Jan. 3, 1933. J. F. FISHER 1,893,075

ACCELERATOR PEDAL FOR AUTOMOBILES

Filed Oct. 13, 1931

Fig. 1.

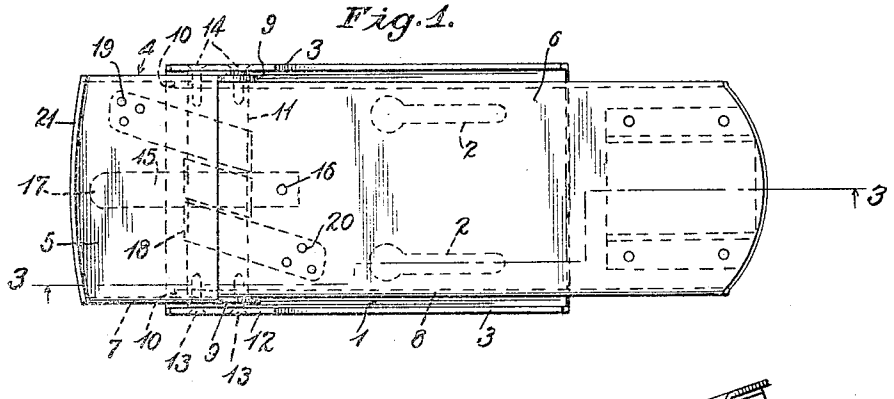


Fig. 2.

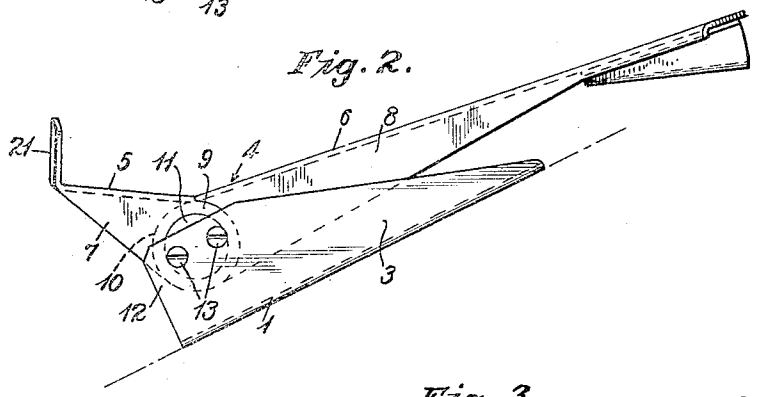


Fig. 3.

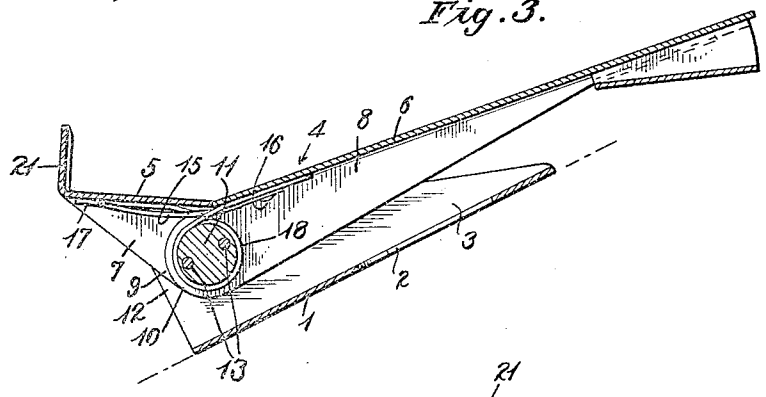
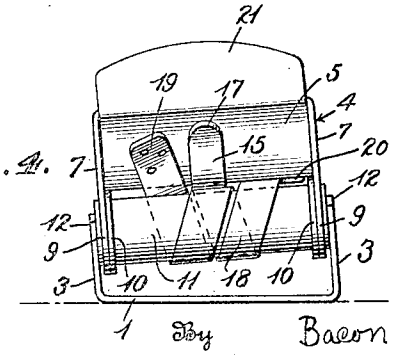


Fig. 4.



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UNITED STATES PATENT OFFICE

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ACCELERATOR PEDAL FOR AUTOMOBILES

Application filed October 13, 1931. Serial No. 568,609.

This invention relates to accelerator pedals for automobiles.

An object of the invention is to provide a foot pedal with frictional means for holding the pedal against rocking action during the normal operation of the machine when no effort is made to accelerate or decelerate.

More specifically, the invention comprehends a sectional pedal plate provided with a friction device which comes into play when the weight of the operator's foot is resting upon the pedal to prevent rocking action thereof, which friction device is automatically released when the toe is pressed down, thereby permitting the pedal to turn forwardly and backwardly as desired.

Numerous objects of the invention will be apparent to those skilled in the art from the reading of the specification, in conjunction with the drawing attached hereto and forming a part hereof, in which:

Fig. 1 is a top plan view;

Fig. 2 is a side elevation;

Fig. 3 is a sectional view on line 3—3 of Fig. 1; and

Fig. 4 is a detail view of the braking mechanism.

Referring now particularly to the drawing, wherein like reference characters represent corresponding parts, 1 is a floor plate secured to the automobile floor board in any desirable manner, as by key-stone slots 2, engaging suitable fastening devices. This floor plate is provided with upwardly extending wings 3 for the purpose hereinafter described. 4 represents the pedal generally. This pedal is composed of two channel sections 5 and 6 having downwardly extending wings 7 and 8. These wings are provided with ears 9 and 10 having apertures for receiving the extremities of the brake drum 11 and adapted to rock thereabout. The floor plate 1 is also provided with ears 12 for receiving screws 13, 14 which engage the ends of the brake drum to prevent rotary movement of the brake drum.

The floor pedal sections are therefore relatively movable to a limited extent. This relative pivotal movement of the sections, however, is resiliently opposed by the spring 15, which is fixed at 16 and is bowed, as shown, with a free end 17 engaging the under surface of the heel section 5.

Positioned within the under side of the accelerator sections is a coil friction strap 18, one end thereof being riveted or otherwise secured as at 19 to the heel section, and the other end similarly secured to the toe section as at 20. The convolutions of the friction strap wrap around the brake drum 11 as shown.

During the operation of the device, when the driver's foot is on the pedal, the weight thereof would cause the sections to slightly move apart, opposed by the spring 15 and this action will pull the ends of the friction strap away from each other, which in turn will tighten the friction band around the drum so that the pedal is effectively prevented from inadvertent rocking action when the desirable speed has been reached. However, as will be understood, if the operator desires to increase the speed of the car, his toe is pressed down against the toe section and the weight of the heel against the heel section is lessened, which will cause the sections, because of the tendency of the spring 15, to resume their normal position, which in turn will release the friction strap and permit the pedal, as a unit, to rotate in either direction without frictional interference of the friction strap with the drum. It will be apparent that the pedal cannot become locked and hold the accelerator open because the band is released when the foot is removed, and the toe of the pedal is forced up instantly by the spring of the accelerator. It will be observed that the heel section has an upstanding lift 21 for facilitating the rocking action of the pedal.

While I have herein disclosed a preferred embodiment of my invention, yet I do not desire my claims to be limited to details of construction, as I am fully cognizant of the fact that various changes may be made in constructing a physical expression of my invention without departing from the invention as defined by the following claims.

What I claim is:

1. An automobile accelerator comprising

a rockable pedal having a heel and toe section respectively, a friction band secured to said sections, a friction drum around which the band is wound, said sections being movable away from each other by the weight of the operator's foot during normal driving operations to thereby tension said friction band to resist the turning action of the pedal.

2. An automobile accelerator pedal comprising a floor plate, a pedal, a plurality of sections composing said pedal, said sections being relatively movable away from each other by the weight of the operator's foot, and clamping means actuated by the separation of the sections for frictionally resisting movement of the pedal.

3. An automobile accelerator comprising a floor plate, a friction drum fixedly secured thereto, a pedal, said pedal being composed of a pair of relatively movable sections, said sections being pivotally secured with respect to the floor plate, a friction band having one end secured to one of said sections and the adjacent end secured to the other of the sections and having its intermediate portion wrapped around said friction drum, said sections being movable away from each other by the operator's foot to thereby tighten the friction band's engagement with the drum and to thereby resist movement of the pedal with respect to the floor plate during normal driving conditions.

4. An automobile accelerator comprising a floor plate, a pedal rockably associated therewith, said pedal comprising a heel section and a toe section angularly disposed with respect to each other, a friction band secured to the toe and heel sections respectively, a friction drum provided by the floor plate, said friction band having convolutions extending around said drum, and means for permitting relative movement of the toe and heel sections when the heel and toe respectively of the driver is placed upon said pedal, thereby tightening said friction band around the drum and resisting turning action of the pedal under normal driving conditions.

5. In an automobile accelerator, a rockably mounted pedal, said pedal having relatively movable sections angularly disposed with respect to each other, a friction device, said friction device being operable to resist rocking action when the weight of the driver's foot is distributed between the sections whereby rocking action of the pedal is resisted, resilient means for returning the sections to the normal positions when the weight of the operator's foot is shifted to either of said sections for acceleration or deceleration purposes.

In testimony whereof I affix my signature.

JOHN F. FISHER.