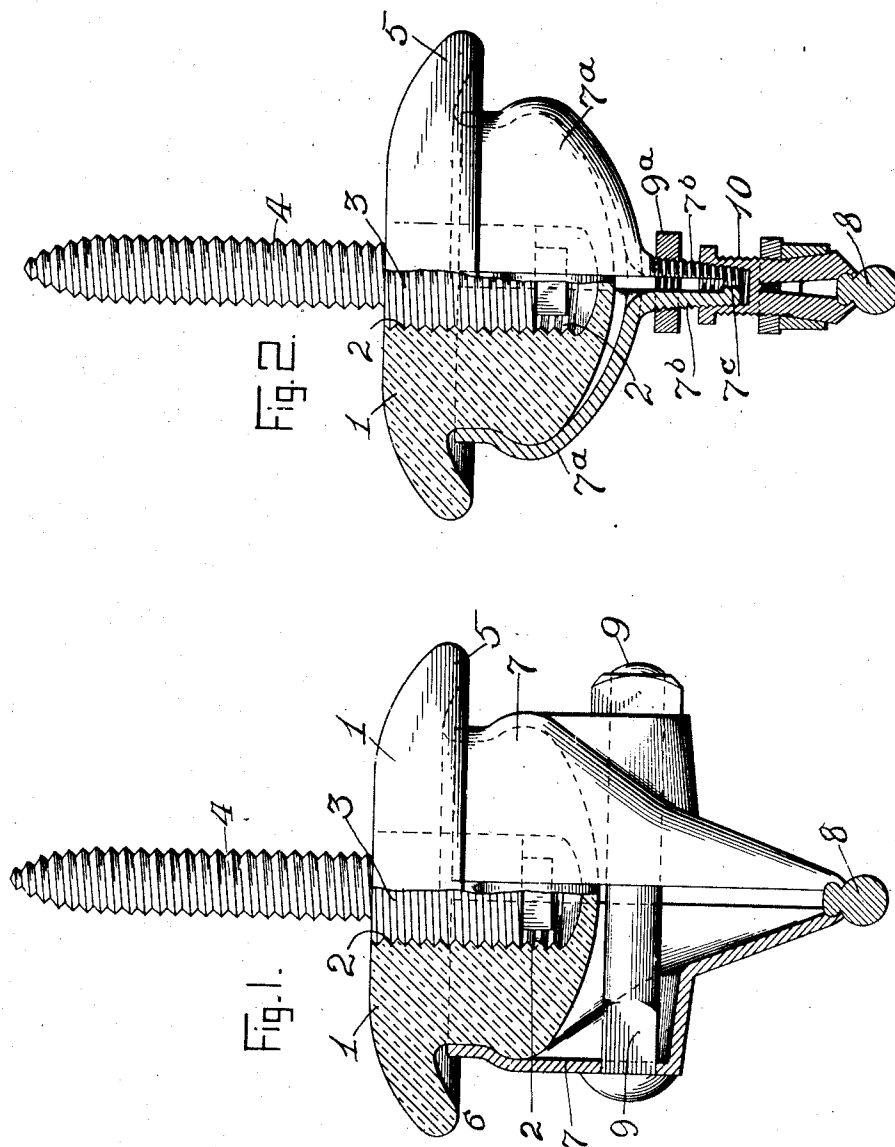


J. L. WAGNER.
INSULATING HANGER FOR TROLLEY WIRES.
APPLICATION FILED APR. 30, 1910.

987,515.

Patented Mar. 21, 1911.



Witnesses

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JOHN L. WAGNER, OF SYRACUSE, NEW YORK.

INSULATING-HANGER FOR TROLLEY-WIRES.

987,515.

Specification of Letters Patent. Patented Mar. 21, 1911.

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To all whom it may concern:

Be it known that I, JOHN L. WAGNER, a citizen of the United States, and resident of Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Insulating-Hangers for Trolley-Wires, of which the following is a specification.

This invention relates to that class of hangers for trolley wires in which an insulating body is suspended from a cross arm, timber or other support and the means for suspending the wire is clamped to the insulating body.

The object of my invention is to provide a construction of insulating support of this kind, wherein satisfactory insulation will be obtained without undue enlargement of dimensions and air spaces and the entire device will be produced in a much more convenient, effective and economical form.

The invention will be understood upon reference to the accompanying drawing in which,

Figure 1 shows an embodiment of the invention, partly in vertical section, of that type of support in which the clamping members are drawn together by a single bolt and made to grip both the insulating body and the trolley wire; and Fig. 2 is a view similar to Fig. 1, showing an embodiment of the invention in which the wire gripping means is separately attached to the insulator clamp.

1 represents the body of insulating material, which is formed with a central attaching socket 2 to receive the threaded enlarged end 3 of a large screw 4 or other suitable supporting member; also with a drip flange 5 and a reduced portion or groove 6 immediately beneath the drip flange. According to the form shown in Fig. 1, this reduced portion or groove 6 receives the members 7 of the combined insulator and wire clamp, which fits the groove or reduced portion 6 and is also made to conform to the trolley or other wire 8; the members of the clamp being drawn together by a suitable means such as a bolt 9 having a location which adapts it to develop clamping pressure on both the insulating body and the wire simultaneously.

It is important in devices of this kind, particularly if used for mine work where overhead space is limited, to reduce the vertical dimension of the hanger as much as possible. For this reason as well as for the

purpose of excluding moisture from the interior of the clamp as much as practicable, the attaching socket 2 does not extend entirely through the insulator but is closed at its lower end by an integral wall of the insulator so that the bolt 9 or other clamping means, and in fact the walls of the clamping members 6, can be brought as closely as desired to the insulator without danger of arcing or leakage. In devices of this kind, as heretofore constructed, where the suspending member 4 extended completely through the insulator, it was necessary to provide for a considerable air space between the member 4 and the bolt 9, and the vertical dimension of the device was thereby materially increased.

According to the form shown in Fig. 2, the members 7^a of the clamp are made to conform more nearly to the contour of the insulator 1 and they are drawn together by means of a clamping nut 9^a on the tapered threaded ends 7^b, said ends being in abutment at 7^c in order to provide the necessary fulcrum to develop the clamping effect upon the insulator. The threaded ends 7^b also receive the socket of a wire hanger 10 of known construction.

In each of the forms, the overhanging drip flange 5 prevents moisture from gaining access to the clamp, and the integral closure at the bottom of the suspending socket makes it practicable to bring the metallic parts of the clamp into close proximity to the insulator.

I claim:—

1. An insulating wire support comprising an insulating member constructed with an overhanging drip flange and a surrounding groove immediately beneath the flange and sheltered thereby, and combined insulator gripping and wire supporting jaws fitting the groove on the insulator and having means for drawing them together, consisting of a threaded clamping member screwing upon the opposed jaws beneath the insulator.

2. An insulating trolley wire support comprising an insulator constructed with an annular shoulder, jaws fitting above said shoulder and having depending lower ends, which when in opposed position provide a threaded end and a clamping nut threaded upon said threaded end and drawing the jaws together.

3. In an insulating wire hanger, the combination of the insulator having an annular

shoulder, the clamping jaws constructed to be sustained by the annular shoulder and having semi-cylindrical lower ends which together provide a threaded stub, means for drawing the jaws together, and a wire clamp screwed upon the threaded stub.

4. In an insulating wire hanger, the combination of the insulator having an annular shoulder, the clamping jaws each constructed with an end adapted to be sustained by the annular shoulder and with a lower threaded end, the lower threaded ends together providing a threaded end, a clamping nut screwed upon said end and a wire-clamp screwed upon the end below the clamping nut.

5. In an insulating wire hanger, the combination of the insulator having an upper attaching socket extending but partially

through the insulator and with an annular drip flange and an annular groove, located beneath and sheltered by the drip flange, clamping jaws embracing the insulator, having ends fitting in the annular groove and depending ends externally threaded and together forming a threaded end, a clamping ring screwed upon the end to clamp the jaws together upon the insulator, and a wire-clamp having a threaded socket fitted upon the threaded end below the clamping ring.

The foregoing specification signed at Syracuse, N. Y., this 21st day of March, 1910.

JOHN L. WAGNER.

In presence of two witnesses—

ELMER C. WARD,
MARY E. DARLEY.