(No Model.)

C. F. BOWMAN.

CUTTING NIPPERS

No. 355,373.

Patented Jan. 4, 1887.

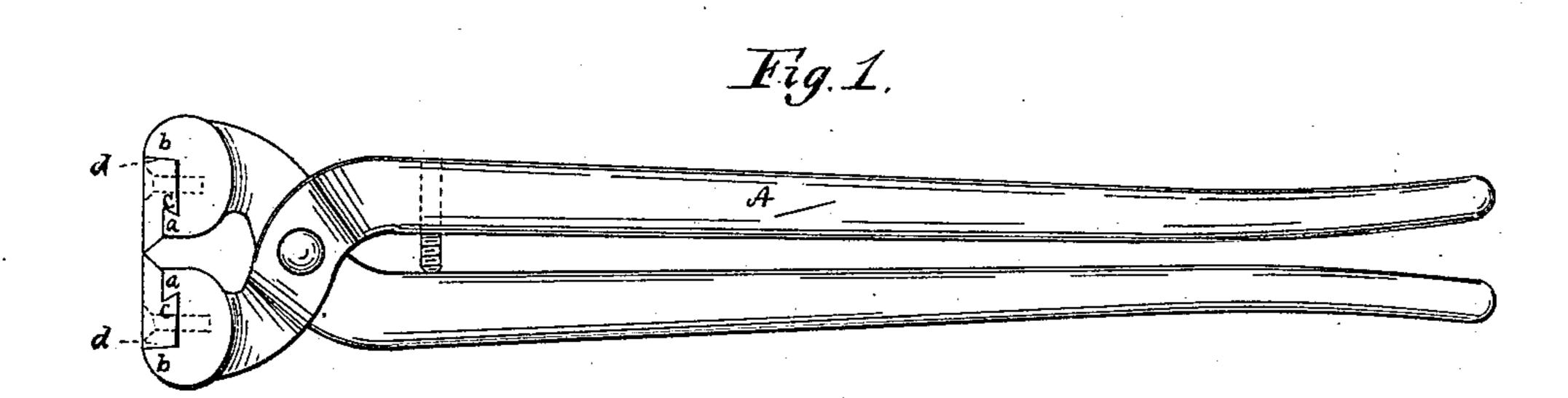
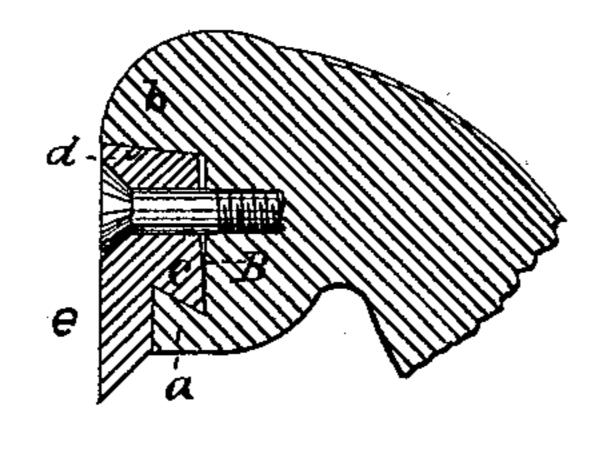


Fig. 2



Witnesses:

J. Edward Ludington James Torn Inventor Charles & Bowman Ly Geo, Verry Edthy

## United States Patent Office.

CHARLES F. BOWMAN, OF NEW HAVEN, CONNECTICUT.

## CUTTING-NIPPERS.

SPECIFICATION forming part of Letters Patent No. 355,373, dated January 4, 1887.

Application filed June 30, 1886. Serial No. 206,696. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BOWMAN, a citizen of the United States, residing at New Haven, in the county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Cutting-Nippers, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a view of a pair of cutting-nippers with my improved detachable cuttingedges. Fig. 2 is an enlarged sectional view of one of the jaws and of a cutting-edge, and shows the screw holding the parts together.

My invention relates to that class of cuttingnippers which have detachable cutting edges, the object being improved means for holding the cutting-edges to the jaws.

The invention consists in making a recess in the jaw, the front side of which is undercut, and the back side of which is slightly inclined, and in making the cutting-edge to fit into the same, as is hereinafter more fully described.

To enable others to make and use my im-25 proved nippers, I will give a description of the same in detail.

The nippers A are of the usual form and construction, except the jaws. The jaws have transverse grooves or recesses B, the front side, a, of which is lower or shorter than the back side by the thickness of the part e of the cutting-edge, and is undercut or dovetailed. The back side, b, of the recess forms an angle with the bottom of the same greater than a right angle, so that as the cutting-edge is forced into the recess it is forced forward and into the under-cut in the front part, a. The cutting-edges have the parts e extending over and beyond the front side, a, of the recess 40 and are made to fit into the recess B. In

order to make the cutting edges sit firmly in the recess and be perfectly rigid, I make the parts in the recess a little longer than the recess, so that the rear ends will not touch the bottom of the recess, as shown in Fig. 2. The 45 cutting edges are fastened to the jaws by screws.

The construction may be somewhat varied without departing from the spirit of my invention. For example, the under-cut may be 50 in the cutting-edge and not in the jaw, and the jaw be made to correspond therewith.

Constructed as described, as the cuttingedges move in a circle the pressure of the edges against the wire to be cut will tend to raise the 55 part c of the cutting-edge against the undercut in the front part, a, of the recess, and the rear part of the cutting-edge downward against the inclined back part of the recess, so that the greater the pressure on the cutting- 60 edges the tighter they will be held in the jaws.

Having described my improved nippers, what I claim as new, and desire to secure by Letters Patent, is—

A nipper-jaw, in combination with a de-65 tachable cutting edge and a fastening device for holding them together, the jaw having a recess, the front side of which is lowest and undercut, the back side of which forms an angle with the bottom of the recess greater 70 than a right angle, the cutting-edge extending over and beyond the front side of the recess, and adapted to fit into it, as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES F. BOWMAN.

Witnesses:

GEORGE TERRY, JAMES TERRY.