(No Model.)

W. M. PRESTON.

DEVICE TO FACILITATE THE DRILLING OF HOLES CENTRALLY IN STAFFS FOR WATCHES, &c.

No. 437,796. Patented Oct. 7, 1890.

Fig. 1.

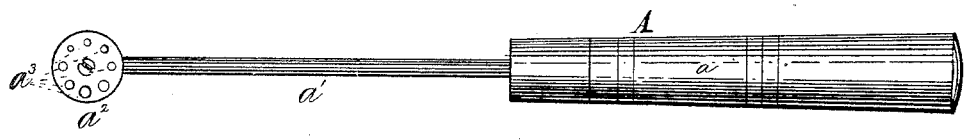


Fig. 2.

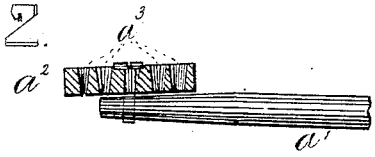
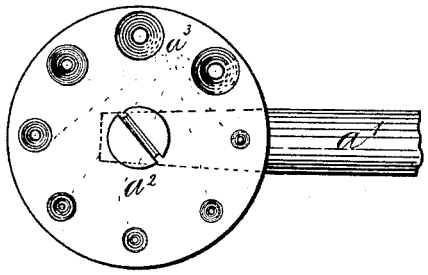


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM M. PRESTON, OF RONDOUT, NEW YORK.

DEVICE TO FACILITATE THE DRILLING OF HOLES CENTRALLY IN STAFFS FOR WATCHES, &c.

SPECIFICATION forming part of Letters Patent No. 437,796, dated October 7, 1890.

Application filed April 8, 1890. Serial No. 347,038. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. PRESTON, a citizen of the United States, residing at Rondout, in the county of Ulster and State of New York, have invented certain new and useful Improvements in a Device to Facilitate the Drilling of Holes Centrally in Staffs for Watch-Pinions, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a device to be operated by hand or in connection with the sliding rest of a lathe for the purpose of drilling holes in the end of the staff or pinion of a watch-wheel, and its object is to facilitate the drilling of said holes correctly and prevent the drill from breaking and the staff from splitting. I obtain said object by a certain arrangement and construction, fully described in this specification, and illustrated in the accompanying drawings, in which—

Figures 1, 2, and 3 are views completely illustrating said device.

A designates the device, which comprises the handle a, the portion a', and the perforated rotating disk a^2. Said disk is pivoted to the portion a', and it is constructed with the orifices a^3. These orifices or openings are cone-shaped and of different sizes, corresponding in number and size to the different pinions or staffs upon which it is designed to be used.

The usual mode in which jewelers pivot a staff or pinion of a watch-wheel consists in finding the center of same and then drilling the hole is said center by means of a drill while the staff is being revolved with a lathe. Frequently they accomplish this without the use of the lathe. It will readily be observed that this is a very tedious and difficult undertaking. Besides in doing this the staff or pinion will frequently split, the drill will get broken, and the orifice, instead of being perpendicular, is frequently the reverse, rendering the work useless. By the aid of my invention I propose to obviate all of said difficulties and to perform the work perfectly and in one-fifth of the time required by the old method.

By placing the staff or pinion to be pivoted in the conical openings a^3 of the disk and inserting the drill in said openings you have at once the center of the staff or pinion without the trouble of finding same. The staff or pinion is then caused to rotate within said conical openings by means of a lathe or any other force, and the work is correctly and quickly performed.

Having fully described my invention and its advantages, what I claim, and desire to secure by Letters Patent, is—

1. In a device to facilitate the drilling of holes centrally in staffs for watch-pinions, &c., the rotating disk or plate with graduated conical perforations, in combination with any suitable handle for operating the same by hand or in connection with the sliding rest of a lathe, substantially as described and set forth.

2. In a device to facilitate the drilling of holes centrally in staffs for watch-pinions, &c., the rotating disk a^2, pivoted to the stem or portion a' of the handle a, substantially as described.

3. The combination of the handle a, the stem a' of said handle, and the disk a^2, substantially as described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM M. PRESTON.

Witnesses:
EMANUEL METZGER,
WILLIAM LAWTON.