

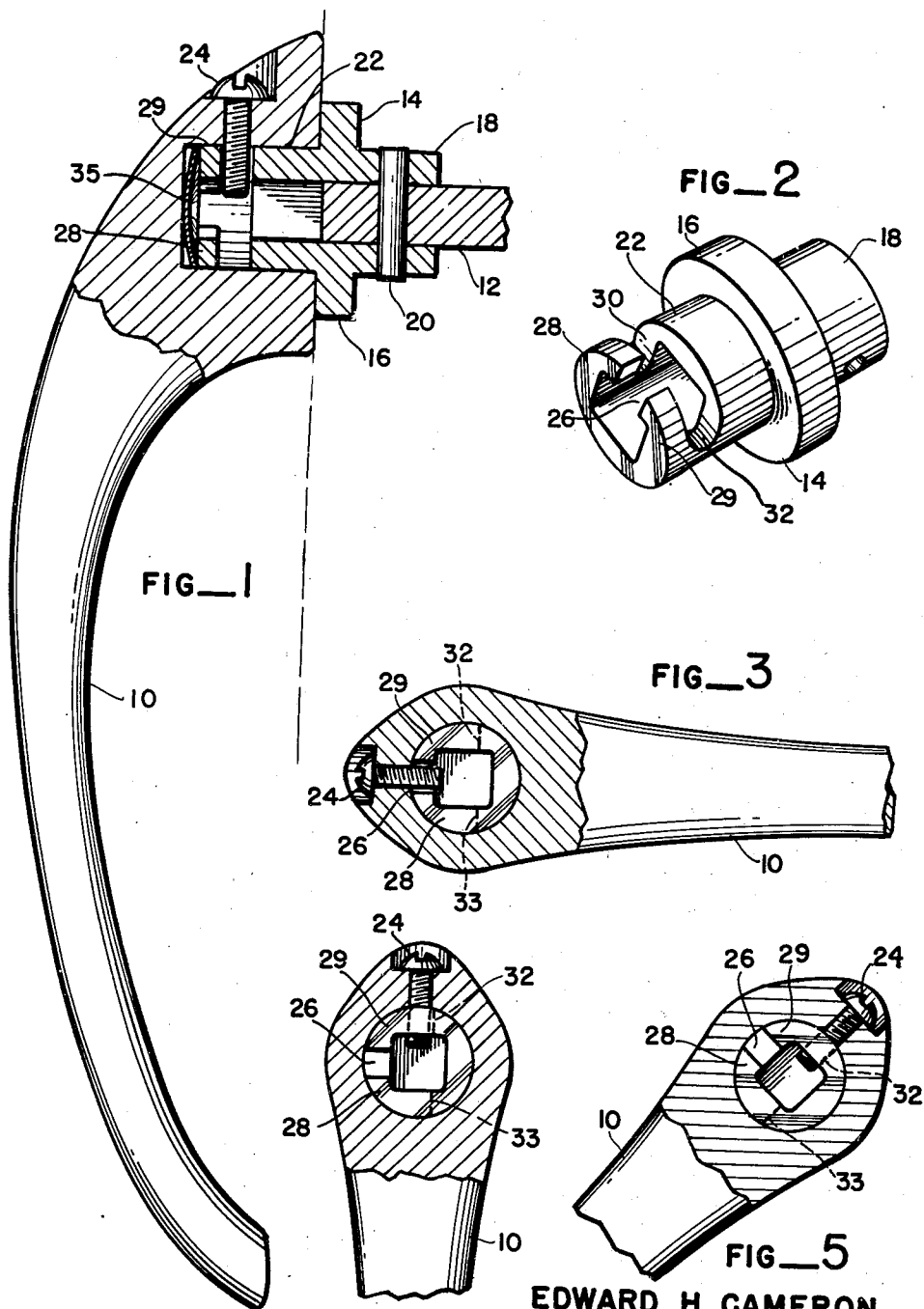
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SAFETY AUTOMOBILE DOOR LOCK HANDLE

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FIG_4

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SAFETY AUTOMOBILE DOOR LOCK HANDLE

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2 Claims. (Cl. 292—348)

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My present invention relates to the art of automotive body door locks, and more particularly to a safety automobile door lock handle.

For many years it has been common among families having small children to prefer the so-called two-door sedan type of body in which all egress making it necessary for persons who entered or left the car to do so by one of the front doors. This is of considerable annoyance to both the front and rear passengers, if they are adult, and the general dissatisfaction with this type of body has prompted many persons to take steps to insure a measure of safety even though they place their children in the rear seat compartment of a four-door sedan. The many and various devices that have been created to take care of this condition are generally characterized by not being certain in their operation, and costly and unsightly in their installation.

It is to overcome the deficiencies of the present means for providing security for juvenile passengers in the rear seat compartment of a four-door sedan that I have provided my present detachable inside door handle.

The principal object of my present invention, therefore, is to provide a safety door handle which is easily detached by persons familiar with it and when detached prevents the operation of the rear door locks from the inside of the car.

A further object of my present invention is to provide a safety or detachable door-lock handle which makes use generally of the conventional handle, to the end that cost can be reduced to a minimum and no change in the construction of the latch operating means is visible to the mature rider in the car.

A further object of my present invention is to provide an intermediate bushing which fixedly engages the operating shank or rod of the door latch or lock and to which the handle can be secured in such a way that it can be quickly and easily detached.

Further objects, advantages and capabilities will be apparent from the description and disclosure in the drawings, or may be comprehended or are inherent in the device.

In the drawings:

Fig. 1 is a vertical view of an interior door latch handle with certain parts being shown in section along the vertical axis of the operating shaft to better illustrate their construction.

Fig. 2 is a perspective view of my bushing member.

Fig. 3 is a fragmentary view, with certain por-

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tions in section, showing my handle being secured in operating position.

Fig. 4 is a view similar to Fig. 3 but showing my handle in its normal position, at rest.

Fig. 5 is a view similar to Fig. 4 but showing my handle in use unlatching the door latch.

Referring more particularly to the disclosure in the drawings, the numeral 10 designates the usual door handle that is positioned on the inside end of a door latch mechanism. Normally, handle 10 is connected directly and fixedly to the operating shaft or shank 12, which passes on into and forms the actuating means for the door lock mechanism. In my present construction, however, I interpose between handle 10 and shank 12 a bushing member 14. The use of this bushing member entails in some cases the use of an entirely new handle 10, whereas in others the original handles can be modified, and where this is done a shoulder 16 is formed as a part of bushing 14 to replace the normal concentric seating boss forming part of the usual handle 10.

Bushing 14 then has the inwardly extending bushing portion 18 which is fixedly secured to shank 12 as by a pin or rivet 20. The outwardly extending portion of bushing 14 will probably be more easily understood by reference to Fig. 2, in which a hollow bushing portion 22 is provided which extends into a recess 24 machined into door handle 10. In order, however, to provide for the removable character of my door handle, a direct connection is not made between bushing portion 22 and the handle securing screw 26, but rather the end of the bushing is cut, as at 24 with a slot wide enough to admit screw 24, and permit the handle to be put in place on bushing portion 22, after the showing of Fig. 3, without loosening screw 24, which might be a fixed portion of handle 10, except that manufacturing expediency seems to indicate that a screw, or an inserted pin, is more desirable. It further provides a means for easy disconnecting and removal of the handle should the securing means become damaged in use or through accident.

Slot 26 provides, in effect, two lug portions, as 28 and 29. The outer end of bushing member 22 is further machined to provide the transverse slot 30. Consequently, when the handle is to be removed or replaced, slot 26 is aligned with screw 24 after the showing of Fig. 3, and then the handle may be inserted or removed. In inserting the handle, it is pressed inwardly until it abuts shoulder 16. It is next rotated through substantially 90° until screw 24 abuts either the solid working surfaces 32 or 33, depending on whether

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the handle is used on a right or left hand door. This abutment is indicated in Fig. 2, and by dotted lines in Figs. 3, 4 and 5. It will now be understood, it is believed, that as long as the latch mechanism within the door is spring actuated, my handle mechanism then needs only to apply pressure in one direction, then the same may be applied as is shown in Fig. 5, in which the door handle has been moved to the left as viewed so as to unlatch the door mechanism.

In order to secure my handle against displacement or rattling, I employ a disc spring 35 at the bottom of the handle recess which will apply pressure to bushing 14.

In case the desire is to use the same type of handle on both doors, or as a matter of convenience to be able to use a single handle on either door, I have provided the two abutment surfaces 32 and 33. So it follows that a parent, for instance, might remove the left hand inside door handle permanently by placing it in the glove compartment of the car, and then the other handle could be removed and kept out of reach of the children when they are being carried, but readily available for use as a wrench, in effect, to unlock either door.

It will be observed, it is believed, that if the car is to be used for the transportation of adults for a period, then both handles would be used and the normal passenger of the car would not be aware of the fact that detachable handles are being used.

It is believed that it will be clearly apparent from the above description and the disclosure in the drawings that the invention comprehends a novel construction of a safety automobile door lock handle.

Having thus disclosed the invention, I claim:

1. A removable handle for use on the operating shank of the door latch mechanism of an automobile door, consisting of: a bushing adapted

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to be fixedly secured to the operating shank of a door latch; a transverse slot in said bushing cut to a depth greater than the radius of the bushing; a longitudinal cut extending from the end of said bushing and joining with said transverse slot to form two lugs; an operating handle bored to seat on the lug bearing end of said bushing; a key member extending into the bore of said operating handle adapted to pass through said longitudinal cut and operatively engage said transverse slot; and resilient means disposed between the bottom of said bore and the lug bearing end of said bushing.

2. A removable handle for use on the operating shank of the door latch mechanism of an automobile door, consisting of: a bushing adapted to be fixedly secured to the operating shank of a door latch; an annular, outwardly extending, handle positioning shoulder formed as part of said bushing; a transverse slot in said bushing cut to a depth greater than the radius of the bushing; a longitudinal cut extending from the end of said bushing and joining with said transverse slot to form two lugs; an operating handle bored to seat on the lug bearing end of said bushing and to abut said positioning shoulder; a key member extending into the bore of said operating handle adapted to pass through said longitudinal cut and operatively engage said transverse slot; and resilient means disposed between the bottom of said bore and the lug bearing end of said bushing.

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