No. 850,507. PATENTED APR. 16, 1907.

S. D. WALDON.

PEDAL FOOT REST FOR AUTOMOBILES.

APPLICATION FILED SEPT. 20, 1906.

Fig. 1.

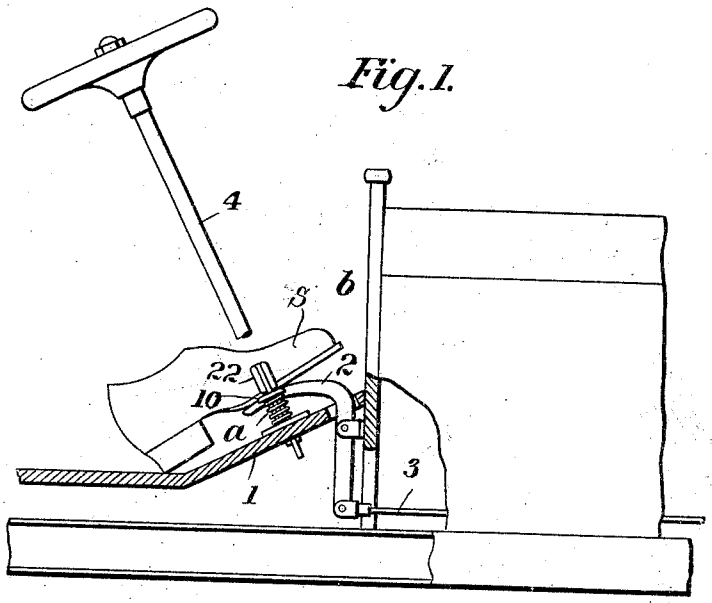


Fig. 2.

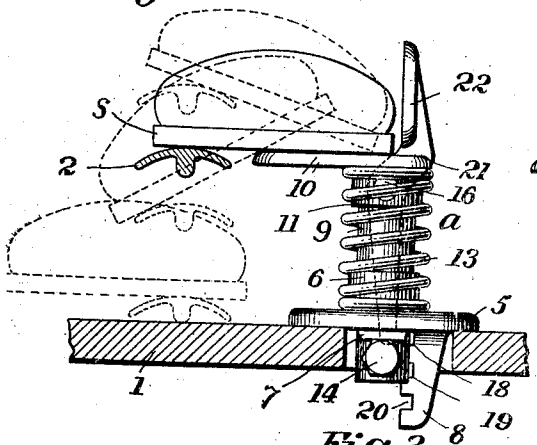


Fig. 4.

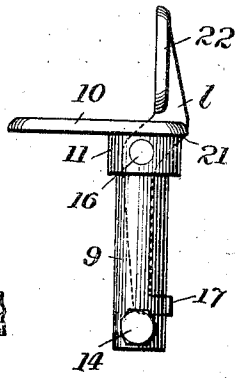


Fig. 6.

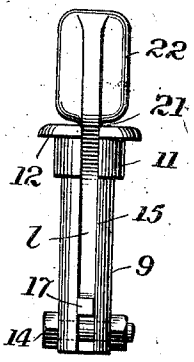


Fig. 3.

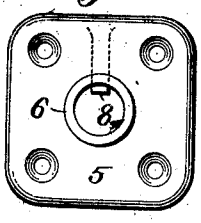


Fig. 5.

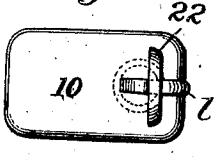
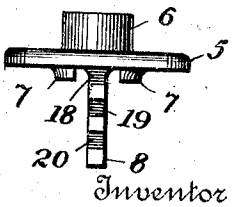


Fig. 7.



Witnesses

J. J. Stinkel

J. J. McCarthy.

Inventor

by S. D. Waldon

Foster Freeman & Watson

Attorneys

UNITED STATES PATENT OFFICE.

SIDNEY D. WALDON, OF DETROIT, MICHIGAN, ASSIGNOR TO PACKARD MOTOR CAR COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF WEST VIRGINIA.

PEDAL FOOT-REST FOR AUTOMOBILES.

No. 850,507. Specification of Letters Patent. Patented April 16, 1907.

Application filed September 20, 1906. Serial No. 335,494.

To all whom it may concern:

Be it known that I SIDNEY D. WALDON, a citizen of the United States, residing at Detroit, Wayne county, State of Michigan, have invented certain new and useful Improvements in Pedal Foot-Rests for Automobiles, of which the following is a specification.

The purpose of this invention is to provide means for relieving the operator of a motor-vehicle from the fatigue which results from holding a motor-controlling pedal partially depressed for long periods of time.

The invention comprises a foot or toe rest arranged adjacent to the pedal, so that the forward part of the operator's foot may be supported while engaging and partially depressing the pedal.

The rest shown in the accompanying drawings is made adjustable, so that the operator's foot may be partially supported thereon and yet engage and hold the pedal in its various positions.

In the accompanying drawings, which illustrate the invention, Figure 1 is a side elevation of the toe-rest and portions of a motor-vehicle, illustrating the location of the rest upon the vehicle. Fig. 2 is a front elevation of the rest, showing also a portion of the pedal and the toe-board of the vehicle. Fig. 3 is a top plan view of the base of the toe-rest. Fig. 4 is a side elevation of the adjustable supporting post and plate and the latch for locking the same. Fig. 5 is a top plan view of the same. Fig. 6 is a side elevation of the same looking from the right of Fig. 4, and Fig. 7 is a side elevation of the base-plate with attached rack.

In Figs. 1 and 2 of the drawings, *a* indicates the foot-rest, which is arranged upon the footboard 1 of a motor-vehicle adjacent to the accelerator-pedal 2, which latter is connected to a rod 3, extending to the speed or motor controlling means of a motor-vehicle.

In Fig. 1, *b* indicates sufficient of the frame of the vehicle to illustrate the location of the foot or toe rest thereon. Preferably the foot or toe rest is arranged adjacent to the steering-stem 4.

In Figs. 2 to 7, inclusive, of the drawings, 5 indicates a base-plate by means of which the device is secured to the toe-board of the vehicle. This base-plate, as shown, has on its upper side a central sleeve 6, the opening in which extends also through the plate, and on its lower side a pair of stops 7 and a depending rack 8. The sleeve 6 forms a guideway for an adjustable post or standard 9, having at its upper end, either integral therewith or suitably affixed thereto, a foot piece or support 10, which projects at right angles to the post toward the accelerator-pedal. As shown, the post has a boss 11 at its upper end of the same diameter as the external diameter of the sleeve 6, and the plate 10 slightly overhangs the post, so as to afford a shoulder 12 at the upper end of the post. Between this shoulder and the base-plate 5 is arranged a helical spring 13, which normally presses the post and attached plate 10 upward into the position shown in Fig. 2. A bolt 14, passing diametrically through the lower end of the post, forms a stop which abuts against the stops 7 and limits the upward movement of the post. The side of the post opposite the laterally-extending foot piece or support 10 has a deep slot or groove 15 extending from end to end of the post and through the foot-piece. Within this groove is arranged a latch or dog 1, which is pivoted upon a pin 16, extending through the post, near the upper end of the latter. The part of the latch below the pivot-pin has at its lower end a right-angled hook or tooth 17, adapted to engage and interlock with the notches 18 19 20 in the rack. The part of the latch immediately above the pivot-pin extends at an obtuse angle to the lower part of the latch, as shown, a cam-surface 21 being thus provided on the latch, which surface extends to the outer edge of the slot in the boss 11 when the tooth 17 is in engagement with one of the notches in the rack. A tongue 22 extends upwardly above the cam portion of the latch to a convenient distance, so that it may be engaged by the side of the operator's foot when the latter is resting upon both the foot-piece 10 and the pedal 2. Normally the spring presses the post 9 upward, and the hook or tooth on the latch is pressed into locking engagement with one of the notches in the rack 8 by the engagement of the upper coil of the spring with the cam-surface 19 on the latch.

The foot-piece 10, as indicated in Fig. 2, is only about one-half as long as the width of the sole of the operator's shoe, (indicated at *s*),

and the device is arranged close enough to the accelerator-pedal so that when the foot of the operator is placed upon the foot-piece adjacent to the latch it will also extend over the pedal. The uppermost position of the foot-piece in practice is arranged at some point between the extreme positions of the pedal, preferably on a level with the position in which the throttle would be held by the operator to give a desired normal speed to the vehicle, so that when the pedal is pressed into this position the operator's foot will rest on the foot-piece and no muscular effort will be required to hold the pedal in this position. As indicated in dotted lines in Fig. 2, a considerable range of movement of the pedal is then possible for temporary decrease or increase in speed by simply rocking the foot one way or the other upon the foot-piece. If it is desired to throw the throttle or mixture valve wide open without adjusting the foot-piece, the operator's foot may be slid off of the end of the foot-piece and the pedal depressed to its lowermost position, as indicated by the lowermost dotted lines in Fig. 2.

From an inspection of Fig. 2 it will be apparent that a foot-rest adjacent to the pedal would relieve the strain on the operator's muscles even if the foot-rest were not adjustable. The rest is, however, made adjustable in height, so that when the foot rests naturally on the foot-piece the pedal will be held at the same height as the foot-piece, and thus the motor-controlling valve operated by the pedal may be held in any desired position permanently without effort on the part of the operator, or the pedal may be temporarily adjusted by rocking the foot, as illustrated in Fig. 2 or the speed may be permanently increased or decreased by adjusting the height of the foot-piece. In order to effect this vertical adjustment of the foot-piece, the operator merely moves his foot laterally against the tongue 22 of the latch without removing it from the foot-piece or the pedal, and thereby releases the tooth of the latch from the rack. By then pressing the foot piece or support downward or by relieving the pressure on the foot-piece the latter may be lowered or raised, as will be evident, and when the lateral pressure of the foot against the tongue 22 is relieved the latch is moved by the pressure of the spring on the cam-surface of the latch until the tooth on the latch engages the rack, and thus locks the foot piece or support in the desired position.

What is claimed is--

1. The combination, in a motor-vehicle, with a pedal, and with the footboard of a foot-support independent of and adjacent to the pedal, said support and pedal being above the footboard and arranged to be simultaneously engaged by the foot of the operator.

2. The combination, in a motor-vehicle, with a pedal, of an adjustable foot-support, independent of and adjacent to the pedal, said support and pedal being arranged to be simultaneously engaged by the foot of the operator.

3. The combination, in a motor-vehicle, with a pedal, of an adjustable foot-support independent of and adjacent to the pedal, said support and pedal being arranged to be simultaneously engaged by the foot of the operator, and means for locking said foot-support in any position of adjustment.

4. The combination with a motor-controlling pedal, of a vertically-adjustable foot-support independent of and adjacent to the pedal, said support and pedal being arranged to be simultaneously engaged by the foot of the operator, and means for locking said foot-support in any position of adjustment.

5. The combination with a motor-controlling pedal, of a foot-rest comprising an adjustable support independent of and adjacent to the pedal, and locking means for said support, said pedal, support and locking means being so arranged that they may be simultaneously engaged by the foot of the operator.

6. A foot-rest comprising a support, adapted to be engaged and depressed by the foot, a spring for moving said support to an upper position, and means for locking said support when depressed, in combination with a pedal independent of and adjacent to said foot-rest.

7. The combination in a motor-vehicle, with the pedal, and with the footboard of a foot-support above the footboard and at one side of the pedal, and independent thereof, said pedal and foot-support being so related that the pedal may be operated by a movement of the foot without removing it from the support.

8. A foot-rest comprising a support, adapted to be moved in a downward direction by foot-pressure, a spring adapted to move said support in an upward direction, and locking means for said support, said means being movable by lateral pressure of the foot to release the support.

9. A foot-rest comprising a support, adapted to be moved in a downward direction by foot-pressure, a spring adapted to move said support in an upward direction, and a latch movable with the support and adapted to lock the support against movement, said latch having a tongue adjacent to the support adapted to be engaged by the operator's foot.

10. An adjustable foot-rest comprising a base having a sleeve or guideway, a rack, a longitudinally-grooved post movable within said guideway, a latch arranged within said groove, said latch having a tongue projecting above the post and having a tooth normally engaging said rack, and a spring interposed between the base and a shoulder on the post.

11. An adjustable foot-rest comprising a

base having a suitable guideway, a rack secured to said base, a slotted post movable within the guideway and having a shoulder near one end, a coiled spring surrounding the post and interposed between said shoulder and base, a latch pivotally arranged within the slot in the post and having a cam-surface adapted to be engaged by the spring, said latch having means at one end for engaging the rack and a tongue or part at the other end adapted to be engaged by the foot of the operator.

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

SIDNEY D. WALDON.

Witnesses:

RUSSELL HUFF,

ALLEN LOOMIS.