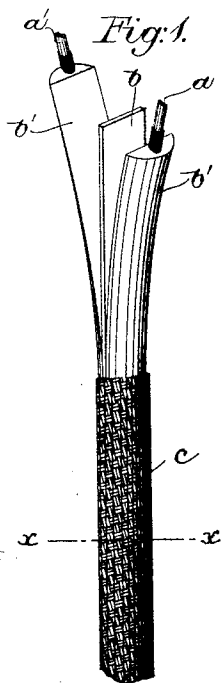
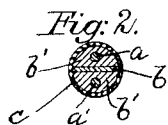


(No Model.)

W. VOGLER.
ELECTRIC CONDUCTOR.

No. 460,606.

Patented Oct. 6, 1891.



Witnesses:
Edgar A. Godkin
Maurice L. Emery

Inventor:
William Vogler,
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UNITED STATES PATENT OFFICE.

WILLIAM VOGLER, OF SOMERVILLE, MASSACHUSETTS.

ELECTRIC CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 460,606, dated October 6, 1891.

Application filed November 9, 1889. Serial No. 329,762. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM VOGLER, of Somerville, county of Middlesex, State of Massachusetts, have invented an Improvement in Electric Conductors, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to provide a novel electric conductor especially adapted to be used in telephonic communication.

In accordance with my invention a re-enforcing strip is interposed between two branches or wires, each of which has an independent semi-cylindrical insulation, the branches being on opposite sides of and the flat sides of the insulation resting upon the strip, an outer covering of insulation covering the branches and re-enforcing strip.

My invention therefore consists, essentially, in an electric conductor consisting of two branches or wires, an independent semi-cylindrical insulation for each branch, and a re-enforcing strip interposed between said branches, and upon the opposite sides of which the flat surface of the insulation rests, and an outer covering of insulation enveloping said branches and re-enforcing strip to secure the parts in place, substantially as will be described.

Figure 1 represents a sufficient portion of an electric conductor constructed in accordance with my invention to enable it to be understood; and Fig. 2, a transverse section on line *x x*, Fig. 1.

My improved electric conductor is composed of two wires or conductors *a a'*, forming branches of a metallic circuit, and a re-enforcing strip, web, or ribbon *b* interposed between the said wires. The re-enforcing strip or ribbon *b* is made flat, so that an increased surface is obtained, against which the semi-cylindrical independent insulation *b'*, covering each of the wires *a a'*, may bear, to thereby keep the said wires in their proper place on opposite sides of the re-enforcing strip. Each wire *a a'*, which may be an ordinary insulated wire, will be first covered with the semi-cylindrical insulation *b'*, and the flat side thereof will be laid against the flat surface of the re-enforcing strip on each side, and the said wires will

then be secured in place by means of a covering *c*, preferably of cotton or other textile braid, saturated with insulating material enveloping said branches or wires, and the re-enforcing strip to secure the parts in place.

The re-enforcing strip will preferably be made of metal, which may be steel, brass, &c., and the conductor used in telephonic communication, and when thus used the branches or wires *a a'* may be connected at their opposite ends to the re-enforcing strip and the latter form a common return for the said wires. In this manner each branch may form part of an independent metallic circuit, and induction from one circuit to the other, or from extraneous sources, is obviated or reduced to a minimum. So, also, if desired, the branches or wires *a a'* may be connected together to form a metallic circuit, and the re-enforcing strip connected at its opposite ends to the ground to form an independent ground-circuit, by which currents induced from extraneous sources may be conducted to the ground. In either case a complete metallic circuit is formed in a single conductor enveloped by a covering of insulation and requiring but a single insulator to support it.

The re-enforcing strip is preferably made of metal to enable my improved conductor to be used in telephonic communication, as described; but I do not desire to limit my invention to the use of a metal strip, as the same may be made of other material—such, for instance, as wood, card-board, webbing, &c.—to impart to the conductor the desired stiffness, and when so constructed the said conductor may be used for electric lighting and like uses. The flat re-enforcing strip prevents the tie-wires, by which the conductor is secured to its insulator or support, from cutting into or abrading the insulation on the branch wires.

The re-enforcing strip, when made of metal, will be sufficiently thin to permit the conductor to be readily bent, and the flat sides will be of sufficient width to prevent relative displacement of the insulation.

I claim—

As an improved article of manufacture, an electric conductor consisting of two branches or wires, an independent semi-cylindrical insulation *b'* for each branch, and a re-enforc-

ing strip interposed between said branches,
upon the opposite sides of which the flat sur-
face of the insulation rests, and an outer cover-
ing of insulation enveloping said branches,
5 and re-enforcing strip to secure the parts in
place, substantially as described.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

WILLIAM VOGLER.

Witnesses:

JAS. H. CHURCHILL,
E. J. BENNETT.