

UNITED STATES PATENT OFFICE.

JOHN FOTTRELL, OF PHILADELPHIA, PENNSYLVANIA.

COMPOSITION OF MATTER FOR THE ELECTRICAL INSULATION OF WIRES COVERED WITH COTTON, SILK, OR WORSTED BRAID OR TAPE.

SPECIFICATION forming part of Letters Patent No. 344,823, dated July 6, 1886.

Application filed November 10, 1885. Serial No. 182,387. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN FOTTRELL, a subject of the Queen of Great Britain and Ireland, residing at No. 621 Silliman street, Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Composition of Matter to be Used for the Electrical Insulating of Wires Covered with Cotton, Silk, or Worsted Braid or Tape, of which the following is a specification.

My composition consists of the following ingredients, combined in the proportions stated, viz: boiled linseed-oil, six gallons; oxide of zinc, ten pounds; Venice turpentine, one pound; lead cut into thin shavings, two pounds. These ingredients are to be thoroughly mixed in a suitable-sized pot, of iron or copper, and boiled for eight hours with occasional stirring. After this mixture has cooled, strain it through muslin, and add to it copal varnish, one gallon; sandarac varnish; one pint. This produces a white flexible yet hard composition, which can be colored any color by mixing it with pigments of the desired color. This composition dries rapidly. In using it for insu-

lating electrical wires I adopt the following plan: The covered wire is thoroughly saturated with benzine first, then immediately coated with the composition before the benzine can evaporate. By doing this the composition penetrates properly through the covering on the wire, and when dry the wire is thoroughly insulated electrically.

I am aware that there are compositions composed of oils and varnishes used for electrical insulation; but I am not aware that all the ingredients of my composition in the proportions stated have been used together.

What I claim, and desire to secure by Letters Patent of the United States, is—

The herein-described composition of matter to be used for the electrical insulation of wires, consisting of linseed-oil, lead shavings, oxide of zinc, Venetian turpentine, gum-copal, and gum-sandarac, in the proportions specified.

JOHN FOTTRELL.

Witnesses:

W. J. FLANAGIN,
ALFRED J. BRIGGS.