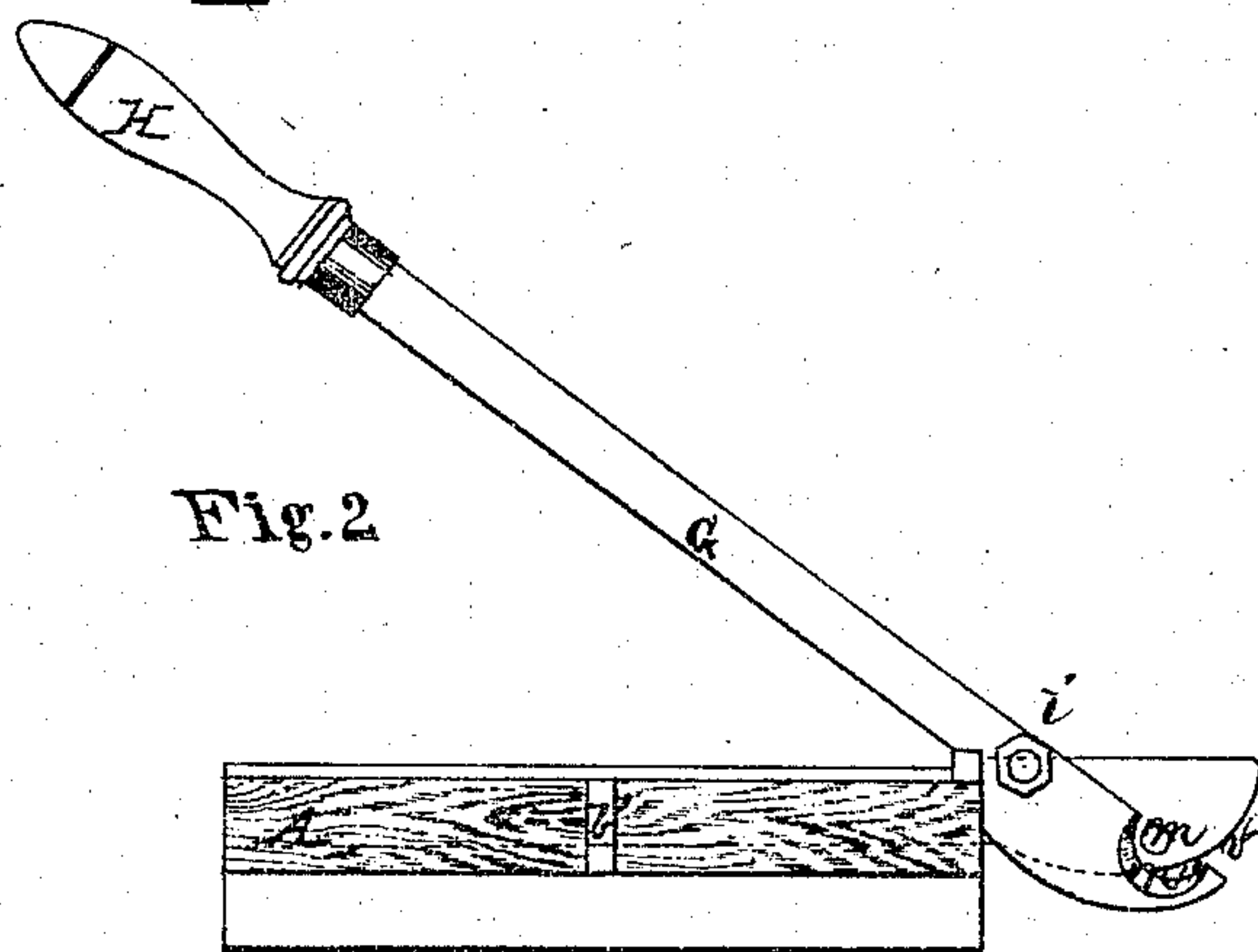
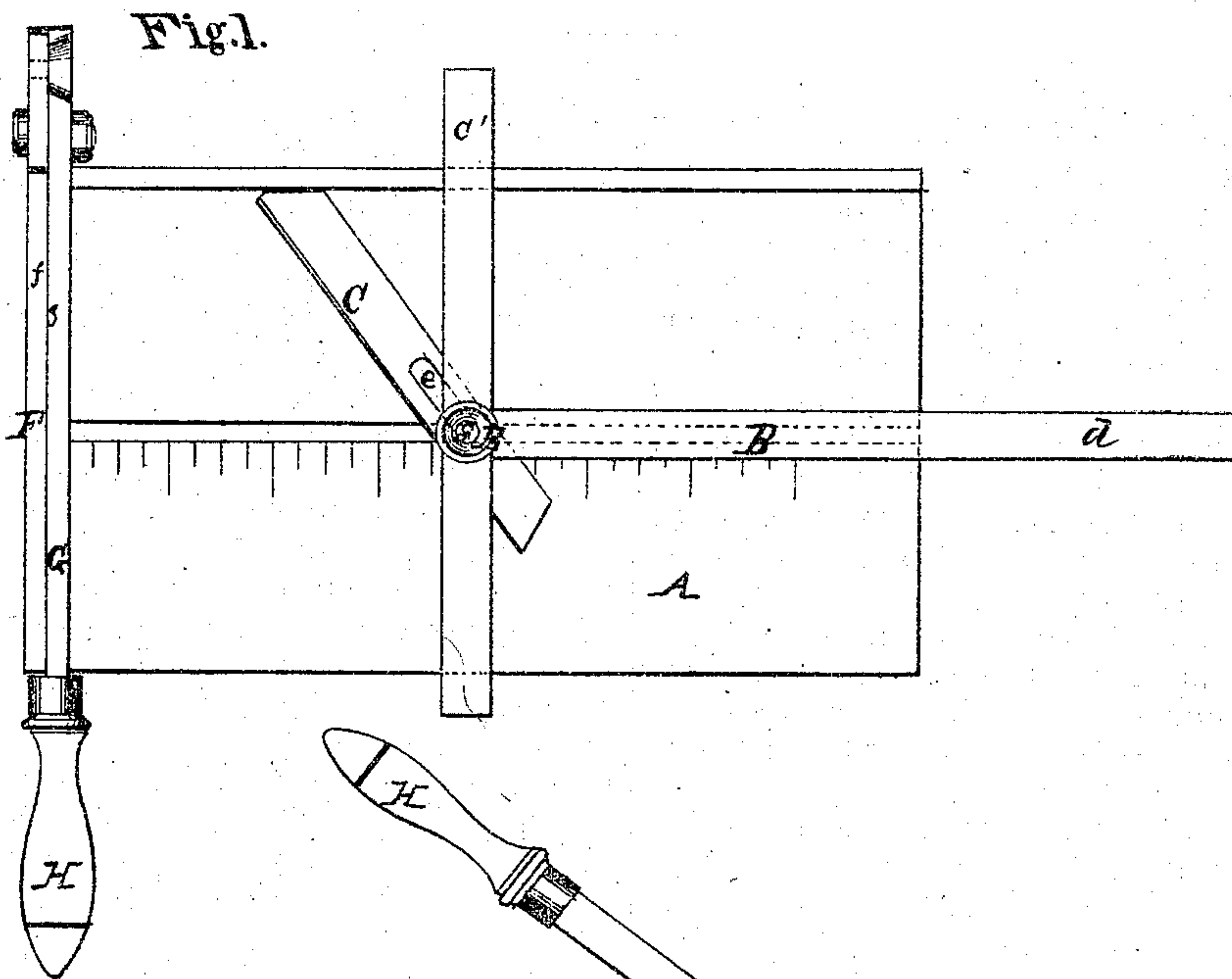


# R.O. WOOD. Cutting Shears.

No. 118,419.

Patented Aug. 22, 1871.



Witnesses

Chas. Kenyon,  
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Inventor.

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# UNITED STATES PATENT OFFICE.

ROSTO ORRIN WOOD, OF NIAGARA FALLS, NEW YORK.

## IMPROVEMENT IN CUTTING-SHEARS.

Specification forming part of Letters Patent No. 118,419, dated August 22, 1871.

*To all whom it may concern:*

Be it known that I, ROSTO ORRIN WOOD, of Niagara Falls, in the county of Niagara and State of New York, have invented a new and valuable Improvement in Cutting-Shears; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my invention. Fig. 2 is a transverse sectional view of the same.

My invention relates to cutting-shears for light metals; and consists in the construction and novel arrangement of devices intended to serve as a valuable and useful apparatus for the purpose hereinafter described.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing.

A represents the bed-piece of my machine, which may be screwed or bolted down to any work-bench or shelf. On one side of this slot a graduated scale is laid off the entire length of the bed-piece. In this bed-piece is a longitudinal slot marked *b'*, as shown on the drawing. B represents a sliding gauge working in slot *b'* to regulate the length of the material to be sheared or cut. This gauge is made in the shape of an ordinary T-square, with cross-head cut out in the center for the reception of the angle-piece marked C, and so arranged that its ends *C'* shall serve as guides moving against the edges of the bed-piece. The bar *d* of the gauge B is made in shape of an H in its cross-section, and thus adapted to slide in the slot *b'* of the bed-piece A. The adjustable piece C has a slot *e* in the center for the purpose of adjusting and regulating it to any necessary angle, which is very often needed in cutting metal, paper, &c. This adjustable piece C is secured in the recess made in the cross-head of the gauge by means of the bolt *f* passing through the slot, and held in place by means of the clamp-nut E. By means of these devices the operator can cut the material to any desired level or length. F represents a stationary shear-blade with a cutting-edge at an angle of

sixty degrees, more or less, which is attached to the front end of the bed-piece A by means of screws or bolts. The movable shear-blade G is pivoted to the lower end of the blade F, as shown on the drawing at *i*. H represents a handle fastened to the upper end of the blade G in the ordinary way. These blades have an enlargement at the pivoted part for strength and durability. This also keeps the blades from springing apart when in use, and in connection with the lateral curve of the blades keeps them in contact throughout the length of the cut. In these enlargements of the blades are openings *m* and *n* for the purpose of cutting small-size wire. The opening *m* in blade F is a small beveled hole in a cutting edge. The convex edge *v* is also a cutting edge. The wire is introduced through the opening *m*, and by lowering the blade G and bringing the concave cutting-recess *n* in contact with the wire it is immediately cut off. The length of the wire to be cut off is regulated by the projection of the sliding gauge B, shown at *K'*.

The operation is as follows: The gauge is arranged in the proper position to determine the length of the piece to be cut off by means of the scale on the bed-piece. If the metal is to be cut on a bevel the angle-piece is adjusted as desired for this purpose. The entire gauge is thus fixed by the clamp-screw. The metal strip is then fed in between the blades with the left hand while the right hand operates the blade. Wire may also be cut between the edges *n* and *v* when it is inconvenient to pass the end of the wire through the cutter-hole *m*.

I claim as my invention—

1. The combination with the slotted bed-piece A having the combined wire and plate-shears *m*, the gauge B' having the extension *C'* and the oblique bar C, substantially as specified.

2. The combination with the bed-piece A, provided with a fixed blade F having cutter-hole *m* and curved edge *v*, of the pivoted blade G provided with the concave edge *n*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses: ROSTO ORRIN WOOD.

WM. CARR,  
JOHN CHRYSLER.