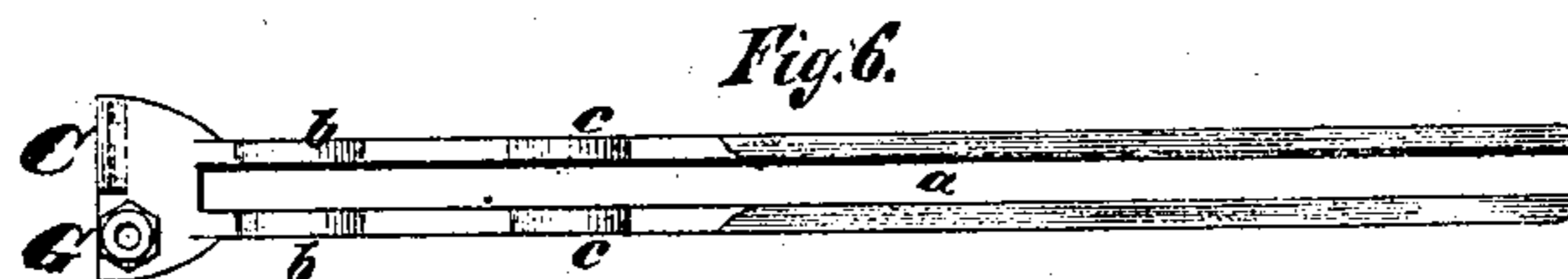
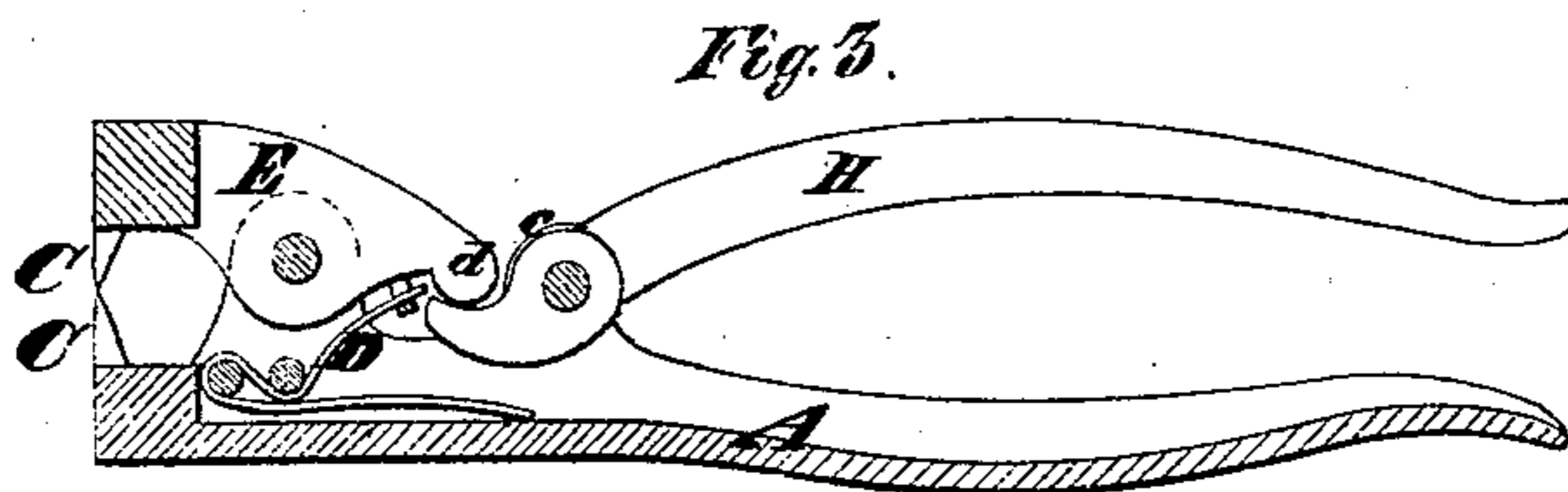
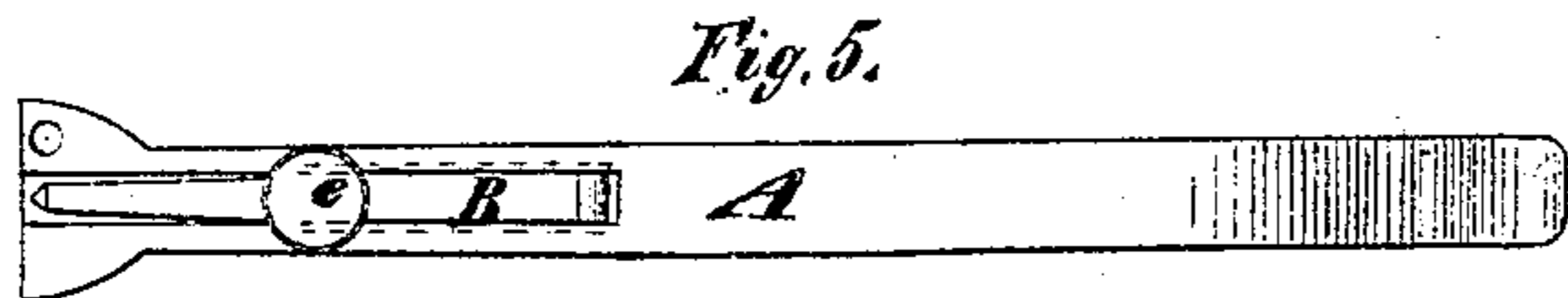
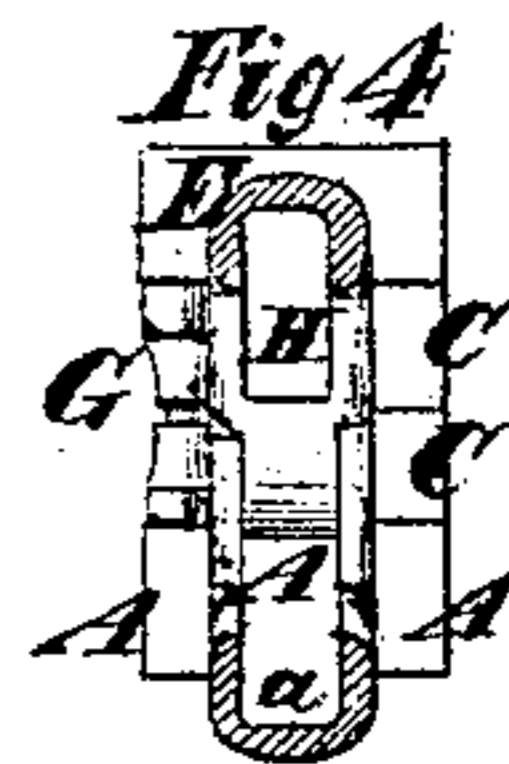
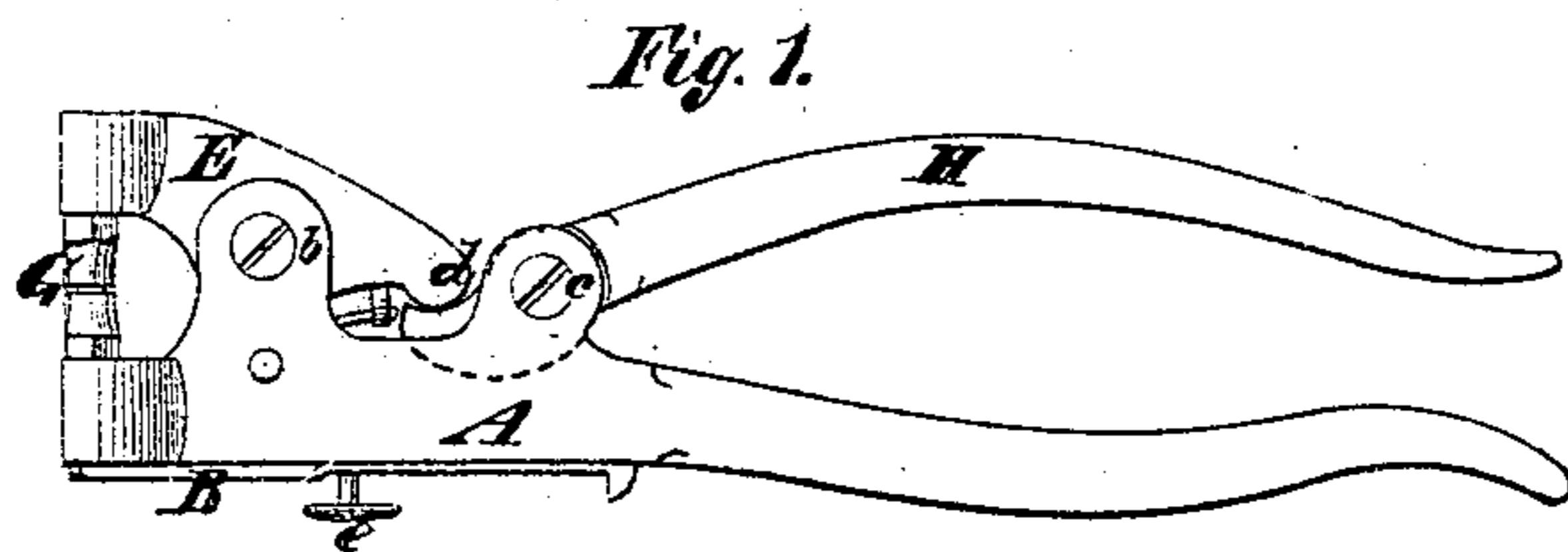
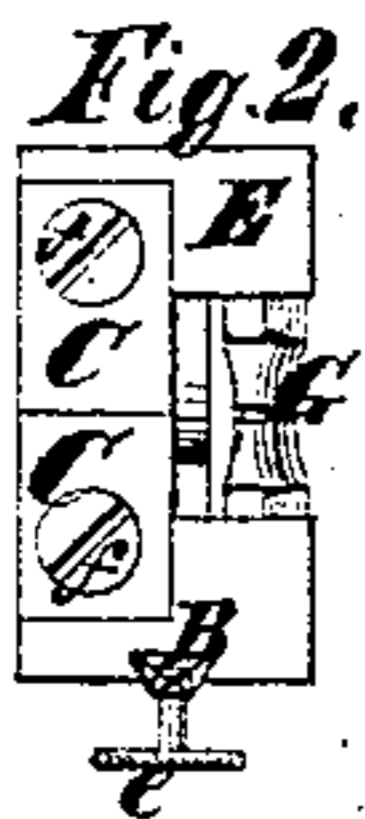


J. O. REILLEY.

Hand-Punches and Cutting-Nippers.

No. 139,079.

Patented May 20, 1873.



Witnesses.

Fred. Hayner
J. D. Driscoll

John O. Reilly

UNITED STATES PATENT OFFICE.

JOHN O. REILLEY, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF
HIS RIGHT TO HENRY M. MARTIN, OF NEW YORK, N. Y.

IMPROVEMENT IN HAND-PUNCHES AND CUTTING-NIPPERS.

Specification forming part of Letters Patent No. **139,079**, dated May 20, 1873; application filed
August 16, 1872.

To all whom it may concern:

Be it known that I, JOHN O. REILLEY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Hand-Punches and Cutting-Nippers, of which the following is a specification:

This invention consists in the arrangement of cutting-nippers and punch relatively to each other in the same tool, whereby the punch is made to form a stop for the nippers to prevent their edges from being injured.

In the accompanying drawing Figure 1 is a side view of my combined hand-punch and cutting-nippers. Fig. 2 is an end of the same. Fig. 3 is a longitudinal section thereof. Fig. 4 is a transverse section through the handles of the same. Fig. 5 is a back view of the instrument; and Fig. 6 is a view of the inner side of the stationary jaw.

Similar letters of reference indicate corresponding parts in all the figures.

A is the stationary jaw of the implement, which is the same width throughout its length except at the forward end, where it is enlarged to accommodate the punch and nippers; and, except on this enlarged portion, throughout its entire length, there is in its inner side a cavity, *a*. On the forward portion of the sides of this cavity the bearings *b b*, for the reception of the movable jaw pivot, are formed, and in rear of these are formed bearings *c c* for the pivot of the handle of said jaw. In the back of the jaw A there is a reamer, B, which is dovetailed into a groove therein, and is secured in place by means of a set-screw, *e*, which screws through the reamer and impinges against the bottom of the groove in which it fits, thus causing the reamer to bind within the groove. The movable jaw E

of the instrument is pivoted to the bearings *b b*, and has on its inner end a rounded projection, *d*, under which the forward end of the handle lever H bears. One end of a spring, D, which is secured to the stationary jaw, is attached to the rear end of the movable jaw for the purpose of throwing it open. From the fulcrum-pivot to the inner end this handle has a longitudinal cavity formed in it like the cavity in the handle of the stationary jaw. The cutters *c c* are fitted into rabbets in the enlarged forward end of the jaws, and occupy about half their width. They are secured in place by screws *f f* passing through them and screwing into the ends of the jaws. The punch G is arranged at the side of the jaws opposite the cutters; the female die being secured to the stationary jaw of the instrument, and the male die to its movable jaw. By means of so arranging the cutters and punch, the shoulder on the male die, or punch proper, coming in contact with the top of the female die, forms a stop to prevent the cutter-knives from coming together too forcibly and being injured. By simply unscrewing the set-screw *c* the reamer B may be adjusted to project beyond the end of the jaw in which it is arranged, and when secured by its set-screw is ready for use.

Claim.

The arrangement of the cutting-nippers and punch, relatively to each other, whereby the latter forms a stop for the former, substantially as and for the purpose set forth.

JOHN O. REILLEY.

Witnesses:

FRED. HAYNES,
A. B. MCNEIL.