

No. 854,433.

PATENTED MAY 21, 1907.

H. B. ROWAN.
JEWELER'S CUTTING PLIERS.
APPLICATION FILED NOV. 30, 1906.

Fig. 1

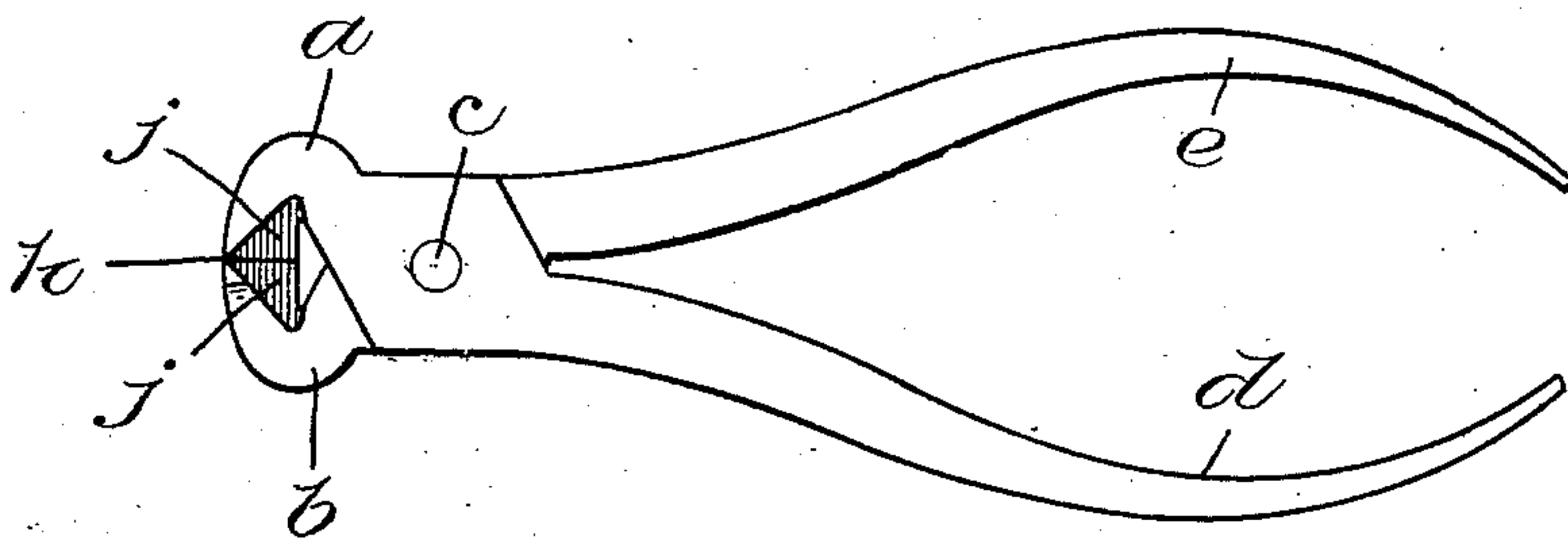


Fig. 2

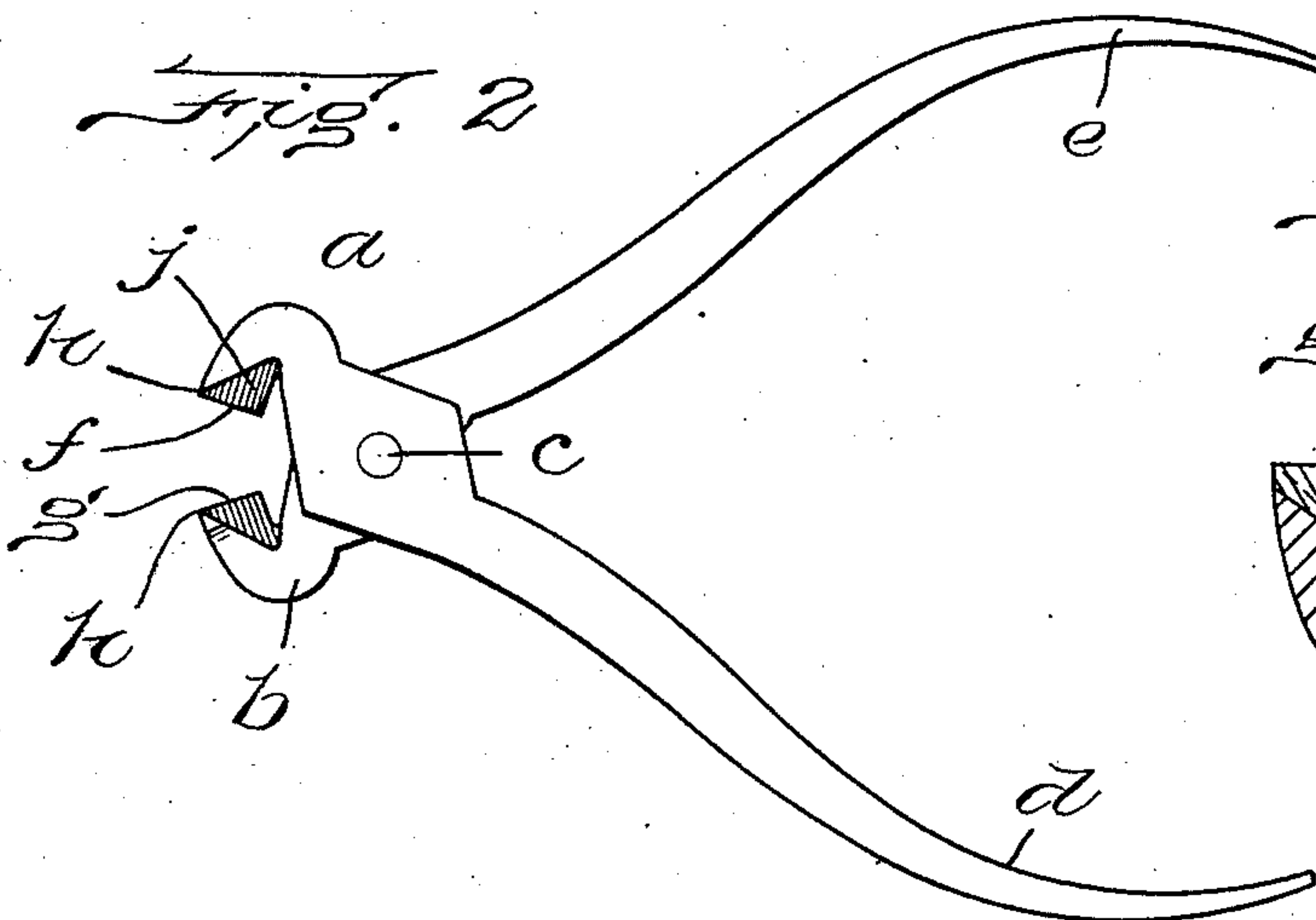


Fig. 4

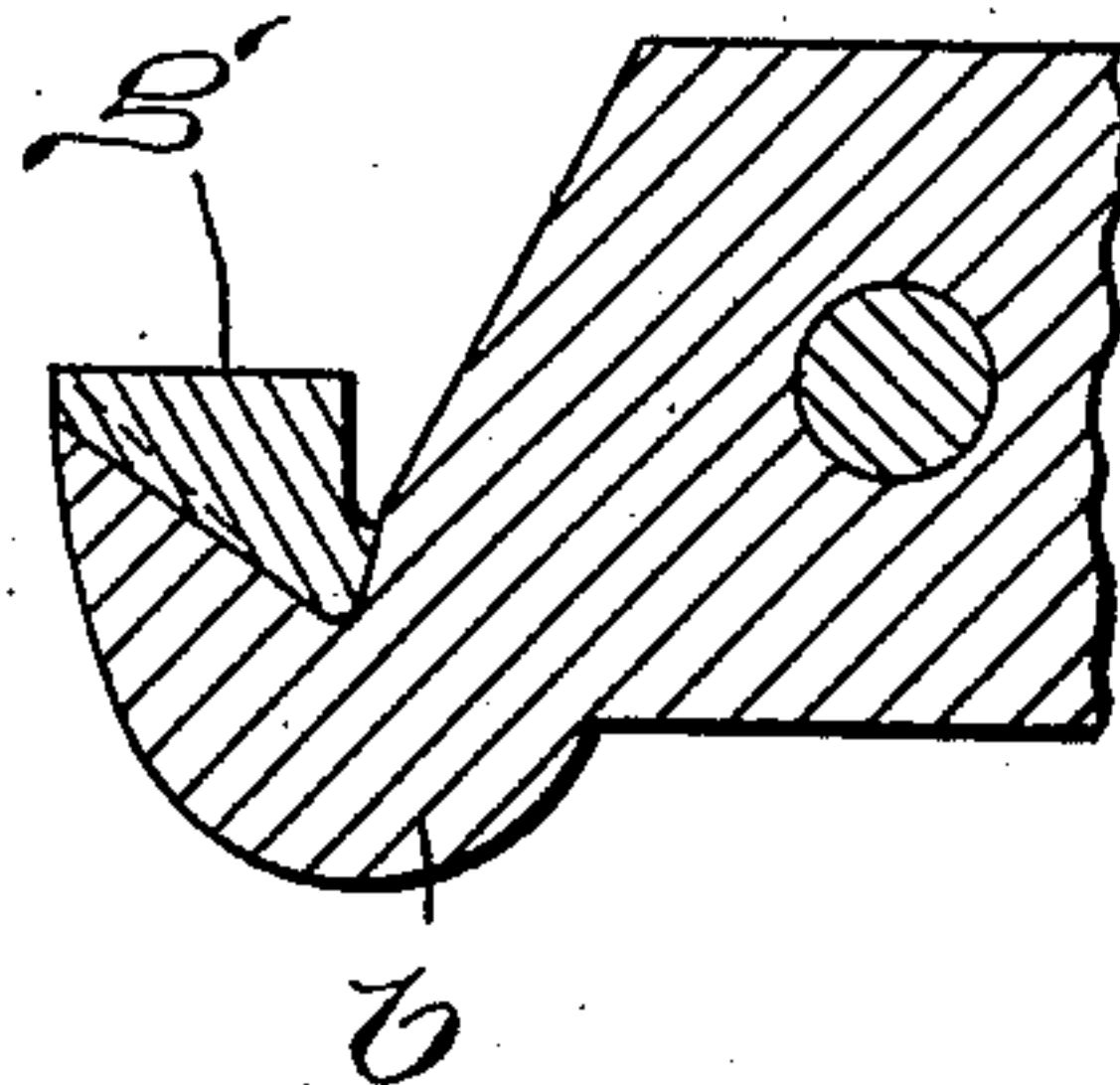
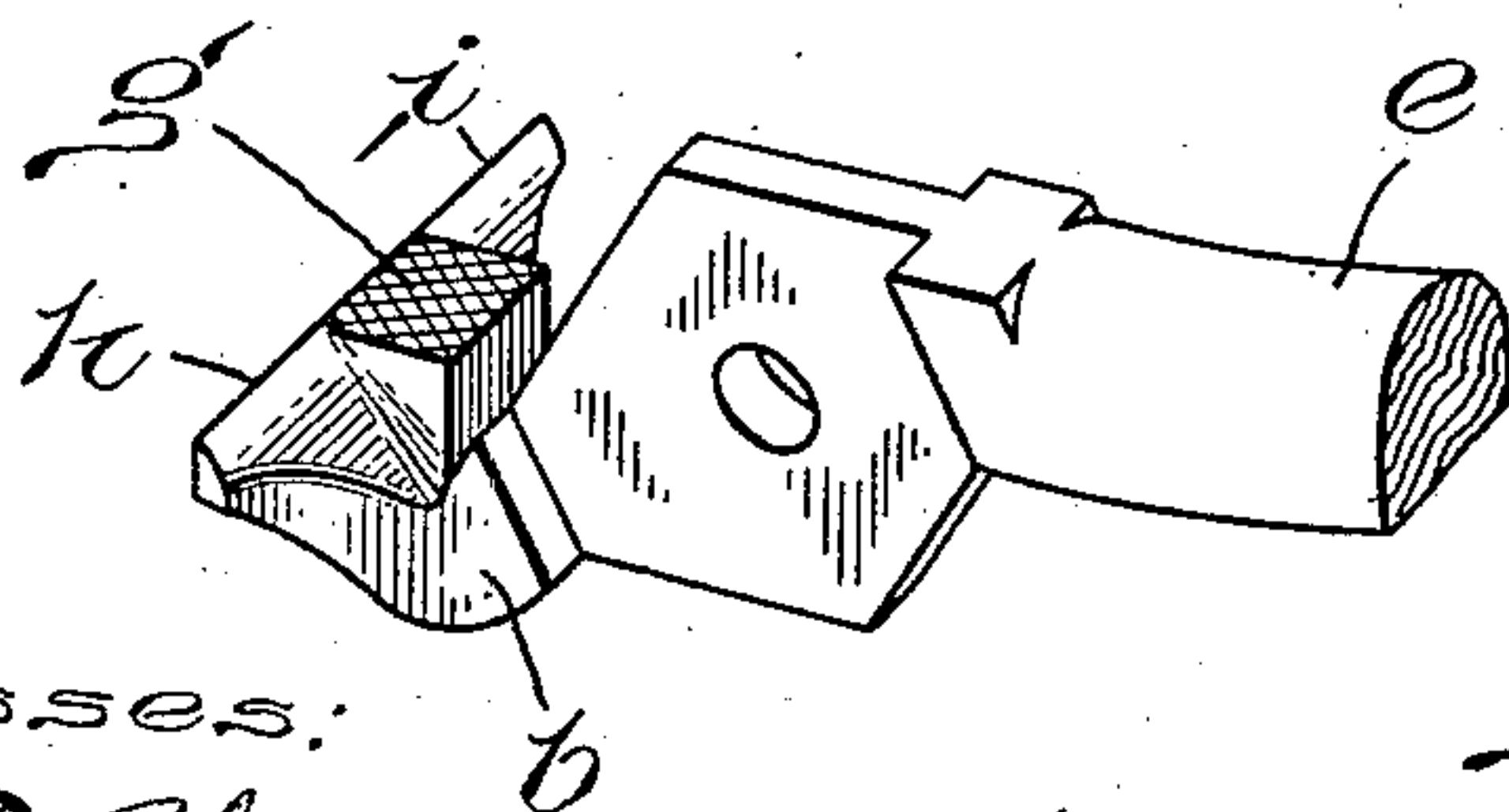


Fig. 3



Witnesses:
Walter P. Abell
A. C. Patigan

In Witness Whereof
Harry Bradley Rowan
by High Brown Lundy May
Attorneys.

UNITED STATES PATENT OFFICE.

HARRY BRADLEY ROWAN, OF NORTH ATTLEBORO, MASSACHUSETTS.

JEWELER'S CUTTING-PLIERS.

No. 854,433.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed November 30, 1906. Serial No. 345,693.

To all whom it may concern:

Be it known that I, HARRY BRADLEY ROWAN, of North Attleboro, in the county of Bristol and State of Massachusetts, have
5 invented certain new and useful Improvements in Jewelers' Cutting-Pliers, of which the following is a specification.

This invention relates to pliers, which may be used as cutters, for jewelers' or silver-smiths' use. Its object is to improve the
10 construction of such pliers so that the same can be used with the minimum shifting of position both for gripping and cutting wire or other forms of metal. In order to accom-
15 plish this object I provide the jaws of the pliers with gripping members having extended surfaces wherewith to grasp the work without cutting the same, and on either or both sides of the gripping members I form
20 the jaws with cutting edges extending laterally. Thereby the tool may be changed from a gripper to a cutter by simply moving it a minute distance toward one side or the other.

The preferred embodiment of my invention is shown in Figure 1 which represents
25 pliers in elevation with their jaws closed. Fig. 2 represents a similar view, showing the jaws separated. Fig. 3 represents a perspective view of one of the jaws disconnected from the
30 other. Fig. 4 represents a section of one of the jaws, showing the manner in which the gripping piece is secured thereto.

The same reference characters indicate the same parts in all the figures.

35 The pliers consist in the usual manner, of jaws *a* and *b* pivoted by a stud *c* and having respectively, the handles *d* and *e*. As these pliers are intended for jewelers' or silver-smiths' use, by whom fine work is done, they
40 are comparatively small, and their full size is approximately that shown in Figs. 1 and 2. The pliers have extended flat gripping surfaces *f* and *g* which close against each other over an extended area, and are knurled or
45 roughened, as shown in Fig. 3. Extending laterally from the outer edges of the gripper members are sharp cutting edges *h* and *i*. These edges are formed on the jaws by cutting away the latter at a sharp angle with
50 their external surfaces, and their direction is transverse or lateral with respect to the path in which the jaws travel when approaching or receding from each other. There may be one or two cutting edges on each jaw, that is,
55 the cutting edges may extend only on one

side of the gripping surfaces instead of on both sides, but it is of the essence of the invention that they extend laterally instead of toward the pivot, and it is preferable that they be on the line of the extreme outer edges
60 of the gripping surfaces.

It is possible to make the gripping surfaces on integral portions of the jaws, but I prefer to form them as shown in Fig. 4. As
seen in this figure, one of the surfaces, as *g*, is
65 formed upon a block *k* set into a recess in the jaw *b* and firmly secured therein by any approved means. The co-operating surface *f* is formed on a similarly constructed and
70 mounted block secured in the jaw *a*.

It will be seen that by the arrangement of the cutting edges directly beside and in line with the extremities of the gripping surfaces, the tool need only be shifted by a minute
75 amount to change it from a cutter to a pair of nippers or vice versa, and that there is no necessity of changing the angle of the tool with respect to the work. Furthermore, the laterally-extending ends of the cutting jaws
80 are tapered down so as to be capable of entering very small recesses, and of cutting very accurately at the point where cuts are required.

I claim:—

1. Jeweler's pliers having jaws provided
85 with meeting gripping surfaces and cutting edges extending laterally in line with the outer edges of the gripping jaws.

2. Jeweler's pliers having jaws movable toward and from each other and provided
90 with cutting edges transverse to the direction of such motion, the jaws having also gripping surfaces of extended area.

3. Jeweler's pliers having jaws provided with meeting gripping surfaces and cutting
95 edges extending laterally on each side of the gripping surfaces.

4. Jeweler's pliers having jaws movable toward and from each other, and provided on
100 their extremities with transverse edges for cutting and with intermediate wide surfaces for gripping.

5. Jeweler's pliers having jaws formed with cutting edges extending transversely to the direction in which the jaws approach and
105 recede from each other, and nipper blocks having gripping surfaces secured to said jaws.

6. Jeweler's pliers having jaws formed with cutting edges extending transversely to
110

the direction in which the jaws approach and recede from each other, and nipper blocks having gripping surfaces secured to said jaws intermediate the extremities of the lateral cutting edges.

5 7. Jeweler's pliers having jaws formed with cutting edges extending transversely to the direction in which the jaws approach and recede from each other, each jaw having a re-

cess, and nipper blocks formed with extend- 10 ed co-operating gripping surfaces, set into said recesses and secured therein to the jaws.

In testimony whereof I have affixed my signature, in presence of two witnesses.

HARRY BRADLEY ROWAN.

Witnesses:

GEORGE H. DAVIS,
ARTHUR W. REED.