(No Model.)

R. SCHEFBAUER.

INSULATING ELECTRIC CONDUCTORS.

No. 377,118. Patented Jan. 31, 1888.

Fig. 1.

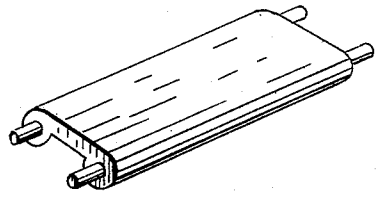


Fig. 2.

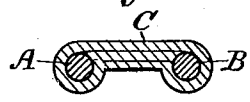


Fig. 3.

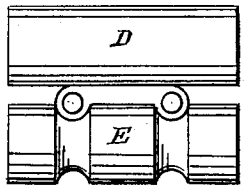
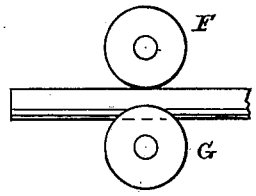


Fig. 4.



Witnesses :
H. A. Daniels
J. B. Nicholson.

Inventor :
Rupert Schefbauer.
By Wm. H. Babcock.
Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

RUPERT SCHEFBAUER, OF DRESDEN, SAXONY, GERMANY, ASSIGNOR TO WEBER & SCHEFBAUER, OF SAME PLACE.

INSULATING ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 377,118, dated January 31, 1888.

Application filed April 25, 1887. Serial No. 236,120. (No model.)

To all whom it may concern:

Be it known that I, RUPERT SCHEFBAUER, of Dresden, Kaulbachstrasse 18, a citizen of Germany, residing at Dresden, in the Kingdom of Saxony, in the Empire of Germany, have invented certain new and useful Improvements in Insulating Electric Conductors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention consists in a process of insulating electric conductors by passing them between rollers along with a sheet of paper moistened with a solution of ammoniacal oxide of copper, and afterward drying the said sheet by heat and pressure.

The invention also consists in the combination of two or more wires with the paper thus rolled and dried on them, the entire strip being ready to be laid as an integral article.

In the accompanying drawings, Figure 1 represents a detail perspective view of a piece of the insulating strip and wires enveloped therein. Fig. 2 represents a transverse sectional view of the same. Fig. 3 represents a front elevation of the first pair of rolls with the end of the strip issuing through the same. Fig. 4 represents an end elevation of the second pair of rolls with the paper and wires.

A designates one of two wires, and B the other. A strip of paper, C, previously moistened in a bath of ammoniacal oxide of copper, is folded about said wires, and the wires, with the paper thus wrapped around them, are passed through a pair of rolls, D E, whereby the moist paper is pressed on each wire, the oxide of copper causing the paper to adhere to the wires. Subsequently the strip of paper and wires are passed through the second pair of rolls, F G. These are heated, and remove the moisture from the strip partly by heat and partly by pressure. The strip is afterward still further dried and dipped in linseed-oil to make it impermeable by moisture. It is afterward passed through another pair of heated rolls to remove the superfluous oil. The strip is afterward still further dried.

Of course the above process may be applied to the coating of a single wire; or any convenient number may be thus rolled and enveloped in one strip. The strip and wires then constitute, in effect, an integral article capable of being laid as such wherever needed, the several wires being effectually insulated by the paper from each other and all other conductors, and necessarily occupying in said strip the precise places respectively assigned them. A single view only of each of the first two pairs of rollers has been given, the rollers being all alike in construction and arrangement.

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

1. The process of insulating electric conductors, consisting in the following steps: first immersing a strip of paper in a bath of ammoniacal oxide of copper, then rolling the conducting-wire with said strip to cause the paper to adhere to said wire, then drying the strip by heat and pressure, substantially as and for the purpose set forth.

2. A strip of paper containing oxide of copper and having conducting-wires embedded therein, the whole forming an integral article, substantially as shown.

In testimony whereof I affix my signature in presence of two witnesses.

RUPERT SCHEFBAUER.

Witnesses:
CARL F. REICHERT,
PAUL DRUCKMÜLLER.