

Feb. 22, 1927.

1,618,652

F. C. GRANT
ACCELERATOR PEDAL
Filed Jan. 6, 1927

Fig. 1.

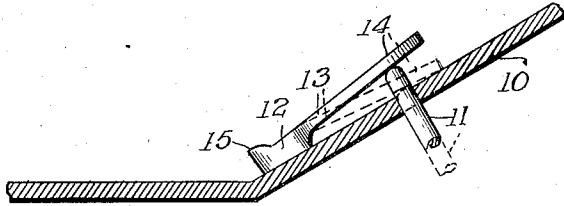


Fig. 2.

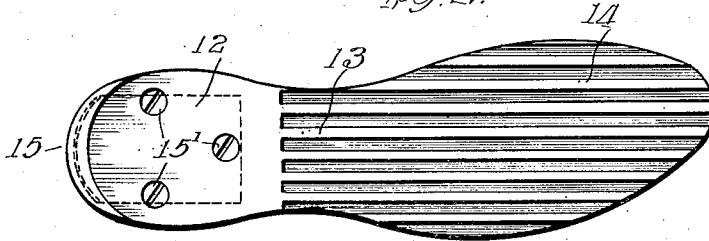


Fig. 3.

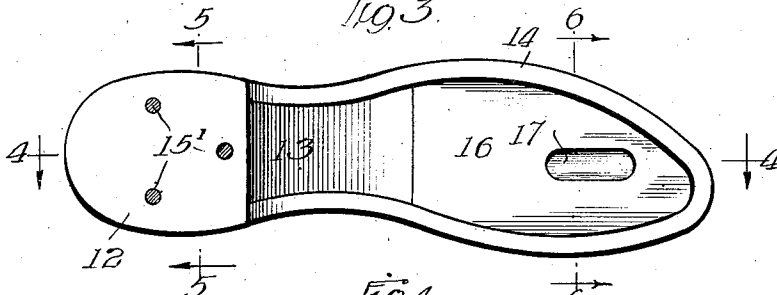


Fig. 4.

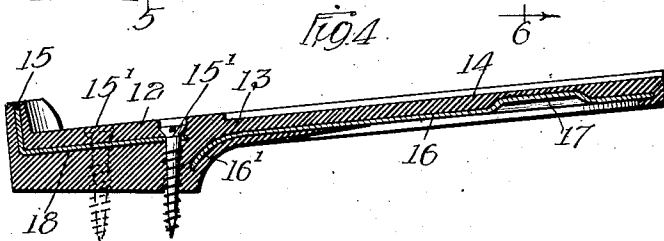


Fig. 5.

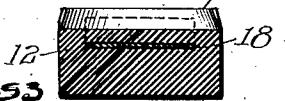


Fig. 6.



Witness

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UNITED STATES PATENT OFFICE.

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ACCELERATOR PEDAL.

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This invention is in the nature of an accessory for automobiles, and relates more particularly to an improved pedal or pad to facilitate the manipulation of the accelerator rod or knob by the foot of the operator.

Various devices of this character have heretofore been proposed, most of which, so far as I am aware, contemplate the employment of a rigid block or pad hinged at one end or between its ends to the floor of the car and at its forward end overlying the accelerator rod or knob.

The principal object of the present invention is to provide a very simple, cheap and practical accelerator pad or pedal that may be easily applied to the floor board of any car to form a rest for the entire foot of the driver, that will require for its manipulation only a downward pressure of the sole of the foot, and that, when the downward pressure is intermitted, will instantly spring back to raised or idle position. Another object is to provide a foot pedal that will avoid the necessity of employing a hinge either in the pedal itself or between the pedal and the floor, and will possess sufficient inherent flexibility to accommodate the slight rocking movement of the forward or sole portion of the pedal in use. A further object of the invention is to provide an accelerator pad or pedal that will securely hold the foot of the operator in proper position thereon without liability of slipping either backwardly or sidewise.

Other objects and attendant advantages of the invention will be apparent to persons skilled in the art as the same becomes better understood by reference to the following detailed description, taken in connection with the accompanying drawing wherein I have illustrated one practical and approved embodiment of the invention, and in which—

Fig. 1 is a side elevation of my improved accelerator pedal, with the floor board to which it is attached appearing in section; the pedal appearing in idle position in full lines and in operating position in dotted lines;

Fig. 2 is a top plan view of the pedal;

Fig. 3 is a bottom plan view of the same;

Fig. 4 is a longitudinal section on the line 4—4 of Fig. 3;

Figs. 5 and 6 are transverse sections on the lines 5—5 and 6—6 respectively of Fig. 3.

Referring to the drawing, 10 designates the usual upwardly and forwardly slanting

portion of the floor board, through a hole in which projects the accelerator rod 11. My improved accelerator pedal consists preferably of a unitary pad of flexible elastic material, such as rubber, having the outline form of the human foot, and comprising a relatively thick heel portion 12, a relatively thin instep portion 13, and a sole portion 14 continuous with and of substantially the same thickness as the instep portion 13. The heel portion 12 is designed to be rigidly attached to the floor board 10, as by screws 15' passed therethrough with their heads countersunk in the upper surface of the heel, and it will be observed that the upper and lower surfaces of the heel 12 are slightly divergent from the rear to the forward portion of the heel, and that the upper surfaces of the instep and sole portions are substantially in the same plane with the upper surface of the heel portion, so that, when the device is attached to the floor board, the sole portion 14 is inclined upwardly relatively to the floor board 10 sufficiently to overlie the upper end of the accelerator rod 11 when the latter is in raised position. The heel member 12 is preferably equipped at its rear end with an upstanding flange 15 which forms a stop for the shoe heel of the driver, preventing the foot from slipping rearwardly off the pedal.

The device as thus far described is practical and efficient for the stated purposes of the invention; but its durability may be enhanced by embedding in the instep 13 and sole 14 a thin metal plate 16, the forward portion of which is formed with an indented recess 17 to accommodate the upper end of the accelerator rod 11. The rear end of the plate 16 is preferably bent downwardly and extended into the lower front portion of the heel, as shown at 16' in Fig. 4; so that the flexure occurs substantially at the junction of the instep with the heel, as indicated in Fig. 1. The durability of the pad at the instep is thus considerably increased. Preferably I also mold in the heel 12 and its flange 15 an L-shaped metal strip 18, the vertical limb of which extends upwardly into the flange 15 and reinforces the latter against any tendency to break off at its base. The reinforcing strip 18 may be formed with suitable apertures for the passage therethrough of the fastening screws 15. The upper surfaces of the instep and sole portions are preferably longitudinally

ribbed or corrugated, as shown in Figs. 2 and 6, to check side slip of the sole of the shoe thereon, but no novelty is claimed for this feature.

6 From the foregoing it will be seen that the device of my invention provides, in its inherent elasticity, for the flexing of the pad necessary for the manipulation of the accelerator, and does away with the necessity of hinged joints, in which respect it represents structural simplicity and economy. It is also capable of being manufactured at low cost, and can be applied with the use of an ordinary screwdriver.

15 I claim—

1. An accelerator pedal for automobiles, comprising a transversely flexible pad consisting of a heel portion adapted to be rigidly fastened to the floor of the car, an instep portion, and a sole portion adapted to overlie the accelerator rod.

2. An accelerator pedal for automobiles, comprising a pad formed with a heel portion adapted to be rigidly fastened to the floor of the car and a sole portion adapted to overlie the accelerator rod and connected to said heel portion by an instep portion adapted to be flexed at its junction with the heel portion.

30 3. An accelerator pedal for automobiles, comprising a rubber pad formed with a relatively thick heel portion adapted to be rigidly fastened to the floor of the car, a relatively thin sole portion adapted to overlie the accelerator rod, and an instep portion adapted to be flexed at its junction with the heel portion.

4. An accelerator pedal for automobiles,

comprising a rubber pad formed with a relatively thick heel portion having an upstanding flange at its rear end and adapted to be rigidly fastened to the floor of the car, an instep portion of reduced thickness relatively to said heel portion and bendable relatively to said heel portion, and a sole portion of substantially the thickness of said instep portion adapted to overlie the accelerator rod.

5. An accelerator pedal for automobiles, comprising a pad having the general outline form of the human foot and formed with a relatively thick heel portion adapted to be rigidly fastened to the floor of the car, an instep portion bendable relatively to said heel portion, and a relatively thin sole portion having embedded therein a metal plate adapted to overlie and bear upon the accelerator rod.

6. An accelerator pedal for automobiles, comprising a rubber pad having the general outline form of the human foot and formed with a relatively thick heel portion having an upstanding flange at its rear end and adapted to be rigidly fastened to the floor of the car, an instep portion of reduced thickness relatively to said heel portion, and a sole portion of substantially the same thickness as said instep portion adapted to overlie the accelerator rod; said heel portion and its flange having a metal reinforcement embedded therein, and said instep and sole portions having embedded therein a metal plate formed with an indented recess adapted to engage with the upper end of the accelerator rod.

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