Apr. 17, 1923. 1,452,394

L. SIMON

EXTENSION BODY FOR AUTOMOBILES

Filed April 19, 1922

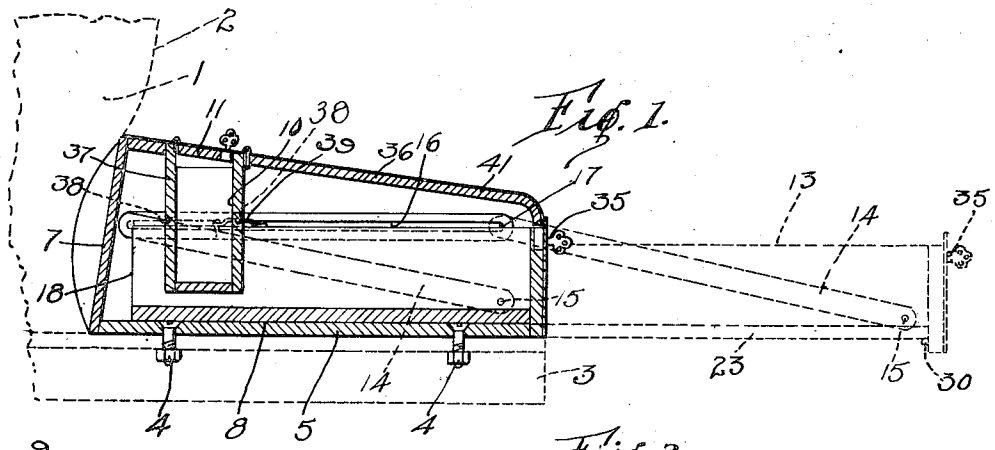


Fig. 1.

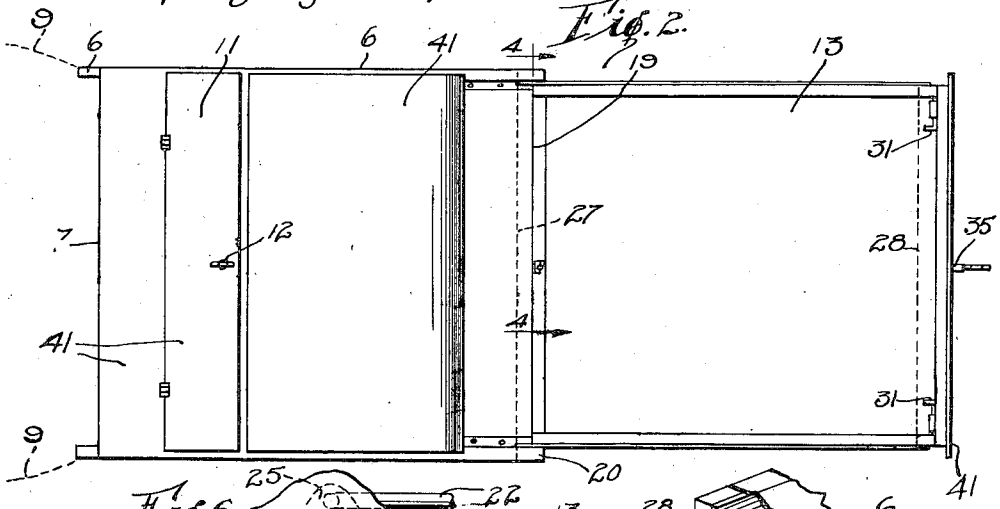


Fig. 2.

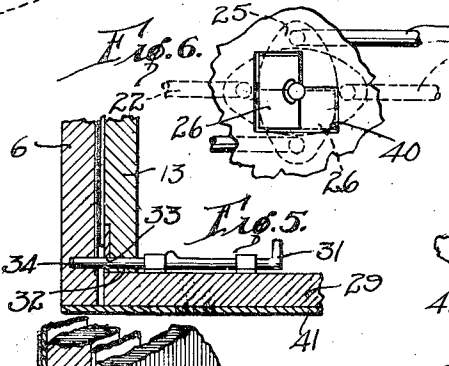


Fig. 6.

Fig. 5.

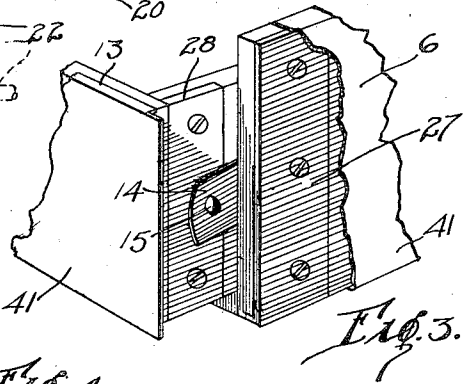


Fig. 3.

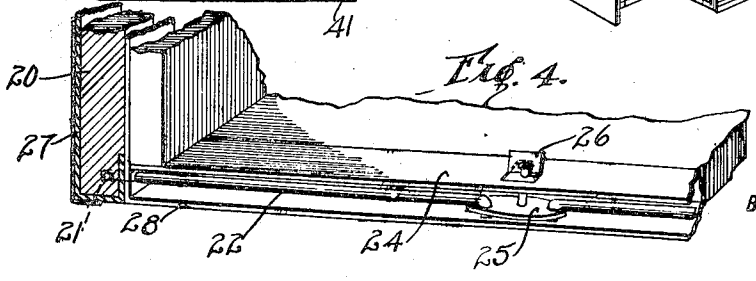


Fig. 4.

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UNITED STATES PATENT OFFICE.

LEWIS SIMON, OF GARY, INDIANA.

EXTENSION BODY FOR AUTOMOBILES.

Application filed April 19, 1922. Serial No. 555,612.

To all whom it may concern:

Be it known that I, LEWIS SIMON, a citizen of the United States, and a resident of Gary, in the county of Lake and State of Indiana, have invented a new and useful Improvement in Extension Body for Automobiles, of which the following is a full, clear, and exact description.

My invention relates to improvements in extension bodies for automobiles or the like, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide an extension body which is especially designed for the Ford roadster and which may be readily attached to the car in place of the ordinary casing disposed in back of the seats.

A further object of my invention is to provide a device of the character described which may be extended to carry twice the load which is ordinarily carried.

A further object of my invention is to provide a device of the character described which has a tool box disposed therein.

A further object of my invention is to provide a device of the character described which has novel locking means whereby the body is locked in extended position.

A further object of my invention is to provide a device of the character described which may be closed and locked, whereby it is theft-proof.

A further object of my invention is to provide a device of the character described which is simple in construction, and which consists of few parts.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing, forming part of this application, in which—

Figure 1 is a sectional view of the device as shown operatively applied to a car,

Figure 2 is a plan view of the device showing the body in extended position,

Figure 3 is a perspective view of a portion of the device,

Figure 4 is a perspective view of another portion of the device taken on the line 4—4 of Figure 2.

Figure 5 is a sectional view of one of the locks, and

Figure 6 is a plan view of another locking mechanism.

In carrying out my invention, I make use of the ordinary Ford roadster, indicated generally at 1, and place my device on the rear end of the car. In the Ford roadster, the casing or cover disposed in back of the seats 2 is secured to the frame 3 by means of bolts 4. In applying my improved device to the car, I use the bolts 4 in securing the device to the frame 3. From this construction, it will therefore be apparent that I can readily apply my device to the ordinary Ford roadster. It is obvious that the device may be changed in dimensions so as to fit any type of car.

The device comprises a compartment 5 which has side boards 6, an end board 7, and a bottom board 8. The board 7 is adapted to abut against the rear surface of the seats 2. The sides 6 project slightly beyond the board 7 so as to abut the sides 9 of the seats 2. A tool box 10 is disposed adjacent to the board 7 and is provided with a cover 11 which may be locked in place by means of a lock 12.

An extensible member or compartment 13 is adapted to be carried by the compartment 5 and is shown in retracted position in Figure 1. The compartment 13 is secured to the compartment 5 by means of links or bracing members 14, these members being pivotally secured to the compartment 13 at 15, and being slidably received in metal grooves 16 in the compartment 5. In extending the compartment 13 to the dotted line position shown in Figure 1, the links 14 slide in the grooves 16 until the bolts 17, carried by the links, engage with the ends of the metal grooves 16. When the bolts 17 are in the outer ends of the guides 16, the inner end 18 of the compartment 13 abuts against the outer end 19 of the compartment 5. It will further be noted that the compartment 13 is moved downwardly when in extended position so as to form a continuous surface with the floor 8 of the compartment 5. The inner end 18 of the compartment 13 is carried by the frame 3 and is further locked in place by a locking means now to be described.

In Figure 4 I have shown a perspective view of the compartment 13 in extended position with respect to the compartment 5. As clearly shown in Figure 2, the sides 6

extend beyond the end 19 of the compartment 5, and thereby act as retaining members to prevent the lateral movement of the compartment 13 with respect to the compartment 5. Furthermore, the extended portions 20 of the sides 6 have recesses 21 therein which are adapted to receive the ends of locking rods or bolts 22 (see Figure 4). The inner end of the floor 23 of compartment 12 has two metal strips 24. These strips are disposed adjacent to the top and bottom of the floor 23 and at the inner end thereof. The strips 24 form a housing in which a plate 25 is pivotally disposed, this plate being rotated by a key 26, and carrying the inner ends of the bolts 22. A rotation of the key 26 will retract the bolts from, or extend them into the opening 21. In this manner, the compartment 13 is positively locked in place. The rear end of the compartment 5 is reenforced by a metal band 27, this band extending along the sides or projections 20 and along the bottom of the floor 8 (see Figure 3). The band 27 has a portion cut away so as to not project beyond the end of the floor 8. It will be observed, however, that the band 27 has portions bent upwardly on the inner sides of the projections 20, these portions having an opening therein in registration with the openings 21. The band 27 therefore acts as a reenforcing means for the projections 20.

In like manner, the outer end of the compartment 13 is provided with a reenforcing band 28 of metal which is disposed on the side and bottom of the compartment. This band carries the bolts 15 to which the links 14 are pivotally secured. The compartment 13 also has a door 29 which is adapted to be swung about hinges 30. The door 29 is locked in place by means of a bolt 31 (see Figure 5). As clearly shown in this figure, the band 28 is bent inwardly at 32, and has a bolt receiving opening 33 therein. The sides 6 also have bolt receiving openings 34 therein. From this construction it will be observed that when the compartment 13 is disposed in the compartment 5, the compartment 13 may be locked in place by merely moving the bolts 31 into the openings 33 and 34. The bolts 31 not only act as a locking means for the door 29, but also prevent the compartment 13 from being moved outwardly from the compartment 5 when the bolts are disposed in the openings 34. When the compartment 13 is desired to be extended, the bolts 31 are removed from the openings 34 and are held in the openings 33. In this manner, the compartment 13 may be moved, but the door 29 will still be locked.

The door 29 carries a lock 35 which is adapted to lock the cover 36 of the compartment 5 in closed position when the comparment 13 is disposed in the compartment 5. The sides 37 of the tool box 10 are cut away at 38 so as to receive the sides of the compartment 13. The sides of the compartment 13 carry leaf springs 39 which are adapted to engage with the cut away portion 38 of the sides 37 so as to prevent the compartment 13 from moving or rattling. The springs 39 yieldingly hold the compartment 13 in engagement with the floor board 8.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. As heretofore stated, the device may be readily applied to the frame of an automobile, such as that of a Ford roadster. The device, when extended, is adapted to hold twice the amount of material it would hold when not extended. The construction of the links 14 is sufficiently strong enough to withstand all strains or the like which the compartment 13 would be subjected to. It will be apparent that any downward movement of the compartment 13 when in extended position, would first tend to pull the bolts 17 out of engagement with the guides 16. This is impossible, since the guides 16 are made of heavy material. The compartment 13 provides a floor board which is even with the floor board of the compartment 5 when the compartment 13 is in extended position. The bolts 22 and the frame 3 prevent any downward movement of the front of the compartment 13 with respect to the compartment 5.

When the compartment 13 is in closed position, the device may be used as an ordinary locked receptacle. As heretofore stated, the cover 36, when in closed position, may be locked to the door 29, so that the contents within the device are fully protected. The device has a readily accessible tool box which is also adapted to be locked so as to protect the tools therein from theft. When the device is closed, it resembles the ordinary cover or casing which is disposed behind the seats in the ordinary Ford roadster.

In Figure 6 I have shown novel means by which the key 26 may be locked in opened or closed position. The upper strip 24 has an angular-shaped recess 40 therein, this recess being adapted to receive the key 26 when in the full line position shown in Figure 6, or in the dotted line position. The sides of the recess 40 are square so as to prevent any movement of the key when disposed therein. In this manner, the bolts 22 are positively locked in opened or closed position. When rotating the key 26, the key is first swung upwardly so as to be freed from the recess 40, whereupon the key may be readily swung.

The entire device may be made of any material desired, such as wood, and is preferably covered by a tin or metal sheeting 41, this sheeting resembling the material of the ordinary Ford roadster body.

The sheeting 41 protects the frame work and also is pleasing to the eye. The device is strengthened by the bands 27 and 28 at the required places, and is therefore rigid enough to withstand all strains, etc. The device is simple in construction and provides a novel means by which a load of twice the size may be carried by the Ford roadster.

I claim:

1. In a device of the type described, a frame having an angular-shaped recess therein, a pin, a plate hingedly carried by said pin to permit the manual oscillation of said pin, said plate being adapted to be received and locked in said recess in either of two positions, a turn plate carried by said pin, said turn plate having diametrically opposed openings therethrough, and bolts pivotally disposed in said openings.

2. A device of the character described comprising a container, a second container disposed in said first named container, said second named container adapted to be extended so as to aline the floors of said containers, links carried by said first named container and adapted to support said second named container in extended position, said links being connected to the outer ends of said containers when said second named container is in extended position, and bolts carried by said second named container and adapted to engage with said first named container, said bolts being locked in extended or retracted position.

3. In a device of the type described, a container, a second container removably disposed in said first named container, a door for said second container, and bolts carried by said door for fastening said door in closed position, said bolts adapted to be extended to fasten said second named container to said first named container.

4. A device of the type described comprising a container, a second container adapted to be entirely enclosed in said first named container, said second named container adapted to be extended so as to align the floor thereof with the floor of said first named container, means carried by said first named container and being adapted to rigidly support said second named container in extended position, a hinged end plate carried by said second named container and being adapted to form a common end plate for both containers when said containers are in collapsed position, and means for locking said end plate in closed position to said second named container, said locking means being adapted to lock said second named container to said first named container when said containers are in collapsed position.

LEWIS SIMON.