Oct. 20, 1931. B. S. FLORADAY 1,827,979

LOCKING HANDLE ASSEMBLY

Filed Jan. 14, 1929

Fig. 1.

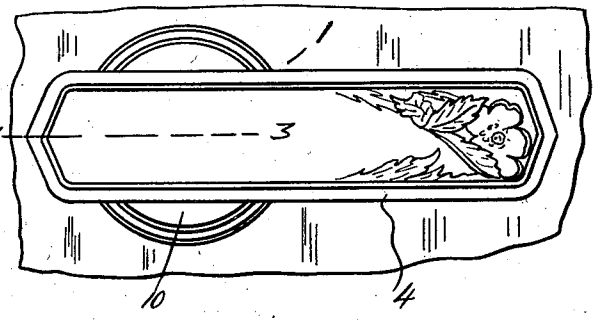
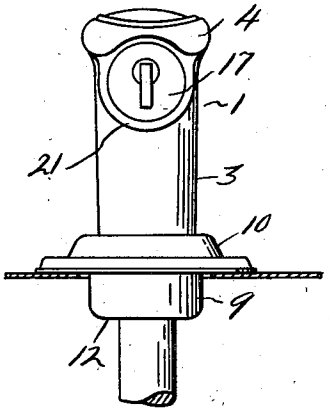


Fig. 2.



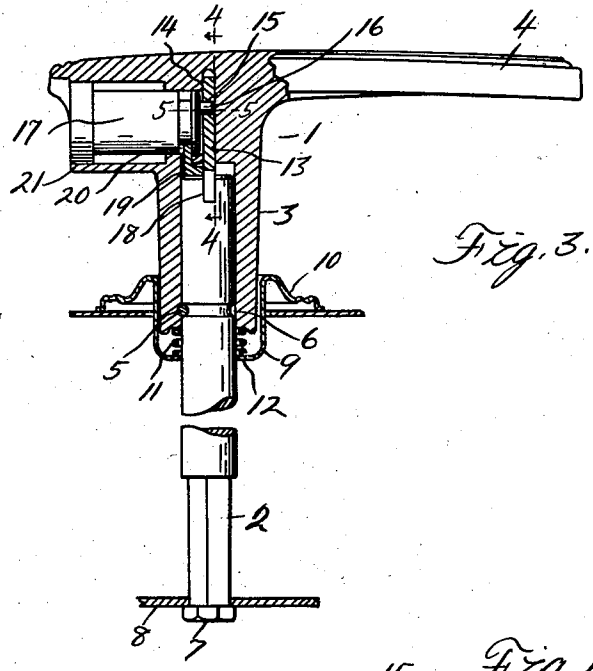


Fig. 3.

Fig. 5.

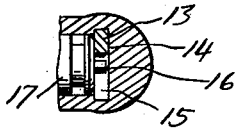
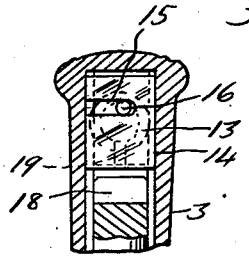


Fig. 4.



INVENTOR

Burton S. Floraday

BY

Whittemore Hulbert Whittemore & Belknap

ATTORNEYS

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UNITED STATES PATENT OFFICE

BURTON S. FLORADAY, OF TOLEDO, OHIO, ASSIGNOR TO THE DURA COMPANY, OF TOLEDO, OHIO, A CORPORATION OF OHIO

LOCKING HANDLE ASSEMBLY

Application filed January 14, 1929. Serial No. 332,491.

The invention relates to handle assemblies and refers more particularly to outside locking handle assemblies for doors of motor vehicles. One of the objects of the invention is to provide a simple construction of locking handle assembly in which the handle is alternatively keyed to the lock actuating spindle to rotate the latter or freed from the spindle to allow rotation of the handle relative to the spindle. Another object is to provide a bolt which is longitudinally movable relative to the handle shank to key the handle to the spindle or free the handle from the spindle. A further object is to provide a construction of handle assembly in which the bolt is actuated by locking means, which latter is positioned so that it is normally concealed by the handle grip. With these as well as other objects in view, the invention resides in the novel features of construction and combinations and arrangements of parts as more fully hereinafter set forth.

In the drawings:—

Figure 1 is a side elevation of a handle assembly embodying my invention;

Figure 2 is an end elevation thereof;

Figure 3 is a cross section on the line 3—3 of Figure 1;

Figures 4 and 5 are cross sections, respectively, on the lines 4—4 and 5—5 of Figure 3.

The handle assembly shown in the present instance is designed particularly for use in motor vehicle doors and comprises the outside door handle 1 and the spindle 2, which latter actuates the door lock and is adapted to be operated by the former. The handle comprises the shank 3 and the hand grip 4, which latter has aligned portions extending transversely beyond the shank. The spindle extends within and is journaled in the shank and is rotatably connected thereto by suitable means such as the pin 5 extending transversely through the shank and engaging in the annular groove 6 formed in the spindle. The handle assembly is held in place in the door by suitable means which in the present instance is shown as comprising the cap bolt 7 threadedly engaging the inner end of the spindle 2 and abutting the inner plate 8 of the door lock. 9 is a cup-shaped escutcheon having the annular flange portion 10 for engaging the outer side of the door and 11 is a coil spring abutting the inner end of the shank 3 and the bottom 12 of the escutcheon for yieldably holding the annular flange portion of the escutcheon against the door.

For keying the handle to the spindle so that rotation of the handle effects rotation of the spindle and also for freeing the handle from the spindle so that the handle may be rotated without effecting rotation of the spindle, we have provided the bolt 13, which is in the nature of a sheet metal plate and which slidably engages in the grooves 14 extending longitudinally within the shank 3. This bolt is formed with the transverse slot 15, which is engaged by the crank 16 of the locking mechanism 17 which, as shown, is of the key actuated type. The outer end of the spindle 2 is formed with the transversely extending outwardly opening slot 18 into which the bolt 13 may be moved upon actuation of the locking mechanism and consequent rotation of the crank engaging the bolt. As shown in Figure 3, the bolt clears the spindle so that the handle may be rotated without effecting rotation of the spindle. However, if the bolt were moved inwardly into the slot in the spindle it would key the handle to the spindle so that rotation of the handle would then rotate the spindle to actuate the door lock.

For holding the locking mechanism 17 in place, there is the lock retainer 19 which, as shown, is L-shaped and has a retaining flange extending into the annular peripheral groove 20 formed in the locking mechanism adjacent to the crank and a transverse flange located between the outer end of the spindle and the adjacent end of the bore in the shank.

The locking mechanism 17 is mounted in the boss 21 which extends transversely of the shank 3 and is preferably integral with both this shank and the grip 4. This boss is located in rear of the grip so that it is normally concealed thereby.

What I claim as my invention is:

1. The combination with a handle having a pair of recesses arranged substantially at right angles to each other and provided with an opening between the adjacent ends of said

recesses, a locking mechanism in one of said recesses, a securing element for said locking mechanism positioned in the other of said recesses and having a portion extending through said opening and engaging said locking mechanism, and a latch actuating spindle in said last-named recess and engaging said securing element for holding the same in place.

2. The combination with a handle having a pair of recesses arranged substantially at right angles to each other and an opening extending between the ends of said recesses, a cylinder lock in one of said recesses having a peripheral groove, an L-shaped securing device for said lock positioned in the other of said recesses and having one of its flanges extending through said opening into said groove, and a spindle extending into said last-named recess and engaging the other flange for holding the securing device in place.

In testimony whereof I affix my signature.

BURTON S. FLORADAY.