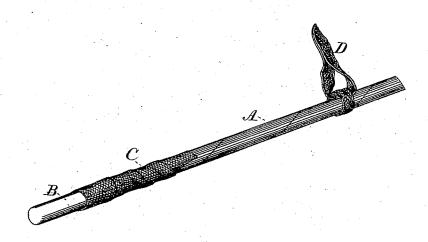
(No Model.)

## E. A. THOMPSON.

JOINT PROTECTOR AND IGNITER FOR FUSES.

No. 305,250.

Patented Sept. 16, 1884.



Witnesses, Gestlettiong Jos Nouse

Ea Thompson Dewey Ho attences

## UNITED STATES PATENT OFFICE.

ELDRIDGE A. THOMPSON, OF SILVER CITY, IDAHO TERRITORY.

## JOINT-PROTECTOR AND IGNITER FOR FUSES.

SPECIFICATION forming part of Letters Patent No. 305,250, dated September 16, 1884.

Application filed May 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELDRIDGE A. THOMPson, of Silver City, county of Owyhee, and Territory of Idaho, have invented an Improve-5 ment in Joint-Protector and Igniter for Fuses; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a new and useful protector for the joint of a fuse, whether said 10 joint be made by the union of two pieces of fuse or the union of the fuse with the cap, said protector being also applicable as an igniter of the fuse.

My invention consists in a peculiarly-pre-15 pared water - proof and inflammable cloth, wound around the fuse at a joint, or tied around the end of the fuse, as I shall hereinafter fully describe

The object of my invention is to keep the 20 joint dry, especially the joint made by the union of the fuse with the cap, and also to provide a ready means for igniting the fuse.

Referring to the accompanying drawing, the figure is a perspective view of a fuse and 25 cap, showing the application of my joint protector and igniter.

A is a piece of fuse, and B the cap on one end. C is the protector wound around the cap and fuse, and covering the joint made by 30 their union. D is a piece of the same material as C, tied around the fuse near its end, and having its free ends brought together ready for ignition. These ends may be made of any suitable length to regulate the period 35 of their combustion.

The protector and igniter consists of a piece of cloth prepared in the following manner: rosin, mutton-tallow, and beeswax, in the proportions, approximately, of three pounds of rosin, one pound of mutton tallow, and one pound of beeswax, are taken and melted together. Into this melted mixture the cloth is dipped until it takes up sufficient to fill its pores and cover its surface with a thin layer of the material. When the cloth dries, it is yet flexible enough to be handled in winding

and tying, and is both water - proof and inflammable. It is of prime importance to render the joint between the cap and fuse water-proof. When the hole is tamped with water, 50 it is absolutely necessary to effect this result to prevent "missing the hole," as the failure of the blast is styled. In any case, where dampness surrounds the fuse, it is essential to protect the joint. By wrapping my cloth 55 around it, this is effectually accomplished. It keeps the joint dry by reason of its imperviousness to water, and it does not hinder combustion in the least. By reason of its inflammable nature, it can be used, as shown by 60 D, for igniting the fuse, a use to which it is adapted with better and cheaper results than the ordinary candle-snuff.

I am aware that the joint between the fuse and cap has been heretofore made water-proof 65 to a certain extent by the use of soap, grease, tar, or clay applied to it, and I have heard of a waxed rope being used for this purpose; but I am not aware that a piece of cloth prepared as I describe, has ever been used, and 70 I claim that it is more readily applied and more effective in its results than those materials I have mentioned.

Having thus described my invention, what I claim as new, and desire to secure by Let- 75 ters Patent, is—

In combination with a fuse and a cap on its end, as described, forming a joint at its union with the fuse, the water-proof protector C, wound around the cap and fuse, and covering 80 the joint, said protector consisting of a piece of cloth prepared by dipping it into a melted mixture of rosin, mutton-tallow, and beeswax, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand.

## ELDRIDGE A. THOMPSON.

Witnesses:

F. H. LEONARD, I. H. WICKERSHAM.