No. 756,181. PATENTED MAR. 29, 1904.

L. McCARTHY.

INSULATOR.

APPLICATION FILED FEB. 11, 1904.

NO MODEL.

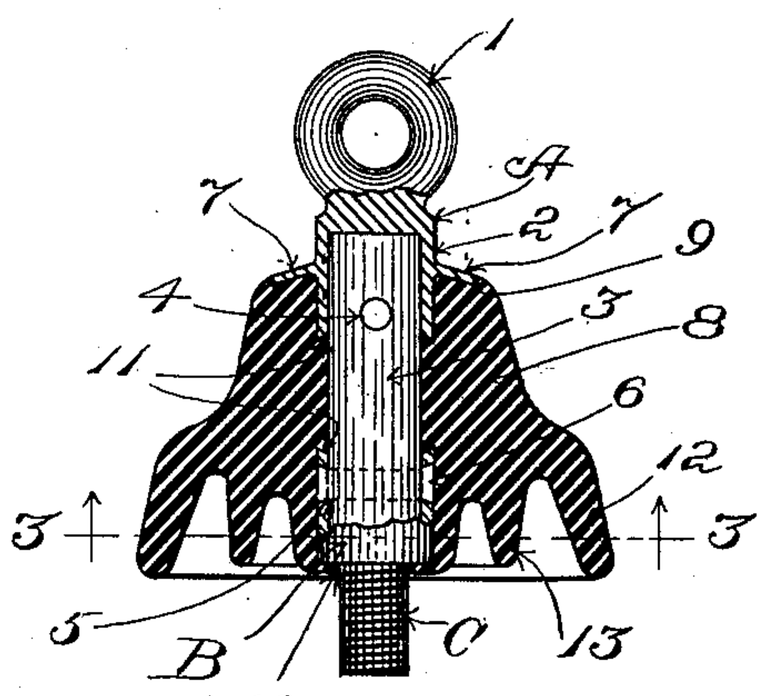

Fig. 2.

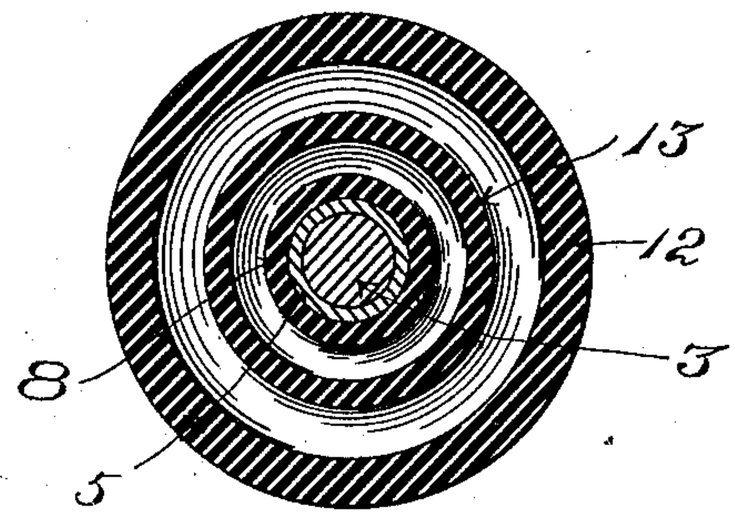

Fig. 3.

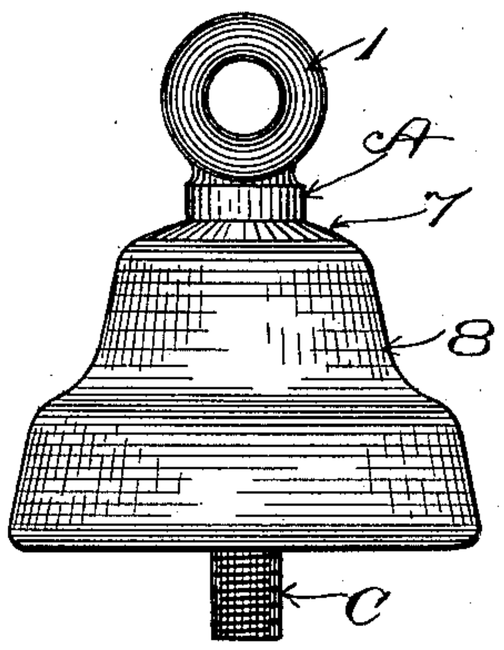

Fig. 1.

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No. 756,181. Patented March 29, 1904.

UNITED STATES PATENT OFFICE.

LOUIS McCARTHY, OF BOSTON, MASSACHUSETTS.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 756,181, dated March 29, 1904.

Application filed February 11, 1904. Serial No. 193,046. (No model.)

To all whom it may concern:

Be it known that I, LOUIS MCCARTHY, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented a certain new and useful Improvement in Insulators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has for its object an improved insulator which shall be strong and durable and adapted for use in connection with electric currents of high potential.

The invention is fully set forth in the following description, taken in connection with the accompanying drawings, and the novel features thereof are pointed out and clearly defined in the claims at the close of this specification.

In the drawings, Figure 1 is a side elevation of an insulator embodying my invention. Fig. 2 is a view, partly in section and partly in elevation, with some of the parts broken away for greater clearness. Fig. 3 is a section on line 3 3, Fig. 2, looking in the direction indicated by the arrows in the said Fig. 2.

My insulator is more especially intended for use in connection with arc-lights, although it is not to be understood as limited to such use, since it is equally applicable to a large variety of uses where a strong and durable insulating-coupling capable of withstanding currents of high potential is desired.

In the accompanying drawings I have shown that embodiment of my invention which is designed more especially for use with arc-lamps, and the following description has reference thereto.

Referring to the drawings, A is a metallic connection having an eye 1, by means of which the insulator may be suspended from a hook or the like. The body of the connection A consists of a cylindrical portion 2, adapted to receive the upper end of a connecting-piece 3, preferably formed from wood, although any other well-known insulating material of sufficient strength may be employed. The upper end of the wooden connecting-piece 3 is inserted in the body portion 2 of the connection A and is firmly secured therein by means of a pin or bolt 4, which passes through the body portion 2 and the inclosed end of the connecting-piece 3. The lower end of the connecting-piece 3 is inserted in a connection B, which has a body portion 5 substantially similar to the body portion 2 of the connection A. The lower end of the connecting-piece 3 is secured within the body 5 by means of a suitable pin or bolt 6. Projecting from the lower connection B is a threaded stud C, which is adapted to be screwed into a socket connected with the lamp. As will be clear, the bolt C may be replaced by a hook or similar device in case these forms are more convenient for attachment in any given case. The construction described is strong and capable of sustaining severe strain and is also of high insulating quality provided the surface of the connecting-piece 3 between the connection A and B is kept free from moisture and the like. The connection A is provided around the body portion 2 thereof with an outwardly and downwardly projecting flange or skirt 7. A mass of insulating material 8 which may be molded to shape is then applied and molded over the body portion 2 below the skirt 7, the molded composition abutting against the edges 9 of the said skirt. The said molded composition 8 is caused to cover the entire portion of the connecting-piece 3 between the oppositely-placed connections A and B, as also to cover, preferably, the entire body portion 5 of the connection B and is abutted against the face of the attaching-stud C, as shown at 10.

For the purpose of more securely holding the molded composition 8 in place and giving it an anchorage the proximate edges of the connections A and B may be beveled, as shown at 11, which tends to more securely hold the insulating composition in place. The exterior shape of the insulating composition is preferably of the flaring or bell shape shown, Fig. 2, which serves to shed moisture and protect the lower connection B or the projecting portion C thereof from said moisture.

To insure against the moisture creeping in over the lower surface of the bell-shaped mass of composition 8, I provide the latter with preferably a double skirt, the downwardly-projecting edges of which serve to cause the

moisture to collect and drip therefrom. The outer skirt is shown at 12 and the inner at 13. The skirt 7, which is preferably of metal and formed integral with the body portion 2 of the connection A, extends outwardly and downwardly from said body portion, and thus prevents any moisture which might get into the joint between the edge of the skirt and the adjacent molded composition from working into contact with the body portion 2 beneath the said skirt 7.

What I claim is—

1. An insulator comprising oppositely-placed metallic portions, an intermediate connecting-piece of insulating material secured to said metallic portions, and a mass of molded insulating composition covering said connecting-piece and molded over and upon said metallic portions, said molded compositions having one or more skirts formed therein, for the purpose and substantially as set forth.

2. An insulator comprising oppositely-placed metallic portions, one of said portions having a metallic flange or skirt projecting therefrom, an intermediate connecting-piece of insulating material secured to said metallic portions, and a mass of molded insulating composition covering said connecting-piece, and molded over the body of one of said metallic portions and up to and against the said skirt on the other metallic portion, substantially as set forth.

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

LOUIS McCARTHY.

Witnesses:

WM. A. MACLEOD,

ALICE H. MORRISON.