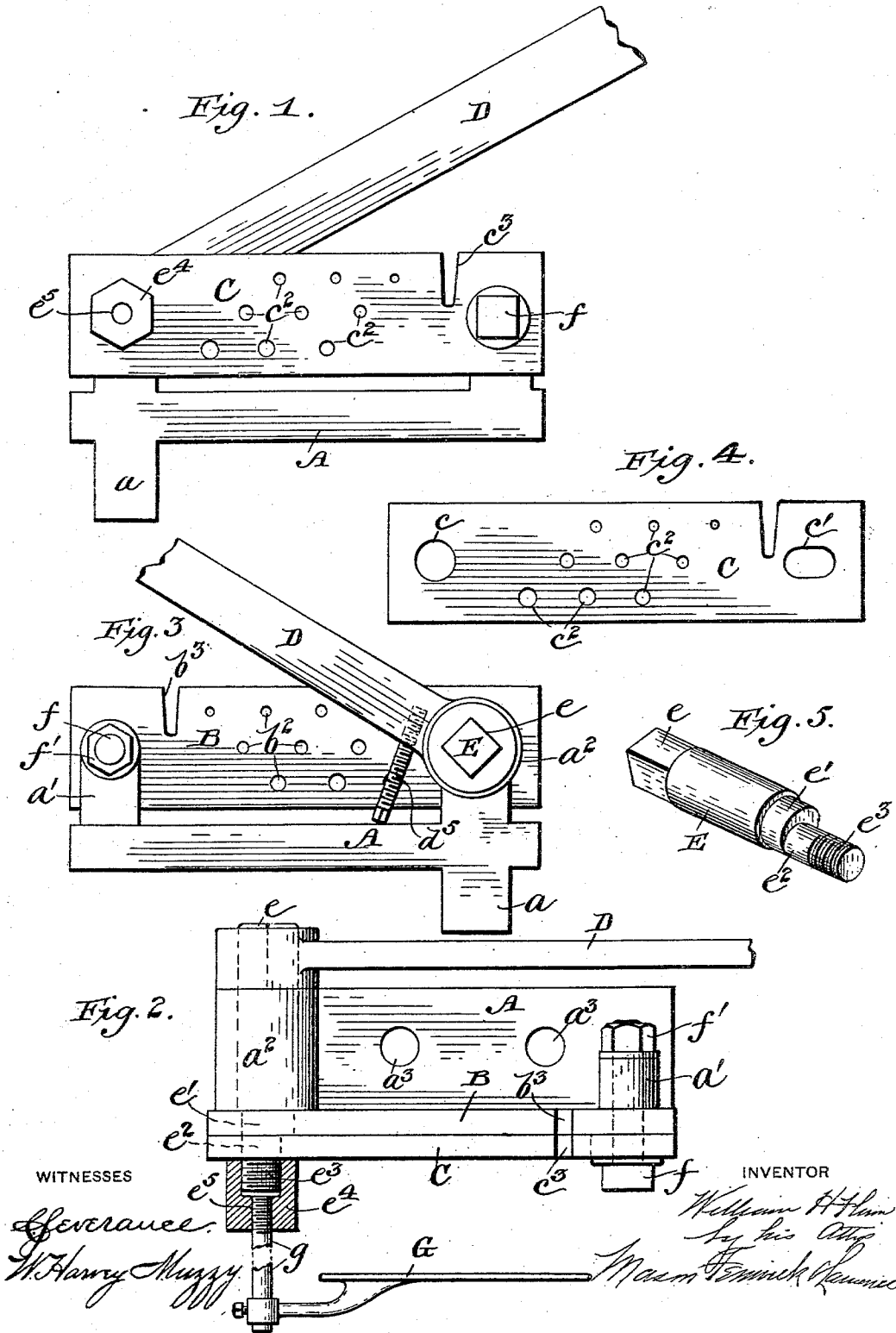


(No Model.)

W. H. FLINN.
WIRE OR ROD CUTTER.

No. 552,831.

Patented Jan. 7, 1896.



UNITED STATES PATENT OFFICE.

WILLIAM H. FLINN, OF NASHUA, NEW HAMPSHIRE.

WIRE OR ROD CUTTER.

SPECIFICATION forming part of Letters Patent No. 552,831, dated January 7, 1896.

Application filed May 31, 1895. Serial No. 551,066. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. FLINN, a citizen of the United States, residing at Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Wire or Rod Cutters; 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 improvements in tools for cutting rods or wires; and it consists of the combination, with a suitable frame, of a stationary cutter-plate, a movable cutter-plate, each plate having cutting apertures, an eccentric for forcing said movable plate forward and returning it to its normal position, and a lever for actuating said eccentric.

It also consists of certain other novel constructions, combinations, and arrangements of parts, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 represents a side elevation of the devices embodying my invention. Fig. 2 represents a top plan view of the same, partly in section. Fig. 3 represents a side elevation of said devices, taken on the opposite side from that shown in Fig. 1. Fig. 4 represents a detail side elevation of the removable cutter-plate, and Fig. 5 represents a detail perspective view of the operating-shaft carrying the cam.

A in the drawings represents the base or frame; B, the stationary cutter mounted thereon; C, the movable cutter mounted beside said stationary cutter, and D the operating-lever.

The base A is provided upon its under side with a projection a , by means of which it may be securely clamped in a vise or it may be attached to a table by bolts passed through apertures a^2 . The said frame is also provided with an upright standard a' , and an upright journal-box a^3 . An operating-shaft E passes through said journal-box and is squared at one end e to receive the operating-lever D, which is secured thereon by a key, or in any other suitable manner. The opposite end of said shaft is reduced in size, as at e' , and one end of the stationary plate is loosely mounted

on said reduced portion. This end of said shaft is further reduced, but out of a true center, so as to form an operating-eccentric e^2 . The outer end of said reduced portion is screw-threaded, as at e^3 , to receive the securing and check nut e^4 . The movable cutter-plate C is provided at one end with an aperture c , which fits loosely upon the eccentric e^2 , and at its opposite end with an elongated slot c' . A securing-bolt f passes through the standard a' , the plate B, and the slot c' in plate C, and is provided with a securing and check nut f' . The nut e^4 is provided with a screw-threaded aperture e^5 , adapted to receive the screw-threaded gage-rod g . A stop-plate G is adjustably mounted on said rod.

Each of the plates B and C is provided with a series of apertures b^2 and c^2 respectively, and also each with a vertical open top slot b^3 and c^3 respectively. The apertures are of varying size for different-sized wire and are arranged obliquely in their respective plates. The apertures and slots in the respective plates coincide in position when the plates are in their normal position with the lever down. The downward movement of the lever is limited by an adjustable bolt d^5 , which screws into the lower edge of said lever and is so placed that its head strikes the base when the lever is down.

When the device is to be operated the gage is first set and the wire then passed through one set of the coinciding apertures or the slots. The operating-lever is then raised whereby the eccentric is revolved and throws the plate C backward and cuts the wire, the gage moving upward out of the way after the cutter-plate has commenced to cut and has a firm hold on the wire so that it cannot slip longitudinally. The slot in the end of the plate C permits this longitudinal movement. When the lever is depressed the cutter-plate is returned to its normal position ready for another cut. The slots in the respective plates are intended more especially for cutting wire where both of the ends of the same are secured or for flat material.

My invention can also be used for cutting rods, bolts, or like articles.

It will be observed from the foregoing that the cutters can readily be removed for sharpening and the like by simply removing the

nuts *e*⁴ and *f* and slipping said cutters laterally off the shaft and securing-bolt. The cutters can also be adjusted as they wear so as to bear firmly against one another by means of these nuts *e*⁴ and *f*.

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

1. In a rod or wire cutter, the combination with a suitable frame, a shaft having a concentric journal portion and an eccentric journal end and mounted in said frame, a lever for operating said shaft, an immovable cutter plate having cutting apertures and mounted on said concentric journal portion of said shaft and the said frame, a movable cutter plate having cutting apertures and mounted on the eccentric journal end of said shaft and said frame whereby upon the rocking of the shaft the said movable plate is moved forward and along the stationary plate and then returned to its first position, substantially as described.

2. In a rod or wire cutter, the combination of a suitable frame, a shaft having a concentric journal portion and an eccentric journal end and mounted in said frame, a lever for operating said shaft, an immovable cutter plate having cutting apertures and an open ended cutting slot and mounted on said concentric journal portion of said shaft and said frame, a movable cutter plate having cutting apertures, and an open ended cutting slot and mounted on the eccentric journal end of said shaft and said frame, whereby upon the rocking of the latter the said movable plate is moved forward and along the stationary plate and then returned to its first position, substantially as described.

3. In a rod or wire cutter, the combination with a suitable frame, a stationary cutter plate provided with cutting apertures, a movable cutter plate also provided with cutting apertures and a longitudinal slot and adapted to slide against said stationary plate, a shaft having a concentric journal portion and an eccentric journal portion, the former support-

ing one end of the stationary plate, and the latter one end of the movable plate, whereby said movable plate is moved forward and returned to its first position by said eccentric end, a securing bolt passed through the stationary plate and the horizontal slot in the movable plate, and a lever for operating said shaft, substantially as described.

4. In a rod or wire cutter, the combination with a suitable frame, a stationary cutter plate provided with cutting apertures, a movable cutter plate also provided with cutting apertures and a longitudinal slot and adapted to slide against said stationary plate, a shaft having a concentric journal portion and an eccentric journal portion, the former supporting one end of the stationary plate, and the latter one end of the movable plate, whereby said movable plate is moved forward and returned to its first position by said eccentric end, a securing bolt passed through the stationary plate and the horizontal slot in the movable plate, a lever for operating said shaft, a gage rod mounted on said shaft and a gage adjustably mounted on said rod, substantially as described.

5. In a rod or wire cutter, the combination with a suitable frame, of a stationary cutter plate, a movable cutter plate; said plates being both mounted on said frame and having cutting apertures, a shaft having a concentric journal portion and an eccentric end which engages the movable plate to move it forward and return it to its first position and the former forming a support for the stationary plate, a lever for operating said shaft and an adjustable stop for limiting the movement of said lever and causing the apertures of the respective plates to correspond when the said plates are in their normal positions, substantially as described.

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

WILLIAM H. FLINN.

Witnesses:

R. T. SMITH,
S. J. M. SMITH.