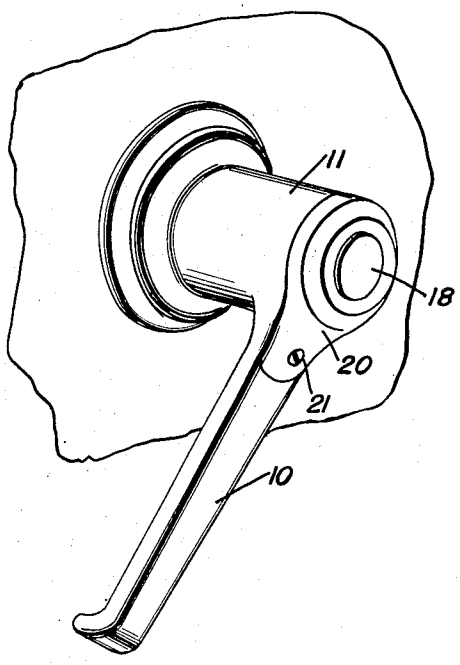
Feb. 26, 1957 B. F. MILTNER 2,783,074

AUTOMOBILE DOOR HANDLE

Filed May 25, 1954

Fig. 1



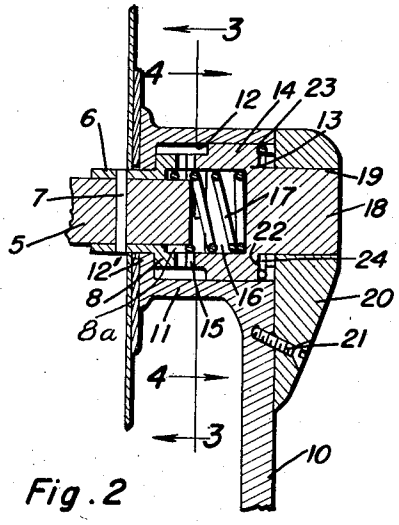


Fig. 2

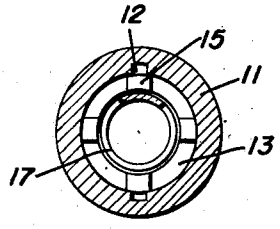


Fig. 4

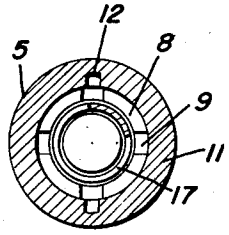


Fig. 3

Bernard F. Miltner
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson
Attorneys

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AUTOMOBILE DOOR HANDLE

Bernard F. Miltner, Solon, Iowa

Application May 25, 1954, Serial No. 432,086

1 Claim. (Cl. 292—336.3)

The present invention relates to new and useful improvements in handles for automobile doors, and more particularly to a handle embodying safety features to prevent accidental opening movement of the door and to prevent children from manipulating the handle to accidentally open the door.

An important object of the invention is to provide a plunger slidably mounted in the hub portion of the handle and actuated by the thumb of a person gripping the handle to move the plunger inwardly into clutching position with the spindle of the handle and placing spring means behind the plunger to maintain the latter in declutching position.

Another object is to provide a safety automobile door handle of simple and practical construction, which is efficient and reliable in operation, relatively inexpensive to manufacture, and otherwise well adapted for the purpose for which the same is intended.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings formnig a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view;

Figure 2 is a fragmentary longitudinal sectional view of the hub and spindle for the handle; and

Figures 3 and 4 are transverse sectional views taken, respectively, on the lines 3—3 and 4—4 of Figure 2.

Referring now to the drawing in detail, wherein for the purpose of illustration, I have disclosed a preferred embodiment of the invention, the numeral 5 designates the spindle of an automobile door lock and to which a clutch member 6 is secured by a transverse pin 7 in a position surrounding the spindle and connected thereto for rotation therewith. The outer end of the clutch member 6 is constructed to provide a collar 8 having notches 9 at circumferentially spaced apart intervals therein.

A handle 10 is formed with a tubular hub portion 11 having an inwardly projecting flange 12′ at its inner end portion engaged behind the collar 8 of the clutch member 6 to rotatably support the hub 11 on the clutch member. The hub 11 is formed with internal longitudinally extending grooves 12.

A plunger 13 is slidably positioned in the hub 11 and is formed with ribs 14 slidably mounted in the grooves 12 to connect the plunger for rotation with the hub of the handle. The inner end of the plunger 13 is formed with teeth 15 adapted to enter the notches 9 of the collar 8 of clutch member 6.

The inner end portion of plunger 13 is recessed, as shown at 16, and in which the outer end of a coil spring 17 is positioned and with the inner end of the spring seated in an annular groove 8a in the clutch member 6 and surrounding the spindle and with the spring bearing

against the clutch member 6 to urge the plunger outwardly with the teeth 15 disengaged.

The outer end portion of the plunger 13 is constructed to provide a push-button 18 which is slidable in an opening 19 in a cover plate 20 and the latter is secured to the handle 10 by screws or the like 21. A shoulder 22 is formed at the junction of the push-button 18 with the plunger 13 and which is positioned behind the cover plate to hold the plunger in the hub 11 of the handle.

Hub 11 is also formed adjacent its outer end with an internal circumferential groove 23 which intersects the longitudinal grooves 12 and in which a resilient wire snap ring 24 is positioned and engaged by the ribs 14 to hold the plunger 13 in the hub while the cover plate is being assembled thereon.

In the operation of the device, with the plunger 13 and spring 17 assembled in the hub 11 of the handle, and after the cover plate 20 has been secured in position to the handle, the spring 17 holds the push button end 18 of the plunger flush with the cover plate, as shown in Figure 2 of the drawing.

Since the spring 17 holds the plunger 13 disengaged from the clutch member 6, the handle 10 will swing freely on the clutch member without turning the door latch spindle 5. By pressing the push button 18 inwardly, the teeth 15 on the plunger 13 will enter the notches 9 of the clutch member 8 and since the plunger is connected to the hub of the handle by the ribs 14 of the former engaged in the grooves 12 of the latter, the turning of the handle will also turn the spindle 5 to actuate the door latch.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

An automobile door handle comprising in combination, a spindle for a door latch, a collar secured to the spindle for rotation therewith, said collar having an annular recess surrounding the spindle a handle having a hub portion rotatably mounted on the collar, said hub portion having an internal longitudinal groove and a circumferential groove, a plunger having a longitudinal external rib slidable in said longitudinal groove of the hub portion, clutch means on the opposing end portions of the collar and plunger, said plunger having a recess in its opposing end portion, a coil spring positioned between the collar and plunger one end of said spring being seated in the recess of the collar and the other end of said spring being seated in the recess of the plunger and moving the latter into declutching position, a snap ring in the circumferential groove of the hub portion limiting declutching movement of the plunger and retaining the plunger assembled in the hub portion, a push button extension on the plunger, and a cover plate secured to the outer end of the hub portion and having an opening in which the push button is exposed flush with the cover plate.

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