

(No Model.)

E. E. ROMBAUER.
HAND STRAP FOR CARS.

No. 497,893.

Patented May 23, 1893.

Fig. 1.

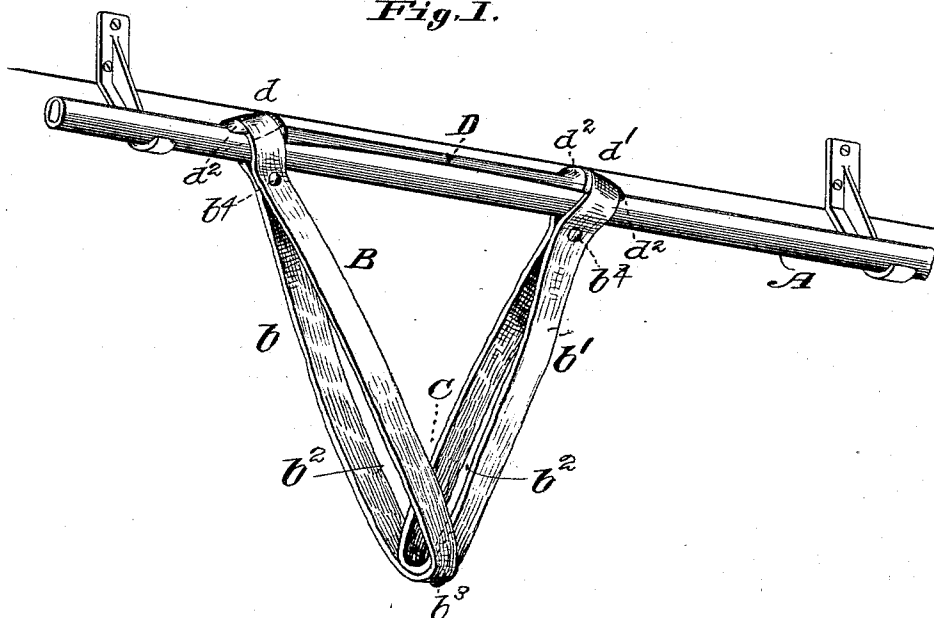


Fig. 3.

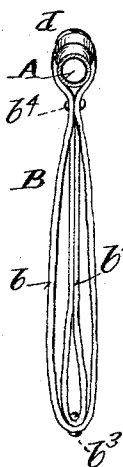


Fig. 4.



Fig. 5.

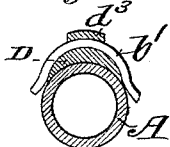


Fig. 6.

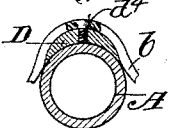
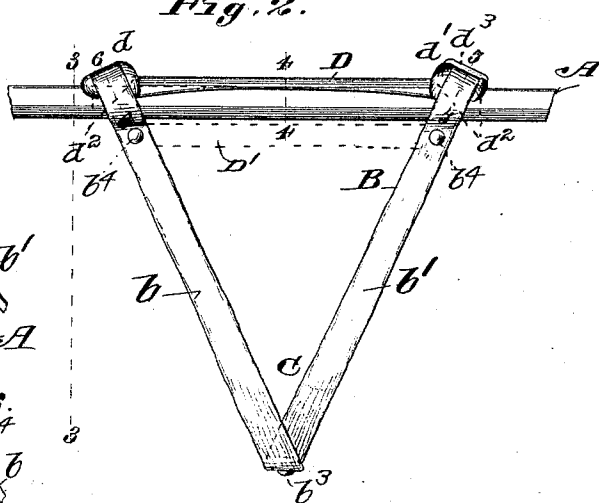


Fig. 2.



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UNITED STATES PATENT OFFICE.

ERNEST E. ROMBAUER, OF ST. LOUIS, MISSOURI.

HAND-STRAP FOR CARS.

SPECIFICATION forming part of Letters Patent No. 497,893, dated May 23, 1893.

Application filed January 31, 1893. Serial No. 460,266. (No model.)

To all whom it may concern:

Be it known that I, ERNEST E. ROMBAUER, of St. Louis, Missouri, have made a new and useful Improvement in Street-Car Passenger-Supporting Straps, of which the following is a full, clear, and exact description.

The strap used by a passenger standing in a street car to steady him is, as hitherto constructed, unsatisfactory in that by reason of its being suspended to swing freely it does not, when the passenger is jostled, provide an adequate support in a lateral direction. The passenger when shaken usually swings or steps aside and the strap by the movement is shifted into an inclined position, and not until then does the strap furnish the desired help. To lessen, if not obviate, the difficulty referred to, and to provide an improved support in the respect mentioned, and which shall materially sustain a passenger against shocks or joltings calculated to move or sway him in the direction of the length of the car, is the object of the improvement under consideration, which consists mainly in making the strap, as a whole, V-shaped, or in the form of a part whose upper end is connected with the supporting-rail, or whatever is employed to sustain the strap, at points thereon distanced apart from each other to cause the lower end of the strap, or portion grasped by the passenger, to be in a plane, vertically, between the mentioned points of connection with the strap-support, all substantially as is herein-after set forth and claimed, aided by the annexed drawings, making part of this specification, and exhibiting a desirable form of the improvement, and in which—

Figure 1 is a view in perspective showing the improved strap in position; Fig. 2 a side elevation of the same; Fig. 3 a vertical cross section on the line 3—3 of Fig. 2; Fig. 4 a vertical cross section on the line 4—4 of Fig. 2; Fig. 5 a vertical cross section on the line 5—5 of Fig. 2; and Fig. 6 a section on the line 6—6 of Fig. 2. The views are not all upon the same scale.

The same letters of reference denote the same parts.

A represents the customary strap-rail of a street-car. It is a convenient support for the improved strap, B, in question, a desirable form of which is the one shown, namely, a

strap having two looped parts, b, b' , of leather, whose lower ends are connected substantially as shown, and whose upper ends are connected with the rail and, respectively, at points thereon spaced apart from each other substantially as shown. This causes each strap-part to assume a position inclined in the direction of the length of the car substantially as shown. The passenger can insert his hand in the loop, b^2 , of either strap-part, or his hand can pass through the loops of both of the strap parts, or again, his hand can pass between the strap-parts and around either one of them. The two parts of the strap can also be respectively held by different persons at the same time. And still another mode of using the strap is to pass the hand transversely into and around the crotch, C, formed by the two strap-parts. In some of the mentioned modes of use the loops in the strap parts are not essential. I prefer however to have them embodied in the construction, and substantially as shown. But however used the passenger is sustained against shocks which are calculated to sway him in a longitudinal direction in the car. For, owing to the direction of the part immediately grasped by the passenger from its points of connection with the strap-support, the strap at once offers a resistance to a movement of the passenger in a longitudinal direction in the car. The strap may also be stayed transversely in the car, but, for some purposes, it is desirable for the strap to be free to swing or turn in the last-named direction, and in the present illustration the strap is so shown. The strap-parts, at the upper end thereof, may be variously attached to, or connected with, the strap-support so long as the points of connection are arranged as described. A desirable form of connection is shown: D represents a part adapted to rest upon the rail. It is provided with bearings, d, d' , which may be inclined substantially as shown, and which serve as the immediate supports for the upper ends of the strap-parts which, in the present illustration, pass around the rail and also the described bearings. The part, D, also serves to hold the upper ends of the strap parts suitably apart. This part, D, is not essential, but it is a desirable feature of the construction, and more especially in serving to hold the strap-parts apart as described.

It may or may not be shaped to form, or be provided with, the described bearings for the strap-parts. For these last named parts, namely the bearings, may, if used, be separate pieces from the part D. And so far as
 5 bracing or distancing the strap-parts apart is concerned the part D need not necessarily be above the rail. And, in practice, the present improved strap may be readily adapted to
 10 existing street-car constructions by arranging an equivalent of the brace D beneath the rail, substantially as is indicated by the broken lines, D', Fig. 2. In the particular form of the part D shown the bearings, d , d' , are pro-
 15 vided with shoulders, d^2 , to better hold the strap-parts in place. And to further and more securely hold said strap-parts the bearings may be provided with a keeper, d^3 , Fig. 5, or a fastening such as the screw, d^4 , Fig. 6,
 20 may be used. The strap-parts, at the lower end thereof, may be connected in any suitable manner. In the present instance rivets b^3 , are used for that purpose. Under some conditions the strap-parts may be integral.
 25 When the part D' is used it may be conveniently connected with the strap-parts by means of the rivets b^4 . The improved strap, as a whole, is preferably adapted to be ad-
 30 justed longitudinally upon the rail or its support.

In the application of the present improvement I desire not to be restricted to street-cars, as it can be used advantageously in other constructions, as, for instance, in an omnibus or on board a ship.

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I claim—

1. In combination with the strap rail of a street car, a strap support resting thereon, and provided at its respective ends with bearings for the straps, and straps secured to and upon
 40 said supports, and at their lower ends to each other, substantially as described.

2. In combination with the strap rail of a street car and the shouldered bearings thereon, the looped straps B, each riveted together
 45 near the rail and secured together at their looped lower ends by a rivet, substantially as described.

3. The hereindescribed passenger-supporting strap having the two looped parts whose
 50 lower portions are connected, and whose upper ends are spaced apart from each other by their points of connection with the strap-support, substantially as described.

Witness my hand this 28th day of January, 55
 1893.

ERNEST E. ROMBAUER.

Witnesses:

C. D. MOODY,
 A. BONVILLE.