

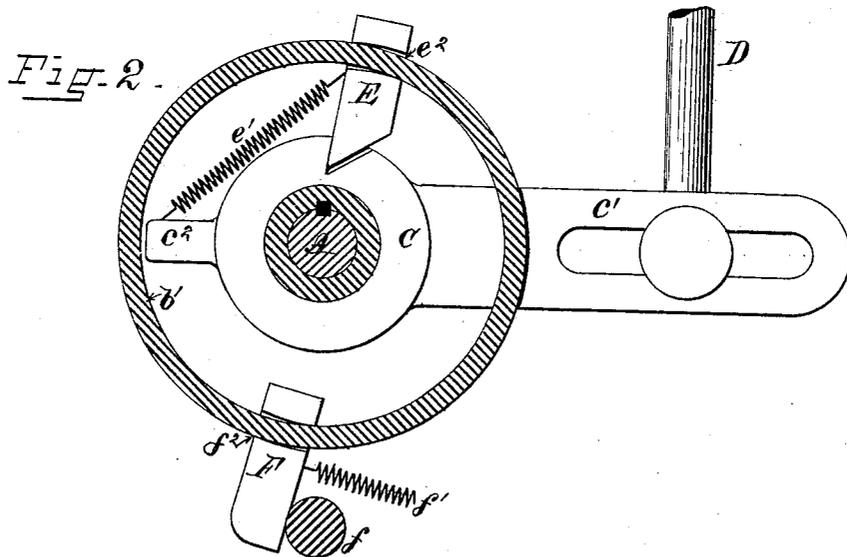
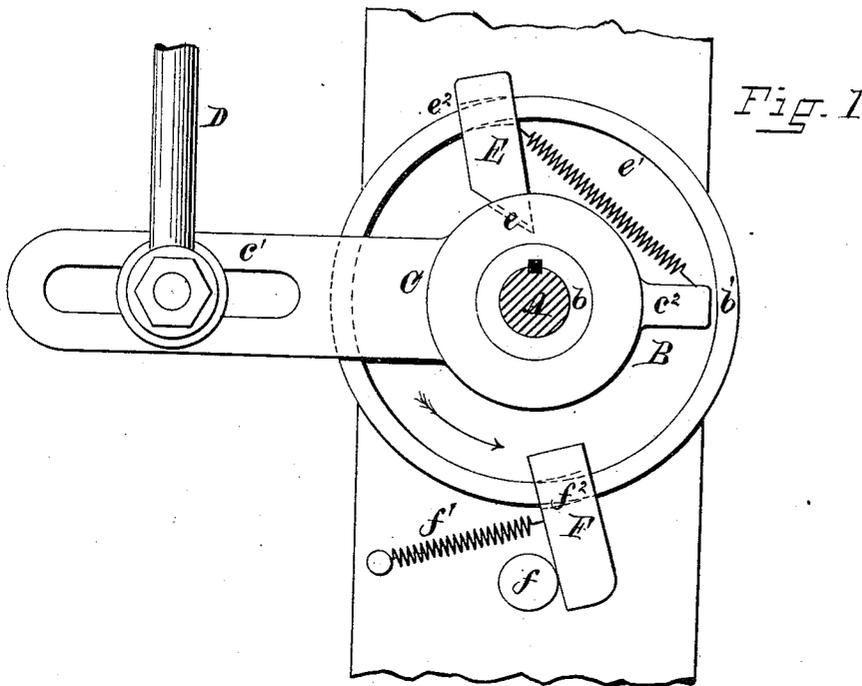
(No Model.)

J. E. WALCOTT.

FEED DEVICE FOR JEWELERS' PRESSES.

No. 273,918.

Patented Mar. 13, 1883.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JABEZ E. WALCOTT, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO  
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## FEED DEVICE FOR JEWELERS' PRESSES.

SPECIFICATION forming part of Letters Patent No. 273,918, dated March 13, 1883.

Application filed November 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, JABEZ E. WALCOTT, of the city and county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Devices for Feeding Jewelers' Stock to Presses; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in devices for feeding the blanks to the presses used by jewelers. It is an improvement on the usual pawl-and-ratchet device, in which the adjustment is limited to the length of the ratchet-teeth.

The object of the invention is to so construct a feeding device for jewelers' stock that the amount of stock delivered to the presses or successively under the dies can be adjusted to the greatest nicety.

The invention consists in connecting with the axis of the usual feed-rolls of jewelers' cutting, stamping, or embossing presses an annular rim, and connecting with the same two pinching-pawls, one operated by an oscillating lever to turn the rolls, and the other constructed to hold the same, as will be more fully set forth hereinafter.

Figure 1 is an end view of the device, showing the annular rim secured to the feed-roll, a lever oscillating on the sleeve and adjustably secured to a connecting-rod provided with a pinching-pawl. Fig. 2 is a reverse view, the annular rim being shown in section.

In the drawings, A is the shaft of one of the usual feed-rolls used on jewelers' presses for feeding the strips of stock to the press.

B is a disk, provided with the annular rim  $b'$  and with the sleeve  $b$ , by which it is secured to the feeding-roller.

C is a lever fitted to turn on the sleeve  $b$ . The arm  $c'$  of the lever C is slotted, so that the connecting-rod D may be secured nearer to or farther from the pivotal bearing of the lever C, and thereby the partial rotation of the lever on the sleeve  $b$  regulated.  $c^2$  is a projection on the side opposite to the arm  $c'$ .

E is a pinch-pawl resting in the V-shaped step  $e$ , made in the boss of the lever C, and

slotted so as to extend over the rim  $b'$ .  $e'$  is a coiled spring, connecting the pawl E with the projection  $c^2$ .

F is a pinch-pawl, also provided with a slot, into which the rim  $b'$  enters.

$f$  is a stop projecting from the frame of the machine, against which the pawl F is held by the spiral spring  $f'$ .

The direction of rotation of the disk B, and with it of the feed-roll, is shown by the arrow in Fig. 1.

The operation of the device is as follows: The connecting-rod D is usually connected with a revolving arm or disk, on which it can be adjusted nearer to or farther from the center of rotation, so that a reciprocating motion of any desired length can be given to the same. As the oscillating motion can also be regulated by securing the connecting-rod D on the slotted arm  $c'$ , the whole is susceptible of very accurate adjustment. When the connecting-rod D descends, the arm  $c'$  is depressed, the boss of the lever C turns on the sleeve  $b$ , and bears against the step of the pawl E, forcing one corner of the groove  $f^2$  against the inner and the opposite corner of the groove against the outer face of the rim  $b'$ , pinching the same and rotating the disk B, and with it the feed-roller, until the end of the downward stroke is reached. During this partial rotation the rim  $b'$  is drawn through the slot of the pawl F, the spiral spring  $f'$  yielding sufficiently to allow such passage; but as soon as the motion ceases the spiral spring  $f'$  draws the pawl F against the rim  $b'$ , so that the opposite corners of the groove  $f^2$  pinch the rim on the inner and outer face, and as the pawl F rests against the stop  $f$  the disk B, and with it the feed-roller, are firmly held without the slightest backlash or loss. The connecting-rod now rises and the lever C turns on the sleeve  $b$ . The spiral spring  $e'$  draws the pinch-pawl E over the rim until the downward motion commences, when the pawl E instantly grips the rim  $b'$  and again rotates the feed-roller.

By this construction the feed-roller is securely held after it has been rotated to feed the desired length of stock, which length can be regulated to the greatest nicety, as the device does not depend on any division, no matter how

fine, of the actuating-rim, and has no loss of motion caused by a pawl entering a tooth. The device is simple in construction, durable, and easily adjusted.

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

1. In a device for feeding jewelers' stock, the combination, with the shaft of a feed-roller, of the disk B, provided with the sleeve *b* and rim *b'*, the slotted lever C, and the pinch-pawls E and F, constructed to change the reciproca-  
10 tion of the connecting-rod to an intermittent rotary motion, as described.

2. The combination, with the disk B, pro-

vided with the rim *b'*, and the slotted lever C, 15 of the pawl E, resting in the step *e*, and provided with the groove *e'*, and the spring *e'*, connecting the pawl with the lever C, the pawl F, and the stop *f*, constructed to rotate a feed-  
20 roll and hold the same, as described.

3. The combination, with the rim *b'*, the pinch-pawls E and F, and the stop *f*, of an oscillating lever constructed to rotate the rim and parts connected with it, as described.

JABEZ E. WALCOTT.

Witnesses:

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