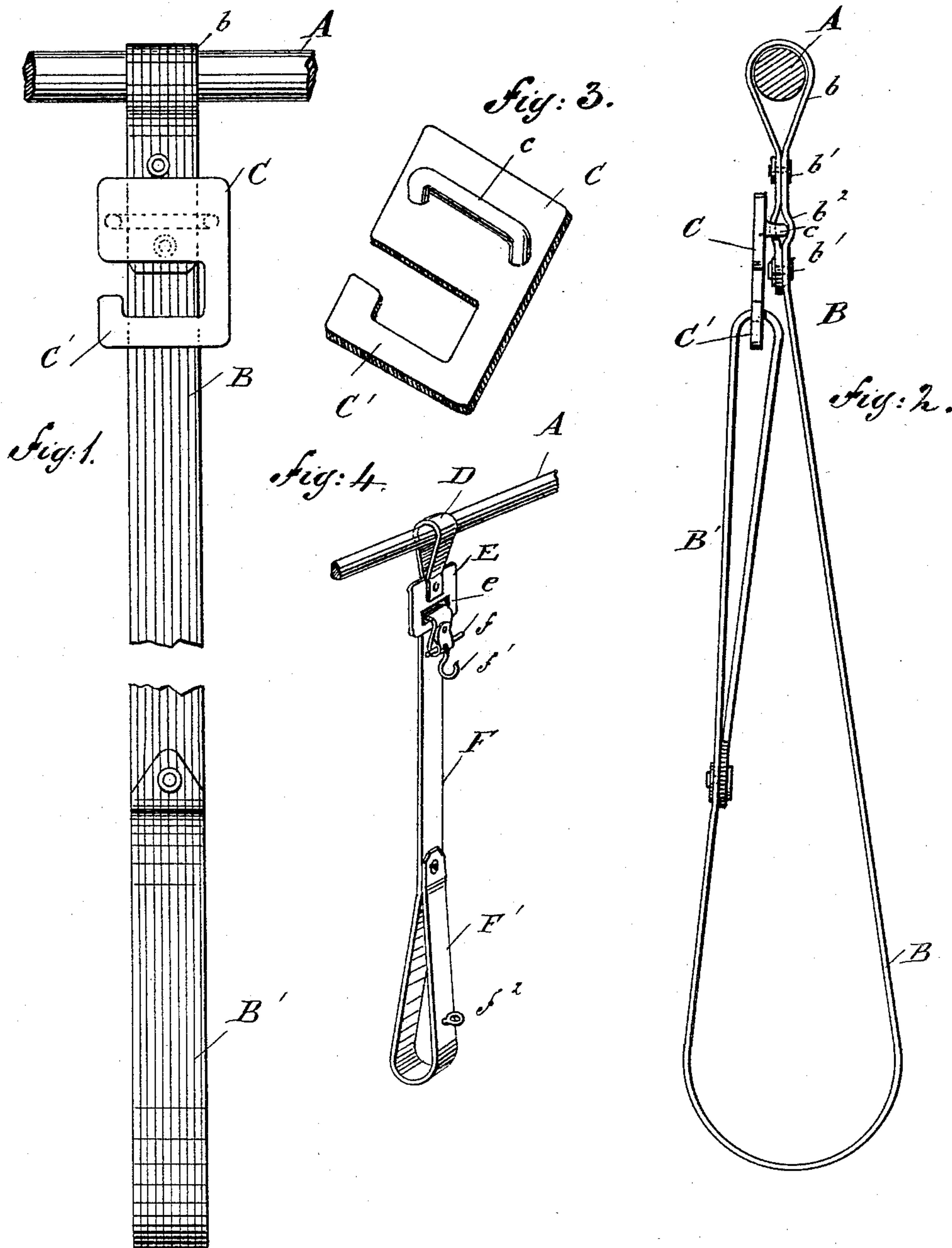


(No Model.)

B. P. JOHNSON.
ADJUSTABLE CAR STRAP.

No. 453,083.

Patented May 26, 1891.



WITNESSES:

Chas. Nida.
C. Sedgwick

INVENTOR:

B. P. Johnson
BY Munn & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

BENJAMIN P. JOHNSON, OF NEW YORK, N. Y., ASSIGNOR TO JAMES C. JOHNSON, OF SAME PLACE.

ADJUSTABLE CAR-STRAP.

SPECIFICATION forming part of Letters Patent No. 453,083, dated May 26, 1891.

Application filed November 13, 1890. Serial No. 371,318. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN P. JOHNSON, of the city, county, and State of New York, have invented a new and Improved Adjustable Car-Strap, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of car-straps which are suspended from the upper portions of street and elevated railway cars, so as to form supports for the standing passengers. The straps which are ordinarily used for this purpose are of uniform length and have no means of adjustment, so that many short people and children find it extremely inconvenient to reach the straps.

The object of my invention is to obviate this difficulty by producing a strap which may be conveniently adjusted to suit people of various heights.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken side elevation of the strap embodying my invention, showing the same in an extended position and suspended from the rod. Fig. 2 is an edge view of the strap, showing it looped up to suit the height of a tall person. Fig. 3 is an enlarged detail perspective view of a hook which is attached to the strap, and Fig. 4 is a perspective view of a modified form of the strap.

A is a rod which usually extends longitudinally through a car, there being a rod on each side of the aisle, and B is the strap, which is looped over the rod at one end, as shown at *b*, and which has its upper end portion riveted to the body of the strap, as shown at *b'*, so as to form a loop *b²* to engage the keeper *c* on the plate C. The lower end of the strap B is formed into a loop *B'*, which may be conveniently grasped by a short person when the strap is extended, and which may be engaged by the hook *C'* of the plate C when the strap is looped up to suit the height of a tall person. The plate C has a hook *C'* at its lower end and a keeper *c* on its back. The plate is secured to the upper portion of the strap B

by passing the end of the strap through the keeper and then riveting the strap at *b'*, as described above. It will thus be seen that the strap may be easily hooked up into the position shown in Fig. 2, or it may be let down into the position shown in Fig. 1, and the strap should be made long enough to come within the reach of the shortest person.

In Fig. 4 I have shown a modified form of the device, in which a loop D is placed over the rod A, and the loop has at its lower end a plate or link E, with a slot *e* therein, and a strap F is passed through the slot, one end of the strap having a cross-bar *f* fixed therein, the cross-bar being wider than the slot *e* is long, so that when the strap F is pulled downward the cross-bar will strike against the link E and prevent the removal of the strap. The strap F has also at its upper end a hook *f'*, and at its lower end the strap is formed into a loop *F'*, which may be conveniently grasped by the hand. The loop *F'* has an eye *f²* fixed to one side thereof, so that when the strap is to be hooked up the hook *f'* may be drawn down and the eye placed upon it, thus shortening the strap.

I do not confine myself to the exact construction shown for changing the length of the strap, as other means may be employed without departing from the principles of my invention.

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

1. An adjustable car-strap having one end adapted to be secured to a rod and its opposite end formed into a loop, and a hook and eye for securing the loop to the body of the strap, substantially as described.
2. An adjustable car-strap having one end secured to a rod and provided with a hook, and having the opposite end formed into a loop, substantially as described.
3. The combination, with a car-strap having one end secured to a rod and its opposite end formed into a loop, of the plate having on one side a keeper for attachment to the strap, and having at its lower end a hook, substantially as described.

BENJAMIN P. JOHNSON.

Witnesses:

WARREN B. HUTCHINSON,
E. M. CLARK.