

C. J. HIXSON.
TROLLEY WIRE HANGER.
APPLICATION FILED FEB. 20, 1911.

1,032,905.

Patented July 16, 1912.

Fig. 1.

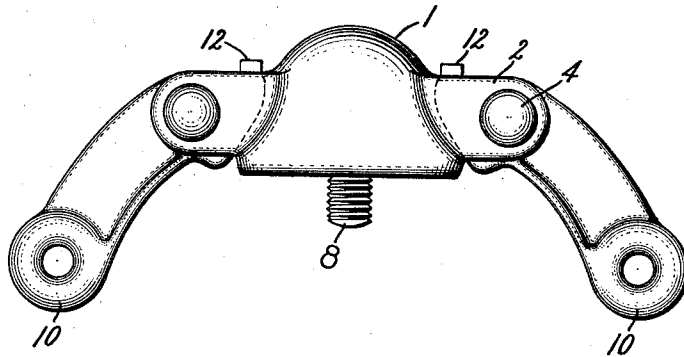


Fig. 2.

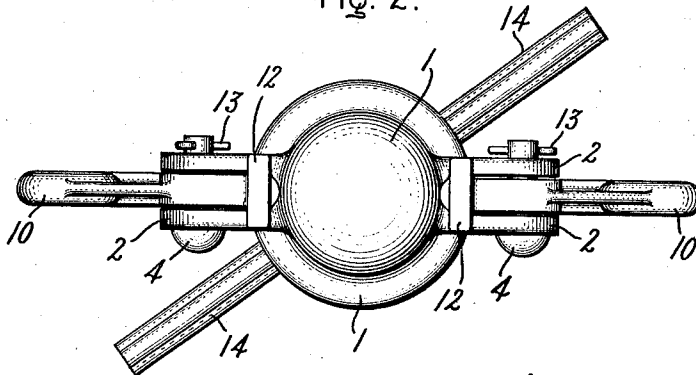


Fig. 3.

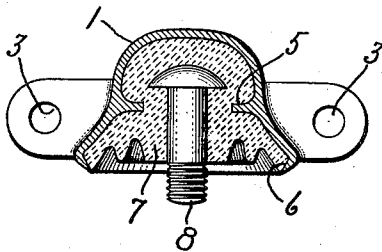
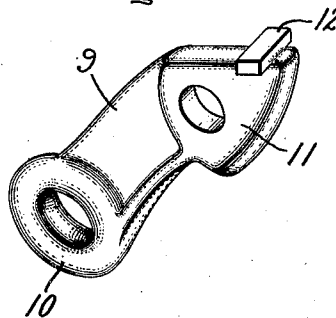


Fig. 4.



Witnesses:

George W. Tilden
J. Ellis Allen

Inventor:

Clinton J. Hixson,
by *Robert G. Davis*
His Attorney.

UNITED STATES PATENT OFFICE.

CLINTON J. HIXSON, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

TROLLEY-WIRE HANGER.

1,032,905.

Specification of Letters Patent.

Patented July 16, 1912.

Application filed February 20, 1911. Serial No. 609,642.

To all whom it may concern:

Be it known that I, CLINTON J. HIXSON, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Trolley-Wire Hangers, of which the following is a specification.

The present invention relates to systems of suspension of overhead conductors for electric trolley cars, and more especially to arched or pull off hangers consisting of an insulated bolt for receiving and supporting a trolley wire ear and in case of an "arch" having two arms and in case of a "pull off" having one arm extending outwardly and downwardly therefrom with means at the free end for attachment of a span wire thereto in such manner that the tension on the wire will be exerted on a line intersecting the suspended trolley wire.

On account of the liability of a trolley jumping the wire and striking a hanger, it is essential that these devices be designed to resist such rough usage and at the same time they must possess a small amount of inertia and be capable of ready replacement in case of breakage.

The form of hanger in general use at the present time consists of a malleable iron casting with a rigid arm or arms downwardly extended from a central bell in which the suspension bolt is held by insulating material molded in place, and when struck by a flying trolley it can yield only by breaking or imposing permanent strains on the metal.

The objects of my invention are to provide an improved form of trolley wire hanger which when struck shall yield and distribute the force of impact without bending or breaking, which shall facilitate repair in case any part becomes broken or loosened so as to permit displacement of the trolley wire, and which shall be readily connected to any form or size of trolley wire ear.

One construction of my improved arch or pull off hanger is shown in the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation; Fig. 2 is a plan; Fig. 3 is a vertical section of the bell or middle section; and Fig. 4 is a perspec-

tive view of one of the detachable arms somewhat enlarged.

The hanger shown in Figs. 1 and 2 consists of a central or bell portion 1 provided on opposite sides with pairs of short horizontal lugs 2 spaced apart and transversely apertured at 3 for the reception of coupling pins 4. The bell has an internal ledge 5 and a shoulder 6 to provide seating surface for the insulating compound 7 whereby the bolt 8 is permanently secured in place and insulated from the other metallic parts. A detachable span arm 9 is shown in Fig. 4 having a ring-shaped lower end 10 and a parallel sided upper end 11 transversely apertured for reception of the coupling pin 4 and provided at or near its extreme point with a transverse bar or abutment 12 designed to engage the upper surface of the lugs 2 to lock the arm from turning in one direction under the strain exerted by a span wire connected to the eye of the lower end and yet leaving it free to turn as by a knuckle joint in the other direction upon receipt of a blow from a flying trolley. In order to enable the arms 9 to yield sidewise, the lugs 2 are spaced sufficiently far apart to provide clearance between their inner surfaces and the sides of the heads 11. By reason of the detachability of the arms 9, ears 14 of any length or size may be screwed into engagement with the bolt 8, and accordingly the arms are free to be made short and stubby, as shown in the drawing, and, in case an arm should by any chance become broken, it may readily be replaced without disconnecting the hanger from the ear or from the opposite span wire. The coupler pins 4 may be held in place by any suitable means such as a cotter pin 13. It will, of course, be understood that in case the hanger is to be used as a single pull off, only one arm 9 and one pair of lugs 2 will be provided.

I do not desire to restrict myself to the particular form or arrangement of parts shown and described in this specification, since it is apparent they may be changed and modified without departing from my invention.

What I claim as new and desire to secure by Letters Patent of the United States, is,—

1. A round top trolley wire hanger hav-

ing one or more arched span arms detachably connected thereto by knuckle joints.

2. A round top trolley wire hanger comprising a main section provided with a pair
5 of spaced lugs, and an arched span arm loosely and detachably held between said lugs.

3. A round top trolley wire hanger comprising a main section provided with a
10 pair of spaced lugs, a detachable fulcrum

pin carried by said lugs, and arched span arm pivoted on said pin and provided with an abutment adapted to engage said lugs.

In witness whereof, I have hereunto set
my hand this 18th day of February, 1911. 15

CLINTON J. HIXSON.

Witnesses:

BENJAMIN B. HULL,
HELEN ORFORD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents
Washington, D. C."