951,170.

T. J. YOUNGLOVE.

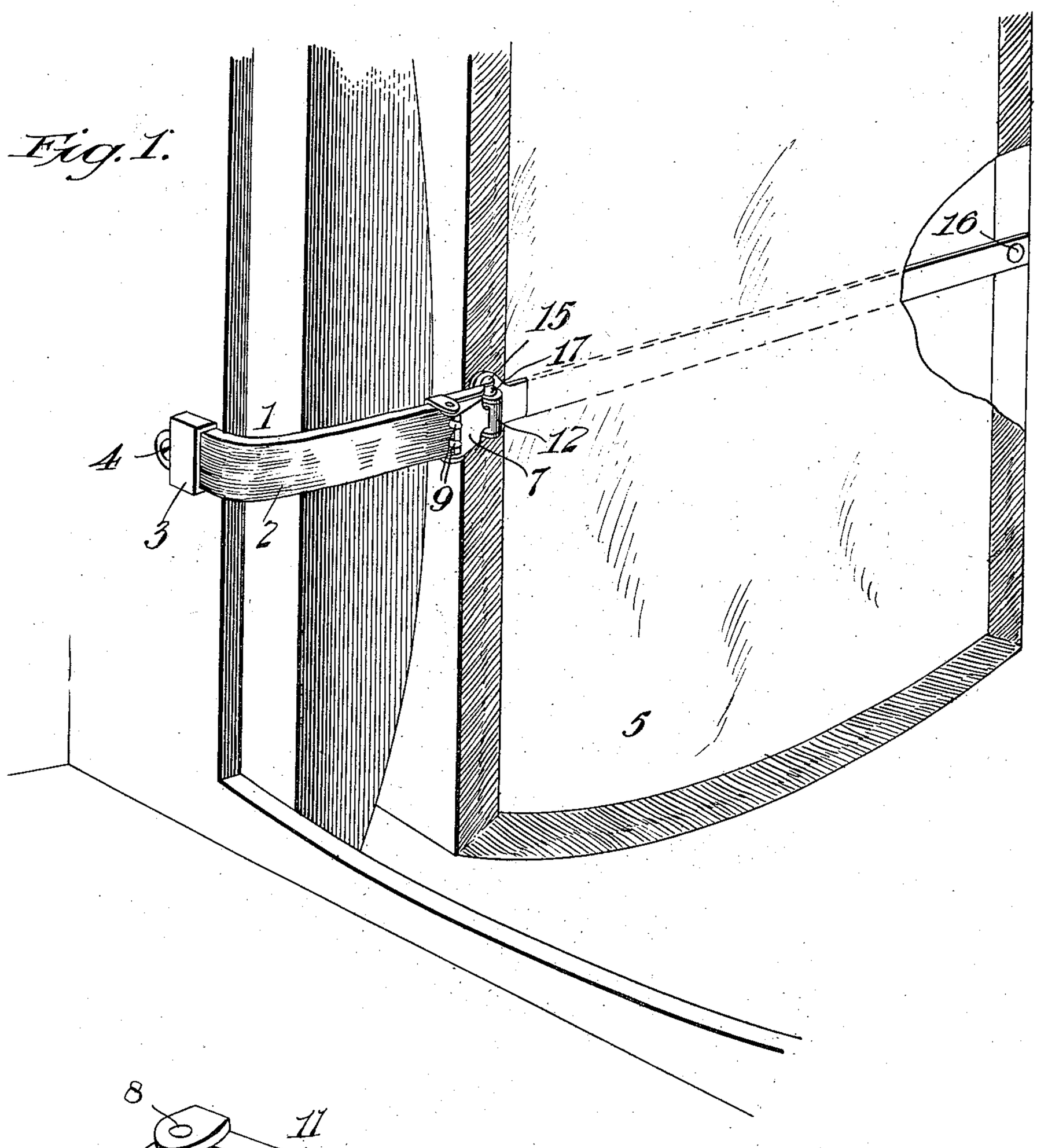
DOOR CHECK.

APPLICATION FILED APR. 16, 1909.

Patented Mar. 8, 1910.

2 SHEETS—SHEET 1.

Fig. 1.



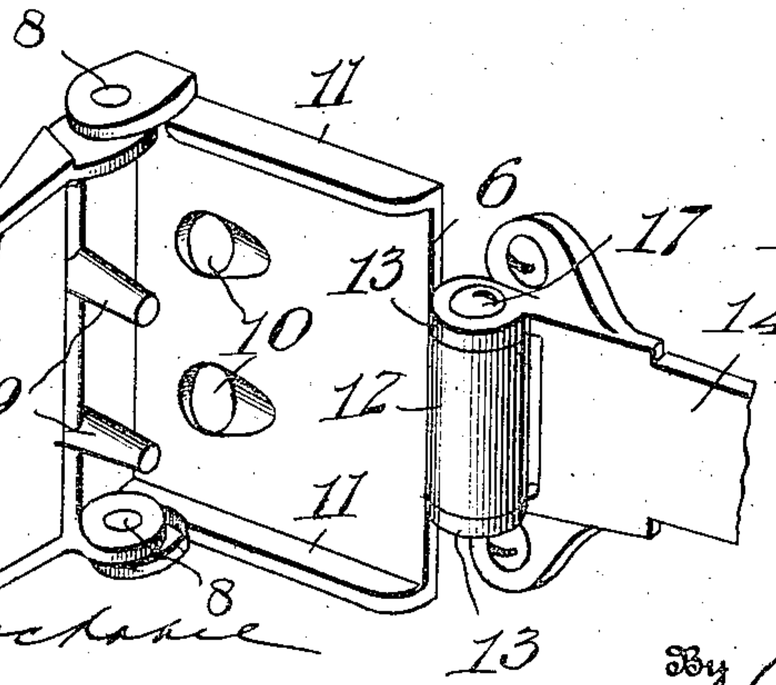


Fig. 5.

Witnesses

T. L. Mackenzie

Robert N. Jones.

Inventor

Thomas J. Younglove

By Rexford M. Smith.

Attorney

T. J. YOUNGLOVE.

DOOR CHECK.

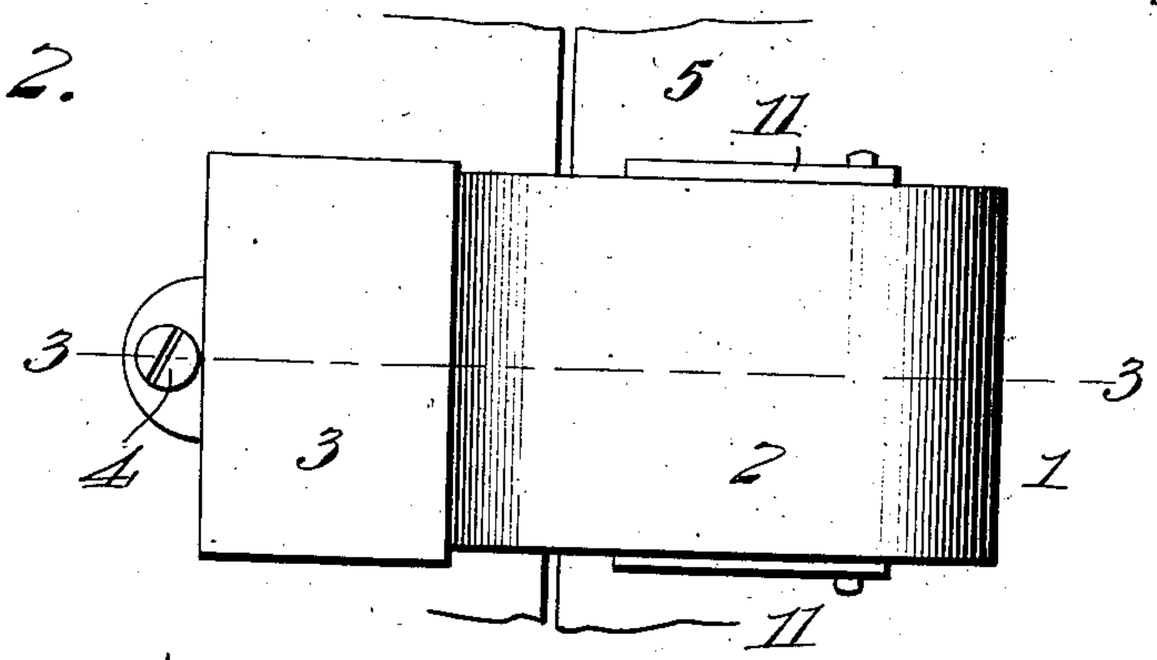
APPLICATION FILED APR. 16, 1909.

951,170.

Patented Mar. 8, 1910.

2 SHEETS—SHEET 2.

Fig. 2.



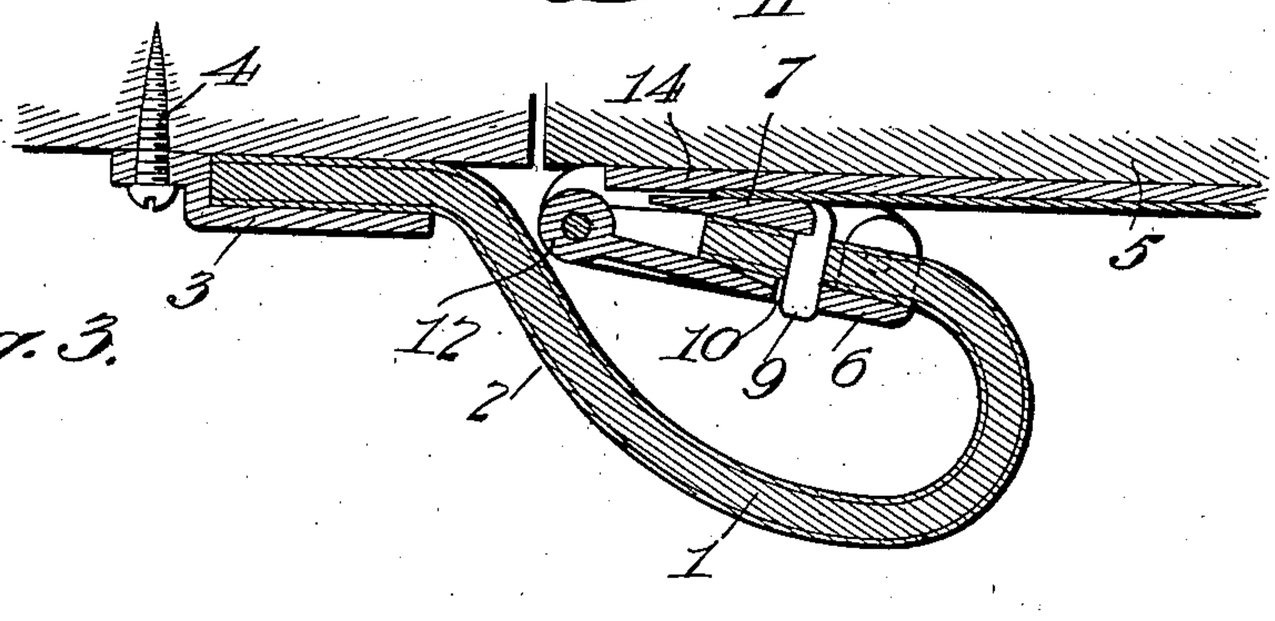


Fig. 3.

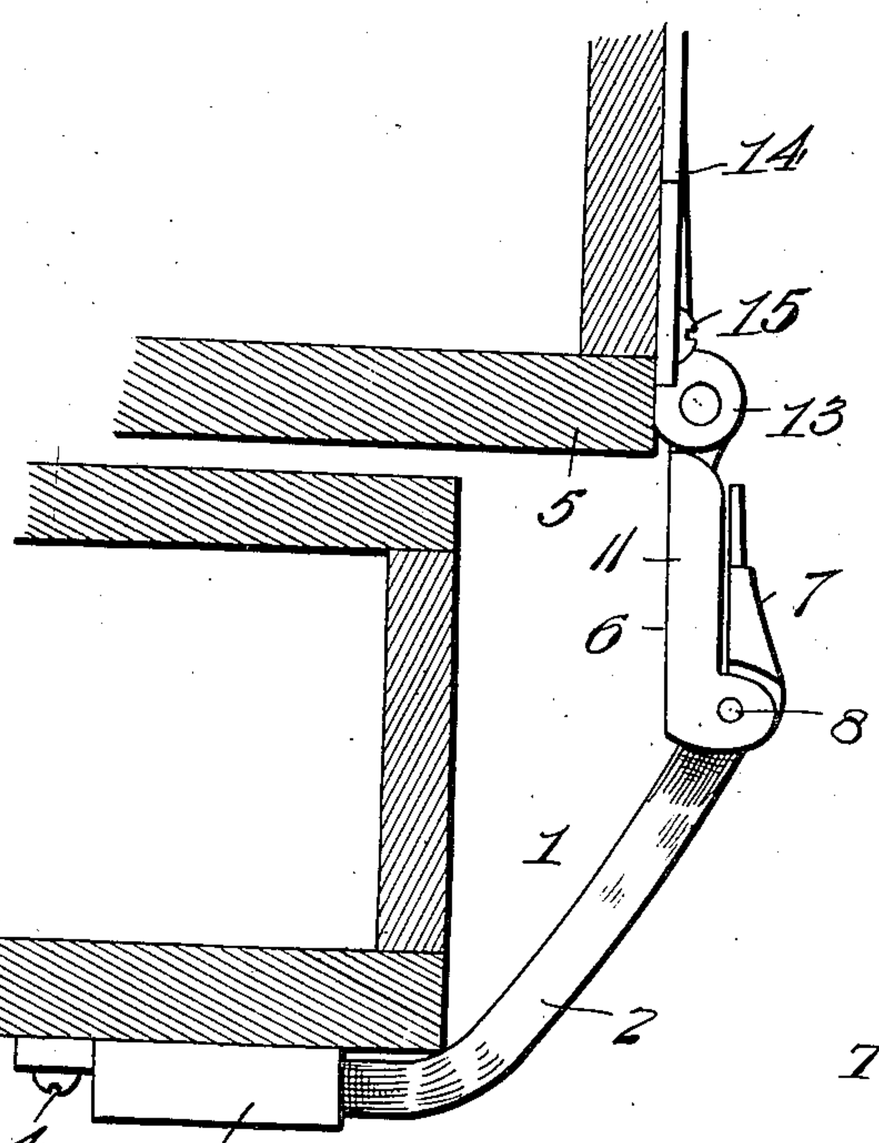


Fig. 4.

Witnesses

T. L. Mackaye

Robert N. Jones,

Inventor

Thomas J. Younglove,

By Pierpont M. Smith.

Attorney

UNITED STATES PATENT OFFICE.

THOMAS J. YOUNGLOVE, OF RICHMOND, VIRGINIA.

DOOR-CHECK.

951,170. Specification of Letters Patent. Patented Mar. 8, 1910.

Application filed April 16, 1909. Serial No. 490,258.

To all whom it may concern:

Be it known that I, THOMAS J. YOUNGLOVE, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented a certain new and useful Door-Check, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to door checks, the same being especially designed for use on vehicle doors such as carriages, coupés and automobiles, the object of the invention being to provide a simple, cheap and effective device for limiting the opening swinging movement of a vehicle door to prevent the same from coming in injurious contact with the adjacent wheel, the said device embodying simple and effective means for shortening the strap when the same becomes stretched, the said means providing for the shortening of the strap being of simple construction so that any unskilled person without the use of special tools may effect the shortening of the strap in a few moments.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawing:—Figure 1 is a perspective view of a portion of a vehicle, showing the doorway and door and the door check of this invention applied thereto. Fig. 2 is an inside face view of the same when the door is closed. Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2. Fig. 4 is a section taken through the door and adjacent portion of the vehicle body, showing the door thrown open and the door check in plan view. Fig. 5 is an enlarged perspective view of the clamp and one end of the stay bar to which said clamp is connected.

Referring to the drawings, 1 designates a flexible strap for connecting the door to the frame of the vehicle. This strap may be either of leather or other suitable material and may be provided with an outer facing or covering 2 as may be desired. One end of this strap is permanently connected to the vehicle body by means of a keeper 3 of metal formed to provide a pocket to receive the end of the strap as best illustrated in Fig. 3, said keeper being shown as secured to the body of the vehicle by means of a screw 4 although any suitable fastener may be employed for that purpose. The other end of the strap 1 is detachably secured to the door indicated at 5 by means of a clamp illustrated in detail in Fig. 5. This clamp comprises a pair of pivotally connected strap retaining members 6 and 7 the same being connected together at the point 8 so that they may be opened and closed relatively to each other to receive and release the outer end of the strap 1. One of these retaining members is provided with one or more inwardly projecting studs 9 adapted to pass through a corresponding number of holes in the strap as shown in Fig. 3, while the other member is provided with a corresponding number of holes 10 to receive the ends of the studs 9 whereby the outer ends of said studs are braced to withstand the strain produced thereon by the strap in throwing the door violently open. One of the retaining members is also, by preference, provided at its top and bottom with flanges 11 to inclose and conceal the end of the strap held by the clamp. One of the strap retaining members of the clamp is also provided with a knuckle 12 received between a pair of lugs 13 which are preferably associated with one end of a stay strap 14 which extends horizontally across the door 5 and has its opposite ends firmly fastened to the upright side bars of the door frame as shown at 15 and 16.

In the manner above described, the clamp is hingedly connected to the door 5 thereby adapting it to fold from the position illustrated in Fig. 4 to the position illustrated in Fig. 3 in the closing movement of the door, and it will be noted that in the opening and closing movements of the door, the clamp swings or folds in a direction opposite to the movements of the door and in the horizontal plane of movement of the strap 1. By reference to Fig. 3, it will be observed that when the door is closed the strap 1 is folded compactly in relation to the door as compared with the ordinary strap now in common use and which, in practice, has both ends secured to the body of the vehicle and the door in the same manner as the fixed end of the strap herein described, which is held by the keeper 3, such old arrangement causing a material bulging and projection of the strap into the vehicle. It will further be seen by the arrangement described that an easy curve or bend is imparted to the strap when the door is folded thus greatly increas-

ing the life and durability of the strap as compared with the present method of securing the ends of these straps. Furthermore, and of great importance, when the strap becomes stretched after continued use, the strap retaining members may be moved apart and the end of the strap removed from the clamp. A portion of the end of the strap is then cut off and new holes punched for the studs 9, after which such end of the strap is reinserted in the clamp and the strap retaining members of the clamp folded together so as to cause the studs 9 to pass through the new holes in the strap. This operation may be easily effected by an unskilled person without the use of special tools, thereby avoiding the necessity of sending the vehicle to a repair shop.

If at any time it is desired to detach the vehicle door, this is easily accomplished by simply removing the hinge pin 17 which connects the knuckle with the stay bar and is provided at its upper end with a head to limit its downward movement, enabling said pin to be lifted out of engagement with said parts, which frees the strap clamp from the door.

I claim:—

1. A door check for vehicle doors comprising a flexible strap, means for fastening one end of said strap to the door post, and means for detachably fastening the other end of said strap to the door embodying a clamp adapted to receive and hold the end of the strap, said clamp being hinged to the door and interposed between the strap and the door.

2. A door check for vehicle doors comprising a flexible strap, means for fastening one end of said strap to the door post, and means for detachably fastening the other end of said strap to the door embodying a clamp adapted to receive and hold the end of the strap, said clamp being hinged to the door and interposed between the strap and the door and also detachable from the door.

3. A door check for vehicle doors comprising a flexible strap, means for fastening one end of said strap to the door post, and means for detachably fastening the other end of said strap to the door, embodying a clamp adapted to receive and hold the end of the strap, said clamp being hinged to the door and embodying pivotally connected strap-retaining members one of which is provided with means for positive engagement with the strap.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS J. YOUNGLOVE.

Witnesses:
P. B. Pace,
H. C. Kueger.