March 31, 1931. B. S. FLORADAY 1,798,527

HANDLE ASSEMBLY

Filed Jan. 16, 1928

Fig. 1.

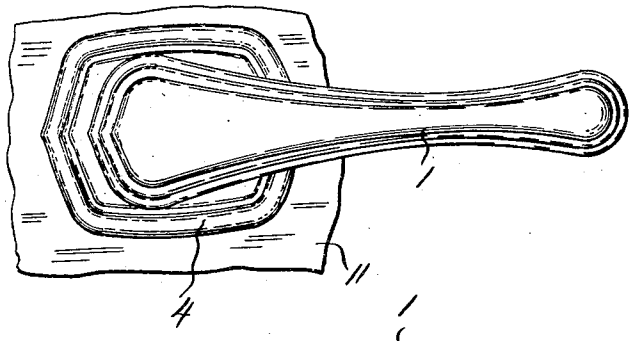


Fig. 2.

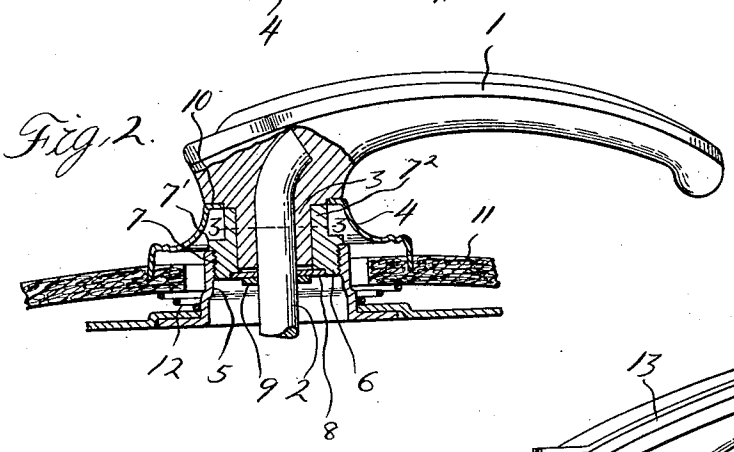


Fig. 3.

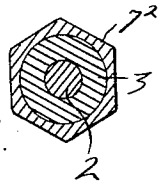
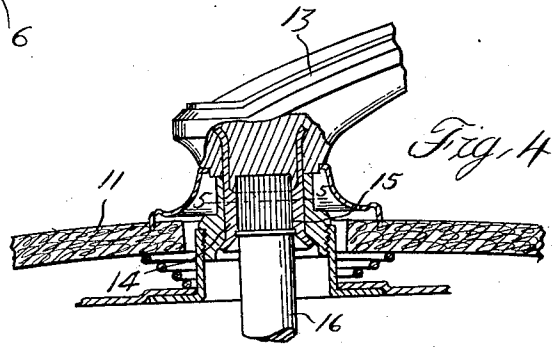


Fig. 4.



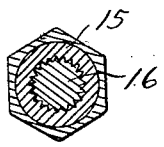


Fig. 5.

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, BY MESNE ASSIGNMENTS, TO THE DURA COMPANY, OF TOLEDO, OHIO, A CORPORATION OF OHIO

HANDLE ASSEMBLY

Application filed January 16, 1928. Serial No. 247,212.

The invention relates to handle assemblies and refers more particularly to inside door handles for use in vehicles. One of the objects of the invention is to so construct the handle assembly that it may be readily mounted on its support without marring its ornamental appearance. Another object is to so construct the handle assembly that its escutcheon may have an irregular conformation or outline and may be arranged to have any desired position. Further objects of the invention reside 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 plan view of a handle assembly embodying my invention;

Figure 2 is a sectional elevation therethrough;

Figure 3 is a cross section on the line 3—3 of Figure 2;

Figure 4 is a view similar to Figure 2, showing a modification;

Figure 5 is a cross section on the line 5—5 of Figure 4.

As shown in the present instance, the handle assemblies are designed particularly for use in motor vehicles and are located on the inside thereof and adapted to actuate door latches and window regulators. These handle assemblies are fashioned to have an ornamental appearance and furthermore they are preferably designed to have escutcheons of irregular conformation or outline intended to occupy predetermined vertical or horizontal positions.

As shown in Figures 1, 2 and 3, 1 is the handle having secured thereto the spindle 2 for actuating a latch, this spindle in the present instance being cast into the handle and extending from its shank 3. 4 is the escutcheon which, as shown, has an irregular conformation or outline. The support for the handle assembly has the internally threaded annular flange 5 and to mount this handle assembly upon the support without marring the ornamental appearance of the handle assembly and at the same time providing for arranging or locating the escutcheon in the desired position, I have provided the thimble 6, which has an externally threaded portion 7 for engaging the internally threaded portion of the flange 5, a collar 7′ beyond the threaded portion and preferably integral with the thimble for engaging the flange 5 and limiting the movement of the thimble into the flange and a tool engaging portion 7^2 beyond the collar. The handle is rotatably mounted on the thimble and also permanently secured thereto before assembly on the support. As shown, the shank 3 of the handle is rotatably journaled in the thimble and the retainer washer 8 and the transversely split retainer ring 9 at the inner end of the shank permanently secure the handle to the assembly. The escuteheon is also secured to the handle before assembly on the support by sleeving the escutcheon over the shank to a position to engage the shoulder 10 upon the handle previous to engaging the thimble over the shank and securing the washer in place by the ring, the central opening in the escutcheon having a diameter greater than that of the tool engaging portion but less than that of the collar. As a result, the handle, escutcheon and thimble form a unit.

To mount this unit upon the support, the escutcheon is moved axially inward over the tool engaging portion of the thimble to a point adjacent the collar, thereby forcing the trim 11 inwardly and compressing the coil spring 12 between the trim and support. A suitable wrench may then be inserted between the escutcheon and the shoulder 10 of the handle to engage the exposed portion of the thimble, which is preferably polygonal, as shown in Figure 3, and to screw the thimble into the flange. After this has been completed, and the tool removed, the coil spring will yieldably force the trim and the escutcheon outwardly to bring the escutcheon into engagement with the shoulder 10 of the handle.

In the modification shown in Figures 4 and 5, the same general arrangement of parts is present, the main difference being in the formation of the handle itself. This handle 13 has the shank 14 secured thereto and preferably cast thereinto, this shank having the interior serrations 15 for engaging and secur-

ing the latch actuating spindle 16 thereto. The shank further has its inner end flared over against the thimble to permanently secure the handle to the thimble.

From the above description, it will be readily seen that I have provided a simple construction of handle assembly which provides for readily mounting the same on its support without marring its ornamental appearance. It will also be seen that the handle assembly is such that its escutcheon may have an irregular conformation or outline and may be arranged to occupy any desired position. Furthermore, the handle assembly is of simple construction and may be readily manufactured and assembled.

What I claim as my invention is:

1. In a handle assembly, the combination with a support, of a handle, a thimble secured to said handle, and an escutcheon having an opening for sleeving over a portion of said handle, said handle and thimble having portions of greater diameter than the opening of said escutcheon and located on opposite sides of the escutcheon for permanently connecting the escutcheon to the handle, said handle being rotatably mounted on said thimble and being rotatable relative to said escutcheon and said thimble being attachable to said support.

2. In a handle assembly, the combination with a support, of a handle, an escutcheon having an opening for sleeving over a portion of said handle, a thimble secured to said handle, said handle and thimble having shoulders located on opposite sides of said escutcheon and extending outwardly beyond the opening in said escutcheon for permanently connecting the escutcheon to said handle, said handle being rotatably mounted on said thimble and being rotatable relative to said escutcheon and said thimble being attachable to said support.

3. In a handle assembly, the combination with a support, of a handle, an escutcheon having an opening for sleeving over a portion of said handle, a thimble secured to said handle, said handle and thimble having shoulders arranged in spaced relation to each other and located on opposite sides of said escutcheon and extending outwardly beyond the opening in said escutcheon for permanently connecting the escutcheon to said handle and at the same time permit movement of the escutcheon longitudinally of the handle, said handle being rotatably mounted on said thimble and being rotatable relative to said escutcheon and said thimble being attachable to said support, and yieldable means for normally maintaining said escutcheon in engagement with the shoulder on said handle.

In testimony whereof I affix my signature.

BURTON S. FLORADAY.