C. A. & I. S. BROWNE.

ELECTRIC BLASTING FUSE.

No. 108,324. Patented Oct. 18, 1870.

Fig. 1.

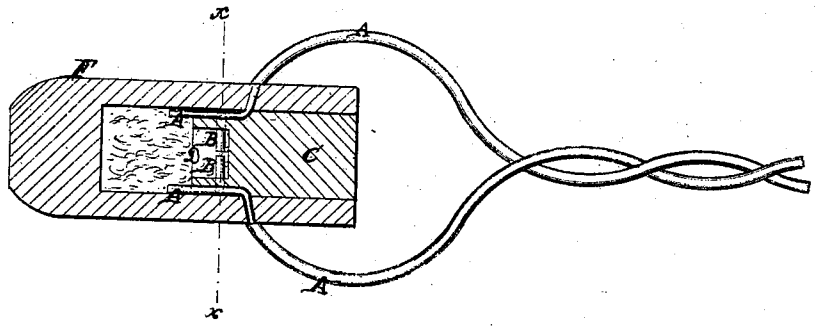
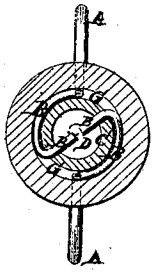


Fig. 2.



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CHARLES A. BROWNE AND ISAAC S. BROWNE, OF NORTH ADAMS, MASSACHUSETTS.

Letters Patent No. 108,324, dated October 18, 1870.

IMPROVEMENT IN ELECTRIC BLASTING-FUSES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, CHARLES A. BROWNE and ISAAC S. BROWNE, of North Adams, in the county of Berkshire and State of Massachusetts, have invented a new and improved Electric Fuse; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a longitudinal section of our improved fuse, and

Figure 2 is a transverse section on the line $x\,x$ of fig. 1.

Similar letters of reference indicate corresponding parts.

Electric fuses of this class are usually divided into two principal parts, first, the main wires; second, the cap, or that part which contains the explosive material.

When these two parts are properly joined they constitute an electric fuse.

The cap of this fuse consists of two pieces: first, a primer, C; second, a cap, F, into which the primer C is introduced, the two forming a complete electric cap.

The primer C is made of wood, or other non-conducting material, having a chamber, D, at one end, for the reception of any material easily exploded by electricity.

Around and just above the bottom of the chamber D, in the primer C, and upon the surface of the primer C, there is turned a groove, G, into which the wires B B are placed, communicating with the chamber D in the primer C.

The cap F, or second piece, is also made of wood or other non-conducting material, and is provided with holes through its sides, through which the main wires A A pass.

This cap F also contains, in its chamber E, any explosive material which may be ignited by the explosive in the chamber D of the primer C.

When each of the above parts is charged with the proper explosive, and the main wires A A are passed through the holes in the cap, and the primer C is introduced into the chamber E of said cap F, metallic communication is made between each of the wires B B in the primer C, and each of the main wires A A, the whole forming a complete electric fuse.

Having thus described our invention,

We claim as new and desire to secure by Letters Patent—

An electric fuse, formed of a primer provided with wires or metallic bands, arranged in an outer groove, and of a charged cap, through the sides of which the main wires of a battery are inserted, the primer and cap being fitted together, as shown and described, whereby metallic communication is made between their respective wires, substantially as and for the purpose specified.

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