July 12, 1938. J. P. GIBBONS, JR., ET AL 2,123,299

ACCELERATOR PEDAL FOR MOTOR VEHICLES

Filed March 26, 1937

Fig. 1.

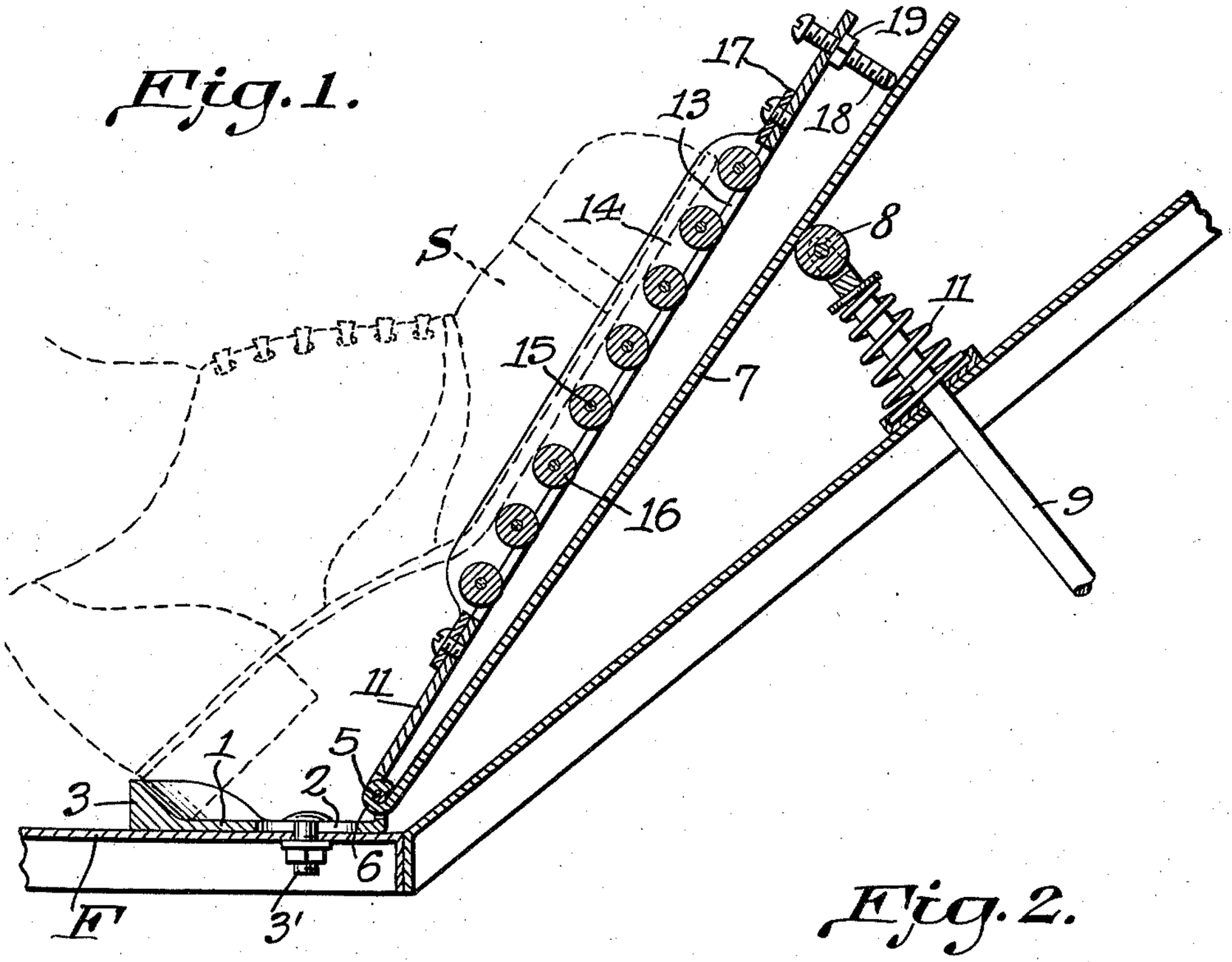


Fig. 2.

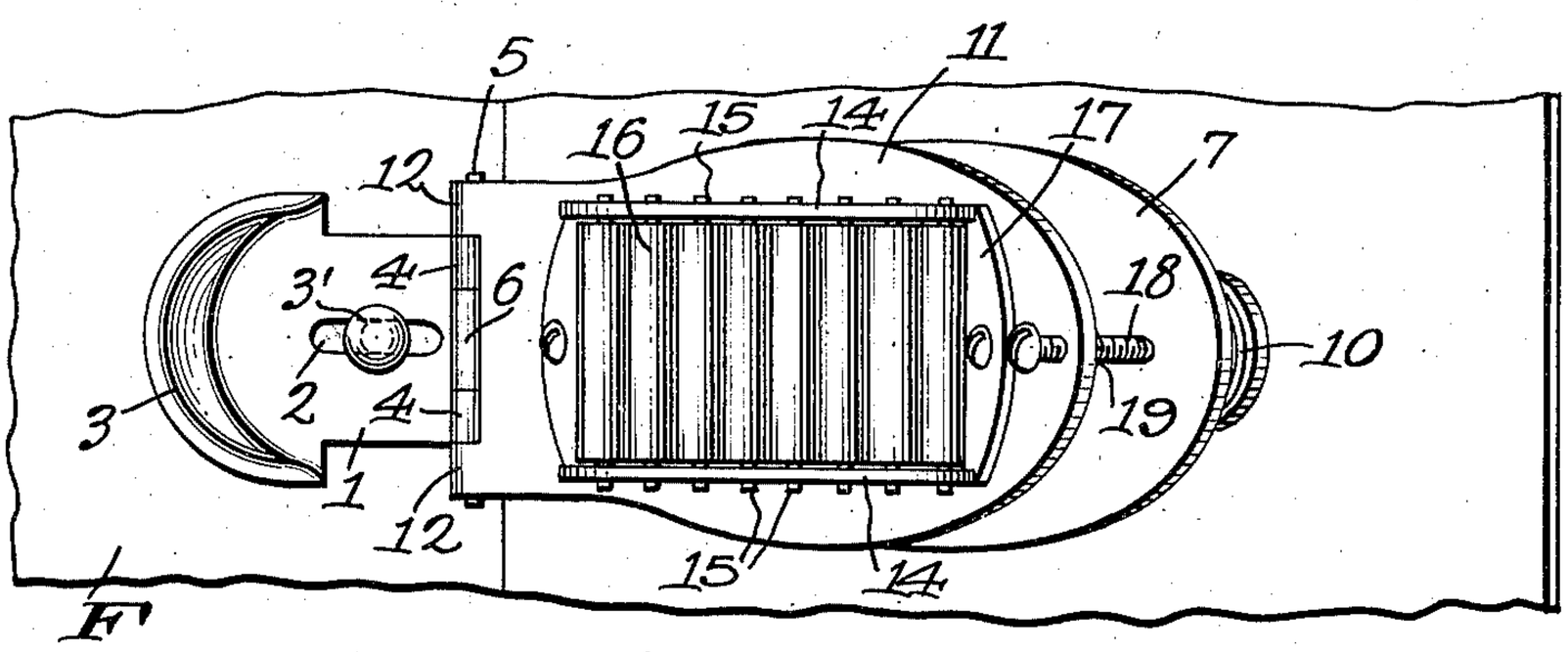
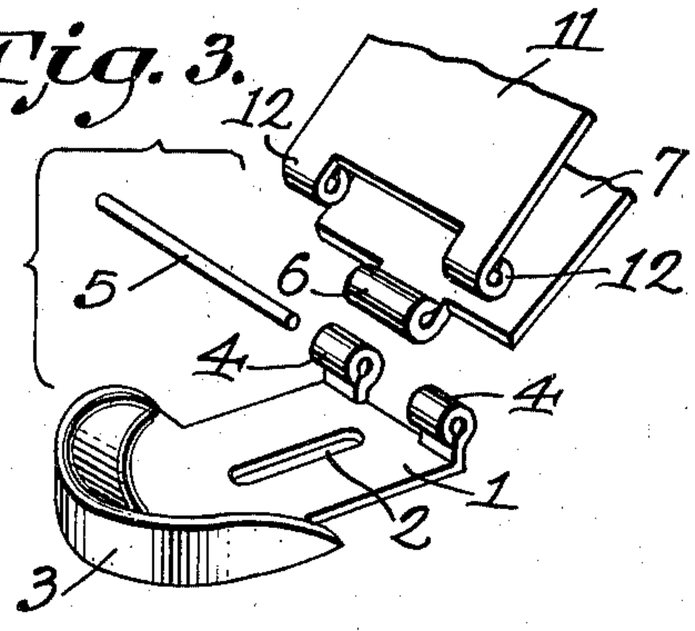


Fig. 3.



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ACCELERATOR PEDAL FOR MOTOR VEHICLES

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Application March 26, 1937, Serial No. 133,278

4 Claims. (Cl. 74—513)

This invention relates to a pedal designed primarily for use in actuating the accelerator of a motor vehicle, one of the objects being to provide a simple and compact device of this character which can be placed on the market as a complete article of manufacture and which, when in the proper position, can be actuated with the minimum amount of friction on the foot of the user.

A further object is to provide a device of this character which can be adjusted readily to position for most convenient operation by the user.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In the accompanying drawing the preferred form of the invention has been shown.

In said drawing

Figure 1 is a vertical longitudinal section through the device in position for use.

Figure 2 is a plan view thereof.

Figure 3 is a detail view of a portion thereof, the parts being separated.

Referring to the figures by characters of reference 1 designates an attaching plate or base formed with a longitudinal slot 2 adapted to receive a bolt 3′ or the like whereby it can be secured adjustably to the floor F of a motor vehicle. At the back of this plate is a heel plate or rest 3 while at the forward end thereof are upstanding ears 4 constituting hinge members adapted to receive a pivot pin 5 or the like. This pin is also adapted to extend through an ear 6 formed at one end of the pusher plate 7 of the pedal, this plate being imperforate and positioned to bear upon a roller 8 mounted on the upper end of a push rod 9. A spring 10 is provided as ordinarily for holding the rod 9 in elevated position so that the presser plate 7 is likewise held raised under normal conditions, as shown in Figure 1.

A foot plate 11 is provided at one end with ears 12 pivotally mounted on the pin 5 and straddling ears 4 and ears 6. This foot plate is formed with a longitudinal opening 13 at the sides of which are upstanding parallel flanges 14 in which are journalled pins 15 extending from the ends of anti-friction rollers 16. The distance between the flanges is sufficient to receive the sole of a shoe S. These flanges can be made integral with the foot plate 11 or, as shown in the drawing, they can be made a part of a top plate 17 bolted or otherwise fastened to the foot plate 11.

An adjusting screw 18 is carried by the foot plate 11 and bears upon the pusher plate 7, this adjusting screw being provided with a lock nut 19 so that it can be held against rotation after adjustment.

In practice the base plate 1 is adjusted to position where the heel of the shoe worn by the operator can rest easily thereon and thrust backwardly against the heel plate or rest 3. The pusher plate 7 will rest on and be supported by the yieldingly supported roller 8. The top plate 17 is then adjusted angularly by means of screw 18 until it has been brought to a position where it can be comfortably engaged by the sole of the shoe S. Thus when it is desired to operate the rod 9, the user need only swing the foot forwardly and downwardly. This will cause the sole of the shoe to exert a wiping downward action along the rollers 16 and at the same time pusher plate 7 will be swung downwardly so as to thrust through roller 8 against rod 9. Obviously the entire operation will take place with minimum friction and the actuation thus will be effected with minimum effort.

The entire device can be readily installed as will be apparent, the only operation necessary being to bolt the plate 1 to the floor F after it has been placed in proper position for use. Thereafter the parts can be adjusted readily.

What is claimed is:

1. As an article of manufacture an accelerator pedal including an attaching plate having a heel rest, a pusher plate hingedly connected to one end of the attaching plate, a foot plate hingedly connected to the attaching plate and the pusher plate, and anti-friction devices carried by the foot plate.

2. As an article of manufacture an accelerator pedal including an attaching plate having a heel rest, means for adjustably connecting said plate to a supporting structure, a pusher plate and a foot plate hingedly connected to each other and to the attaching plate, and anti-friction means carried by the foot plate for engagement by the foot of the user.

3. As an article of manufacture an accelerator pedal including an attaching plate having a heel rest, a pusher plate hingedly connected to one end thereof, a foot plate hingedly connected to said end and overlying the pusher plate, means for adjusting the foot plate angularly relative to the pusher plate, and anti-friction means carried by the foot plate.

4. As an article of manufacture an accelerator pedal including an attaching plate having a heel rest, a pusher plate hingedly connected to one end thereof, an apertured foot plate hingedly connected to said end and overlying the pusher plate, means for adjusting the foot plate angularly relative to the pusher plate, bearing elements at the sides of the aperture, and rollers supported by said bearing elements and across the aperture for engagement by the foot of the user.

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