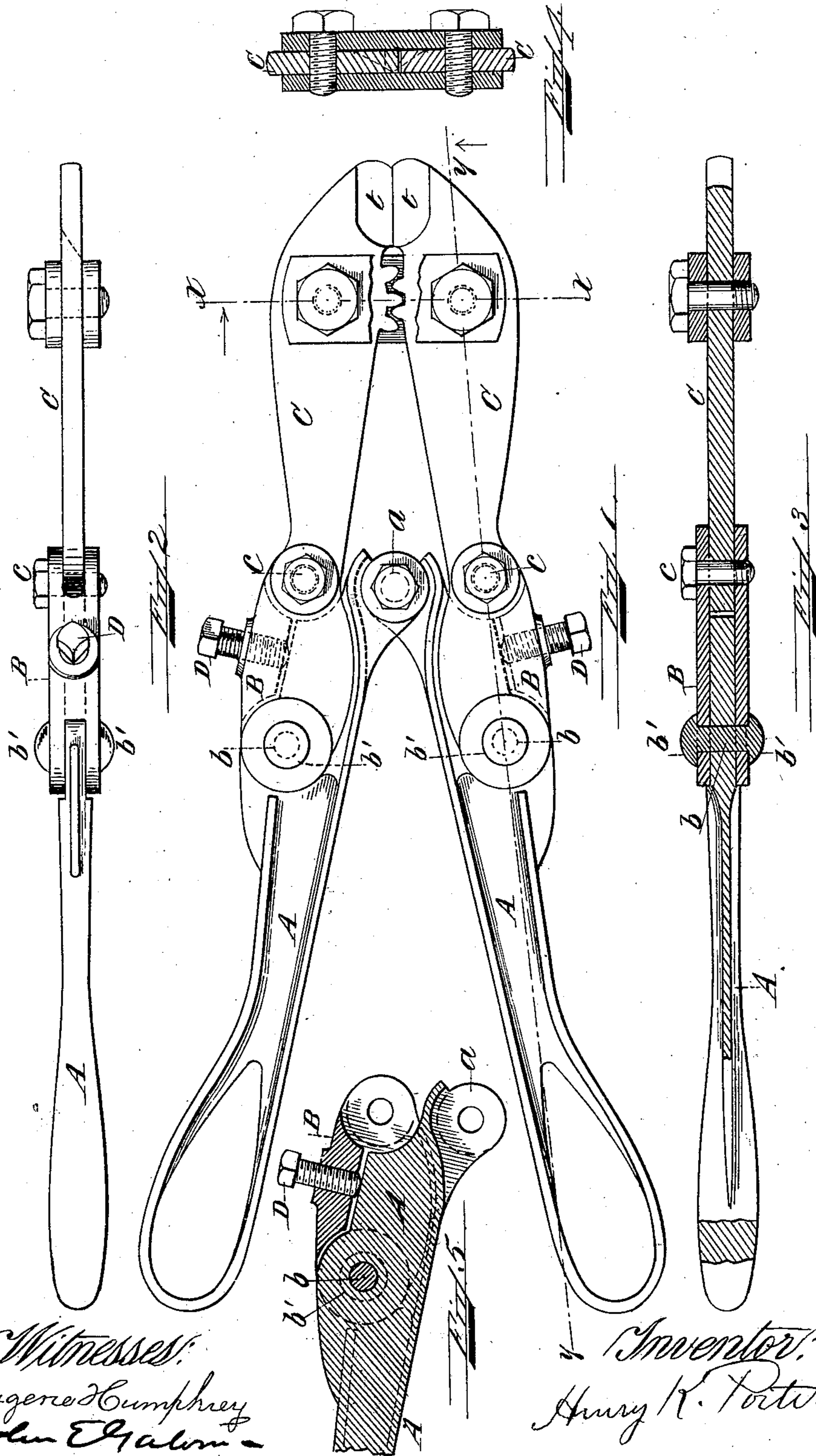


No. 862,279.

PATENTED AUG. 6, 1907.

H. K. PORTER.  
BOLT CLIPPER.

APPLICATION FILED DEC. 19, 1906.



Witnesses:  
Eugene Humphrey  
John E. Galum

Inventor:  
Harry K. Porter

# UNITED STATES PATENT OFFICE.

HENRY K. PORTER, OF CHELSEA, MASSACHUSETTS.

## BOLT-CLIPPER.

No. 862,279.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed December 19, 1906, Serial No. 348,540.

*To all whom it may concern:*

Be it known that I, HENRY K. PORTER, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Bolt-  
5 Clippers, of which the following is a specification.

My present invention relates to an improvement upon the bolt-clipper patented by me October 18, 1892 and numbered 484,670, and has for its object to produce a cutting tool of the general character of the one  
10 described in said patent, but so improved as to effect greater economy in construction, and simplicity and effectiveness in use, as will be described. And I attain said object by the mechanism illustrated in the accompanying drawing, in which—

15 Figure 1 is a top plan of my improved bolt-clipper complete, Fig. 2 is a side or edge view of the same, as seen from the left of Fig. 1, Fig. 3 is a longitudinal section of the same taken substantially on the line  $y-y$ , Fig. 1. Fig. 4 is a cross-section through the cutting  
20 jaws, taken as on line  $x-x$  Fig. 1 and viewed in the direction indicated by the arrow thereon, and Fig. 5 is a detached section of one of the handles, and of the adjusting lever, and its regulating screw, all of which are shown in their proper connections and relations in the  
25 completed view, Fig. 1.

In the specification of my said patent No. 484,670, hereinbefore referred to, certain parts are described as "the adjusting levers B", and shown as pivoted to  
30 "cutting-jaws C", and to "handles A". My present invention relates particularly to those parts and their construction and combinations; and in my present drawings similar parts are shown and hereinafter described, and designated by like reference letters; but  
35 are differently constructed, combined and arranged so that greater economy is gained in construction, and simplicity of adjustment and effectiveness in use, which afford practical advantages.

It is not deemed necessary to particularly describe, in detail, all the general features of the tool which is  
40 well known, but I will so describe the novel changes from the old, and their advantages. As shown, the tool comprises the usual jointed handles A; adjusting-levers B; and fulcrum cutting-jaws C; the handles being pivoted together at  $a$ , and to the adjusting-levers  
45 at  $b$ ; the adjusting-levers being also pivoted to the cutting-jaws at  $c$ . A regulating screw D, is threaded through lever B, and its end bears against the edge of handle A, between the pivots  $b$  and  $c$ , in which arrangement pivot  $b$  is movable with the handle A and the lever  
50 B, conjointly; and pivot  $c$  is movable conjointly with the handle A, lever B, and cutting-jaw C. This ar-

range-ment of adjusting devices and their described joint movements is to serve as the means by which levers B are set outward to compensate for the wearing away and sharpening of the cutting edges  $t t$  of cutters  
55 C, as explained in my former patent with reference to the means therein employed for the same purpose. In my said patent No. 484,670, the adjusting levers were peculiarly constructed and arranged to be held in place by means of pivoted "eye-bolts" attached to  
60 specially provided bosses on the handles. That more complicated and expensive construction I have discarded, and invented a more simple and less costly device to accomplish the purpose in my new tool herein described. I have simplified the construction of the  
65 adjusting-levers B, and the manner of combining them with the handles to which they are attached, doing away entirely with eye-bolts and the necessary bosses for supporting the same, and thereby also greatly facilitating the adjustment of the tool respecting the rela-  
70 tive positions of the cutting edges, doing away with a compound adjustment at two points, the eye-bolts and regulating screw, and simplifying it to a single regulating screw. I am enabled thereby to employ with advantage a shorter adjusting-lever and a larger and more  
75 substantial pivot for attaching the same to the handle; the pivotal rivets  $b$  having enlarged and overlapping flanged-heads  $b'$ , formed hot against the sides of the parts B and A, so riveted together, thus getting the advantage of the shrinkage in cooling, and securing there-  
80 by a very firm and close set of the rivet, sufficient to insure the parts against being casually turned and the adjustment of the cutting edges thereby disturbed; but not so inflexible as to prevent their being practically adjusted by means of the regulating screw D,  
85 provided for that purpose. Thus have I attained the object sought, namely, greater economy in construction, and simplicity of adjustment, and effectiveness in use.

I claim—

In a tool of the character described, the combination with the handle, A, the adjusting lever, B, and the cutting jaw, C, pivotally connected to said adjusting lever, of a pivotal connection between said handle and said adjusting lever the same comprising a headed rivet,  $b$ , which  
95 clamps said handle and said adjusting lever closely together, thereby interposing frictional resistance against the relative turning movement of said parts, and a single adjusting screw adapted to move said parts in opposition to said resistance.

HENRY K. PORTER.

Witnesses:

JOHN E. GALVIN,  
EUGENE HUMPHREY.