L. W. MORAN.

INSULATING TROLLEY WIRE HANGER.

APPLICATION FILED FEB. 7, 1908.

913,419. Patented Feb. 23, 1909.

Fig. 1.

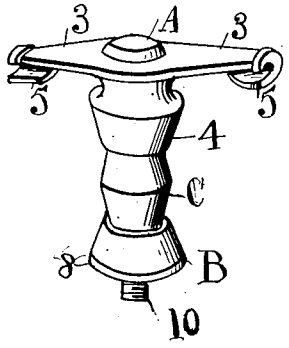


Fig. 2.

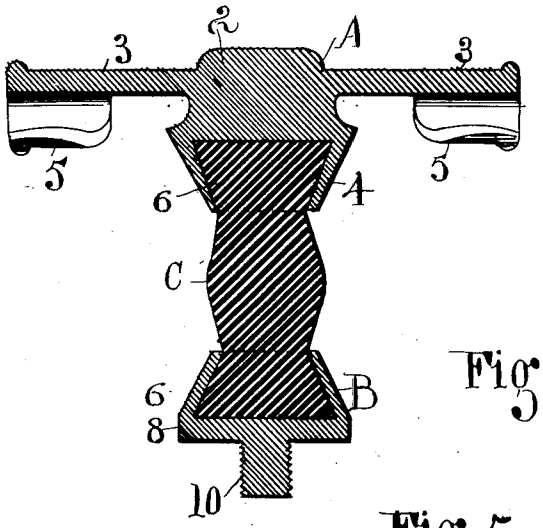


Fig. 3.

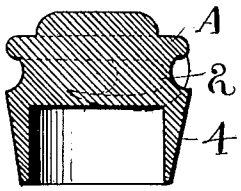


Fig. 4.

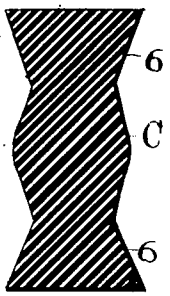
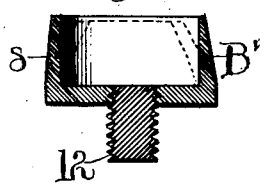


Fig. 5.



ATTEST

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LEO W. MORAN, OF GRAFTON, OHIO.

INSULATING TROLLEY-WIRE HANGER.

No. 913,419. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed February 7, 1908. Serial No. 414,774.

To all whom it may concern:

Be it known that I, LEO W. MORAN, a citizen of the United States, residing at Grafton, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Insulating Trolley-Wire Hangers, and do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in insulating trolley wire hangers, all substantially as shown and described and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective elevation of the hanger in one form. Fig. 2 is an enlarged vertical sectional elevation of the hanger seen in Fig. 1. Fig. 3 is a cross section of the upper member of the hanger seen in Fig. 2, and at right angles to said figure. Fig. 4 is a longitudinal sectional elevation of the insulating member, and Fig. 5 is a cross section of the lower member of the hanger, modified.

The idea of the invention is to provide an insulating hanger for trolley wires which is simple and cheap in construction and which is also effective and durable in service and is not liable to be broken nor to be worn out by use. To these ends the said hanger is constituted of three members or parts, only, as shown in Figs. 1 and 3, and which is its simplest form. These parts comprise the upper supporting member A, which has a head 2, a pair of lateral arms 3 oppositely divergent from said head, and a substantially cup shaped cavity or socket 4 in its bottom. The said arms have underlying lips 5 at their respective ends adapted to engage and clamp on a supporting wire, or wire from which the hanger is adapted to be suspended, but which is not shown herein. The entire metallic portion of this hanger is preferably made of malleable iron for cheapness, but any equivalent metal may be employed, it being understood that such metal must necessarily be like malleable iron in respect to its quality so that it will bend without breaking and be adapted to shaping as may be required in assembling the parts. Thus, the ears or lugs 5 have to be bent and clamped upon the cross wire when the hanger is put in place. Otherwise the hanger is brought to the work assembled as seen in Figs. 1 and 3, but in the assembling of the parts further flexibility and responsiveness in the metal is required as will now be seen. Thus, the complete device comprises the lower socket member B and the intermediate and connecting insulating member C. Said member C is preferably of wood, shaped with circular outwardly flaring heads 6 at its ends of such taper that when clamped within the respective sockets 4 and 8 it is firmly and permanently incorporated with said parts. To this end the lower part B has a cup shaped socket 8 corresponding to socket 4, and when said insulating piece is placed in these sockets they are compressed thereupon uniformly all around so as to engage over the said heads 6 and thus unites the parts A and B permanently by means of said insulator C. The trolley wire connection is made with or through threaded stem 10 at the bottom of part B, or a corresponding stem 12 set or threaded into the cup B, instead of being integral therewith.

What I claim is:

In trolley hangers, a hanger consisting essentially of three pieces comprising separate upper and lower metallic members having corresponding substantially cup shaped sockets on their inner sides and an insulating stem having outwardly flaring circular ends clamped in said sockets, the said lower member having a screw threaded projection at its center and bottom, and the said upper member having lateral arms provided with lips on their ends and bottom adapted to be clamped on a supporting wire.

In testimony whereof I sign this specification in the presence of two witnesses.

LEO W. MORAN.

Witnesses:

FRANK E. MORAN,

EDWARD L. SMALLWOOD.