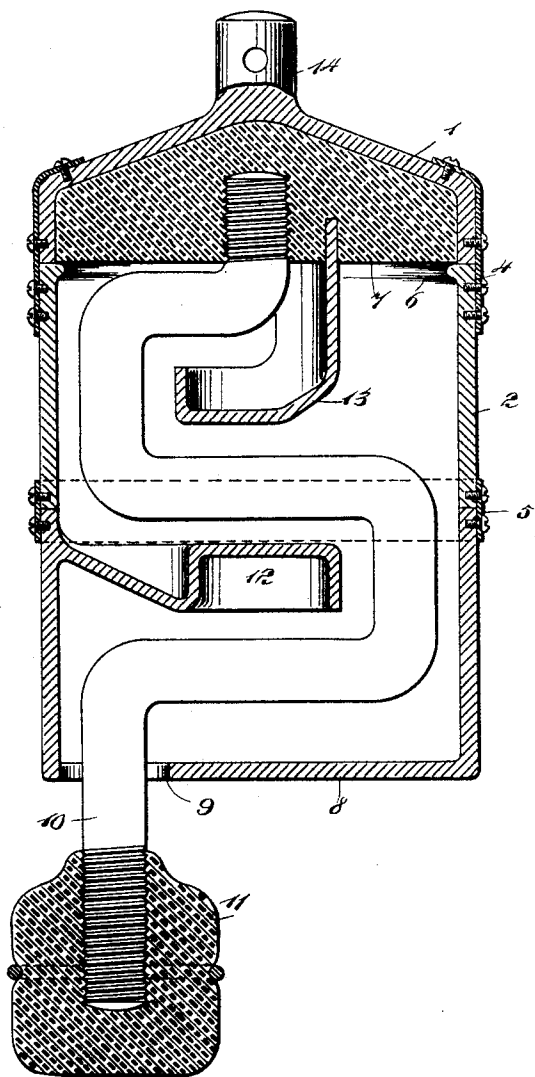


(No Model)

W. CHRISTIE.
ELECTRIC INSULATOR.

No. 583,787.

Patented June 1, 1897.



WITNESSES:
Henry T. Hirsch.
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WILLIAM CHRISTIE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO WILLIAM S. JOY, OF SAME PLACE.

ELECTRIC INSULATOR.

SPECIFICATION forming part of Letters Patent No. 583,787, dated June 1, 1897.

Application filed February 16, 1897. Serial No. 623,667. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CHRISTIE, of San Francisco, in the county of San Francisco and State of California, have invented a new and Improved Electric Insulator, of which the following is a full, clear, and exact description.

This invention relates to insulated hangers for electric wires, and the object is to provide an insulator in which leakage through conduction by atmospheric conditions—such, for instance, as rain, fog, dew, and the like—is reduced to a minimum.

I will describe an electric insulator embodying my invention, and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure represents a vertical section of an insulator embodying my invention.

The insulator comprises a casing of bell-like construction, which for convenience in casting I form of three pieces—that is, a top portion 1, having a downwardly-extended flange, a central section 2, and a bottom section 3. The sections 1 and 2 are connected by a metal band 4, surrounding the same and secured in place by means of screws, and the sections 2 and 3 are secured together by a metal band 5, attached by means of screws.

The upper end of the section 2 is provided with an interior annular flange 6, designed as a seat to hold an insulating material 7 in the upper section 1. This insulator 7 may consist of any fictile material—such, for instance, as glass or porcelain. The lower end of the section 3 has a closure 8, provided at one side with an opening 9, through which a suspending-rod 10 passes, the said suspending-rod being smaller in diameter than the hole, so that there will be no contact between the parts. This suspending-rod 10 is made of zigzag form and has a screw-thread engagement at its upper end with the insulating material 7. The lower outer end of the suspending-rod is provided with a block 11 of insulating material similar to the insulating material 7.

Cast integral with the section 3 of the metal casing is an inverted-cup-shaped condensing-plate 12. This condensing-plate 12 is shown

as located centrally within the casing, and between the lower and central horizontal portions of the suspending-rod 10 and secured within the section 2 of the casing is a cup-shaped condensing-plate 13, which extends between the central and upper horizontal portions of the suspending-rod. The central portion of the upper section 1 of the casing is provided with a lug 14, by means of which the device may be secured to a suitable overhead support, and it is to be understood that the conducting-wire is to be secured in the usual manner to the insulating-block 11.

By the construction shown and described it is obvious that the great area of metallic surfaces, being colder than the atmosphere, will condense the moisture therein, and thus to a great extent prevent the carrying away or grounding of a current at the pole.

The insulator may be made of different sizes to accommodate it to the size of the wire suspended, and therefore I do not confine my invention to any particular size of insulator.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An electric insulator, comprising a metal casing having a bottom closure provided with an opening near one side, an insulating material secured in the upper portion of the casing, a zigzag suspending-rod extended through the opening in the bottom closure and connected to the insulating material in the upper portion of the casing and an inverted-cup-shaped condensing-plate arranged within the casing between the lower and central horizontal portions of the suspending-rod, substantially as specified.

2. An electric insulator, comprising a metal casing having a bottom closure provided with an opening near one side, an insulating material secured in the upper portion of the casing, a zigzag suspending-rod extended through the opening in the bottom closure and having connection with the insulating material, and a cup-shaped condensing-plate arranged in the casing between the central and upper horizontal portions of the suspending-rod, substantially as specified.

3. An electric insulator, comprising a metal casing having a bottom closure provided with

an opening near one side, an insulating material secured in the upper portion of the casing, a zigzag suspending-rod extended through the opening in the bottom closure
5 and having connection with the insulating material, an inverted-cup-shaped condensing-plate secured within the lower portion of the casing between the lower and central horizontal portions of the suspending-rod, a cup-
10 shaped condensing-plate in the upper portion of the casing between the central and upper horizontal portions of the suspending-rod, and a block of insulating material on the outer end of said rod, substantially as specified.
15 4. An electric insulator, comprising a metal casing consisting of an upper cup-shaped section, a central section, and a lower section

having a bottom closure provided with an opening near one side, metal bands for connecting the several sections together, an insulating material in the upper section, a zigzag suspending-rod extended through the opening in said bottom closure and having connection with the insulating material, a condensing-plate in the casing between the lower and central horizontal portions of the suspending-rod, and a condensing-plate in the casing between the central and upper horizontal portions of the suspending-rod, substantially as specified.

WILLIAM CHRISTIE.

Witnesses:

G. A. FICKES,

T. A. READ.