

UNITED STATES PATENT OFFICE.

JOHN FOTTRELL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
THOMAS S. LEIGH, TRUSTEE, OF SAME PLACE.

COMPOSITION FOR ELECTRICAL INSULATION.

SPECIFICATION forming part of Letters Patent No. 294,457, dated March 4, 1884.

Application filed January 7, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, JOHN FOTTRELL, a subject of the Queen of Great Britain, residing in the city and county of Philadelphia, and State
5 of Pennsylvania, have invented a new and useful Composition for Electrical Insulation, of which the following is a specification.

In carrying out my invention I first prepare metallic soap, which may be accomplished in
10 various ways, the following being most suitable: One pound of common brown soap is thoroughly dissolved in two gallons of hot water. In another vessel one and a quarter pound of alum is thoroughly dissolved in two gallons
15 of hot water. The dissolved soap and alum are now mixed together, the result being a flocculent mass of metallic soap, which is afterward removed from the water and dried by any suitable means. The metallic soap is dis-
20 solved in benzine, turpentine, or gasoline, one gallon thereof being employed to one pound of the soap, and to the same I add one gallon of boiled linseed-oil, all well stirred together, and half-gallon copal varnish, or any other
25 good varnish, well stirred with the previous mixture of metallic soap and boiled linseed-oil. The proportions of the different ingredients may be varied as required. The solution is now adapted for saturating cotton, silk, or
30 other fibrous covered wires, thus rendering

them water-proof and electrically insulated in a durable manner, the means employed being inexpensive and easily applied.

Should it be desired to thicken the mixture, it may be accomplished by means of white oxide of zinc ground in oil or white lead—such
35 as is used by house-painters—or the oxide of zinc or white lead may be used in powder form and ground with the mixture hereinbefore described until a paint of proper consistency is obtained. Any other suitable powder
40 or paint may be used in place of the oxide of zinc or white lead.

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

1. Metallic soap for the purposes of electrical insulation, substantially as described.

2. A composition for electrical insulation, consisting of metallic soap, benzine or its
50 equivalent, linseed-oil, and varnish.

3. Metallic soap, benzine or its equivalent, linseed-oil, and varnish, in combination with a thickening material, substantially as and for the purpose set forth.

JOHN FOTTRELL.

Witnesses:

THOS. S. LEIGH,
JOHN A. WIEDERSHEIM.