E. M. HEDLEY.

CAR STRAP.

APPLICATION FILED AUG. 7, 1907

922,765.

Patented May 25, 1909.

2 SHEETS—SHEET 1.

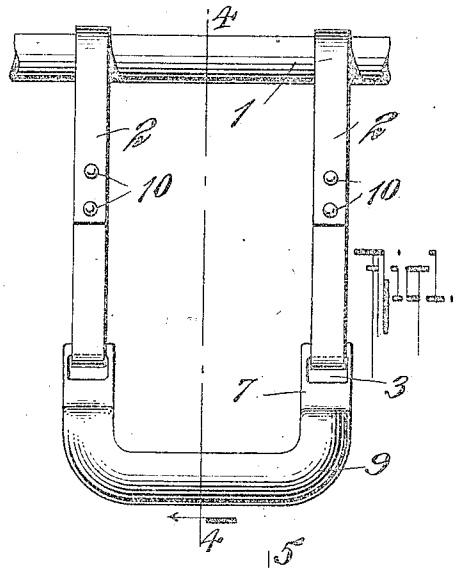


Fig. 1.

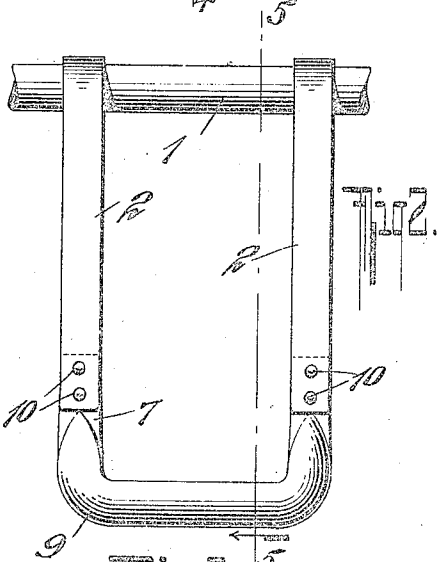


Fig. 2.

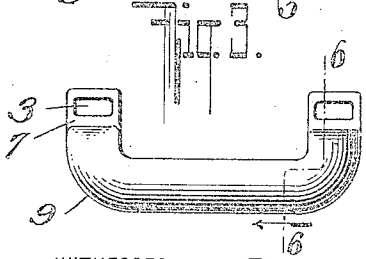


Fig. 3.

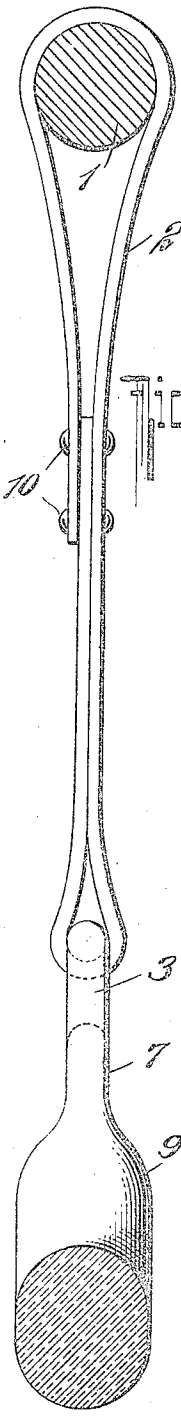


Fig. 4.

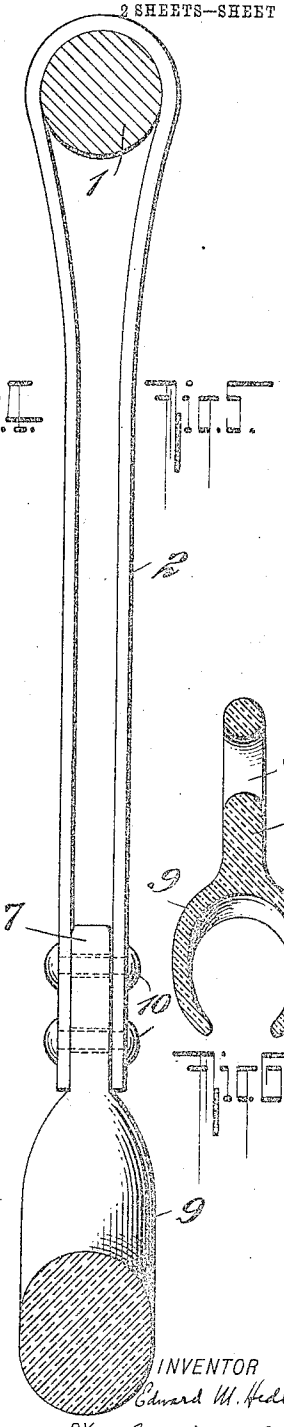


Fig. 5.

Fig. 6.

WITNESSES

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2 SHEETS—SHEET 2.

Fig. 7.

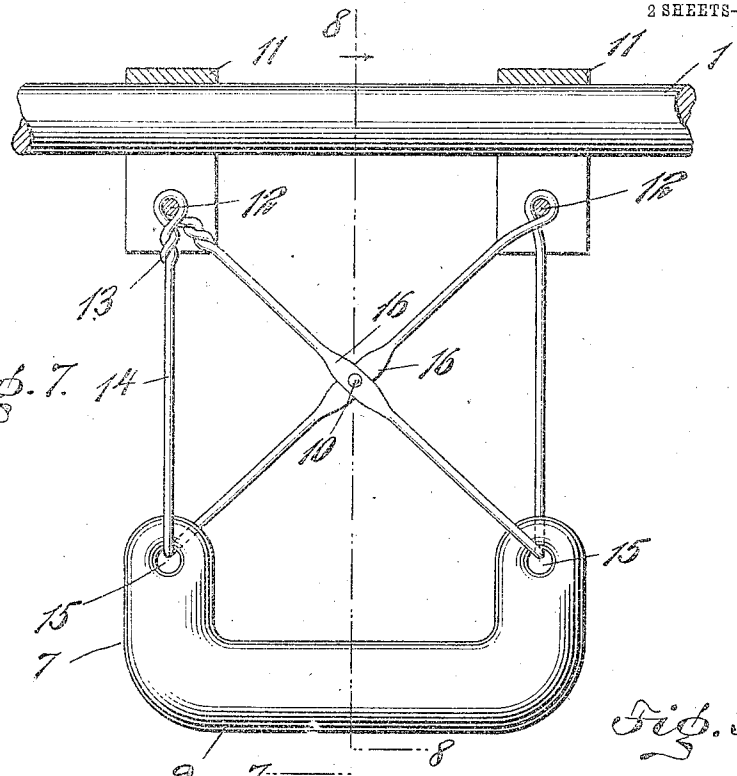


Fig. 9.

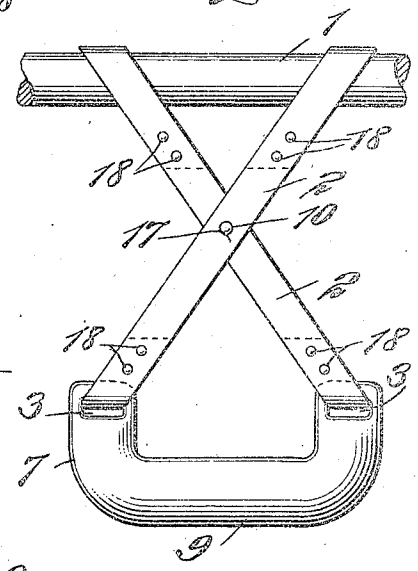
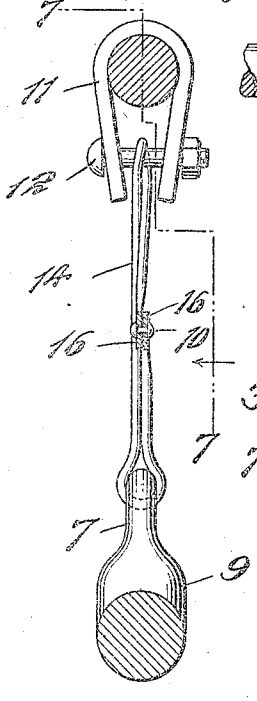


Fig. 8.



WITNESSES

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CAR-STRAP.

No. 922,755. Specification of Letters Patent. Patented May 25, 1909.

Application filed August 7, 1907. Serial No. 387,397.

To all whom it may concern:

Be it known that I, EDWARD M. HEDLEY, a citizen of the United States, and a resident of New York city, in the county of New York, State of New York, have invented a Car-Strap, of which the following is a specification.

The present invention relates to car straps, or suspended hand loops, designed for use in cars or other vehicles for the conveyance of passengers.

As is well known, the ordinary car strap comprises merely a leather loop freely suspended from a rail extending longitudinally of the car. Incident to such a strap are certain disadvantages. For instance, in a crowded car, the passengers are liable to be jostled and jolted by the stopping and starting of the car, and the straps, sliding along the rail or rod, form a very unstable means of support. Furthermore, such straps are usually of leather and the portion gripped by the hand soon becomes soiled, and the danger of contamination from germs is constantly present.

In the present instance, it is my purpose to provide a strap embracing the desired features of durability, cleanliness and convenience. For instance, I so suspend the grip from the rod that the liability of lengthwise movement along the supporting rod is obviated. Furthermore, I form the grip or grasping portion of my strap in such a manner that a convenient and comfortable support is provided. In addition, it is my purpose to form the gripping section of a material, such as porcelain, enamel ware, or nickel ware, which may be readily and easily cleaned with a cloth, thereby preventing the accumulation of germs and dirt.

To the accomplishment of these and other ends, the invention consists in the construction, combination and arrangement of parts set forth in, and falling within scope of, the appended claims.

In the accompanying drawings, Figure 1 is a view in front elevation of a hand-grip, embodying my improvements. Fig. 2 is a view of a modified form of construction. Fig. 3 is a view in side elevation of the handle or grip portion of the device. Fig. 4 represents a sectional view in end elevation taken through line 4—4 of Fig. 1. Fig. 5 represents a sectional view in end elevation taken through line 5—5 of Fig. 2. Fig. 6 represents a sectional end view taken through line 6—6 of Fig. 3. Fig. 7 represents a view in front elevation of a second modified form of my improved suspended grip. Fig. 8 represents a sectional view in end elevation taken through line 8—8 of Fig. 7. Fig. 9 represents a view in front elevation of a third modified form of my improved suspended grip.

I do not wish to be understood as limiting myself to any particular form in which my invention may be embodied as shown in the drawings or set forth in the description thereof, but desire to cover any form falling within the spirit of the invention and the scope of the claims hereto appended.

Turning now to a description of the various figures in detail, Fig. 1 represents the preferred form of my invention numeral 1 therein denoting a bar running near the top of the car at a required height from the floor and over which are passed two straps 2, the ends of which hang down; one end of each strap 2 is then passed through one of two slots 3 which are cut one in each upcurved end 7 of a rounded grip member 9; these upcurved ends 7 taper up from the rounded grip surface and form flattened arms through which the slots 3 are pierced, as shown more particularly in Fig. 6. The rounded grip member 9 is preferably made of porcelain or some other such material offering a smooth easily cleaned surface and is of a length sufficient to accommodate the hand. After passing through slots 3 the ends of straps 2 are turned up and overlap the remaining ends, which are hanging down, at a point midway between the bar 1 and the grip portion 9, the pairs of ends being fastened together by rivets 10 which for added strength also pass through the central portion of the straps 2 as is shown in Fig. 4. By reason of the use of a pair of straps 2 to suspend the grip 9 the swinging motion lengthwise of the car is avoided, and by reason of the loose joints where straps 2 pass through slots 3, the grip 9 when in use may preserve an upright position notwithstanding the swinging motion of straps 2 laterally of the car.

Fig. 2 represents a modified form of my invention in which the straps 2 do not pass through slots in the arms of grip member 9, but the upcurved and flattened arms 7 of said grip 9 are solid and the ends of the straps 2 hang down equidistant from the bar 1, opposite ends of each pair being fastened on opposite sides of an arm 7 by riv-

ets 10 passing through said pair of strap ends and said arm 7 as shown in Fig. 5.

Fig. 3 represents the rounded grip member 9 showing the upcurved flattened arms 7 and slots 3. This grip member 9 is preferably made of porcelain as has been stated and in order to secure lightness the central portion thereof between the upcurved arms 7 is preferably constructed in hollow form with curved sides spaced apart at the bottom as shown in section in Fig. 6.

Fig. 4 represents a view in section of the preferred form of my invention taken through line 4—4 of Fig. 1, showing bar 1, strap 2, rivets 10, slot 3, upcurved arm 7, and grip member 9.

Fig. 5 is a similar view of a modified form taken on line 5—5 of Fig. 2, and showing the ends of a strap 2 attached to opposite sides of a flattened upcurved arm 7 of grip member 9.

Fig. 6 represents a sectional end view of the preferred form of grip member 9 taken through the line 6—6 of Fig. 3 and described in connection with said Fig. 3 above.

Fig. 7 represents a second modified form of my invention, the straps 2 being replaced by a pair of short strap members 11 which are placed over the bar 1 at a distance apart equal to the length of grip portion 9; through the ends of said members 11 are passed bolts 12; around one of these bolts 12 is fastened one end 13 of a strong metal wire 14 (this may be done by turning up end 13 and twisting it around 14 as shown) the wire 14 then hangs downward and passes through a hole 15 in one of the upcurved arms 7 of grip member 9, from there it is turned and runs diagonally upward to and around the other bolt 12, thence downward and through the hole 15 in the second arm 7 of grip 9, and again diagonally upward to the first bolt 12 around which it is fastened in like manner as end 13. At the point of intersection of the diagonal portions of wire 14 said portions are flattened out as shown at points 16 and fastened together by rivet 10. This construction provides even more perfect stability against lateral and longitudinal swinging than my preferred form shown in Fig. 1.

Fig. 8 represents a sectional view in end elevation through line 8—8 of Fig. 7 looking in the direction of the arrow in said Fig. 7 showing members 11, bolt 12, wire 14, flattened portions 16, rivet 10, grip member 9 and upcurved arm 7.

Fig. 9 represents a view in front elevation of a third modified form of my invention, the straps 2 hanging downward diagonally thus crossing each other in X shape and being fastened together at the crossing point 17 by a rivet 10, one end of each strap is passed over the bar 1 and being fastened to the diagonal strap portion by rivets 18, thereby forming a loop over said bar 1, the other end of each strap 2 is passed through a slot 3 in an upcurved arm 7 of grip member 9 and likewise formed in a loop by rivets 18 passing through it and the diagonal strap portion.

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

1. The combination with a support of a car strap suspended therefrom, the hand-grasping portion thereof consisting of a tubular member open on its under side.

2. The combination with a support of a hand-strap suspended therefrom comprising a plurality of diagonally crossed hanging members, and a grip member connecting the lower ends of said hanging members.

3. The combination with a support of a hand-strap comprising a hanging member with substantially parallel arms and diagonals connecting the ends of the arms, said hanging member being formed of an integral piece of wire and a grip member suspended from said hanging member.

4. The combination with a support of a U-shaped grip member suspended therefrom and diagonals connecting the ends of the arms of said car strap.

5. The combination with a support extending longitudinally of the car of a car strap suspended therefrom comprising a plurality of hanging strap members, and a grip member pivotally suspended from said strap members, said grip member extending longitudinally of the car and being adapted to retain a vertical position during the lateral movement of said car strap.

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Witnesses:
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