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PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

Anti-theft Device for Road Vehicles

1, KITTY ZAIDENER, a British subject, 36 Hamilton Court, Maida Vale, London, W.9. formerly of 414 The White House, Albany Street, London, N.W.1., do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to an anti-theft device for a road vehicle having a steering wheel and at least one control pedal, and is an improvement on or a modification of the invention described and defined in my Patent No. 1,039,980.

It is an object of the present invention to provide a reliable anti-theft device which is of simple and inexpensive construction and is easy to apply and convenient to store.

According to the present invention there is provided an anti-theft device for a road vehicle having a steering wheel and at least one control pedal, the device comprising a first elongated part formed with an axially extending series of recesses, a second elongated part in telescopic relationship with the first part, the free end of one of said parts being arranged to be secured to the steering wheel of the vehicle and the free end of the other of said parts being arranged to be secured to said control pedal, a spring-loaded detent mounted on said second part to engage said recesses and so promote telescopic movement between said parts in a series of steps through a series of positions, and locking means for locking said detent in engagement with one of said recesses to secure the telescopic parts in one of said positions to prevent free movement of the steering wheel and the control pedal.

Preferably, said first part comprises a spigot part and said second part comprises a socket part, the recesses being formed in the spigot part and the locking means being mounted on the socket part at or near the mouth thereof.

The device has a wide range of application and can be used with vehicles having automatic or semi-automatic transmission. Suitably, the lower end of the rod is arranged to hook round the accelerator pedal; however, this lower end may be arranged to hook round the brake pedal or the clutch pedal (if any).

An embodiment of the invention will now be described, by way of example, with reference to the accompanying drawing in which:—

Fig. 1 is a perspective view showing the anti-theft device in use; and,

Fig. 2 is a sectional view showing details of the locking arrangement.

Referring to the drawings, the anti-theft device includes a telescopic member 10 which comprises an elongated square-section tube 11 and a spigot member in the form of a square-section rod 12. A hook 13 is secured to the free end of the tube. The spigot member comprises an hook 14 and a straight length which is formed along one face with a series of closely-spaced recesses 15, and is a sliding fit in the tube 11.

A key-operated lock 16 is secured to the tube near the mouth of the tube, the lock being arranged in a tamper-proof casing 17 which is firmly secured to the tube, the casing have legs 17A which straddle the tube and are secured at their ends to plate 18.

In the lock casing, a steel ball 19 is urged into engagement with said recesses 15 by a centrally-arranged short helical compression spring 20, the ball being movable in aligned openings in the tube and in a plate 21 of the lock casing. Plate 21 is fixed firmly to square tube 11 so as to resist the sliding of casing 17 on square tube 11 when held on by plate 18. A washer 22 is interposed between the spring and the ball 19. The ball is positioned towards the lower end of the casing 17 and so the washer occupies an angled position.

A rotary cam in the form of a short helical

[Price 4s. 6d.]

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member 23 is connected to key-operated rotary mechanism 24 of the lock by a bolt 25. The helical member is centrally arranged, within the coils of the spring 20, and on being appropriately turned by the lock mechanism engages the washer 22 to hold the ball in locking engagement with a selected recess (15A).

In use of the device as shown in Fig. 1, the hook 13 is hooked round a control pedal, for example accelerator 26. The hook 14 is then hooked round the rim or a spoke of steering wheel 27 and the rod is then telescoped into the tube as far as possible, the telescoping movement being stopped by the hook yokes abutting the control pedal and the wheel spoke.

During telescoping movement of the device, the lock is in the unlocked position and the cam faces the ball 19 which acts as a detent movable, against the action of spring 20, into and out of the recess 15. The spring loaded ball thus promotes movement in a series of steps which provides that, when the rod is pushed fully home, or within say $\frac{1}{4}$ inch from this position, the ball is in engagement with one of the recesses.

A key is then applied to turn the lock-mechanism and thus the helical member 23 turns, through say 180 degrees, to act as a cam with free end part 23A of the helical member holding the ball in locking engagement with its aligned recess. In this position, relative movement between the tube and the rod is prevented by the shear resistance of the ball 19. With the telescopic parts of the device locked together in their positions of minimum length, free movement of the steering wheel and the clutch pedal is prevented.

Removal of the device is effected by unlocking the lock and drawing out the rod 12. Complete withdrawal may be prevented by the ball entering a shaped end notch (not shown) as described in my Patent No. 1,039,980.

It will be appreciated that the device can be positioned and removed within a few seconds and that after removal, the device can be fully telescoped and can be stored, for example under the driver's seat of the vehicle.

WHAT I CLAIM IS:—

1. An anti-theft device for a road vehicle having a steering wheel and at least one control pedal, the device comprising a first elongated part formed with an axially extending

series of recesses, a second elongated part in telescopic relationship with the first part, the free end of one of said parts being arranged to be secured to the steering wheel of the vehicle and the free end of the other of said parts being arranged to be secured to said control pedal, a spring-loaded detent mounted on said second part to engage said recesses and so promote telescopic movement between said parts in a series of steps through a series of positions, and locking means for locking said detent in engagement with one of said recesses to secure the telescopic parts in one of said positions to prevent free movement of the steering wheel and the control pedal.

2. An anti-theft device according to claim 1, in which said first part comprises a spigot part and said second part comprises a socket part, said recesses being formed in the spigot part, and the locking means being mounted on the socket part at or near the mouth thereof (remote from said free end).

3. An anti-theft device according to claim 1 or claim 2, in which said locking means comprise a cam surface arranged to move said detent into locking engagement with one of said recesses.

4. An anti-theft device according to claim 3, in which said detent is loaded by a short helical spring arranged around said cam surface.

5. An anti-theft device according to any preceding claim, in which said detent comprises a rigid ball.

6. An anti-theft device according to any preceding claim, in which said first part comprises an elongated rod, said second part comprises an elongated tube, said locking means are mounted on the tube, and an opening is provided in the tube wall to accommodate said detent.

7. An anti-theft device according to claim 6, in which said rod and said tube are of square section.

8. An anti-theft device for a road vehicle having a steering wheel and at least one control pedal, the device being constructed, arranged and adapted to operate substantially as herein before described with reference to the accompanying drawing.

GEE & CO.,

Chartered Patent Agents,
51/52 Chancery Lane, London, W.C.2.

and
22 Whitefriargate, Hull, Yorks.
Agents for the Applicant.

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Removal of the device is effected by unlocking the lock and drawing out the rod 12. Complete withdrawal may be prevented by the ball entering a shaped end notch (not shown) as described in my Patent No. 1,039,980.

It will be appreciated that the device can be positioned and removed within a few seconds and that after removal, the device can be fully telescoped and can be stored, for example under the driver's seat of the vehicle.

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series of recesses, a second elongated part in telescopic relationship with the first part, the free end of one of said parts being arranged to be secured to the steering wheel of the vehicle and the free end of the other of said parts being arranged to be secured to said control pedal, a spring-loaded detent mounted on said second part to engage said recesses and so promote telescopic movement between said parts in a series of steps through a series of positions, and locking means for locking said detent in engagement with one of said recesses to secure the telescopic parts in one of said positions to prevent free movement of the steering wheel and the control pedal.

2. An anti-theft device according to claim 1, in which said first part comprises a spigot part and said second part comprises a socket part, said recesses being formed in the spigot part, and the locking means being mounted on the socket part at or near the mouth thereof (remote from said free end).

3. An anti-theft device according to claim 1 or claim 2, in which said locking means comprise a cam surface arranged to move said detent into locking engagement with one of said recesses.

4. An anti-theft device according to claim 3, in which said detent is loaded by a short helical spring arranged around said cam surface.

5. An anti-theft device according to any preceding claim, in which said detent comprises a rigid ball.

6. An anti-theft device according to any preceding claim, in which said first part comprises an elongated rod, said second part comprises an elongated tube, said locking means are mounted on the tube, and an opening is provided in the tube wall to accommodate said detent.

7. An anti-theft device according to claim 6, in which said rod and said tube are of square section.

8. An anti-theft device for a road vehicle having a steering wheel and at least one control pedal, the device being constructed, arranged and adapted to operate substantially as herein before described with reference to the accompanying drawing.

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