(No Model.)

D. MENDELSON.

WATCHMAKER'S STAKING TOOL.

No. 506,010. Patented Oct. 3, 1893.

Fig. 1.

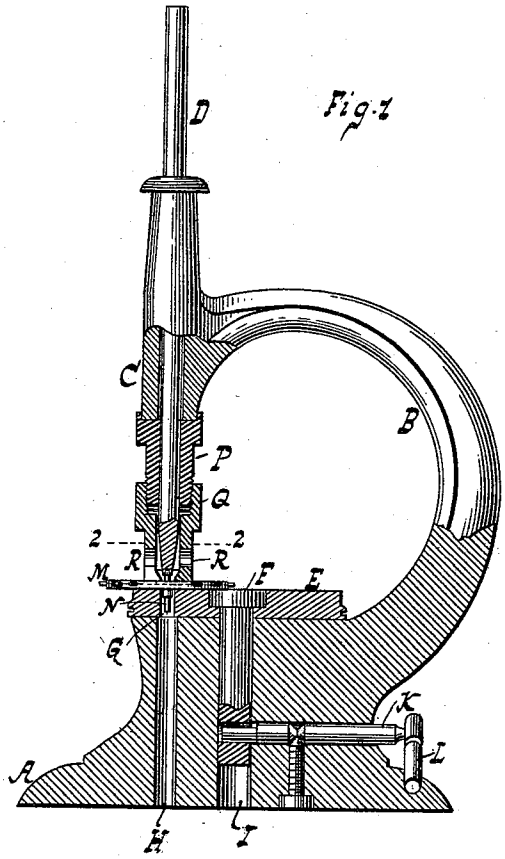


Fig. 2.

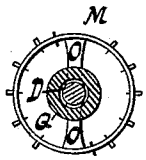
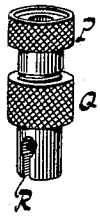


Fig. 3.



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UNITED STATES PATENT OFFICE.

DAVID MENDELSON, OF NEW YORK, N. Y.

WATCHMAKER'S STAKING-TOOL.

SPECIFICATION forming part of Letters Patent No. 506,010, dated October 3, 1893.

Application filed December 2, 1892. Serial No. 453,867. (No model.)

To all whom it may concern:

Be it known that I, DAVID MENDELSON, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Staking-Tools, of which the following is a specification.

This invention relates to an improvement in staking tools or devices for removing the staff or stakes from balance and other wheels and the object of the invention is to prevent bending or misshaping of the balance wheels during unstaking or expelling and to this end the invention consists in certain novel features pointed out in the following specification and claims and illustrated in the annexed drawings in which—

Figure 1, shows a side elevation partly in section of the tool. Fig. 2, is a section along line 2 Fig. 1. Fig. 3, is a detail view of a jackscrew or hollow clamp.

In the drawings the letter A indicates a foot from which extends an arm or goose neck B carrying a tube or guide sleeve C for a punch or plunger D. On the foot A is a base or disk E adapted to rotate about a shaft F and having one or more perforations G. When operating with the device the base E is rotated until its perforation G or a desired one of its perforations corresponds to or is in line with the perforation or channel H extending through foot A. The cam or eccentric I extending into an eye in shaft or pivot F is then rotated by the axle K and handle L to draw or clamp the base E down against the foot A so as to prevent further rotation of the base. An article such as a balance or other pinion or wheel M from which the staff or spindle N is to be removed is then placed on base E with the staff N projecting into perforation G. The punch D being then driven down onto staff or spindle N will force the latter out of the wheel M said removed staff N dropping out through the perforations G H. The pressure of the punch D however tends to bend or curve the spokes or arms O of the wheel M. To prevent such bending or misshaping a jackscrew or clamp P Q is inserted between the guide or sleeve C and the base E. This jackscrew consists of two tubular sections P Q through which the punch D passes and which are adapted to screw into and out of one another so as to be shortened or lengthened as desired. The jack screw or clamp being shortened is inserted into position as seen in Fig. 1, and is then lengthened so as to brace against the guide or sleeve C and press on the arms O of wheel M thereby holding the arms flat on base E preventing said arms from being bent or misshaped by the blow or pressure of punch D. The clamp part Q is shown with lateral slots or holes R which allow access of light to the interior for obtaining a clear view and for allowing the part Q to be readily passed by the staff N when the clamp is being put in place. The opening R on one side of the clamp (Fig. 1) is shown in form of a hole and the opening R on the other side is shown in form of a slot.

Of course the jack screw or clamp might be used otherwise than in staking tools as for example in drilling, punching tools and the like.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a punch and a guide or sleeve for the punch, of a perforated base for supporting an article to be acted on by the punch and a jackscrew or clamp adapted to be inserted between the guide and base substantially as described.

2. The combination with a punch and a guide or sleeve for the punch of a perforated base for supporting an article to be acted on by the punch and a tubular jackscrew or clamp through which said punch passes said clamp being adapted to be inserted between the guide and base and being provided with a lateral opening or hole R substantially as described.

3. A hollow clamp or jack screw composed of two tubular sections adapted to screw into or out of one another and provided with a lateral opening or hole, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

DAVID MENDELSON.

Witnesses:
WM. C. HAUFF,
E. F. KASTENHUBER.