

(No Model.)

W. J. SUMNER.
TROLLEY CARRIER AND HANGER.

No. 564,949.

Patented July 28, 1896.

Fig. 1.

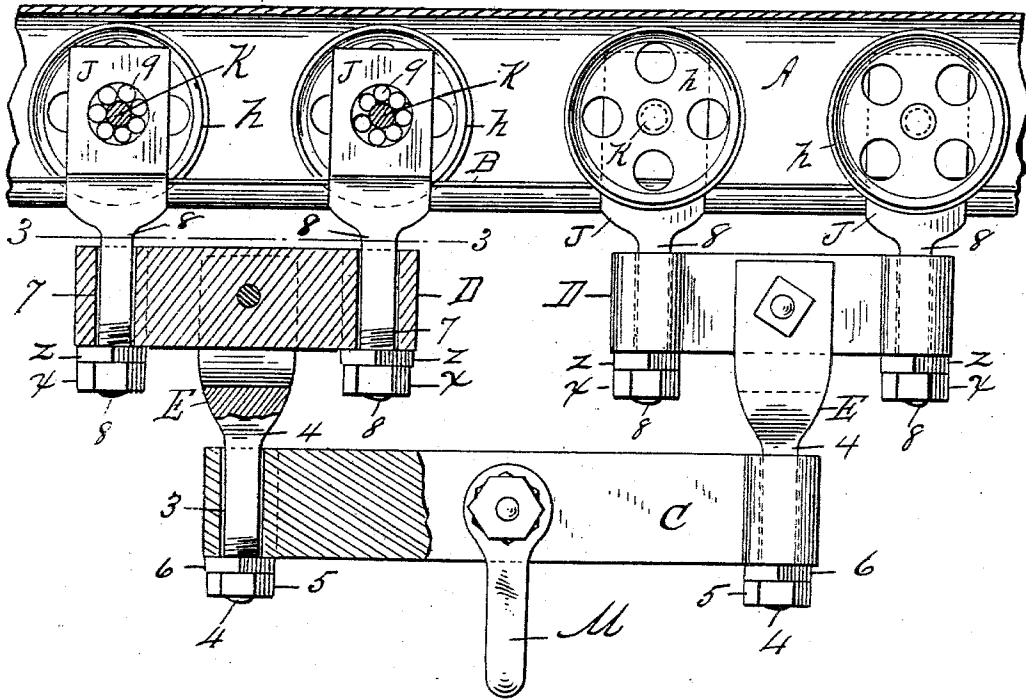
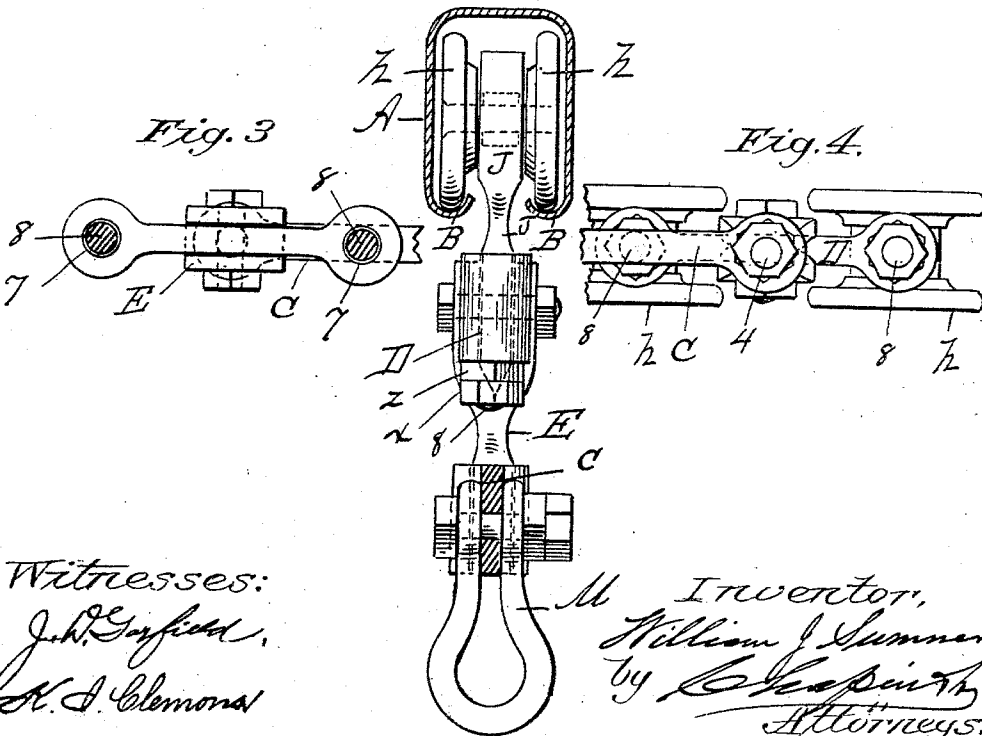


Fig. 2.



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TROLLEY CARRIER AND HANGER.

SPECIFICATION forming part of Letters Patent No. 564,949, dated July 28, 1896.

Application filed March 25, 1896. Serial No. 584,784. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. SUMNER, a citizen of the United States of America, residing at Holyoke, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Trolley Carriers and Hangers, of which the following is a specification.

This invention relates to trolley carriers and hangers, the object being to provide an improved compound hanger which is adapted by its peculiar construction to sustain heavy loads, and to distribute, longitudinally, the weight of said loads over a considerable portion of the runway-surface of a trolley-track.

A further object of said peculiar construction is to provide a trolley-hanger which, while bearing on said considerable surface of said runway, is peculiarly adapted for use on curved tracks, and is so constructed that the axes of the trolley-wheels are constantly in a line at right angles to the runways of the track, whether the latter be straight or curved; and the invention consists in the peculiar construction and arrangement of the parts of said hanger, all as hereinafter fully described and more particularly pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a longitudinal section of a trolley-track and a side and a partially sectional elevation of a compound trolley-hanger embodying my improvements. Fig. 2 is a view on line 2 2, Fig. 1, showing full section of the trolley-track. Fig. 3 is a section on line 3 3, Fig. 1. Fig. 4 is a bottom view of one of the pairs of trolley-wheels, their hangers, the hanger-yoke, and a part of the main yoke.

In the drawings, A indicates a longitudinal section of a trolley-track, showing one of the runways or trolley-tracks B thereof formed by bending the lower edge thereof in the form shown in Fig. 2, or in any other suitable form to receive trolley-wheels therein.

The trolley-wheel compound hanger herein shown and described consists of a main yoke-bar C, to which is attached the "clevis" or part M to which said load is hung, and two secondary yokes D D, said last-named yokes

being united by the yoke-connecting hangers E E. Each of said hangers E has a free swivel connection with said main yoke-bar C, formed by perforating said last-named bar at 3, near each extremity, and by giving to one end 4 of each of said connecting-hangers E a cylindrical form of slightly less diameter than said perforation 3, and securing said cylindrical ends 4 in said yoke-bar C by a nut 5 and washer 6 on each one, or by other similar suitable means. The described manner of connecting said main yoke-bar C and the secondary hanger E provides for a free movement of the connected parts as to diverse alinement of said yokes, whereby all cramping is avoided when the hanger is used on a curved track or otherwise. The said hangers E are attached each to one of said secondary yokes D, midway between the ends thereof, preferably by bolting the same thereto, as shown, whereby each yoke D and hanger E are rigidly united, said hangers occupying, in practice, depending positions relative to the yoke D to which they are secured. Each of said yokes D is perforated near the opposite ends at 7 to receive therethrough the ends of the cylindrically-formed shanks 8 of trolley-wheel hangers J. The said shanks 8 of the hangers J are loosely fitted in their perforations 7 in the yokes D, and are secured therein each by a nut and washer *x z*. In each of said hangers J is fitted a trolley-wheel axle K, whereby two trolley-wheels *h h*, fixed thereon, are properly supported on said hanger to run in said track A. Said hangers J are preferably provided with ball or with roller bearings for said axles K, as shown in two of said hangers at 9 in Fig. 1.

As a consequence of the above-described construction, it is obvious that the free swiveling action of the four trolley-wheel hangers J in said two secondary yokes D D, and the like free swiveling action of said two yokes and their connected hangers E E in said main yoke-bar C, the said trolley-wheels *h*, each or all of them, are absolutely free to adjust themselves to any line of movement which may be required to follow the line of the trolley-track runways, be it curved or otherwise deviating from a direct line. The said swivel-con-

connected yokes and hangers obviate all frictional or grinding contact of the sides of the trolley-wheels *h* with any part of the adjoining sides of the trolley-track, thus conducting to the free movement of the wheels and hangers and the load carried thereby and to greater durability of all of the operative parts of the device.

It is obvious that for the purpose of conveying objects of ordinary or moderate weight on a trolley-track, whereby one pair of hangers *J J* and their wheels *h h* may be sufficient therefor, the clevis *M* may replace one of the hangers *E*, thus providing a trolley-hanger with one pair of swiveled hangers and wheels instead of two pairs, but preserving the said advantages pertaining to the said compound swiveled hanger construction.

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

1. A compound trolley-hanger consisting of a main yoke-bar several secondary yoke-

bars, connections between said main and secondary yoke-bars, whereby said bars may severally freely assume positions of diverse alinement, combined with two trolley-wheel hangers for each of said secondary yoke-bars, each of said hangers having a free-swiveling connection with said secondary bars, and a trolley-wheel on each hanger, substantially as set forth.

2. A compound trolley-hanger consisting of the main yoke-bar *C*, the hangers *E, E*, having free swiveling connection with said main yoke-bar, the secondary yoke-bars *D, D*, secured to said hangers, combined with two trolley-wheel hangers *J, J*, and trolley-wheels thereon, connected to each of said secondary yoke-bars, and having free swiveling connections therewith, substantially as set forth.

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