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DOOR HANDLE OPERATING MECHANISM

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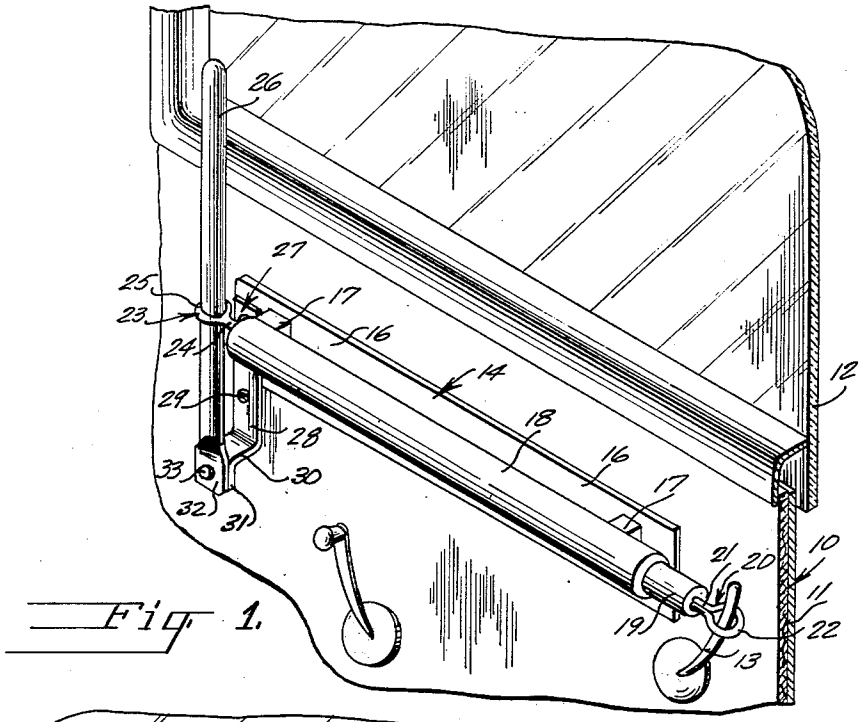


Fig. 1.

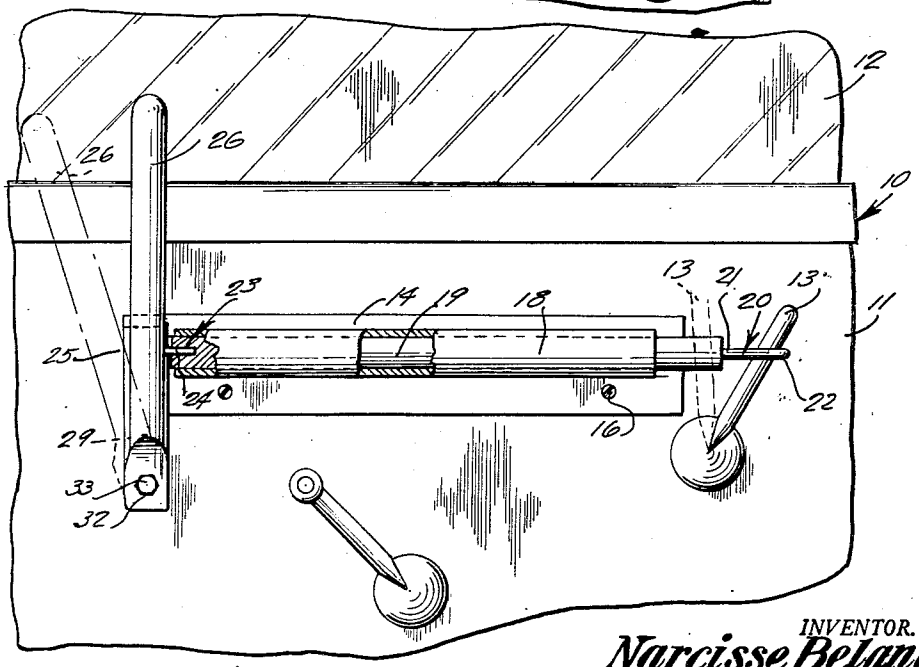


Fig. 2.

INVENTOR.
Narcisse Belanger
BY
Victor J. Evans & Co
ATTORNEYS

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DOOR HANDLE OPERATING MECHANISM

Narcisse Belanger, Detroit, Mich.

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3 Claims. (Cl. 74—479)

This invention relates to a door handle operating mechanism, and more particularly to a door handle operating mechanism for use in a taxicab.

The object of the invention is to provide a mechanism which will permit the operator of a vehicle such as a taxicab to more readily open the door of a taxicab.

Another object of the invention is to provide a door handle operating mechanism for a vehicle such as a taxicab whereby the operator of the vehicle can more readily open the door by actuating the handle, the handle being actuated without the necessity of the driver or operator of the vehicle stretching to open or close the door.

A further object of the invention is to provide a door handle operating mechanism which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to desigate like parts throughout the same.

Figure 1 is a perspective view illustrating the handle operating mechanism of the present invention attached to a door such as a door of a taxicab, and with parts broken away and in section.

Figure 2 is an elevational view of the mechanism shown in Figure 1, and with parts broken away and in section.

Referring in detail to the drawings, the numeral 10 designates a portion of a door such as the rear door of a taxicab, and the door 10 may include the usual panel 11 and window 12. The numeral 13 designates the usual handle which can be used for unlocking the door.

Secured to the inner surface of the panel 11 is a bracket or plate 14, and the bracket 14 may be secured to the panel 11 through the medium of securing elements such as screws or bolts 16. The bracket 14 may have spacer members 17 secured thereto, and secured to the spacer members 17 is a horizontally disposed hollow cylindrical casing 18, and the casing 18 may have its end open.

Slidably arranged in the casing 18 is a rod 19 which is of cylindrical shape, and the rod 19 is longer than the casing 18.

Connected to one end of the rod 19 is a body member 20 which includes a shank 21 which can be secured to the rod 19 in any suitable manner, and the body member 20 further includes an eyelet 22 which engages the door handle 13.

A similar body member 23 includes a shank 24 which is connected to the front end of the rod 19, and the body member 23 includes an eyelet 25 which is engaged by a handle member or lever 26.

A pivotal mounting is provided for the lever 26, and this pivotal mounting includes a support member 27 which includes a first portion 28 that is secured to the inner surface of the panel 11 through the medium of securing elements 29. The support member 27 further includes a second portion 30 which extends outwardly from the first portion 28, and the second portion 30 terminates in a third portion 31 which is arranged parallel to the

first portion 28. The lower end of the lever 26 is shaped to provide a flattened section 32 which is pivotally connected to the third portion 31 through the medium of a pivot pin 33.

From the foregoing, it is apparent that there has been provided a mechanism which will facilitate the movement of a door handle such as the door handle 13 which may be mounted on the door 10 of a taxicab or the like. In use, the bracket 14 may be secured to the inner surface of the door 10 through the medium of the securing elements 16, and the hollow casing 18 is secured to the bracket 14. The rod 19 is slidably mounted in the casing 18, and the eyelet 22 of the body member 20 engages the handle 13. The eyelet 25 on the body member 23 engages the lever 26, and the lever 26 has its lower end pivotally connected to the support member 27 through the medium of the pivot pin 33. Then, when the door 10 is to be opened, it is not necessary to reach a long distance to grasp the handle 13, since it is only necessary to conveniently grip the lever 26 which is arranged in a convenient location readily accessible to the driver of the taxicab. Then, by manually moving the lever 26, as for example, from the solid line position shown in Figure 2 to the dotted line position of Figure 2, the rod 19 will be shifted and this will move the body member 20 which in turn will move the handle 13 so that the door can be opened readily.

The lever 26 may be arranged at a position which is convenient to the operator of the taxicab so that the lever 26 can be readily gripped in order to actuate the handle 13 so that the door 10 can be readily opened or closed.

The present invention can be used for opening the rear doors of taxicabs, and the device can be applied to existing door handles so that the rear doors of sedans or taxicabs can be opened without the necessity of the driver reaching clumsily over the front seat backwards. The lever 26 may be arranged adjacent to the center pillar so that it is readily accessible to the driver of the vehicle. Thus, passengers can be picked up with a minimum amount of delay and effort. The parts can be made in any suitable size and shape and of any desired material.

The mechanism of the present invention is adapted to be mounted on the right rear door of a taxicab whereby the driver can open the door from the inside of the car without the necessity of the driver reaching over the seat to operate the regular door handle 13. The lever 26 serves as the handle which the taxi driver pushes to open the door.

With the present invention, the unit can be readily adapted to various makes of vehicles and is simple to install and has increased flexibility and insures that there will be sufficient performance since there will be maintained a constant relationship between the handle 26 and support member 27. The solid plate 14 is adapted to be secured to the door through the medium of securing elements 16, and the spacer members 17 are secured to the plate 14 and to the casing 18.

I claim:

1. In a handle operating mechanism for a door of a taxicab, a bracket secured to the inner surface of said door, a horizontally disposed hollow open ended casing secured to said bracket, a rod slidably mounted in said casing, a body member secured to each end of said rod and including an eyelet, one of said eyelets engaging said handle, a support member including a first flat portion secured to the inner surface of said door, a second portion extending outwardly from said first portion and terminating in a third portion, said third portion being arranged parallel to said first portion, a lever having a flat section on its lower end pivotally connected to the third portion of said support member, said lever engaging the eyelet on the adjacent body member.

2. In a handle operating mechanism for a door of a taxicab, a bracket secured to the inner surface of said door, a horizontally disposed hollow open ended casing secured to said brackets, a rod slidably mounted in said casing, a body member secured to each end of said rod and including an eyelet, one of said eyelets engaging said handle, a support member including a first flat portion secured to the inner surface of said door, a second portion extending outwardly from said first portion and terminating in a third portion, said third portion being arranged parallel to said first portion, a lever having a flat section on its lower end pivotally connected to the third portion of said support member, said lever engaging the eyelet on the adjacent body member, said casing and rod both being of cylindrical construction, said rod being of greater length than said casing.

3. In a handle operating mechanism for a door of a taxicab, a bracket secured to the inner surface of said door, a horizontally disposed hollow open ended casing secured to said bracket, a rod slidably mounted in said casing, a body member secured to each end of said rod and including an eyelet, one of said eyelets engaging said handle, a support member including a first flat portion secured to the inner surface of said door, a second portion extending outwardly from said first portion and terminating in a third portion, said third portion being arranged parallel to said first portion, a lever having a flat section on its lower end pivotally connected to the third portion of said support member, said lever engaging the eyelet on the adjacent body member, said casing and rod both being of cylindrical construction, said rod being of greater length than said casing, said lever being arranged at a point so that it can be conveniently grasped by the driver of the vehicle whereby the door can be readily opened or closed.

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