(No Model.)

J. WILSON.

TELEGRAPH INSULATOR.

No. 346,971. Patented Aug. 10, 1886.

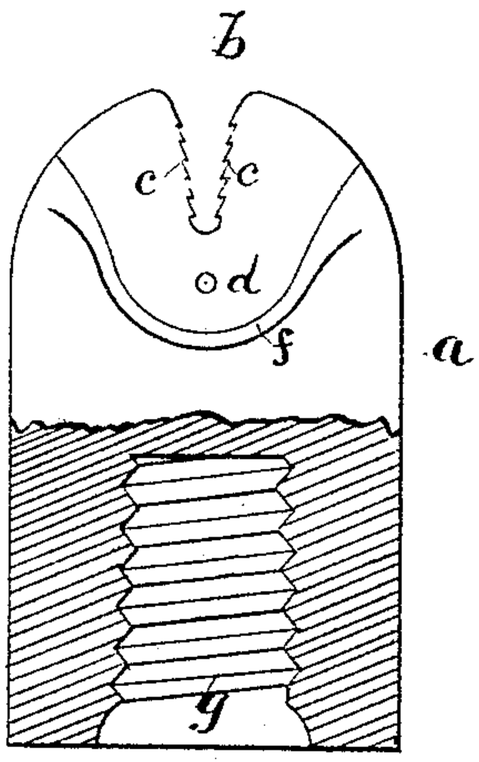

Fig. 1.

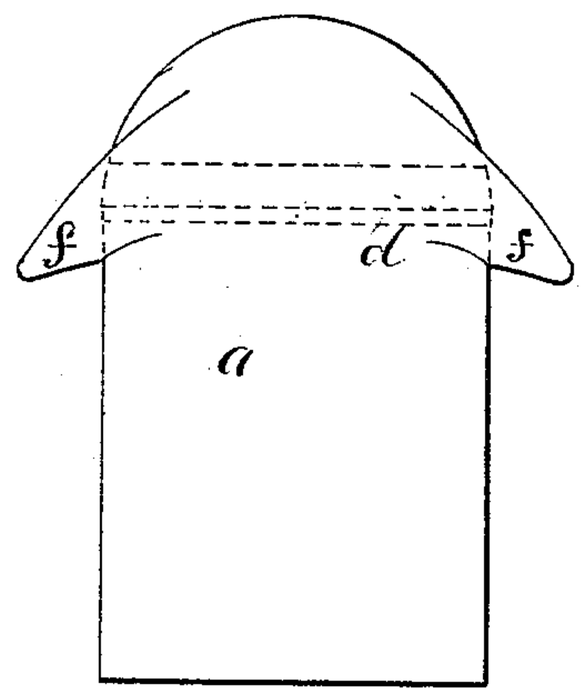

Fig. 2.

Fig. 3.

Fig. 4.

WITNESSES:

D. F. Morgan.

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UNITED STATES PATENT OFFICE.

JOHN WILSON, OF NEW YORK, N. Y.

TELEGRAPH-INSULATOR.

SPECIFICATION forming part of Letters Patent No. 346,971, dated August 10, 1886.

Application filed October 13, 1885. Serial No. 179,783. (No model.)

To all whom it may concern:

Be it known that I, JOHN WILSON, a citizen of the United States, residing at New York city, in the county and State of New York, have invented new and useful Improvements in Telegraph-Insulators, of which the following is a specification.

My invention consists of improved contrivances of the glass or other equivalent insulators for shedding the rain, so as to lessen the waste of the electric currents thereby, as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is an elevation, partly in side view and partly in section, of an insulator contrived in accordance with my invention. Fig. 2 is a side elevation. Fig. 3 is a top view, and Fig. 4 is a side elevation with the wire attached.

I make glass, porcelain, or equivalent insulators, *a*, with a deep transverse groove, *b*, in the top for reception of the wire or wires, and construct the side walls of the groove with projecting barbs or ribs *c*, adapted to prevent the escape of the wires from the groove when thrust upward by the wind or other cause, said ribs being inclined downward, or so undercut—that is to say, so shaped on the under side—that any upward thrust of the wires along or against either side of the groove will cause them to be caught and held by a rib. The ribs will be molded together with the forming of the rest of the insulator while in the molten state. I also construct the insulator with a hole, *d*, through it below or it may be at one side of the groove, for a wire tie, *e*, which may be passed through the hole and be made fast at one or both ends to the telegraph wire or wires lying in the groove, the hole being also formed in the molding of the insulator, which may be done by means of a wire extending through the mold while the insulator is being formed, and be fitted so as to be drawn out of the insulator at the proper time; or the insulator may be formed on the tie-wire itself, the wire being suitably placed in the mold, and being removed from the mold with the insulator, in which it remains.

For shedding the rain and snow, so as to avoid as much as may be the dissipation of the electric currents thereby, I construct the insulator with a sort of spout, *f*, at each side under the mouth of the groove, where it will receive the drip from the wire and discharge the water into the air free of the rest of the insulator in such manner as to prevent the escape of the water by continuous currents down the sides of the insulator, through which the waste is much greater than by the spouts from which the water-currents break, and thus have less electrical conductivity. These spouts being combined with the grooved insulators from which the water flowing from the wires escapes at two points only, are much smaller and require much less material than the hood employed with the insulators around which the wires are tied, and which hood surrounds the insulator.

The insulator thus constructed may have the ordinary screw-threaded socket, *g*, in the bottom, or it may have an external screw-stem, or both, for being secured to the support where on it is mounted.

What I claim, and desire to secure by Letters Patent, is—

The improved telegraph-wire insulator having a transverse groove, *b*, in the top for retaining the wires, and a spout, *f*, at each end of the groove for receiving and discharging the rain, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN WILSON.

Witnesses:
W. J. MORGAN,
S. H. MORGAN.