

(No Model.)

G. SYLVIA.
WATCH MAKER'S STAKING TOOL.

No. 450,263.

Patented Apr. 14, 1891.

Fig-1

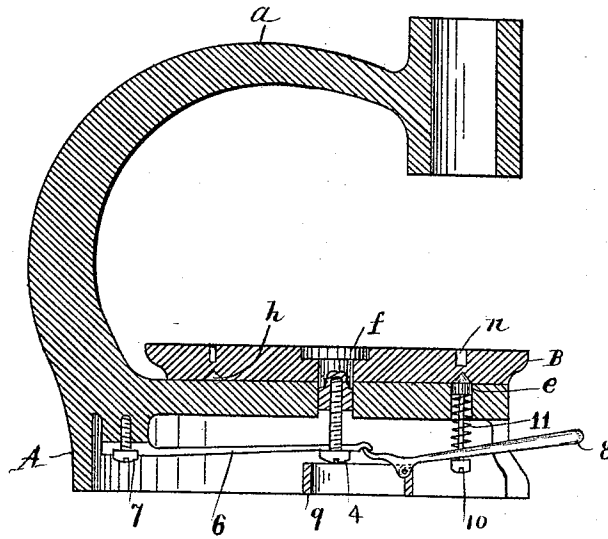


Fig-2

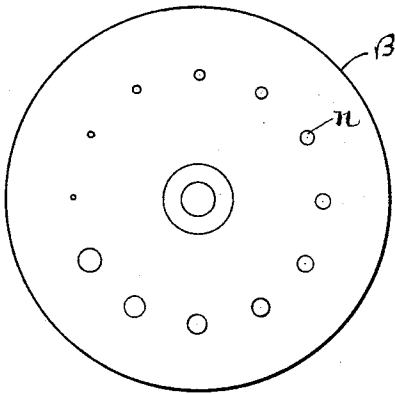
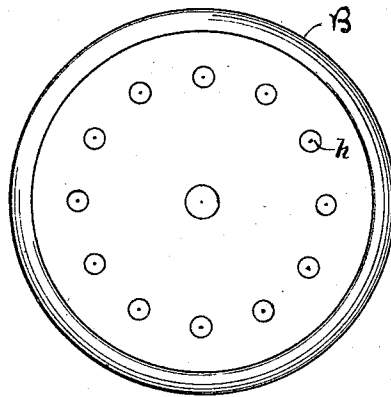


Fig-3



WITNESSES:

G. E. Hamill
C. H. Schow

INVENTOR:

Geo. Sylvia
By *C. B. Tuttle*
Atty

UNITED STATES PATENT OFFICE.

GEORGE SYLVIA, OF WALTHAM, MASSACHUSETTS.

WATCH-MAKER'S STAKING-TOOL.

SPECIFICATION forming part of Letters Patent No. 450,263, dated April 14, 1891.

Application filed October 3, 1890. Serial No. 366,939. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SYLVIA, of Waltham, in the county of Middlesex and Commonwealth of Massachusetts, have invented certain Improvements in Watch-Makers' Staking-Tools, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention relates to watch-makers' staking implements, and has for its object to provide an implement for the said purposes which permits of economical construction, easy adjustment, and positive accuracy in use.

The invention consists, mainly, in matters of construction hereinafter described, and then specifically claimed.

In the drawings, Figure 1 is a sectional elevation of my improved staking-tool. Fig. 2 is a plan of the plate B of Fig. 1. Fig. 3 is a plan of the plate B inverted.

The operative parts of the implement are supported in a base-block A. Said base is provided with an overhanging arm *a*, in which is provided a hole for receiving a staking-tool. On the base is supported the plate B, arranged to turn on a central stud *f*, the underface of the plate being in bearing contact with the contiguous face of the base-block. The central stud *f* receives a screw 4, which in turn engages the spring 6, as shown. (See Fig. 1.) The spring 6 has its rear end fixed to the base-block by screw 7, and operated to bear downwardly against the head of screw 4, so as to draw the plate B into close frictional contact with the base-block. The tension of this spring 6 may be varied by a suitable turn of screw 4.

Engaging with spring 6 is a lever 8, which has its fulcrum on the edge of a ring 9, which ring is brazed or otherwise secured into the base-block A, as shown. Said lever is recessed to receive a screw 10, that carries on its top end the locking-bolt *e*. A spiral spring 11 is interposed between the lever 8 and bolt *e*, as shown, and lifts upwardly the bolt; but when the lever is lifted by spring 6 the spring 11 yields downwardly against pressure on the top of the bolt, and thereby allows the force of spring 6 to be further and in all cases fully exerted against the plate B to force it into close frictional contact with the contiguous

face of block A. The upward movement of bolt *e* is limited by the screw 10, and the tension of spring 11 is varied and regulated by turning the screw 11, all of which is obvious.

On the under side of plate B are holes *h*, (see Fig. 3,) and through the plate are holes *n*. (See Fig. 2.) The holes *n* are graduated in size from the smallest to the largest size of holes desired for use, and said holes *n* are arranged with relation to the holes *h*, respectively, so that if the plate is turned to bring a hole *n* into exact alignment with the tool-receiving hole in the arm *a* there will be a hole *h* in position to receive the locking-bolt *e*. Said bolt *e* has its top end tapered or made conical to facilitate the alignment of the hole end and the tool-receiving hole of arm *a*.

In operation the workman places one hand upon and depresses the lever 8. This movement depresses the locking-bolt *e* out of its hole in plate B, and also lifts spring 6, thereby releasing plate B from frictional bearing upon the base-block A. The plate B is then turned so as to bring the desired hole *n* into comparative alignment with the tool-receiving hole in arm *a*, whereupon the depressing force is removed from lever 8 and the bolt *e* is forced upwardly into its hole and completes the alignment. A further upward movement of the lever 8 allows spring 6 to again press plate B upon block A. The plate B is now securely locked and the implement is ready for use in the usual and customary way.

Having thus described my invention, I claim—

1. In a staking-tool, the base-block A and the movable locking-bolt *e*, combined with the revoluble perforated plate B, mounted on the base-block and provided with holes, as *h*, to receive the locking-bolt, substantially as described.

2. In a staking-tool, the base-block A, locking-bolt *e*, the lever 8, and intermediate connections consisting of screw 10 and interposed spring 11, combined with the revoluble perforated plate B, mounted on the base-block and provided with holes to receive the locking-bolt *e*, substantially as described.

3. In a staking-tool, the base-block A and the revoluble perforated plate B, mounted on the base-block, combined with a yielding holder mechanism engaging the plate and

pressing it to the base-block, substantially as described.

4. In a staking-tool, the base-block A and the revoluble perforated plate B, mounted on the base-block, combined with spring 6, and connections consisting of screw 4 and central stud *f*, substantially as described.

5. A staking-tool consisting of the base-block A, the movable locking-bolt *e*, the perforated revoluble plate B, mounted on the base-block and provided with holes *h* to receive the locking-bolt, the spring 6, the lever 8, and described connections between the spring and the plate and between the lever and the bolt, all substantially as set forth.

6. In a staking-tool, in combination, the base-block A, a perforated revoluble plate

mounted on the base-block, a yielding holding mechanism engaging the plate and holding it pressed on the base-block, a locking-bolt to engage and lock the plate against rotary movement, and an operative lever engaging both the locking-bolt and holder mechanism, whereby the bolt and holder mechanism are simultaneously disengaged from the plate, substantially as described, and for the purposes stated.

Signed at Boston, Massachusetts, this 3d day of July, A. D. 1890.

GEORGE SYLVIA.

Witnesses:

JOHN FOSTER BISCOE,
CALVIN B. TUTTLE.