

(No Model.)

J. C. LOVE.
CONDUCTOR SUPPORT.

No. 532,164.

Patented Jan. 8, 1895.

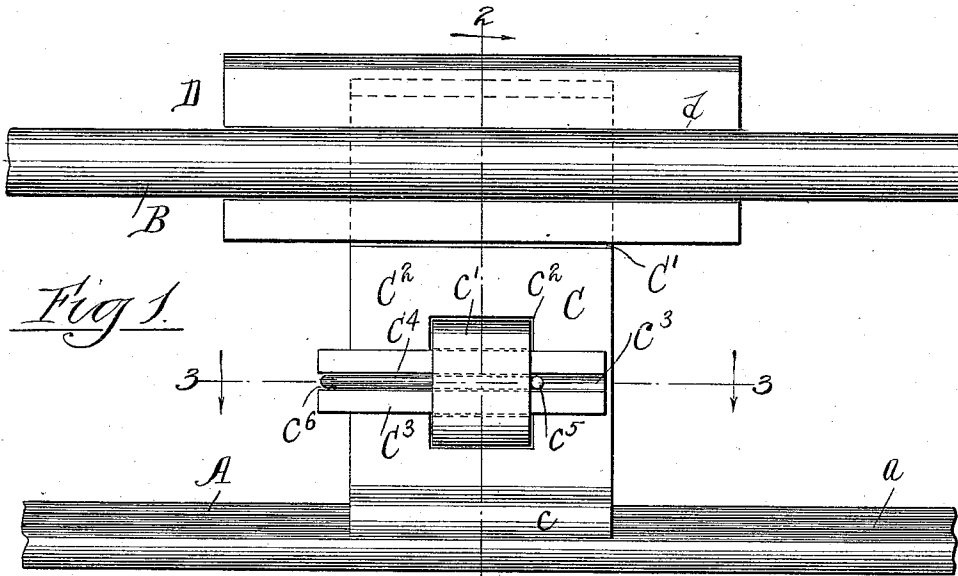


Fig. 1.

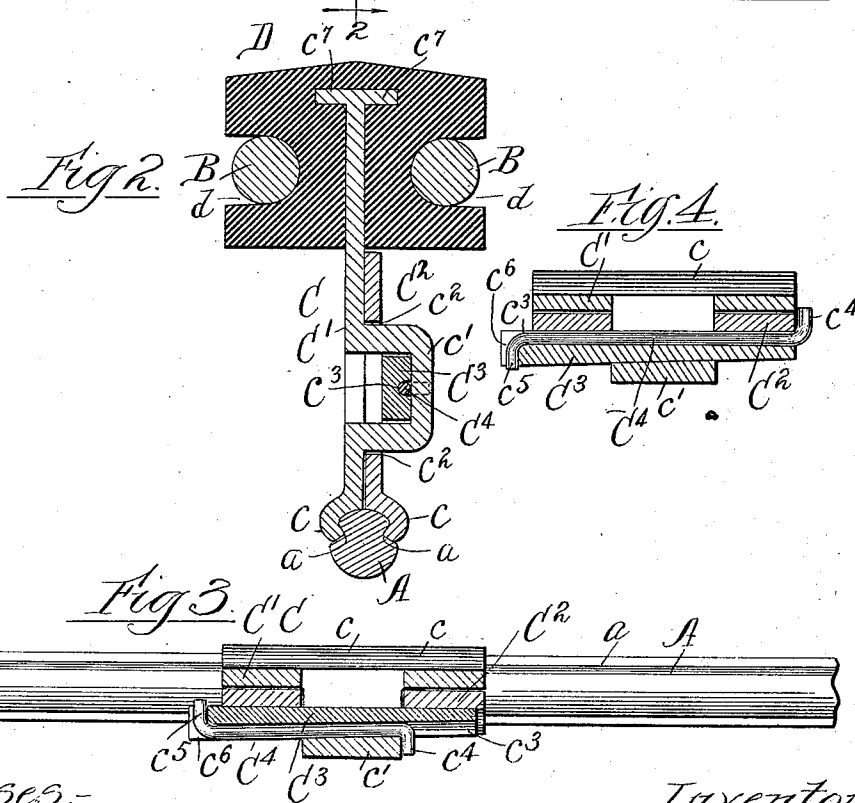


Fig. 2.

Fig. 4.

Fig. 3.

Witnesses:-
Wm. F. Fleming
Wm. M. Rheem.

Inventor:
John C. Love
by: - Mayton, Poole & Brown *his Attys.*

UNITED STATES PATENT OFFICE.

JOHN C. LOVE, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE LOVE ELECTRIC TRACTION COMPANY, OF SAME PLACE.

CONDUCTOR-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 532,164, dated January 8, 1895.

Application filed May 9, 1894. Serial No. 510,652. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. LOVE, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Conductor-Supports; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in devices for supporting the line wires or conductors of electric railroads. Its object is to provide an improved construction in devices of the character referred to; and it consists in the matters hereinafter set forth and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a side elevation of a line wire support embodying my invention in one form. Fig. 2 is a transverse section on line 2—2 of Fig. 1. Fig. 3 is a top plan section taken on line 3—3 of Fig. 1. Fig. 4 is a similar view of a construction slightly modified from that previously shown.

In said drawings, A designates the line wire or conductor and B stationary supporting rods or bars from which the line wire is suspended.

C is a clamp comprising two separable plates C' and C² which are shaped at their lower ends to form jaws c between which the line wire A is gripped and held.

As herein shown, the wire A is provided on each side above its center with a longitudinal groove a, and the lower edges of the jaws c are turned inward to engage said grooves, so that the wire is held solely by its upper portion leaving its lower half unobstructed and fully exposed at every point to the passing trolley wheel.

As an approved means of clamping the plates C' and C² together the plate C' is herein shown as provided centrally with a laterally projecting loop c' adapted to extend through a corresponding aperture c² in the plate C², and secured therein by a wedge or key C³ which passes through the loop and engages the outer surface of said plate C². By driving in the wedge C³ the two plates must obviously be drawn tightly together and the line

wire or conductor A firmly held between the jaws c at their lower ends.

The wedge C³ is conveniently locked in place after being driven in as far as desired by means of a malleable strip, strand or wire C⁴ which is inserted and held between the outer face of the wedge and the loop, and has its ends c⁴ c⁵ bent so as to engage the end of the wedge and the side of the loop in such manner as to prevent the wedge from slipping from its place.

A longitudinal groove c³ is made in the outer face of the wedge C³ to form a seat for the wire C⁴, the ends c⁴ c⁵ of which are bent over in opposite directions to engage respectively the head of the wedge and the side of the loop c' remote from the head of the wedge. The end c⁵ of the locking wire will ordinarily be bent over before the wire is inserted, its other end being left straight. The straight end of the wire is placed in the groove c³ at the small end of the wedge and slipped along said groove beneath the loop c' until its bent end c⁵ comes in contact with the edge of said loop. The end c⁴ of the wire is then hammered or otherwise bent over to closely engage the head of the wedge, and obviously thereafter prevents the wedge from working loose. A recess c⁶ in the head of the wedge forming a continuation of the groove c³ affords a seat for the end c⁵ of the wire when bent over as described.

The clamp C is, as herein shown, suspended and insulated from the stationary support B by means of a block D of insulating material in which the upper end of the plate C, which is extended above the plate C', is embedded; said block being grooved at its opposite sides to engage the supporting rods B B, flanges c⁷ c⁷ projecting laterally on both sides of the plate C' along the upper edge thereof to afford a stronger connection between the plate and the block.

Instead of the rods B B any form of stationary support may be used, which may form part of an overhead or underground railway structure and may be engaged with the insulating block D in any desired manner. In the particular form herein shown, the two parallel rods B B are similar to those which

are secured in the yokes of a slotted underground conduit, of a kind shown in prior patents granted to me, and the block D is provided on opposite sides with grooves adapted to engage the said rods when the block is placed between the latter. This construction obviously permits the line wire supporting device to slide freely endwise on the support B and provides for any longitudinal movement of the line wire resulting from any cause, as from the application thereto of tension devices of the nature set forth in my previous Patent No. 511,345, dated December 26, 1893.

In Fig. 4 I have shown a slightly modified construction of the insulating support in which the wedge C³ is reversed or turned with its grooved face inward against the plate C². The end c⁵ of the locking wire C⁴ in this case engages the edge of the plate C² instead of the edge of the loop c', as in the construction first described, but obviously the locking effect is the same in either case, though the construction shown in Fig. 1, 2 and 3 is the most convenient and is preferred.

I claim as my invention—

1. A supporting device for electric conductors provided with a clamp comprising two separable plates between the margins of which the conductor is gripped and held, one of which is apertured and the other provided with a loop which projects therefrom through said apertured plate, and a wedge or tapered key driven through said loop and engaging the outer face of the apertured plate to force the plates toward each other, substantially as described.

2. A supporting device for electric conductors comprising two separable plates between the margins of which the conductor is held, one of which plates is apertured, and the other provided with a loop which projects

therefrom through the apertured plate, a wedge passing through said loop and engaging the outer face of the apertured plate, and a locking wire inserted between the said wedge and an opposing part of one of the plates, said wire being bent at its ends to engage the head end of the wedge and an oppositely facing surface of one of the plates, substantially as described.

3. A supporting device for electric conductors provided with a clamp comprising two separable plates between the margins of which the conductor is gripped and held, one of which is apertured and the other provided with a loop which projects therefrom through said apertured plate, a wedge passing through said loop and engaging the outer face of the apertured plate, and a locking wire seated in a groove in said wedge and bent at its ends to engage the head of the wedge and an oppositely facing surface of one of the plates, substantially as described.

4. A support for electric conductors comprising an insulating block, two separable plates between the margins of which the conductor is held, one of which plates is extended past the other and embedded in said insulating block, one of said plates being apertured and the other provided with a loop which projects therefrom through the apertured plate, a wedge passing through said loop and engaging the outer face of the apertured plate, and a locking device to hold the wedge in place, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

JOHN C. LOVE.

Witnesses:

C. CLARENCE POOLE,
W. S. HALL.