

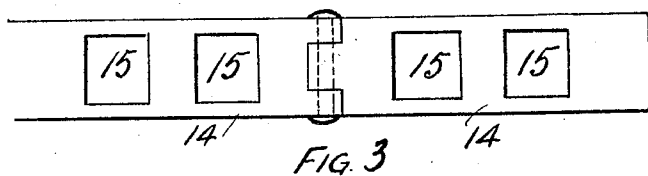
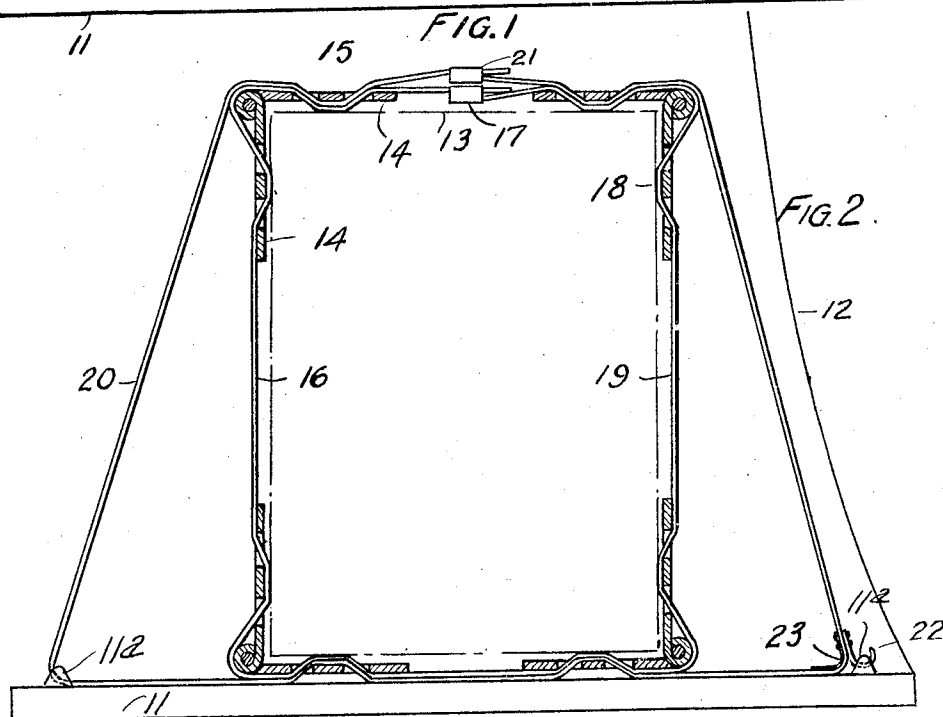
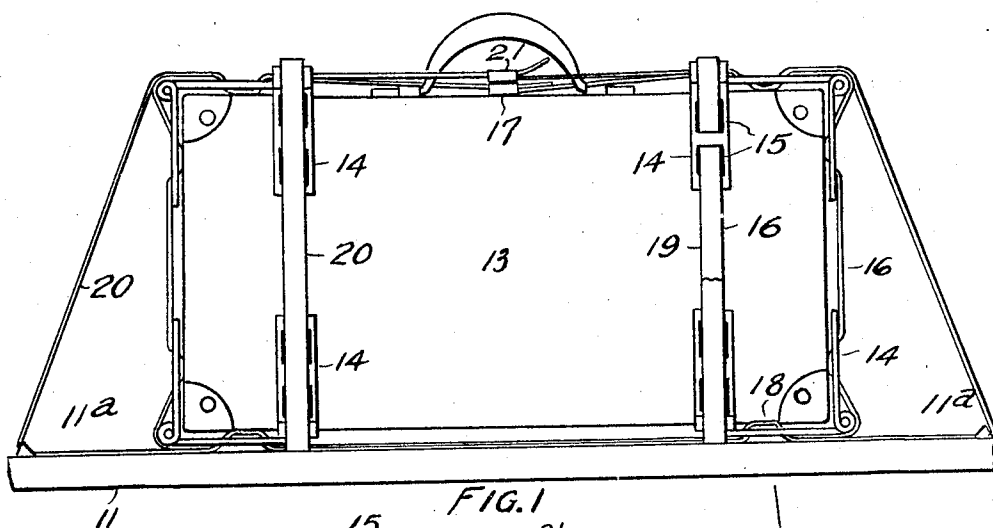
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FASTENING DEVICE

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FASTENING DEVICE.

Application filed May 5, 1922. Serial No. 558,796.

To all whom it may concern:

Be it known that we, HENRY ERNEST LLOYD OWEN and KENNETH HALLIDAY MACARTNEY, both subjects of the King of Great Britain, and residents of the city of Port Arthur, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Fastening Devices, of which the following is a full, clear, and exact description.

This invention relates to improvements in harness for fastening luggage or the like to the running boards of automobiles or for other similar purposes, and the object of the invention is to provide a device which will securely fasten luggage and the like without damage to the same.

A further object is to provide a device of this character which may be very easily operated to secure or remove luggage.

Another object is to provide a device which may be easily adjusted according to the size and shape of the article to be secured.

Various other objects and advantages will be apparent from the following description.

At the present time, motor vehicles are equipped with luggage carrying devices for the convenience of tourists, picnickers and the like. These luggage carrying devices are divided broadly into two classes, namely the rigid structures similar to the well known collapsible gates which form a pen or enclosure in which an article of luggage may stand without danger of dislodgment. The second class is in the nature of a harness to secure the luggage by means of straps. In the first form the disadvantage is that if the device is applied to the running board, there is a large and more or less permanent obstruction on the running board. The disadvantage of the second class is that, to obtain secure attachment, the harness is frequently so greatly tightened as to crush and destroy the shape of the luggage. With both classes, there is considerable relative movement of the luggage in the carrier, which soon wears out or at least destroys the appearance of the luggage.

According to the present invention, a simple carrier of the harness type is provided, which is so constructed that it is practically a physical impossibility to tighten the same to a degree which will result in

damage to the luggage. Furthermore, the device is so constructed as to form a wear-receiving device interposed between the luggage and the holding means and its support, which moves with the luggage and receives all the wear.

In the drawings which illustrate one embodiment of the invention.

Figure 1 is a side elevation of the device.

Figure 2 is a cross section on the line 2—2 Figure 1.

Figure 3 is a plan view of one of the edge protectors.

Referring more particularly to the drawings, which show the application of the device to supporting a suitcase on the running board of an automobile, 11 designates the running board, 12 the car body and 13 the suitcase. The running board is provided with a suitable number of flat eyes 11^a disposed in suitable locations and of such small size as not to form any obstruction on the running board.

The harness comprises two distinct parts, firstly an enclosure for the luggage and secondly a holding-down device. The protective enclosure for the luggage comprises a series of corner guards each composed of a pair of plates 14 hingedly connected and provided each with a pair of slots 15, through which may be threaded straps 16 to connect the guards to the luggage. The plates forming the guards are connected preferably in the same manner as ordinary hinges, so that the pin is disposed entirely on one side of the structure when the plates are straightened out. According to the present invention, the guards are arranged each in L-shape, with the hinges projecting outwardly and forming smooth rounded surfaces over which the straps 16 may bend without danger of breaking. Another and more important result is that the inside corner defined by the plates is sharp and unobstructed. This part of the harness preferably comprises two straps to encircle the luggage transversely and a single strap to encircle it longitudinally but, in each case, the construction and arrangement are exactly the same, so that a description of one suffices. The strap 16 is threaded through the apertures of the plates 14, so that the strap passes over the projecting hinge portion, through the adjacent or inner slots to

the opposite side of the plate, along the opposite side of each plate and through the outer walls, so that when the strap with four guards thereon is folded around a suitcase the guards will embrace the four edges with the hinge portions of the guards turned outwardly or away from the suitcase. It will be readily seen that those portions of the strap which pass through from the hinge sides of the guards will bear against the suitcase and hold the metal guards in spaced relation therewith, so that the leather will not be chafed by the metal guards. Each strap passes around the luggage and the ends thereof are connected by friction or other type of buckle 17. The luggage engaging portions of the strap, designated 18, being between the guards and the luggage, while the portions of the strap, designated 19, extending between adjacent guards being on the outer sides of the guards, it is evident that tension in the strap will tend to draw the extremities of the guard arms together, so that the enclosed angle would be less than 90°. This tendency is only sufficient to overcome the tendency of pressure where the strap passes around the hinge pin to open the arms out, and the result is that the arms or plates of each guard are held substantially rigidly at right angles and do not bear upon the edges of the luggage in a manner to crush the same in when the strap is tightened.

The holding down arrangement comprising a series of straps 20 equal in number to the straps 16 and threaded through one plate of each guard in the same manner as the straps 16. The plates through which the straps 20 are threaded, are those which underlie and overlie the luggage, so that the straps 20 do not pass through the plates on the vertical surface of the luggage. Each of these straps 20 is provided with a buckle 21 of the friction or other suitable type and is in addition somewhat longer than the corresponding straps 16. Each outer strap 20 carries a suitably disposed hook 22 adapted to engage an eye 11* of the running board, and preferably a curved plate 23 is secured on the opposite side of the strap from this hook to form a guide around which the strap bends and to prevent the strap tearing away from the fastenings of the hook. The transverse straps may be secured to the longitudinal straps or may be separate therefrom. It will also be understood that, while both longitudinal straps 16 and 20 have been shown, the inner longitudinal strap 16 may be eliminated and also that the outer longitudinal strap need not pass under the suitcase but need only pass from eye to eye of running board over the suitcase. Various similar modifications of the invention may be made without departing from the spirit thereof.

The method of using the device is as follows:—

The hooks 22 are engaged with the eye 14 at the inner edge of the running board, and, all buckles being open, the suitcase is set down on the harness. The guards at the bottom of the suitcase are then adjusted along the straps according to the size of the suitcase and the harness brought up over the top of the suitcase, the top guards being similarly adjusted. The inner straps 16 are now tightened and lastly the outer straps 20. When the inner straps are tightened, these straps and the guards form in effect a cage which so tightly encloses the suitcase that it cannot move therein, so that any movement of the suitcase will produce a similar movement of the case of straps and guards containing it. In this way all wear due to vibration will be taken up in the harness. The formation of the guards and the method of passing the straps 16 therethrough precludes possibility of the edges of the suitcase being crushed in when the straps are tightened, as already explained, and therefore the guards serve also to prevent the suitcase edges being crushed when the outer straps 20 are tightened. When it is desired to remove the luggage from a vehicle, only the buckles of the outer straps need be unfastened, the outer ends of the straps disengaged from the eyes at the outer edge of the running board, and the harness unhooked from the remaining eyes. The inner part of the harness may be unbuckled and the whole removed from a suitcase without destroying the adjustment, so that when the device has been once adjusted to a particular size of luggage, it may be very quickly attached to or detached from the same. The hinged construction of the guards enables them to be flattened out so that the device may be stored in very small space when not in use.

Having thus described our invention, what we claim is:—

1. A device of the class described, comprising a series of straps adapted to be secured around an article of luggage, rigid edge guards threaded on said straps, and a second series of straps releasably connectible to a vehicle and threaded through said guards.

2. A device of the class described comprising a series of guards each formed of two hingedly connected apertured members, straps passing through the apertures of said guards to position the same in embracing relation on the edges of an article of luggage, and further straps passing through the apertures of said guards outside the first to attach the same to a vehicle.

3. A device according to claim 2, in which the straps of the first series are threaded through the guards in a manner to hold the

guards in spaced relation from the article of luggage.

4. A device according to claim 2, in which the straps of the second series are provided
5 with hooks for engagement with and disengagement from a vehicle.

5. A device according to claim 2, in which the straps of the second series have secured thereto hooks and curved plates by means of
10 common fastenings, said curved plates holding the straps against tearing away from the hook securing fastenings.

6. A device of the class described, comprising a series of edge guards for an article
15 of luggage, straps passing transversely of the luggage and through said edge guards and constituting with the guards a protective cage for the luggage, and further straps passing through said guards transversely
20 and longitudinally of the luggage and securable to a vehicle to hold the luggage thereon.

7. A device of the character described

comprising a series of edge guards, a strap threaded through the guards of each series adapted to be secured around an article of
25 luggage and to hold the guards in position thereon and further straps threaded through said guards and adapted to be secured to the running board of a motor vehicle.

8. In a device of the character described, 30 comprising a series of harness straps, a series of anchor straps, a series of edge guards connecting the harness and anchor straps together, means for securing the harness straps about an article of luggage to provide
35 a protective harness for said article and to hold the edge guards in position thereon and means for securing the anchor straps to a supporting surface to anchor the article of luggage thereto. 40

In witness whereof, we have hereunto set our hands.

HENRY ERNEST LLOYD OWEN.
KENNETH HALLIDAY MACARTNEY.