

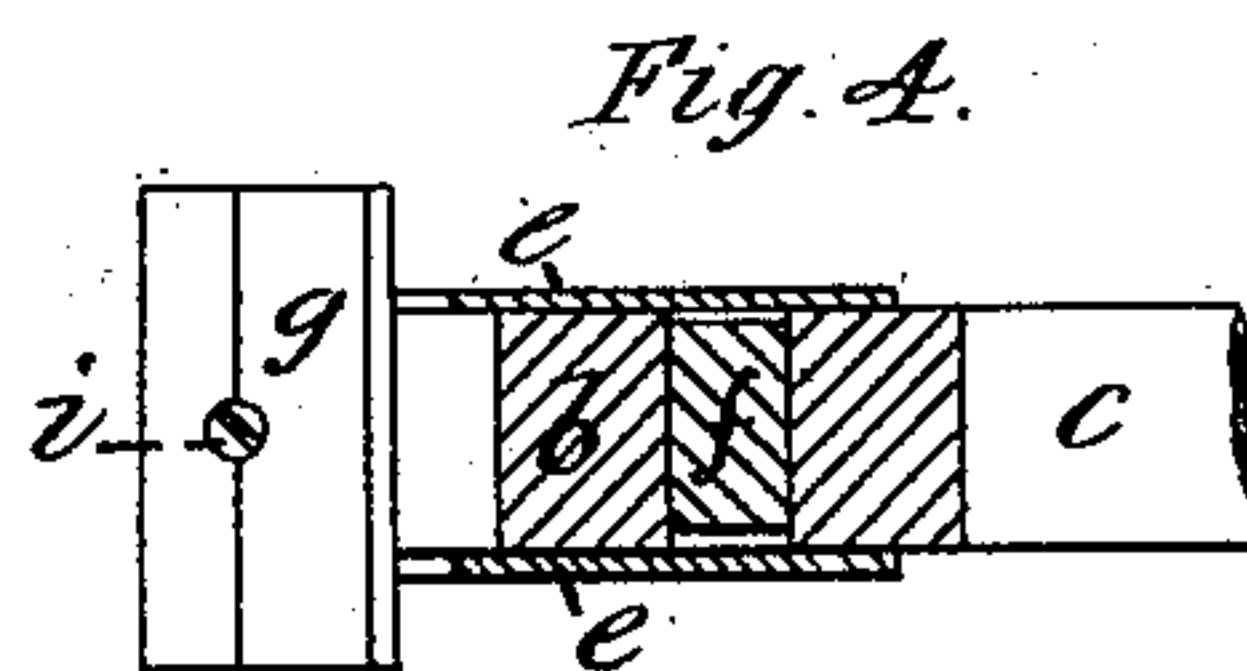
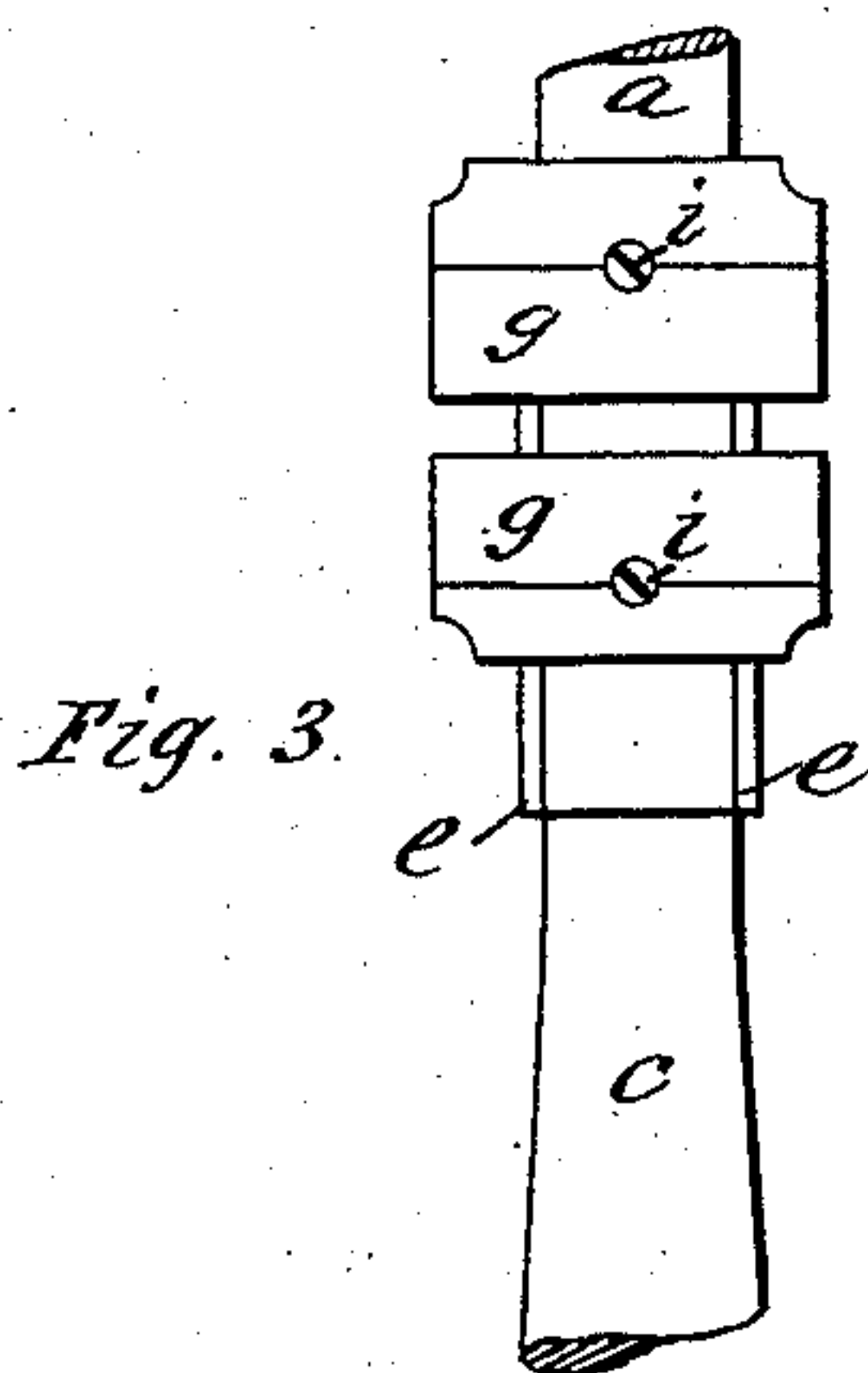
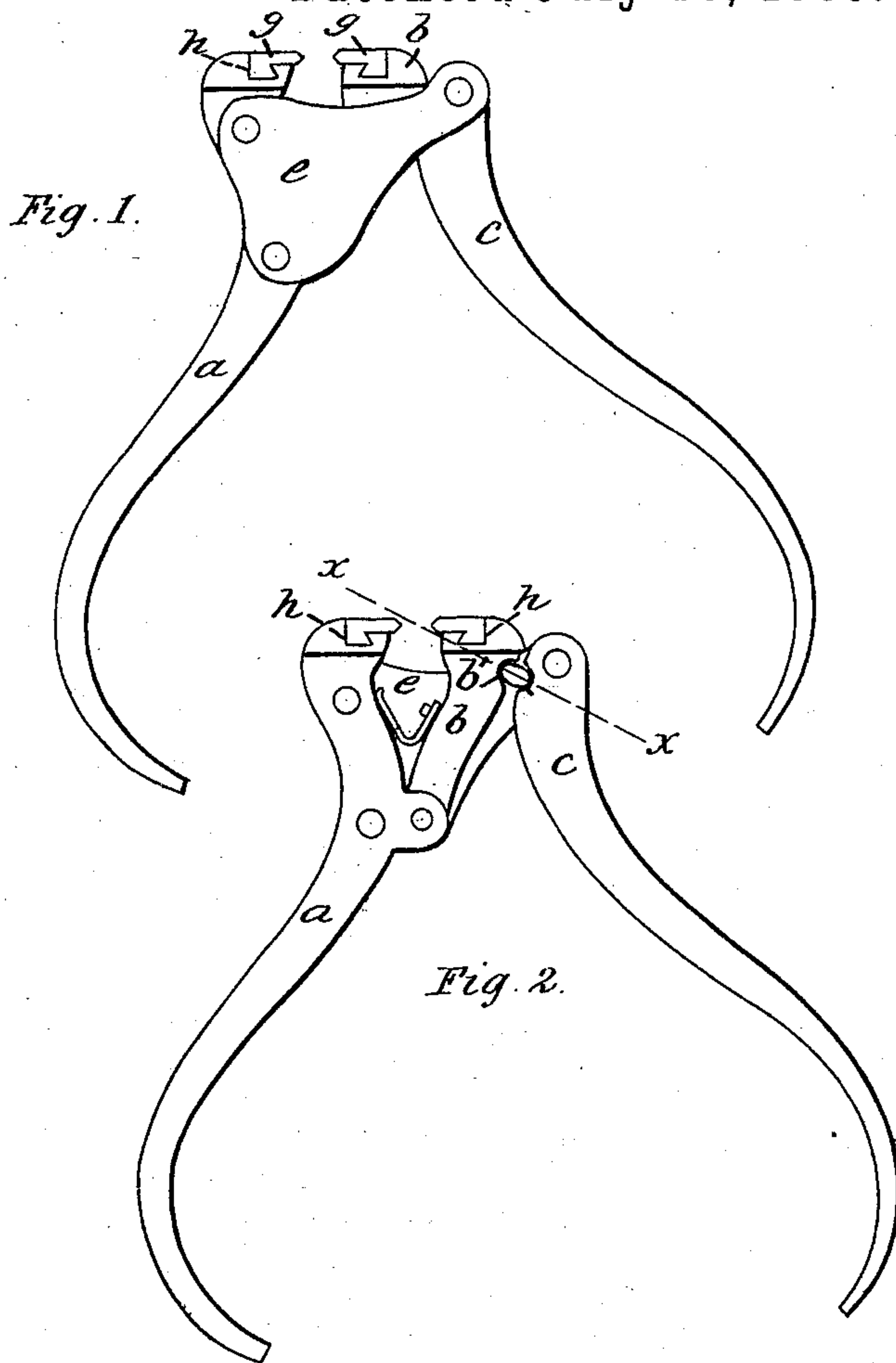
(No Model.)

T. D. HOTCHKISS.

CUTTING PLIERS.

No. 280,825.

Patented July 10, 1883.



Witnesses:
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UNITED STATES PATENT OFFICE.

TIMOTHY D. HOTCHKISS, OF HIGGANUM, CONNECTICUT.

CUTTING-PLIERS.

SPECIFICATION forming part of Letters Patent No. 280,825, dated July 10, 1883.

Application filed June 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY D. HOTCHKISS, of Higganum, in the county of Middlesex and State of Connecticut, have invented a certain new and useful Improvement in Cutting-Pliers, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a side view. Fig. 2 is a view similar to Fig. 1, with a side plate removed, so as to show what is behind it. Fig. 3 is a top view. Fig. 4 is a view in section on the plane *x x*.

My improvement mainly pertains to that class of cutting-pliers having two lever-handles with a short lever intermediate between them; and it consists in the combinations of parts set out in the claims at the end of this description.

The letter *a* denotes a lever-handle, the upper end of which carries one of the detachable cutters.

The letter *b* denotes a short lever pivoted to the lever-handle *a*, intermediate between that lever-handle and the other lever-handle, *c*. A short lever, *b*, carries the other of the detachable cutters, and the spring *d* tends to press the levers *a* and *b* apart.

The letters *e e* denote two side plates, which are attached to the sides of the levers *a* and *c*, the latter being pivoted therein.

The short lever *b* has in what may be called its "outer side" a socket, *b'*, for the reception of the rounded side of the rocking shaft *f*.

The lever-handle *c* has in what may be called its "inner side" a U-shaped socket, *c'*, for the reception of the U-shaped side of the rocking shaft.

It is obvious that by pressing the lower ends of the two lever-handles together the two cut-

ters will be caused to meet, and that on releasing such pressure the spring will throw the two cutters apart. The improvement in this regard consists in the use of the rocking shaft *f* as an intermediate between the short lever *b* and the lever *c*, these two levers being appropriately socketed for the reception of this rocking shaft.

I am aware that the general combination of these three levers is old; but the particular combination by which the movements of the levers *b* and *c* are connected is new.

The letters *g g* denote the detachable and interchangeable cutters. The heads of the levers *a* and *b* are furnished with the recess *h*, having one side at a right angle to the bottom of the recess and the other side at an acute angle to the bottom of the recess.

The screw *i* may be used to keep the cutters from accidental displacement.

I claim as my invention—

1. In combination, the handle-lever *a*, the intermediate lever, *b*, having the socket *b'*, the handle-lever *c*, having the socket *c'*, the rocking shaft *f*, and the side plates, *e e*, all substantially as described.

2. In combination, the lever *a*, having recess *h* and cutter *g*, intermediate lever, *b*, having socket *b'*, recess *h*, and cutter *g*, lever *c*, having socket *c'*, rocking shaft *f*, spring *d*, and side plates, *e e*, all substantially as described.

3. In combination, cutter-levers *a*, *b*, and *c*, spring *d*, plates *e*, and rocking shaft or wedge *f*, working in U-shaped sockets in the levers *b* and *c*, all substantially as described.

TIMOTHY D. HOTCHKISS.

Witnesses:

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