

L. STEINBERGER.

INSULATED HANGER.

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923,598.

Patented June 1, 1909.

Fig. 1.

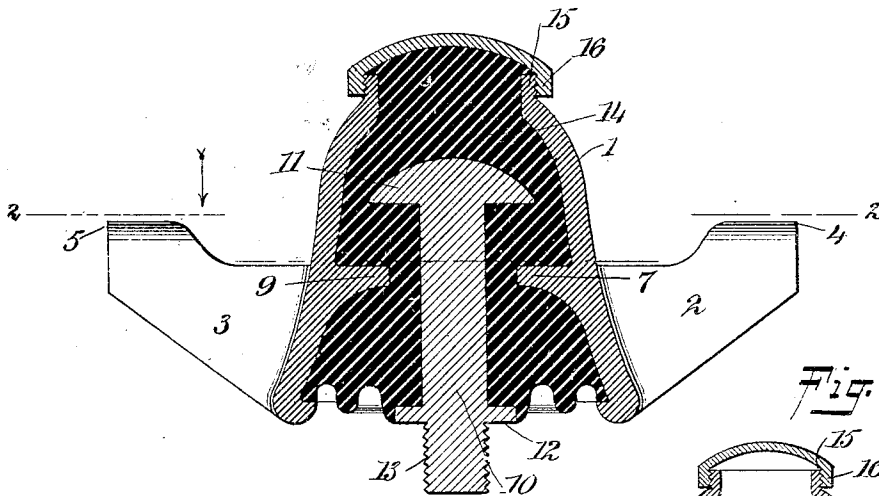


Fig. 2.

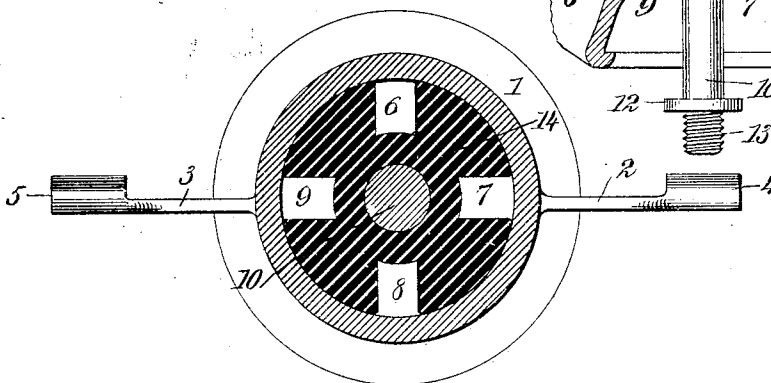


Fig. 3.

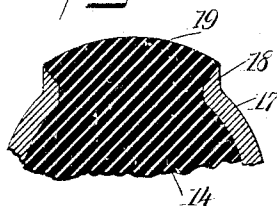
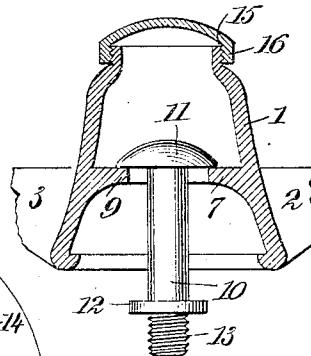


Fig. 4.



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INSULATED HANGER.

No. 923,598.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed April 28, 1903. Serial No. 154,620.

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 Hanger, of which the following is a full, clear, and exact description.

My invention relates to insulated hangers, admitting of general use, and particularly adapted to be employed for supporting electrical railway trolley wires; my object being to produce a type of hanger of a simple and inexpensive construction, strong and durable and of a high efficiency, which shall be capable of sustaining severe lateral strain without breaking, and the outer metallic case of which shall be of such shape as to fully protect the insulation which is contained within the same from blows which it may receive from a misplaced trolley, which may operate to injure the insulation; my more particular object being, however, to produce a type of hanger in which the melting of the insulation, due to leakage from heavy currents or other causes, is unable to cause the line wire or other conductor supported by the hanger, to separate from the same or to fall to the ground.

I do not desire to limit myself to the particular form or construction of the parts as herein shown and described, as variations of details will readily occur to those skilled in this art, without departing from the spirit and scope of my invention.

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 substantially central section through the insulated hanger of my invention; Fig. 2 is a horizontal section upon the line 2—2 of Fig. 1, looking in the direction of the arrow; Fig. 3 is a fragmentary view of a modified form of supporting member; and Fig. 4 is a substantially central section through the hanger shown in Figs. 1 and 2, but in which the insulation has melted.

A substantially bell-shaped member 1 is provided with hanger portions 2, 3, bent at 4, 5, for the purpose of engaging a suspension wire, the bell-shaped and hanger portions preferably being integral. Integrally connected with the bell-shaped member 1 are metallic lugs 6, 7, 8, 9, which extend toward

a common center, as indicated in Fig. 2. A metallic bolt 10 is provided with a head 11, with a shoulder 12, and with a threaded portion 13, as indicated in Fig. 1. The body portion or stem of the bolt 10 is comparatively small, so as to be able to pass freely between the lugs 6, 7, 8, 9, while the head 11 is of such size as to be unable to pass downward between these lugs.

Packed within the bell-shaped member 1 is a quantity of insulation 14, in which the bolt 10 is preferably embedded, as indicated in Fig. 1. The extreme upper portion of the bell-shaped member 1 is provided with a threaded neck 15, and is engaged by a threaded cap 16. This cap is preferably made convex, as indicated in Fig. 1.

In the form shown in Fig. 3, the bell-shaped portion 17 has substantially the form above described, with the exception that the neck 18 is smooth and is beveled internally as shown. Where this form of bell-shaped member is used, the insulation is merely piled up in the center so as to form a rotund portion 19. Where either form is used, the purpose in having the upper portion rotund is to avoid injurious effects due to the accidental blows of the trolley pole, and to shed rain, snow, etc., more readily.

In operating overhead trolleys, the trolley pole frequently slips, owing to the fact that the trolley misses the wire, and when brought down often injures the insulators and hangers disposed along the route by striking them upon the top. I propose to avoid this difficulty in two ways: first, by producing the rotundity above described, and second, by adding a metallic cap 16, as shown in Fig. 1. One of the principal objects of my invention, however, is to so support the conducting wire or cable that if the insulation 14 be melted, as it frequently is owing to short circuiting or heavy currents, the bolt 10 will simply descend so that the head 11 will rest upon the lugs 6, 7, 8, 9. This gives the bolt 10, and consequently the clip to be secured thereto by means of the thread 13, a firm support from which it can only be released by the melting of the metallic support, consisting of the bell-shaped member 1, or the hanger members 2, 3.

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

An insulated hanger, comprising a substantially bell-shape support open at its

top and provided at its bottom with a flange
cupped slightly inward, said support being
further provided with lugs disposed inter-
mediate its upper edge and its lower edge,
5 said lugs forming a circle, a body portion
of insulating material mounted within said
bell-shape support and engaging said lugs
and said lower edge, said body portion of
insulating material extending through the
10 open top of said bell-shape member and
provided above said top with a portion of
slightly greater diameter than the internal
diameter of the opening, and a metallic bolt
partially embedded within said body por-
15 tion of insulating material, said bolt having

a body portion extending intermediate said
lugs, and provided with a head disposed be-
tween said lugs and the top of said support,
said bolt being further provided with a
flange partially embedded within said body 20
portion of insulating material and being
further provided with a threaded portion
extending from said flange.

In testimony whereof I have signed my
name to this specification in the presence of 25
two subscribing witnesses.

LOUIS STEINBERGER.

Witnesses:

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JNO. M. RITTER.