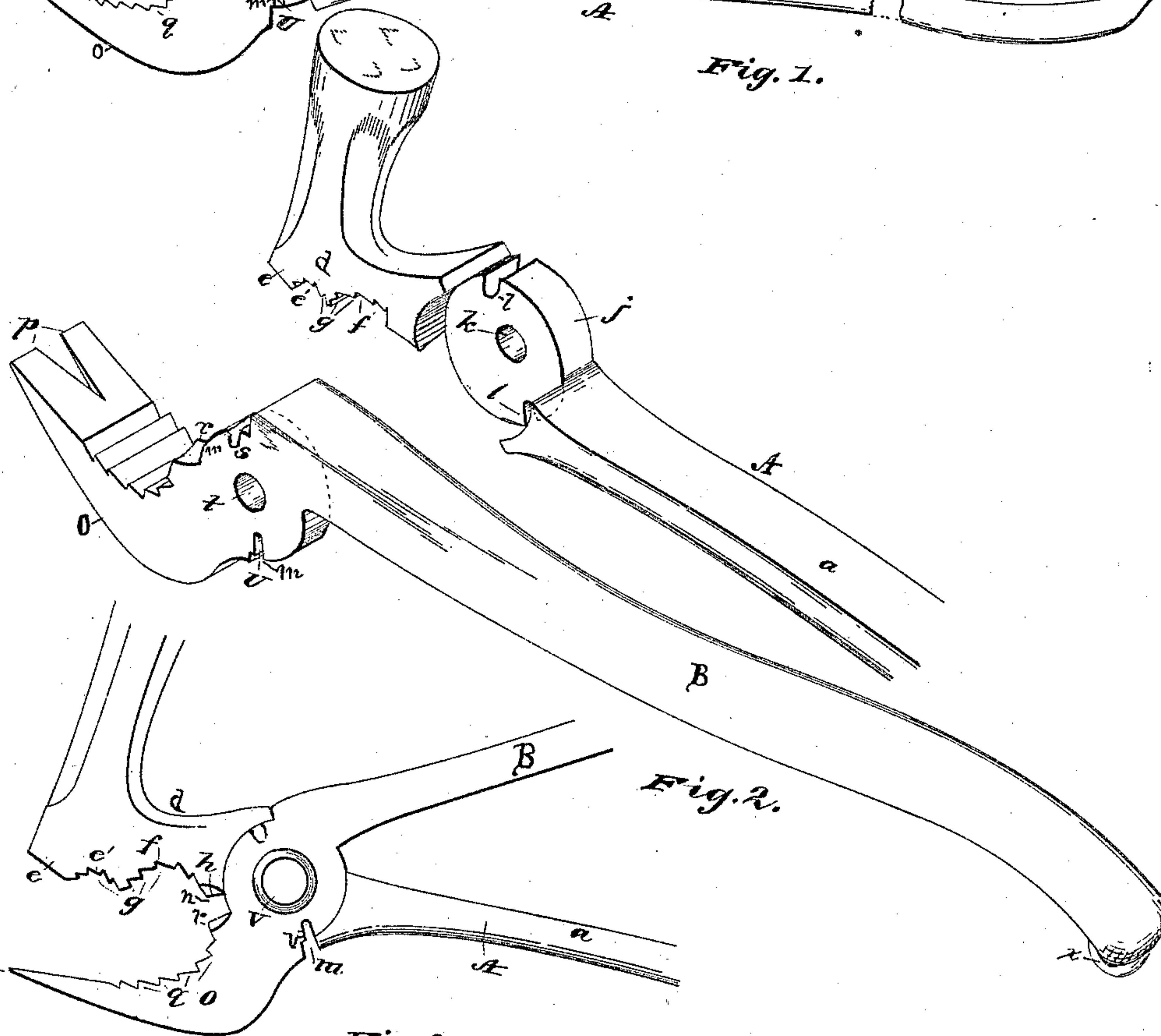
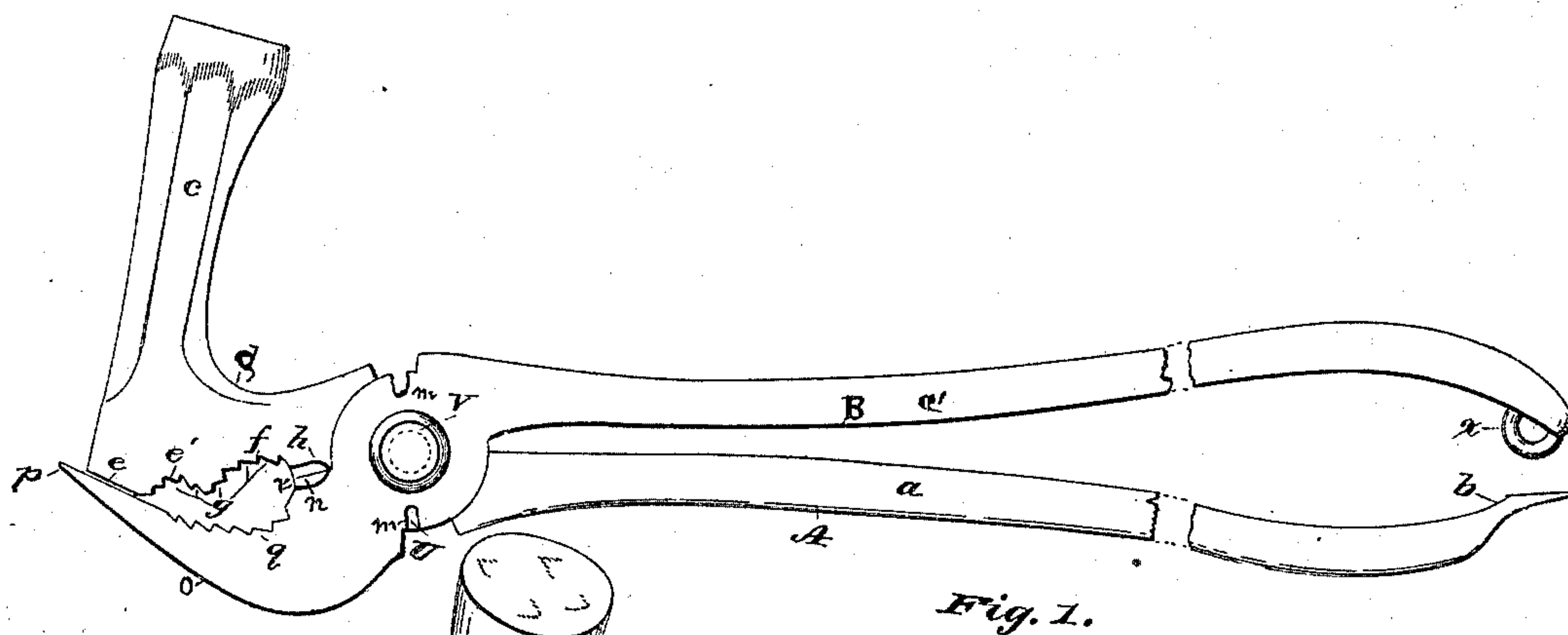


(No Model.)

E. D. ELY.  
COMBINATION TOOL.

No. 413,180.

Patented Oct. 22, 1889.



Witnesses

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# UNITED STATES PATENT OFFICE.

ELISHA D. ELY, OF CANTON, OHIO.

## COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 413,180, dated October 22, 1889.

Application filed May 13, 1889. Serial No. 310,547. (No model.)

*To all whom it may concern:*

Be it known that I, ELISHA D. ELY, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have invented a new and useful Improvement in Combination-Tools, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a new article of manufacture; and it consists in providing a tool comprising a tack-hammer, a claw, a pipe-tong, a wire-cutter, and a screw-driver.

With these ends in view my invention consists in certain features of construction and combination of parts, as hereinafter described, and set forth in the claim.

Figure 1 of the accompanying drawings is a side elevation of a tool, illustrating my invention. Fig. 2 is a perspective of the jaws and handles apart to show detail; and Fig. 3 is a side elevation of a portion of the tool, showing the wire-cutters and jaws open.

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

The tool, as represented in the drawings, may be made of any suitable metal, such as malleable cast-iron or cast-steel, or, if preferred, may be drop-forged from bars of steel or iron.

The tool is formed of two portions A and B, substantially as shown in the drawings, the former having a handle portion *a*, on the inner end of which is provided a screw-driver *b*, and at its outer end portion a hammer *c*, integral with said handle, and a jaw *d*, said jaw having on its inner face a flat portion, as *e*, circular depressions, as *e'* and *f*, of different diameters, each of said depressions provided with a series of teeth, as *g*, and a wire-cutter, as *h*. A circular disk portion *j* is provided, having a central perforation *k* and a notch or groove *l* in its upper and lower portions to form wire-cutters *m*, as shown in Fig. 3. Portion B consisting of a handle portion *a'*, provided at its inner end with a ring *x*, by which the tool may be hung up when not in use, the outer end portion is provided with a curved jaw *o*, having at its outer end portion a claw *p*, and on the inner face of the jaw a series of teeth *g* and a cutter *r* to cor-

respond with a similar cutter *h* on a portion A, by which a wire-cutter *n* is formed between the jaws *d* and *o*. A disk *s* is also provided in said portion B, similar to that described in portion A as having a central perforation *t* and a notch *u* in its upper and lower portions corresponding with the notches *l* in the disk *j* of portion A, forming wire-cutters *m*. The parts are secured together by a rivet *v*, thus forming a tack-puller and hammer, a pipe-wrench and nut-cracker, and wire-cutters *n* and *m*, as well as a screw-driver, the notches *l* and *u* to coincide, as shown in Fig. 3, when the handle portions are thrown apart, and pass by each other as the handles are brought together, the inner edges forming the wire-cutter *m*, by which a wire placed in the notch may be severed.

To set a tack near the wall or a corner, or where it cannot be set with the fingers, it is placed in the prong *p*, the head resting against the face *e* of the hammer, by which the tack may be struck through the carpet or other article into the floor and then driven in with the pole of the hammer *c*.

The two sizes of pipe-tongs *e'* and *f* will be found especially adapted to remove or tighten gas-burners, the smaller *e'* to remove the burner-tips, which frequently become fast in the body portion of the burner.

Having thus fully explained the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is—

A combination-tool consisting of the following elements, namely: the members A and B, pivoted together, the member A provided with a handle *a*, terminating at one end in a screw-driver *b*, and provided at its opposite end with recesses of different diameters, the walls of each provided with teeth, a hammer portion *c*, and a hammer-pole *c*, the other member provided with a curved recess provided with teeth and with a tack-claw, the two members provided with opposite notches to produce wire-cutters *m m* and *n*, substantially as set forth.

In testimony whereof I have hereunto set my hand this 29th day of April, A. D. 1889.

ELISHA D. ELY.

Witnesses:

W. K. MILLER,  
CHAS. R. MILLER.