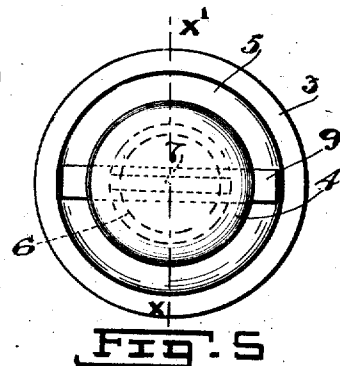
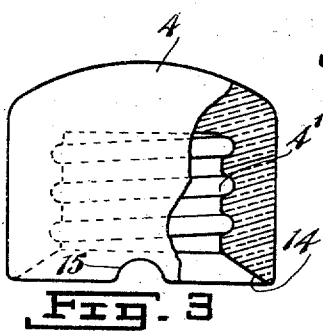
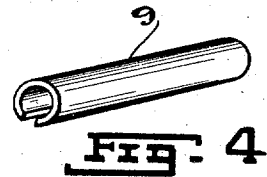
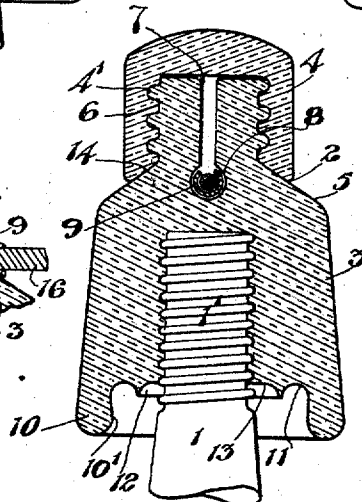
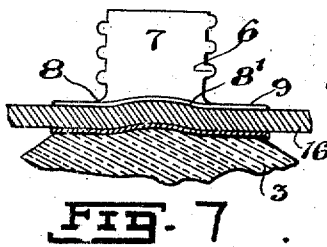
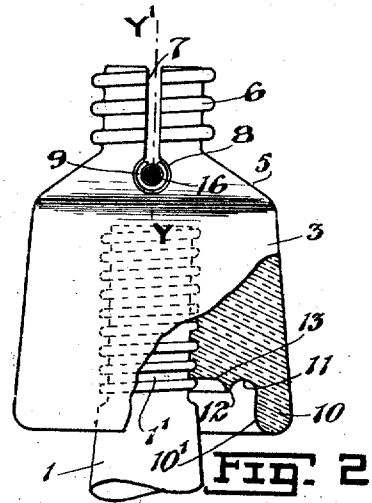
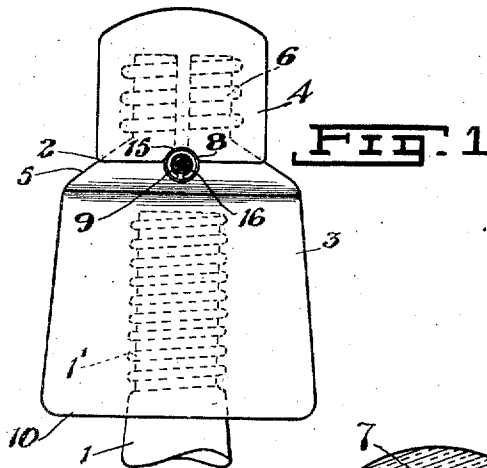


961,646.

Patented June 14, 1910.



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UNITED STATES PATENT OFFICE.

WILLIAM LOUIS REUSCH, OF YORKTON, SASKATCHEWAN, CANADA.

INSULATOR.

961,646.

Specification of Letters Patent. Patented June 14, 1910.

Application filed April 24, 1909. Serial No. 492,014.

To all whom it may concern:

Be it known that I, WILLIAM LOUIS REUSCH, of the town of Yorkton, in the Province of Saskatchewan, Canada, have invented certain new and useful Improvements in Insulators, of which the following is the specification.

My invention relates to insulators, particularly to insulators for telephone and telegraph outside wiring, and the prime object of the invention is to provide an insulator which will avoid the present necessity of tying the line wire to the insulator.

Other objects of the invention are to provide a simple and inexpensive insulator which can be quickly placed in position and secured to the wire, and which is so designed as to prevent the accumulation of water or snow between the insulator and the insulator post or support.

It consists essentially in a base adapted to screw to the insulator support, the base being supplied with a deep channel passing across the upper exteriorly threaded end; a tube designed to be received within an enlargement formed at the bottom of the channel; and a cap adapted to screw unto the upper threaded end of the base, the parts being arranged and constructed as hereinafter more particularly described.

Figure 1 is a side elevation of my complete insulator showing it in position. Fig. 2 is a side elevation of the base of the insulator, part of it being broken away. Fig. 3 is an enlarged side elevation of the cap, part being broken away. Fig. 4 is a perspective view of the tube. Fig. 5 is a plan view as in Fig. 1. Fig. 6 is a vertical sectional view centrally through the insulator in the plane denoted by the line X X, Fig. 5. Fig. 7 is a vertical sectional view in the plane denoted by the line Y Y', Fig. 2, showing the manner in which the wire is arched when in position.

In the drawings like characters of reference indicate corresponding parts in each figure.

1 represents the usual insulator post or support which is threaded at 1, it being understood that the post is secured to the ordinary cross arm (not shown).

2 is the insulator which is formed from a base 3 and a cap 4. The base is bored centrally and interiorly threaded at 3', the thread corresponding to the thread on the support so that the base may be screwed

thereon. The upper end of the base diminishes in cross sectional area forming a shoulder at 5, and then extends upwardly where it is exteriorly threaded at 6.

7 is a deep channel passing centrally across the upper end of the base, and the channel is enlarged at the bottom at 8 to receive the split tube 9 which passes completely thereacross. The enlarged portion of the channel is circular in cross section and instead of passing straight across is arched as at 8' so that the tube 9 is arched also when in position.

10 is a rim extending downwardly from the base and it is to be noticed that the inner wall 10' of the rim tapers outwardly when passing upwardly and is continuous with a curved wall 11 which projects in a downwardly pointed rib at 12 and then passes completely across the base at 13. My object for so constructing the bottom of the base will be shortly explained. The cap 4 is simply bored and threaded at 4' so as to screw to the thread 6 and the central bore flares outwardly at the bottom at 14 so as to allow the cap to screw down tightly against the shoulder 5 of the base.

15 are circular notches cut in the lower edge of the cap and directly opposite each other, and they are adapted to receive the tube when the cap is screwed into position.

16 represents one of the line wires.

In order to better understand my insulator I will now describe the manner in which the wire is placed in position:—The base is first screwed to the support and the channel 7 is brought so that it will be in alinement with the channel in the base on the adjoining post. The wire held in such other channel is passed within the channel 7 of the insulator in question and a tube such as that 9 is placed on the wire, the wire passing through the longitudinal opening in the tube. The wire is passed to the lowest part of the channel, that is, into the enlargement, and the tube is then forced into the enlargement with the side having the longitudinal opening therein facing downwardly. The wire is then stretched, allowing the proper slack between the adjoining posts, and the cap is applied to the base and screwed tightly to the shoulder. The notches 15 in the final position appear directly over the tube, which tends to a certain extent to hold the cap in position. The downward pressure of the cap on the tube when it is

being screwed onto the base tends to close the open edges of the tube together, which makes it fit more tightly on the wire, as is best shown in Fig. 1. The tube has been shown turned upwardly and with the opening continuous with the channel 7 in Fig. 2. When the cap is screwed down with the wire and tube in position the operation is complete. The arch in the tube together with the pressure of the cap on the tube prevents the wire from slackening.

The enlargement 8 instead of being arched could pass straight across the base and in this case the tube would be inserted within the enlargement with the longitudinal opening upwardly and continuous with the channel 7. The wire would then be inserted within the channel and in passing downwardly would enter the tube which would afterward be turned over with the opening downwardly. By applying the cap and screwing to position the tube would be closed as in the previous case. However it is considered that the arched effect is preferable as it effectually prevents longitudinal displacement of the wire. It will of course be understood that the tube is formed from a very flexible metal and that the insulator will be completely of glass.

My object in forming the bottom of the base as described is to avoid the accumulation of snow and rain between the base and the support as the presence of such is harmful, and with my insulator it is contended that the rain or snow will not tend to lodge

between the insulator and the support but will be driven by the sweeping effect of the wind downwardly from the insulator on account of the construction of the walls 10 and 11.

What I claim as my invention is:

1. An insulator comprising, a base having a threaded upper end with a cross channel therein, said channel being enlarged at the bottom throughout the length thereof, a longitudinally split tube adapted to pass snugly within the enlarged portion of the channel and extend beyond the end thereof, and a cap constructed to screw to the threaded end of the base and bear on the extending end of the tube, as and for the purpose specified.
2. An insulator comprising, a base having a contracted upper end with a cross channel therein, said channel being enlarged at the bottom and arched, a longitudinally split tube designed to pass endwise snugly within the enlarged portion of the channel and beyond the ends thereof, the split in the tube being continuous with the upper end of the channel and a cap constructed to screw to the threaded end of the base and engage with the extending end of the tube and close the split when the tube is turned, as and for the purpose specified.

Signed at Yorkton, in the Province of Saskatchewan, this 24th day of October 1908.

WILLIAM LOUIS REUSCH.

Witnesses:

J. A. M. PATRICK,
M. MYRTLE WILSON.