(No Model.)

B. L. TOQUET.

TESTING JOINT FOR ELECTRIC CONDUCTORS.

No. 562,261. Patented June 16, 1896.

FIG. 2.

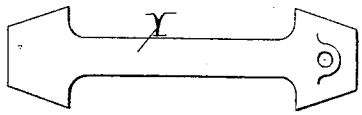


FIG. 1.

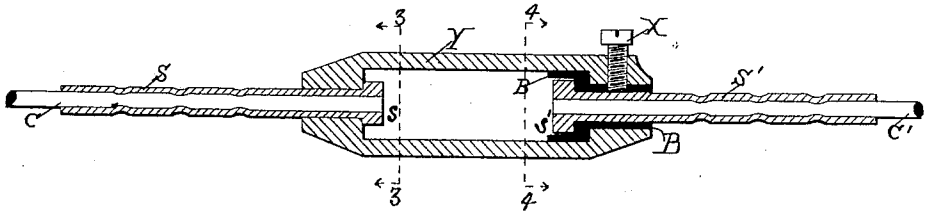


FIG. 3.

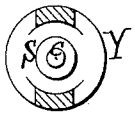
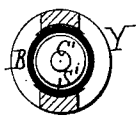


FIG 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

BENJAMIN LOUIS TOQUET, OF WESTPORT, CONNECTICUT.

TESTING-JOINT FOR ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 562,261, dated June 16, 1896.

Application filed April 14, 1896. Serial No. 587,466. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN LOUIS TOQUET, a citizen of the United States of America, residing at Westport, Fairfield county, Connecticut, have invented Improved Testing-Joints for Electric Conductors, of which the following is a specification.

The object of my invention is to provide for telephonic, telegraphic, or other electric line-wires a joint which will permit electrical connection between different sections of an electric line-wire of conductor to be broken without disturbing the mechanical connection.

It is a common practice, when there is a break on an electric line, to send out a lineman to locate the break by testing the line at intervals. For this purpose he cuts the conductor, making both a mechanical and an electrical break in the line, to connect up his testing instrument to see if the breakdown is ahead or back of the point of testing on the line. After making the test, the cut made by the lineman has to be repaired by means of a connector. Thus in addition to the cost and delay of making this repair, the line in time gets patched up with many useless joints which increase the liability to breakdowns and bad connections. To remedy this, I have devised a joint which can be applied to the line-wires at intervals wherever suitable or desired, either when the line is built or afterward, and which will enable a lineman to cut the electrical connection in the line without mechanically severing it.

In the accompanying drawings, Figure 1 is a sectional view illustrating the preferred form of my joint as applied to adjoining ends of electrical conductors. Fig. 2 is a plan or side view of the frame or yoke. Fig. 3 is a sectional view on the line 3 3, Fig. 1; and Fig. 4 is a sectional view on the line 4 4, Fig. 1.

In the form of testing-joint illustrated in the drawings, the frame or body part of the joint is made in the form of an open yoke Y, which is perforated at is opposite ends for the passage therethrough of the electrical conductor ends C and C'. One of these conductor ends is electrically as well as mechanically connected to the frame, which is of conducting material, while between the other conductor end and the yoke is interposed a suitable insulation, in connection with which is provided an adjustable contact, by moving which the yoke may be electrically connected to the other conductor end across the insulation, or may be electrically disconnected from said conductor end.

As a convenient way of connecting the conductor ends to the frame or yoke, I provide a connector-sleeve S (S',) such as forms the subject of my Letters Patent No. 557,037, dated March 24, 1896. Each of these connector tubes or sleeves S (S') is provided with a holding-shoulder *s* (*s'*) to engage with a part on the yoke to take up the pulling strain. Each conductor end is introduced into its sleeve and secured therein by indenting it at suitable points, as described in my above-mentioned Letters Patent. I do not wish to restrict myself, however, to this particular manner of securing the conductor ends to the yoke or frame.

Between the sleeve S' with its shoulder *s'* and the frame or yoke Y there is introduced an insulating-bushing B. The adjustable contact between the frame or yoke Y and the conductor C', or its sleeve S', may conveniently be in the form of a metallic screw X, threaded into the end of the yoke or frame Y at right angles to the line of the conductor, so that by screwing down this contact-screw, good electrical connection may be made across the insulation B between the yoke or frame Y and the conductor C', while upon screwing back this contact X, electrical connection may be broken without disturbing the mechanical connection between the wires C and C'.

These testing-joints may be put into the line when it is built, or at any time afterward, at suitable intervals, so that a lineman, wishing to locate a brake, simply goes to the successive testing-joints, breaks the electrical, without disturbing the mechanical, connection, by opening the contact X and applying his testing instrument. Electrical connection can then be restored by simply turning down the screw X.

I claim as my invention—

1. A testing-joint for electrical conductors, consisting of a frame connecting conductor ends, with an interposed insulation and an

adjustable piece to make or break the electrical connection across the insulation, substantially as set forth.

2. A testing-joint for electrical conductors, consisting of a yoke with perforated ends through which the conductors pass and to which they are connected, with an interposed insulating-bushing and adjustable contact-screw to make or break electrical connection across the insulation, substantially as set forth.

3. The combination of a yoke or frame with shouldered connector-tubes passing through the perforated ends of the yoke and to which the conductor ends are connected with an insulating-bushing interposed between one of the shouldered tubes and the yoke and a contact-screw carried by the yoke and adapted to pass through the insulation to make or break contact between the yoke and the connector-tube on the conductor end, substantially as described.

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

BENJAMIN LOUIS TOQUET.

Witnesses:
BENJ. H. TOQUET,
HUBERT HOWSON.