

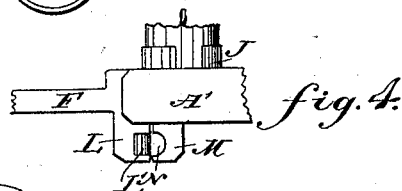
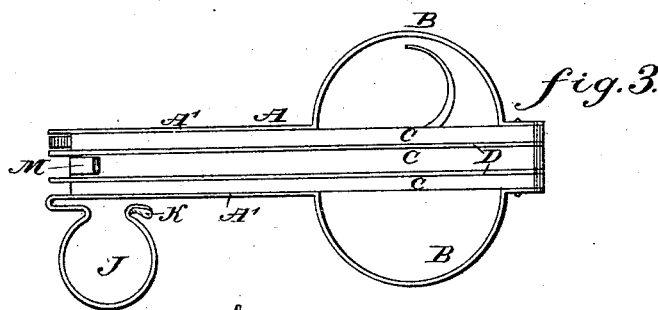
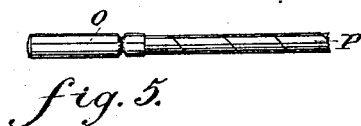
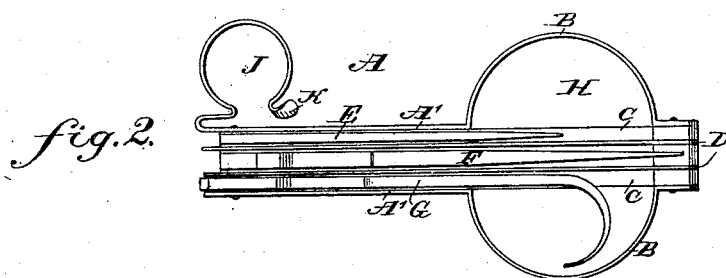
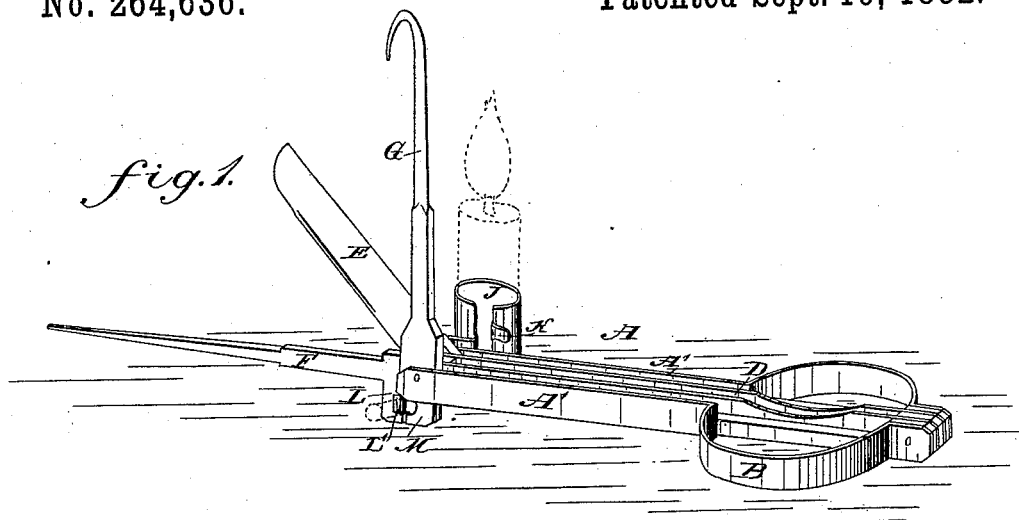
(Model.)

C. P. DES MOINEAUX.

COMBINED MINERS' CANDLESTICK AND LOADING TOOL.

No. 264,636.

Patented Sept. 19, 1882.



WITNESSES:

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CHARLES P. DES MOINEAUX, OF LEADVILLE, COLORADO.

COMBINED MINER'S CANDLESTICK AND LOADING-TOOL.

SPECIFICATION forming part of Letters Patent No. 264,636, dated September 19, 1882.

Application filed June 12, 1882. (Model.)

To all whom it may concern:

Be it known that I, CHARLES P. DES MOINEAUX, of Leadville, in the county of Lake and State of Colorado, have invented a new and Improved Combined Miner's Candlestick and Loading-Tool, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved combination of the candlestick and the tools required by a miner in preparing the blasts, which tools are to be combined in such a manner that they can be folded very compactly and conveniently.

The invention consists in a jaw projecting from the frame or one of its springs, combined with a jaw projecting from one of the implements, between which jaws a cap into which a fuse has been passed is pressed, for the purpose of forcing part of the metal of the cap into the fuse to hold the cap on the fuse.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved combined miner's candlestick and loading-tool, showing some of the implements raised. Fig. 2 is a plan view of the same, showing the implements folded in the frame. Fig. 3 is a plan view of the under side of the same. Fig. 4 is a detail view of the cap-presser. Fig. 5 is a detail view of a piece of a fuse and the cap held thereon.

The frame A is formed of the metal strips A', placed parallel and connected at the ends, which strips have lateral semicircular curvatures B at one end, which curvatures form a loop or pocket, H, for the ends of some of the implements. A series of locking spring-bars, C, and vertical longitudinal strips D between them, are held between the strips A', whereby a series of longitudinal compartments will be formed in the same manner as in a knife. A series of implements, E, F, and G, are pivoted between the strips D at that end of the frame opposite the one at which the loop H is formed, the pivoted ends of these implements resting against the inner surfaces of the springs C at the free ends of the same in the same manner

as the ends of the blades of a knife rest against the springs.

Of the implements, E is an ordinary knife-blade, F a pointed prong, and G a hook. An open spring loop or socket, J, for receiving a candle, is formed of one end of one of the side strips, A', of the handle-frame A, and is provided at its free end with lug K, against which the thumb is pressed in case the loop is to be opened for inserting or removing a candle. In the loop H the upper edges of the strips D are recessed to permit grasping the implements for raising them.

The prong F is provided at its inner end with a jaw, L, projecting from its back edge, which jaw has part of its edge beveled or tapered at L'. A jaw, M, provided on its outer edge with a recess, N, projects from the rear edge of the spring C of the prong F, at the upper or forward end of this spring, or from the frame. The knife E is used to cut fuses or for other suitable purposes. The prong F can be forced into a beam, post, or crevice in the rocks for holding the candlestick, and can also be used in preparing the charges and in loading the drill-holes for blasting. The hook G is used for suspending the candlestick from projecting parts of the rock or framing.

To hold a cap, O, on the fuse P passed into it, part of the cap must be pressed into the fuse. This is accomplished by placing the cap after the fuse has been inserted into the recess of the jaw M, and then pressing the jaws together by opening the prong F. The cap is turned and the jaws L and M are pressed together several times until a sufficient part of the cap has been pressed into the fuse to hold the cap on the fuse, whereby an annular groove will be formed in the cap, as shown.

The special advantages of the above described implement are that it contains most of the small implements used by miners, which implements are folded very compactly, so as to occupy very little space, and so as not to injure the person carrying this combination-tool.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the frame A, of

implements pivoted to the same, a jaw on one of the locking-springs or on the frame, and of a jaw on one of the implements, substantially as herein shown and described, and for
5 the purpose set forth.

2. The combination, with the frame A, of the blade E, the prong F, and the hook G, pivoted thereon, the jaw M on the frame or on

one of its locking-springs, and the jaw L on the prong F, substantially as herein shown and described, and for the purpose set forth.

CHARLES P. DES MOINEAUX.

Witnesses:

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