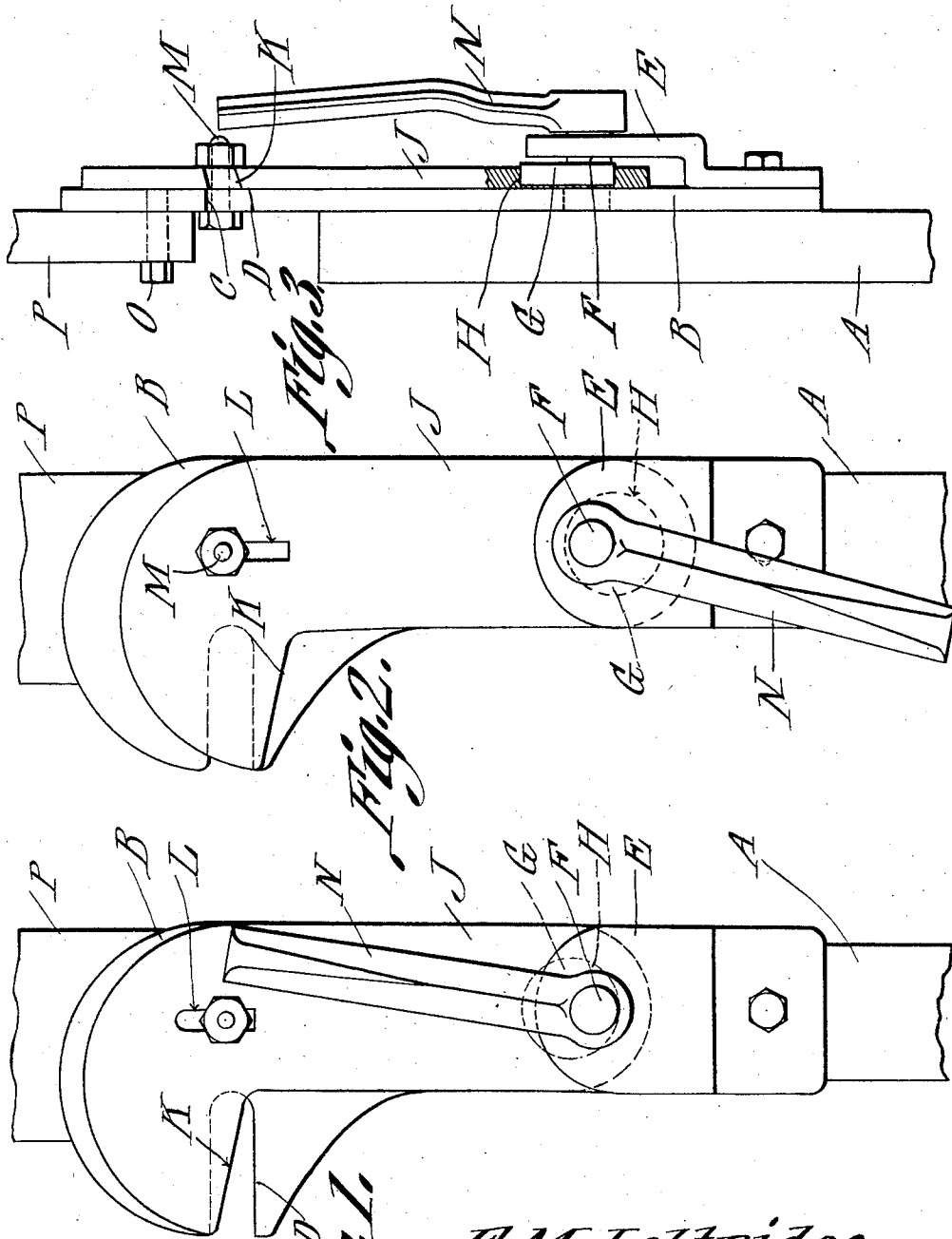


F. M. LOTTRIDGE.
METAL SHEARS.
APPLICATION FILED MAY 24, 1911.

1,058,769.

Patented Apr. 15, 1913.



Witnesses

J. R. Dineen
J. H. Wilson

F. M. Lottridge

Inventor

by

C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

FRANK M. LOTTRIDGE, OF STAR CITY, INDIANA.

METAL-SHEARS.

1,058,769.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed May 24, 1911. Serial No. 629,119.

To all whom it may concern:

Be it known that I, FRANK M. LOTTRIDGE, a citizen of the United States, residing at Star City, in the county of Pulaski and State of Indiana, have invented a new and useful Metal-Shears, of which the following is a specification.

This invention relates to an improvement in metal shears, the primary object of the invention being the provision of a metal shears, adapted to be operated by one man, for cutting iron or steel bars, it comprising particularly a stationary metal holding member or jaw, and a slidingly mounted cutting jaw, with eccentrically or cam operated hand power means to move the sliding jaw relative to the stationary jaw to cut the metal and to return the sliding jaw to metal receiving position.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings:—Figure 1 is a side elevation of the shears in metal holding position. Fig. 2 is a similar view in metal cutting position. Fig. 3 is a front elevation of the movable jaw in section to clearly show the cam or eccentric operating means.

Referring to the drawings, the letter A, designates the main support by means of which the device may be attached to a bench or other support, and rigidly secured thereto, is the main or stationary metal holding member B, whose outer end projects upwardly and is provided with the slot C, the wall D, of which is slightly inclined or beveled, to provide a shear edge.

Pivoted in the member B, and in the bracket E, which is attached to the member B, is a pin or shaft F, which carries thereon between the bracket and the member B, the cam or eccentrically mounted circular plate G, which as shown rotatably fits in the circular opening H, of the slidably mounted member J, which is provided with the upturned shear end K, which is adapted to co-act with the shear edge D, of the member B, to cut any metal fitting within the slot C of the member B. The sliding mem-

ber J, is provided with an elongated slot L, which surrounds and slides upon the bolt M, carried by the member B, thus holding the outer or shearing end of the member J, in operative relation to the member B.

Carried upon the outer end of the shaft F, is a handle N, by means of which the cam is operated to move the sliding member to and fro with relation to the metal shearing end of the member B, and by means of which one person may operate the shears to shear bar iron or steel.

When in use the support or standard A, is mounted upright, and to brace the slotted end of the member B, a set screw O, may be used, to form a means to attach any other bracing means as P. In this way the handle will be readily accessible to push down upon to cut the metal, thus giving the greatest possible amount of leverage for shearing.

It will be noted that when the handle N is swung to the left, when the parts are arranged as in Fig. 1, the eccentric or cam G will first swing the lower end of the member J to the left and thus cause the cutting edge K to swing upwardly at its free end. Further rotation of the eccentric or cam G will result in the downward movement of member J, thus causing the material to be pinched between the edges D and K. As the eccentric or cam continues to rotate, the lower end of member J will be swung to the right and the edge K will thus swing downwardly at its outer end so as to rock upon the material being cut. Thus the material is subjected to two actions, to wit, the movement of the edge K downwardly toward the edge D and the rocking movement of said edge K about the pivot bolt M. As a result, the material is more readily cut than where it is subjected solely to a pinching action.

What is claimed, is:—

Metal shears including a stationary member having a material receiving slot arranged transversely therein, the lower wall of the slot constituting a cutting member, a bracket secured to said stationary member, a pin mounted for rotation in the member and bracket, a handle for rotating the pin, an eccentric upon the pin and revoluble therewith, said eccentric being located between the stationary member and its bracket, a pivot device extending from the stationary member and adjacent the inner

end of the slot, a movable member mounted to slide and oscillate upon the pivot device and having an opening in which the eccentric is adapted to revolve, said movable
5 member having an inclined cutting edge, inclined downwardly toward the inner end of the stationary cutting edge, said eccentric constituting means, when rotated, for rocking the said inclined cutting edge relative
10 to the stationary cutting edge while draw-

ing the inclined edge toward and past the stationary edge.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK M. LOTTRIDGE.

Witnesses:

CHAS. A. KING,

ALBERT M. YOUNT.

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