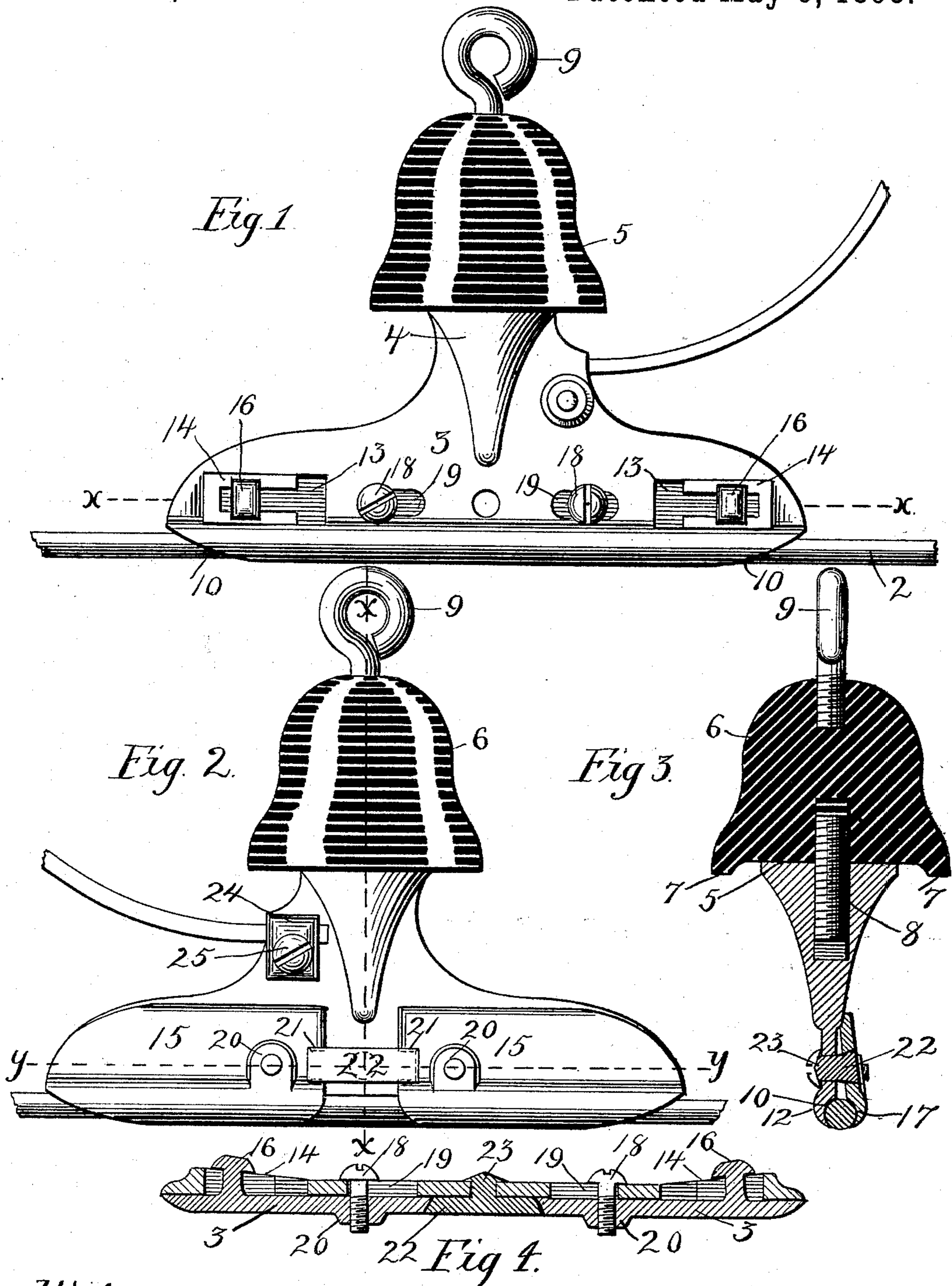


(No Model.)

H. A. HAMLIN.
TROLLEY WIRE SUPPORT.

No. 497,293.

Patented May 9, 1893.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY A. HAMLIN, OF MINNEAPOLIS, MINNESOTA.

TROLLEY-WIRE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 497,293, dated May 9, 1893.

Application filed June 18, 1892. Serial No. 437,156. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. HAMLIN, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain Improvements in Hangers for Overhead Conductors, of which the following is a specification.

My invention relates to means for fastening the overhead conductors of electric railways and especially to a cheap and novel clamp by means of which the wire is firmly secured, and its object is to provide a clamp which may be more readily attached to the wire than those in present use, most of which are soldered upon the wire.

The invention consists in the combination with a plate having a longitudinal groove in its lower edge, of two clamping plates similarly grooved, said plates provided with T-heads and wedged surfaces upon the opposite side of the main hanger plate with which the heads are adapted to engage, and means for securing the plates when finally wedged in place, in the particular arrangement of the insulating bell, and in various details of construction and combinations all as hereinafter described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of a hanger embodying my invention. Fig. 2 shows the opposite side of the hanger. Fig. 3 is a vertical section on the line $x-x$ of Fig. 2. Fig. 4 is a horizontal longitudinal section on the line $y-y$ of Fig. 2 and showing the hanger with the wire removed.

As shown in the drawings, 2 represents the trolley or conductor wire and 3 the main hanger plate provided on its upper end with the enlarged cone shaped part 4 having the flat upper surface 5 upon which the insulating bell 6 having the depending edge 7 is firmly secured by the threaded connecting pin 8. In the upper part of the bell is the eye 9 by which the device is secured to the cross arm or other support. The plate 3 has a long longitudinal lower edge curved inwardly at the ends as shown at 10 and provided with the shallow groove 11 and the convex outer surface 12 the lower edge of which

is adapted to extend flush with the bottom of the wire.

In each end of the plate 3 I provide a T-shaped slot 13 and along the narrow portions of the slots provide the outwardly inclined wedge surfaces 14. On the opposite side of the part 3 are the two clamping plates 15 similarly formed and having on their inner sides the T lugs 16 which are inserted through the broad portions of the slots 13 and then pushed out upon the wedge surfaces 14 as shown in Figs. 1 and 4, thereby firmly setting the grooved lower edges 17 of the clamping plates against the side of the wire. The plates are fastened in place after being thus wedged out by the set screws 18 extending through the slots 19 in the plate 3 and having their threaded ends fastened in the inner ends of the two plates 15 which are also provided with the bosses 20.

In the inner end of each plate 15 is a notch 21, and the plates being fastened with the screws 18 the soft metal wedge 22 is placed in position with its wedge shaped ends in the opposite notches 21, the wedge being secured by riveting the end of the lug 23 of the wedge on the outer surface of the plate 3 as shown in Figs. 3 and 4.

On the upper part of the plate 3 I provide the small clamping block 24 grooved on its inner side and fastened to the plate 3 by the screw 25, this block being adapted to secure the end of the feed wire. It will thus be seen that I provide a clamp which after being adjusted upon the wire and fastened with the wedge block 22 cannot become loose, which forms no obstruction to the passage of the trolley wheel, which has a convenient feed wire connection and in which the pivot pin of the hanger is removed to a greater distance above the trolley wire than is the case in the hangers now in use. If for any reason it is desired to remove the wire from the clamp that may be readily done after punching out the rivet of the wedge block 22, after which the set screws 18 may be loosened and the heads 16 slipped back on the wedge surfaces 14 to separate the clamping edges of the parts 13 and 15.

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

1. The combination in a device of the class described, of the grooved plate provided with the T slots and the wedge surfaces, of the clamping plates having the T heads to be secured thereon.
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2. The combination in a device of the class described, with the main grooved plate provided with the T slots and the wedge surfaces on its outer side, of the corresponding
10 grooved clamping plates having the T heads to be fastened on said wedge surfaces, said main plate provided with other slots and screws passing through the same into said clamping plates, substantially as described.
- 15 3. The combination in a device of the class described, of the main grooved clamping plate provided with the slots and the wedge surfaces provided with T heads to engage said wedge surfaces of the main plate, said
20 main plate provided with slots 19, screws 18 projecting through the same and secured in said clamping plates and the wedge block to engage the notched ends of said clamping plates and riveted upon the main plate, sub-
25 stantially as described.
4. The combination with the main grooved plate, of the two clamping plates similarly grooved, means for securing the same thereon, a block 24 to engage the feed wire, and the screws 25 for fastening said block, sub-
stantially as described. 30
5. The combination with the main plate grooved to engage the wire, of the similarly grooved clamping plates to engage the opposite side of the wire, the main plate provided
35 with the T slots and the wedge surfaces 14 said clamping plates having the T headed lugs 16 to be secured on said wedge surfaces, said lugs extending through slots in the main plate and fastened in the clamping plates, the wedge
40 arranged between the inner ends of said clamping plates, said main plate having the part 4, the bell secured thereon and means for suspending the whole, substantially as described. 45

In testimony whereof I have hereunto set my hand this 15th day of June, 1892.

HENRY A. HAMLIN.

In presence of—

FREDERICK S. LYON,
CHARLES E. VAN DOREN.