

(No Model.)

A. J. CARTER.

COMBINED CANDLE HOLDER, CRIMPER, AND CUTTER.

No. 534,137.

Patented Feb. 12, 1895.

Fig: 1.

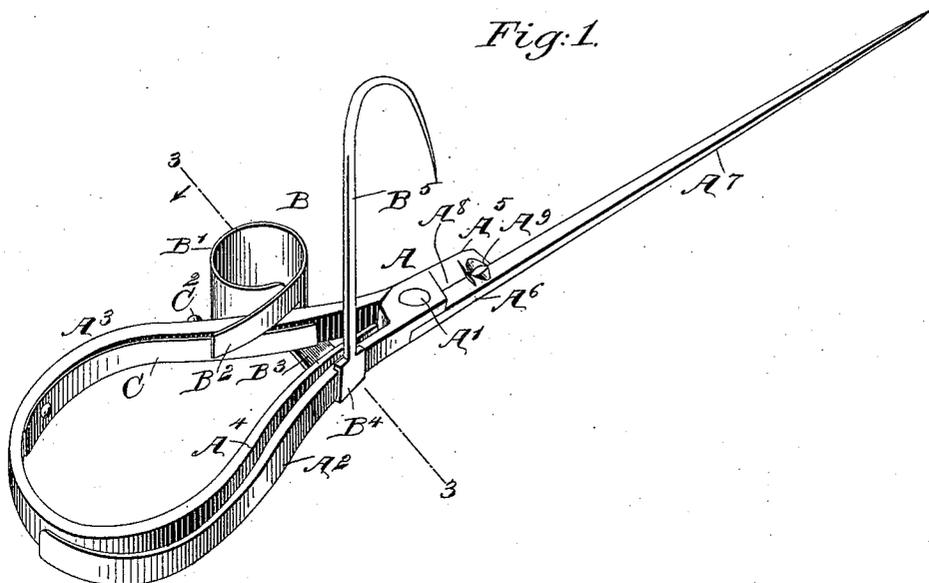


Fig: 2.

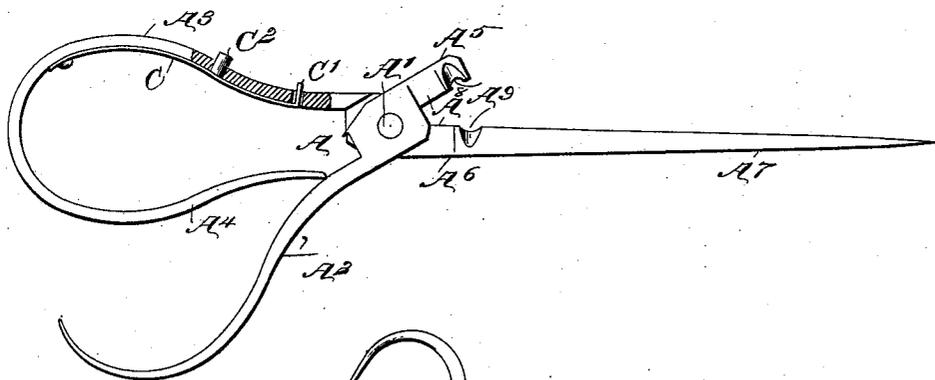
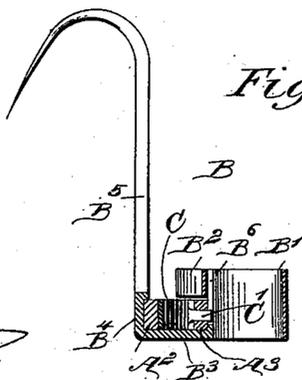


Fig: 3.



WITNESSES:

John A. Rennie.
Fred. H. Foster.

INVENTOR

A. J. Carter
BY Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE

ANDREW J. CARTER, OF ALMA, COLORADO.

COMBINED CANDLE-HOLDER, CRIMPER, AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 534,137, dated February 12, 1895.

Application filed April 7, 1894. Serial No. 506,690. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. CARTER, of Alma, in the county of Park and State of Colorado, have invented a new and Improved
5 Combined Candle-Holder, Crimper, and Cutter, of which the following is a full, clear, and exact description.

The invention relates to miners' tools and the object is to provide a new and improved
10 combined candle holder, crimper and cutter, which is simple and durable in construction, and arranged to enable the miner to readily and conveniently cut the fuse and to crimp the cap, the device also forming a suitable
15 candle holder adapted to be driven into the mine chamber or hung on a projection from the wall.

The invention consists of a candle holder of special construction, adapted to be locked
20 in place on the pair of tongs.

The invention also consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed
25 out in the claims.

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

Figure 1 is a perspective view of the improvement, showing the candle holder locked
35 on the tongs. Fig. 2 is a plan view of the improvement, with parts in section and with the candle holder removed; and Fig. 3 is a transverse section of the improvement on the line
38-38 of Fig. 1.

The improved tool is provided with a pair of tongs A, and a candle holder B, adapted to be locked in place on the said pair of tongs, as illustrated in Figs. 1 and 3, and hereinafter
40 more fully described. The pair of tongs A is provided with the usual pivot A', and the handles A² and A³, adapted to be taken hold of by the operator to open and close the jaws A⁵ and A⁶ of the said pair of tongs A.

The handle A³ is formed at its outer end with a spring plate extension A⁴, curved inwardly and forwardly to rest against the inner side of the handle A², so as to make the pair of tongs spring-pressed to automatically
45 open the jaws A⁵ and A⁶. By the operator pressing the handles A² and A³ the jaws A⁵

and A⁶ close. The jaw A⁶ is formed into a point A⁷, of a suitable length, as shown in the drawings and adapted to be driven into timber of the mine so as to conveniently support
55 the tool. The jaws A⁵ and A⁶ are provided with the cutting edges A⁸, for cutting the fuse and with the crimping notches A⁹, for crimping the cap onto the fuse.

The candle holder B previously mentioned
60 is formed with the band B', preferably made of spring metal and arranged in the form of an open ring having one end terminating in an extension forming a handle B² for conveniently opening and closing the band to insert
65 or remove the candle from the said band. The other end of the band B' is provided on its bottom with a transversely-extending bar B³ from which extends upward a recessed guide arm B⁴ adapted to engage the handle
70 A² of the pair of tongs, as plainly shown in Fig. 3. From this guide arm B⁴ extends upward a hook B⁵ adapted to be hung on a projection in the mine, so as to support the tool in position in case the point A⁷ is not used as
75 previously explained.

The candle holder B is fastened in place on the tongs and for this purpose a spring C is employed, fastened at one end to the side of the handle A³ and formed at its free end with
80 a pin C' projecting through an opening in the handle A³ to engage one end of the band B', so as to lock the latter and consequently the candle holder B in place on the tongs. See Fig. 3. On the spring C is also formed a
85 knob C² extending through an opening in the handle A³ to the outside thereof at the rear of the band B' as plainly shown in Figs. 1 and 2, the said knob being adapted to be pressed by the operator so as to move the free end of the spring C inward and to disengage the pin
90 C' from the end of the band B' whenever it is desired to remove the candle holder from the pair of tongs. When the several parts are in the position as shown in Figs. 1 and 3, then the handle A² engages the slotted guide arm B⁴ while the other handle A³ abuts against one end of the ring-shaped band B', as plainly shown in the said Fig. 3.

By moving the candle holder B rearward,
95 the pin C' snaps in on one end of the band B' so as to lock the latter and the candle

holder in place. At the same time the pair of tongs A are locked in a closed position, so that the cutting edges A⁸ and the crimping grooves A⁹ are closed.

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

1. A tool of the class described, comprising a pair of tongs formed on its jaws with cutting and crimping edges, and a candle holder adapted to engage the said pair of tongs so as to lock the latter in a closed position, substantially as shown and described.

2. A tool of the class described comprising 15 a pair of tongs formed on its jaws with cutting and crimping edges, the forward end of one member being extended longitudinally to form the point A⁷ and its rear end being reduced and curved inwardly to form a spring 20 A⁴ to press the handles of the tongs apart, a spring catch on said spring carrying member in rear of the pivot, a candle holder having an aperture to be engaged by said catch and provided with a transverse bar and a hook to

engage the other member of the tongs and 25 hold them closed, substantially as described.

3. A tool of the class described, clamping tongs formed with cutting and crimping edges, a spring catch on one of the members, and a candle holder having an aperture to receive the said catch and a hook to engage the 30 opposite member of the tongs and hold the tongs closed, substantially as described.

4. A tool of the class described, comprising a pair of tongs having spring-pressed handles, 35 and jaws formed with cutting and crimping edges, a spring secured on one of the handles and formed with a pin and a knob, and a candle holder provided with an open ring-shaped band adapted to be engaged by the said spring 40 pin, the said candle holder being also provided with a transverse bar, and a guide arm having a hook, substantially as shown and described.

ANDREW J. CARTER.

Witnesses:

CHARLES F. LAKE,
JAMES J. CLEARY.