(No Model.)

J. DOUGLAS.

WATCH BEZEL REAMER.

No. 547,112. Patented Oct. 1, 1895.

Fig. 1.

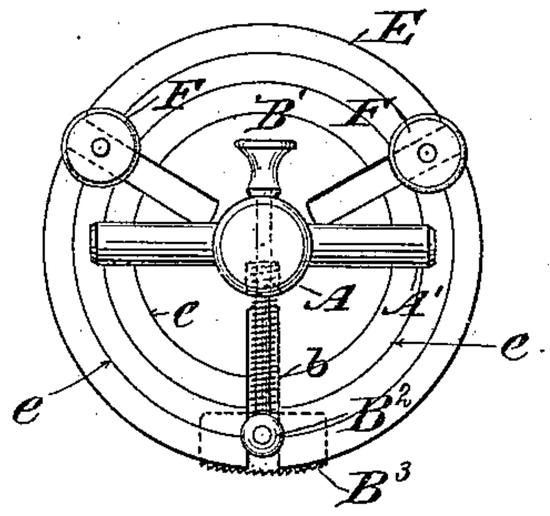


Fig. 2.

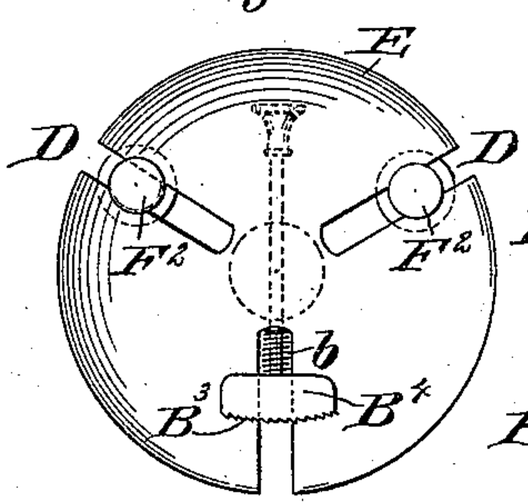
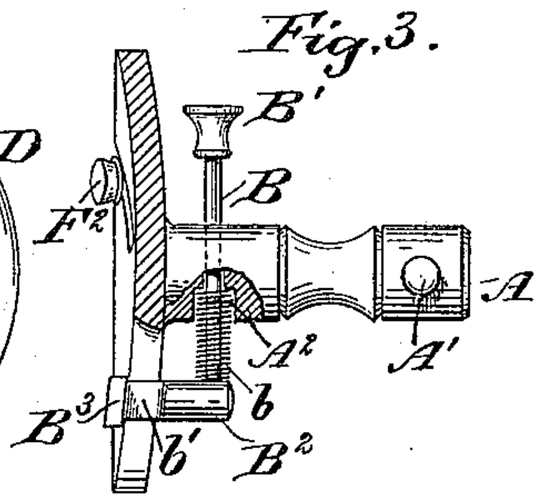
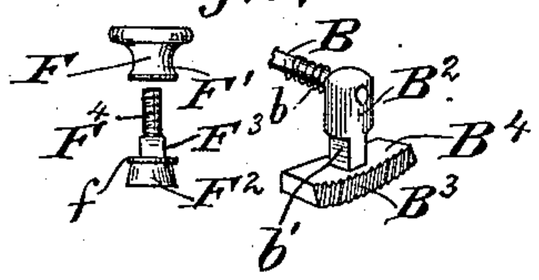


Fig. 3.



D

Fig. 4.



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JOHN DOUGLAS, OF ONAWA, IOWA.

WATCH-BEZEL REAMER.

SPECIFICATION forming part of Letters Patent No. 547,112, dated October 1, 1895.

Application filed December 12, 1894. Serial No. 531,560. (No model.)

To all whom it may concern:

Be it known that I, JOHN DOUGLAS, a citizen of the United States, residing at Onawa, Monona county, State of Iowa, have invented a new and useful Improvement in Watch-Bezel Reamers, of which the following is a full, clear, and exact description, enabling others skilled in the art to which it pertains to make and use the same.

My invention relates to watchmakers' tools, and particularly to such tools as are used in preparing the bezels of watches for the fitting of crystals.

It consists in the device and parts illustrated in the accompanying drawings, in which like letters refer to like parts in each. Its object is to effect a ready, safe, and reliable means of restoring the integrity of the rabbet of a watch-bezel when the same has been injured or distorted from its normally circular shape. It is also used in reaming out the rabbet of a watch-bezel when the same is desirable.

Figure 1 is a top view of the device. Fig. 2 is an under view of the same. Fig. 3 is a side view of the same partially in section. Fig. 4 is an enlarged perspective view of parts.

In the drawings, A is the handle of the device. A′ is the lever or cross-bar of the same. At the lower portion of this handle is a stepped perforation A^2, through which the rod B operates. This rod has a knob B′ upon one end, and at the other end it is attached to an adjustable post B^2. Strung upon the rod B is the spiral spring *b*. This spring is lodged upon one end in the step of the perforation A^2 and at the other end abuts against the post B^2. Attached to this post is the rasp B^3. The post B^2 operates in one of a series (preferably three in number) of radial slots D D D, which begin upon the perimeter of the disk E and extend inwardly toward the handle A, which is fixed in the center of the disk E. In these radial slots the gage-posts F F are arranged to slide. They are held in any fixed position desired by means of the thumb-nut F′. These gage-posts F (see Fig. 4) are so constructed that the portion of them F^2 which is designed to be lodged in the rabbet of the bezel is shaped to conform to the usual shape of the rabbet. In order that it may be adjusted in the slot and held in position, that portion immediately above the portion F^2 is flattened upon two of its sides F^3. This portion is intended to adjustably fit and slide in the radial slots D. A flange *f* seats it in position. The thread upon the shank F^4 is arranged to thread in the thumb-nut F′ for the purpose of fixing it at any desired point. Upon the upper side of the disk E are lodged a series of concentric rings *e e*, which may be properly designated by numbers or otherwise, which indicate the position of the gage-posts. The rasp B^3 is fixed to the bottom of the post B^2, so that its flanges B^4 extend on both sides of the slot in which it is lodged. A notch *b*′ on the post engages the sides of the slot and causes the post bearing the rasp to be seated.

The operation of the device is as follows: When the rabbet of a watch-bezel is to be straightened or reamed, the device is placed over the bezel and the gage-posts F are adjusted in the radial slots, so that the portion F^2 is lodged in the rabbet of the bezel. When these posts are so lodged, the concentric line *e* upon which one is located will be the same upon the other if the device is properly adjusted. The thumb is now placed upon the post B^2 bearing the rasp and a pressure exerted upon said post. This collapses the spring *b* and causes the rod B to pass through the handle A. This is best shown in Fig. 2 in dotted lines. When the rasp is drawn within the circumference of the bezel, the thumb releases the post and the rasp B^4, which is constructed so as to fit the rabbet of the bezel, is lodged within the said rabbet. The lever A′ is now grasped and the device turned slowly around. The gage-posts being pressed firmly by the spring *b* cause any indentation on the rabbet to be raised to its proper position, and the rasp, following these in their rotation around and in the rabbet, cuts out or enlarges any portion that these gage-posts may leave projecting.

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

1. In a device for reaming and straightening the rabbet of a watch bezel, the combination of a radially slotted disk, a series of gage-posts, adapted to be fixed in position in said slots by thumb-nuts, and an adjustable

rasp also operating in one of the radial slots of said disk, said rasp adjusted and held in position by a spring strung upon a rod, and connected to the post bearing said rasp, and said rod passing through a handle used as a means for operating said device, substantially as herein described and set forth.

2. In a device for reaming and straightening the rabbet of a watch bezel, the combination of a radially slotted disk having a series of indicated concentric rings, a series of gage-posts adapted to be adjusted in said slots and fixed in position by thumb-nuts, and an adjustable rasp also operating in one of the radial slots of said disk, said rasp adjusted in position by a spring strung upon a rod and connected to the post bearing said rasp and said rod passing through a handle used as a means for rotating said device, substantially as herein described and set forth.

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Witnesses:
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