(No Model.)

E. CLARK.

INSULATOR.

No. 306,719. Patented Oct. 21, 1884.

fig. 1.

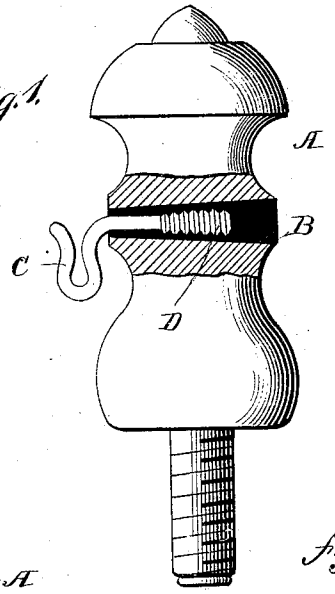


fig. 2.

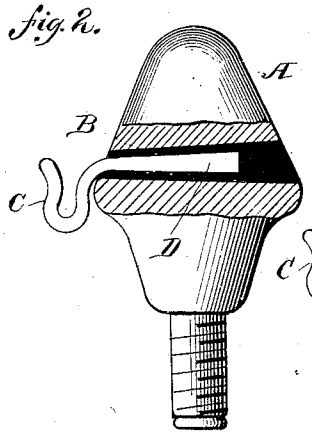


fig. 3.

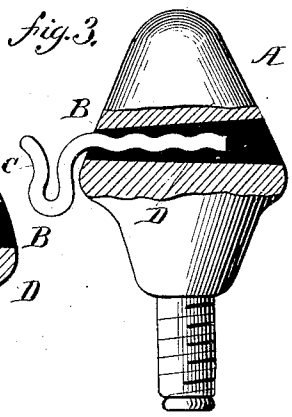


fig. 4.

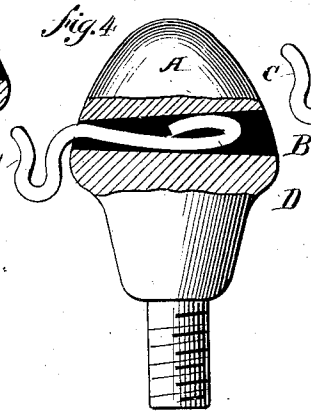
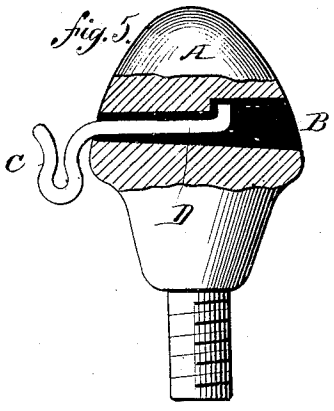


fig. 5.



Witnesses:
John G. Hinkel
Wm. F. Fayers.

Edward Clark
Inventor.
by Foster & Freeman
Attys

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

EDUARD CLARK, OF JERSEY CITY, NEW JERSEY.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 306,719, dated October 21, 1884.

Application filed September 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDUARD CLARK, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Insulators, of which the following is a specification.

My invention relates to insulating holders for electrical conductors, and more particularly to that class in which the body of the holder is made of some suitable material having sockets into which are secured supports for the line-wires, and which are properly insulated from the holder; and it consists in the improved construction herein more particularly pointed out.

In a prior application filed by me on July 1, 1884, Serial No. 136,571, I have described and claimed an improvement in insulating-holders of the character described; but I have found some practical improvements may be made in the manner of securing the line-wire supports in the holders. It is necesary that the supports be very securely held in position in the holders to guard against any lateral strains upon the wires—as during a storm, for instance—and it is also necessary that the insulation be maintained thoroughly and completely. While all this may be accomplished in some of the forms shown in my application above referred to, I have found that the following-described forms have some very practical and valuable advantages. I make the perforations or sockets in the holders of a tapering form, smallest toward the side where the support receives the wire, and I provide the part of the support entering the socket of the holder with some means that will enable the insulating material to bite or fasten itself more securely to it, and thereby prevent it from being withdrawn, and at the same time allow of complete and perfect insulation between the holder and support.

In the accompanying drawings the various figures show sectional views of holders having various modified ways of carrying out my improvement.

In Figs. 1, 2, 3, and 4 the holder A is provided with a tapering socket, B, which may be readily formed by any suitable means, as by boring with a proper tool, and the support C has some peculiar construction applied to the end D, entering the socket, that allows the insulating material to firmly embed itself around or bite the end of the support. In Fig. 1 deep screw-threads are formed on the end. In Fig. 2 the end is enlarged or flattened. In Fig. 3 the end is corrugated. In Fig. 4 the end is bent. In all these it is evident that the plastic insulating material, which may be of any suitable composition, but preferably of the kind described in the case before referred to, consisting of powdered corundum and some suitable binding agent, may be forcibly packed around the stem of the support, and when it has set or hardened any lateral strain tending to withdraw the support will be firmly resisted, and the harder the strain the more the material will be compacted toward the smaller end of the tapering socket, and thereby be enabled to resist the strain. At the same time the insulation may be complete and perfect, there being a uniform thickness of material on all sides of the stem and between it and the sides of the socket.

In Fig. 5 the socket, tapering or otherwise, has an offset in its interior, and the stem of the support is bent at an angle so as to fit into the offset and bear against the edge thereof or a mass of insulating material between it and the bent end.

I have shown various ways of carrying out my improvement; but it is obvious many other ways may be adopted without departing from the spirit thereof, and more than one support may be applied to a holder.

What I claim as my present invention is—

1. An insulator for electrical conductors, consisting of a solid body of wood or similar material, having tapering sockets extending through the body, and a metallic line support entering the socket and secured therein, substantially as described.

2. The combination, with the solid body of wood, having a tapering socket extending through the same, of a line-support the stem

of which is enlarged, as described, and insulating material between the walls of the socket and the stem, substantially as described.

3. The combination, with the wooden body having a horizontal tapering socket through the same, of a line-support having a screw-threaded stem embedded in the insulating material in the socket, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDUARD CLARK.

Witnesses:
DANIEL E. DELAVAN,
CHAS. H. GARDNER.