

No. 826,569.

PATENTED JULY 24, 1906.

O. HANSON.
MINER'S TOOL.

APPLICATION FILED NOV. 2, 1905.

FIG. 1.

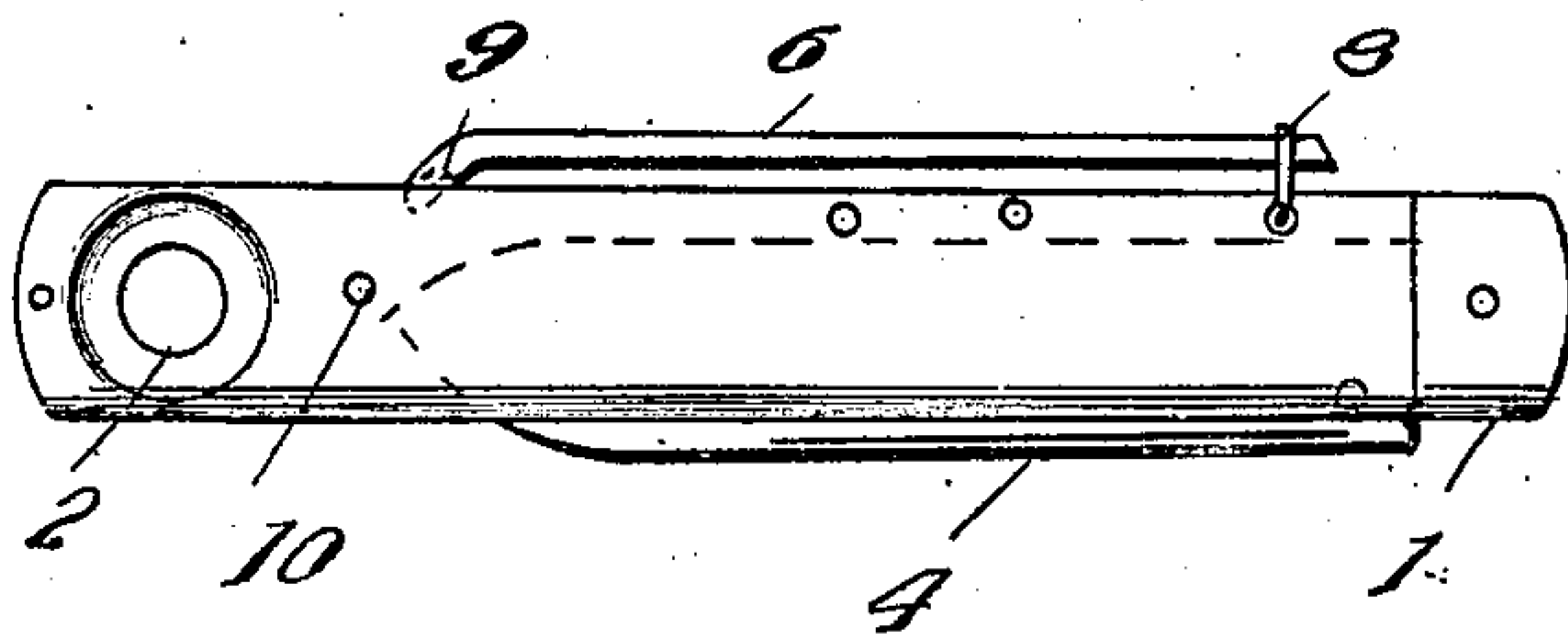


FIG. 2.

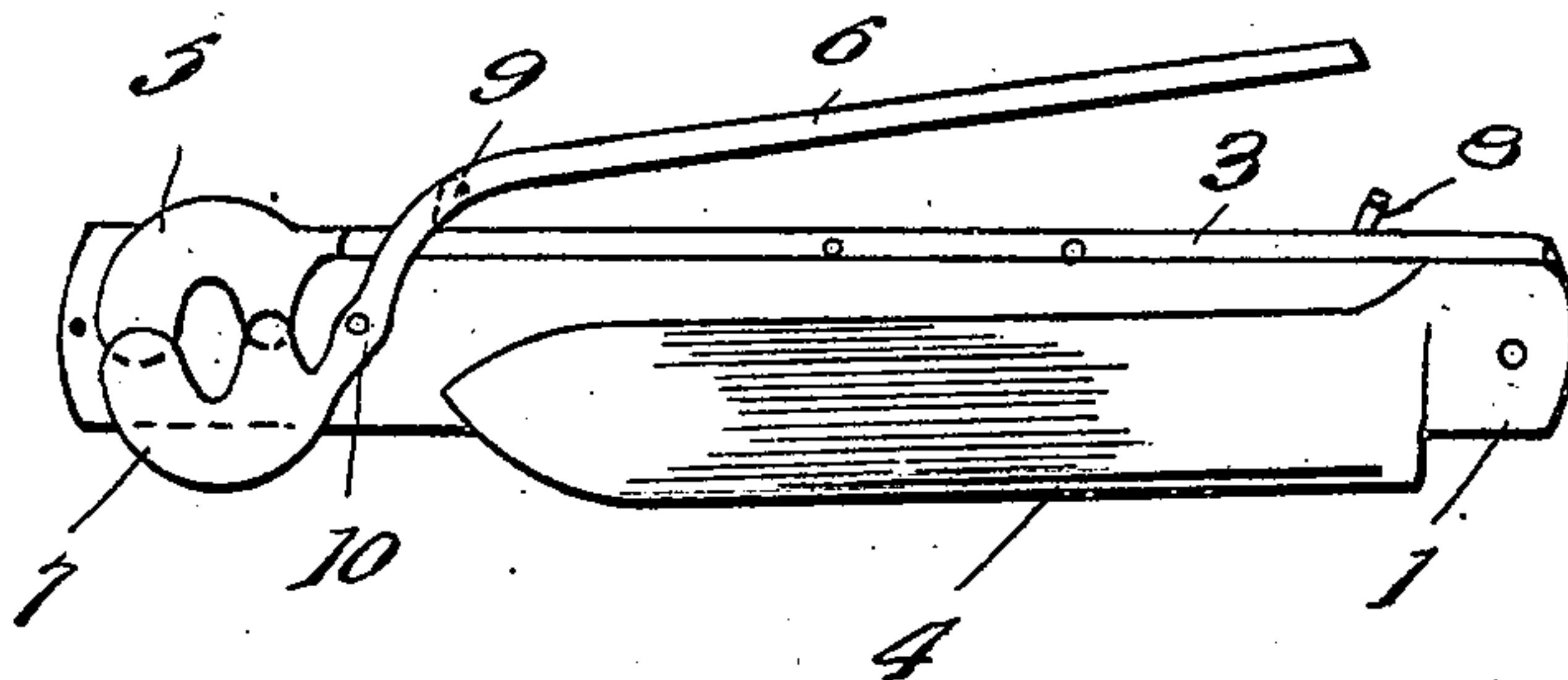
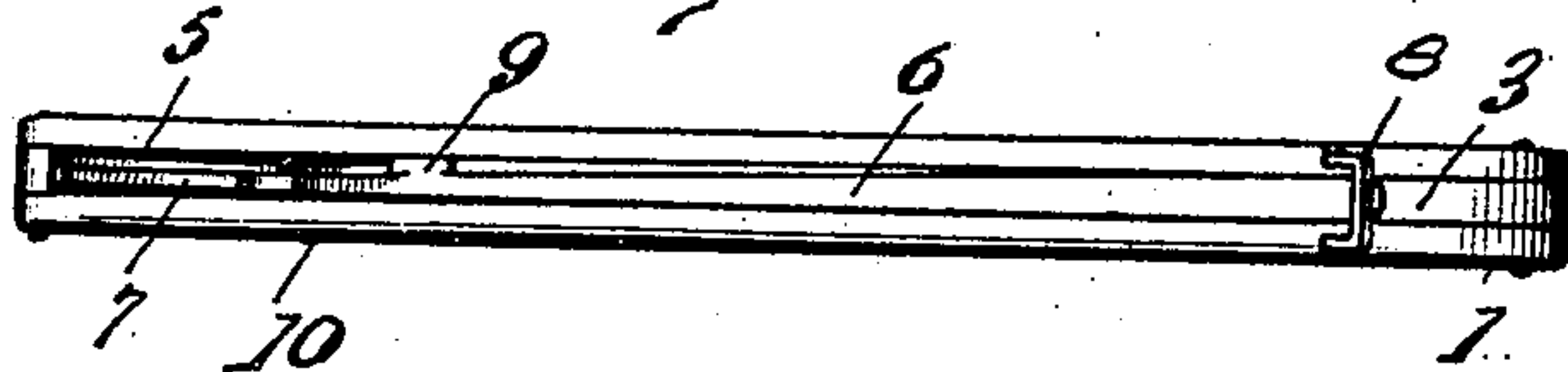


FIG. 3.



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OLE HANSON, OF MERCUR, UTAH.

MINER'S TOOL.

No. 826,569.

Specification of Letters Patent.

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Application filed November 2, 1905. Serial No. 285,661.

To all whom it may concern:

Be it known that I, OLE HANSON, a citizen of the United States, residing at Mercur, in the county of Tooele and State of Utah, have
5 invented certain new and useful Improvements in Miners' Tools, of which the following is a specification.

In blasting the miner is required to affix a cap to the end of each fuse. This is effected
10 by crimping the sides of the cap after the same has been fitted upon the end of the fuse. These caps or primers are generally crimped by the teeth of the miner by biting or by using a penknife. Both ways are ob-
15 jectionable and result in imperfect crimping and a failure of many charges to explode.

This invention combines a crimper with a penknife in a novel manner, so as not to interfere with the free use of the knife for ordi-
20 nary purposes, thereby enabling the miner to have at hand a tool for uniformly crimping the caps or primers and insuring their proper attachment to the fuse.

For a full description of the invention and
25 the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is
30 shown in the accompanying drawings, in which—

Figure 1 is a side view of a pocket-knife embodying the invention. Fig. 2 is a view similar to Fig. 1, having the rear side of the
40 handle omitted and showing the operating-lever of the crimper released. Fig. 3 is a top plan view of the device.

Corresponding and like parts are referred to in the following description and indicated
45 in all the views of the drawings by the same reference characters.

The crimper may be applied to any form of pocket-knife best adapted for the use of miners and comprises cooperating crimper
50 members, one of said members forming a part of the back-spring and the other member constituting a part of an operating-lever, which is so positioned with reference to the blade and handle of the knife as not to interfere with the accustomed use of such imple-
55 ment.

In order to demonstrate the application of the invention, the same is shown applied to a pocket-knife having a single blade, although this is not essential. The side pieces 1, comprising the handle, are extended at one end, and such extensions have an opening 2, formed therein to receive the cap or primer after the same has been fitted to the end of a fuse. The back-spring 3, for operating the
65 blade 4 in the ordinary manner, is extended at one end and formed into a crimping member 5, the same consisting of a jaw having a notch arranged opposite to the opening 2. The end portion of the back-spring provided
70 with the crimper member 5 is free to admit of said crimper member having a limited movement, so as to be pressed forward in the crimping operation and to spring outward to clear the cap and fuse after the primer has
75 been crimped.

The operating-lever 6 is pivoted near one end to the sides 1 of the handle, and its outer end is formed with a crimper member 7, similar in formation to the crimper member 5—
80 that is, with a jaw the inner edge of which is notched opposite to the opening 2, the two notches in the jaws or crimper members receiving the sides of the cap and crimping the same about the fuse—and handle end of the
85 operating-lever 6 is pressed upon. The outer end of the operating-lever is inclined so as to extend across the handle of the knife and admit of the handle portion of the operating-lever extending upon the outer side of the
90 knife-handle. When the knife is carried in the pocket and is used in the accustomed manner, the handle portion of the operating-lever 6 lies close against the back and is retained in folded position by means of a suit-
95 able catch 8, which, in the present instance, is in the form of a bail having its members pivoted to the sides of the handle and adapted to embrace the outer end of the operating-lever 6 and hold the same both from lateral
100 and outward displacement. A lug projects laterally from the operating-lever 6, adjacent to its pivotal connection 10 with the handle, and extends across the path of the back-spring. The lug 9 is so positioned that when
105 the catch 8 is moved to release the operating-lever the back-spring, acting upon the lug 9, throws the rear end of the operating-lever outward, as indicated in Fig. 2. When operating the crimper, after the cap has been
110 fitted to the end of the fuse and thrust into the opening 2 the rear portion of the operat-

ing-lever is pressed upon, and the lug 9, bearing upon the free end of the back-spring, presses the same inward, thereby causing both crimper members 5 and 7 to advance and grip opposite sides of the cap and crimp the same about the fuse in the manner well understood.

It will be understood from the foregoing that the attachment is such as to be readily adapted to any pocket-knife without interfering with the ordinary use of the latter, while at the same time enabling a miner to have conveniently at hand at all times a crimper by means of which the cap or primer may be properly attached or crimped about the fuse, thereby reducing the casualties attributable to unexploded charges from improperly-crimped caps to a minimum amount.

Having thus described the invention, what is claimed as new is—

1. A pocket-knife having an end portion of the back-spring extended and terminating in a spring crimper member, a second crimper member cooperating therewith, means for actuating the second crimper member, and means whereby said actuating means is adapted to force the first crimper member toward the second crimper member.

2. In a pocket-knife, a back-spring having an end portion free and provided with a

crimper member, an operating-lever pivoted to the handle of the knife and having a cooperating crimper member, and a lug projected laterally from the operating-lever to engage with the free portion of the back-spring to press the latter inward upon actuating the said operating-lever and to throw the latter outward when released.

3. A pocket-knife having corresponding end portions of its sides extended and provided with registering openings, a back-spring having an end portion free and terminating in a notched jaw forming a crimper member, an operating-lever arranged to actuate the aforesaid crimping member, said lever having an end portion inclined and pivoted between the side pieces of the knife-handle and terminating in a notched jaw forming a cooperating crimper member, and a catch applied to the knife-handle to hold the handle portion of the operating-lever closed against the back of the knife so as to be out of the way and not interfere with the ordinary use of the knife.

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

OLE HANSON. [L. s.]

Witnesses:

CARL MARLSEN,
J. M. NORTON.