Sept. 16, 1924. 1,508,989

G. A. ROTH

LUGGAGE CARRIER

Filed Dec. 29, 1922

Fig. 1.

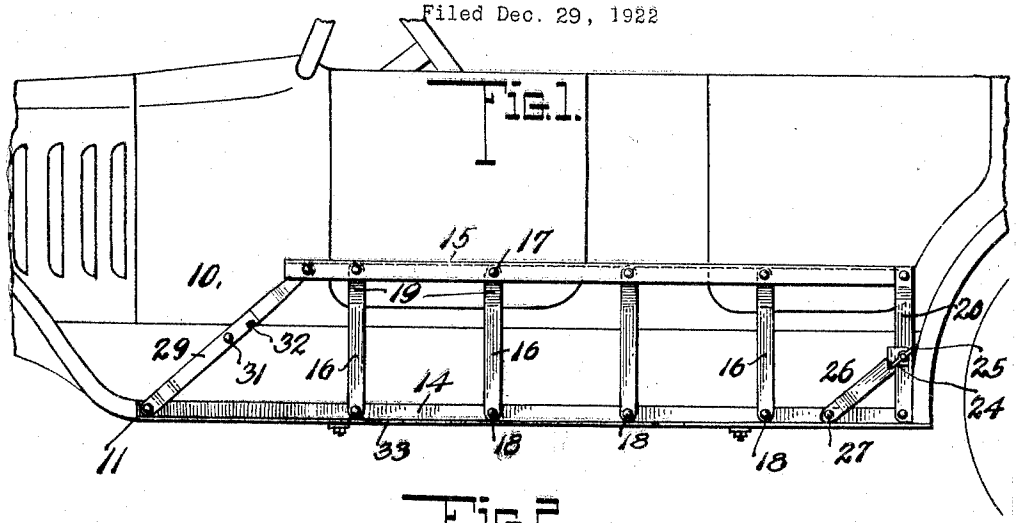


Fig. 2.

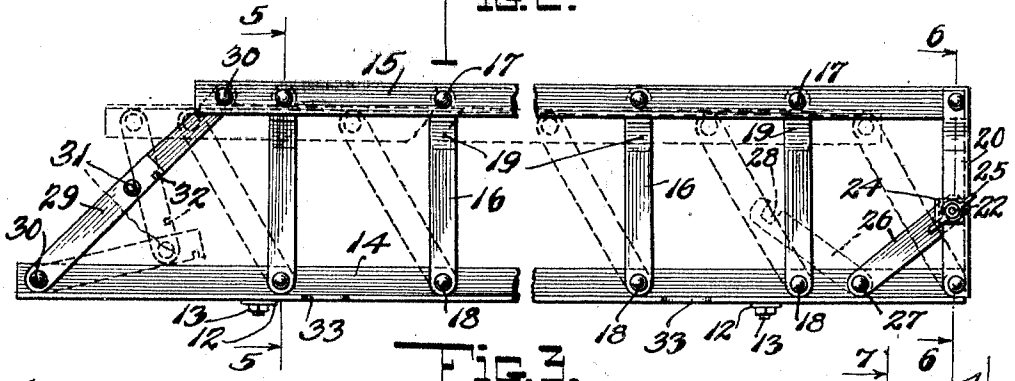


Fig. 3.

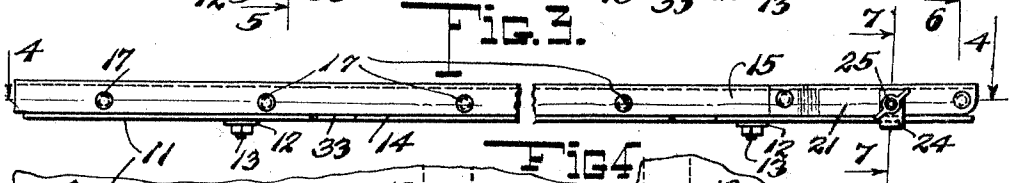


Fig. 4

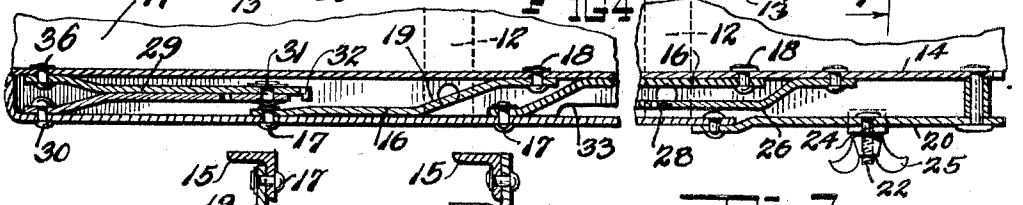


Fig. 5.

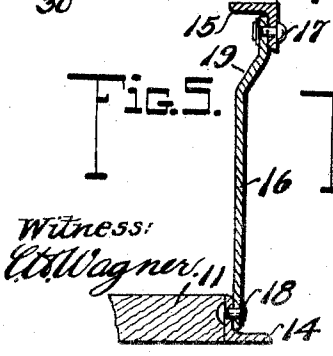


Fig. 6.

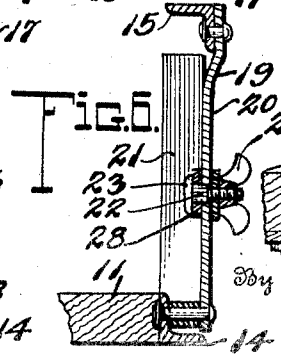
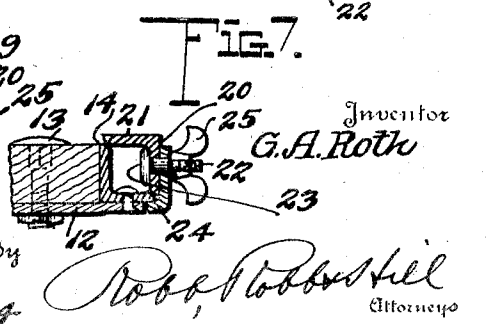


Fig. 7.



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UNITED STATES PATENT OFFICE.

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LUGGAGE CARRIER.

Application filed December 29, 1922. Serial No. 609,664.

To all whom it may concern:

Be it known that I, GILBERT A. ROTH, a citizen of the United States, residing at Hastings, in the county of Adams and State of Nebraska, have invented certain new and useful Improvements in Luggage Carriers, of which the following is a specification.

This invention relates to a luggage carrier and particularly to a construction adapted for application to the running board of an automobile.

In the prior art such carriers of the toggle construction removably mounted upon the board have been used and when collapsed comprise an obstruction upon the running board liable to interfere with the use of the doors while the detachable fastening means become loose under road conditions, causing the carrier to be both insecure and noisy. The present invention avoids these objections by providing a rigidly mounted carrier adapted for application to the running board to form the outer edge thereof and particularly to be applied at the factory in the general construction of the vehicle. When this improved form of carrier is collapsed the upper rail thereof lies substantially flush with the surface of the running board and when in extended position provides a smooth finish which will not engage and injure the clothing of the user of the car.

A further feature of material improvement is a unitary locking means by which the carrier may be quickly secured in either extended or collapsed position.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

Figure 1 is a side elevation showing the carrier applied.

Figure 2 is a detail enlarged elevation thereof.

Figure 3 is a side elevation of the carrier collapsed or closed.

Figure 4 is a longitudinal section on line 4—4 of Figure 3.

Figure 5 is a detail enlarged section on line 5—5 of Figure 2.

Figure 6 is a similar view on line 6—6 of Figure 2.

Figure 7 is an enlarged detail section on line 7—7 of Figure 3.

Like numerals refer to like parts in the several figures of the drawing.

The numeral 10 designates an automobile which may be of any desired construction and provided with the usual running board 11 to which the present invention is adapted to be secured by any desired means, for instance the plates 12 secured to the board by bolts or similar fastenings 13 as shown in Figure 7. The outer edge of this plate extends beyond the board and has secured thereto an angle iron 14 which forms the base rail of the carrier. The upper or top rail 15 may be of similar angle structure and the base and top rails are secured together by a series of links 16 pivotally connected at 17 to the top rail and at 18 to the base rail. These links may be laterally deflected as shown in Figures 4, 5 and 6 in order to allow clearance in the closing movement of the parts, as indicated at 19. The links 16 move in parallelism from their closed to their open position as indicated by dotted lines in Figure 2, where the parts are partially collapsed.

At one end the rails are connected by an end link 20 which is formed with an angle wall 21 substantially closing that end of the carrier. This wall 21 is cut away or removed at its upper end 34 so that when the parts are in closed position a continuous flush upper surface is presented, as shown in Figure 3. This link also carries the locking means which may be of any preferred construction. A desirable form is herein shown and comprises the bolt member 22 having the head 23 at the inner face of the link and also carrying a locking clip 24 adapted to engage an edge of the base rail 14. This bolt is further provided with a wing nut 25 or similar securing device. For the purpose of retaining the carrier in extended position a locking arm 26 is pivotally mounted at 27 upon the base rail 14 and has a hooked free end 28 to engage beneath the bolt head 23 as shown in Figure 6. This locking action is also assisted by the toggle members 29 at the opposite end of the carrier which facilitate the opening thereof and brace against longitudinal play. These members are pivoted at 30 to the top and base rails and are pivotally connected with each other at 31. They are also provided with the usual stop 32 to prevent travel in one direction past a straight line position. In order to secure the parts in collapsed position at the outer edge of the running board the clip plate is adjusted beneath the base rail and clamped as in Figure 7. The horizontal flange of the base

rail may be notched or cut away as at 33 to provide a finished opening for grasping the upper rail when raising the same from collapsed position.

It will be seen that this invention provides a construction adapted to be permanently attached to the running board and to be folded into closely compact position at the very edge thereof so as to leave no obstruction in the use of the machine and yet provide a carrier ready for instant use by simply raising the retainer or top rail into position and securing it as described. The construction permits the use of angle irons in its principal members, thus affording strength and rigidity and providing a smoothly finished top rail which lies substantially flush with the upper face of the running board when in collapsed position. The device also provides for a unitary securing means adapted to cooperate either with the locking arm or the base rail in the raised and lowered positions, respectively. When this carrier is used to produce a protective facing for the running board it comprises a part thereof as the base rail forms the outer edge of the board and when the top rail is in folded position a substantially flush protective facing is secured. One of the primary features of the device, however, lies in the coaction of the angle iron elements when the carrier is collapsed, such that a substantially completely enclosed housing is formed, within which the link elements are snugly housed, thus enhancing the appearance of what is usually an unsightly attachment.

The details of this invention have been specifically shown and described but it is not confined thereto as changes and alterations may be made therein without departing from the spirit of the invention as defined by the appended claims.

What I claim is:

1. A luggage carrier comprising a base rail, an upper rail, a series of parallel connecting links pivoted at opposite ends to said rails, and means coacting with one rail and one link to secure said rails in either extended or collapsed position, said base rail being angular in shape to receive the links and part of said securing means therein when in collapsed position and constituting a protector against entry of dirt thrown upwardly from the ground.

2. A collapsible luggage carrier comprising a base rail, an upper rail, links pivotally connected at their opposite ends to each of said rails, and a locking arm carried by the base rail and adapted to engage securing means upon one of said links, said rails being formed to engage about the links when collapsed into cooperating position to prevent entry of dirt between the rails.

3. In a luggage carrier, a base rail, an upper rail, connecting links pivoted at their ends to said rails to permit longitudinal swinging of the upper rail, a clamping device mounted upon one link, and a securing clip carried by said device and adapted to engage the base rail when the parts are collapsed.

4. In a luggage carrier, a base rail, an upper rail, connecting links pivoted at their ends to said rails to permit longitudinal swinging of the upper rail, a clamping device mounted upon one link, a securing clip carried by said device and adapted to engage the base rail when the parts are collapsed, and a hooked arm pivoted upon the base rail and adapted to engage said device.

5. In a luggage carrier, a base rail, an upper rail, connecting links pivoted to said rails, an end link pivoted to said rails, a headed bolt mounted in said end link, a securing clip supported upon said bolt, clamping means carried by said bolt, and a pivoted hooked arm adapted to engage beneath the head of said bolt.

6. In a luggage carrier, an angle base rail, means for securing the same to a running board, an angular top rail disposed to form an enclosing case when associated with the base rail, and a series of links pivotally connected to one face of each of said rails to lie within said case when in folded position.

7. In a luggage carrier, an angle base rail, means for securing the same to a running board, an oppositely disposed angular top rail, a series of links pivotally connected to one face of each of said rails, and an angular end link pivotally connected to said rails and forming a continuation of the top rail when in folded position.

8. In a luggage carrier, an angle base rail, means for securing the same to a running board, an oppositely disposed angular top rail, a series of links pivotally connected to one face of each of said rails, an angular end link pivotally connected to said rails and forming a continuation of the top rail when in folded position, a securing arm pivoted upon the base rail, clamping means mounted upon the end link to engage said arm, a retaining clip carried by said clamping means to engage the base rail when in collapsed position, and toggle members pivotally connected to the base and top rails at the opposite end from said end link.

9. The combination with the running board of an automobile, of a foldable luggage carrier secured thereto and adapted when folded to form a protective face at the outer edge thereof of substantially the thickness of said board said carrier being composed of cooperating parts constituting a housing providing a finishing appearance for the edge of the running board.

10. The combination with the running board of an automobile, of a foldable luggage carrier comprising base and top rails

with intermediate links pivoted to each thereof, and means for permanently securing the base rail to the outer edge of said board, said rails being shaped to cooperate with each other so that the top rail when folded houses said links and forms a protective facing along said edge substantially flush with the upper face of said board.

11. In a luggage carrier, a base member, a relatively movable top member, and folding connecting elements, said members being constructed and arranged to form a housing to enclose said elements when in folded position.

12. In a luggage carrier, an angular base member, a relatively movable angular top member, folding cennecting means pivoted at opposite ends to said members, said members being relatively disposed to form when associated in folding position a casing having walls to substantially enclose all of the connecting means.

13. A luggage carrier of the class described including an angle bar arranged at the outer vertical face of a running board, a second angle bar, a movable connecting means therebetween, the bars, when in collapsed condition constituting a housing to enclose the movable connecting means.

14. A collapsible luggage carrier including a lower member of angle iron, an upper member of angle iron opposed thereto, and a plurality of supporting members pivoted at both ends to said lower and upper members and adapted to be folded therebetween.

15. A collapsible luggage carrier for vehicle running boards comprising upper and lower frame members and an end member associated together to form a box-like structure when collapsed, means in addition to said end member and acting in conjunction therewith to support the upper member in operative position and disposable within said box-like structure when the carrier is collapsed, and means for securing the carrier at the front edge of the running board.

16. A luggage carrier for vehicle running boards comprising a vertically collapsible frame secured adjacent the front edge of the running board and forming an extension of said edge when collapsed, parts of said frame forming a complete housing for other parts when in collapsed condition.

17. A luggage carrier for automobiles comprising a main horizontal rail secured against the outer vertical face of the running board of a vehicle, a second rail having a horizontal flange, and a means of pivotal connection between said rails for moving said last mentioned rail adjacent to said fixed rail comprising a plurality of bars mounted between portions of the rails when in collapsed condition, said flange covering and protecting from entry of dirt said means when the carrier is collapsed.

18. A luggage carrier for automobiles comprising a main horizontal rail secured against the outer vertical face of the running board of a vehicle, a second rail having a horizontal flange, a means of pivotal connection between said rails for moving said last mentioned rail adjacent to said fixed rail comprising a plurality of bars mounted between portions of the rails when in collapsed condition, said flange covering and protecting from entry of dirt said means when the carrier is collapsed, and means for maintaining the opened out relation of the luggage carrier.

19. A luggage carrier for automobiles comprising a main horizontal rail secured against the outer vertical face of the running board of a vehicle, a second rail having a horizontal flange, and means of pivotal connection between said rails for moving said last mentioned rail adjacent to said fixed rail, said means comprising a plurality of bars mounted between portions of said rails when in collapsed condition, said flange covering and protecting from entry of dirt said means when the carrier is collapsed, said first mentioned rail having a horizontal member cooperating in the collapsed condition of the device with the second mentioned rail to form a box member housing the means which constitutes the said pivotal connection.

20. A luggage carrier for automobiles comprising a main horizontal rail secured against the outer vertical face of the running board of a vehicle, a second rail having a horizontal flange, and means of pivotal connection between said rails for moving said last mentioned rail adjacent to said fixed rail, said means comprising a plurality of bars mounted between portions of the rails when in collapsed condition and said flange covering and protecting from entry of dirt said means when the carrier is collapsed, and means for maintaining the opened out relation of the luggage carrier, said first mentioned rail having a horizontal member cooperating in the collapsed condition of the device with the second mentioned rail to form a box member housing that means constituting the said pivotal connection.

21. In a luggage carrier, the combination of upper and lower angle bars diagonally opposed to each other, and flat sided connecting members pivotally attached thereto, said members being pivotally connected at one end to the vertical web of said upper angle bar and at their opposite ends similarly attached to the vertical web of the lower angle bar.

22. In a luggage carrier, the combination of parallel upper and lower horizontally disposed angle bars and spaced apart, flat sided vertical members pivotally connecting

said bars together, said members disposed to lie diagonally across the floor of an enclosure formed by the angle bars when the carrier is in collapsed or folded position.

23. In a luggage carrier, the combination with a pair of opposed angle bars, of flat sided bars vertically disposed when in operative position and whose opposite ends are pivotally connected to the opposed webs of said bars and whose intermediate portions are bent to allow said ends to be in offset but parallel planes when in collapsed condition.

In testimony whereof I affix my signature.

GILBERT A. ROTH.