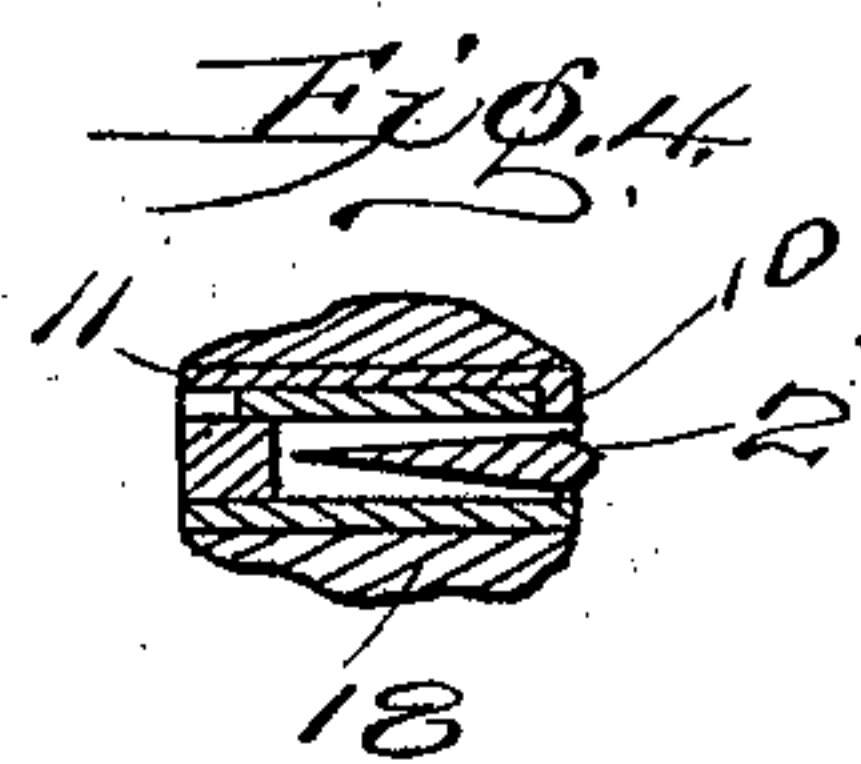
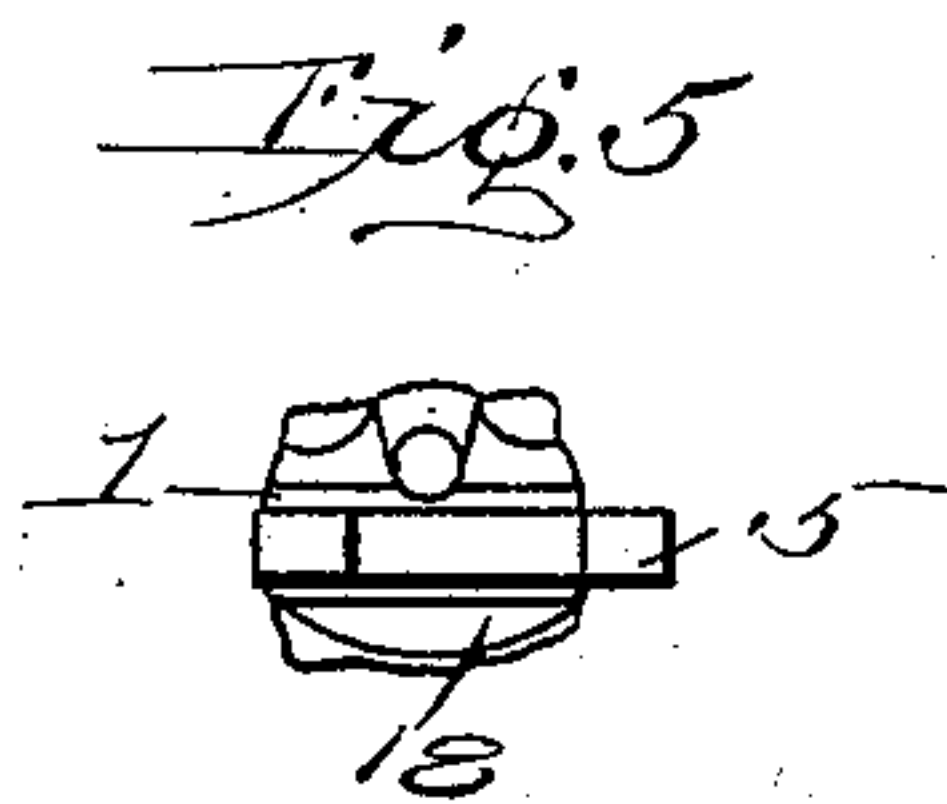
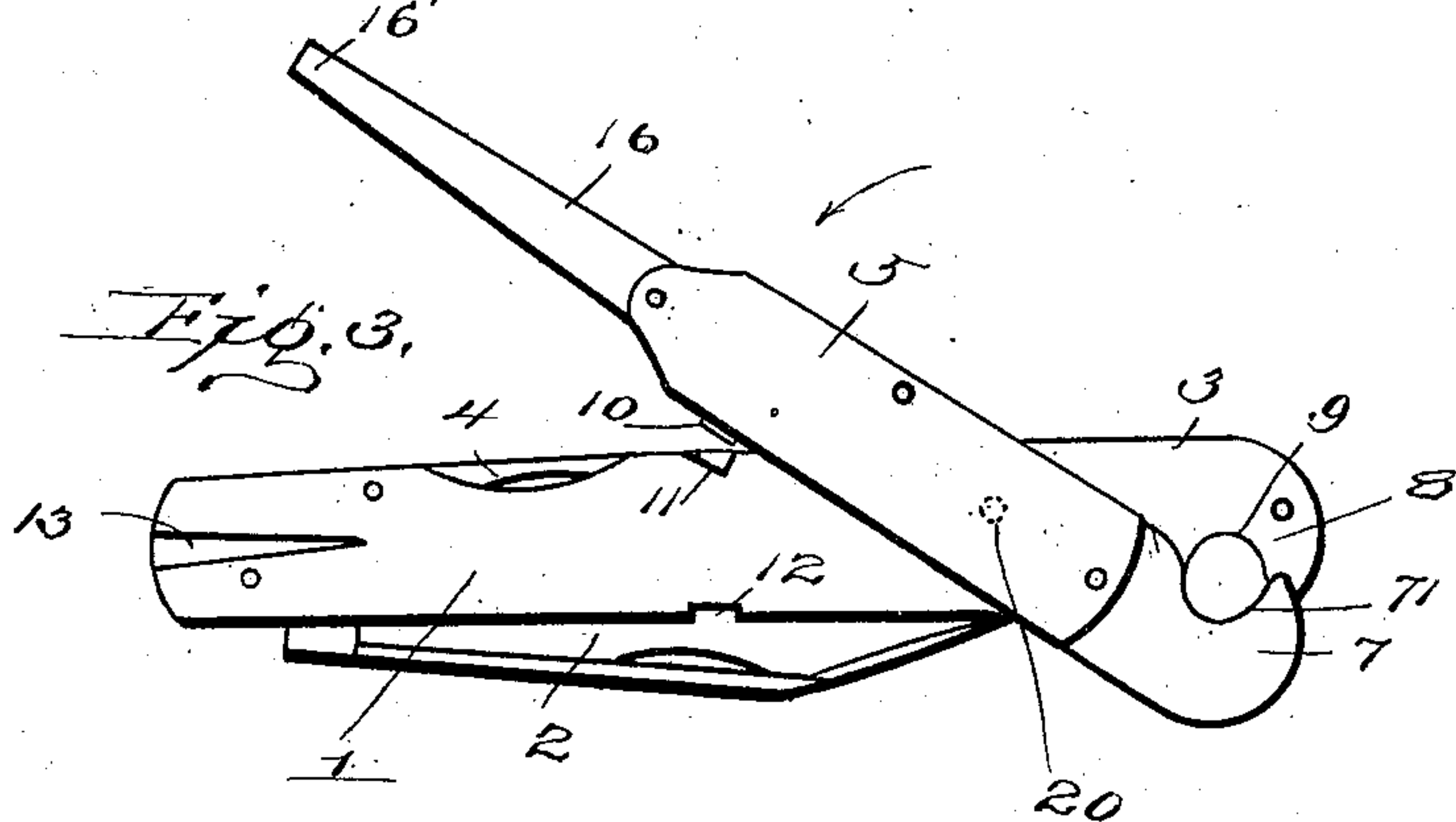
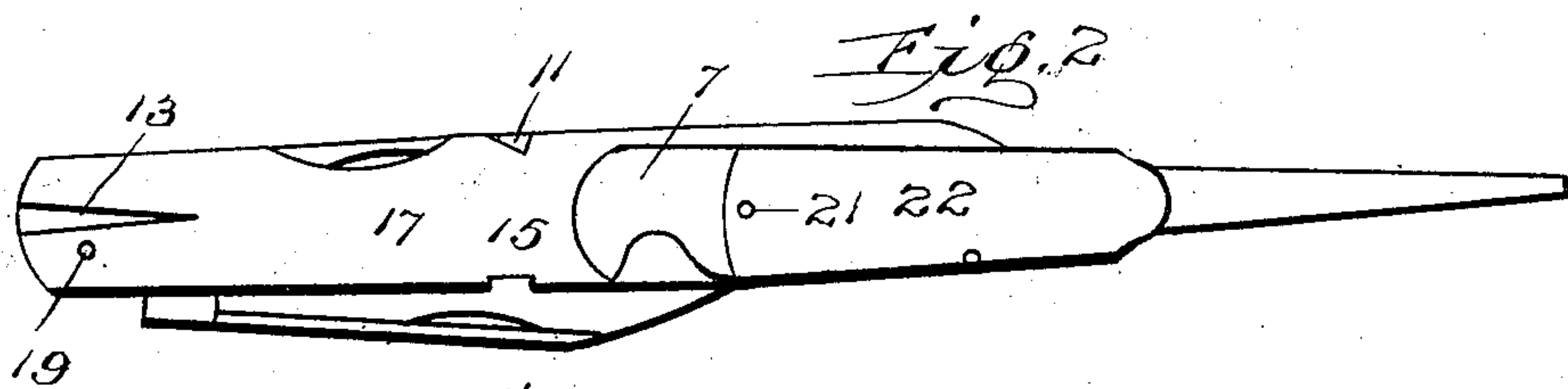
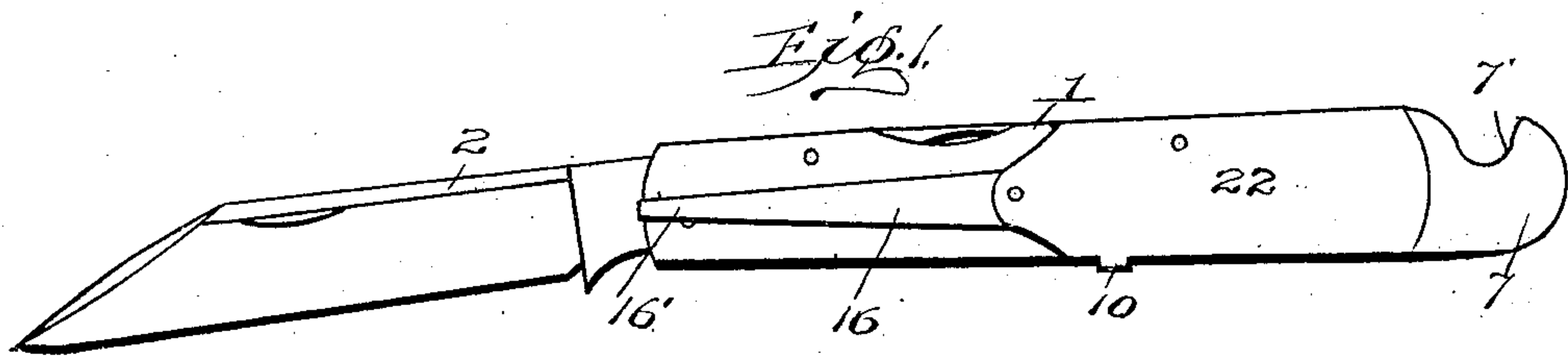


C. SCHULTZE, JR.
COMBINATION KNIFE AND CRIMPER
APPLICATION FILED APR. 8, 1908.

903,234.

Patented Nov. 10, 1908.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES SCHULTZE, JR., OF DENVER, COLORADO.

COMBINATION KNIFE AND CRIMPER.

No. 903,234.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed April 8, 1908. Serial No. 425,912.

To all whom it may concern:

Be it known that I, CHARLES SCHULTZE, Jr., citizen of the United States, residing at Denver, in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in a Combination Knife and Crimper; 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.

My invention relates to combination tools and especially to a miner's knife, crimper and tool carrier, and the objects of my invention are to furnish a tool which shall combine in one an entire miner's kit of knife, crimper and punch; with carrying means for the same and also an ingenious and novel means of connecting the parts together. I achieve these results by the device shown in the drawings in which

Figure 1 is an elevation of a knife with the blade open and showing one section of the crimper jaw. Fig. 2 shows the knife with the blade closed and the attached crimper section carrying the punch extended. Fig. 3 shows the device with the crimper in the position in which it is used. Fig. 4 is a section through the notch 11, and Fig. 5 is an end view of the front end of the knife. Fig. 6 shows a section of fuse with its enveloping metal sheath and crimped by the crimping device.

Similar letters refer to similar parts throughout the several views.

Referring to the drawings, 1 is a sectional knife handle having a blade 2 pivoted therein and having at the end of the handle opposite the blade a sectional handle pivoted at 20 and carrying the jaw 7 with a recessed portion 7' chamfered to a dull edge. On the inner side of the sectional handle is a spur 10 the purpose of which will be later explained. The punch 16 having a smaller end 16' is attached to the end of the sectional handle opposite to the jaw.

At the back of the handle, better shown in Fig. 2, is a notch or depression 11, the function of which will later appear and on the front of the sectional handle carrying the knife blade is a semi-circular depression 13 and feathered to an extremity about one inch from the end of the handle.

The functions of the sectional handle carrying the punch are four in number. It furnishes a punch for making a depression in the

dynamite or explosive substance for the placing of the fuse shown in Fig. 6. Again on being turned in the direction of the arrow in Fig. 3 the dog 10 takes against the notch 11 in the other section of the handle and thus stops the jaws 7 and 8 at the proper aperture to crimp the fuse. Also when the punch handle section is returned the reverse way from the arrow until it is parallel with the section of the handle carrying the blade, the pivot 20 being closely riveted, the punch 16 takes closely against the handle 3 until it snaps into the recess 13 above described, thus locking the punch section of the handle vertically against its complementary section. The dog 10 also at the same time sinks into the recess 12 and thus double locks the section. It is now performing its function of handle alone and is locked into position by the two ingenious devices just mentioned. The jaw 7 is similarly chamfered at its crimping edge 7'.

I thus have a device which in addition to a knife furnishes a punch with an extendible handle, a crimping tool all in compact form, the body of the device forming a compact yet commodious tool carrier for the outfit.

What I claim is:—

1. The combination in a miner's knife and crimper, of a sectional handle, a knife blade pivoted at one end of the handle, and a second jaw pivoted near the jaw end of the handle and adapted to co-act with the handle jaw to form a crimping tool, and also to serve as a complement to and complete the sectional handle.

2. In a combination tool of the kind described, a sectional handle, a knife blade pivoted at one end of the handle, a crimper jaw at the end of the handle opposite the knife, a second jaw pivoted near the jaw end of the handle, and adapted to co-act with the handle jaw to form a crimping tool, a spur to stop the jaw at a predetermined point, and a recess for the spur.

3. The combination in a miner's knife and crimper, of a sectional handle, a knife blade pivoted at one end of the handle, a crimper jaw at the end of the handle opposite the knife, a second jaw pivoted near the jaw end of the handle and adapted to co-act with the handle jaw to form a crimping tool, and a punch at the extremity of the second jaw.

4. In a miner's combination knife and crimper, a sectional handle having a crimper jaw, and a recess on the back of the handle, a second sectional handle pivoted to the first

and having a dog adapted to take against the recess and limit the clutch of the crimper jaw to a predetermined extent.

5 5. A combination miner's knife, punch and crimper having a sectional handle, a horizontal recess in the front end of the sectional handle, a recess on the back of the sectional handle, a recess on the front edge of the sectional handle, a complementary section
10 tion pivoted to the recessed section and bearing upon one end a punch and upon the other end a crimping jaw adapted to co-act with

the crimping jaw on the complementary section, and said complementary section being adapted to complete the handle by the locking of said punch extension in the recess of the complementary handle section. 15

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES SCHULTZE, JR.

Witnesses:

W. B. SHATTUC,
ALBERT L. VOGL.