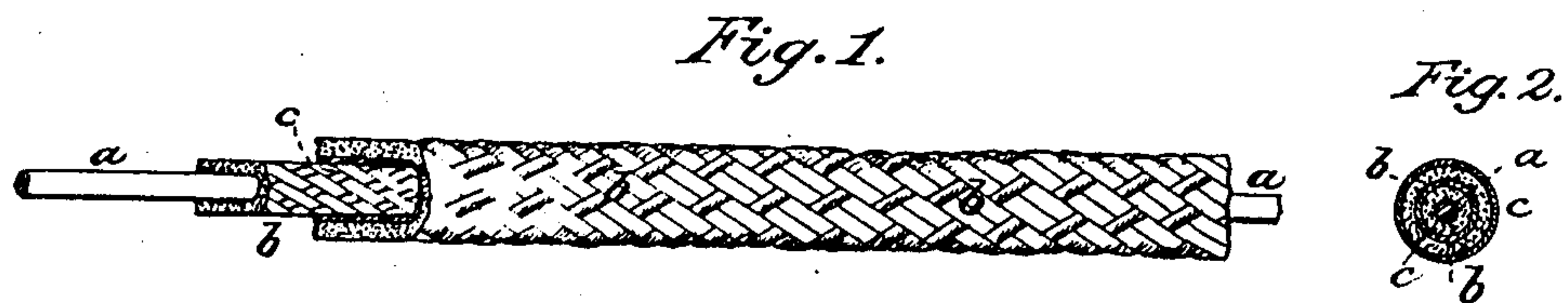


S. C. BISHOP.
COMPOUND FOR INSULATING TELEGRAPH AND ELECTRIC WIRES.
No. 83,031. Patented Oct. 13, 1868.



Witnesses.
A. Le Clerc
A. Kimmer

Inventor.
S. C. Bishop
per Brown & Coombes attys

United States Patent Office.

SAMUEL C. BISHOP, OF NEW YORK, N. Y.

Letters Patent No. 83,031, dated October 13, 1868.

IMPROVED COMPOUND FOR INSULATING TELEGRAPH AND ELECTRIC WIRES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SAMUEL C. BISHOP, of the city, county, and State of New York, have invented a new and useful Compound for the Insulation of Telegraph and Electric Wires and Conductors; and I do hereby declare that the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a partly-sectional longitudinal view of a portion of telegraph-wire covered by my improved compound, and

Figure 2 a transverse section of the same.

Similar letters of reference indicate corresponding parts.

My improved compound for insulating telegraph and electric wires is made by taking two and a quarter pounds ($2\frac{1}{4}$ lbs.) of asphaltum; one-quarter of a pound ($\frac{1}{4}$ lb.) of gutta-percha; one-quarter of a pound ($\frac{1}{4}$ lb.) of crude rosin; half a gallon ($\frac{1}{2}$ gal.) of spirits of turpentine. To these ingredients I add about one (1) gill of boiled linseed-oil, together with two ounces (2 ozs.) of umber, and mix the whole together in any suitable vessel, having steam or dry heat applied to it to effect the necessary melting of the solid ingredients in the mixture.

Of course the several proportions of the ingredients may be more or less varied, and equivalents substituted, or additional ingredients added; but I find that the ingredients in or about the proportions specified answer the desired purpose.

Prior to applying this compound to the wire, I cover

the latter with a layer of flax, jute, or any other suitable fibrous material, which may be braided, wound, or woven on the wire, and then pass the whole through the compound while hot, or said compound may be applied to the covered wire with a brush, sponge, or in any other desired way. This coating is then dried, after which as many similar additional coatings of the compound may be put on as is necessary or desirable, interposing, it may be, a layer or covering of fibrous material between the successive coatings of the compound, until the wire is sufficiently covered. After the wire has been thus coated or covered, the whole, after being left to dry some days, may have a coating of varnish applied to it, to prevent stickiness in handling.

Said compound may be applied as a coating, not only to single but many-wire lines or cables.

In the drawing—

a represents a single wire;

b b, the layers of flax, or fibrous material; and

c c the successive coatings of the compound.

What is here claimed, and desired to be secured by Letters Patent, is—

The insulating-compound for telegraph and other electric wires or conductors, composed of the ingredients described, in, or about in, the proportions specified.

SAML C. BISHOP.

Witnesses:

HENRY T. BROWN,
CHAS. W. WELSH.