

H. M. LAMBERT.

CAR FENDER.

APPLICATION FILED MAY 13, 1908.

921,716.

Patented May 18, 1909.

3 SHEETS—SHEET 1.

Fig. 1.

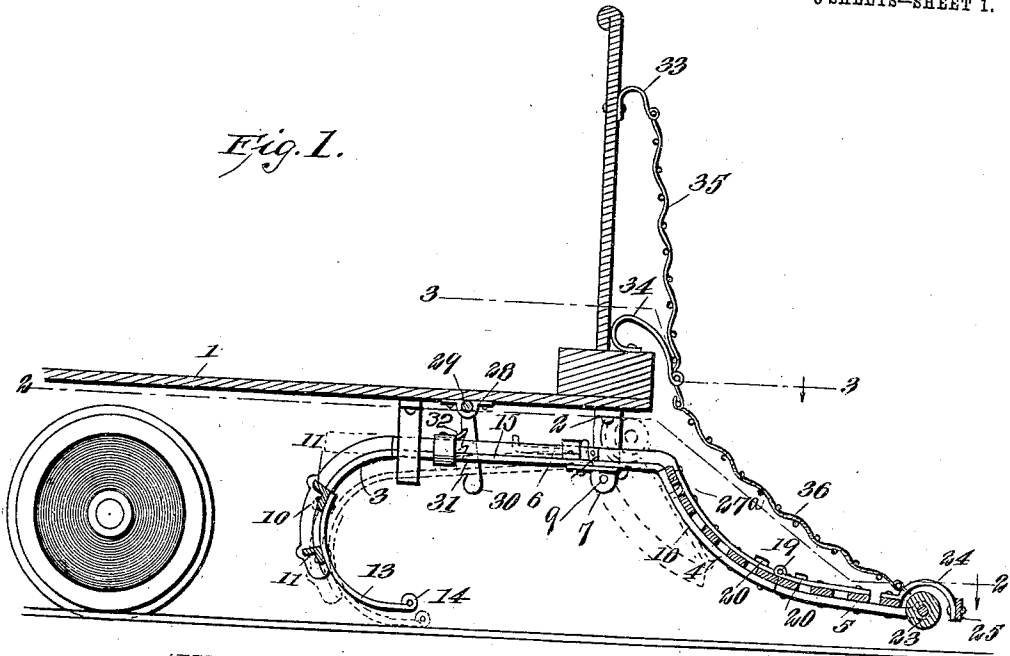
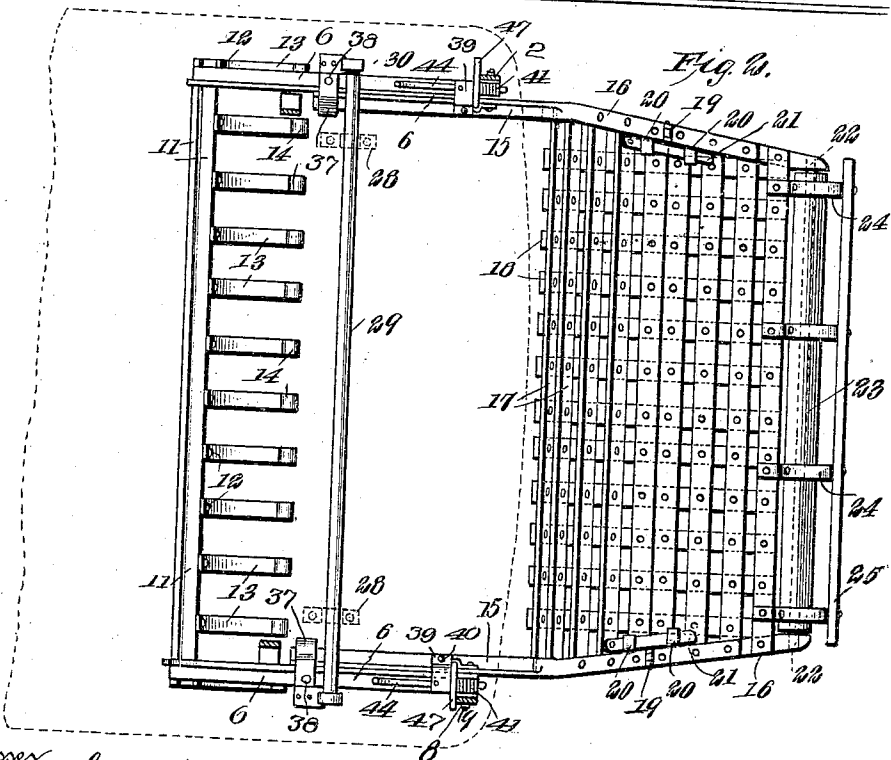


Fig. 2.



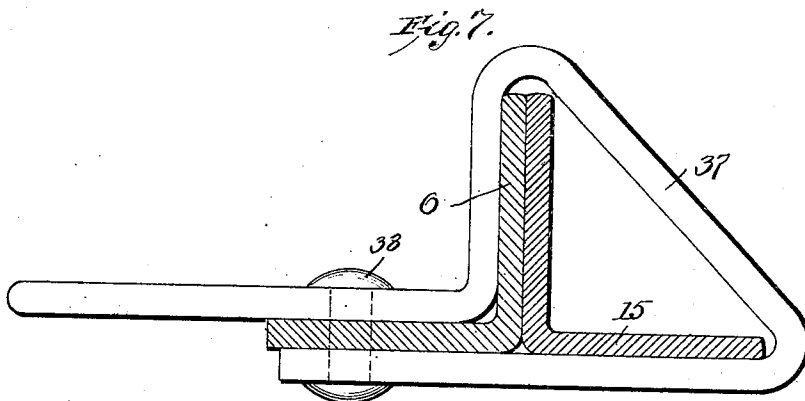
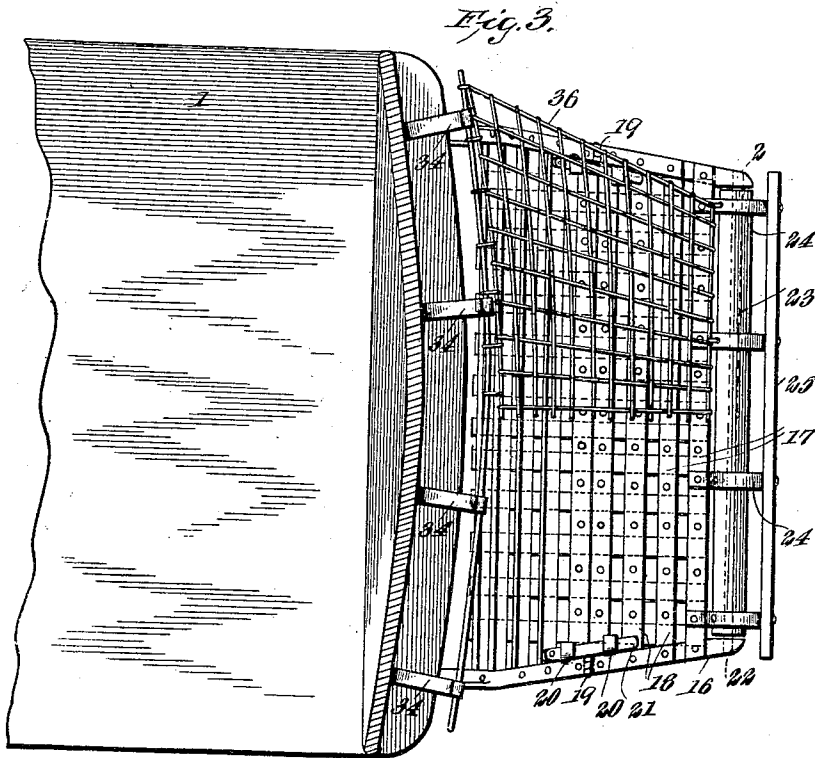
Witnesses
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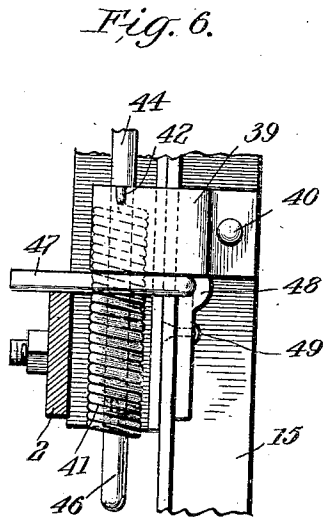
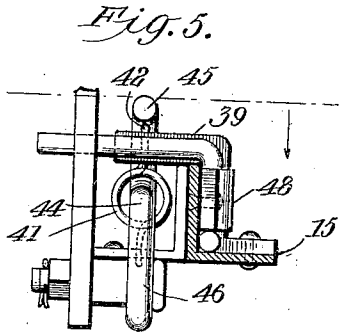
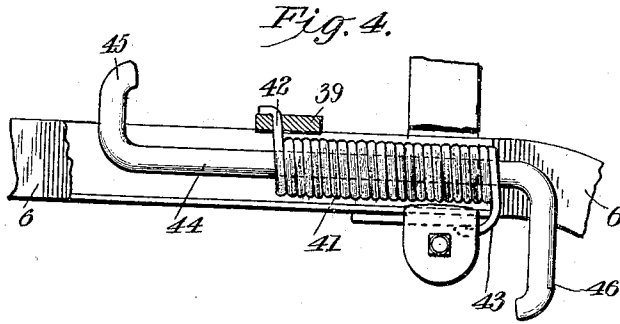
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UNITED STATES PATENT OFFICE.

HENRY M. LAMBERT, OF PORTLAND, OREGON.

CAR-FENDER.

No. 921,716.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed May 13, 1908. Serial No. 432,715.

To all whom it may concern:

Be it known that I, HENRY M. LAMBERT, a citizen of the United States, and a resident of Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

My invention is an improvement in car fenders, being an improvement over my prior patent No. 865,258 Sept. 3rd, 1907, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

Referring to the drawings forming a part hereof Figure 1 is a central longitudinal section of a part of a car provided with my improved fender. Fig. 2 is a section on the line 2—2 of Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a detail view of a part of the connection between the rear and the front fender. Fig. 5 is an end view of the same. Fig. 6 is a top plan view of the same, and Fig. 7 is a section through the side bars of the front and rear fender on the line of the sleeve.

In the present embodiment of my invention, the platform 1 of the car is provided with a downwardly projecting bracket 2, at each end thereof, and the fender which consists of two sections 3, 4, is supported from the brackets. The rear section consists of side bars 6, each provided on its lower face near the front end thereof, with a bearing 7, and a bolt 9 traverses openings in the bracket and the bearing being secured in place by a nut 8. The side bars are curved downwardly at the rear end as shown at 10, and are connected by a plurality of cross bars 11. It will be observed that the rear section 3 turns upon the pivot or bolt 9 while the section 4 is slidably connected with the section 3. To the cross bars are secured by bolts or rivets 12, a plurality of curved spring arms 13, each of said arms having its free end turned back upon itself as at 14 to present a blunt point. It will be noticed that when the rear section of the fender is in the position shown in Fig. 2, the free ends of the curved arms 13 are a short distance above the track, and the fender is normally supported in this position by the weight of the forward section 4.

The section 4 consists of side members having a forward, downwardly curved portion 16, and a rear straight portion 15, the portion 16 being connected by slats 17, to

which are riveted or otherwise secured at right angles thereto, other slats 18 forming a lattice work. The section 5 is similarly constructed, being hinged to the section 4 as at 19, and each of the sections adjacent to the hinge is provided with inwardly projecting lugs 20, adapted to receive therebeneath a bar 21 for the purpose of locking the sections in substantial alinement with each other.

The free ends of the side bars of the section 5, are provided with openings in which are received the trunnions 22 of a roller 23 of wood or other suitable material and the outermost slat of the said section has secured thereto a plurality of arms 24 curved outwardly over the roller, the free ends being connected by a bar 25, the said bar being directly in front of the roller. The straight portions 15 of the side bars are arranged along the inner face of the side bars 6 of the rear section, and a sleeve 37 encircles the straight portion 15, near its rear end, the sleeve being provided with a lateral lug riveted to the side member 6 as at 38, and having on the free end thereof a pawl 32 for a purpose to be presently described. A plate 39 is riveted as at 40 to the straight portion 15, and rests upon the top of the adjacent side bar 6 and coöperates with the sleeve 37 for supporting the front fender, and a coil spring 41 has one end connected with the plate as at 42, and the other end provided with a hook 43 engaging the free end of the adjacent side plate 6. The purpose of the spring is to permit some yielding of the front fender with respect to the rear fender when engaging an obstruction, and this yielding movement is limited by a bar 44, having one end hooked as at 45 for engaging the plate 39, and the other hooked as at 46 for engaging the end of the adjacent side plate 6. The bar 44 is arranged within the coil spring, and may be rotated to release the hooks, when it is desired to pull the forward portion of the fender out at the front of the car, or to push it back into the dotted line position of Fig. 1, it being understood that the coil spring must also be disengaged. To prevent the forward movement of the front portion of the fender, a lock is provided comprising a bar having a horizontal portion 47 adapted to engage the bracket 2, and a vertical portion received in a bearing 48 connected with the straight portion 15 as at 49. When the forward portion of the fender is moved back-

wardly against tension of the spring, a sufficient distance to permit the end of the horizontal portion of the bar to pass the bracket 2, the said bar may be swung into parallelism with the straight portion 15, to permit the fender to move forwardly. The bar is prevented from swinging backwardly by the plate 39 before mentioned.

The platform 1 is provided with bearings 28, behind the bracket 2, and a shaft 29 is journaled in the bearings, the ends of the shaft each having rigid therewith an arm 30 provided with ratchet teeth 31 engaged by the pawl 32, before mentioned.

In operation, the fender being in the position shown in Fig. 1, should the bar 25 strike an obstruction having its center of gravity elevated, the obstruction would be thrown on to the fender. Should, however, the center of gravity be near the ground, the front part of the fender would be elevated thus dropping the rear end thereof (*i. e.* section 3) toward the ground thus bringing the spring arms 23 into position to engage the obstruction after the roller 24 had passed thereover. The rear end of the fender is retained in lowered position by the engagement of the pawl 32 with the ratchet teeth 31.

The platform 1 is provided with hooks 33, 34 one of said hooks being secured to the lower part of the dashboard and the other to the upper part, and a wire netting 35 is arranged between the hooks 33, 34 while a rope netting 36 is connected with the hook 34, and with the arms 24 before mentioned. The nettings 35 and 36 are for the purpose of preventing injury to persons thrown on the fender.

I claim:

1. The combination with hangers under a car platform, of a sectional fender, the rear section comprising side bars pivoted to the hangers, the rear ends of the side bars curving downwardly, cross bars connecting said side bars, curved springs secured to the cross bars and extending forwardly, a shaft journaled on the platform and provided at each end with arms having ratchet teeth, the side bars being provided with pawls for engaging the ratchet teeth, the central section having a slidable connection with the rear section, a spring arranged between the sections, means for limiting the movement of the sections, the front section being hinged to the central section to fold thereon, and means for retaining the front section in substantial alinement with the central section.

2. A fender comprising a rear section having depending curved springs normally elevated above the track, a central section having a slidable connection with the rear section, a spring arranged between the sections,

means for limiting their movement with respect to each other, a front section hinged to the central section and adapted to fold thereon, said fender being mounted to swing on a horizontal axis whereby when the front end is elevated, the curved springs will be moved into contact with the track, and means for locking the fender in such position.

3. A fender comprising a rear section having depending curved springs normally elevated above the track, a central section having a slidable and yielding connection with the rear section, means for limiting the movement of the sections with respect to each other, a front section hinged to the central section and adapted to fold thereon, said fender being mounted to swing on a horizontal axis whereby when the front end is elevated, the curved springs will move into contact with the track, a roller journaled at the free end of the front section, and a curved guard above and in front of the roller.

4. A fender comprising a rear section having depending curved springs normally elevated above the track, a central section having a slidable connection with the rear section, yielding means for retaining the rear and the central section in position with respect to each other, a front section hinged to the central section to fold thereon, means for locking the central and the front section in substantial alinement, said fender being mounted to swing on a horizontal axis whereby when the front end is elevated, the curved springs will be moved into contact with the track, and means for locking the fender in such position.

5. A fender comprising a rear section having depending curved springs normally elevated above the track, a central section having a slidable connection with the rear section, yielding means for retaining the rear and the central section in position with respect to each other, a front section hinged to the central section to fold thereon and means for locking the central and the front sections in substantial alinement.

6. A fender comprising a rear section provided with depending curved springs normally elevated above the track, a central section having a slidable connection with the rear section, means for retaining said sections in alinement, said fender being pivoted on a horizontal axis, whereby when the front is elevated, the rear will be depressed to bring the curved springs into contact with the track, and means for locking the fender in such position.

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Witnesses:

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