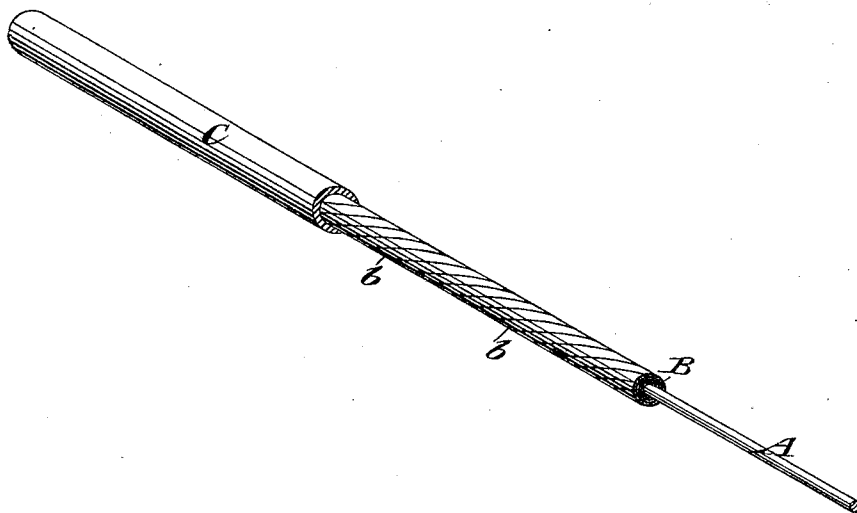


(No Model.)

E. D. McCracken.  
ELECTRICAL CONDUCTOR.

No. 524,343.

Patented Aug. 14, 1894.



Witnesses:

*Chas. Sundgren*  
*Fred Haynes*

Inventor:

*Edwin D. McCracken*  
by attorneys  
*Frank Howard*

# UNITED STATES PATENT OFFICE.

EDWIN D. McCracken, of Alpine, Assignor to the Norwich Insulated Wire Company, of Harrison, New Jersey.

## ELECTRICAL CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 524,343, dated August 14, 1894.

Application filed November 29, 1893. Serial No. 492,330. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN D. McCracken, of Alpine, in the county of Bergen and State of New Jersey, have invented a new and useful Improvement in Electrical Conductors, of which the following is a specification.

I will describe a conductor embodying my improvement and then point out the novel features in the claims.

10 The accompanying drawing is a side view of a conductor embodying my improvement, different portions of its length being represented with the insulating and covering materials removed so as to exhibit the important feature.

15 A designates a conductor which may consist of covered wire.

20 B designates an insulating covering, which may consist of a strip or strips *b* of paper, made of pure vegetable fiber used in its unchanged fibrous condition. Preferably the strip or strips will be spirally laid upon the conductor and so laid as to overlap at the edges.

25 To attain a high degree of insulation, it is very important to remove from the insulating material all the moisture which is capable of being evaporated, and thereafter to protect the insulating material from the absorption of moisture. I therefore, after applying  
30 the paper, dry the same with air which has already been dried or deprived of moisture besides being heated. In this way, I am able to remove practically all the moisture from  
35 the paper. Afterward, and while still heated,

the paper is coated and permeated with a liquid which after filling, will render the paper anhydrous. Outside the paper and its coating and permeating material, will preferably be used a coating or tubing of lead or other like material C.

In another application Serial No. 492,331, filed November 29, 1893, I have fully described the process of producing an electrical conductor such as I here claim, and have also  
45 illustrated and described apparatus which can be advantageously used in carrying out such process. Therefore further description of such process and apparatus will be unnecessary here.

50 What I claim as my invention is—

1. An electrical conductor having a covering consisting of a strip or strips of paper, composed of pure vegetable fiber, applied in its unchanged fibrous condition, the paper  
55 forming of itself an insulating covering and being dry and coated to render it practically anhydrous, substantially as specified.

2. An electrical conductor having a covering consisting of a strip or strips of paper, composed of pure vegetable fiber, applied in its unchanged fibrous condition, the paper  
60 forming of itself an insulating covering and having a suitable material coating and permeating it to render it practically anhydrous, 65 substantially as specified.

EDWIN D. McCracken.

Witnesses:

FREDK. HAYNES,  
GEORGE BARRY.