April 20, 1948. A. W. KONCHAN 2,439,978

KEYHOLE COVER

Filed Nov. 21, 1945

Fig. 1

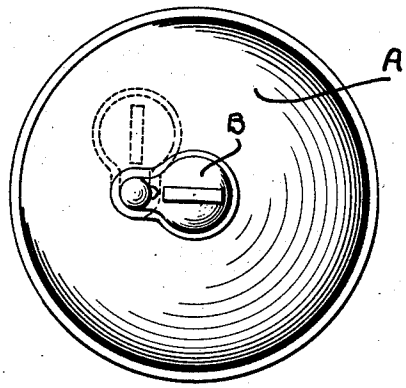


Fig. 2

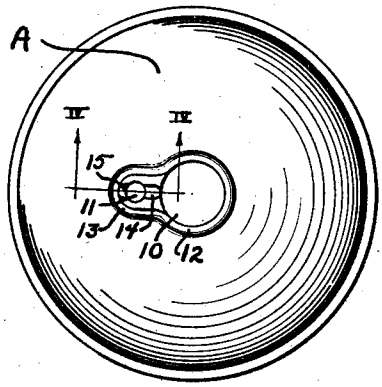


Fig. 3

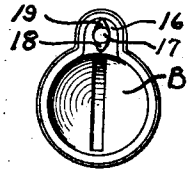


Fig. 4

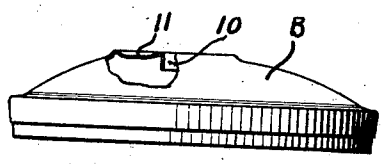


Fig. 5

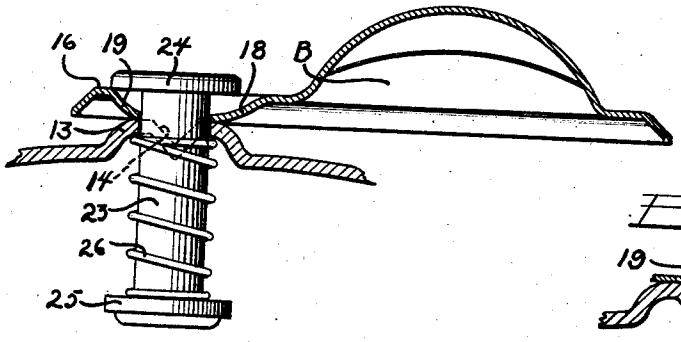


Fig. 6

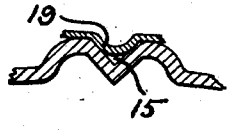


Fig. 7

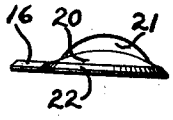
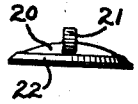


Fig. 8



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KEYHOLE COVER

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2 Claims. (Cl. 70—455)

1

The present invention relates to a keyhole cover, and more particularly to a cover applicable to a closure cap which is provided with a key operated lock.

The present invention is intended for a keyhole cover used with a cap for closing the gas tank or radiator of an automotive vehicle which cap is locked in place, although, of course, the invention is susceptible of other uses than that for automotive vehicle caps.

An important object of the present invention is to provide a cap member having a keyhole in it with a cover for the keyhole, the parts being stamped and designed for economical manufacture to sell at low prices.

Another object of the present invention is to provide a cover for the keyhole of a closure cap for the filler neck of the gasoline tank which cap carries a key operated lock and which cover is retained in closed position against accidental displacement due to vehicle vibrations.

A further object of the invention is to provide a cover for a keyhole of a cap which will snap to fully closed position when pushed toward its closed position.

Another object is to provide a keyhole cover with means for positively holding it in either open or closed positions.

A still further object of the present invention is to provide a cover for a keyhole in a closure cap which cover is held by spring action against the keyhole margin, when in closed position, to exclude dirt.

The above, other and further objects of the present invention will be apparent from the following description and accompanying drawing.

An embodiment of the present invention is illustrated in the accompanying drawing and the views thereof are as follows:

Figure 1 is a top plan view of the cap and cover showing in full lines the cover in closed position and in dotted lines the cover in open position.

Figure 2 is a top plan view of the cap with the cover removed.

Figure 3 is a bottom plan view of the cover.

Figure 4 is a side elevation with a part broken away to show a vertical section taken in the plane of lines IV—IV of Figure 2.

Figure 5 is a fragmental enlarged vertical sectional view taken through the pivotal connection of the cover to the cap, and showing the cover in open position.

Figure 6 is an enlarged fragmental sectional view showing the engagement of the interengageable elements on the cap and cover for preventing accidental displacement of the cover when in closed position over the keyhole.

2

Figure 7 is a side elevational view of the cover.

Figure 8 is an end view of the cover.

The drawing will now be explained.

The cap A is made as a stamping, circular in plan, and having an axially disposed opening 10 as a keyhole for a lock suitably secured in the cap. Formed in the cap in spaced relation to the keyhole 10 is a hole or aperture 11 for a pivot pin. The cap is formed with a ridge 12 about the keyhole 10 and also about the pivot pin opening 11. As may be observed from Figure 2, the plan view of the ridge is somewhat like a figure 8 with the portion about the pivot pin hole 11 of less size than the portion about the keyhole 10. The ridge is formed with two grooves 14 and 15 spaced in endwise relation by the pivot pin hole 11 and in axial alignment, thus providing grooves on each side of the pivot pin hole 11, as may be observed in Figure 2.

The cover B is formed as a stamping of relatively thin material. As may be observed from Figure 3, the plan view of the cover is in the form of a figure 8 with one portion of lesser extent than the other, the smaller portion constituting a tab 16. Punched in the tab 16 is a pivot pin hole 17. Formed in the tab and spaced endwise by the pivot pin hole 17 are tongues 18 and 19 adapted to enter the grooves 14 and 15 of the cap when the cover is in closed position over the keyhole 10.

In order to rigidify the cover B it is preferably formed in side and end elevation as illustrated in Figures 7 and 8 with a portion of the body thereof crowned as at 20 with the central portion of the crown further offset as at 21. The skirt 22 of the cover B is downwardly and outwardly flared so as to overlie the ridge 12 of the cap when the cover is in closed position.

The cover B is pivotally connected to the cap A by a pivot pin 23 entered through the holes 11 and 17 when the cover is assembled on the cap, which pin has a head 24 for overlying the outer surface of the tab 16 of the cover. A cotter pin 25 or similar instrumentality is entered through the inner or lower end of the pivot pin 23 and above it is a spring 26 so tensioned as to normally urge the tab 16 of the cover B tightly against the cap.

When the cover is in closed position over the keyhole 10 the tongues 18 and 19 of the cover are entered in the grooves 14 and 15 of the cap in the manner illustrated in Figure 6. The spring

26 tends to hold the tongues in engagement with the grooves to prevent accidental displacement of the cover with respect to the keyhole.

The inclination of the side walls of the grooves 14 and 15 is such that the tongues of the cover will snap into engagement therewith as the cover is swung towards closed position, by reason of the influence of the spring 26 on the pivot pin 23.

Figure 5 illustrates the relationship of the parts when the cover B is swung to expose the keyhole 10. It will be observed that in this figure the tongues 18 and 19 of the cover B rest on top of the ridge 13 adjacent the pivot pin hole thus tensioning the spring to firmly hold the cover in opened position. As the cover B is swung to open position the spring is tensioned to a greater extent than it is when the cover is in closed position. It will be understood, of course, that the tension of the spring, when the cover is in closed position is such as to hold the cover, tightly, in closed position with respect to the keyhole 10.

The fact that the marginal portion of the cover B is flanged in the manner shown, causes this flange to overlie the ridge 12 of the cap to exclude dirt when the cover is in closed position. This is an advantage especially when the cap is used as the closure cap for an automotive vehicle gasoline tank, to keep dirt out of the keyhole and from entering the key receiving slot of the lock.

The construction of the device of the present invention is simple, the cap A being made of a stamping, and the cover B being made of a stamping. The materials used for the cap and cover may be thin, as the stamping thereof supplies the necessary strength and rigidity to the parts.

It will be noted that five components are utilized, one is the cap A, another is the cover B, a third is the pivot pin 23 and a fourth is the spring 26 held in place by suitable means such, for example, as a fifth component a cotter pin 25.

It will be readily observed that the cost of assembling such a device is reduced to a minimum as the parts are easy to assemble in a relatively short period of time.

It will, of course, be understood that various details of construction may be varied through a wide range without departing from the principles of this invention and it is, therefore, not the purpose to limit the patent granted hereon otherwise than necessitated by the scope of the appended claims.

I claim as my invention:

1. A closure cap having a keyhole in it and having a pivot pinhole in it adjacent the keyhole, said cap having a ridge formed in it about said holes simulating a figure 8 in plan, said ridge having two aligned grooves in it separated in endwise relation by the pin hole, a cover for the keyhole pivoted to the cap and formed to simulate a figure 8 in plan to conform to the ridge contour of the cap, said cover having a tab portion, the tab portion having a pivot pin hole through it with the tab formed with two aligned tongues separated by the pin hole therein, a pivot pin through said holes, and a spring about said pin to draw the tongues of the cover into the grooves of the cap when the cover is in closed position over the keyhole to thereby restrain the cover from accidental displacement from closed position.

2. A closure cap having a keyhole in it, said cap being formed with a protuberant ridge in the form of a figure 8 with the larger part of the ridge defining the keyhole, said cap having an aperture through the smaller part of the ridge, said ridge having a groove in it between said holes with its length at right angles to the axes of both holes and also having another groove in it at the remote side of the pin hole and in alignment with the first groove, a cover having a hole through it and having tongues at diametrically opposite points with respect to the pivot hole in it to enter the grooves in the cap when the cover is moved to closed position with respect to the keyhole, a pivot pin in said holes, a spring surrounding said pin and acting to hold said tongues in said grooves when the cover is in closed position, and said cover having a deflected marginal portion to receive the ridge about the opening when the cover is in closed position.

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