

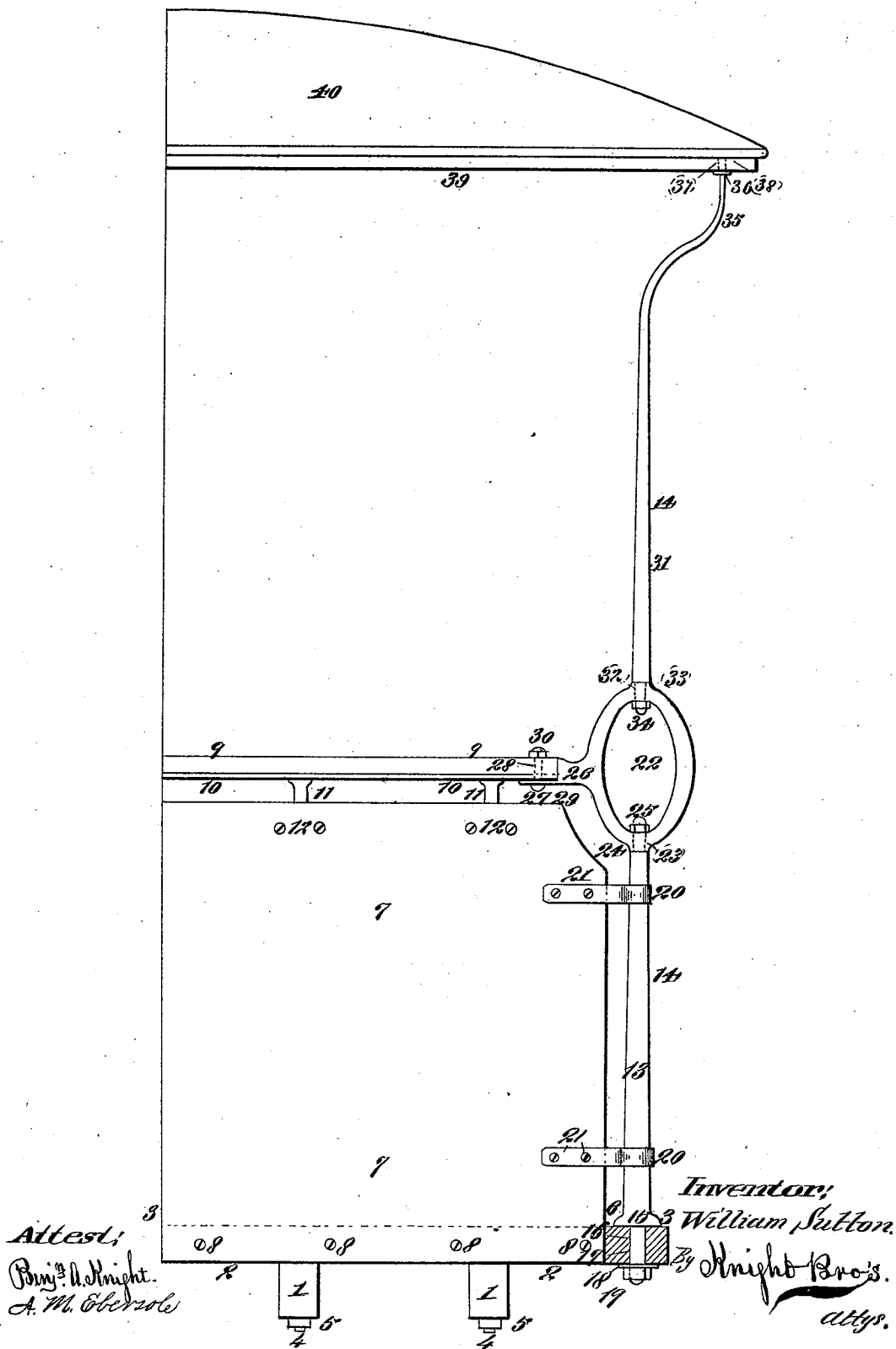
(No Model.)

W. SUTTON.

COMBINED REINFORCE DASH POST AND GRAB HANDLE FOR CARS.

No. 516,948.

Patented Mar. 20, 1894.



UNITED STATES PATENT OFFICE.

WILLIAM SUTTON, OF ST. LOUIS, MISSOURI.

COMBINED REINFORCE DASH-POST AND GRAB-HANDLE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 516,948, dated March 20, 1894.

Application filed October 30, 1893. Serial No. 489,498. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SUTTON, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in a Combined Reinforce Dash-Post and Grab-Handle for Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to combined reinforce standard dash-posts and grab-handles, that aid the landing and exit of passengers, and form an efficient catch hold for the conductor after dropping from the forward car while in motion, and mounting the rear car to attend to his duties on the same. The said standard also greatly strengthens the dash, and constitutes a guard hold to retain passengers on the platform, and in combination with its surmounting rave, and sill, and roof-tie it constitutes a brace hold of the same and of the dash, that stiffens the car, and even in times of collisions it aids to prevent the disastrous act of telescoping; and the invention consists in features of novelty hereinafter fully described and pointed out in the claims.

The figure is a detail elevation of a car, with the above named devices attached, with the base of the column attachment in section.

Referring to the drawing: 1 represents the sill stringers, which are secured to the cross-sills 2 and floor 3 by the screw bolts 4, and nuts 5.

6 is the end platform to which the dash is secured by the screws 8.

9 is the rave that is secured to the iron strap bar 10, on which it is mounted, and by means of the perforate T brackets 11 and screws 12 the said rave is secured to the dash it surmounts.

13 represents the base sections of the columns or posts 14. 15 are the shoulders at the foot of said columns that rest on the platform. 16 is the screw tipped extension bolts that pass from said shoulders through their perforate seats 17 in the platform. 18 are washers mounted on said bolts, and 19 are screw-nuts mounted thereon and that firmly hold said columns to the platform. 20 represents perforate attachment tie-straps that bind around said base section of the column

and are secured by screws 21 to said dash. 22 represents the grab handles that are preferably of an oval form, of a vertical elongation. 23 are surmounting screw-tips to said base section of the column, which screw-tips pass through their perforate seats 24, in the bottom of the grab handles, and 25 are dome capped octagon screw-nuts that are firmly screwed home on said screw-tips to securely hold said grab-handles to said column section. 26 represents lateral metal attachment straps that extend from said grab-handles to and overlap the end of said rave to which they are secured by the bolts 27 that pass through their perforate seats 28 in the angle flanges 29 of said extension straps and in the rave, to which they are firmly secured by the dome capped screw nuts 30.

31 represents the upper sections of the columns or posts 14; the base screw tips 32 of which pass through their perforate seats 33 in the grab handles and are there secured by the dome capped screw nuts 34. 35 represents the bonnet curves near the summit of said columns, 36 are shoulder flanges thereon, and 37 the screw tips, that are secured in their screw bed seats 38 in the canopy frame 39, to which the roof 40 of the car is secured.

This invention has a combination function, to supply a convenient and safe grab-handle to facilitate the boarding and alighting of passengers, and the frequent boarding by the conductor of the rear car, while in full motion, after dropping from the forward car. This convenient catch hold alike for both passengers and conductor, supplies a long felt necessity for lack of which, not only much inconvenience, but also many dangerous accidents have occurred, when trains are moving. Also the columns that are made necessary as a means of secure attachment of the grab handle and are therefore a necessary element of the combination, have other valuable functions. They form a strong tie frame on each side of and to the dash, and to the sill and roof, to the latter of which they form a support, where there is no other direct means of support, where it extends as a canopy roof over the rear platform, and also a strong brace guard at times of end on collisions, to lessen the danger of telescoping. The said columns also act as a valuable inclosure to

protect the passengers that ride on the rear platform, from falling off as said platforms are sometimes crowded to overflowing.

I claim as my invention—

- 5 1. In combined reinforce dash posts and grab-handles for cars, the combination of the posts 14 and the oval shaped grab-handles 22: substantially as described.
- 10 2. In combined reinforce dash posts and grab-handles for cars, the combination of the separate base sections, 13 and the separate upper sections 31 of the dash posts 14, and the sections forming the grab-handles 22 secured to said upper and lower sections, mid-
15 way of said posts, substantially as described.
- 20 3. In a combined reinforce dash post and grab-handle for cars, the combination of the lower post section attached to the floor and dash-board, the upper section attached to the car roof, and the central loop-shaped handle portion secured to the said upper and lower post sections and formed with an offset which is attached to the rave of the dash-board, substantially as set forth.
- 25 4. In combined reinforce dash posts and grab-handles for cars the combination of the dash 7, the base sections 13, of post 14, the upper sections 31 of said posts, the grab-handles 22, the screw tipped connection of said
30 post sections to said handle, the rave 9, the perforate T brackets 11, the lateral attachment straps 26 and the bolts 27: substantially as described.
- 35 5. In combined reinforce dash posts and grab-handles, for cars, the combination of the end platform 6, the dash 7, the base sections

13, of dash posts 14, secured to said platform by the screw tipped extension bolts 16, the tie straps 20 secured by screws 21 to said dash, the grab-handles 22, the surmounting 40 screw tips 23, and the dome capped nuts 25 that secure said grab-handles to the base sections 13 of the dash posts, the rave 9 that surmounts the dash, the perforate flanged attachment straps that project laterally from 45 said grab-handles and the bolt 27, that couples said strap to said rave: substantially as described.

6. In combined reinforce dash posts and grab-handles, the combination of the end plat- 50 form 6, the dash 7, the rave 9 that surmounts said dash, the canopy frame 39, the roof 40 that surmounts said frame, the grab-handles 22, having the perforate lateral attachment straps 26, the coupling bolt 27, the base section 13, of the dash post having the screw bolt 55 tipped attachment, ends 16 and 23, seated below in the platform sill and above in said grab-handles, the screw nuts that fasten said tips, the upper sections 31 of the dash posts, 60 having the screw tipped extension bolts 32, that are seated in said grab-handle, the screw nuts 34 that fasten the same, the curve bonnets 35 at the top of said section posts 31, the flange shoulder or collar 36 and the surmount- 65 ing screw tip 37, that is seated in said canopy frame of the roof: substantially as described.

WILLIAM SUTTON.

In presence of—

BENJN. A. KNIGHT,
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