

No. 889,559.

PATENTED JUNE 2, 1908.

J. N. TOMLINSON.
PROTECTOR FOR THIRD RAILS OF RAILWAY SYSTEMS.
APPLICATION FILED DEC. 19, 1906.

Fig. 1.

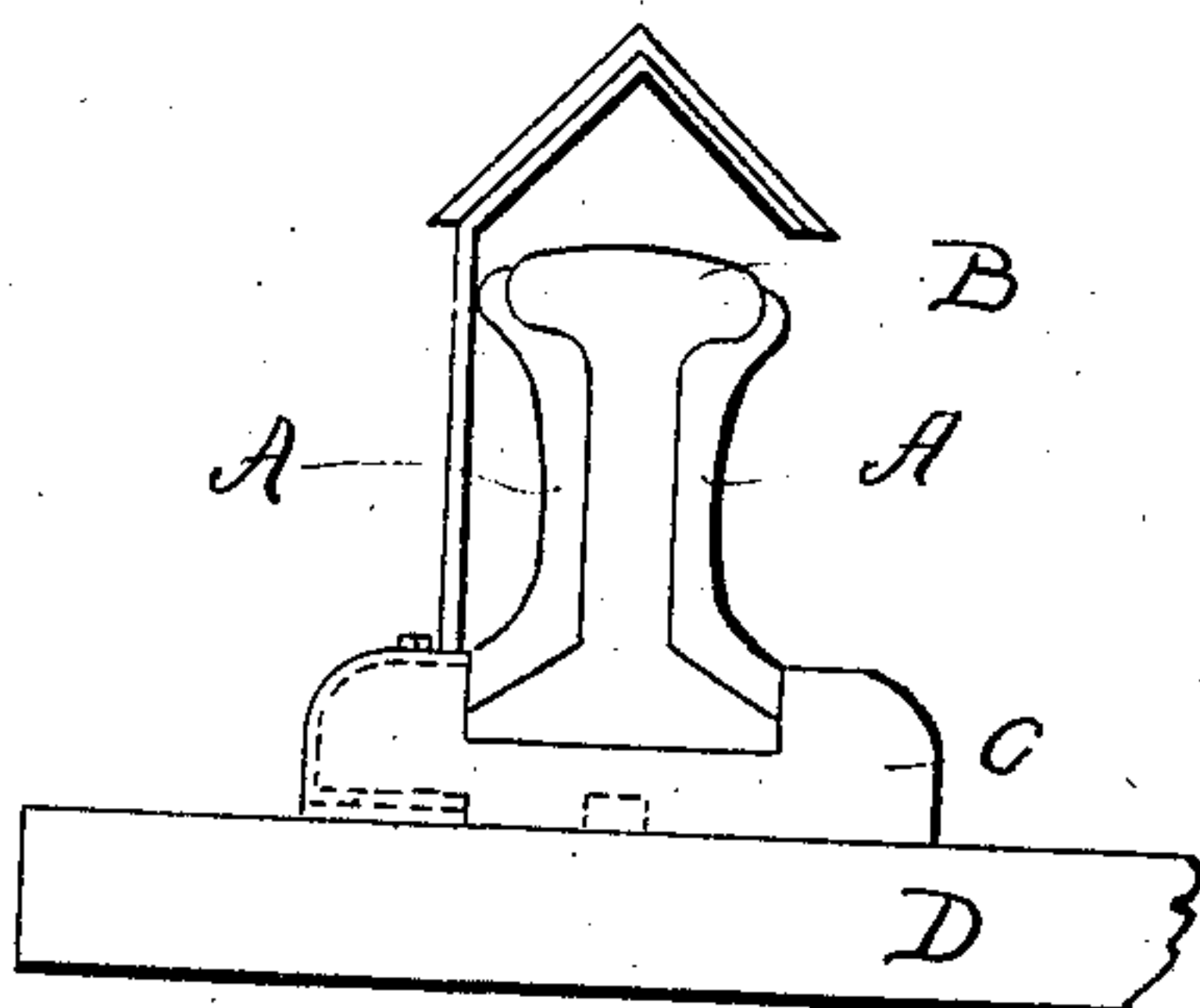


Fig. 2.

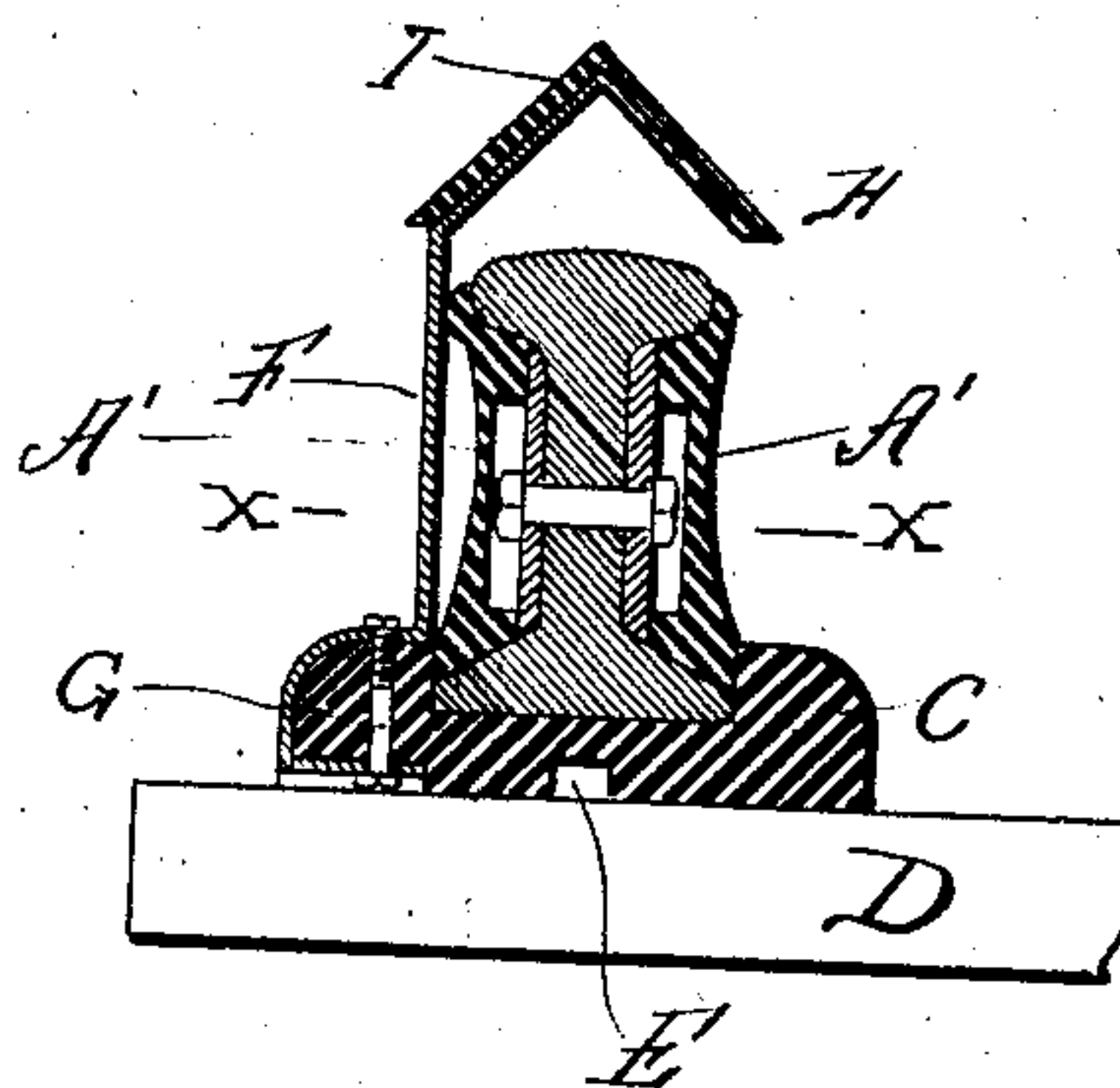


Fig. 3.

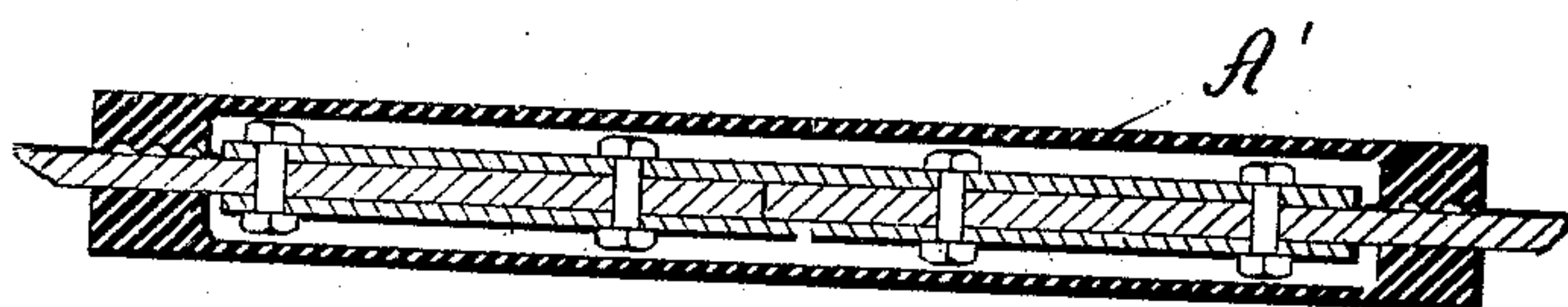


Fig. 5.

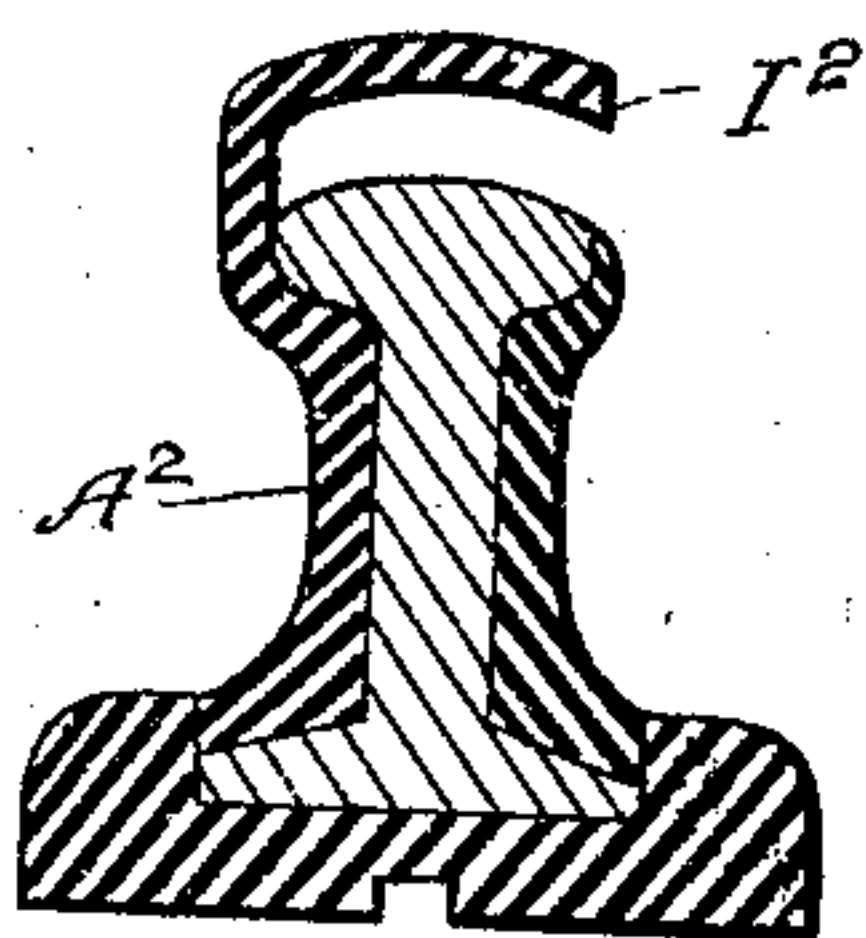
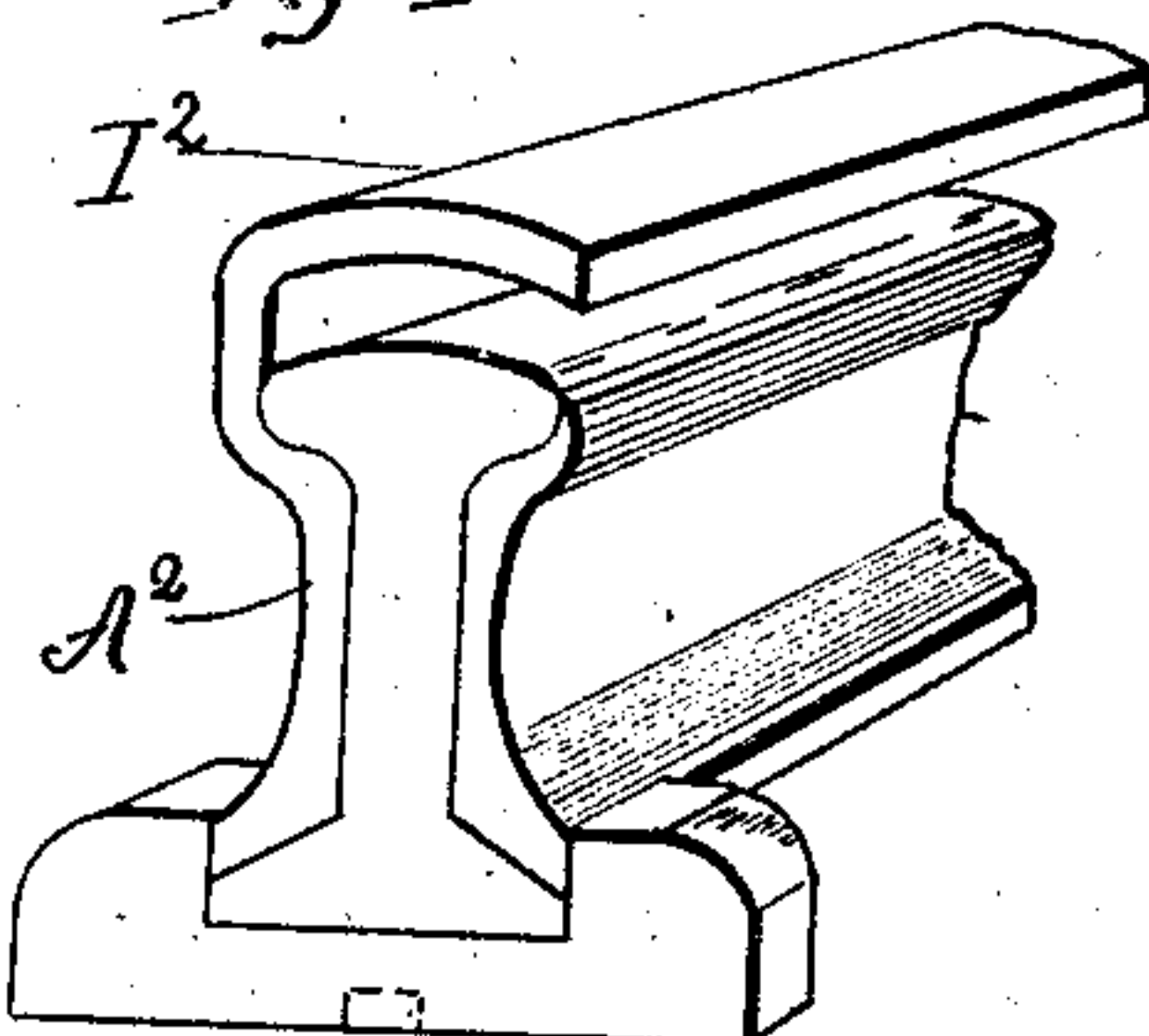


Fig. 4.



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JOSEPH N. TOMLINSON, OF VINELAND, NEW JERSEY.

PROTECTOR FOR THIRD RAILS OF RAILWAY SYSTEMS.

No. 889,559.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed December 19, 1906. Serial No. 348,513.

To all whom it may concern:

Be it known that I, JOSEPH N. TOMLINSON, a citizen of the United States, residing at Vineland, county of Cumberland, and State of New Jersey, have invented a certain new and useful Improvement in Protectors for Third Rails of Railway Systems, of which the following is a specification.

My invention relates to a new and useful improvement in protectors for third rails of railway systems, and has for its object to provide an exceedingly simple and effective arrangement by which the third rail of such a system will be absolutely protected against a person or animals coming in contact therewith, and at the same time protect it from the accumulation of ice or snow.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an elevation of a third rail showing my improvement applied thereto. Fig. 2, a similar view, the section being taken at a point where the fish plates clamp two rails together. Fig. 3, a horizontal section at the line $x-x$ of Fig. 2 showing the form of insulating blocks which are utilized to embrace the fish plates. Fig. 4, is a view in perspective of a slightly modified form of invention. Fig. 5, is a cross section of Fig. 4, taken through the shoe.

In carrying out my invention as here embodied, A represents the insulating blocks which are adapted to fit against the web of the third rail B between the head and base thereof, thus completely inclosing the sides of the rail throughout the full length thereof, and protect it against contact, and the inner faces of these blocks may be corrugated to prevent the accumulation of the moisture.

C represents one of the chairs or shoes which are placed at proper distances apart along the rail, each shoe being seated upon one of the cross ties D, and each of these shoes has a recess formed in the bottom thereof adapted to fit over the post E projecting from the tie so as to hold it in place. Each shoe has a groove in its upper surface

in which fits the rail, and the bracket F is secured to the shoe by means of the bolts G, which pass through the shoe and the strip. Each of these brackets extends upwards and terminates in an angular support H, upon which the roofing I is supported, this roofing being made in sections of convenient and varied shapes to suit the location, preferably of insulated material.

Where two rails come together and are secured in alinement by the ordinary fish plates the insulated blocks A are hollowed out, as indicated at A', so as to accommodate the fish plates and bolts.

In practice I prefer that the shoes, insulated blocks and roofing be made of material that may be easily molded, such as clay cement, earthenware, glass or wood pulp.

In Fig. 4 the brackets are dispensed with and the roofing I² and its support A² formed in a single piece, the support also serving as the insulating block on one side of the rail. This has some advantages.

From this description it will be seen that a third rail protected in this manner cannot become clogged from snow, hail or ice, will prevent persons or cattle from coming in contact therewith, while at the same time leaving sufficient space beneath the roof to permit the passage of the contact so carried by the car.

Having thus fully described my invention, what I claim as new and useful, is—

1. In combination with the third rail of an electric system, a series of shoes made of insulating material provided with grooves in which the rail is seated, insulating blocks carried by the rail and extending within the said grooves, said blocks contacting with the end walls of said grooves, and a roofing for the rail.

2. In combination with the third rail of an electric system, a series of shoes made of insulating material provided with grooves in which the rail is seated insulating blocks carried by the rail and extending within the said grooves, said blocks contacting with the end walls of said grooves and a roofing for the rail formed with one of the insulating blocks.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

JOSEPH N. TOMLINSON

Witnesses:

G. E. LEWIS,

L. E. CRANMER.