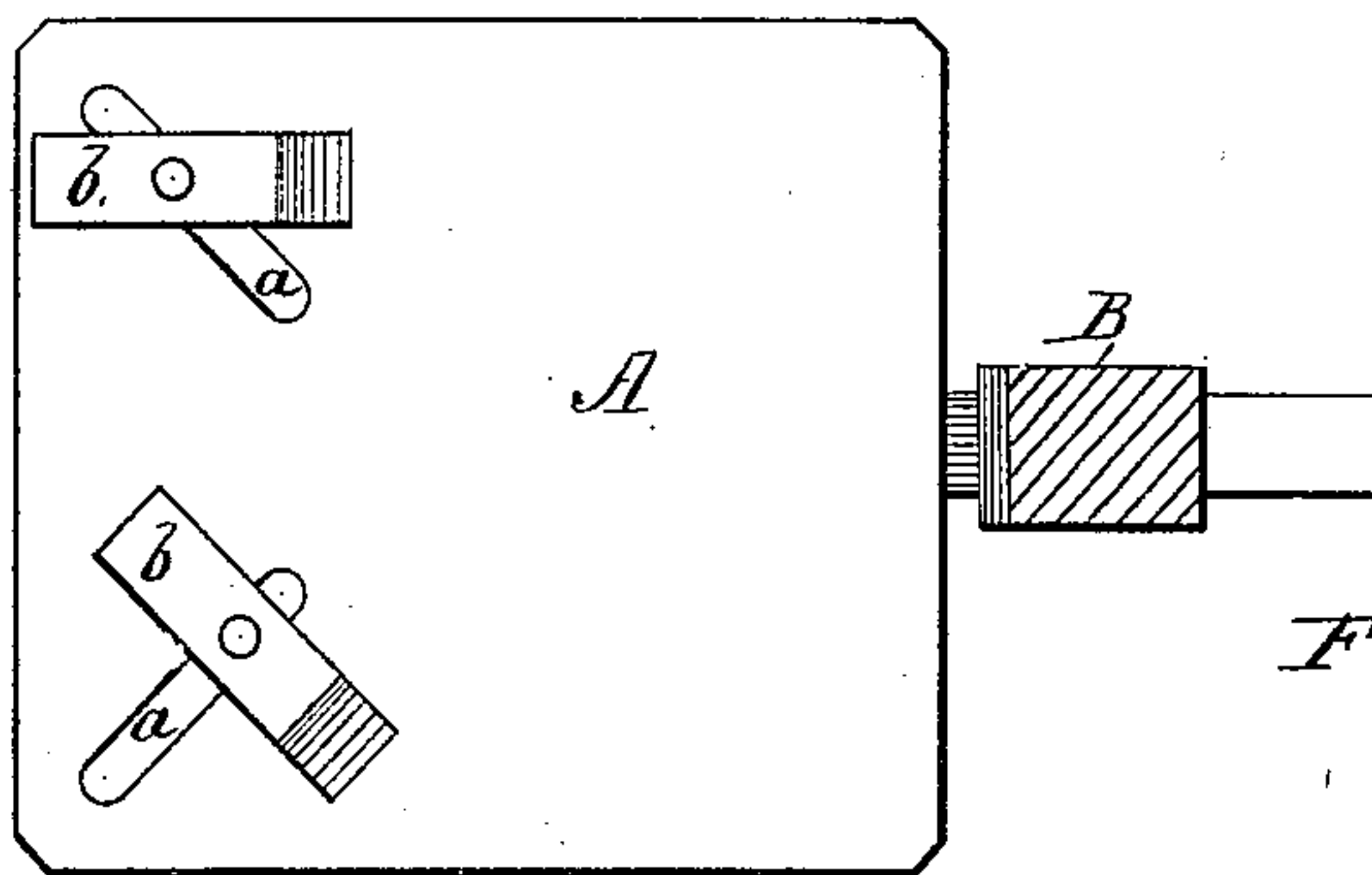
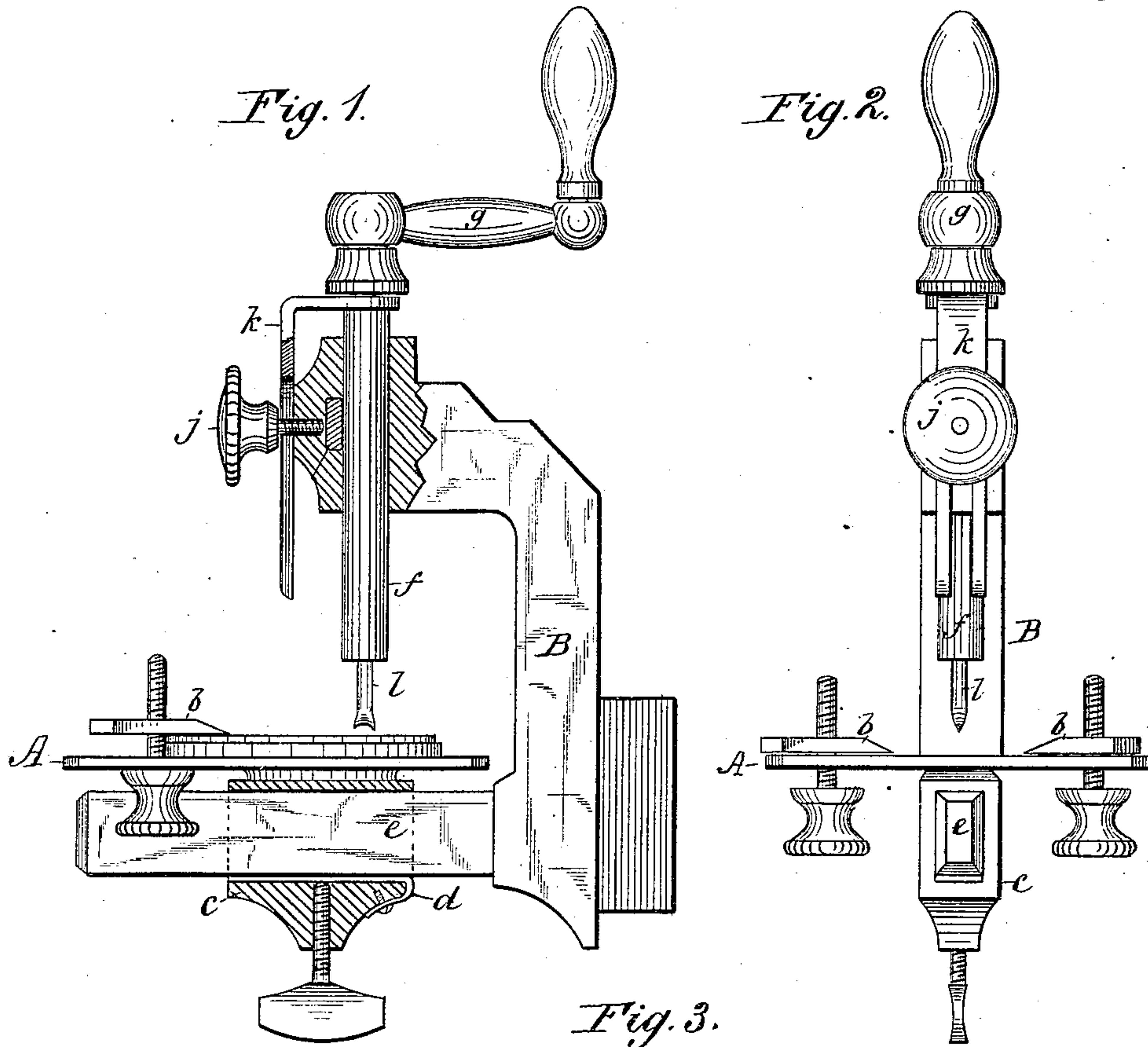


Fig. 6.



Fig. 4.

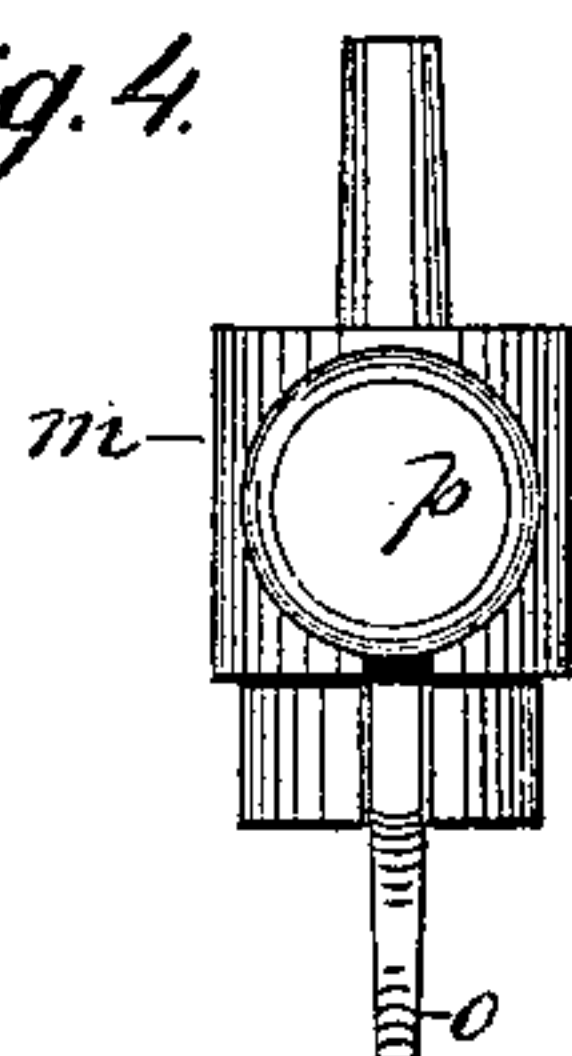
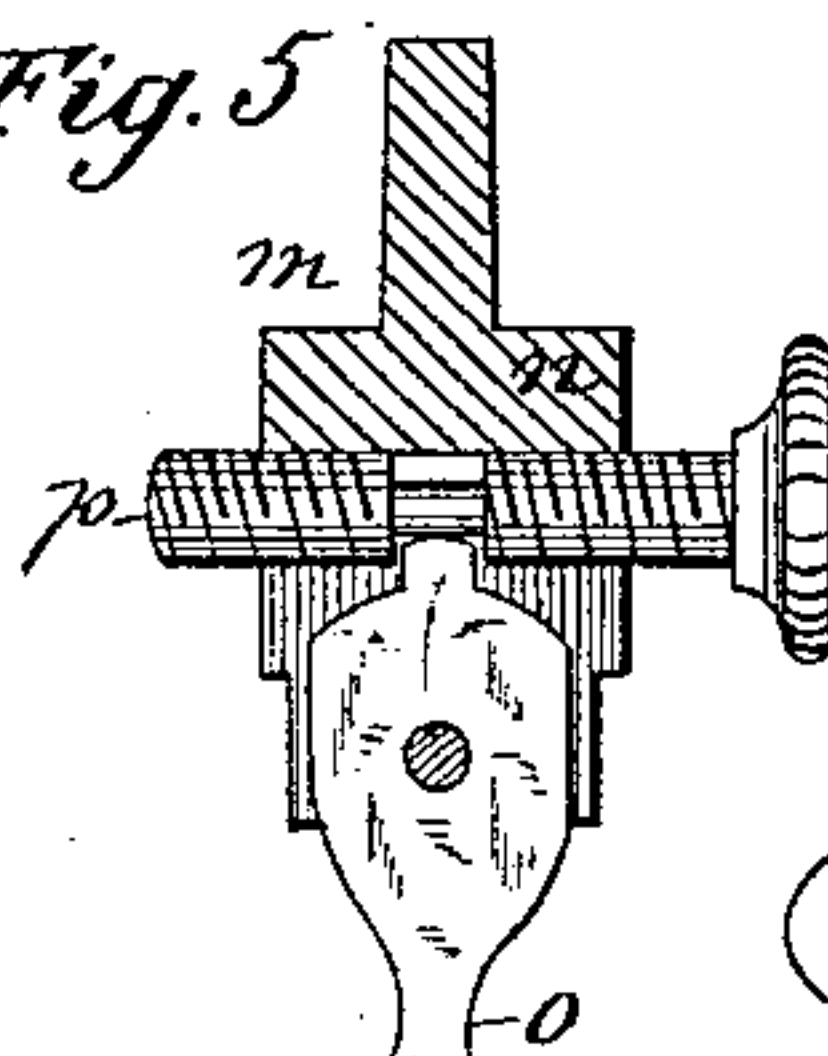


Fig. 5.



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# UNITED STATES PATENT OFFICE.

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TO WILLIAM R. JACKSON, OF SAME PLACE.

## JEWELING-TOOL.

SPECIFICATION forming part of Letters Patent No. 258,690, dated May 30, 1882.

Application filed March 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM B. ATKINSON, of Franklin, in the county of Simpson and State of Kentucky, have invented a new and useful Improvement in Jewelring-Tools, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

This invention relates to tools for setting, resetting, or extracting jewels in the manufacture or repair of watches; and the invention consists of the device hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of the holding device, partly in section. Fig. 2 is a front view of the same. Fig. 3 is a plan view of the same; and Figs. 4, 5, and 6 are details.

The holding device comprises a bed-plate, A, having converging slots *a a*, containing screws for adjusting the clamps *b b*, by which the plate to be jeweled is held in position. The bed-plate has a socket or sleeve, *c*, on the under side, containing a spring, *d*, against which a set-screw is adjusted to hold the sleeve at any desired position on the arm *e* of the bracket B. The bracket projects above and over the bed-plate, and is provided with a vertical perforation for holding the drill-rod *f*, which is provided with a crank, *g*, at the upper end and a seat in the lower end for holding a drill or chisel, *h*. The bracket is provided with a thumb-screw, *j*, which holds a slotted gage, *k*, for limiting the action of the drill upon the watch-plate. This gage consists of a plate bent at right angles and provided with a perforation for the drill-rod at one end, and slotted longitudinally at the other end, and adjustably secured to the bracket by the said thumb-screw.

In cutting a jewel-seat in a plate a small sharp centering-tool is to be inserted into the seat in the drill-rod, and with the aid of this the plate to be drilled is to be placed in proper position on the bed-plate and secured thereon by the clamps. The centering-tool is then to be removed from the drill-rod and a chisel inserted instead and the gage adjusted according to the depth of seat required. By turning the crank the jewel-seat will be bored in the plate. The jewel is then to be placed in the seat and a closing-pin, *l*, is to be substituted for the chisel by withdrawing the drill-rod. By means of the pin *l*, having a concave end, the

rim of the seat will be closed around the sides of the jewel, thus completing the operation of setting the jewel.

In opening the rim of an empty seat to reinsert a jewel a spreading-tool, *m*, is to be inserted into the drill-rod. This spreading-tool consists of a head, *n*, with a shank to fit in the seat of the said rod, and a tapering finger, *o*, pivoted by means of a screw in a suitable slot in one end of the head, and having a projection on its inner end which fits in a concentric groove in a screw, *p*, passing through the head. This tool *m* does not differ materially in its general construction from other devices for boring metal, except that I use a straight tapering finger for spreading a burr instead of cutting the metal. By turning the screw *p* the point of the finger will be adjusted in a more or less eccentric position. After the point of the finger *o* is adjusted in the jewel-seat so as to rest upon the bottom thereof, a slight degree of eccentricity is to be given the finger by the means above described, and the degree of eccentricity is to be increased gradually with each rotation of crank until the burr is opened.

In extracting jewels from old plates the finger of the spreading-tool is to be removed by withdrawing its screw-pivot, and a small chisel is to be inserted in the slot and pivoted therein in the manner of the finger. The chisel is then to be adjusted eccentrically, with its cutting-point turned inward or toward the center and lowered in contact with the edge of the jewel, so that the said cutting-point will pass under the rim of the jewel-seat. The crank is then to be turned and the eccentricity of the chisel gradually increased, if necessary, until the rim is sufficiently spread to allow the jewel to be removed.

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

In a jewelring-tool for hand use, the combination of the bracket B, the drill-rod *f*, journaled in the bracket, and the slotted and perforated gage *k* and thumb-screw *j*, with a bed-plate, A, adjustably supported on an arm of the bracket and having movable clamps, substantially as shown and described.

WILLIAM BROWNLOW ATKINSON.

Witnesses:

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