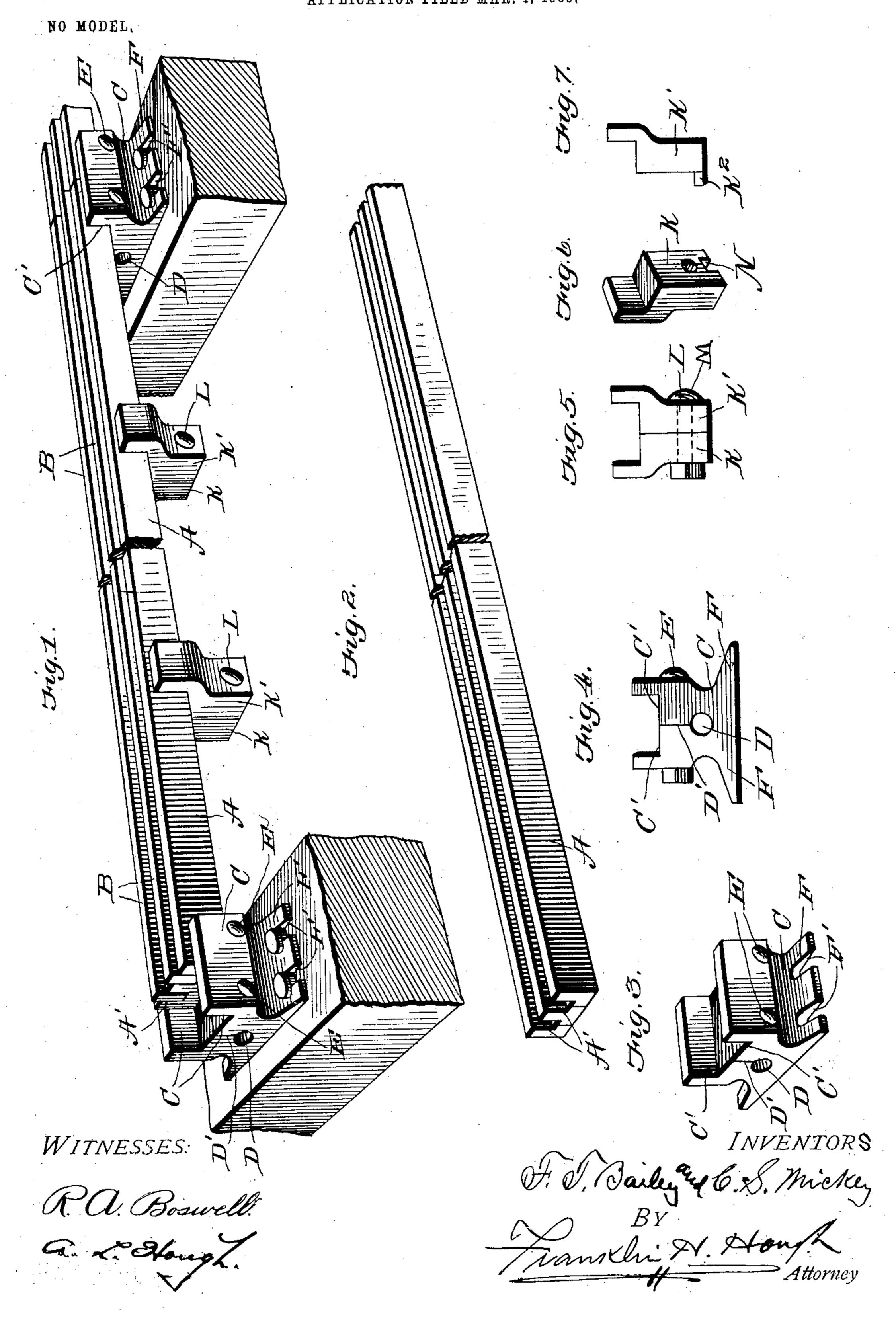
F. T. BAILEY & C. S. MICKEY. THIRD RAIL CONDUCTOR. APPLICATION FILED MAR. 4, 1903.



United States Patent Office.

FRANK T. BAILEY AND CHARLES S. MICKEY, OF BALTIMORE, MARYLAND.

THIRD-RAIL CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 741,613, dated October 20, 1903. Application filed March 4, 1903. Serial No. 146, 156. (No model.)

To all whom it may concern:

Be it known that we, FRANK T. BAILEY and CHARLES S. MICKEY, citizens of the United States, residing at Baltimore city, State 5 of Maryland, have invented certain new and useful Improvements in Third-Rail Conductors; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the 10 art to which it appertains to make and use the same, 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 new and useful improvements in third-rail conductors adapt-. ed to be mounted upon ties of a railway and affording means whereby communication may be had electrically between a train hav-20 ing electrical apparatus in connection with the conductor with other trains or with stations for the purpose of signaling the approach of trains or the location of the same with reference to each other or to stations.

25 More specifically, the invention comprises a conductor apparatus consisting of a suitable insulated conductor-way and suitable insulating material held by suitable tie-clamps which are adapted to be fastened to the ties 30 of a railway.

Our invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings 35 similar letters of reference indicate like parts

in the several views, in which— Figure 1 is a perspective view of a portion of our third-rail conductor shown as held by tie-clamps. Fig. 2 is a perspective view of 40 one of the insulating members in which the conductors are mounted. Fig. 3 is an enlarged detail view of one of the tie-clamps. Fig. 4 is an end view of the tie-clamp. Fig. 5 is a detail view of one of the intermediate 45 clamps, and Figs. 6 and 7 are detail views of one of the intermediate clamps separated.

Reference now being had to the details of the drawings by letter, A designates one section of the conductor-holding blocks, which 50 may be made of any suitable insulating material, as wood or other fiber, and in the drawings we have shown said block as longitudi-! prising a series of conductor-carrying blocks

nally recessed, as at A', to carry two conductors B, although any number of conductors may be used. The ends of said blocks A are 55 supported in the tie-clamp members C, each of which is recessed out on its top, as at C', and has an aperture D running longitudinally through the member, and a slit D' is cut through the bottom of the recess C' into 60 the aperture D for the purpose of allowing the side walls of said member to clamp more securely the opposite edges of the blocks A when the clamping-bolts E, which pass transversely through apertures in said member, 6; are screwed up. The flanges F of said clamping members are recessed, as at F', to receive spikes, whereby said members may be securely fastened to the ties of a railway.

Intermediate the members Care the clamp- 70 ing-jaws K and K', through which a bolt L is passed, whereby the two jaws may be securely held against the opposite edges of the blocks A. One of said jaws K' has a lug K² projecting at right angles from its lower end and 75 designed to engage a notch N in the block K when the two are clamped together in the position illustrated in the drawings by means of a bolt M, passed through said jaws.

By the provision of the clamping means de-80 scribed it will be observed that the conductors may be securely held by the blocks, which are clamped tightly by said jaws and also by the clamping members which connect the ends of the conductor-carrying blocks.

While we have shown a particular form of apparatus embodying our invention, it will be understood that we may make alterations in the detailed construction of the same, if desired, without departing from the spirit of 90 the invention.

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

1. A third-rail conductor comprising a se- 95 ries of channeled insulating-blocks with electrical conductors therein, tie-clamps adapted for attachment to the ties of a railway and having recesses to receive said conductorcarrying blocks, and means for clamping said 100 members against the opposite sides of the blocks, as set forth.

2. A third-rail conductor for railways, com-

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with channels therein, tie-clamps having recesses in their upper faces adapted for attachment to the ties of a railway, each of said tie-clamps having a longitudinal aperture beneath its recessed top and the bottom of each recess being slitted through into said aperture, and bolts for passing transversely through said clamps and the slitted portions designed to securely hold the side walls of the recessed portions of the clamp against the opposite sides of the conductor-carrying block, as set forth.

3. A third-rail conductor for railways, comprising a series of conductor-carrying blocks, grooved to receive conductors, yielding clamp-

ing members adapted for attachment to the ties of a railway and recessed to receive the meeting ends of the conductor-carrying block, and intermediate clamping-jaws, and means for holding the same opposite each other, and 20 bolts for retaining the jaws in clamping relation with the opposite faces of said conductor-blocks, as set forth.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

FRANK T. BAILEY. CHAS. S. MICKEY.

Witnesses:

JOHN C. WILLIAMS, SAMUEL C. JARDEN.