

(No Model.)

D. BROOKS.

INSULATING THE TERMINALS OF SHEATHED ELECTRICAL CONDUCTORS.

No. 362,872.

Patented May 10, 1887.

FIG. 1.

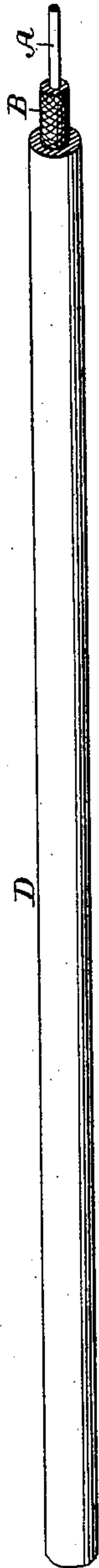


FIG. 2.

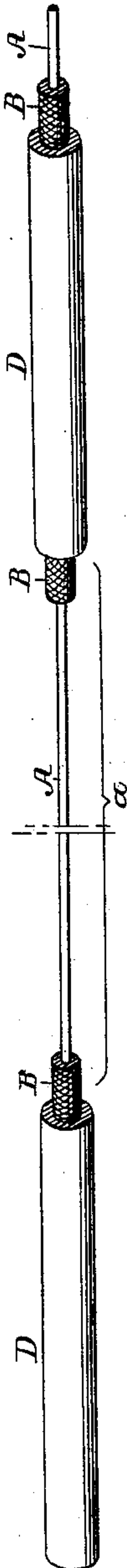


FIG. 3.

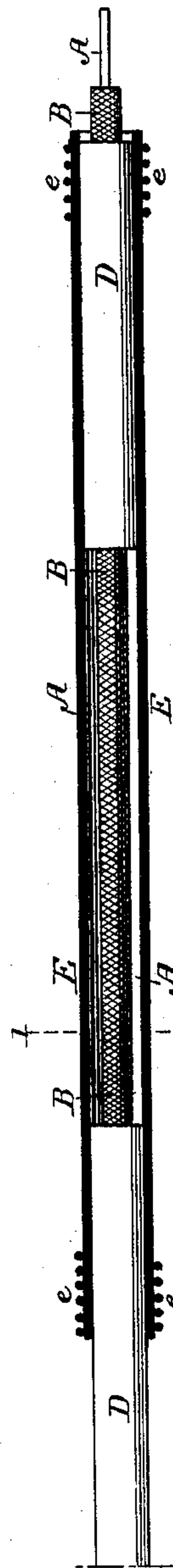
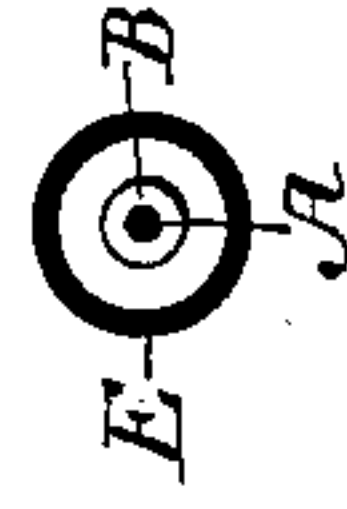


FIG. 4.



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UNITED STATES PATENT OFFICE.

DAVID BROOKS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HENRY B. TATHAM, OF SAME PLACE.

INSULATING THE TERMINALS OF SHEATHED ELECTRICAL CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 362,872, dated May 10, 1887.

Application filed February 21, 1887. Serial No. 228,331. (No model.)

To all whom it may concern:

Be it known that I, DAVID BROOKS, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Insulating the Terminals of Sheathed Electrical Conductors, of which the following is a specification.

My invention relates to the insulation of the terminals of that class of insulated electrical conductors which have an outer sheathing of lead or other suitable metal; and the object of my invention is to prevent leakage from the conductor to the earth through any collection of moisture on the insulating material between the conductor and sheathing at the terminals.

In the accompanying drawings, Figure 1 is a view of the terminal end of a lead-incased insulated electrical conductor. Figs. 2 and 3 are views illustrating the manner of insulating the terminal so as to prevent leakage to the earth from the conductor through the lead sheathing; and Fig. 4 is a transverse section on the line 1 2, Fig. 3.

In the use of these lead-incased insulated conductors, either inside or outside buildings, great inconvenience and trouble are experienced, owing to the collection of moisture at the terminals where the wires come out of the casings for connection with lamps or other instruments, for, owing to the direct or indirect connection of the lead casing with the earth and the creeping of the moisture over the fibrous or other insulating material between the end of the lead casing and the wire, more or less current is lost by leakage to the earth. To prevent this I disconnect the end of the pipe or metal sheathing from the main part thereof, and interpose between said disconnected end and main part a sleeve or other body of a substance which is both an electrical insulator and a moisture-resistant.

In Fig. 1, A is the electrical conductor with a fibrous or other insulating cover, B, inclosed in a lead or other metal sheathing or pipe, D. In carrying out my invention I first sever

the outer metal sheathing at some little distance from the end—say a foot—and cut it away for a suitable length, as shown at *a*, Fig. 2. I prefer, also, to cut away the fibrous insulating material for about the same length. I then slip over the disconnected end and extending onto the end of the main part of the sheathing a sleeve, E, of rubber or other suitable material, Fig. 3, which will resist moisture and at the same time be an electrical insulator.

For greater security the sleeve is bound down at *e e* onto the metal sheathing, to prevent moisture from creeping underneath. By this means the collection of moisture on the insulating material B at the end of the pipe, making a more or less imperfect electrical connection between the wire and the severed or disconnected end of the pipe, will not be of any importance, and will not cause any leakage to the earth, since the severed end of the pipe is disconnected from the ground by the insulating and moisture resisting body E.

I claim as my invention—

1. The combination of the terminal of an insulated electrical conductor with a metal sheathing, having its end disconnected from its main part, and a moisture-resisting and insulating substance interposed between the said disconnected end and main part of the sheathing, substantially as set forth.

2. The combination of the terminal of an insulated electrical conductor with a metal sheathing, having its end disconnected from its main part, and a rubber sleeve connecting the two parts of the sheathing, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID BROOKS.

Witnesses:

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HARRY SMITH.