

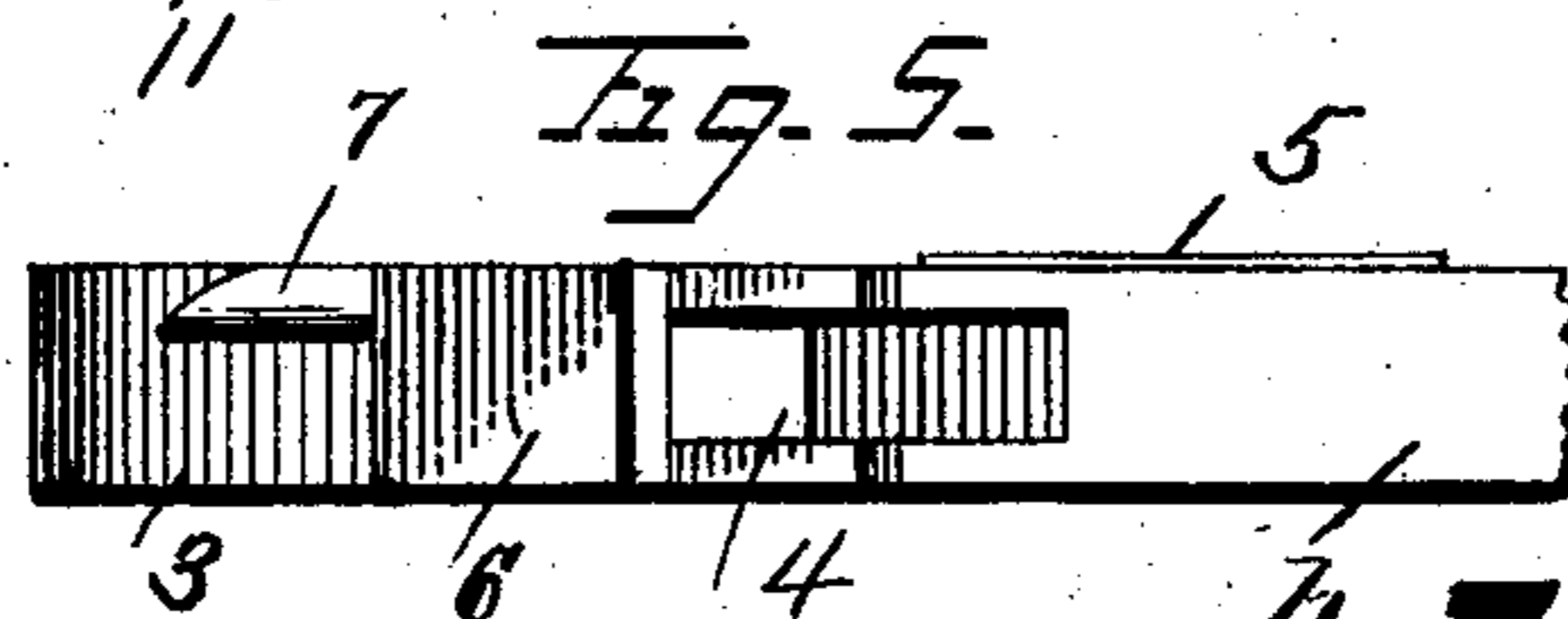
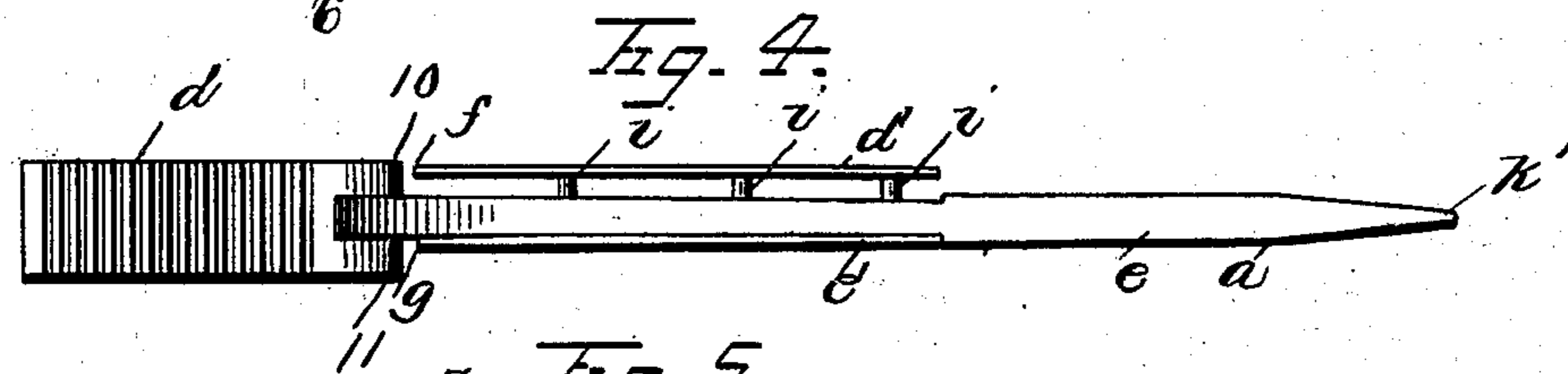
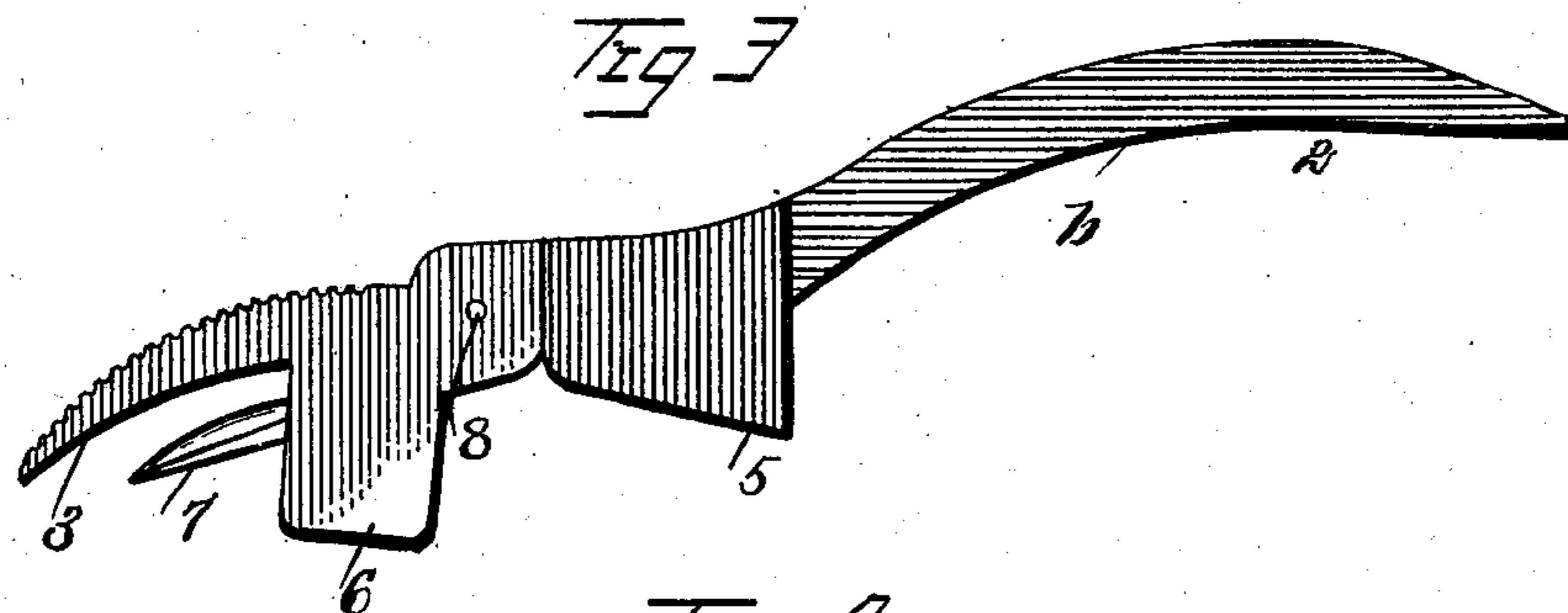
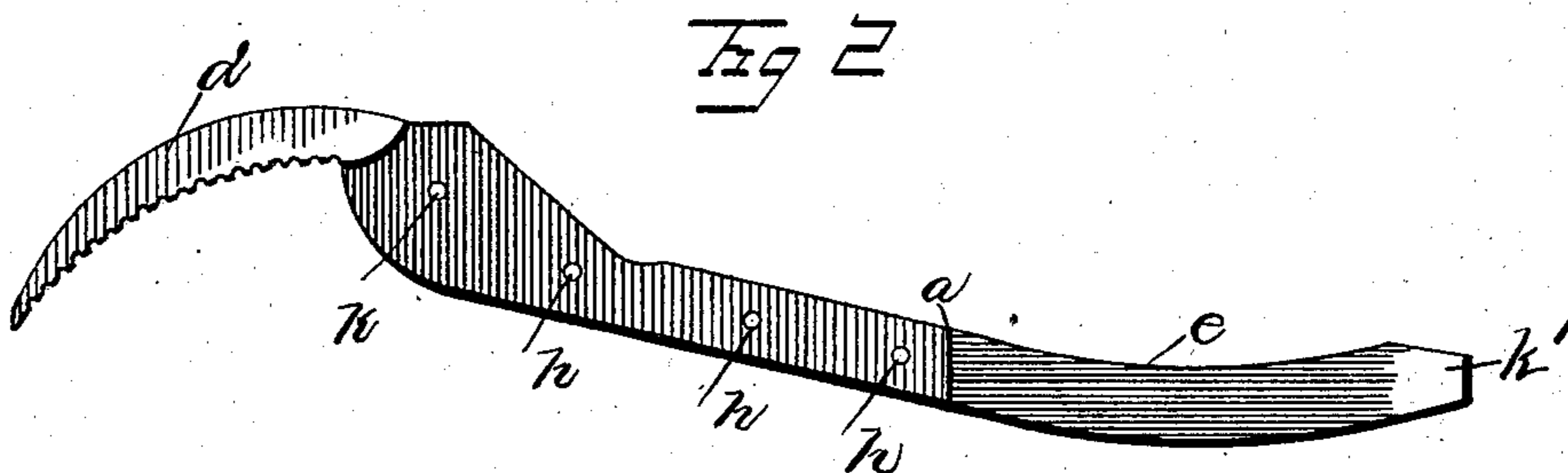
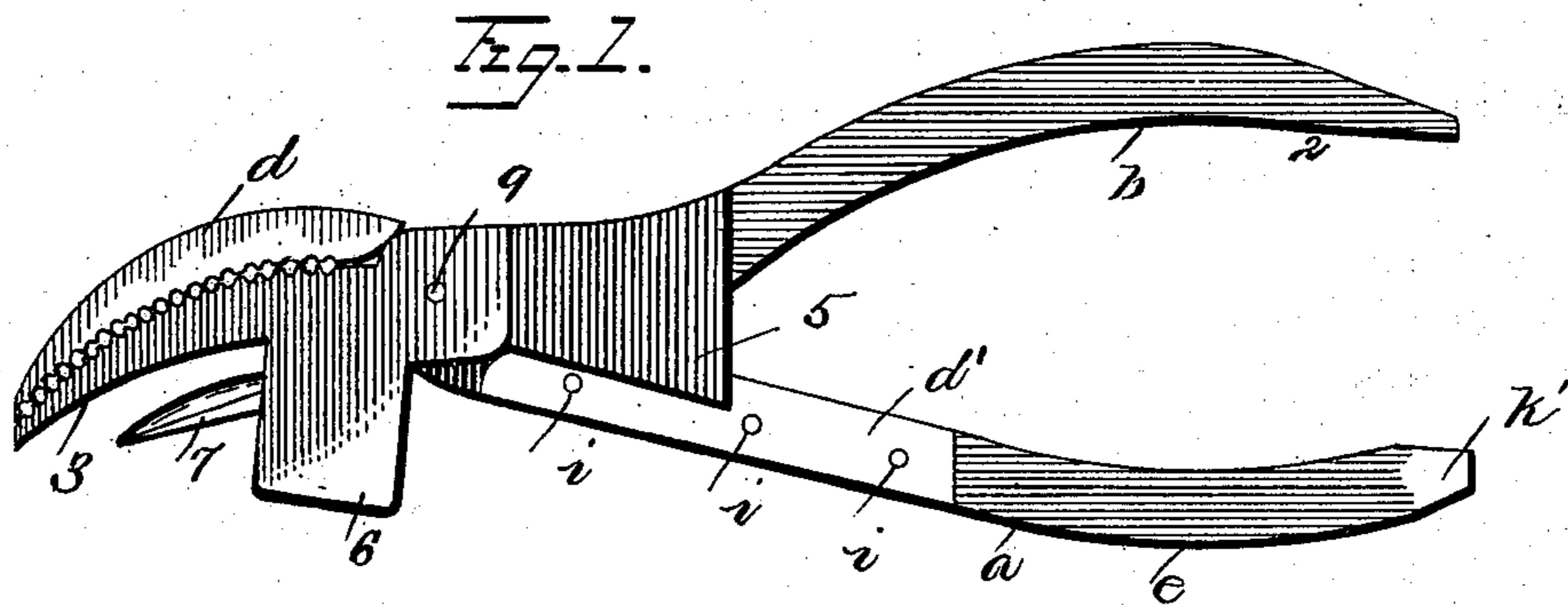
No. 702,542.

Patented June 17, 1902.

I. A. COON.  
PLIERS.

(Application filed May 22, 1900.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## PLIERS.

SPECIFICATION forming part of Letters Patent No. 702,542, dated June 17, 1902.

Application filed May 22, 1900. Serial No. 17,557. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC A. COON, a citizen of the United States, residing at Ellenville, in the county of Ulster, State of New York, have invented certain new and useful Improvements in Pliers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to pliers; and it has for its object to provide as an article of manufacture a pair of pliers which will be simple in form and which may be easily made at a small cost, a further object of the invention being to provide a construction wherein the different members will be so arranged as to secure the best results.

In the drawings forming a portion of this specification, and in which like characters of reference indicate similar parts in the several views; Figure 1 is a side elevation of the pliers, showing them closed. Fig. 2 is a side elevation of one jaw of the pliers. Fig. 3 is a side elevation of that jaw of the pliers that carries the supplementary tools. Fig. 4 is a plan view of the jaw shown in Fig. 2, one of the side plates thereof being partly withdrawn. Fig. 5 is a plan view of the jaw portion of one member of the pliers.

Referring now to the drawings, the present pliers comprise two members *a* and *b*.

The member *a* comprises a handle portion *e*, having a curved or arc-shaped jaw *d*, the concave side of which is provided with teeth, as shown, and said member from the inner end of the jaw to a point substantially midway of the ends of the handle is reduced in thickness, as illustrated in Fig. 4, to form recesses, in which are engaged the plates *d'* and *e'*, one end of each of which rests against the shoulder at the outer end of the reduced or recessed portion, while the opposite ends of the plates terminate short of the inner end of the jaw. The plates are held in place by the rivets *i*, and the plate *e'* at its upper edge adjacent to the jaw forms a cutting-blade for the purpose hereinafter described.

The second member *b* of the pliers comprises a handle portion 2, at one end of which is an arc-shaped jaw 3, corresponding to the jaw *d*, and which jaw 3 is corrugated on its

convex face. Through the handle 2 at the inner end of the jaw 3 is formed an opening 4, in which is received the reduced or recessed portion of the member *a*, lying between the plates *d'* and *e'* and the jaw *d*. When the two portions are engaged as described, a pivot-pin 9 is engaged with the perforations 8 and *k* thereof, and to permit the engagement of the members the plates *d'* and *e'* are removed, when the member *a* may be slid through the opening 4 in the member *b*. The plates *d'* and *e'* are then fitted into the recesses, and the rivets *i* are engaged therewith and with the perforations *h* in the member *a*. It will be seen that this structure permits of a cheap and easily-manufactured article and that when the plates *d'* and *e'* are in position the sides of the handles correspond in width. Upon the member *b* is formed a cutting-blade 5, which has a shearing action against the plate *d'* above referred to.

Upon the member *b* is cast a block 6, projecting from the concave face of the jaw of said member, and this block is squared to form a hammer-head. The block 6 not only forms a hammer-head, but also forms a support for the finger 7, which is of arc shape and projects in the same direction with the jaw 3 and is separated therefrom by a tapered interspace, the finger 7 being somewhat shorter than the jaw 3 and being sharpened at its end and side edges to form a cutting-blade.

The blade or finger 7 is used for opening cans, said blade being passed through the top of the can at such point that the jaw 3 may lie against the outer face of the can, said jaw holding the blade at a proper distance from the outer face of the can, as will be understood.

It will be noted that the hammer and can-opening blade are carried by the heavier member *b* of the pliers and that the hammer not only acts as a hammer, but as a base for the can-opening blade, while the jaw 3 acts not only as a gripping-jaw, but as an element of the can-opener. Hence in the process of opening a can portions 6, 7, and 3 cooperate.

What is claimed is—

1. As an article of manufacture a pair of pliers comprising a member provided with a jaw and having an opening therethrough at

the rear of the jaw, a second member reduced transversely and passed through the opening in the first member, and having a jaw beyond said reduced portion, plates re-  
5 movably secured in the reduced portions of the second member at the opposite side of the first member from the jaw of the second member, to lie flush with the sides of the first member, and a pivot-pin engaging the mem-  
10 bers.

2. A pair of pliers comprising a member provided with a jaw and a lateral projection

at the base of the jaw, and a blade mounted upon the lateral projection and extending in the same direction as the jaw, said blade ter- 15 minating short of the outer end of the jaw.

In testimony whereof I sign my name and affix my seal, in the presence of two subscribing witnesses, on this 10th day of May, 1900.

ISAAC A. COON. [L. S.]

Witnesses:

FRANK P. DAUCH,  
LEWIS W. FULLER.