

No. 652,573.

Patented June 26, 1900.

A. S. WILLIAMSON.  
FUSE WATERPROOF DETONATOR CRIMPER.

(Application filed Jan. 5, 1900.)

(No Model.)

FIG. 1.

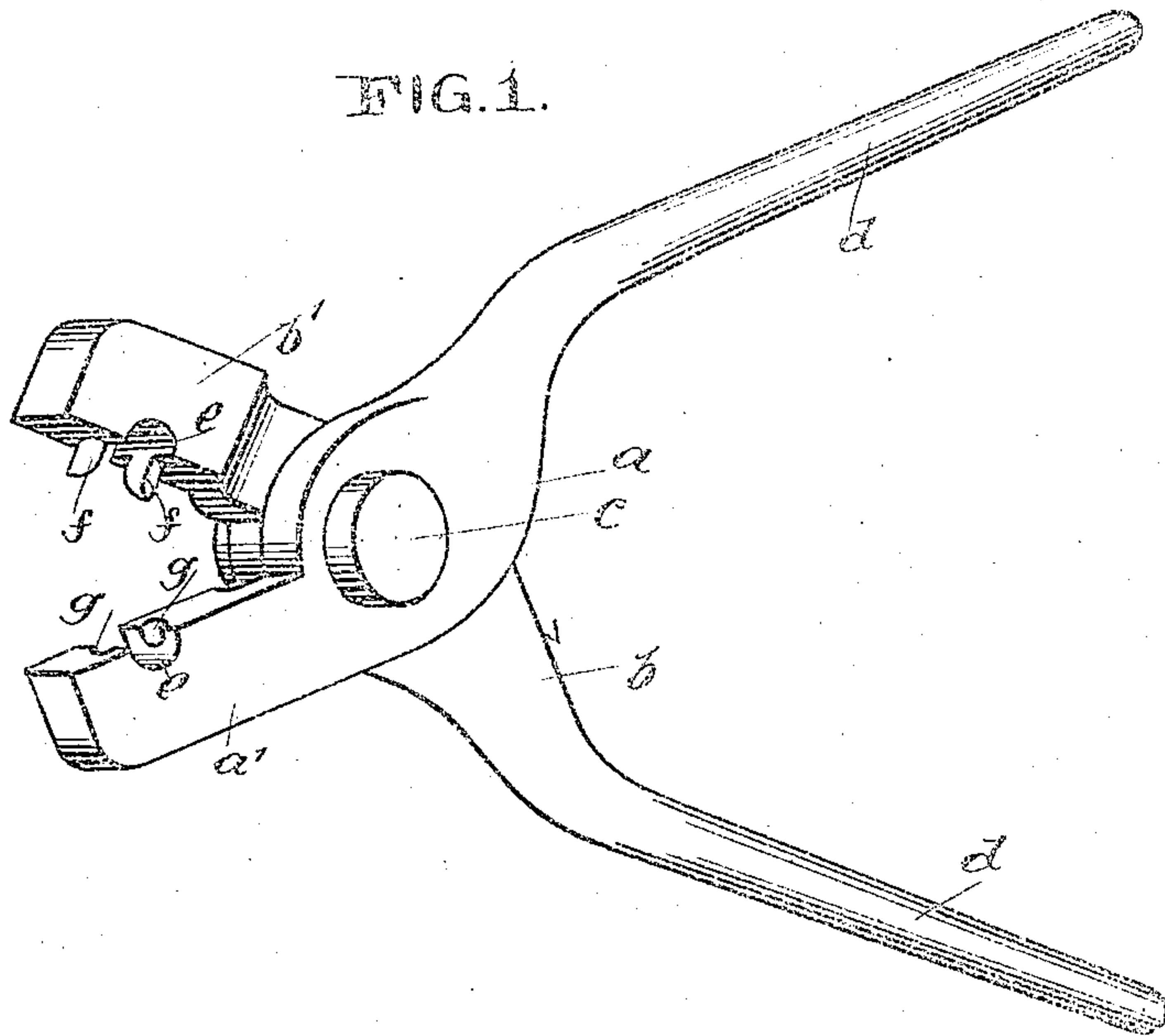
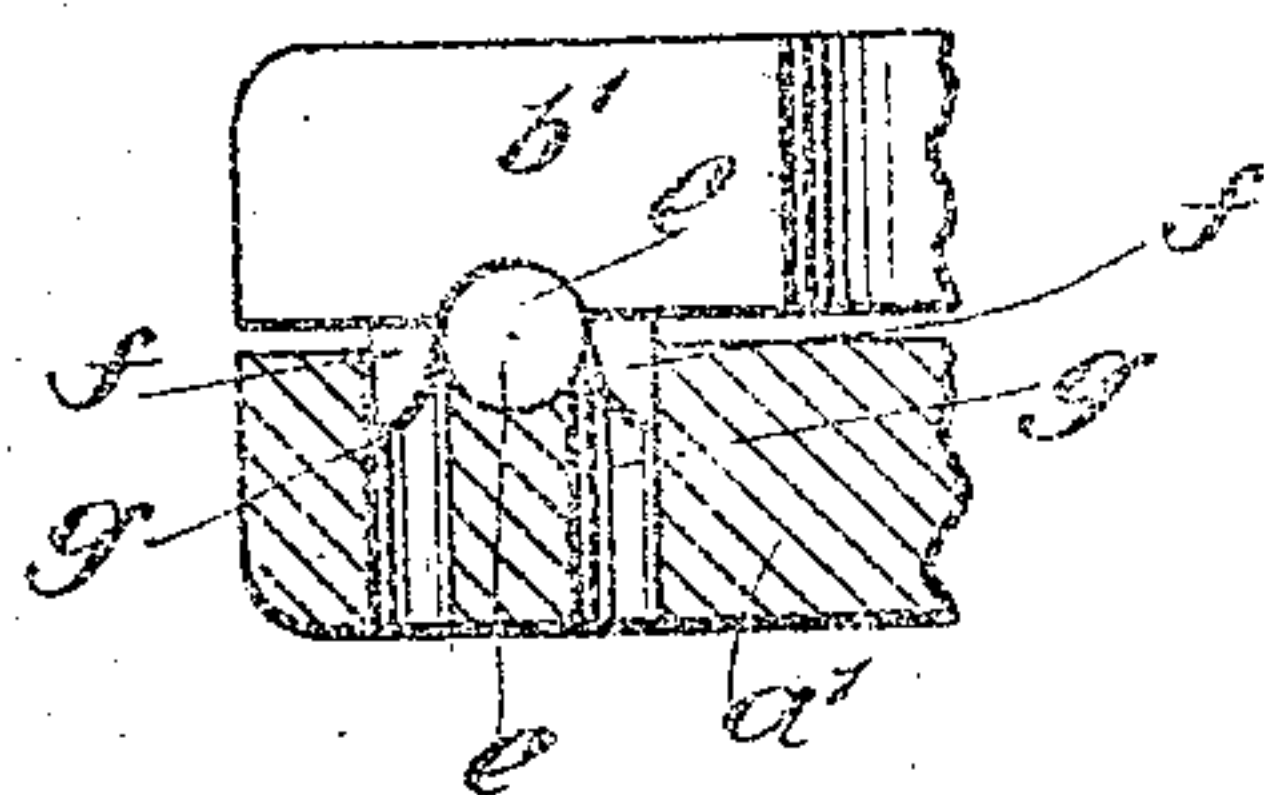


FIG. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ARTHUR SHEWAN WILLIAMSON, OF PHOENIX, CANADA.

## FUSE-WATERPROOF-DETONATOR CRIMPER.

SPECIFICATION forming part of Letters Patent No. 652,573, dated June 26, 1900.

Application filed January 5, 1900. Serial No. 470. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR SHEWAN WILLIAMSON, a citizen of the United States, residing at Phoenix, in the Province of British Columbia and Dominion of Canada, have invented a new and Improved Fuse-Waterproof-Detonator Crimper, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide an instrument for crimping fuse waterproof detonators to seal the same by producing in the detonator a uniform contraction and also producing folds or crimps at opposite sides thereof, thus sealing the detonator around the fuse proper.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a perspective view of the invention, and Fig. 2 is a fragmentary view showing the upper jaw in side elevation and the lower jaw in longitudinal section.

The tool consists of two sections *a* and *b*, pivoted to each other on the bolt *c* and formed with handles *d* and jaws *a'* and *b'*. The jaws *a'* and *b'* are offset laterally in opposite directions, so as to engage each other fair, and each jaw is formed on its inner face with a semicircular concavity *e*. The jaw *b'* has spurs *f* formed on its under face, such spurs being respectively at opposite sides of the recesses *e*, and the jaw *a'* is formed with cavities *g* in its inner face, such cavities being placed so as to respectively receive the spurs *f* when the jaws are engaged, as shown in Fig. 2. The adjacent faces of the spurs *f* are

beveled outward, as indicated, so that they will properly engage the detonator and cause the same to be wedged between the spurs and into the recesses *e*.

In using the tool the detonator, with the fuse therein, is inserted between the jaws and the jaws are engaged so that the spurs *f* enter the cavities *g*, and the tube is compressed or contracted within the recesses *e*, which are then matched with each other, as indicated in Fig. 2. Simultaneously the spurs *f* in straddling the tube produce crimps or folds therein. By these means the detonator is effectually and hermetically sealed on the fuse proper.

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

1. A crimping-tool, having jaws adapted to work toward and from each other, each jaw being formed with recesses, the recesses matching when the jaws are engaged to form an inclosed space receiving the article to be crimped, one of the jaws being formed with spurs situated at opposite sides of the recess therein and the other of the jaws being formed with cavities receiving the spurs.

2. A crimping-tool, having two jaws arranged to work toward and from each other and formed each with a recess, such recesses registering to form an enlarged space receiving the article to be crimped, and a spur carried on one jaw at one side of the recess therein, the other jaw having a cavity registering with the spur, to receive the spur when the jaws are engaged.

ARTHUR SHEWAN WILLIAMSON.

Witnesses:

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J. A. WILLIAMSON.