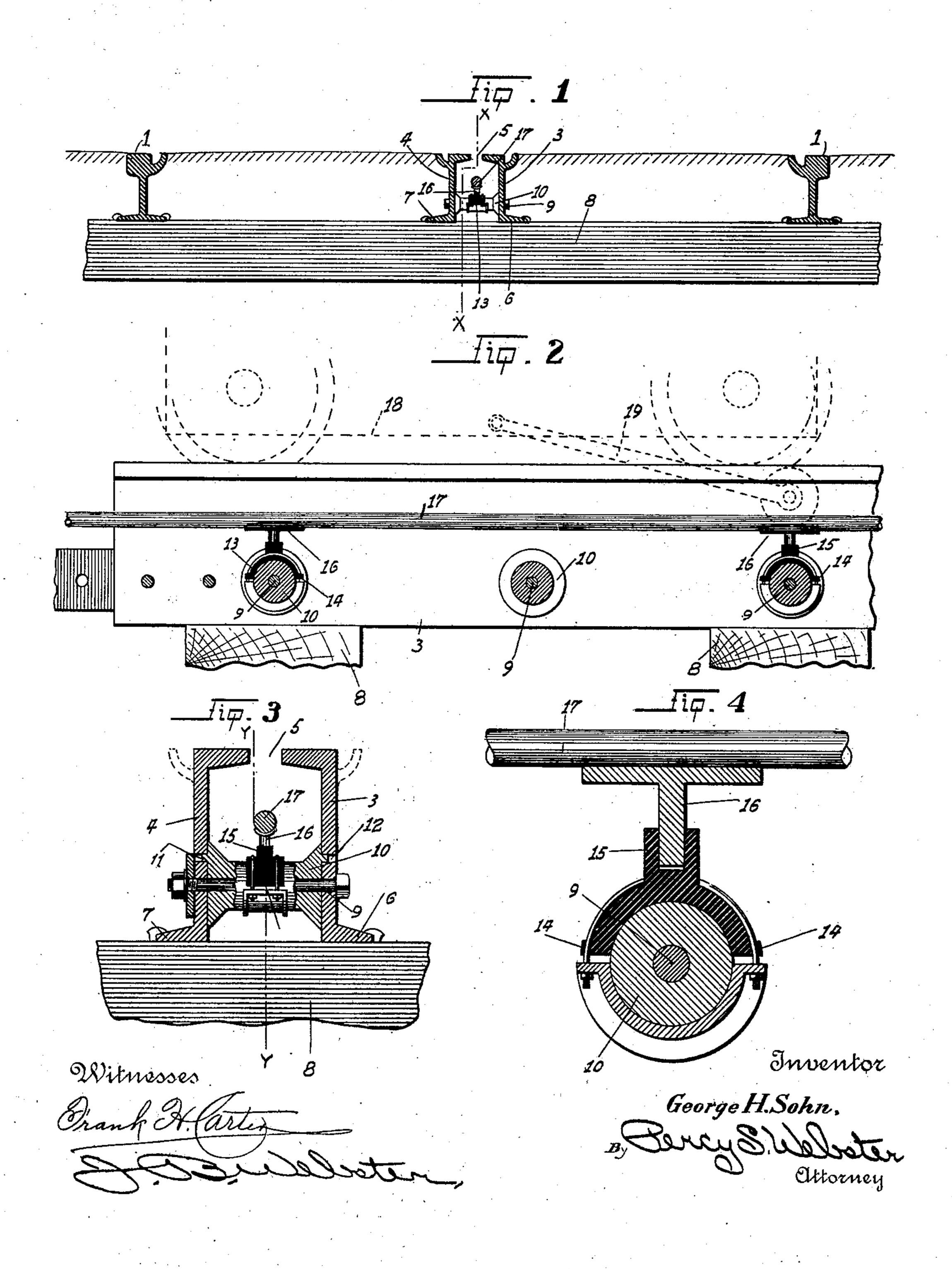
G. H. SOHN.

THIRD RAIL ATTACHMENT FOR ELECTRIC CARS. APPLICATION FILED OCT. 30, 1907.



UNITED STATES PATENT OFFICE.

GEORGE HENRY SOHN, OF LINCOLN, CALIFORNIA.

THIRD-RAIL ATTACHMENT FOR ELECTRIC CARS.

No. 889,266.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed October 30, 1907. Serial No. 399,865.

To all whom it may concern:

Be it known that I, George Henry Sohn, a citizen of the United States, residing at Lincoln, in the county of Placer and State of 5 California, have invented certain new and useful Improvements in Third-Rail Attachments for Electric Cars; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in electric railways and particularly to third rail systems, my object being to produce such a third rail as will be simple, inexpensive and effective, and yet one which will do away with the dangers now incurred in the present system of having man or beast come in contact with the charged wire, and one which will be free from the objections to

most rails of this character.

This object I accomplish by means of a slotted rail in which is disposed a current carrying wire, there being suitable means connected with the car for conveying the current in said wire to the motor on the car.

This current conveying means and one form of rail I have already protected by Letters Patent, No. 874,630. Hence this application relates to and claims only the specific form of rail and the general construction and relative arrangement of parts thereof, all as will appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the

40 several views.

Figure 1 is a cross sectional view of a railway showing my improved rail installed therein. Fig. 2 is a sectional view taken on a line xx of Fig. 1. Fig. 3 is an end elevation of my improved rail. Fig. 4 is a sectional view taken on a line yy of Fig. 3.

Referring more particularly to the characters of reference 1 designates the usual rails of a railway intermediate which I dispose my third rail which is composed of two members 3 and 4 suitably spaced apart and

forming a top central slot 5. Said members 3 and 4 have plain vertical inner surfaces but are provided with outer flanges 6 and 7 for the purpose of securing the same to the ties 55 8. The inner sides of said members 3 and 4 are suitably secured and braced by means of bolts 9 surrounding which are spools 10 bearing against the inner sides of the members 3 and 4 and provided with lugs 11 which 60 fit into orifices 12 in the said members 3 and 4, all for the purpose as will appear. Clamped onto alternate spools 10 are insulators 13 having lugs 14 extending on each side of the clamping wire for the purpose of holding the 65 same in position. The said insulators 13 are provided with upward sleeves 15 in which rest wire holders 16 holding a current carrying wire 17.

In practice the means which conveys the 70 current, such as a dummy car 18 carrying a trolley 19, may ride on the rail 3—4, the trolley 19 extending into the slot 5 and engaging the wire. Should any dirt, or other deleterious matter fall between the members 3 and 75 4 it falls below and between the spools 10 or between the ties out of the way of the wire 17. Also in practice a gutter could be disposed under the center of the ties to act as a drain, thus making it practically unnecessary to 80 open street unless in case of serious obstruction. The lugs 11 prevent any possibility of the spools 10 turning, thus displacing the

insulators 13 and wire 17.

From the foregoing description it will be 85 seen that I have produced such a third rail as substantially fulfils all the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of my 90 device, still in practice many small deviations from such detail may be resorted to without departing from the spirit of my invention.

Having thus described my invention what 95 I claim as new and useful and desire to secure

by Letters Patent is:—

A rail for the purpose described comprising two independent rail members spaced apart forming a central slot, said rail members being provided with orifices in their sides, a spool bolted between said rail mem-

bers and having lugs normally projecting into said orifices, an insulator clamped onto said spool, lugs on said insulator on either side of said clamp member, a sleeve formed in said insulator, a holder removably disposed in said sleeve, and a wire upheld by said holder, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE HENRY SOHN.

Witnesses:

W. J. PRUVETT, C. E. FINNEY.