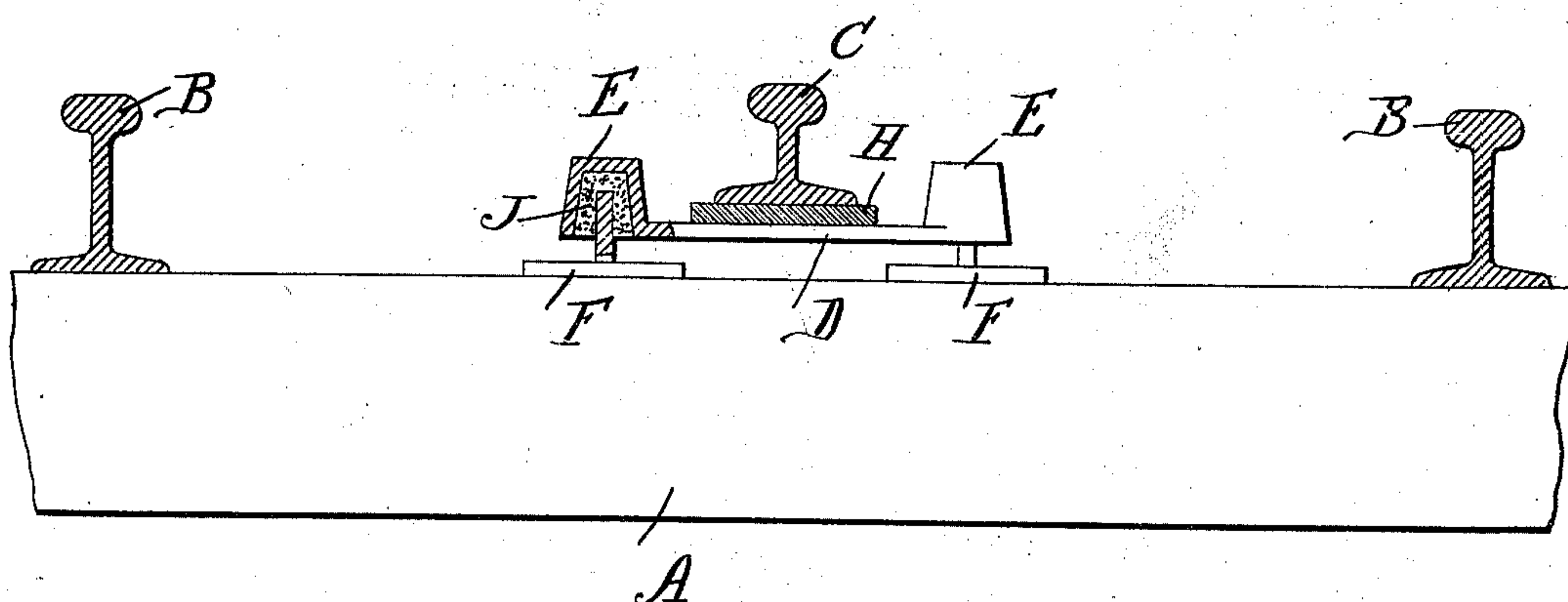


(No Model.)

S. H. SHORT.
MOUNTING FOR THIRD RAILS.

No. 605,260.

Patented June 7, 1898.



Witnesses.
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UNITED STATES PATENT OFFICE.

SIDNEY HOWE SHORT, OF CLEVELAND, OHIO.

MOUNTING FOR THIRD RAILS.

SPECIFICATION forming part of Letters Patent No. 605,260, dated June 7, 1898.

Application filed November 5, 1897. Serial No. 657,510. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY HOWE SHORT, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Mounting for Third Rails, of which the following is a specification.

This invention relates to mountings for third rails.

The object of the invention is to provide a mounting for third or contact rails in electric-railway equipments wherein the third or contact rail is efficiently supported and insulated.

The invention consists, substantially, in the construction, combination, location, and relative arrangement of parts, all as will be hereinafter set forth, as shown in the accompanying drawing, and finally specifically pointed out in the appended claims.

The accompanying drawing illustrates a transverse section of the road-bed of an electric railway, showing the mounting for the third or contact rail in accordance with the principles of my invention.

In the drawing, A designates a cross tie or beam of the road-bed, B the track or service rails, and C the third or contact rail. In order to efficiently support and insulate this third or contact rail, I support the same on short transverse bars D. Attached to or formed with the ends of this bar are the bell or cup shaped castings E. The standards F, suitably mounted on and secured to the cross beams or sills of the road-bed, are arranged to project into the bell or cup shaped castings E. To afford proper insulation, these bell or cup shaped castings are filled with suitable insulating material I—such, for instance, as rubber, wood, sulfur, or the like—and the ends of standards F are received and embedded in this insulating material. In order to still further aid the above-described arrangement in properly and efficiently insulating the third or contact rail, I interpose between the rail C and the supporting-bars D a strip or board of suitable insulating material—as, for instance, a wooden board suitably tarred or waterproofed. It is evident that a rubber strip or other suitable insulating material is equally well adapted for this purpose. The strip H is laid upon the supports D parallel with the rail C, which is placed thereon. From

this arrangement it will be seen that the third or contact rail C is doubly insulated, first by the insulating-strip H and then by the insulated supports of bars D.

In order that the motor, truck-frame, brake-rigging, and the like may not be obstructed by the contact-rail C, it is important that the top surface of said rail be as low down as possible. To secure this end, the bell or cup shaped portions E are arranged to extend away from said bar on one side thereof, thereby imparting a U shape in longitudinal section to said bar, and hence bringing the top surface of said rail into the same horizontal plane, or nearly so, with the tops of the traction or service rails B.

Of course it will be obvious that the third rail may be arranged between the service or traction rails, as shown, or in any other suitable or convenient relation with respect thereto, the particular relative location of said rail being unimportant so far as the present invention is concerned.

While the invention is adapted for use generally in electric railways employing third or contact rails, it is particularly designed for use in connection with elevated-railway structures.

Having now set forth the object and nature of my invention and an arrangement embodying the same, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent of the United States, is—

1. In a mounting for third or contact rails, the combination with standards, a bar supported by but insulated from said standards, an insulating strip or board supported by said bars and arranged to extend lengthwise with respect to the third or contact rail, said rail being arranged to rest on said strip or board, as and for the purpose set forth.

2. A supporting-bar for a third or contact rail having bell or cup shaped castings at the end thereof, insulating material arranged in said castings, and supporting-standards arranged to be received in said insulating material, as and for the purpose set forth.

3. A supporting-bar for a third or contact rail having inverted-bell or cup shaped castings arranged to project from the ends and on the same side thereof, insulating material

arranged in said castings, and supporting-standards arranged to be received in said insulating material, as and for the purpose set forth.

5 4. The combination with a third or contact rail, a supporting-bar therefor having inverted-bell or cup shaped castings arranged to project from the ends and on the same side thereof, insulating material arranged in said
10 castings, supporting-standards arranged to

be received in said insulating material, and an insulating-strip interposed between said bar and rail, as and for the purpose set forth.

In witness whereof I have hereunto set my hand, this 1st day of November, 1897, in the 15 presence of the subscribing witnesses.

SIDNEY HOWE SHORT.

Witnesses:

M. A. KENSINGER,

JOHN J. BEVER.