

No. 877,764.

PATENTED JAN. 28, 1908.

W. A. GAHLER.
SHEARS FOR CUTTING IRON.
APPLICATION FILED OCT. 31, 1907.

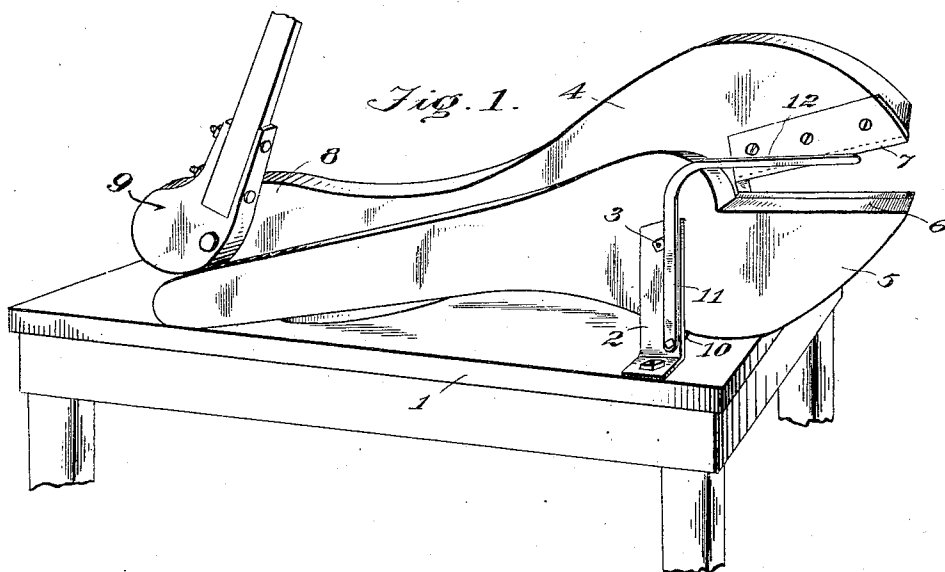


Fig. 2.

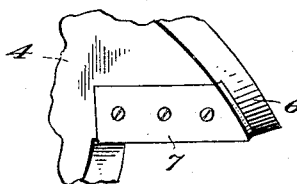
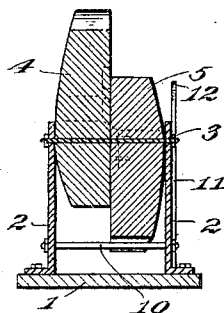


Fig. 3.

Inventor

W. A. Gahler.

Witnesses

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By

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UNITED STATES PATENT OFFICE.

WILLIAM A. GAHLER, OF JANESVILLE, MINNESOTA.

SHEARS FOR CUTTING IRON.

No. 877,764.

Specification of Letters Patent.

Patented Jan. 28, 1908.

Application filed October 31, 1907. Serial No. 400,021.

To all whom it may concern:

Be it known that I, WILLIAM A. GAHLER, citizen of the United States, residing at Janesville, in the county of Waseca and State of Minnesota, have invented certain new and useful Improvements in Shears for Cutting Iron, of which the following is a specification.

This invention contemplates certain new and useful improvements in that type of shears adapted to cut iron or other metal and the object of the invention is a set of shears of this type which may be easily operated by hand to shear metallic plates, bars, bolts and the like.

With this and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions and arrangements of parts that I shall hereinafter fully describe and then point out the novel features thereof in the appended claims.

For a full understanding of the invention and the merits thereof and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a perspective view of my improved shears. Fig. 2 is a transverse sectional view thereof, and Fig. 3 is a detail perspective view of one of the cutting jaws.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings the numeral 1 designates a base board or plate, to which two standards 2 are secured. A bolt 3 is secured between the standards and two bars 4 and 5 are mounted or fulcrumed near one end on said bolt, the other ends of said bars being adapted to rest on the base plate 1. The front ends of these bars constitute the cutting jaws 6, the contiguous faces of which are rabbeted as shown and cutting blades 7 are secured in the said rabbeted portions.

The bar 4 at its rear end is vertically extended as indicated at 8 and a cam lever 9 is pivoted to the inner face of said extended por-

tion, with the cam impinging against the rear end of the bar 5.

A bolt 10 is secured to the standards below the bolt 3 and forms a brace for said standards 2, and also secures a dog 11 to one of them. This dog 11 is formed with an angularly disposed arm 12 which is designed to hold the metal to be sheared, between the cutting jaws 6.

By operating the cam lever 9, the bar 4 is rocked to close the cutting jaws 6. There is a decided mechanical advantage gained by this combination of the cam with the longer arm of the arm 4 and the jaws 6 are closed with sufficient force to easily and quickly shear a thick steel bar.

Having thus described the invention, what I claim is:

1. The hereindescribed shears for cutting metal, comprising a base plate, two standards secured thereto, a bolt secured between the standards, two bars fulcrumed near one end on said bolt and adapted to have their other ends rest on the base plate, the contiguous faces of said bars being rabbeted near their front ends, cutting blades secured in the rabbeted portions, the rear end of one of said bars being vertically extended, and a cam lever pivoted to the extended portion with the cam impinging against the rear end of the other bar as and for the purpose set forth.

2. The herein-described shears comprising a base plate, two standards secured thereto, two bars fulcrumed near one end between said standards and adapted to have their other ends rest on the base plate, cutting blades secured to the contiguous faces of said bars near the front ends thereof, the rear end of one of said bars being upwardly extended, and a cam lever pivoted to the extended portion with the cam impinging against the rear end of the other bar as and for the purpose set forth.

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

WILLIAM A. GAHLER. [L. s.]

Witnesses:

C. H. BAILER,
THEODORE PETERSON.