



N° 1681



A.D. 1905

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COMPLETE SPECIFICATION.

“Improvements in Insulators for Electric Conductors.”

We, MARCONI'S WIRELESS TELEGRAPH COMPANY, LIMITED, and GEORGE ELLIOT TURNBULL, Engineer, both of 18 Finch Lane, in the City of London, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

This invention has for its object an insulator for high tension electrical currents capable of resisting great mechanical strains.

The insulator consists of a length of a cord preferably made of well stretched corded fibre having at its ends metallic bearings arranged to carry shackles or other means of attachment. The cord is enclosed in a waterproof tube of a dielectric substance preferably ebonite or porcelain. The ends of the tube fit elastically and waterproof into sockets into which also fit elastically and waterproof the attachment bearings. Previous to its being put in place, the cord is oiled to prevent hygroscopic action. No mechanical strain is exerted on the tube, which in the event of a slight elongation, will correspondingly slide in the sockets.

Figure 1 is a plan of the insulator. Figure 2 is a side elevation. Figures 3 and 4 are sections on the lines 3—3 and 4—4, Figures 1 and 2, with the cord removed. Figure 5 shows the cord.

A is the socket. B are the metallic bearings (made in halves screwing together). C is the shackle. D the shackle pin. E the dielectric tube. F the keyholes. G the cord. H is binding thread. K is binding tape, and L is the loop to carry B.

The socket A may be made of rubber or similar elastic substances, or of hard substances such as ebonite, porcelain, or metal, fitted with washers. The metallic bearings B may be constructed as shown in two pieces screwing together, or in two pieces sliding together and held in place by a bolt and nuts which serve also as the shackle pin. The corded fibre may be of a substance which does not require oil.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is:—

1. The combination of a cord, sockets attached to the ends of the cord and a tube enclosing the cord and free to move in the sockets, substantially as described.

2. Insulators substantially as described and illustrated in the drawings.

Dated this 25th day of January 1905.

MARCONI'S WIRELESS TELEGRAPH CO. LTD.,

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(2nd Edition)

