(No Model.)

A. HENNEFELD, C. DEHNER & C. H. VAN NESS.

SECTION INSULATOR.

No. 529,616. Patented Nov. 20, 1894.

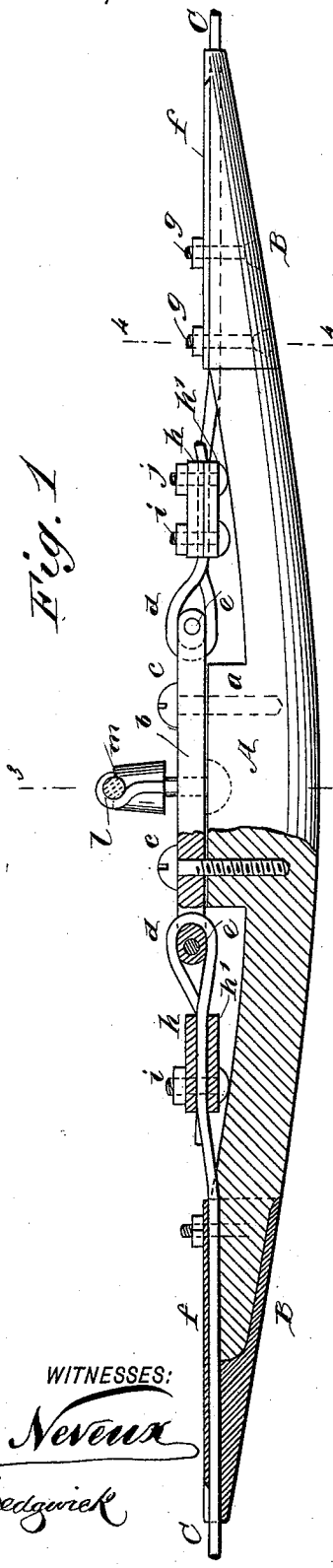

Fig. 1.

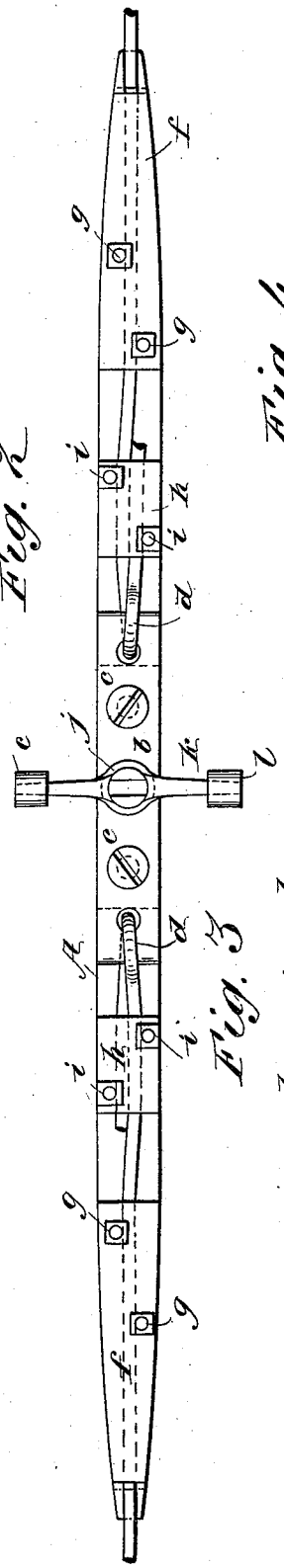

Fig. 2.

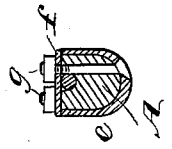

Fig. 4.

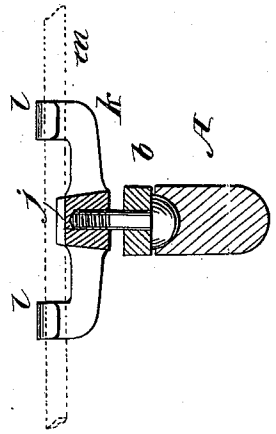

Fig. 3.

WITNESSES:

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SECTION-INSULATOR.

SPECIFICATION forming part of Letters Patent No. 529,616, dated November 20, 1894.

Application filed April 19, 1894. Serial No. 508,154. (No model.)

To all whom it may concern:

Be it known that we, ALBERT HENNEFELD, CHRIST. DEHNER, and CHARLES H. VAN NESS, all of Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and Improved Break for Trolley-Wires, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation, partly in section, of our improved break for trolley wires. Fig. 2 is a plan view. Fig. 3 is a transverse section taken on line 3—3 in Fig. 1, and Fig. 4 is a transverse section taken on line 4—4 in Fig. 1.

Similar letters of reference indicate corresponding parts in all the views.

The object of our invention is to provide a simple and effective trolley wire break, which may be inserted in the line at any time without interfering with traffic, and without the necessity of slackening the line.

Our invention consists in a curved bar of wood or other insulating material provided at its ends with metallic tips, and furnished with means for mechanically connecting the ends of the trolley wire and for engaging the span wire.

The bar A, forming the body of the break, is made of wood or other suitable insulating material. Its under surface is convex in the direction of its length, and it is also convex in a transverse direction and tapered at the ends. The extremities of the bar A are inclosed in metallic tips B, which are notched at the ends to receive the trolley wire C. The upper surface of the bar A is grooved to receive the said trolley wire, and upon opposite sides of a central boss *a*, is cut away to make room for the connections. To the boss *a* is secured a bar *b* of insulating material, by means of screws *c*. The said bar is perforated at opposite ends to receive the loops *d*, formed on the ends of the trolley wire. The bar *b* is perforated transversely at its ends and in the perforations are inserted metallic rods *e*, to strengthen the material of the bar at that point.

The trolley wire C is held in place in the end of the bar A by the plate *f*, which is clamped in place by the bolts *g* passing through the bar and through the metallic tip B. The ends of the trolley wire C forming the loops *d*, are returned parallel with the wire, and securely held between metallic clamping plates *h h'*, which are fastened together by bolts *i*.

In the insulating bar *b* is inserted a screw which extends upwardly and receives the threaded boss *j* of the double span wire hook *k*, the said hook consisting of arms extending laterally from the boss *j*, and provided at their extremities with hooks *l* which receive the span wire *m*.

Our improved break may be inserted in the line without the use of solder, and with the expenditure of very little time and labor, and it is not liable to breakage which occurs in other forms of break where solder is employed.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In a trolley wire break, the combination of a curved bar of insulating material provided with metallic tips, a perforated insulating bar secured to the main bar and adapted to receive loops formed on the ends of the trolley wire, clamping plates for holding the trolley wire in its place in the bar, and clamps for fastening the loops at the end of the trolley wire, substantially as specified.

2. In a trolley wire break, the combination of a curved bar of insulating material provided with metallic tips, a perforated insulating bar secured to the main bar and adapted to receive loops formed on the ends of the trolley wire, clamping plates for holding the trolley wire in its place in the bar, clamps for fastening the loops at the ends of the trolley wire, and a double hook adapted to receive the span wire and support the break, substantially as specified.

ALBERT HENNEFELD.
CHRIST. DEHNER.
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Witnesses:
J. A. BUSTER,
J. C. CRAIN.