

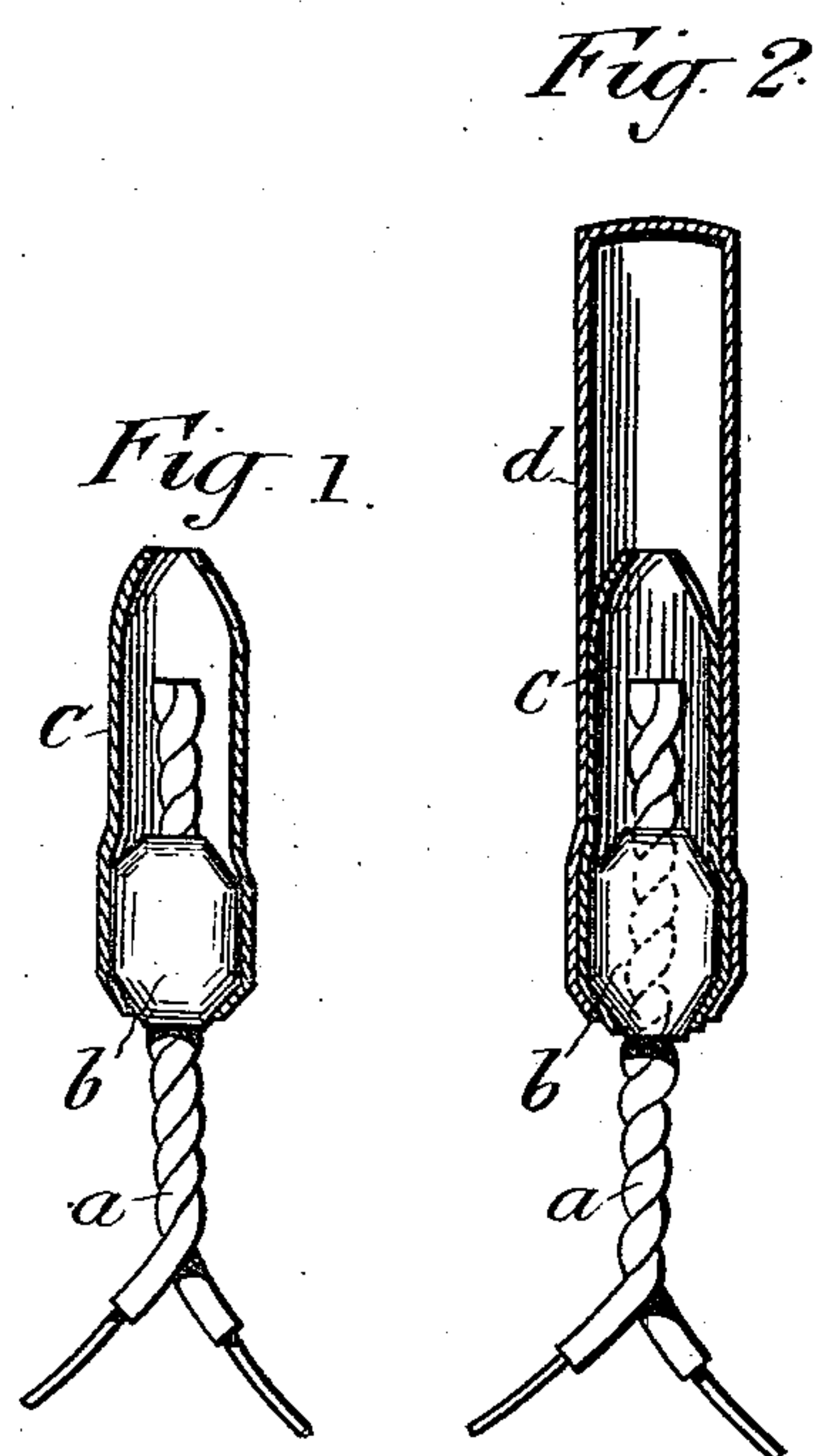
No. 677,477.

Patented July 2, 1901.

G. SMITH & D. CORRIE.
ELECTRIC DETONATOR FUSE.

(Application filed Feb. 23, 1900.)

(No Model.)



Witnesses:

J. D. McMahon.
J. Buckler.

Inventors,

George Smith
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UNITED STATES PATENT OFFICE.

GEORGE SMITH AND DAVID CORRIE, OF POLMONT, SCOTLAND.

ELECTRIC DETONATOR-FUSE.

SPECIFICATION forming part of Letters Patent No. 677,477, dated July 2, 1901.

Application filed February 23, 1900. Serial No. 6,294. (No model.)

To all whom it may concern:

Be it known that we, GEORGE SMITH and DAVID CORRIE, of Polmont, in the county of Stirling, Scotland, have invented certain new and useful Improvements in Electric Fuses and Electric Detonator-Fuses, (for which we have applied for a patent in Great Britain, No. 16,040, and bearing the date of the 5th of August, 1899,) of which the following is a specification.

This invention relates to improvements in electric fuses and electric detonator-fuses, the object of which is to provide a fuse in which wires are firmly fixed and cannot be pushed out of the fuse shell or tube.

In the drawings which form a part of this application, Figure 1 is a view, partly in section, showing the inner tube and the plug forming parts of our detonator-fuse. Fig. 2 is a section of the detonator-fuse.

The electric primer *a* consists of two copper wires suitably insulated and braided or twisted together. The twisted wires are threaded through a suitable opening in a lead plug *b*, which is pressed closely on and secured firmly to the wires by means of suitable pliers. The fuse-head thus prepared is forced into a small tube *c*, of metal or other suitable material, having one end tapering and which is turned over or bent down onto the lead plug at its other end. In this way the lead plug is firmly fixed into the tube, the taper and bent-over portions of which prevent any movement either

backward or forward of the plug. The flashing mixture is then put in the tube in the usual way.

The tube *c* is forced by a suitable machine into the detonator-tube *d*, where the bulging portion of the small tube *c* engages with the sides of the detonator-tube and makes a tight joint, so that it is impossible to remove the inner tube from the outer or to pull the wires backward or forward.

To make the inner tube more secure, the edge of the outer or detonator tube may be turned over the inner, as shown in Fig. 2, which effectually prevents the latter from being moved in any direction.

Having now particularly described and ascertained the nature of our invention and in what manner the same is to be performed, we declare that what we claim is—

An electric fuse composed of a detonator-tube, tapering tube contained in said detonator-tube, a soft plug contained in said tapering tube and having the walls of the latter pressed inwardly thereabout, said plug having an opening to receive the primer, as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses.

GEORGE SMITH.
DAVID CORRIE.

Witnesses:

JAMES M. ANDERSON,
JOHN BRYCE.