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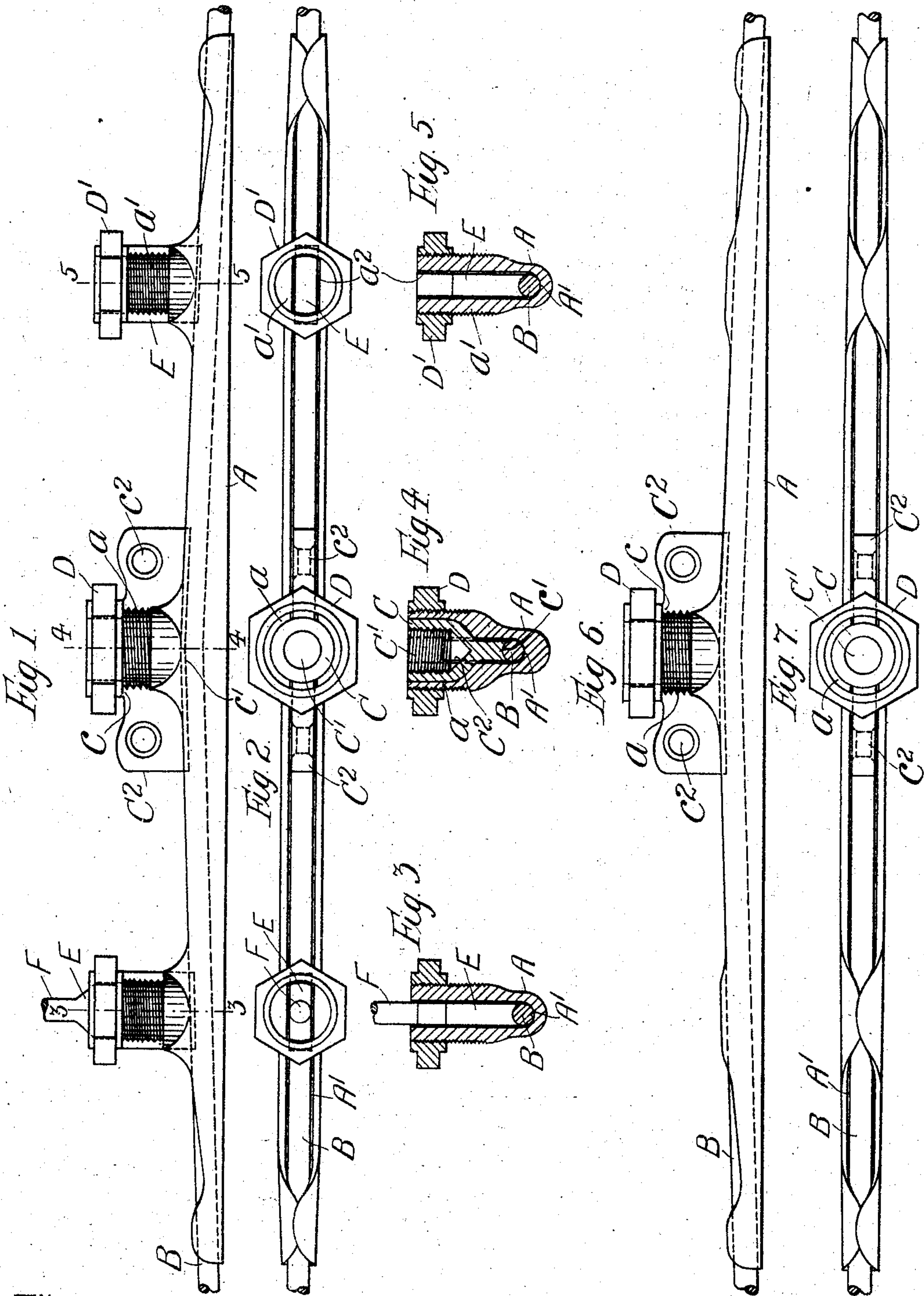
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EAR FOR CARRYING OVERHEAD TROLLEY WIRES.

APPLICATION FILED JUNE 13, 1904.

NO MODEL.



Witnesses.

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EAR FOR CARRYING OVERHEAD TROLLEY-WIRES.

SPECIFICATION forming part of Letters Patent No. 773,089, dated October 25, 1904.

Application filed June 13, 1904. Serial No. 212,404. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS MORRIS, of 8 Morganstreet, Govanhill, Glasgow, Scotland, have invented certain new and useful Improvements in Ears for Carrying Overhead Trolley-Wires, of which the following is a specification.

This invention relates to the ears or supports employed to carry overhead trolley-wires of electric-tramway and light railway systems; and it has for its object to provide an improved ear or support for this purpose wherein the trolley-wires are housed and secured in electric contact without soldering thereto and which may also serve as a connection for feeding in current and for holding the spliced ends of the wires, while it presents no obstruction to the free passage of the trolley-pulley traveling under the wire.

In the accompanying drawings, which illustrate the invention, Figure 1 is an elevation; Fig. 2, a plan of the improved ear or support as adapted also for the connection of anchor-wires and for feeding in current to the trolley-wire. Fig. 3 is a cross-section thereof as at the line 3 3, Fig. 1, and showing the feeding-in connection. Fig. 4 is a cross-section as at the line 4 4, showing the socket into which is secured the usual insulator-stem for supporting the ear from the cross-wires. Fig. 5 is a cross-section at the line 5 5. Fig. 6 is an elevation, and Fig. 7 a plan, showing a modification in which a single supporting-socket is provided for carrying the ear from the cross-wires.

As shown by the drawings, the improved ear or support is composed of a channel or U-shaped bar A of conducting metal, preferably tapering slightly toward the ends, which may be pressed over the trolley-wire B, as shown, after the latter has been laid in the channel A'. At about the mid-length of the channel-bar A is a socket-piece C, having a screw-threaded orifice C² tapped in it for the reception of an insulator by which the bar is suspended from the usual cross-wire stretched across the roadway or from projecting arms on the trolley-wire support, said socket C being fitted within upwardly-extending wings a, formed on the supporting-bar, and upon which

wings, which are externally screw-threaded, as shown, is screwed a nut D to retain the socket-piece C in place. The socket-piece C is formed with side ribs or webs C², extending through the side wings a to present bearing-shoulders at c, on which the nut D presses, and its lower end c' is brought to bear hard on the trolley-wire B, which is laid in the channel of the bar A. The said side ribs or webs C² of said socket-piece C may be extended through the side wings a and bored at c² on either side, as shown at Figs. 1, 2, 6, and 7, for the purpose of anchoring the trolley-wire by means of cross-wires fixed in said extended webs; but such side webs are only provided in cases in which provision is to be made for attaching anchor-wires. On each side of the socket part or at other points in the length of the bar A are smaller side wings or bridge-pieces a', formed with slotted guides a², wherein are fitted keys or wedges E, resting on the trolley-wire B and pressed hard down thereon by means of screw-nuts D', threaded on said wings or bridges and bearing on the upper edges of the keys or wedges or on shoulders formed on them. By these means the trolley-wire B or the spliced part thereof is firmly held in the channel-bed A' of the ear or support A, while the latter conveys without break the current from the wire to the trolley-pulley traveling under it.

For the purpose of feeding current to the trolley-wire B through the ear A one or more of the bridge-pieces or wedges E, fitted therein, may be formed with an orifice for the reception of a feed-wire F, as indicated at Figs. 1, 2, and 3, which wire may be secured by soldering in such orifice or by other means.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The improved ear or support for carrying trolley-wires, comprising, in combination, a bar of conducting material and having a channel to hold the trolley-wire, a socket-piece for suspending said support and devices for securing said socket-piece in position so as to press the wire within the channel, substantially as described.

2. The improved ear or support for trolley-wires, comprising, in combination, a bar of

channel-section having upwardly-extended wings formed thereon, said wings being screw-threaded externally, a socket-piece screw-threaded internally and having side ribs extending through said wings, and a nut to retain said socket-piece in place, substantially as described.

3. The improved ear or support for trolley-wires, comprising, in combination, a bar of channel-section having upwardly-extending central wings formed thereon, said wings being screw-threaded externally, a socket-piece screw-threaded internally and formed with side ribs extending through said wings, said ribs being bored to receive anchor-wires, a nut engaging the screw-threads of said wings, bridge-pieces formed with slotted guides, wedges adapted to press on the trolley-wire and means for pressing down said wedges, as and for the purpose set forth.

4. The improved ear or support for trolley-wires, comprising, in combination, a bar of channel-section having upwardly-extending central wings formed thereon, said wings being screw-threaded externally, a socket-piece screw-threaded internally and formed with

side ribs extending through said wings, a nut engaging the screw-threads of said wings, bridge-pieces formed with slotted guides, wedges adapted to press on the trolley-wire, one of said wedges having an orifice for reception of a feed-wire, and means for pressing down said wedges, as and for the purpose set forth.

5. The improved ear or support for carrying trolley-wires, comprising, in combination, the channel-bar A tapered toward its ends, and having upwardly-extending wings *a* formed thereon and screw-threaded externally, the socket-piece C having a screw-threaded orifice and having side webs *C*² extending through the wings *a*, the nut D, bridge-pieces *a'* with slotted guides *a''*, wedges E and nuts D', as shown and described.

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

FRANCIS MORRIS.

Witnesses:

WALLACE FAIRWEATHER,
JNO. ARMSTRONG, Junr.