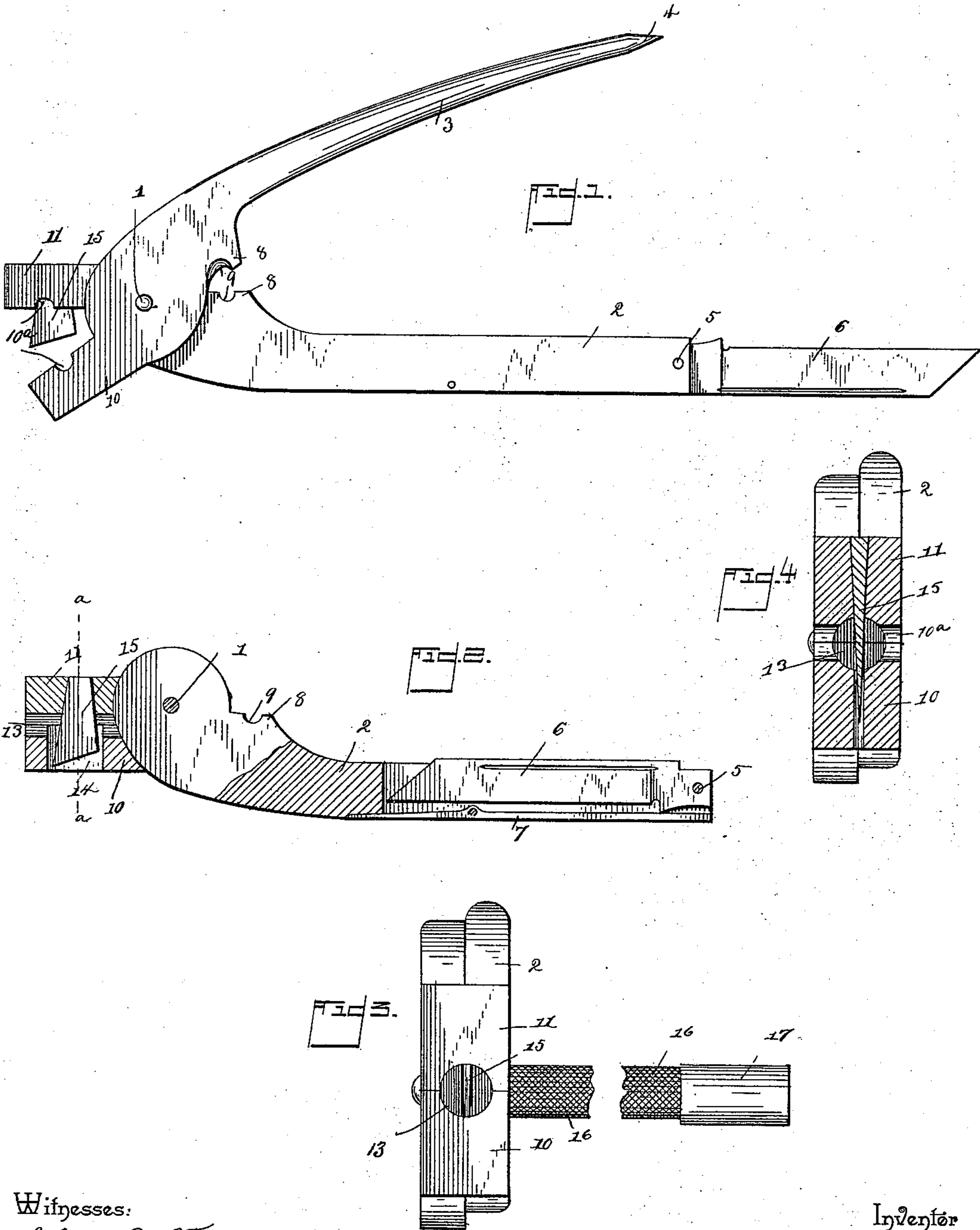


(No Model.)

P. STEVES.
FUSE TOOL.

No. 464,088.

Patented Dec. 1, 1891.



Witnesses:

Chas. A. Ford.

W. S. Duval.

By his Attorneys,

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Inventor
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UNITED STATES PATENT OFFICE.

PARKER STEVES, OF ASPEN, COLORADO.

FUSE-TOOL.

SPECIFICATION forming part of Letters Patent No. 464,088, dated December 1, 1891.

Application filed May 14, 1891. Serial No. 392,799. (No model.)

To all whom it may concern:

Be it known that I, PARKER STEVES, a citizen of the United States, residing at Aspen, in the county of Pitkin and State of Colorado, have invented a new and useful Fuse-Tool, of which the following is a specification.

This invention relates to a tool for use by miners in preparing fuses for blasting purposes; and the objects in view are to provide a cheap, simple, and handy tool adapted to cut the fuse into proper lengths, split the same for readily igniting, compress the end for insertion into a cap, and to ream the cap upon the fuse.

A further object is to provide the tool with a convenient knife-blade and also with means for forming a cavity in a stick of giant-powder for the reception of the cap.

With the above objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a side elevation of a tool constructed in accordance with my invention, the same being spread or opened. Fig. 2 is a vertical longitudinal section. Fig. 3 is a front end elevation. Fig. 4 is a transverse section on the line *a a*, Fig. 2.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I pivot at 1 a pair of levers or members, which I will designate as the "cutting member" 2 and the "punching member" 3. The longer ends of the levers serve as handles, and the handle of the lever 3 is tapered and terminates in a point 4, constituting a punch, which may be employed for forming a cavity in a stick of giant-powder for the reception of the cap of the fuse. The opposite member is provided with a recess, and has pivoted therein, as at 5, a blade 6, which may be used as a jack-knife for various purposes during the operation of charging. A spring 7 is riveted in the back of the recess of the lever and operates upon the knife in the usual way, so as to retain the same closed or open. Webs 8 are located at the inner edges of the levers immediately in rear of the pivot 1, the webs of the two levers being adapted to pass by each other when the levers are closed and at their meeting edges by the semicircular recesses, forming crimpers 9. Beyond the pivot the levers terminate

in oblong jaws 10 and 11, each of which is provided with a central transverse groove 10^a, semicircular in cross-section, said grooves being located opposite each other and extending across the faces of the jaws. The jaws are also provided upon their inner faces with longitudinally-disposed semicircular grooves 13, and the jaw 10 is provided in the bottom of the screw with a narrow slot 14, while the companion jaw 11 has secured thereto in the bottom of its groove a knife-blade 15.

16 designates an ordinary blasting-fuse, and the same is cut into a suitable length through the medium of the knife 15, said fuse being inserted between the two jaws, so that after being cut the grooves 10^a at opposite sides of the jaws act to compress the severed ends of the fuse, and thereby adapt said ends for a ready subsequent insertion into the cap 17. The cap thus mounted upon the fuse is passed butt-end first between the crimpers 9, and the lever is again closed so as to compress or crimp the material of the cap around the blasting-fuse, whereby a water-tight connection is formed. The opposite or uncapped end of the fuse is now inserted between the jaws in the longitudinal grooves 13, after which the jaws are closed, so that the knife 15 serves to split the fuse longitudinally, and in thus dividing it renders the ignition by means of a match much easier and quicker.

From the above description it will be seen that I provide a handy device to be used by miners in preparing fuses for use, the advantages of which will be at once recognized by all conversant with such work.

Having described my invention, what I claim is—

The herein-described miners' tool, comprising a pair of levers pivoted together and beyond their pivots terminating in jaws transversely and longitudinally grooved upon their inner faces, the knife located in the longitudinal groove of one of the jaws, and a slot for receiving the knife, located in the corresponding groove of the opposite jaw, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

PARKER STEVES.

Witnesses:

THOMAS H. MURRAY,
A. J. VARNEY.