

UNITED STATES PATENT OFFICE.

OSCAR STILES, OF OMAHA, NEBRASKA.

INSULATING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 528,744, dated November 6, 1894.

Application filed March 26, 1894. Serial No. 505,095. (No specimens.)

To all whom it may concern:

Be it known that I, OSCAR STILES, of Omaha, in the county of Douglas and State of Nebraska, have invented certain useful Improvements in Insulating Compounds; and I do hereby declare that the following is 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 has relation to a new and novel insulating compound, the object being to provide a material which shall be more especially adapted to provide an insulating cover for the wires, bars, or plates used in connection with electric appliances and to provide the same with an insulated coating.

My invention comprises, essentially, a compound in which I use six parts of alcohol in which three parts of commercial shellac have been dissolved. To this fluid mixture I next add three parts of pulverized asbestos, thoroughly stirring and mixing the compound. I next add one part of ground mica and add to it one part of ground alum, which two powders are thoroughly mixed in their dry state and then added to the liquid. The liquid can be applied with a brush and can also be cast in thin sheets, which are easily dried by a gentle heat. The bar, wire, or plates to be insulated are immersed within this bath, when the same is removed and is permitted to dry. The coating is in the form of a hard, glossy non-conducting surface, which is impervious

to water and, what is more important, is essentially impervious to oil. Covered wire is, of course, much more easily and readily insulated, as the fabric absorbs this liquid insulating material.

If desired the alum can be eliminated in the combination, though I prefer using the same as it acts as a hardener in combination with the mica.

Now, having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

1. An insulating compound, comprising the combination of the following ingredients: asbestos, alcohol, shellac, and mica, combined substantially in the proportion set forth.

2. In an insulating compound the combination of the following ingredients: asbestos, alcohol, shellac, mica, and alum, all combined substantially as and in the proportion set forth.

3. As a new insulating compound, the combination of six parts of alcohol, three parts of shellac, three parts of asbestos, and one part each of mica and alum, all combined as and for the purpose set forth.

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

OSCAR STILES.

Witnesses:

J. H. SCHMIDT,
G. W. KING.