

UNITED STATES PATENT OFFICE.

DAVID BROOKS, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
ELECTRIC CABLE CONSTRUCTION AND MAINTENANCE COMPANY, OF
SAME PLACE.

ANTI-INDUCTION COMPOSITION FOR ELECTRIC CABLES.

SPECIFICATION forming part of Letters Patent No. 333,096, dated May 22, 1888.

Application filed December 4, 1886. Serial No. 220,645. (No specimens.)

To all whom it may concern:

Be it known that I, DAVID BROOKS, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Anti-Induction Composition for Electric Cables, which improvement is fully set forth in the following specification.

The object of my invention is to provide a wrapping or covering for the electrical wires of a cable of such a character as to be of low induction capacity, while acting at the same time as a conductor to convey the induced currents to the outside of the cable, from whence they are conducted to the ground by proper wires.

In carrying out my invention I take any powdered conducting material—such as plumbago, carbon, or metallic dust—and mix it with a gum—such as gum copal or shellac—and a combining material—such as linseed-oil and turpentine, in about equal parts—thus forming a paint or gum of a conductive character for induced currents of electricity. The fibrous tapes with which the electric wires of the cable are covered are saturated with the compound thus formed, and when dry some of them are inserted within a bunch of insulated electric wires, and other tapes are wrapped around the exterior of said bunch, forming a cable. The tapes form a conductor of low inductive

capacity, as well as a conductor for induced currents of great cheapness. All currents absorbed by the tapes are conveyed to the outside of the cable or to the ground by metallic wires or other conducting paths in the usual way.

I am aware that it is not new to employ a water-proof wrapping for electric wires formed of woven material saturated with a bituminous preparation; but such mixture is a non-conductor, and would not answer the purposes intended by the saturating-composition herein set forth, which is to convey induced currents from the cable, and therefore must be of a conductive character.

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

1. A composition, for the purpose set forth, consisting of plumbago, gum copal, linseed-oil, and turpentine, substantially as described.

2. A composition, for the purpose set forth, consisting of a carbonaceous gum composed of a powdered electrical conducting material, gum copal, linseed-oil, and turpentine, substantially as described.

DAVID BROOKS, JUNR.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.