

J. N. Wallis,

Bolt Cutter.

N^o 45,659.

Patented Dec. 27, 1864.

Fig. 3.

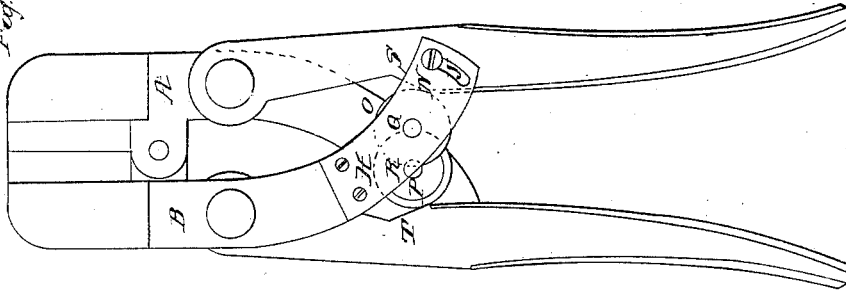


Fig. 2.

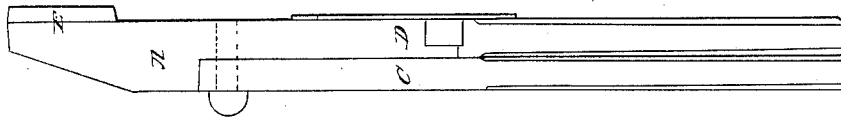
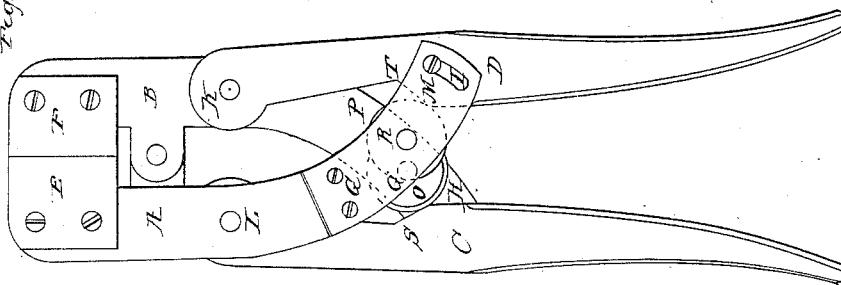


Fig. 1.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN N. WALLIS, OF FLEMING, NEW YORK.

IMPROVED HAND-SHEARS.

Specification forming part of Letters Patent No. **45,659**, dated December 27, 1864.

To all whom it may concern:

Be it known that I, JOHN N. WALLIS, of the town of Fleming, in the county of Cayuga, in the State of New York, have made a new and useful Improvement in Hand Shears or Nippers, and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention consists in the peculiar arrangement of the several parts, to the end that less power or force shall be required to operate the same than in any heretofore in use.

Figure 1 is a plan of said shears. Fig. 2 is an edge view. Fig. 3 shows the opposite side from that shown in Fig. 1.

In Fig. 1, A is one of the front levers. B is the other. C and D are the two rear levers. To the levers A and B are secured pieces of steel, E and F, which form the cutting edges. The opposite ends of said levers are curved inward. The curved pieces G on the lever A, and the piece H of like form on the rear end of the lever B, have slots I and J in each, and said pieces are secured to each of the said levers by means of screws. The levers C and

D are jointed to the levers A and B at K and L. The curved pieces G and H have a slot in the rear end of each, into which the studs M and N are secured. Said studs as they pass through the slots enter into and secure the curved pieces H and G to the lever C and D. Underneath each of said curved pieces G and H are pulleys O and P, having their centers at Q and R. The slots in the rear end of the plates G and H serve to hold the pulleys O and P close against the two inclined planes S and T on the inside of the levers C and D.

And now it will be observed that whenever the rear end of the levers C and D are pulled apart the cutting-edges will be opened, and when made to approach each other the cutting-edges will approach.

Having described the mode of constructing and operating my invention, what I wish to secure by Letters Patent is—

The friction-pulleys O and P, working against the levers C and D, in combination with the slots I and J, or their equivalents, as set forth.

JOHN N. WALLIS.

Witnesses:

A. BABBETT,
A. E. BABBETT.