

D. M. Bissell,

Jewellers Tool.

No. 107,153.

Patented Sept. 6, 1870.

Fig. 1.

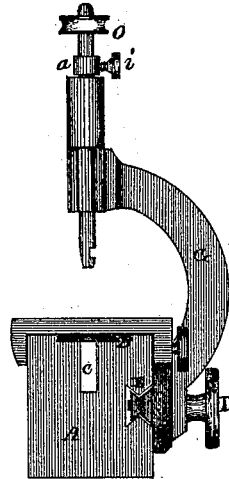
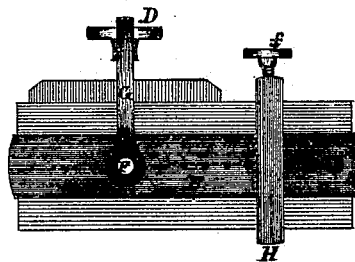


Fig. 2.



Witnesses.
G. B. Miller
Frank Rogers

Inventor.

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United States Patent Office.

DANIEL M. BISSELL, OF SHELBURNE FALLS, MASSACHUSETTS.

Letters Patent No. 107,153, dated September 6, 1870.

IMPROVEMENT IN JEWELERS' TOOLS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, DANIEL M. BISSELL, of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented new and useful Improvements in Staking-Tools for Jewelers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing forming a part of this specification, and to the letters of reference marked thereon.

My invention is embodied in a tool much needed by watch-makers in repairing watches; and

Its object is to provide a cheap and durable tool, by which the craft are enabled to do many kinds of work in a much more expeditious and perfect manner than by any other means hitherto devised or used.

The nature of this invention relates to the employment or use of a solid block of iron or other suitable metal, in which is closely fitted a cast-steel plate, spanning a deep groove in the said block. In this cast-steel plate is a series of holes, graduated in size, so as to allow the journal of a watch-wheel to pass through, and the wheel to lie upon the flat surface of the plate while being operated upon in the manner required.

It further relates to the use of a movable guide for the tool to be used, in combination with the said block, so arranged that the punch or other tool may be brought directly over any one of the holes in the said steel plate, and secured in its position by means of a set-screw.

This device is almost indispensable for riveting and unriveting wheels, and for rounding and stretching the same. It is also one of the most convenient devices for a freeing-tool, and for finishing bushings; also for closing rivet-holes, and removing table-rollers from balance staffs, and in many instances answers the purpose of a lathe in connection with the bow, besides being adapted to many other purposes that might be mentioned.

Its many advantages will be readily seen from the fact that the drill, punch, or finishing-tool used therewith, have a perfect guide, so that a true and unerring blow may be given, and the work more accurately performed than can possibly be done by hand.

It also forms a true and perfect guide for the drill when the bow is used, and also admits of many attachments being used therewith, such as small anvils and beaks, on which many kinds of work may be done in the most accurate manner.

To enable others skilled in the art to make and use my invention, I will proceed more particularly to describe its construction and operation.

Figure 1 represents an end elevation of my improved staking-tool.

Figure 2 is a plan view of the same.

A represents the block or foundations on which the attachments and adjuncts of my tool are fixed. It is made of any suitable metal, but from experience it has been found that cast-iron, steel, brass, or wrought iron are most suitable. It is rectangular in form, and may be made of any suitable or desired dimensions.

C is a groove, made much deeper than its width, running longitudinally from end to end of the block A.

Over this said groove C, and on the top of the block A, is closely imbedded a tempered cast-steel plate, B, which also runs from end to end of the block A, and spans the groove C.

The surfaces of the block A and steel plate B are planed off evenly, and polished, so as to form a perfect and true surface.

The steel plate B is provided with a series of holes, graduated in a true longitudinal line with the block A, the objects of which are to allow the journal of a watch-wheel to pass down through them, so that the rim or side of the wheel can be brought flat upon the true plain surface of the plate.

G represents a movable guide, that moves or slides from end to end of the block, by means of a gib, E, fitted and working closely in a dovetail groove, and secured in any desired position by means of a set-screw, D, all these being arranged and located on the side of the block A.

The arm of the guide G leaves the block A in a curve, and is brought around over the top of the center of the block, at which point the said arm is provided with a perpendicular hole or bore, F, which receives a punch, drill, or other tool required, as seen at O, which represents a drill provided with a grooved wheel, designed to be used with the bow.

This drill is provided with a movable sleeve, *a*, for the purpose of gauging the depth of the drill, which is done by moving the said sleeve up or down, and securing the same in the desired position by means of the set-screw *i*.

H shows a cross-bar, with flanges or gibs closely fitted over each side of the block A, which serves the purpose of a gauge or guide, for steadying the work while being done.

This cross-bar is rigidly secured in its position by means of a set-screw, *f*.

The simplicity of this tool, and the many uses to which it is adapted, would seem to readily suggest its mode of operation to any one of ordinary skill. I will, however, state, that to bring the bore or tool to

be used directly over the center of any of the holes in the block, I have a slim center punch, closely fitting to the bore, which, when the set-screw D is slackened, is introduced into the hole designed to be used, by which means the bore is brought directly over the center, where it can be firmly secured by the set-screw D.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent of the United States, is—

The improved device herein described, consisting essentially of the slotted block, perforated die-plate, movable and adjustable guide, and clamp, exclusive of any tool to be used therewith.

DANIEL M. BISSELL.

Witnesses:

G. B. MILLER,
FRANK ROGERS.