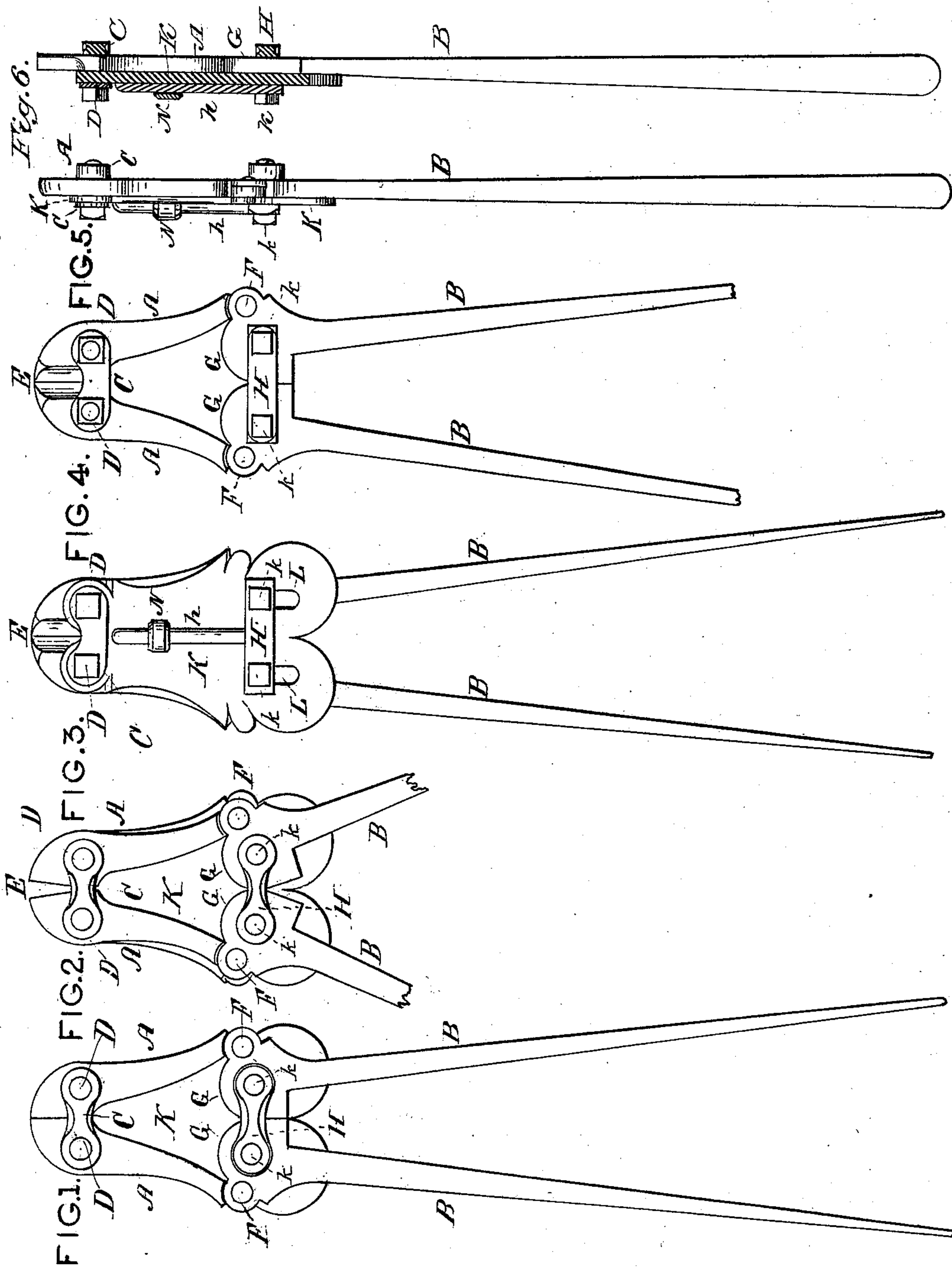


J. H. GEE.  
Shears for Cutting Metal

No. 227,684.

Patented May 18, 1880.



Witnesses:

*F. E. White*  
*Wm. A. Johnson*

Inventor:  
*John H. Gee*  
by *J. R. Nottingham*  
his *Att'y*



# UNITED STATES PATENT OFFICE.

JOHN H. GEE, OF CORTLAND VILLAGE, NEW YORK, ASSIGNOR OF ONE-HALF  
OF HIS RIGHT TO JAMES H. VAN VALEN, OF SAME PLACE.

## SHEARS FOR CUTTING METAL.

SPECIFICATION forming part of Letters Patent No. 227,684, dated May 18, 1880.

Application filed October 10, 1879.

*To all whom it may concern:*

Be it known that I, JOHN H. GEE, of Cortland Village, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Shears or Apparatus for Cutting Metal; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in shears or apparatus for cutting metal; and it consists in the combination of two compound levers suitably fulcrumed, the forward members of said levers carrying or forming the cutters, and the rear members of said levers forming the handles by which the device is operated, the forward and rear levers being connected at their contiguous ends and the rear levers with a suitable brace by means of fulcrum-pins for the purpose, as more fully hereinafter specified.

It further consists in a supporting-plate secured to the compound levers by means of fulcrum-pins, and a sliding guide and brace, also secured to said levers by means of fulcrum-pins, and sliding upon the supporting-plate, the fulcrum-pins passing through longitudinal slots in the said supporting-plates as more fully hereinafter specified.

In the drawings, Figure 1 represents a back elevation of my improved cutting device, showing the levers or cutters in a closed position. Fig. 2 represents a similar view, showing the levers or cutters open to receive the metal to be cut. Fig. 3 represents a front elevation of the device; Fig. 4, a front elevation, showing the levers and braces, the supporting-plate and sliding guide being detached; Fig. 5, a side elevation, and Fig. 6 a longitudinal sectional view taken on a line through the sliding guide and plate, of said invention.

The letters A B indicate the members of two compound levers, the forward members, A, being connected near their forward ends by means of braces C on opposite sides, and the pivotal bolts D passing through said members A. The

forward ends of said members carry or form the cutters E of the device.

The forward members, A, and rear members, B, are pivoted together at their contiguous ends by means of bolts or pins F, and the rear members are provided with bearing-faces G, which work against each other. The said bearing-surfaces start from their pivotal points, forming a portion of a circle, and terminate in a line tangential to the circle, by means of which they form a stop for limiting the movement of the levers when brought together. The said rear members are connected to each other by means of braces H on opposite sides, similar to the braces C which connect the forward members.

In order to render the device more substantial and accurate in its operation, I prefer to combine with it a supporting and guide plate, K, which is provided with two parallel longitudinal slots, L, through which the bolts k, which secure the rear members together, pass, and in which they are adapted to travel back and forth during the working of the device, and with two apertures at its forward ends for the passage of the bolts which secure the braces C to the forward members of the compound lever.

The front brace, H, of the rear members of the compound lever is T form in shape. The longitudinal portion thereof, indicated by h, extends through a guide, N, formed on the supporting and guide plate, whereby the parts are guided and kept in their proper and relative position, insuring accuracy in their mutual operation.

The operation of my invention will be evident from the above description without further explanation.

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

1. A device for cutting metal, consisting of two compound levers, the forward members of which are pivotally connected by means of suitable braces on opposite sides, the rear members being pivotally connected together by similar braces, the respective rear and forward members being pivotally connected together at their contiguous ends, the rear mem-

bers being provided with smooth circular and tangential bearing-surfaces adapted to work in conjunction with each other, substantially as and for the purpose specified.

5 2. The combination of the compound levers, fulcrumed as described, and the T-shaped sliding guide and brace secured to the front of the supporting-plate, and connected to the rear levers by means of pins, to which the brace  
10 connecting said levers is pivoted, substantially as specified.

3. The combination of the compound levers, fulcrumed as described, the supporting-plate secured to the forward levers by means of  
15 bolts, and provided with longitudinal slots, through which pass pins, securing said plate to

the rear levers, and the T-shaped sliding guide and brace, secured to the rear levers by means of the pins passing through the longitudinal slots in the plate, and to the supporting-plate 20 by means of the guide N, whereby the parts are guided and kept in their proper and relative position, thereby insuring accuracy in their mutual operation, substantially as specified.

In testimony that I claim the foregoing as 25 my own I affix my signature in presence of two witnesses.

JOHN H. GEE.

Witnesses:

GEO. C. HUBBARD,  
HUGH DUFFEY.