

(No Model.)

V. THÉLIN.
ELECTRICAL RAIL FISH.

No. 552,338.

Patented Dec. 31, 1895.

Fig. 2.

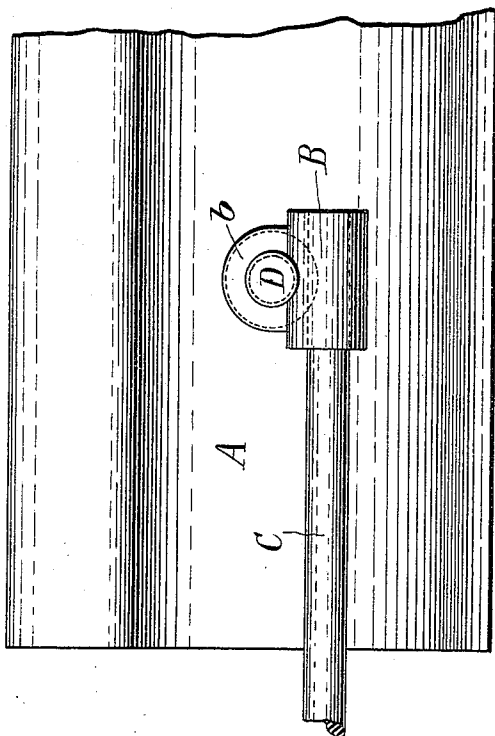


Fig. 3.

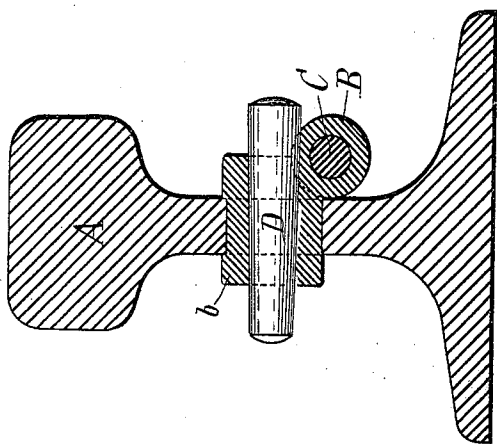
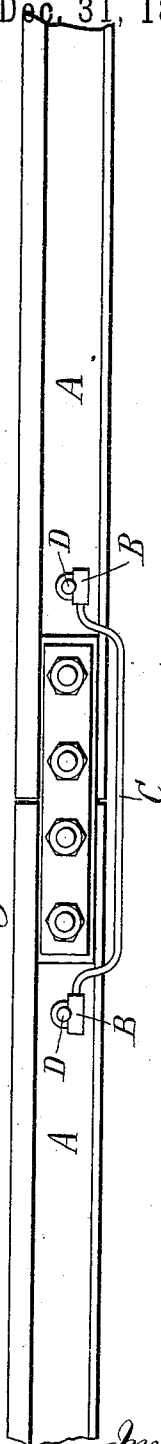


Fig. 1.



Witnesses

Chas. H. Smith
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Inventor

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per Lemuel W. Serrell
Att'y.

UNITED STATES PATENT OFFICE.

VICTOR THÉLIN, OF GENEVA, SWITZERLAND, ASSIGNOR TO THE COMPAGNIE
DE L'INDUSTRIE ÉLECTRIQUE, OF SAME PLACE.

ELECTRICAL RAIL-FISH.

SPECIFICATION forming part of Letters Patent No. 552,338, dated December 31, 1895.

Application filed August 1, 1895. Serial No. 557,829. (No model.)

To all whom it may concern:

Be it known that I, VICTOR THÉLIN, electrician, a citizen of the Republic of Switzerland, residing at Geneva, Switzerland, have
5 invented certain new and useful Improvements in Electric Bond Connections for Railway-Rails, of which the following is a specification.

In electrical tramways it is often necessary
10 to use the rails as electrical conductors, especially for return-wire conductors, and as the usual fish-plates connecting two adjacent rails with one another do not constitute a satisfactory conductor of the current and offer
15 a higher resistance than the rails the latter are generally connected with one another by a supplementary fish-plate especially intended to transmit the electric current from one rail to the other. These electric rail-
20 fishes are generally composed of a copper wire fixed to the adjacent end of the two rails. The devices hitherto employed presented the disadvantage of being either too costly or lacking in strength.

25 The purpose of my invention is to provide an electric rail connection which can be fixed in a perfectly solid and reliable manner to the rails by the mere application of some well-applied hammer-blows.

30 In the drawings, Figure 1 is a side view of the joint connection. Fig. 2 is a side view, and Fig. 3 is a cross-section in larger size, of one end of the connection.

The adjacent ends of the two rails A, which
35 are to be connected with one another, are provided with suitable holes to receive the block B, of some suitable malleable metal, which must be a good conductor of electricity. Each electric connection is composed of a conductor
40 C having at each of its ends such a connect-

ing-block B, the conductor C being preferably formed of a copper wire. Each of the connecting-blocks B is provided with a tubular plug *b* intended to fit in one of the holes in the rails A. The said plug *b* has a central
45 hole, in which is received a tapering pin of hard metal D intended to tightly hold the plug *b* to the rail. By means of this very simple construction the connecting-blocks B may be very solidly fixed to the rails by a
50 mere hammer-blow applied on the head of pin D after the plug *b* has been passed into the hole in the rail. The malleable material forming the said plug *b* is not only tightly
55 pressed against the inner walls of the hole of the rail, but it forms, furthermore, a head or swelling which prevents the connecting-block B being disconnected from the rails by the vibrations caused to the latter by the trains.

Having thus described my invention, I
60 claim—

The combination with the rails having holes through them near their ends, of tubular plugs to pass through and project beyond the surfaces of the rails and open at both
65 ends, and each having a projecting block and a rod extending from one block to the other, and a taper pin driven through each tubular plug adjacent to the block to press the said block against the rail and spread the
70 plug and prevent the same being withdrawn, substantially as specified.

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

VICTOR THÉLIN. [L. s.]

Witnesses:.

E. IMER-SCHNEIDER,
ED. TISSOT.