

(Model.)

D. BROOKS, Jr.
ELECTRIC CABLE.

No. 437,330.

Patented Sept. 30, 1890.

Fig. 1.

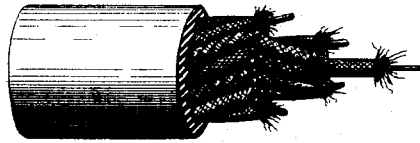
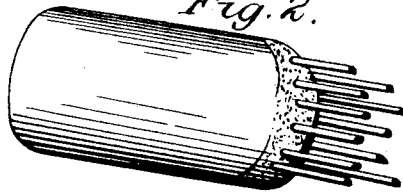


Fig. 2.



Witnesses

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ELECTRIC CABLE.

SPECIFICATION forming part of Letters Patent No. 437,330, dated September 30, 1890.

Application filed December 29, 1888. Serial No. 295,109. (Model.)

To all whom it may concern:

Be it known that I, DAVID BROOKS, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Electric Wires or Cables, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an electric wire or cable insulated, as hereinafter fully set forth and definitely claimed, whereby the employment of an insulating material or compound in liquid, molten, or other condition is obviated.

Figure 1 represents a sectional perspective view of a portion of a cable embodying my invention. Fig. 2 represents a perspective view of my improved cable, showing the manner of sealing the end thereof.

In carrying out my invention I take an electric wire cable, composed of a bunch of fibrous or tissue covered wires, and subject the same to a drying temperature of about 212° for a period of twenty-four hours, more or less, so as to entirely expel all moisture from the coverings of all of the wires of the bunch. Immediately after drying, while the cable is yet warm, an air-tight covering or incasement—such as lead, rubber, or tin-foil, or a combination thereof—is placed around the cable or bunch of wires. It will be seen that the cable now consists of an outside air-tight covering and an inside bunch of dried fibrous-covered wires, dry air occupying the interstices of the fibrous covering, instead of the usual insulating material employed in liquid, molten, or other condition, thus avoiding the employment of such material and the operation of applying the same by saturation or filling in.

After the fibrous-covered wires are dry they may be coated with powder—such as flour, soapstone, marble-dust, &c.—and the ends or terminals of a cable are saturated with a suitable compound or sealed up, as shown in Fig. 2, to prevent moisture from entering the fibrous materials from the ends.

Owing to the coating of powder, the moisture which may enter at any place where a cut or break occurs in the outside air-tight covering cannot penetrate but to a limited extent, as the powder—such as flour—forms a barrier to the rapid absorption of water. This allows the break to be repaired before any considerable damage has occurred.

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

1. An electric cable consisting of a bunch of dry fibrous-covered wires having the interstices between said wires filled with dry air, a coating of powder on said wires, and an air-tight incasement inclosing the same, substantially as described.

2. A bunch of dry fibrous-covered wires with the interstices filled with dry air and an air-tight incasement inclosing the same, forming a cable, the ends whereof are provided with means for preventing moisture from reaching the fibrous coverings of the wires, substantially as described.

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Witnesses:

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