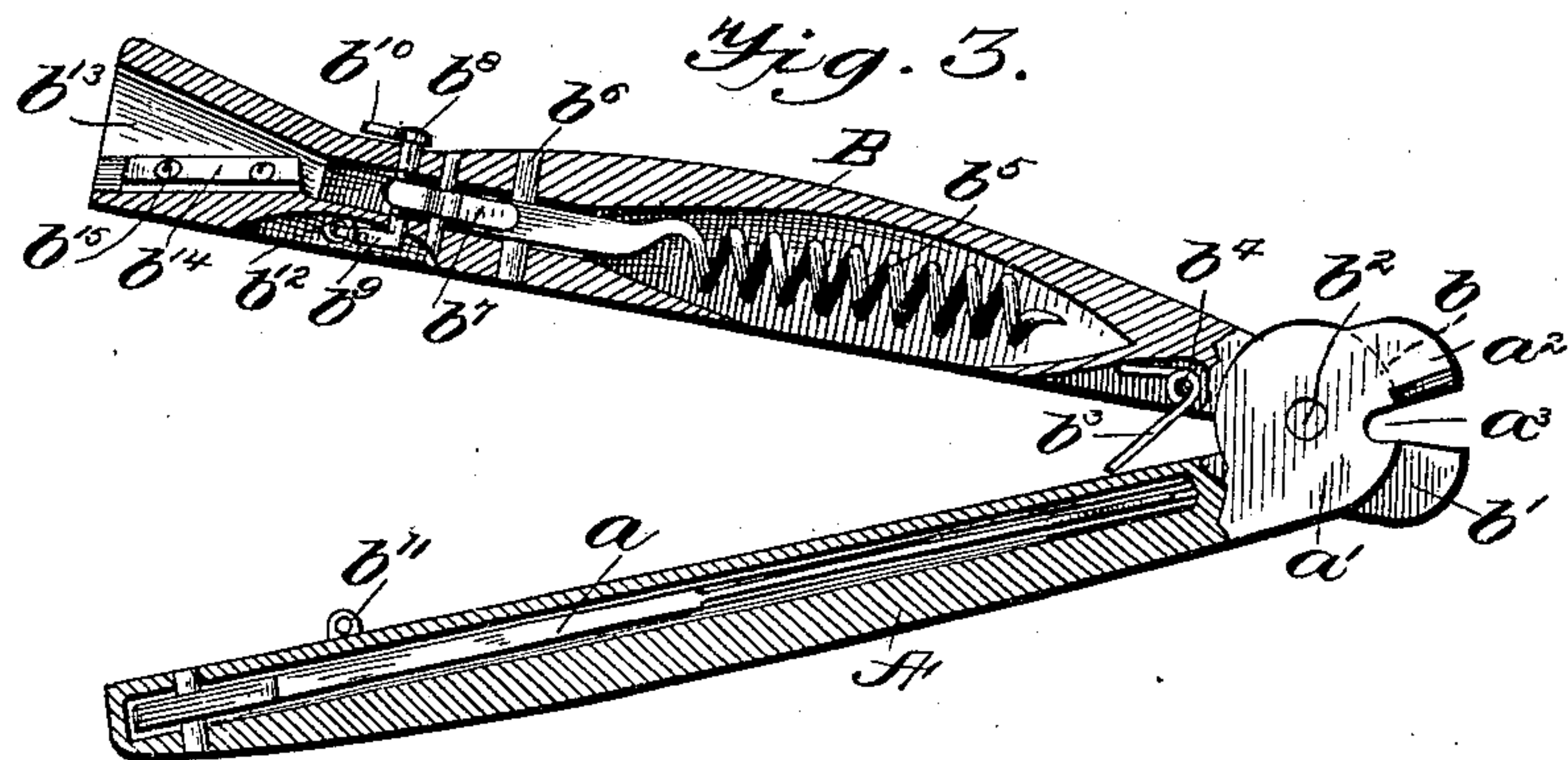
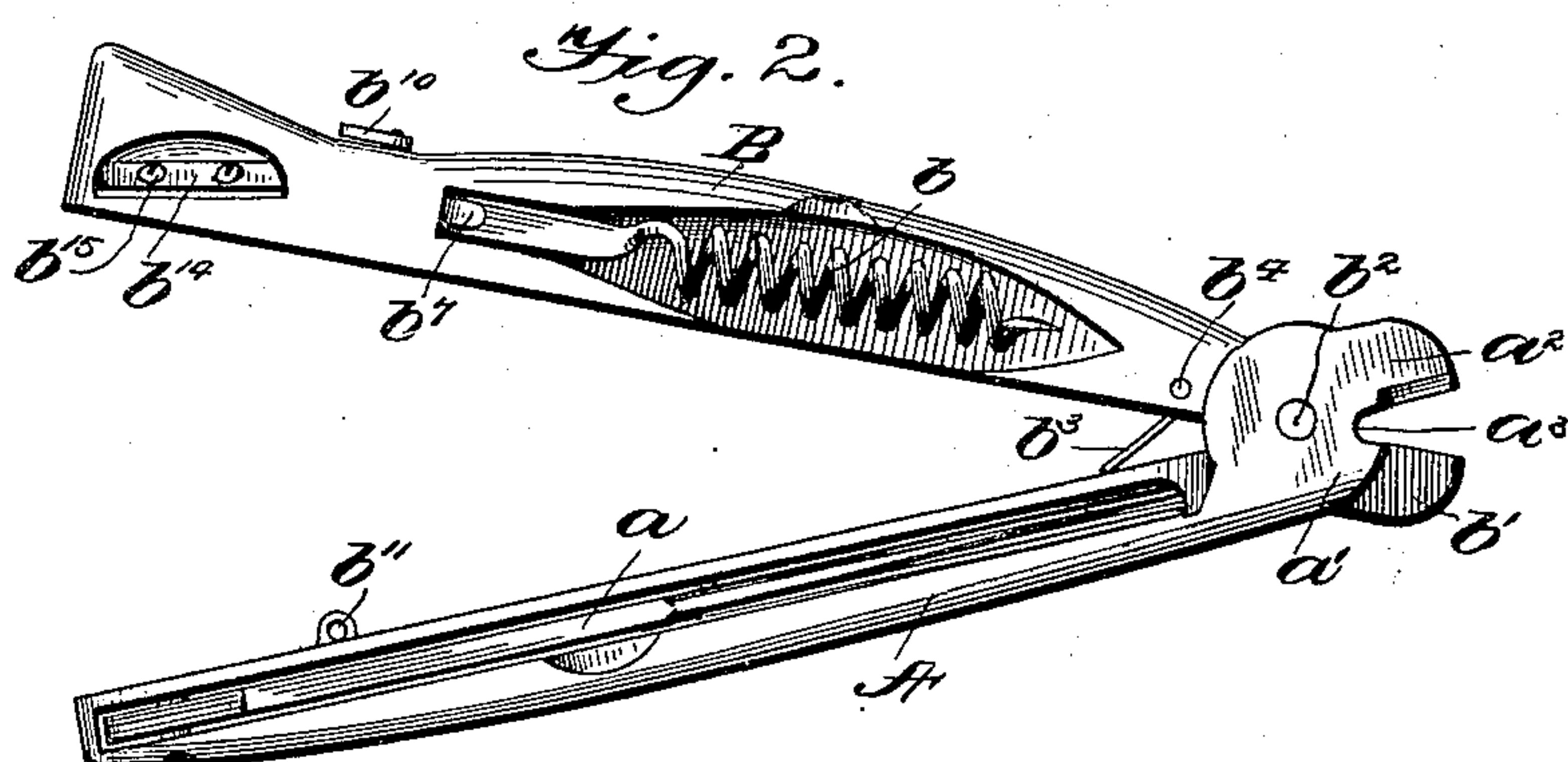
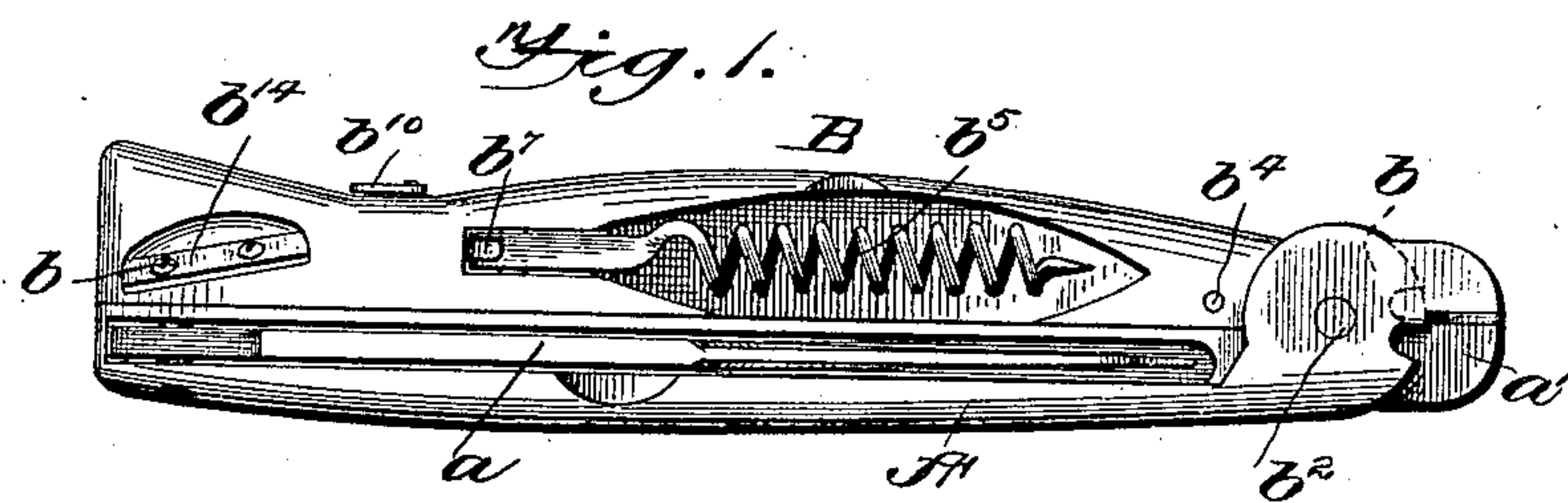


(No Model.)

A. R. KOLAR.
COMBINATION KNIFE.

No. 589,392.

Patented Aug. 31, 1897.



WITNESSES

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ANTONIN R. KOLAR, OF CLINTON, IOWA, ASSIGNOR OF ONE-THIRD TO
KATHERINE A. WILLS, OF SAME PLACE.

COMBINATION-KNIFE.

SPECIFICATION forming part of Letters Patent No. 589,392, dated August 31, 1897.

Application filed August 26, 1896. Serial No. 604,048. (No model.)

To all whom it may concern:

Be it known that I, ANTONIN R. KOLAR, a citizen of the United States, residing at Clinton, in the county of Clinton and State of Iowa, have invented certain new and useful Improvements in Combination-Knives; 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 improvements in combination-tools, and has more particular relation to tools that are commonly known as "combination-knives."

The invention consists of the combination, with a knife-frame carrying a knife-blade and formed with a wire-cutting end, of another frame carrying a corkscrew and pencil-sharpener and formed into the other member of the wire-cutter, said wire-cutting portions being pivoted together, so that the frames form operating-handles.

The invention also consists of certain other novel constructions, combinations, and arrangements of parts, all of which will be more particularly hereinafter set forth and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a knife embodying my invention in its closed position. Fig. 2 represents a side elevation of said knife in its open position, and Fig. 3 represents a similar vertical section through my said improved combination-knife.

A in the drawings represents the blade-carrying frame, and B the corkscrew and pencil-sharpener carrying-frame. The frame A is provided with a pivoted knife-blade a and is formed at its forward end into a disk a' , having a cutting-jaw a^2 and a wire-nipping recess a^3 . The frame B is also provided at its forward end with a disk b , having a cutting-jaw b' , said disk b being pivoted to the disk a' by means of a pivot-pin b^2 . The said frames A and B are held normally separated to hold the jaws a^2 and b' open by a spring b^3 , applied upon a pin b^4 on frame B and having its opposite ends extending into contact with said frames A and B, respectively.

It will be observed from the above that when the frames A and B are brought together by the pressure of the hand the jaws a^2 and b' are closed and cut any substance that is between them. It will also be observed that if a piece of wire be inserted into the recess a^3 the closing of the jaw b' past said recess will cut the wire therein.

A corkscrew b^5 is pivoted within a suitable recess in the frame B by a pin b^6 . The inner squared end of said corkscrew b^5 engages a flat spring b^7 , mounted on said frame, and thus causes said corkscrew to spring into either an open or closed position and remain so under spring tension. The said spring b^7 also projects forward past the end of the corkscrew and engages an angular pivot-pin b^8 , mounted in the frame B and provided with a latching-arm b^9 and operating-handle b^{10} .

Suitable latch-eyes b^{11} and b^{12} are provided upon the respective frames A and B, so that when said frames are brought together said eyes will coincide in position, and upon the rotation of the pin b^8 the latch-arm b^9 will pass through said eyes and thus hold the two frames firmly together against the tension of the spring b^3 . This rotation of the pin b^8 is caused by the handle b^{10} . The said pin b^8 will be held in any of its adjusted positions by means of the end of the spring b^7 pressing against its angular sides. Suitable thumb-notches a^5 and a^6 are provided in the respective frames A and B, so that the finger-nail may be readily inserted to raise either the cutting-blade a or the corkscrew b^5 into operative position. The outer end of the frame B is provided with a conical pencil-sharpening recess b^{13} , in the wall of which is set an inclined sharpening-blade b^{14} by means of screws b^{15} .

It will be observed from the foregoing description that I provide in one implement a knife, a cutter, wire-nippers, a corkscrew, and a pencil-sharpener, the whole being adapted to be closed into a compact form, so that the knife may be stored away in a vest pocket if so desired. It will also be observed that when so desired the blade b^{15} of the pencil-sharpener may be removed for sharpening or repairs.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a combination-tool, the combination
5 with a frame carrying a knife-blade and one
jaw of a cutter, of another frame carrying a
corkscrew, a pencil-sharpener and the other
jaw of a cutter, a pivot-pin connecting said
frames, a spring for holding said frames nor-
10 mally separated, a spring for holding the
corkscrew in either its open or closed posi-
tion, and a catch adapted to lock the two
frames together and engaged by said latter
spring to hold it in its adjusted position, sub-
15 stantially as described.

2. In a combination-tool, the combination
with a frame carrying a knife-blade and a

cutting-jaw, of another frame carrying a cork-
screw, pencil-sharpener, and a cutting-jaw,
and pivoted to the first-mentioned frame, a 20
spring for keeping said frames normally sep-
arated, a spring for holding the corkscrew in
either its open or closed position, securing-
eyes formed on said frames respectively, and
a pivot-catch adapted to pass through said 25
eyes to secure the frames together, substan-
tially as described.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

ANTONIN R. KOLAR.

Witnesses:

JOHN W. LEMING,
CHARLES DICKINSON.