

I. KINNEY.
POCKET KNIFE.

(Application filed Apr. 7, 1902.)

(No Model.)

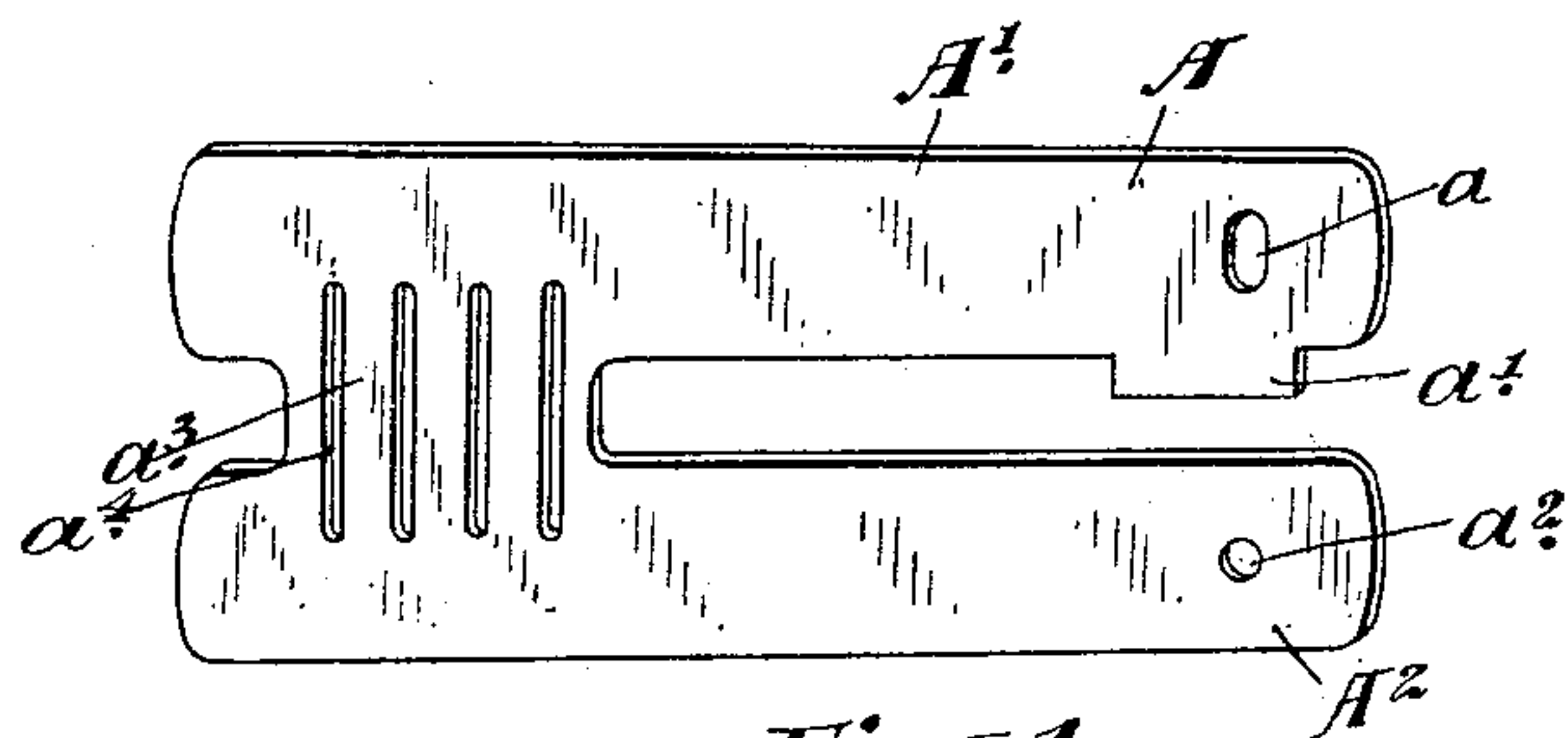


Fig. 1

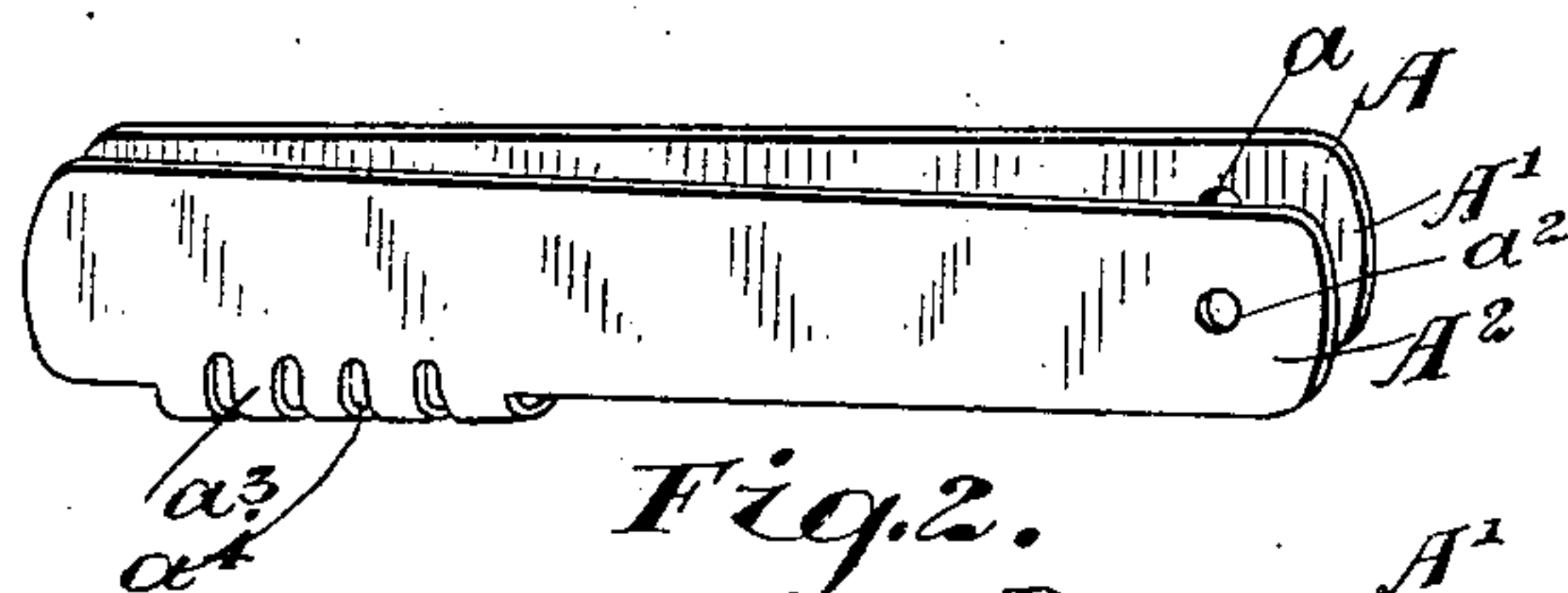


Fig. 2.

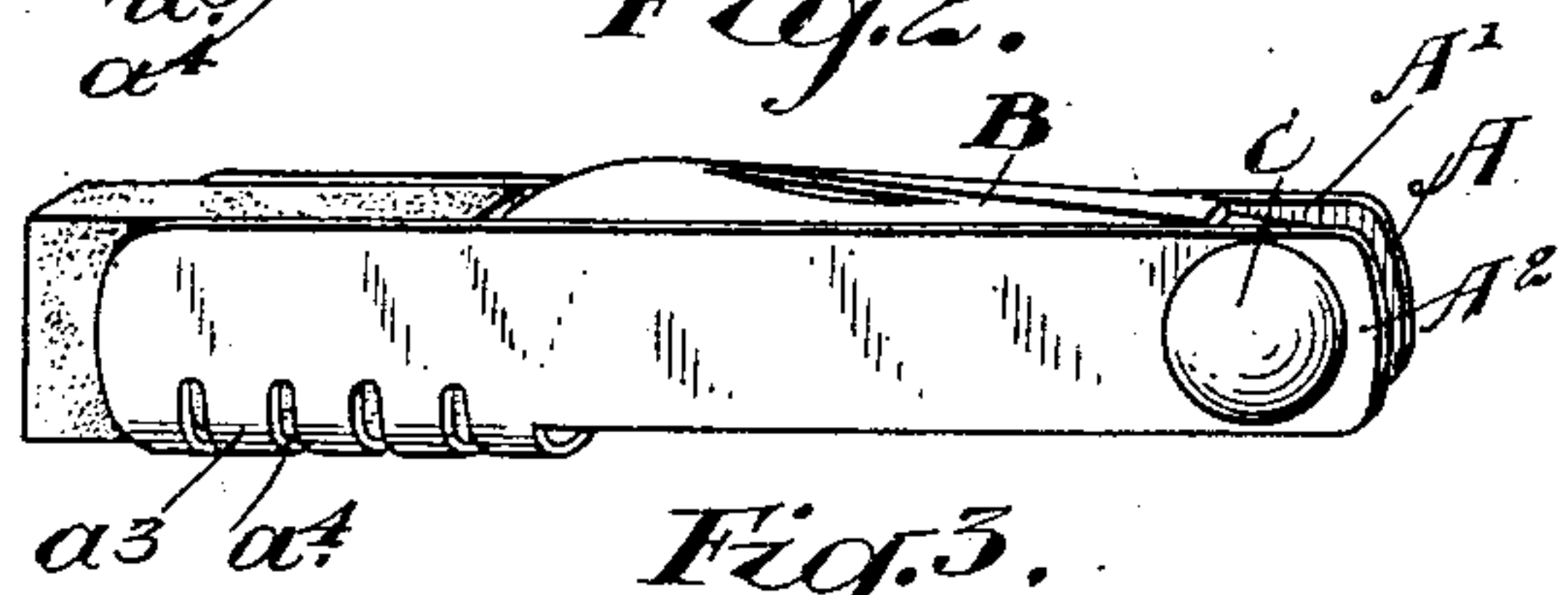


Fig. 3.

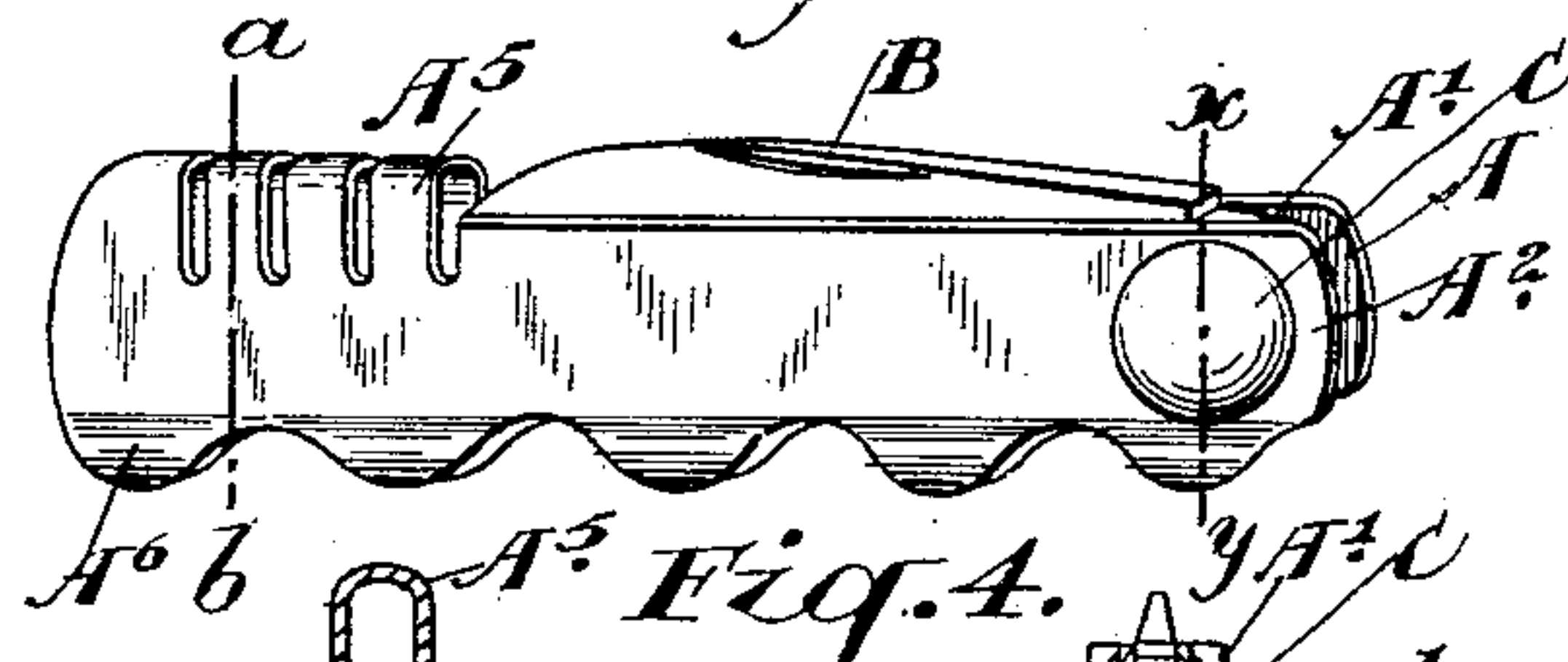


Fig. 4.

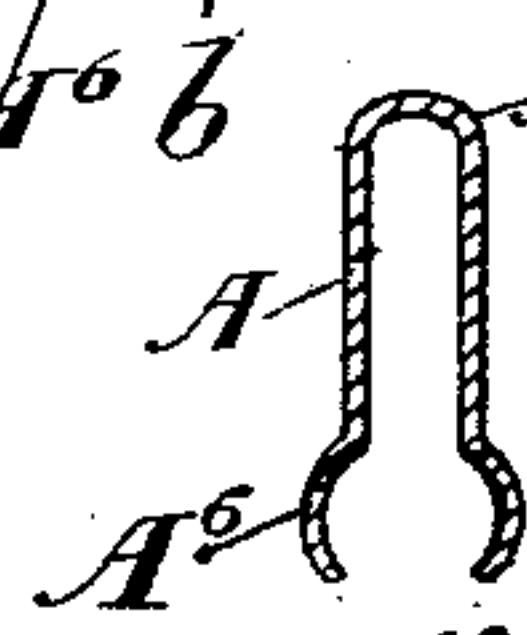


Fig. 5.

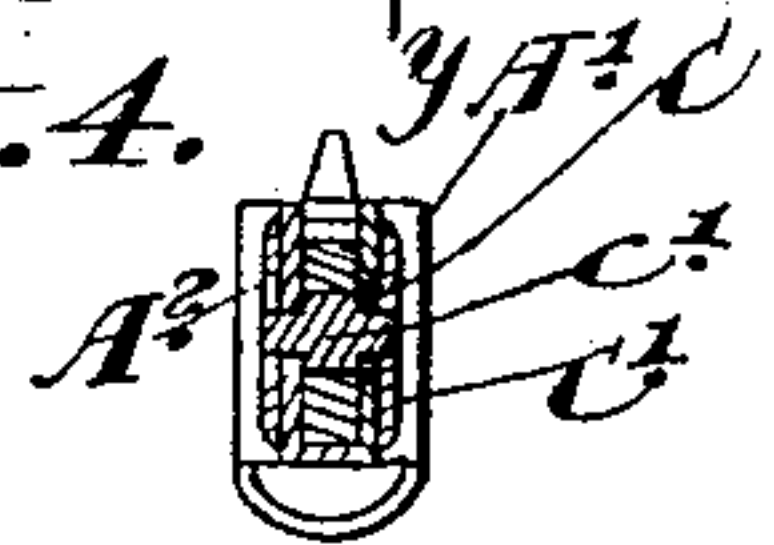


Fig. 6.

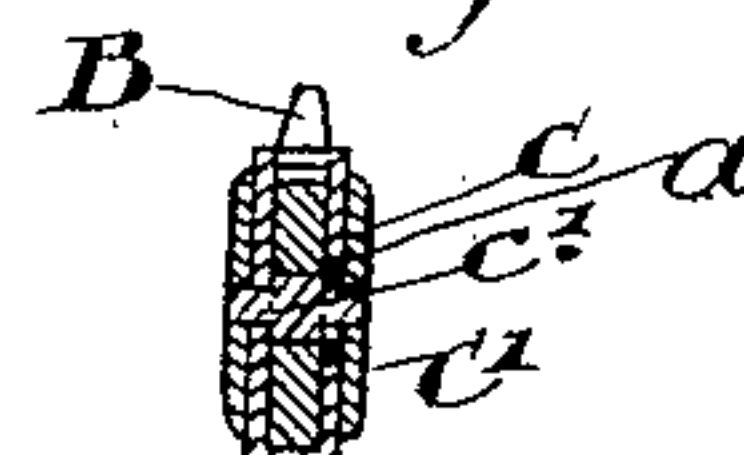


Fig. 8.

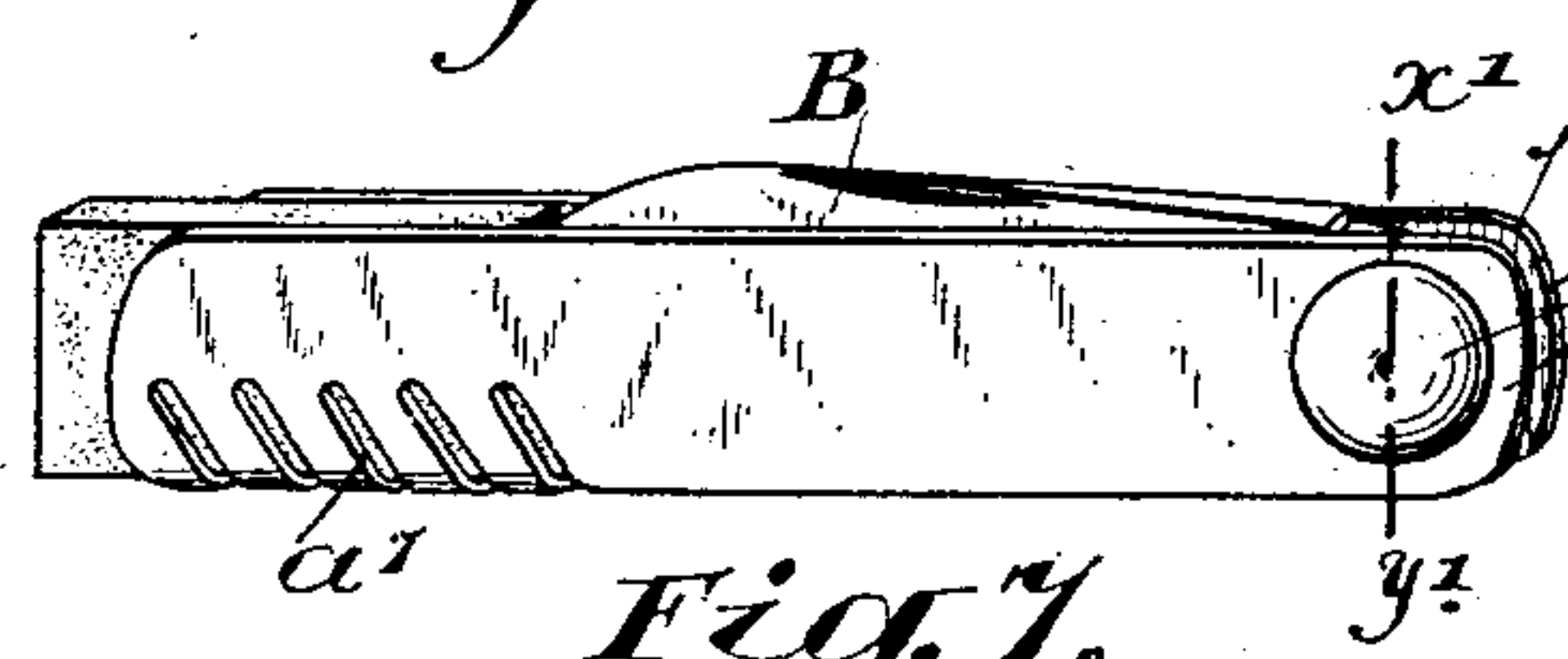


Fig. 7.

Witnesses.
P. Shields
L. C. Reynolds

Inventor.
I. Kinney
J. H. Kinney
attys.

UNITED STATES PATENT OFFICE.

ISRAEL KINNEY, OF TORONTO, CANADA.

POCKET-KNIFE.

SPECIFICATION forming part of Letters Patent No. 702,968, dated June 24, 1902.

Application filed April 7, 1902. Serial No. 101,815. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL KINNEY, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Pocket-Knives, of which the following is a specification.

My invention relates to improvements in knives, and more particularly in pen or pocket knives; and the object of the invention is to devise a very cheap and simple form of knife which will be strong and light and yet durable and capable of a greater range of usefulness than an ordinary pocket-knife; and it consists, essentially, of a knife formed of a handle struck up in one piece and the blade suitably secured in one end of the handle and the opposite end of the handle being arranged to form a spring the force of which is exerted on a shoulder formed on the handle behind the pivoted end of the blade, the parts being arranged and constructed in detail as hereinafter more particularly explained.

Figure 1 is a plan view of the blank forming the handle. Fig. 2 is a perspective view of such blank as formed up preparatory to receiving the blade. Fig. 3 is a perspective view showing a complete knife. Fig. 4 is a perspective view of an alternative form of knife. Fig. 5 is a cross-section through the line $a b$, Fig. 4. Fig. 6 is a cross-section through the line $x y$, Fig. 4. Fig. 7 is a detail of another alternative form. Fig. 8 is an end view through the line $x' y'$, Fig. 7.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the blank forming the handle, which comprises two portions A^1 and A^2 , the portion A^1 having a slot a near the end and a projection a' , and the portion A^2 having a hole a^2 . The two portions A^1 and A^2 are connected by a bridge a^3 , which is provided with a series of slots a^4 , which are designed when the knife is riveted in the position shown in Fig. 3 to give increased resiliency to the handle.

B is the blade, which is secured in the free ends of the portions A^1 and A^2 by means of the rivet C, which extends through the blade and the portions A^1 and A^2 and is provided with suitable flat heads C' . It will be noticed that the rivet has a reduced end c' at one side.

It will be seen on reference to Fig. 2 that the portion A^2 is offset or has the free end lower than the free end of the portion A^1 , and consequently when the blade is fitted in position the shoulder a' , abutting the blade, will by virtue of the continuous spring-pressure imparted to the handle by the offset when opened hold the blade securely in line with the handle or when closed hold it securely closed substantially in line with the handle.

In Fig. 3 I show an eraser D, inserted in the open end of the handle A, such eraser being held by the spring between the two portions A^1 and A^2 .

In Figs. 4 and 5 it will be seen that I show the bridge A^5 on the opposite side to that shown in Fig. 2. In this construction also I show the side of the knife with inwardly-bent lips A^6 , whereby a pencil or other suitable instrument may be held in place from end to end of the knife.

In Fig. 7 I show the bridge of the handle with diagonally-placed slots a^7 , which are designed to give both sides of the handle a spring and yet allow of the sides of the handle being made of the full width, but closer together. The shoulder a' of course is similarly formed on one of the sides, so as to hold the blade in position and yet permit of sufficient resiliency at the ends of the handle, so as to open and close the blade. If the knife should be a two-blade knife, of course the bridge A^5 , which forms the spring, would be placed in the center of the handle, the blades being one on each end. I have also found that where the slots are at an angle, as indicated in Fig. 7, a greater resiliency is imparted to the spring sides than when the slots are cut at right angles to the edge of the sides.

I preferably make the end slots connected with the slot formed in the back of the handle in order that I can obtain the benefit of the resiliency of the length of the bars formed between the slots. In Fig. 7 of course the diagonally-shaped slots instead of having the bridge across the side of the knife I may with equal facility make such bridge extend across the end of the knife.

It will be seen from the construction of my handle that not only is there an edgewise spring for the purpose of holding the blade

in position when operated, but there is also a lateral spring for holding any article of utility in the end of the handle opposite the blade. It will also be understood that the lip or shoulder a' , which I describe in this specification as forming part of the handle at the point where the blade is connected, may be made of a separate piece of metal suitably shaped and suitably fastened to the side of the handle in which the slot is located.

Although I show my invention as particularly applicable to a knife, it will be of course understood that a handle so formed or equivalently constructed might be with equal facility adapted to receive at the free end any other instrument of utility.

What I claim as my invention is—

1. In a pocket or other knife, the combination with the blade, of a spring-metal handle comprising two sides, the end of one side of which is provided with a round hole and the end of the other with a slotted hole and a projection designed to extend underneath the inner end of the blade, the opposite end of the handle being provided with a bridge, whereby a spring is imparted to the blade, and a rivet extending through the end hole and slot and hole in the blade as and for the purpose specified.

2. In a pocket or other knife, the combination with the blade, of a spring-metal handle comprising two sides, the end of one side of which is provided with a round hole and the end of the other with a slotted hole and a projection designed to extend underneath the inner end of the blade, and the opposite end of the handle being provided with a bridge having cross-slots, whereby a spring is imparted to the blade, and a rivet extending through the end hole and slot and hole in the blade as and for the purpose specified.

3. In a pocket or other knife, the combination with the blade, of a spring-metal handle comprising two sides, the end of one side of which is provided with a round hole and the end of the other with a slotted hole and a projection designed to extend underneath the inner end of the blade, and the opposite end of the handle being provided with a bridge having diagonal side cross-slots whereby a spring is imparted to the blade, and a rivet extending through the end hole and slot and hole in the blade as and for the purpose specified.

4. In a pocket or other knife, the combination with the blade, of a spring-metal handle comprising two sides, the end of one side of which is provided with a round hole and the

end of the other with a slotted hole and a projection designed to extend underneath the inner end of the blade, and the opposite end of the handle being provided with a bridge whereby a spring is imparted to the blade, and a rivet extending through the end hole and slot and hole in the blade, the end of the handle being open and designed to receive an instrument of utility as and for the purpose specified.

5. In a pocket or other knife, the combination with the blade, of a spring-metal handle comprising two sides, the end of one side of which is provided with a round hole and the end of the other with a slotted hole and a projection designed to extend underneath the inner end of the blade, the opposite end of the handle being provided with a bridge whereby a spring is imparted to the back of the blade, and a rivet extending through the end hole and slot, and hole in the blade, and the opposite side of the handle from the bridge being provided with lips designed to receive an instrument of utility as and for the purpose specified.

6. In a knife, a handle comprising two sides formed integrally of spring metal with a bridge connecting them at one end, one side being provided with a hole and being offset in relation to the other, which is provided with a slot and projection between which hole and slot the blade is held by a rivet as and for the purpose specified.

7. In a knife, a handle comprising two sides formed integrally of spring metal with a bridge connecting them at one end, one side being provided with a hole and being offset in relation to the other, which is provided with a slot and projection between which hole and slot the blade is held by a rivet, such bridge forming an edgewise-pressing spring at the free end of the sides and an inwardly-pressing spring at the bridge end as and for the purpose specified.

8. In a knife or similar article having a butt-end for fastening such instrument in place, a handle comprising two sides formed integrally of spring metal with a bridge connecting them at one end, one side being provided with a hole and being offset in relation to the other, which is provided with a slot and a rivet or pin extending through the hole in the slot and the butt-end of the knife as and for the purpose specified.

ISRAEL KINNEY.

Witnesses:

B. BOYD,
R. SHIELDS.