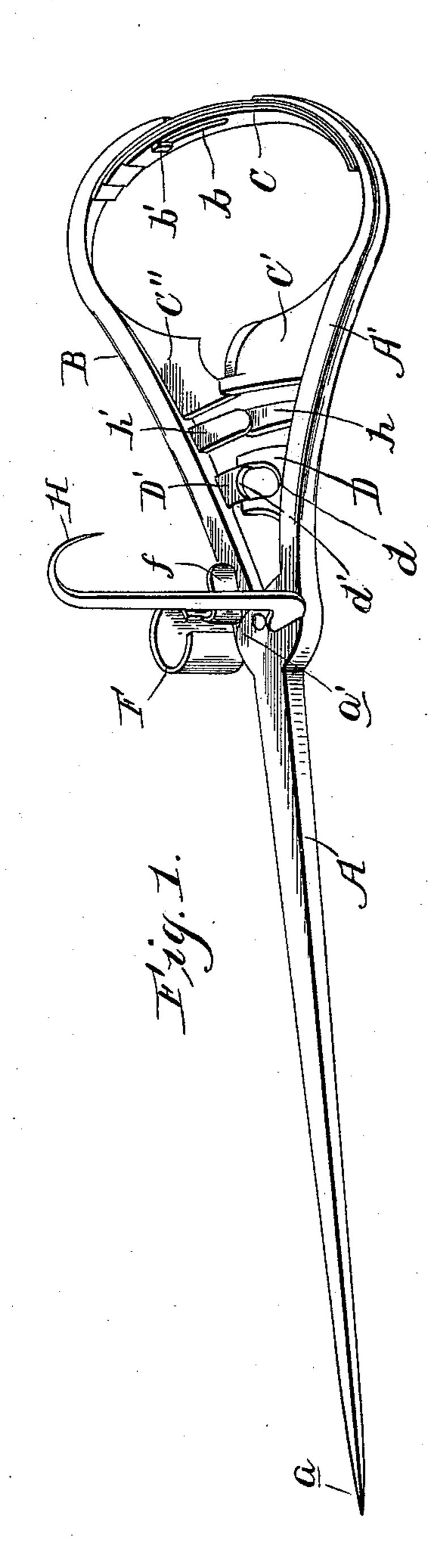
(No Model.)

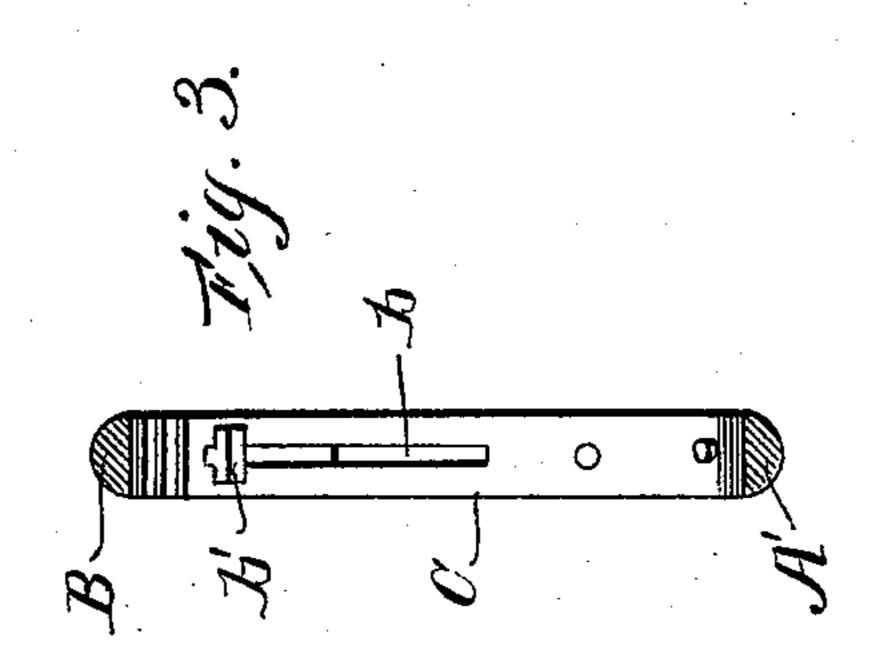
C. S. McCREADY.

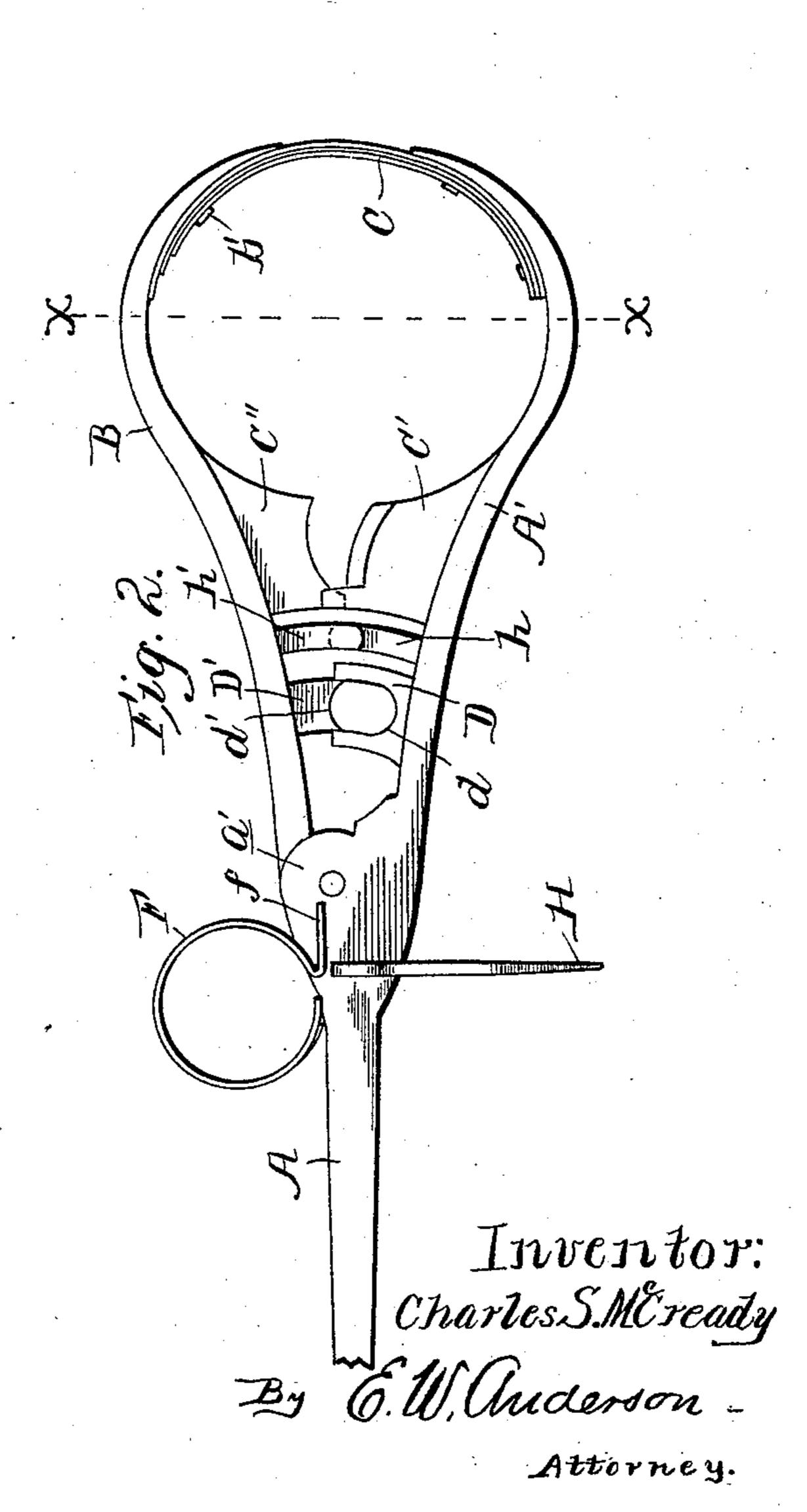
MINER'S COMBINED CANDLESTICK, CAP CRIMPER, AND FUSE CUTTER No. 594,354.

Patented Nov. 23, 1897.



Witnesses: Carrole & Webstro PhilipleMasi.





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United States Patent Office.

CHARLES S. McCREADY, OF BODIE, CALIFORNIA, ASSIGNOR OF ONE-HALF TO LEWIS A. MURPHEY, OF SAME PLACE.

MINER'S COMBINED CANDLESTICK, CAP-CRIMPER, AND FUSE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 594,354, dated November 23, 1897.

Application filed May 18, 1897. Serial No. 637,071. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. MCCREADY, a citizen of the United States, and a resident of Bodie, in the county of Mono and State of 5 California, have invented a certain new and useful Improvement in a Miner's Combined Candlestick, Cap-Crimper, and Fuse-Cutter; and I do 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view of a device embodying my invention. Fig. 2 is a plan view of a portion of the same; and Fig. 3 is a cross-section on line xx, Fig. 2.

This invention is designed to provide a convenient and effective tool or appliance of novel character for the use of miners for the purposes of a fuse-cutter and cap-crimper and also as a candlestick or holder.

With this object in view the invention consists in the novel construction and combination of parts, all as hereinafter described, and

Referring to the accompanying drawings, the letter A designates a light metallic bar having one end portion thereof tapered down to a sharp point a and its opposite end portion shaped to form an approximately semicircular jaw A'. At the junction of these two

35 portions the bar is formed with a lateral lug or projection a', to which is pivoted a second and similar jaw B.

C designates a spring which in the present instance consists of a number of superimposed leaves which are secured at one end portion to the inner face of the fixed jaw A' and are arranged to bear at their opposite end portions upon the inner face of the pivoted jaw, being slotted at b to engage a headed stud b'. When the jaw B is pressed toward the fixed jaw, this spring is bent, as will be readily seen, in such a manner as to put it under tension, so that when the jaw is released by the hand it will be at once returned to its normal position. Formed in the throat portions of the said jaws are coacting knife projections

C' C'', which constitute the fuse-cutter. In said throat also, but nearer the $\log a'$, are capcrimping devices D D', carried by the respective jaws, the part D being a slotted projection having a concave bottom wall d, while the part D' is a lug or projection designed to enter the slot of the projection D and formed with a concave end d'. h h' are oppositely-projecting lugs which are located between the 60 crimping devices and the knife projections and which are arranged to ride one upon the other, so as to prevent any tendency of the knife projections to spring laterally with respect to each other.

Secured to the bar A at the base of the lug a' is the candle-holding device F, which consists of a piece of thin spring metal bent into substantially cylindrical form, its free end portion being turned outwardly at substantially right angles to form a thumb-piece f. The end portion of a candle is inserted into this holder and is retained therein by its clamping or spring action.

Adjacent to the candle-holder the bar A is 75 provided with a vertical arm rising therefrom and terminating in a hook portion H, formed with a sharp point and serving as a means by which the device may be suspended from any convenient object or support. The 80 elongated tapered point portion a also forms means for supporting the device, being designed to be forced or driven into the wall of the mine or elsewhere.

When used for the purpose of a fuse-cutter, 85 the fuse is inserted between the knife projections C' C" and is severed by the operation of the movable jaw. The cap is then placed upon the fuse end, which is then placed between the projections D D' and is crimped 90 by a similar operation of the jaw.

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

1. In a tool or implement of the character 95 described, the combination with the tapered and pointed bar having the fixed, approximately semicircular jaw, of the movable jaw of similar form pivoted to said bar, and the spring, the latter consisting of a number of 100 superimposed leaves secured at one end to the inner face of one of the said jaws and

594,354

having a sliding bearing upon the inner face of the other jaw, said spring closing the space between the free ends of the jaws, together with coacting cap-crimping and fuse-cutting 5 devices located on the throat portions of said

jaws, substantially as specified.

2. In a tool or implement of the character described, having two jaws, the one fixed and the other movable and acted upon by a spring, 10 one of said jaws having upon its throat portion a slotted projection D, a knife C, and a lug h, and the other of said jaws having upon

its similar portion a concave lug D' adapted to enter the slot of the lug D, a knife C' adapted to coact with the knife C, and a lug 15 h' arranged to slide upon the lug h and thereby hold the two knives in proper relative positions, substantially as described.

In testimony whereof I affix my signature

in presence of two witnesses.

CHARLES S. MCCREADY.

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Witnesses:

HARVEY BOONE, F. E. QUINNILLE.