P. BROADBOOKS.
Mechanical Movement.

No. 203,112. Patented April 30, 1878.

Fig. 1.

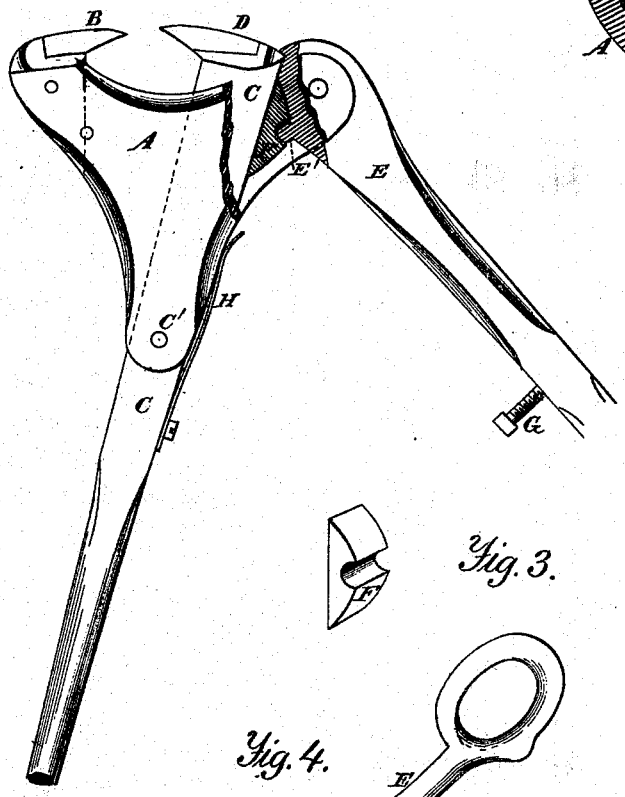


Fig. 2.

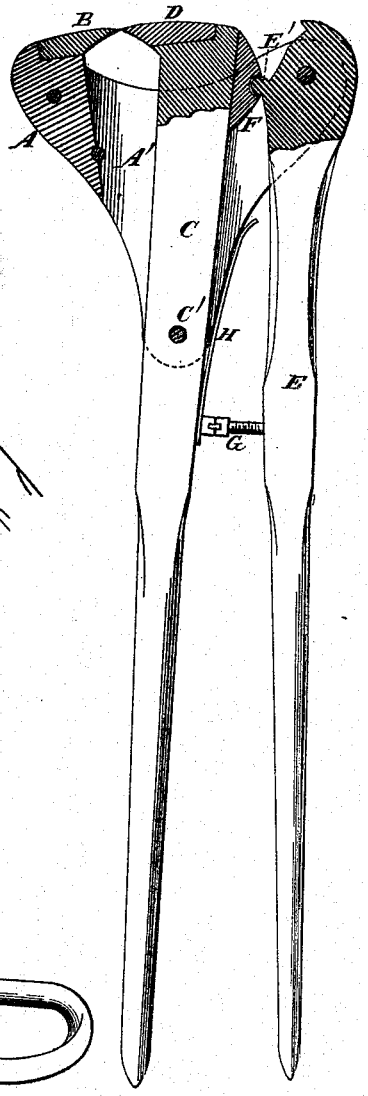
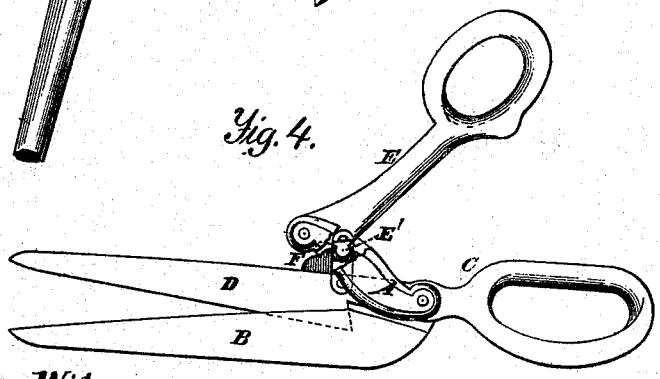


Fig. 3.

Fig. 4.



Witnesses.
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Jno. G. Mason.

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Inventor.
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UNITED STATES PATENT OFFICE.

PETER BROADBOOKS, OF BATAVIA, NEW YORK.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **203,112**, dated April 30, 1878; application filed April 26, 1877.

To all whom it may concern:

Be it known that I, PETER BROADBOOKS, of Batavia, in the county of Genesee, and State of New York, have invented a new and useful Improvement in Mechanical Movements, of which the following is a specification:

I have illustrated this invention as applied to a pair of nippers, also to a pair of shears. It may also be applied to a variety of other implements, such as saw-sets, punches, presses, &c., which need not be specially represented, as I do not limit the invention to any particular application.

The characteristics of the invention will sufficiently appear from the following description and claims.

In the annexed drawings, making a part of this specification, Figure 1 is an elevation representing a pair of nippers operated by my improvement. Fig. 2 is a sectional elevation of the same, showing the jaws closed. Fig. 3 is a perspective view of the sliding wedge, and Fig. 4 an elevation, showing the same movement applied to a pair of shears.

The same letters are employed in all the figures in the indication of identical parts.

A is the frame, formed of two plates, attached by rivets. On one edge the steel-cutter B is attached by means of flanges or dovetailed grooves formed to receive it, and it is secured in place by a set-screw. A recess is formed in the side pieces at A′, extending through the frame and leaving an open channel, through which the fore end of the wire or rod to be cut may be passed. The other and movable jaw is formed by the handle or lever C, pivoted to the side pieces at C′, and, like the latter, formed to receive the corresponding blade D of the nippers. E is the other handle or lever. It is, in like manner, secured between the plates by a pivot, and has on its head, near the pivot, a knuckle, E′, which fits in the corresponding recess in a sliding wedge, F, interposed between the two levers, and held in place by the side plates. As the levers pass from the position shown in Fig. 1 to that shown in Fig. 2, forcing the cutters together, the knuckle moves the wedge toward the end of the levers, thereby bringing the resistance nearer to the pivot which is the fulcrum of lever E, and constantly increasing the power applied to the cutters.

The set-screw G controls the movement of the levers, and thus permits the edges of the cutters to be kept from acting on one another. When the handles are freed, the cut having been accomplished, the spring H attached to lever C, and bearing against the frame A, will force the jaws apart.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the frame A, forming or supporting the fixed jaw B, the lever C, forming or supporting the jaw D, lever E, having on its head the knuckle E′ and the sliding wedge F, substantially as set forth.

2. In combination with the frame A and jaw B, the lever C and jaw D, the lever E with knuckle E′, the sliding wedge for forcing the jaws together with a constantly-increasing force, and the spring H for throwing the jaws apart when released, substantially as set forth.

3. The combination of the frame, the levers, the jaws, and the sliding wedge, for applying a constantly-increasing force to the jaws, and the adjusting-screw G, for regulating the relation of the jaws, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER BROADBOOKS.

Witnesses:
H. B. CONE,
J. E. WILFORD.