

W. H. POND.
SHEARING DEVICE.
APPLICATION FILED DEC. 26, 1912.

1,064,929.

Patented June 17, 1913.

Fig. 1.

Fig. 2.

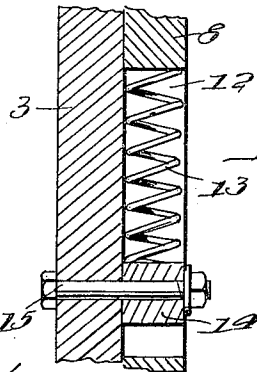
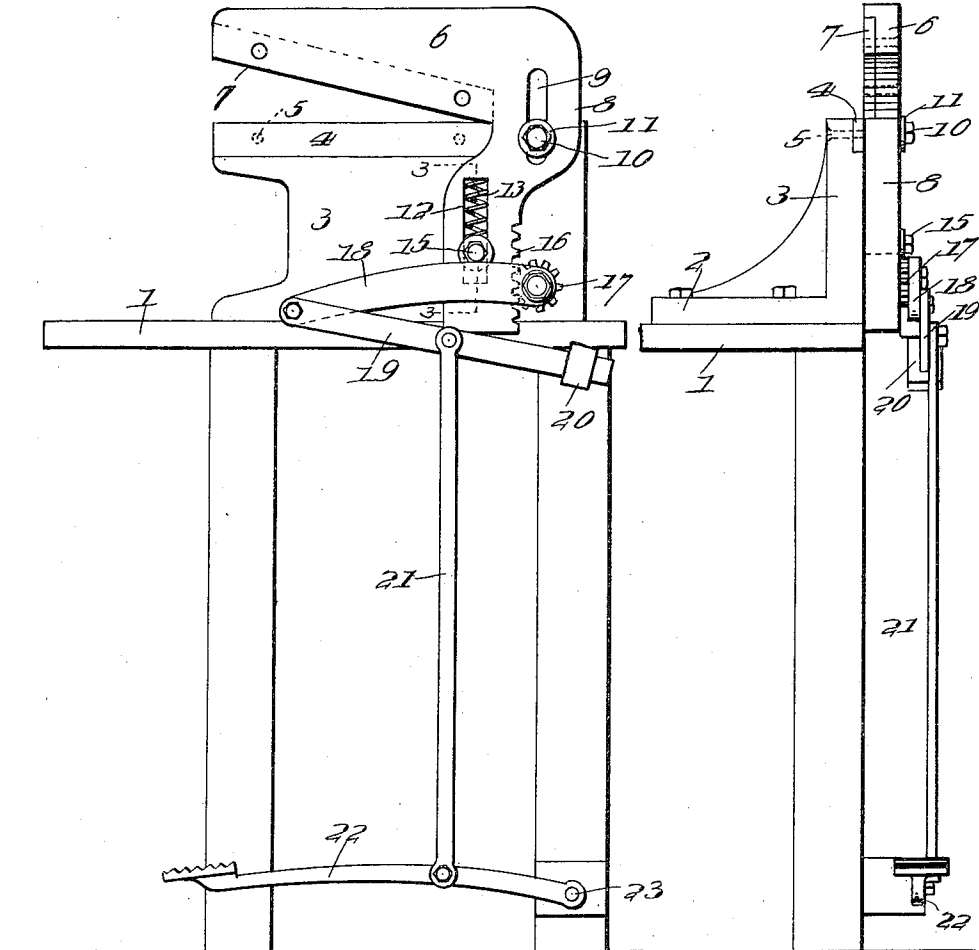


Fig. 3.

Witnesses
Ada E. Taylor
Annie H. Miller

Inventor
William H. Pond
Joseph H. Miller
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM H. POND, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THEODORE W. FOSTER & BRO. CO., OF PROVIDENCE, RHODE ISLAND, A CORPORATION OF MAINE.

SHEARING DEVICE.

1,064,929.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed December 26, 1912. Serial No. 738,656.

To all whom it may concern:

Be it known that I, WILLIAM H. POND, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Shearing Devices, of which the following is a specification.

This invention relates to certain new and useful improvements in shearing devices and pertains more particularly to devices of this kind for jewelers' use.

The object of the invention is to provide novel, improved and simplified means for enabling actuation of the cutter both easily and quickly and for otherwise generally improving the structure and increasing the efficiency of the device.

In the drawings—Figure 1 is a side elevation of the invention. Fig. 2 is an end elevation, and Fig. 3 is an enlarged section on the line 3—3 of Fig. 1.

The invention is illustrated in position on a work bench 1, but it will be apparent that any other supporting frame or structure may be used in lieu thereof.

A base plate 2 is formed with an upstanding web 3 in which a cutting bed plate 4 is inset and secured by screws 5, the bed plate 4 having its outer exposed side face flush with the inner face of the web 3.

The cutter mechanism comprises a horizontal arm 6 to which is secured a diagonal cutting blade 7, the latter being preferably inset in the arm 6 to afford a more substantial and firm seat therefor. The arm 6 is provided with a depending portion 8 which is vertically slotted at 9, and receives a bolt 10 in the slot in order to provide a guide for the vertical sliding movements of the arm 6. The bolt is equipped with a washer 11 in order to prevent outward movement of the arm 6. The portion 8 is offset at its lower end and is vertically slotted at 12 and receives a coil spring 13 in said slot, the coil spring abutting the end wall formed by the slot 12 at its upper end and has its lower end seating on a block 14 which latter projects in the slot 12 and is held stationary on the web 3 by means of a bolt 15. The block 14 permits sliding movement of the portion 8 of the arm, and the spring acts to normally

hold the arm in the position shown in Fig. 1 of the drawings.

The outer side of the offset lower end of the part 8 is formed with a rack 16 which meshes with a gear 17 that is journaled on the web 3. An arm 18 is rigidly connected to the gear 17 and in turn is pivotally connected to a downwardly inclined arm 19, the latter passing through a pivoted slide 20 to permit of movement of the arm therein. A rod 21 is pivoted to arm 19 and in turn is pivoted to a foot operated lever 22 that is pivoted at 23 to the bench structure.

From the above it will be seen that a shearing action is obtained between the bed plate 4 and the cutting blade 7.

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

1. In a shearing device, a base having a bed plate thereon, a horizontal arm carrying a cutter blade and having a depending portion provided with a pair of slots located one above the other, a bolt in one of the slots connected to the base, a block in the other slot, a coiled spring seating on the block and abutting the top end wall formed by the last named slot, a rack on said depending portion, a gear in mesh with the rack, an arm rigidly connected to the gear, a second downwardly inclined arm connected to the first named arm, a rod connected to the last named arm, and a foot operated lever connected to the rod.

2. In a shearing device, a base, a cutter arm having a depending portion which is provided with a plurality of slots, a projection in each slot, a spring between one projection and the upper end of the slot of said projection, a rack on the depending portion, a gear meshing with the rack, and means to actuate the gear.

3. In a shearing device, a base, a cutter arm having a depending portion which is provided with a plurality of slots, a projection in each slot, a spring between one projection and the upper end of the slot of said projection, and means to actuate the cutter arm.

4. In a shearing device, a base, a sliding cutter arm on the base formed with a slot, a projection carried by the base and extending

in said slot to guide the sliding movements of the cutter arm, a spring engaging said projection at one end and having its opposite end engaged with one of the end walls
5 formed by the slot, and means to actuate the arm.

5. In a shearing device, a base, a sliding cutter arm on the base having a rack, a gear in mesh with the rack, an arm rigidly connected at one end to the gear, a second arm
10 pivotally connected to the first named arm

at the opposite end of the latter, a guide for the last named arm, and a foot operated lever connected to the second named arm between the ends of the latter.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM H. POND.

Witnesses:

ADA E. HAGERTY,
J. A. MILLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."