E. GODFREY.

TOOL FOR MINERS' AND BLASTERS' USE.

APPLICATION FILED JUNE 26, 1918.

1,300,834. Patented Apr. 15, 1919.

Fig. 1.

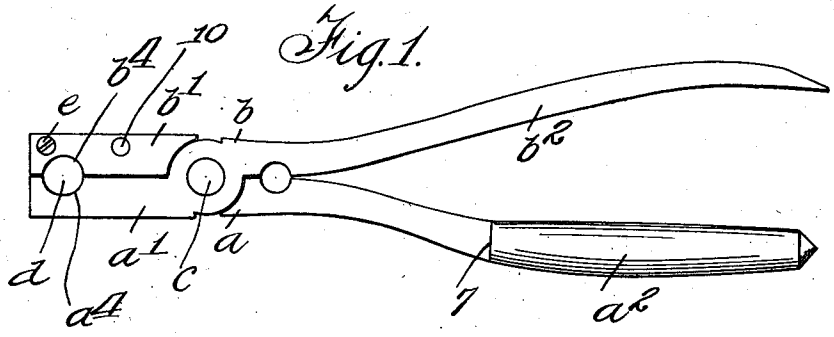


Fig. 2.

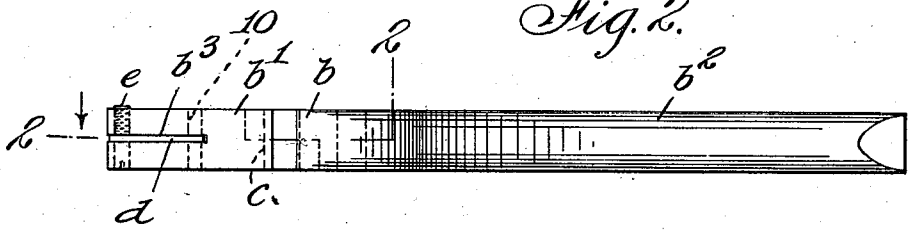


Fig. 3.

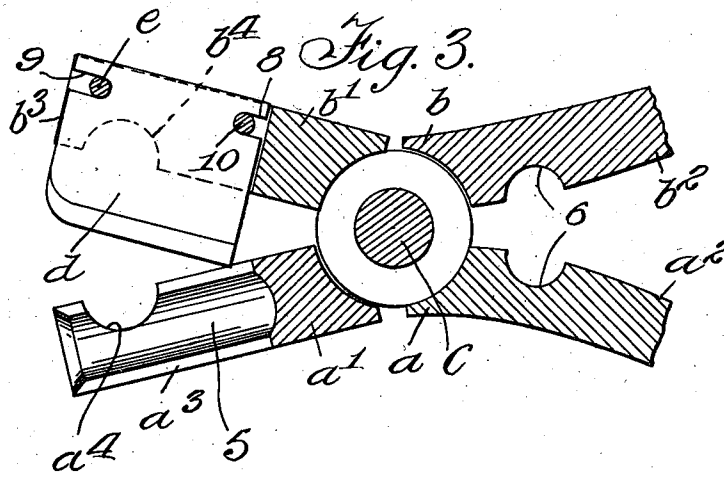
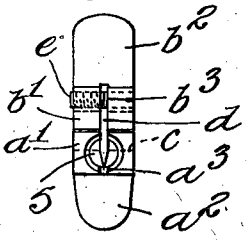


Fig. 4.



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UNITED STATES PATENT OFFICE.

EDWARD GODFREY, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR TO CANADIAN EXPLOSIVES LIMITED, OF MONTREAL, CANADA, A CORPORATION.

TOOL FOR MINERS' AND BLASTERS' USE.

1,300,834. Specification of Letters Patent. Patented Apr. 15, 1919.

Application filed June 26, 1918. Serial No. 241,942.

To all whom it may concern:

Be it known that I, EDWARD GODFREY, a subject of the King of Great Britain, and resident of the city of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Tools for Miners' and Blasters' Use; and I do hereby declare that the following is a full, clear, and exact description of same.

My invention relates to tools used by miners and blasters for cutting and splitting fuses and the like, for crimping the caps upon the fuses and forming the holes in the explosive cartridge for the reception of the capped fuse, the object of the invention being to construct a tool capable of such uses from the fewest possible number of parts and more especially to provide an improved fuse splitting arrangement, means for rendering the cutting blade readily removable and also one of its handle portions safer for use in making holes in the explosive and it consists of the special construction and arrangement of parts hereinafter described and pointed out in the claims.

For full comprehension of the invention reference must be had to the accompanying drawings in which similar reference characters indicate corresponding parts and wherein

Figure 1 is a side elevation of the tool;

Fig. 2 is an edge elevation thereof;

Fig. 3 is an enlarged longitudinal section on line 2—2 Fig. 2 and

Fig. 4 is an end view.

The tool as usual in its general appearance resembles a pair of pliers and is composed of but two members a and b, pivoted together at c, and a single cutting blade d removably held in place by a set screw e.

Each of the members a and b presents a jaw portion a^1 b^1 respectively and handle portion a^2 b^2 respectively and each jaw portion is slotted from its outer end inwardly as at a^3 b^3 respectively and also has a semicircular fuse holding recess a^4 b^4 extending transversely of their respective inner opposing faces.

For cutting off a length of fuse the latter is placed in the semicircular recess a^4 which accommodates one side thereof and the blade forced through same, the other side of the fuse end being accommodated by the holding recess b^4 of the blade jaw.

To split the end of the fuse such end is inserted for the desired distance in the bore 5 formed axially of the jaw portion a^1 and the blade forced through the center of same with the result that the powder core is compressed on each side by the blade and as the fuse is confined on every side there is no chance of powder escaping during the operation.

The means for crimping the cap upon the fuse end consists of the opposing and co-operating semi-circular recesses 6 in the inner faces of the handle portions a^2 b^2 in rear of the pivot point of the members a and b.

In order to readily remove the cutting blade when desired I provide it with notches 8 and 9 in its ends, that at 8 being adapted to fit over a fixed rivet 10 extending through the jaw and that at 9 accommodating the set screw e which passes through one side of the jaw and having screwthreaded connection with the other side.

To render it safer to use one of the handle portions for making holes in the explosive I have shown the pointed end portion of the one a^2 as formed of or coated with copper, bronze, phosphor bronze or like substance, extending from the end to the point 7.

What I claim is as follows:

1. A tool for miners' and blasters' use consisting of two pivoted members each of which presents a handle portion and a jaw portion, one jaw portion having a cylindrical bore formed axially thereof extending inward from its outer end and the other jaw portion carrying a cutting blade adapted to be passed through said bore sidewise thereof, the first named jaw portion being slotted to accommodate movement of the blade.

2. A tool for miners' and blasters' use consisting of two pivoted members, each of which presents a handle portion and a jaw portion, one jaw portion having a cylindrical bore formed axially thereof extending inward from its outer end, the other jaw portion carrying a cutting blade adapted to be passed through said bore sidewise thereof, the first named jaw portion being slotted to accommodate movement of the blade and the opposing face of each jaw portion having a semicircular recess therein.

3. In a tool for miners' and blasters' use

consisting of two pivoted members each of which presents a handle portion and a jaw portion, one of said jaw portions having a slot extending from its outer end inward and a fixed rivet extending transversely through the slot near the inner end thereof; a cutting blade adapted to be fitted in said slot, having a notch in its inner end adapted to engage said rivet and a notch in its outer end, and a set screw passing through the last named notch.

In testimony whereof, I have signed my name to this specification.

EDWARD GODFREY.