No. 749,336. PATENTED JAN. 12, 1904.

L. STEINBERGER.

INSULATED SUPPORT FOR WIRES.

APPLICATION FILED NOV. 12, 1902.

NO MODEL.

Fig. 1.

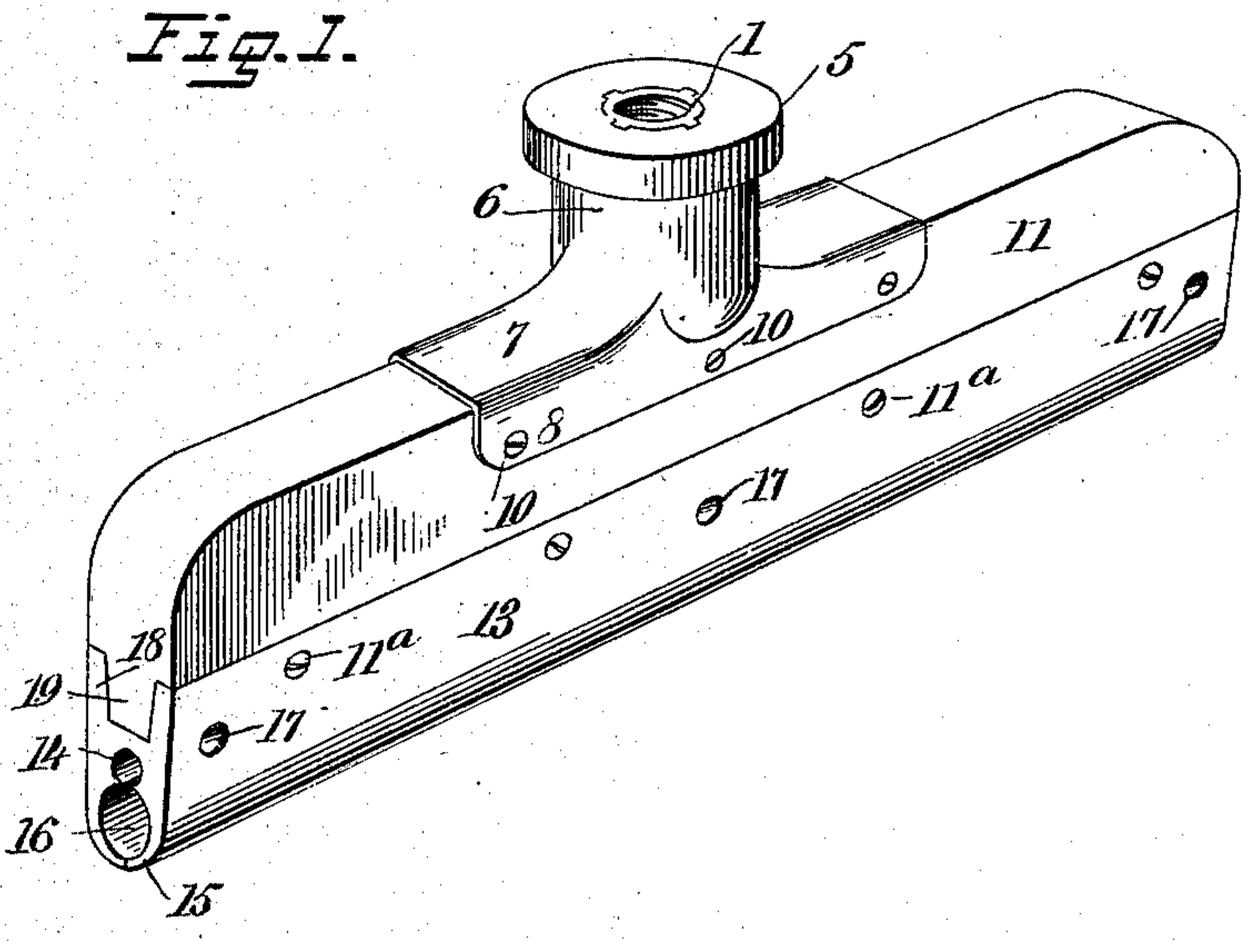


Fig. 2.

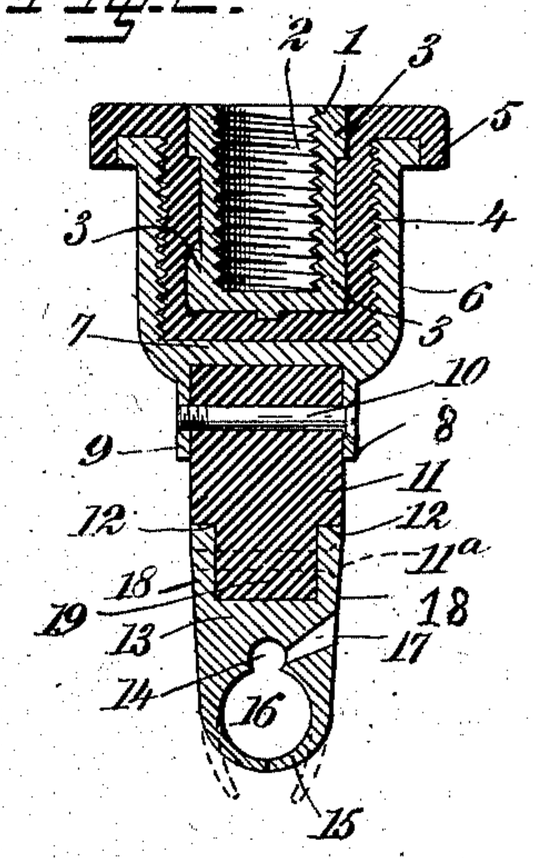
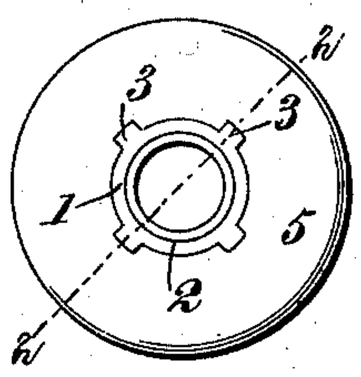


Fig. 3.



WITNESSES:

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No. 749,336. Patented January 12, 1904.

UNITED STATES PATENT OFFICE.

LOUIS STEINBERGER, OF NEW YORK, N. Y.

INSULATED SUPPORT FOR WIRES.

SPECIFICATION forming part of Letters Patent No. 749,336, dated January 12, 1904.

Application filed November 12, 1902. Serial No. 131,064. (No model.)

To all whom it may concern:

Be it known that I, LOUIS STEINBERGER, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Insulated Support for Wires, of which the following is a full, clear, and exact description.

My invention relates to insulated clips, my more particular object being to improve the insulation and to attain certain advantages hereinafter described.

The invention consists in certain parts and details and combinations of the same hereinafter described, and pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of one form of my device complete. Fig. 2 is a central vertical section taken obliquely upon the line 2 2 of Fig. 3 through the same, and Fig. 3 is a plan view of the central sleeve and insulating bushing therefor.

A central sleeve 1 is threaded internally at 2 and is provided externally with beads 3, integral therewith. A substantially cup-shaped bushing 4, of insulating material, engages the sleeve 1 and is threaded externally, as indicated in Fig. 2. The upper end of the bushing 4 is provided with an integral flange 5 of the shape indicated more particularly in Figs. 1 and 2. A metallic socket 6, threaded internally, as shown, is screwed upon the bushing 4, the upper edge of the socket engaging the under side of the flange 5, this arrangement serving to insulate the metal socket 6 and also to prevent the entrance of water.

Mounted upon the socket 6 and integral therewith is a saddle 7, provided with depending webs 8 9, through which pass the threaded bolts 10. A plate 11, of insulating material, is sandwiched between the webs 8 9 and is likewise engaged by the bolts 10. This plate 11 is provided adjacent to its lower edge with mutilations 12 and is engaged by the ear 13, which is integrally provided with webs 18, these webs fitting into the mutilations 12, as indicated more particularly in Fig. 2. The webs 18 and the lower edge of the plate 11 are engaged by bolts 11ª, which clamp the webs 18 firmly in position within the mutilations 12 upon opposite sides of the tongue 19, formed on the plate 11. The ear 13 is provided with a groove 14 and with a channel 16, this groove and channel being merged together. The channel 16 is for the purpose of supporting the wire. The lower edge of the ear 13 is provided with jaws 15, integral therewith, which normally occupy the position indicated in dotted lines in Fig. 2, or they may be so crimped or bent inward as to occupy the position indicated in full lines in the said figure. The ear 13 is further provided with substantially conical holes or apertures 17, through which lead may be poured into the groove 14, the lead thereby engaging the wire and holding the same firmly in position. As the channel 14 extends the entire length of the ear and is substantially horizontal, the lead is enabled to flow easily along the same from one end to the other. The open ends of the channel 14 and the apertures 17 also serve as air-vents, thus facilitating the flow of the lead and enabling the same to become attached to the wire and to assume the conformity of the upper portion of the channel 16. The apertures 17 are placed at one side of the clip, as shown, to avoid mutilating the plate 11. The groove 14 further serves to add resilience to the ear, and thereby to facilitate the entrance of the wire into the channel 16.

By the construction above described I secure a clip having exceptional insulating qualities. Not only is the threaded sleeve 2 insulated from the socket 6, but this socket is in turn insulated from the ear 13.

Any part above described may be readily replaced when broken or worn out, and all of the parts are of such construction as to be easily made.

The structure can be operated by any person of ordinary intelligence.

The structure of this insulating-clip is such that if the insulation should prove defective at a particular point the current is nevertheless not allowed to escape because of the insulation at other points.

It will readily be apparent even to an inexperienced observer that an insulated clip such as above described will prevent arcing and leakage and will be the means of saving a great portion of the current which now is wasted on the lines owing to uncertain and defective insulation in the fixtures distributed between the ordinary clips, the span-wires, and the ground-poles.

I do not limit myself to the particular form of device above described, as many other forms may be employed, all coming within the scope of my invention.

The principal object of this invention is to insulate the conductor-wire from the hanger devices, span-wires, and poles and also to prevent arcing, surface leakage, and grounding of the current.

Another important feature of this invention is to enable one to readily replace the ear when worn out. This may be done by a very small expense. The insulating-body member 11 will last indefinitely.

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

1. An insulated support for wires comprising a body member of insulating material, means for attaching the same to a hanger device, and a metallic ear mounted upon the lower side of said member and secured thereto by aid of a tongue-and-groove connection.

2. An insulated support for wires comprising a body member of insulating material, and a metallic ear connected with said member, said metallic ear being provided with jaws for supporting a wire, and with a groove for holding a fastening of lead in contact with said wire, and further provided with side channels for conducting molten lead into said groove.

3. An insulated support for wires comprising a metallic sleeve provided with means for detachably securing the same upon a hanger device, a bushing of insulating material mounted upon said sleeve, and a clip connected with said bushing for supporting a wire.

4. An insulated support for wires comprising a metallic saddle provided with depending webs, a member of insulating material sandwiched between said webs, means for connecting said webs and said insulating member together, and mechanism mounted upon said insulating member for supporting a wire.

5. An insulated support for wires comprising an ear provided with a channel for engaging a wire and with side apertures for introducing lead into contact with said wire, and an insulating-support forming part of said clip.

6. An insulated support for wires comprising an ear provided with a channel for engaging a wire and with a groove disposed adjacent to said channel, said ear having its side perforated for introducing lead into said groove, and an insulating-support forming part of said clip.

7. An insulated support for wires comprising an ear provided with a channel for engaging a wire, and with a longitudinal groove disposed adjacent to said channel and merged thereinto, said ear having its side perforated for introducing lead into said second-mentioned channel, and means for mounting said ear to an insulating body member forming part of said clip.

8. An insulated support for wires, comprising an ear provided with a channel for engaging a wire and with means for introducing lead through perforations in the side of said ear into contact with said wire, an insulating body member forming part of said clip, and means for supporting said insulating member.

9. An insulated support for wires comprising an ear provided with a channel for anchoring a wire and with means for introducing lead into contact with said wire, said ear being further provided with webs, and an insulating body member provided with mutilations engaging said webs and means for securing said web and said insulating body member together.

10. An insulated support for wires comprising a metallic threaded sleeve, an insulating-bushing engaging the same, a metallic saddle connected with said sleeve and supported thereby, a body member of insulating material connected with said saddle, and a metallic ear provided with members for clamping a wire and with perforations in its side for introducing lead into contact with said wire.

11. An insulated support for wires comprising an ear provided with a channel for engaging a wire and with a groove for holding lead, and further provided with side passages for introducing lead into said groove, and an insulating body member as a support for said ear.

12. An insulated support for wires, comprising a support, a bar of insulating material connected therewith and provided with a depending edge, and a longitudinal metallic ear secured upon said depending edge.

13. An insulated support for wires, comprising a support, a bar of insulating material connected therewith and provided with a depending edge terminating in a tongue, and a metallic ear engaging said bar of insulating material and provided with a groove engaging said tongue.

14. An insulated support for wires, comprising a support, a plate of insulating material connected therewith and provided with a depending edge terminating in a tongue, a metallic ear engaging said plate and provided with a groove engaging said tongue, and bolts engaging both said plate and said clip.

15. An insulated support for wires, comprising a support, a flat plate of insulating material connected therewith and provided with a depending edge, a metallic ear provided with a longitudinal portion engaging said depend-

ing edge, and bolts passing laterally through both said depending edge and said metallic ear, thereby securing the same together.

16. An insulated support for wires, comprising a metallic saddle, means for supporting the same, a flat longitudinal member of insulating material suspended edgewise from said saddle, and mechanism mounted upon said member for supporting said wire.

17. An insulated support for wires, comprising a metallic saddle provided with webs, and with means for supporting said metallic saddle on a hanger device, a flattened member of insulating material depending edgewise from said saddle, said member of insulating material being provided with mutilations, and a metallic member connected with said insulating member and provided with ears for supporting a wire and with webs for engaging said mutilations.

18. An insulated support for wires, comprising a body member of insulating material, means for attaching the same to a hanger device, and a metallic member connected with said body member for holding a wire, said metallic member being provided with a groove for holding a fastening of lead in contact with said wire.

19. An insulated support for wires, comprising a metallic saddle provided with webs, and with means for supporting said saddle upon a hanger device, a member of insulating material secured to said saddle, said member of insulating material being provided with mutilations, and a metallic member connected with said insulating member, said metallic member being provided with webs for engaging said mutilations and with means for supporting a wire.

20. An insulated support for wires, comprising a metallic threaded sleeve, an insulating-bushing engaging the same, a metallic saddle connected with said bushing and supported thereby, an insulating body member connected with said saddle, and a metallic clip mounted upon said insulating member.

21. An insulated support for wires, comprising a metallic sleeve, means for supporting the same, an insulating-bushing connected with said sleeve, a metallic member mounted upon said bushing, a plate of insulating material engaging said metallic member and depending edgewise therefrom, and a metallic ear mounted upon said plate.

22. An insulated support for wires, comprising a longitudinal body member of insulating material, means for attaching said body member rigidly to the hanger device, said longitudinal body member of insulating material being provided with a depending edge, and a longitudinal metallic member connected with said lower edge of said body member for supporting a wire.

23. An insulated support for wires, comprising a longitudinal body portion of insulating material having a lower edge, and a metallic clip attached directly to said lower edge for supporting a wire, said body portion being provided with means whereby the same may be attached directly and rigidly to a hanger device.

24. An insulated support for wires, comprising a longitudinal member of insulating material provided with means whereby the same may be suspended, and also provided with a depending edge, and a metallic clip mounted upon said longitudinal member and engaging the same throughout the entire length of said depending edge.

25. An insulated support for wires, comprising a longitudinal member of insulating material provided with means whereby the same may be suspended, and also provided with a depending edge, and a longitudinal metallic clip portion secured upon said depending edge.

26. In an insulated support for wires, the combination of a metallic sleeve provided with a thread for securing the same upon a hanger device, and also provided with beads, a member of insulating material engaging the exterior of said sleeve and also engaging said beads, said member of insulating material being provided exteriorly with a thread, and mechanism provided with a thread for engaging said thread of said member of insulating material and also provided with means for supporting a clip.

27. An insulated support for wires, comprising a metallic sleeve, a member of insulating material encircling the same, a metallic member detachably connected with said member of insulating material, an insulating-plate mounted upon said metallic member, and a clip connected with said insulating-plate for the purpose of supporting a wire.

28. In an insulated support for wires, the combination of a metallic sleeve, a substantially cup-shaped member of insulating material encircling said sleeve and provided exteriorly with a thread, and mechanism provided with a socket having a thread for detachably engaging said thread of said cup-shaped member and with a clip portion for engaging a wire.

29. An insulated support for wires, comprising an insulating-bushing, a metallic member mounted within said insulating-bushing and provided with a screw-thread whereby said metallic member may be supported, said insulating-bushing being provided exteriorly with a threaded cylindrical surface, a conductor provided with a portion for engaging a wire, and mechanism engaging said clip and provided with a threaded socket for engaging said threaded cylindrical surface of said insulating-bushing.

30. An insulated support for wires, comprising an insulating-bushing provided exteriorly with a thread, a sleeve connected with said bushing and provided with a thread whereby

said sleeve is supported, and a clip provided with mechanism having a socket for directly engaging said insulating-bushing, said clip being provided with means for supporting a wire.

31. An insulated support for wires, comprising a bushing of insulating material provided with a flange, means for connecting said bushing with a hanger device, a clip provided with a portion for engaging a wire, and mechanism for connecting together said clip and said bushing of insulating material, said mechanism engaging said bushing and said flange and being partially protected by said flange.

32. An insulated support for wires, comprising an insulating-bushing provided exteriorly with a threaded cylindrical surface, a metallic socket mounted therein and provided with a thread for attaching said metallic socket to a hanger device, and a clip provided with a portion for engaging a wire and with a threaded socket for engaging said threaded cylindrical surface of said insulating-bushing.

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

LOUIS STEINBERGER.

Witnesses:
WALTON HARRISON,
EVERARD BOLTON MARSHALL.