

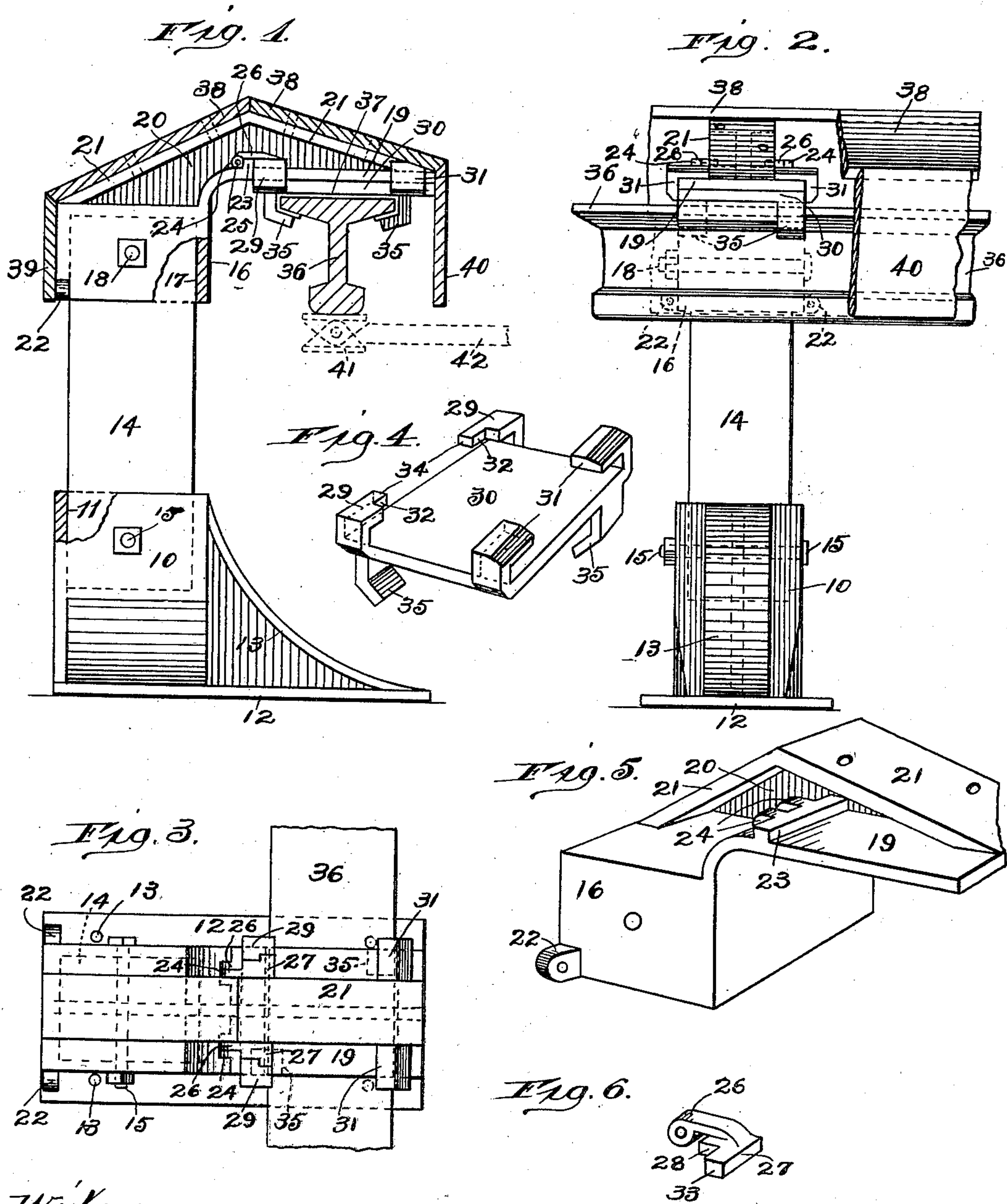
No. 741,393.

PATENTED OCT. 13, 1903.

J. E. BLAKESLEY.  
SUPPORT OR CHAIR FOR THIRD RAILS.

APPLICATION FILED APR. 27, 1903.

NO MODEL.



Witnesses:

Chas. E. Gorton.  
A. Gustafson.

Inventor:

James E. Blakesley.  
By Chas. C. Hillman  
Atty



## UNITED STATES PATENT OFFICE.

JAMES E. BLAKESLEY, OF CHICAGO, ILLINOIS.

## SUPPORT OR CHAIR FOR THIRD RAILS.

SPECIFICATION forming part of Letters Patent No. 741,393, dated October 13, 1903.

Application filed April 27, 1903. Serial No. 154,563. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES E. BLAKESLEY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Supports or Chairs for Third Rails, of which the following is a specification.

This invention relates to improvements in means for supporting the third or electrically-charged rails used in that class of electric railways known as "third-rail" systems; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

One of the objects of my invention is to provide simple, strong, durable, and inexpensive means or a support for supporting third rails in an inverted position from that usually occupied by such rails, which support shall be so made that the rails may be easily and securely attached thereto.

Another object of the invention is to construct the support in such a manner that it will afford a guard for the rails, thus protecting them from sleet, snow, and ice and also shielding them in such a manner as to prevent shocks or accidents to employees or others.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is an end view of a third rail, showing it in place and supported by a support embodying my invention. Fig. 2 is a side view in elevation of a portion of the third rail, showing a part of the housing of the support broken away. Fig. 3 is a plan view of the supporting-chair and a part of the rail, showing the housing or guard removed. Fig. 4 is a detached perspective view of the rail-holder. Fig. 5 is a similar view of the cap or upper portion of the chair; and Fig. 6 is a detached perspective view of one of the lock-

ing-dogs used for securing the rail-holder in position.

Like numerals of reference refer to corresponding parts throughout the different views of the drawings.

The support comprises a number of chairs or supporting-pieces which are counterparts of one another and are connected together and covered by means of a housing or guard, and inasmuch as the chairs are alike I have shown one of them only in the drawings. The base of the chair comprises a body portion 10, which is preferably rectangular in shape and has in its upper end a socket 11 and is provided on its lower end with a horizontal portion 12 to rest on the cross-ties or road-bed, to which it may be secured by means of spikes or bolts passing through openings 13 in the sides thereof. The horizontal portion 12 is united to the side of the body 10 by means of a flat-faced rib 13, as is shown in Figs. 1 and 2 of the drawings.

Located at its lower end in the socket 11 of the base is a standard 14, usually of wood, which is held in place by means of a bolt 15, which passes transversely through said standard and the base. On the upper end of the standard 14 is mounted the cap or upper portion of the chair, which comprises a body portion 16, which is preferably rectangular in shape and is provided with a socket 17 to receive the upper end of said standard, which is held in place by means of a bolt 18, passing transversely through the standard and body portion 16 of the cap. As is clearly shown in Figs. 1 and 5 of the drawings, the body portion 16 is provided with a laterally-extending arm 19, from the upper surface of which and the top of the part 16 rises a rib-like portion 20, which has a flat top 21, sloping toward its ends and usually angular in form, with its apex about its middle. The cap or portion 16 is provided at each of its ends, near its outer surface, with an apertured lug 22 to receive bolts for securing a portion of the housing thereto. The upper surface of the arm 19, near its juncture with the cap portion 16, is provided on each side of the rib 20 with a transverse cleat or raised portion 23, which is formed on its outer surface with lugs 24, which are slightly sepa-



rated, as shown in Fig. 5, and are formed with transverse openings to receive pintles 25, used for securing the locking-dogs for the rail-holder in place. Each of said dogs comprises an apertured arm 26, which is located between the lugs 24 and pivotally secured therebetween by means of the pintle 25, as will be readily understood by reference to Figs. 1 and 6 of the drawings. The inner end of the arm 26 of each of the locking-dogs is provided with an enlargement 27, having a recess 28 to engage the lugs 29 on the outer edge of the rail-holder, which comprises a rectangular plate 30, having at each of its corners upwardly-extending and intumed lugs 29 and 31, the former of which are provided with recesses 32 on their inner surfaces to engage the projections 33 of the locking-dogs, while the recesses 28 of said dogs will receive the projections 34 on the lugs 29 of the rail-holder. The arm 19 of the cap portion 16 is located between the upper surface of the plate 30 and the inward extensions 29 and 31, and said holder will be firmly locked on the arm by reason of the engagement therewith of the locking-dogs, as is apparent. The plate 30 is provided on its lower surface at corners diagonally opposite each other with downwardly and inwardly extending lugs 35, which engage the sides of the top of the third rail 36, which portion is commonly called the "base" when used without being inverted, as shown in Fig. 1 of the drawings. Interposed between the lower surface of the plate 30, the lugs 35 thereon, and the rail 36 is insulating material 37, of fiber or other suitable substance.

Secured to the inclined top portion 21 of the rib 20 are boards 38, of wood or other suitable material, which extend from one chair to the other and afford a roof for the housing, which also comprises side boards 39 and 40, the former of which is secured to the outer surface of the cap portions usually by means of bolts passing through the lugs 22 thereon, while the latter is secured to the inner portion of the arms 19 and board 38 and depends to near the lower end of the third rail, as is clearly shown in Fig. 1, in which a shoe 41 and a portion of the supporting-arm 42 therefor are shown by dotted lines as impinging the lower part of the inverted rail or that portion thereof commonly called the "tread."

From the foregoing and by reference to the drawings it will be seen and clearly understood that by placing the plate 30 on the rail so that its diagonal corners without the lugs on the lower surface thereof will lie in about a longitudinal line on the upper surface of the rail the lugs 35 will be in position so that by turning the plate in such a manner as to bring its sides into alinement with the sides of the rail the said lugs will embrace and support the same, in which position the plate may be securely locked by means of the lock-

ing-dogs and lugs 29 on the arm 19 of the cap portion of the support.

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

1. In a support for third or electrically-charged rails, the combination with an upright provided at its upper portion with a laterally-extending arm, a rail-holder having means on its lower portion to engage the rail and means integral with the holder to secure it to the arm, substantially as described.

2. In a support for third or electrically-charged rails, the combination with an upright having a laterally-extending arm, a rail-holder having means on its lower portion to engage the rail and means integral with the holder to detachably secure it to the arm, substantially as described.

3. In a support for third or electrically-charged rails, the combination with an upright having a laterally-extending arm, a rail-holder having means on its lower surface to engage the rail, and means integral with the holder to detachably secure it to the arm and to prevent its longitudinal or lateral movement, substantially as described.

4. In a support for third or electrically-charged rails, the combination with a suitably-supported standard, of a cap portion mounted on the upper end thereof and having a laterally-extending arm, a rail-holder having means on its lower portion to engage the rail, and means to detachably secure the holder to the arm, substantially as described.

5. In a support for third or electrically-charged rails, the combination with a suitably-supported standard, of a cap portion mounted on the upper end thereof and having a laterally-extending arm, a rail-holding piece having on its lower surface diagonally oppositely disposed means to engage the rail, and means to secure said piece to the arm, substantially as described.

6. In a support for third or electrically-charged rails, the combination with a suitably-supported standard, of a cap portion mounted on the upper end thereof, and having a laterally-extending arm, a rail-holding piece having on its lower surface diagonally oppositely disposed downwardly and inwardly inclined lugs to engage the rail, and means to secure said piece to the arm, substantially as described.

7. In a support for third or electrically-charged rails, the combination with a suitably-supported standard, of a cap portion mounted on the upper part thereof, and having a laterally-extending arm, a rail-holding piece having on its lower surface diagonally oppositely disposed downwardly and inwardly extending lugs to engage the rail and on its upper surface a number of inward-turned lugs to engage the arm, substantially as described.

8. In a support for third or electrically-charged rails, the combination with an upright



having at its upper end a laterally-extending arm, a rail-holder having on its lower surface means to engage the rail and provided on its upper surface with a number of inwardly-turned lugs to engage the arm, and locking-dogs pivotally secured to the arm and adapted to engage two of said lugs so as to prevent the longitudinal or lateral movement of the rail-holder, substantially as described.

9. In a support for third or electrically-charged rails, the combination with a suitably-supported upright portion having at its upper end a laterally-extending arm, a rail-holder having on its lower surface means to engage the rail, means integral with the holder to secure it to the arm, and an inclined housing located above the arm longitudinally with the rail and extending downwardly at each side of the upright so as to form a guard or shield for the rail, substantially as described.

10. In a support for third or electrically-charged rails, the combination with a number of suitably-supported standards each having a laterally-extending arm, a rail-holder having means on its lower portion to engage the rail and means integral with the holder to secure it to each of said arms, a housing located above the standards and extending from one to another thereof, and having depending

sides so as to form a guard or shield for the rail, substantially as described.

11. In a support for third or electrically-charged rails, the combination with a socketed base-piece, of a standard secured in the socket thereof, a socketed cap portion secured on the upper end of the standard and having a laterally-extending arm, a rail-holder having means on its lower portion to engage the rail and means to secure the holder to the arm, substantially as described.

12. In a support for third or electrically-charged rails, the combination with a socketed base-piece of a standard secured in the socket thereof, a socketed cap portion mounted on the upper end of the standard and having a laterally-extending arm provided on its top with a rib, said rib having an inclined upper edge, a rail-holder having means on its lower portion to engage the rail, means to secure the holder to the arm, and housing secured to the top edge of the said rib and extending longitudinally with the rail and depending at the sides thereof, substantially as described.

JAMES E. BLAKESLEY.

Witnesses:

CHAS. C. TILLMAN,  
A. GUSTAFSON.