No. 698,180. Patented Apr. 22, 1902.

J. T. DEVIESE.

RAIL BOND.

(Application filed Jan. 9, 1902.)

(No Model.)

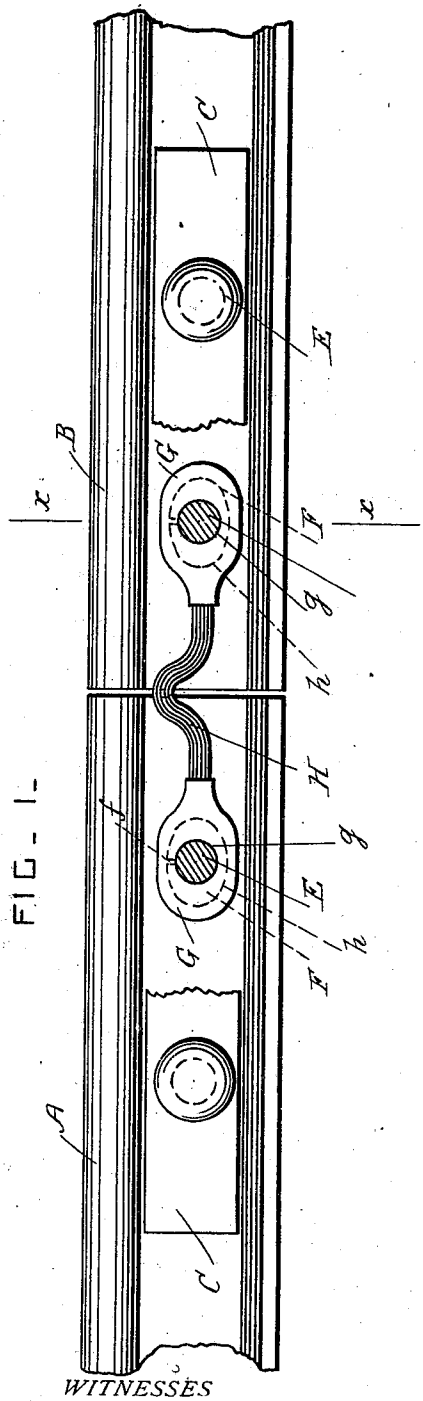


FIG. 1.

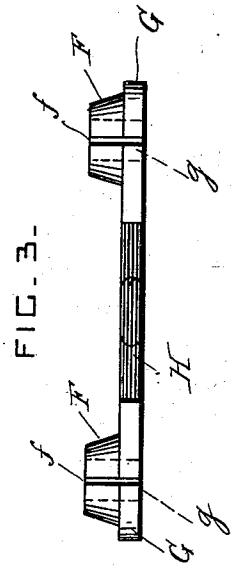


FIG. 3.

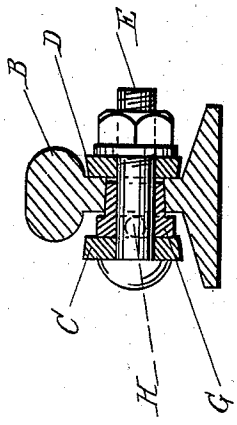


FIG. 2.

WITNESSES

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JOHN T. DEVIESE, OF CROWNHILL, WEST VIRGINIA, ASSIGNOR OF TWO-THIRDS TO EZRA L. MORRISON, OF CROWNHILL, WEST VIRGINIA, AND JOHN C. MORRISON AND THOMAS E. EMBLETON, OF CHARLESTON, WEST VIRGINIA.

RAIL-BOND.

SPECIFICATION forming part of Letters Patent No. 698,180, dated April 22, 1902.

Application filed January 9, 1902. Serial No. 89,045. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. DEVIESE, a citizen of the United States, residing at Crownhill, in the county of Kanawha and State of West Virginia, have invented certain new and useful Improvements in Rail-Bonds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to rail-bonds which form portions of the conductors on electric railroads; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the rails and the bond, showing a portion of the front fish-plate removed. Fig. 2 is a cross-section taken on the line *x x* in Fig. 1. Fig. 3 is a plan view of the rail-bond.

A and B are the adjacent end portions of two rails. C and D are the two fish-plates, and E represents the connecting-bolts. All these parts are of any approved size and construction.

F represents oval sleeves, which are split at *f* on one side upon their shorter width or diameter and which are tapered externally. These sleeves have flanges G at their larger ends and circular holes *g* for the bolts E to pass through. The holes *h* in the webs of the rails are punched oval to correspond with the sleeves F.

H is a flexible connection, having its end portions secured to the flanges of two sleeves, so that they form a pair. The flexible connection H preferably consists of twisted wires soldered to the flanges G; but any other approved flexible connections may be used.

The sleeves F are inserted into the holes *h*, as shown in Fig. 1, and when the nuts are screwed up the front fish-plate bears on the flanges, so that the split sleeves are contracted upon the bolts and a good contact is formed. The same oval split sleeve can be used to connect a conducting-wire to the rails, and it is then applied to one of the end bolts instead of to the two middle bolts.

What I claim is—

1. The combination, with the end portions of two rails, a fish-plate, and connecting-bolts; of a tapering sleeve split on one side and provided with a projecting flange at its larger end, said sleeve being inserted in one of the bolt-holes and clamped upon one of the said bolts by the pressure of the said fish-plate, and a conductor secured to the said projecting flange, substantially as set forth.

2. The combination, with the end portions of two rails, a fish-plate, and connecting-bolts; of a pair of tapering sleeves each split upon one side and provided with a projecting flange at its larger end, said sleeves being inserted in the bolt-holes and clamped upon the said bolts by the pressure of the said fish-plate, and a conductor coupling the flanges of the said pair of sleeves, substantially as set forth.

3. The combination, with the end portions of two rails, a fish-plate, and connecting-bolts; of a pair of oval and tapering sleeves each split upon one side where narrowest and provided with a projecting flange at its larger end, said sleeves being inserted in the bolt-holes and clamped upon the said bolts by the pressure of the said fish-plate, and a conductor coupling the flanges of the said pair of sleeves, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN T. DEVIESE.

Witnesses:
JOHN M. EMBLETON,
A. KIRBY.