

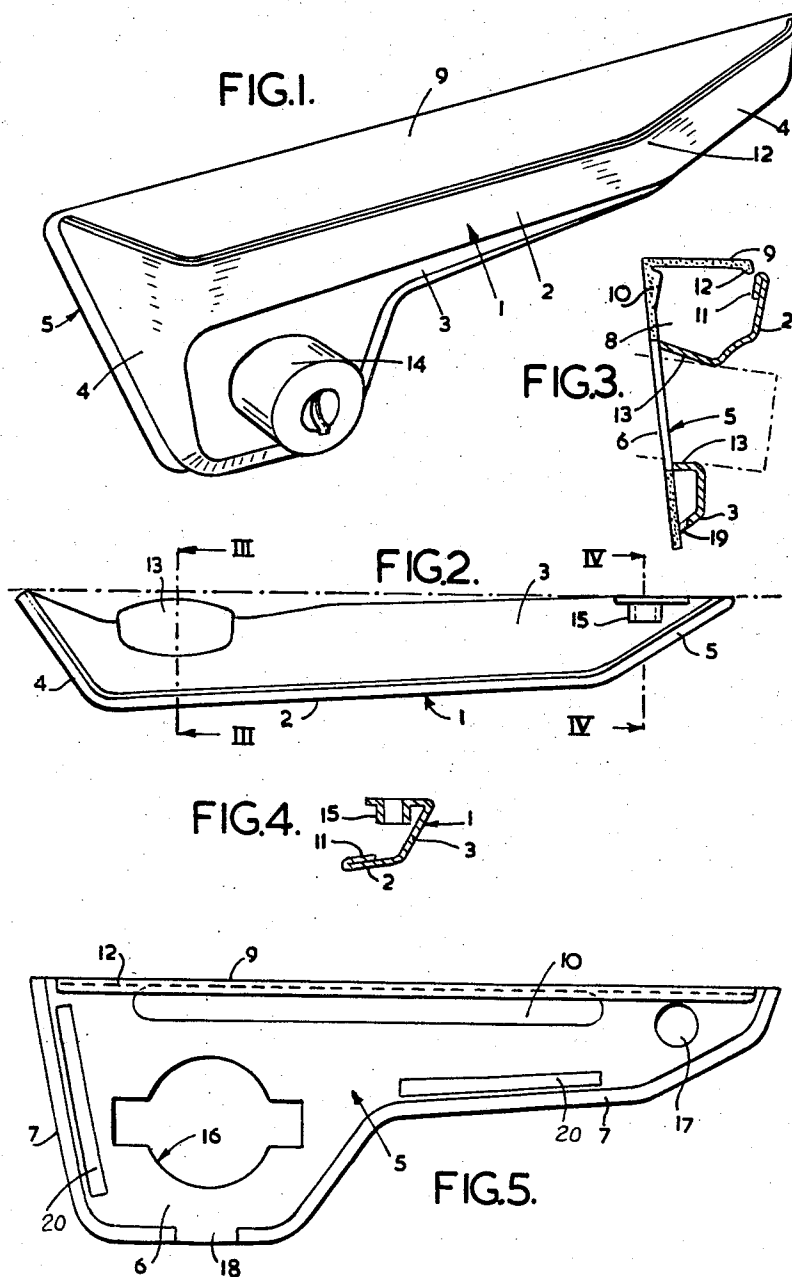
Sept. 15, 1964

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3,148,905

HANDLE ASSEMBLIES

Filed Sept. 5, 1961



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3,148,905

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Filed Sept. 5, 1961, Ser. No. 135,915

Claims priority, application Great Britain Sept. 7, 1960
5 Claims. (Cl. 292—336.3)

This invention relates to handles and more particularly to outside handle assemblies for vehicle doors.

One type of outside handle member for a vehicle door has a finger recess with an upwardly facing mouth. In use this recess collects rain, snow and road dust and, although a drain hole is provided in the bottom of the recess, the recess tends to become undesirably full of foreign matter.

It is an object of this invention to provide means for reducing the foreign matter collected in a finger recess of a handle member of the above mentioned type.

According to the invention there is provided, in combination, a handle member having a finger recess with an upwardly facing mouth, and a lid resiliently urged normally to close the mouth but displaceable into the recess thus permitting the fingers to enter the recess.

Preferably the lid is hingedly mounted adjacent an edge of the recess and resiliently urged to close said mouth. The handle member may be arranged for mounting on supporting structure, which may be a vehicle door, with the interposition of a packing member of resilient material and the packing member may have a flap which provides the lid. Where the lid is provided by such a flap the natural resilience of the material resiliently holds the flap in position to close said mouth and resilient deformation of the material occurs upon displacing the flap into the recess. Suitable resilient materials are, for example, rubber, polyvinyl chloride and polyethylene.

The packing member preferably has a main body interposed between the handle member and the supporting structure with the flap forming said lid extending from the upper edge of the main body in a direction normal thereto. An upper portion of the main body may be thickened for strengthening purposes immediately beneath the flap, and the free edge of the flap may be provided with a reinforcing rib.

The invention will now be further described with reference to the accompanying drawings which illustrate, by way of example, a vehicle door handle assembly in accordance with the invention, and in which:

FIGURE 1 is an overhead perspective view of the assembly as fitted to the vehicle door,

FIGURE 2 is a plan view of a handle member of the assembly,

FIGURE 3 is a cross-section on the line III—III in FIGURE 2,

FIGURE 4 is a cross-section on the line IV—IV in FIGURE 2, and

FIGURE 5 is a front view of a packing member of the assembly.

The assembly comprises a pressed metal handle member 1 having an outer face 2 which is arranged to extend generally parallel with the outer surface of a vehicle door when fitted thereto and a lower edge portion 3 and side edge portions 4 extending away from the outer face 2 towards the door surface. Interposed between the handle member 1 and the door surface when fitted to the latter is a packing member 5 of resilient polyethylene. The packing member 5 (as shown in FIGURE 5) has a main body 6 having an upstanding locating rib 7 extending

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round its side and lower edges and contoured to closely embrace the lower and side edge portions 3 and 4 of the handle member (as shown in FIGURE 1).

The main body 6 of the packing member 5 and the outer face 2 and edge portions 4 of the handle member 1 define between them a finger recess 8 (see FIGURE 3) having an upwardly facing mouth. This mouth is normally closed by a lid formed by a flap 9 extending from the upper edge of the main body 6 of the packing member and in a generally horizontal direction normal thereto. An upper edge portion 10 of the main body 6 is thickened immediately beneath the flap 9 for strengthening purposes, this thickening being provided by a reinforcing rib slightly spaced from the flap 9. This rib does not extend along the whole length of the flap 9 but is about three-quarters of the length of the latter and arranged generally centrally of said length.

Along the mouth of the recess 8 the handle member 1 is rolled inwardly at 11 (see FIGURES 3 and 4) to provide a strengthened edge.

The flap 9 is shaped to close the mouth of the recess 8 and has, around its free edge, a downwardly directed reinforcing rib 12. The main body 6 of the packing member 5 has two ribs 20 spaced inwardly from its peripheral locating rib 7 and arranged to assist in locating the handle member 1 within the peripheral rib 7.

The handle member 1 has formed therein a housing 13 for a door release pushbutton and a threaded fixing lug 15. The main body 6 of the packing member 5 is apertured at 16 and 17 respectively to pass the pushbutton 14 and a fixing screw for the lug 15. The peripheral locating rib 7 is interrupted at 18 beneath the pushbutton housing 13 to provide a drain aperture in register with a cut-away portion 19 of the handle member 1 also provided for drainage aperture.

In use, the natural resilient of the flap 9 holds it horizontal to close the mouth of the recess 8. However, finger pressure on top of the flap 9 will pivot it about the upper edge of the main body 6 of the packing member 5, thus permitting the fingers to enter the recess 8. When the fingers are removed the flap 9 returns to close the mouth of the recess 8, thus restraining the entry of dirt and other foreign matter until the recess 8 is again required for door opening purposes.

I claim:

1. A vehicle door handle assembly comprising a pressed metal handle member of trough-like form providing a finger recess with an upwardly facing mouth, and a packing member of resilient material with a main body for positioning between the handle member and the vehicle door structure and a flexible flap which extends from the upper edge of said body so that it normally adopts a position in which it substantially closes said mouth and from which it can be displaced into the recess to allow the fingers to enter the latter.

2. A handle assembly according to claim 1, wherein an upper portion of the main body is thickened for strengthening purposes immediately beneath the flap.

3. A handle assembly according to claim 2, wherein the free edge of the flap is provided with a reinforcing rib.

4. A handle assembly according to claim 1, wherein the handle member is rolled inwardly at the mouth of said recess to provide a strengthened upper edge for the handle member.

5. A vehicle door handle assembly comprising a pressed metal handle member of trough-like form providing a finger recess with an upwardly facing mouth, formed with a housing for a door release pushbutton, and a packing

member of resilient material with a main body portion for positioning between the handle member and the vehicle door structure and a flexible flap portion which extends from the upper edge of said body portion so that it normally adopts a position in which it substantially closes 5 said mouth and from which it can be displaced into the recess to allow the fingers to enter the latter.

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